Technical Building Services, Inc.
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Ray Torres, Director
Southern Ute Indian Tribe
Construction & Project Management
PO Box 737
Ignacio, CO 81137

Subject: Building Assessment for Code Compliance January 25, 2019
(excluding MEP & Struct.)
Project Name: Peaceful Spirits Building
Location: 269 Mouache Drive
Ignacio, CO 81137

Dear Mr. Torres,

PREAMBLE

Per your request, Technical Building Services, Inc. (TBS), Me& E Engineering and Wilson Structural Engineering conducted site observations, interior and exterior, at the above referenced Project site on December 12, 2018. TBS, Inc. also conducted an assessment of this building on September 17, 2013. No changes have occurred to this structure since our previous assessment. Our previous assessment will be part of this report and this report will be an update to that assessment relating specifically to Code conformance regulations.

The purpose of this evaluation was to document the existing Construction and Design Compliance, including analysis of the design and construction components as necessary to determine if the work is in conformance with the current applicable code, regulations, technical criteria, plans, and recognized standard industry requirements. This report is a summary of code writings, our recordings, photographs, and other documents, which cannot conveniently be produced by way of attachment. This report is a summary of code writings, our recording, photographs, and other documents, of which the originals are available for examination in the TBS job file. A description of such assumptions can only be identified if specific questions are directed at discrete issues because many of such assumptions are incorporated in TBS's experience, training, education, and judgment. This report is based on information provided and reviewed to-date, and is meant to provide building code opinions regarding construction and conditions as noted within this text. Should additional information be made available or unknown conditions discovered, TBS retains the right to periodically revise and supplement this report accordingly.

BUILDING CODE STANDARDS

Based upon the note applicable codes using the International Building Code (IBC), 2015 edition, including the IBC references to the code and their standards and the current ICC/A117.1-2017 Standard for Accessible and Usable Buildings and Facilities. In order to address the multitude of products and techniques, the use of alternates allowed by the building code, manufacturer standards and guidelines and industry guidelines are used either in full or to supplement the code. As well, the building codes adopt and reference many standards pursuant to specific manufacturer products and application. The order of the associated documents reviewed to determine the standard of care is generally regarded in this order: Applicable Codes, Site Specific Plans and Specifications, Manufacturer Installation and Code Compliance Documents, Specific Industry Documentation and Instruction, and Industry based knowledge, providing that these documents and compliance documents exist and have been brought to our attention for review.

SUMMARY OF NON-COMPLIANT CODE FINDINGS

PROJECT DOCUMENTATION REVIEWED

The following project-specific documentation was provided by SUIT and reviewed by TBS as a part of its Scope of Work for this project:
Floor Plans:

1. PDF - " *Peaceful Spirits 1*" - First floor, floor plan only.

Existing Occupancy: I (Institutional)
Proposed Occupancy uses for review: Offices (Group B per IBC),

CODE EVALUATIONS

Type of Construction - Type VB (non-rated) [this is the lowest classification of building construction]
Number of Stories - Two Stories
Area - 8,400 sq. ft. Total

FOR OFFICE (B) CLASSIFICATION

- 2 stories are allowed for type VB construction.
- 8,400 sq. ft. is acceptable for VB construction, two story.
- Has Assembly area classified as an A-3.

NOTE:

A. Upper Floor is less than 3,000 sq. ft., no elevator is required.
B. Assembly area is on first floor with an area less than 12,000 sq. ft. and less than 300 occupants, thus **NO** fire sprinkler system is required.

ASSESSMENT TEAM:

TBS, Inc., Michael Shave, **ICC # 0825924, Colorado Dept. of Fire Prevention 3rd Party #13-190269**
ME&E Engineering, Inc., Dustin Sullivan, P.E.
Jim Osgood, Mech. Designer
Nate Brush, Electr. Designer
Wilson Structural Engineering, Inc., David Wilson, P.E.

SUMMARY OF FINDINGS

Life/Safety, Accessibility, Energy, Mechanical, Electrical, Plumbing & Structural

TBS, Inc. - Life/Safety, Accessibility, Energy

The main life/safety issue is with this un-sprinklered building is the stairway protection extending into the lobby. The rear stairway is semi-protected and would need modifications to meet current codes. Accessibility can be accomplished quite easily with most costs associated with two exterior sidewalks from the assembly area and change out of door hardware. Not all rooms located on the first floor would need to comply with all ADA requirements, only workstations and associated rooms such as employee kitchens, restrooms, assembly room and other meeting rooms. Full compliance to the energy code is not reasonable, they is a lot of room for improvement for energy efficiency. Examples of these are noted in our 2013 assessment such as improving windows, exterior doors and thresholds.

ME&E, Inc. - Mechanical, Electrical & Plumbing

Mechanical:

A. Replace the evaporative coolers with packaged, gas-fired, pad mounted rooftop units ducted to the existing ceiling and floor register locations. This will satisfy the heating, cooling and ventilation needs of the building.
B. Remove and dispose of boiler plant.
C. Replace ductwork.
D. Replace floor registers.
E. Replace ceiling exhausters
F. Remove and dispose of baseboard heaters. Patch and repair scarred surfaces.
G.

Plumbing:

A. Replace all galvanized domestic water piping in the building with insulated copper or PEX.
B. Replace existing fixtures with ADA compliant fixtures including automatic or wrist blade type faucets and controls.
C. Add plumbing fixtures to meet minimum code requirements for this occupancy. (Note: Code analysis and determination of actual number of fixtures should be completed prior to proceeding.)

Fire Suppression-Sprinklers:

A. If the building is to remain as an "I" occupancy provide a fire sprinkler system throughout. If the building were to change to offices ("B" occupancy) no action would be required.

Fire Alarm:

A. If the building is to remain as an "I" occupancy provide a new addressable fire alarm system throughout. If the building is to change to offices ("B" occupancy) existing fire alarm system could be removed with approval of Authority Having Jurisdiction (AHJ). However, the AHJ may not allow owner to make the building less safe, even if the building changes occupancy. AHJ may require replacing existing fire alarm system in order to maintain same level of life-safety.

Electrical:

A. Replace branch circuits as required to make all receptacles ADA compliant.
B. Remove frogeye egress lighting. Replace lighting and controls with new LED type fixtures. Provide new LED fixtures with integral battery backup as needed for egress lighting.
C. Support all conduit and MC cable per NEC.
D. Support all communications cable to prevent kinking and chafing.

Wilson Structural Engineering, Inc.:

All the structural elements observed were in good condition and are consistent with contemporary light wood framed structures bearing on conventional shallow concrete foundations. Because of the lack of plans for the building and the inability to determine the actual bearing points of the superstructure within the crawlspace analysis of flexural members was not possible. However, based on the numerous walls in the building to demise spaces it is likely that the building design was well done using many wall opportunities to create an efficient load path to the foundation. Also, as noted above, the building appears to be well braced to resist lateral loads.

The building structure appears to be in very good condition. No significant cracking or separations were found in any of the building components or finishes. Particularly telling was the exterior slump block veneer and the interior gypsum board wall finishes which were all in good condition. Connections and materials able to be observed appeared complete and appropriate for the conditions. It is expected that with proper care and maintenance the building structure could be safely occupied and service well for years to come.

Individual Discipline Assessments:

CODE EVALUATIONS FOR LIFE/SAFETY, ACCESSIBILITY, ENERGY

by: TBS, INC.

Michael Shave, **ICC # 0825924, Colorado Dept. of Fire Prevention 3rd Party #13-190269**

FOR OFFICE (B) CLASSIFICATION

Exiting, Exit Access, Travel Distances, Stairs

1. Exit from the first floor conference room (Assembly) will need landing outside of the exterior doors. The fence will need to be removed so that the exit discharge may continue to the parking lot. A hard surface sidewalk will also need to be added per handicap regulations, ANSI 117.1, from the landing to the parking area/driveway. Both exterior doors and exist passageways must meet ANSI 117.1 handicap standards. [These exiting exterior doors should remain otherwise the interior corridor would need to be fire rated, with protected openings and another exit would be needed from the adjacent interior corridor to another exit passageway].

2. Interior Stairs (2) Locations - Stairways need to be enclosed by a one-hour rated fire barrier. Openings into the enclosure shall be rated except for those in exterior walls. The stairs on the west end, which discharges into the lobby, would need a fire door at the top of the stairs, beyond a landing. The stairs could open into the lobby provided the lobby and the open adjacent spaces (hallways) are one-hour rated with all interior doors fire-rated as required for openings in fire barrier walls.

    2.1 The stairs will need to be modified to meet current codes, handrails required on each side of the stairs, minimum headroom clearances to be 80". (36" wide is acceptable, stairs service an occupancy load of less than 50 persons).

4. Exit Signs/Illumination - Exit signs will be needed and reconfigured to provide apparent paths of travel to all required exits. Exit travel also must be provided with exit illumination for the fill travel distance. [Exit signs with built-in emergency lighting should suffice]. Exit sign above the door to Mechanical room #105 will need to be removed, exiting through this room is prohibited].

Accessibility for Disabilities

5. Only the first floor needs to meet accessibility requirements for wheel chair impairment providing the proposed B occupancy is NOT offices for health care providers.
6. Door hardware needs to be changed out meeting the ADA requirements for levers.
7. The lobby restrooms will need additional grab bars, lavatory faucet lever valves and under sink water piping protection.
8. All rooms will need proper signage w/Braille.

Energy Conservation Code - All building components are non-compliant (non-existing envelope R-Values)

MECHANICAL - ELECTRICAL - PLUMBING REVIEW

By: ME&E ENGINERRING

Dustin Sullivan, P.E., Jim Osgood, Mech. Designer, Nate Brush, Elect. Designer

Mechanical. Existing Conditions. Mechanical systems have been inspected utilizing the 2015 International Building Code (IBC), 2015 International Mechanical Code (IMC). It is assumed the building will be classified as Group B- Business Group occupancy according to the 2015 IBC for purposes of the report. A gross square footage of 8,400 has been assumed.

1. Heating. The building is served by two Burnham 806B-WI cast-iron, atmospheric boilers piped in a primary-secondary configuration. The combined capacity of the units at elevation is estimated to be 412,000btuh. (Photo 1)

   According to the manufacturer they no longer keep records on this unit. It was manufactured sometime in the 1980s. ASHRAE (American Society of Heating Cooling and Refrigeration Engineers) lists the median life of cast iron boilers to be 30 years. These boilers appear to have been installed mid-1980s indicating replacement will likely be necessary. Boiler efficiency at sea level is listed at 78%. At site elevation (6,450'ASL) and being 30 years old the boiler output most likely has an efficiency of <70%

   While the boiler access does meet the 30" deep x 30" wide access required from the IMC 306.1 in front of the equipment it does not meet the 80" passageway height requirement of 306.2. Flue terminations may be within 18" of combustibles at ceiling penetrations 803.10.6 and should be provided with a thimble at the ceiling penetration. The vent terminations appear to be within 4' of operable skylights 804.3.5.4.

   Heating Distribution System. Hot water is circulated from the boiler plant throughout the building in insulated copper piping by (2) Taco pumps. Pumps are in parallel allowing one pump to be in stand-by. Pumps appear to be in fair to good condition.

   Piping appears to be a two-pipe hot water supply and return to convectors located throughout the building. Detailed pipe routing and convector lengths have not been determined but appear to be in rough shape. Many covers and have been crushed and fins have been bent. (Photo 2) Hot water convectors are located in each room and controlled by a two-position control valve/thermostat combination.

2. Cooling. There (4) roof mounted and (2) attic mounted evaporative coolers that provide cooling for the facility. The current location of the roof mounted units does meet 306.5.1, which requires platforms, and guardrails, be provided when the angle of the roof is equal to or exceeds 25% (3/12). An electrical receptacle is also required per 306.5.2. (Photo 3) The attic mounted units are too wide to be removed and replaced without dismantling the equipment. There does not appear to be a method to close outside air ductwork (eg. outside air damper, exterior cover, etc.) when equipment is not in use per 2015 IECC C403.2.4.3. The only method in place to relieve building pressure is through operable windows.

Cooling Distribution System. A combination of lined and wrapped ductwork route through the attic to serve the upper floor and crawl space with floor grilles to serve the lower level and ceiling and sidewall grilles to feed the upper floor. Floor grilles have been crushed due to 30 years of foot and furniture traffic. The ceiling/wall-mounted grilles appear to be in fair condition. The crawl space mounted ductwork is lined. With 30 years of evaporatively cooled (wet) air being delivered through the ducts mold growth on the liner is highly probable. The attic mounted units are showing signs of leaking around the sump basins, which indicate they have reached the end of their useful life. It appears mold may be growing around the outside of the basin. Mold testing was not done during the site inspection.

3. Ventilation. There are three methods this building has to meet ventilation needs.
    a. Openable windows most of which are currently inoperable. This method requires 4% of the gross floor area be openable to the exterior of the building most of the south side sleeping rooms would meet this requirement if the windows were operable.
    b. Evaporative cooling provides ventilation but only during the cooling season.
    c. An inline supply fan, currently dismantled, provided ventilation to the upper north side sleeping rooms. This fan pulled air from an outside air chase located on the north side of the building and delivered the air to sidewall grilles into the sleeping rooms. There is no evidence to indicate that this air was preheated so whatever the outside temperature was at the time was delivered to the space.

    If the operable windows are not fixed mechanical ventilation will be required to meet the current code. This method stipulates minimum airflow rates in cfm (cubic feet per minute) of outside air that must be mechanically introduced into the building. Following are the rates per area that will be required:

Offices/Conference:	5cfm/ person	+	.06cfm/sq.ft.
Storage Rooms:	0cfm/ person	+	.12cfm/sq.ft..
Corridors:	0cfm/ person	+	.06cfm/sq.ft.

4. Exhaust. Most of the exhausters located in the facility do not appear to be working. Janitor closets and restrooms will require air to be exhausted at the following rates:

Janitor Closets:	1.0cfm/sq.ft.
Restrooms	70cfm/water closet or urinal

The existing kitchen appears to have had an exhaust hood and sidewall exhauster both of which no longer exist. The floor and walls have short-term patches at both locations. The makeup air unit, now abandoned in place, is a McQuay model LHD103CH air handler with its hydronic heating coil removed and laying nearby. (Photo 4)

Plumbing Existing Conditions. Plumbing systems have been inspected utilizing the 2015 International Building Code (IBC), 2015 International Plumbing Code (IPC).

1. Domestic Water Piping. Domestic water piping throughout appears generally

to be copper. Much of the piping lacks insulation. Water entrance is on the west side of the building. Exact point of entry was not determined however, manholes and valve boxes located southwest of the building suggest the meter could be located therein. No backflow preventer was noted.

2. Waste and Vent Piping. Waste and vent piping appears to be mostly cast-iron. Various PVC exposed traps and tailpieces were noted. The upper floor Corridor ceiling spaces had a noticeable sewer gas odor.

3. Domestic Hot Water. Hot water is provided to the building from a single Bradford/White 75 gallon, gas fired water heater located in an upper level mechanical room. The water heater was installed in May 2012 and appears in good condition. Exterior skin damage may have affected glass lining. The hot water line exiting the water heater immediately tees and routes through a mixing valve creating a two-temperature system . The entire system should be 140 degrees with point of use thermostatic mixing valves. Water heater lacks an expansion tank and vacuum relief valve.

4. Fixtures. Building fixtures are vitreous china, floor mounted water closets, 2 enameled steel bathtubs,, 4 shower stalls and countertop mounted lavatories. None meet current ADA requirements.

   Chapter 29 of the 2015 IBC lists minimum plumbing fixtures required according to occupant load in Chapter 10-IBC. Depending on how the building is classified (educational vs. educational/business), plumbing fixtures do not appear to be adequate. Following is a listing of fixtures required versus provided in the building.

Required	WC (M/W)	Lav	DF	Service
Admin	1/1	1/1	1	1
Institutional	6	4	1	1

Provided	WC (M/W)	Lav	DF	Service
Admin and Educ	4/4	4/4	1	1

Fire Protection-Automatic Sprinklers. Existing Conditions. Fire protection-automatic sprinkler systems have not been installed in this facility. If the building were to remain an "I-2" occupancy the building would require fire sprinklers throughout. If the building is converted to a "B" occupancy (offices) sprinklers are not required. (See 903.2.6-IBC.)

Fire Alarm. Existing Conditions. Automatic Fire Alarm systems have been inspected utilizing the 2015 International Building Code (IBC), 2016 NFPA 72 National Fire Alarm and Signaling Code. It is assumed the building will be classified as Group B- Business Group occupancy according to the 2015 IBC for purposes of the report. A gross square footage of 8,400 has been assumed.
Fire alarm system is antiquated 4-zone system. If building remains an I occupancy, fire alarm system is non-compliant. If building changes to B occupancy, fire alarm system, (with AHJ approval) can be removed.

1. Abandoned fire alarm control panel at entry foyer should be removed.
2. Existing detectors are not up to NFPA 72 mounting and coverage standards in vaulted ceiling areas,

allowing fire and smoke to propagate before detector will be in smoke plume.

3. Existing detectors in residence rooms not mounted centered in ceiling per NFPA 72. Mounting on sidewall could allow fire and smoke to propagate before detector will be in smoke plume.
4. Open fire alarm j-boxes should be blanked or fire alarm devices replaced.
5. Operable component of manual pull stations are at 49" AFF, not compliant with ADA
6. Inadequate cable support in crawlspace
7. Inadequate cable support in attic.

Electrical. Existing Conditions. Electrical systems have been inspected utilizing the 2015 International Building Code (IBC), 2014 NFPA 70 National Electrical Code. It is assumed the building will be classified as Group B- Business Group occupancy according to the 2015 IBC for purposes of the report. A gross square footage of 8,400 has been assumed.

1. Distribution: Existing Square D I-Line and NQOD panels are in adequate condition and parts are readily available.
2. Convenience power: Building devices are not compliant with ADA. In the north wing, receptacles are mounted at 15" from floor to center of top receptacle. In south area all operable parts of receptacles are mounted below 15".
3. Existing lighting is generally T8 fluorescent lighting and PAR can lights with single-level switching. Any level 3 Alteration to the system would require compliance with the IECC, including lighting controls. Approximately 80% of "frogeye" emergency fixtures are not operational. Even if operational, egress coverage estimated to be inadequate.
4. General deficiencies:
    a. Exercise Room 109 and various dorm rooms: receptacle faceplates broken and conductors exposed
    b. Various light fixtures damaged.
    c. Communications cable in crawlspace not properly supported
    d. Communications cable in attic not properly supported
    e. Mechanical rooms: various open j-boxes with exposed conductors and splices. Various conduit and MC cables not supported according to code.

Recommendations

Mechanical

H. Replace the evaporative coolers with packaged, gas-fired, pad mounted rooftop units ducted to the existing ceiling and floor register locations. This will satisfy the heating, cooling and ventilation needs of the building.
I. Remove and dispose of boiler plant.
J. Replace ductwork.
K. Replace floor registers.
L. Replace ceiling exhausters
M. Remove and dispose of baseboard heaters. Patch and repair scarred surfaces.

Plumbing

A. Replace all galvanized domestic water piping in the building with insulated copper or PEX.
B. Replace existing fixtures with ADA compliant fixtures including automatic or wrist blade type faucets and controls.
C. Add plumbing fixtures to meet minimum code requirements for this occupancy. (Note: Code analysis and determination of actual number of fixtures should be completed prior to proceeding.)

Fire Suppression-Sprinklers.

A. If the building is to remain as an "I" occupancy provide a fire sprinkler system throughout. If the building were to change to offices ("B" occupancy) no action would be required.

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Electrical

E. Replace branch circuits as required to make all receptacles ADA compliant.
F. Remove frogeye egress lighting. Replace lighting and controls with new LED type fixtures. Provide new LED fixtures with integral battery backup as needed for egress lighting.
G. Support all conduit and MC cable per NEC.
H. Support all communications cable to prevent kinking and chafing.

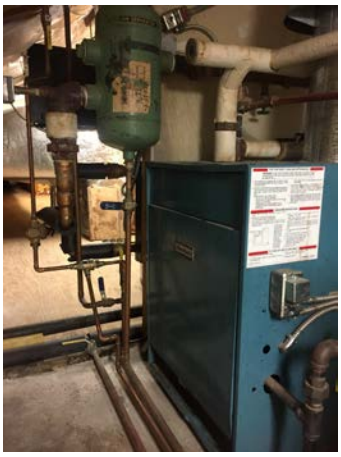

Photo1: Boiler Room

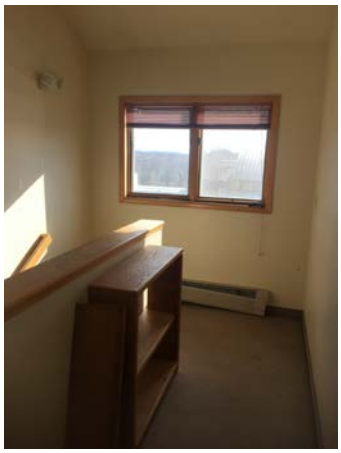

Photo 2: Busted Baseboard

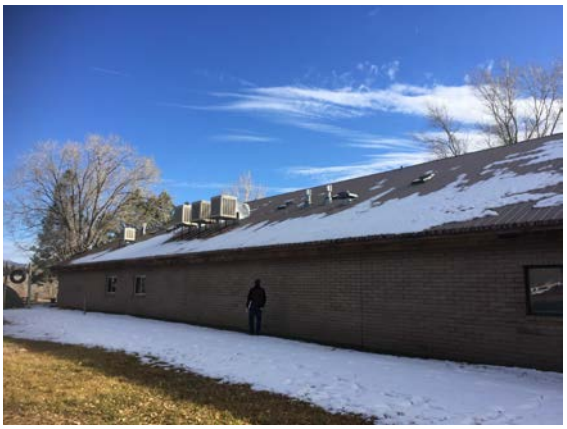

Photo 3: Roof mounted evaporative coolers

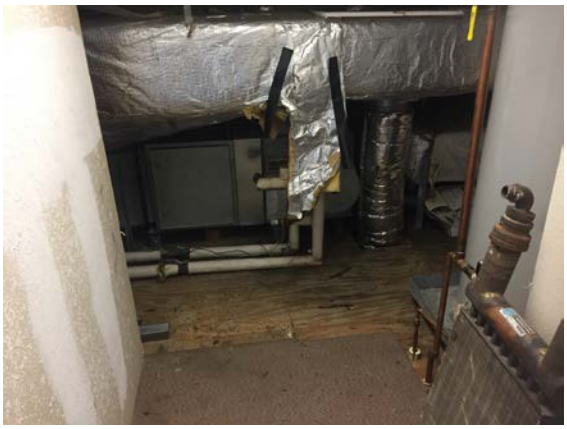

Photo 4: Makeup air unit

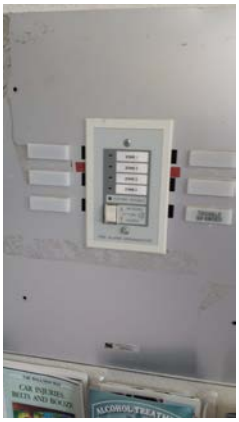

Photo 5: existing, unused fire alarm panel at entry

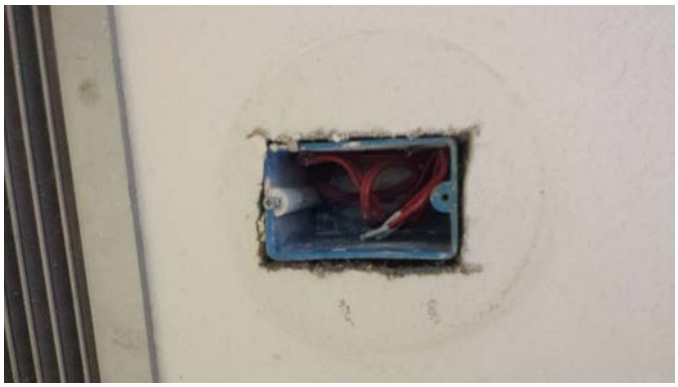

Photo 6: Missing fire alarm device

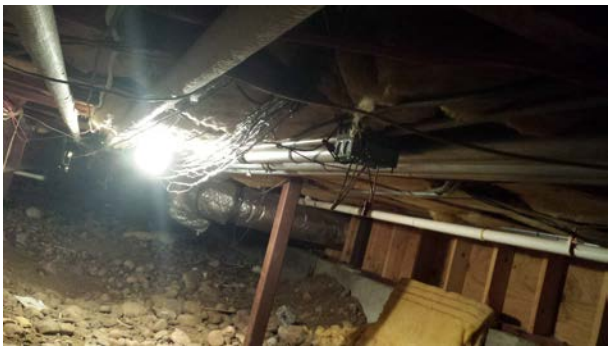

Photo 7: Unsupported crawl space cabling, open j-boxes

STRUCTURAL REVIEW

By: WSE STRUCTURAL ENGINEERING

David Wilson, P.E.

Peaceful Spirits overview:

The building may have been constructed in 2 phases. If so, the original construction on the east end was probably constructed in the late 1980's or early 1990's. If the building was constructed in two phases, the east end of the building springing from the east lobby wall was probably the addition. The entire area is 2 stories in height. The building is a light-wood framed building constructed over a crawlspace.

The building systems:

The building foundation appears to be entirely concrete. No footings were exposed above the surface of gravel and large cobbles in the accessible area of the crawlspace but a continuous concrete stem wall was observed around the perimeter of the space viewable. Indications suggest though that a shallow conventional concrete foundation system of footings and stem walls supports the building.

Both floors are constructed of engineered wood framing members. I-joists, laminated veneer lumber, steel wide flange beams and limited glulams were used. The steel beams were only observed in the crawlspace and used to support the main floor joists. It is likely that they also

support a portion of the second floor and roof. Note that observable areas of the crawlspace was very limited by a shallow crawlspace height and dropped steel beams below the floor joists. There was also mechanical equipment and duct-work crowding the space and limiting access. The second floor structure was largely not accessible or observable but appears to be the same joist system as the main floor, i.e. I-joists supporting floor sheathing (and in some cases sub-flooring). The second floor framing also supports a gypsum board ceiling for the first floor. The ceiling is probably attached directly to the underside of the second floor joists in most areas.

The roof system appears to be entirely 'I'-joist rafters bearing on wood framed walls and some glulam beams. Roof sheathing appears to entirely be APA rated sheathing nailed to the joists. The roof is a gable shape with roof pitches of about 4 to 6:12. The long east-west axis of the roof is non-symmetrical with the ridge offset to the south creating height for a second story on the south side of the building. A gable end of the roof looks south at the meeting room at the southwest corner of the building creating a high volume ceiling. A similar condition exists at the east end of the building.

Walls observed in all interior and exterior locations are wood framed and sheathed with rated wood sheathing (plywood) on the exteriors. Interior walls were sheathed with gypsum board sheathing and some areas of plywood. The exterior walls are finished with an attached slump block veneer on the west and north sides of the building from grade to roof. The south and east sides of the building are finished with stucco except for the meeting room at the southwest corner of the building, which is also veneered with slump block.

Building Materials:

The building materials used are common to light wood frame construction and are common in the current construction industry;

* Wood framed structural walls:	2x6 Hem Fir at 16" and 24" on center Allowable bending stress = 850 psi Allowable shear stress = 150 psi Allowable compression perpendicular to grain = 405 psi
* Glue-Laminated Beams 24F-V4:	Allowable bending stress = 2400 psi Allowable shear stress = 265 psi
* I-joists:	They are propriety products and as such individual manufactures publish allowable maximum shears, moments, bearing values allowable for each specific series of joists and its depth
* Steel Beams:	Allowable bending stress = 24,000 psi Allowable shear stress = 14,500 psi

Analysis/Evaluations:

Due to the lack of actual plan dimensions of the building and layout of interior wall dimensions, guess work for the load-path of the framing was necessary to estimate load capacities of members. Furthermore, very poor crawlspace clearances prohibited access to determine where framing loads actually land on beams or pony walls to transfer leads to the foundations.

Foundations:

The foundations are largely concealed under crawlspace cobble and gravel backfill. Concrete

stem walls were observed in a very limited area due to the height limited crawlspace. Steel posts supporting steel beams could also be seen in a limited area. Both the stem walls and the steel posts appear to be the elements that comprise the foundations. They are likely bearing on concrete footings of some arrangement under the crawlspace grade. The exterior stem walls have a ledge on which wood pony walls rest and the concrete stem continues above the floor system likely for the support of the exterior slump block veneer.

Floor framing:

The floor I-joists in the crawlspace of the original construction are 14" deep with 2-3/8" wide flanges spaced at 24" on center. Those members would safely span 16' with office loads (50 psf), 19' with classroom loads (40 psf) and 9' for areas for assembly areas with moveable seats or dining rooms (100 psf). It is possible that all these conditions are met with proper bearing points to the foundations and bearing walls appropriately used and located over bearing elements in the crawlspace. The floor sheathing appears to be 3/4" APA rated plywood. It is important to note that no crawlspace vents were observed anywhere in the crawlspace or on the building exterior.

Roof Framing:

The roof joists observed in the attic were 11-7/8" I-joists spaced at 24" on center. These joists could span 16' with a 40 psf snow load. If the joists were spaced at 16" on center for greater spans, those could be up to 18'. The roof sheathing is probably 5/8" APA rated sheathing but could not be directly observed.

Lateral Force Resisting System:

The building in all likelihood is laterally braced with a system of shearwalls in both orthogonal directions. The components for shearwalls were seen throughout the building. The roof and floor sheathing noted previously would comprise the diaphragms necessary to distribute lateral load from wind or seismic activity to the shearwalls. No analysis was done for lack of specific materials and connections but by observation of length of exterior walls and the numerous interior walls there is little doubt that the system offers adequate lateral resistance.

Summary:
All the structural elements observed were in good condition and are consistent with contemporary light wood framed structures bearing on conventional shallow concrete foundations. Because of the lack of plans for the building and the inability to determine the actual bearing points of the superstructure within the crawlspace analysis of flexural members was not possible. However, based on the numerous walls in the building to demise spaces it is likely that the building design was well done using many wall opportunities to create an efficient load path to the foundation. Also, as noted above, the building appears to be well braced to resist lateral loads.

Conclusions:
The building structure appears to be in very good condition. No significant cracking or separations were found in any of the building components or finishes. Particularly telling was the exterior slump block veneer and the interior gypsum board wall finishes which were all in good condition. Connections and materials able to be observed appeared complete and appropriate for the conditions. It is expected that with proper care and maintenance the building structure could be safely occupied and service well for years to come.

Respectfully,
David L. Wilson, P.E.
Principal

CONCLUSION

This building can be converted to and office designation and conform to most current building codes with moderate modifications. (excluding Energy Code). All disciplines had favorable comments for the necessary upgrades to the current conditions for code compliance. The existing conditions of this building for an office classification reduces the previous risks form the former use as a rehabilitation facility, I-1 code classification. Specific levels of safety provisions need to apply for the conversion of use as stated in this updated assessment report.

Limits of Liability:
All comments made are based on conditions seen during observations and limited to fees/time associated with our defined not to exceed price for discovery. TBS, Inc. nor ME&E, Engineering, Inc. & Wilson Structural Engineering, Inc. does not accept any responsibility for unknown or unknowable conditions within the existing site or structure.

Please contact us if we can be of any assistance or provide further clarification of the conditions observed and are within this report.

Respectfully,

Michal Shave
President
ICC # 0825924
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Attachments: Sept. 17, 2013 Assessment with attachments