

EXISTING MECHANICAL CONDITIONS SUMMARY

The items listed below are based on our site visit on Nov 10, 2016. Our review is based on current conditions and anticipated future use of these building. In the context of current mechanical code references, we used 2009 International Energy Code (IECC). NFPA31, 90A, 90B and 96 are also referenced where applicable. Minimum required ventilation requirements are from the 2009 International Mechanical Code.

MECHANICAL / PLUMBING / SPRINKLER SYSTEMS

Mechanical / HVAC:

Heating system is hydronic (hot water) baseboard with finned tube radiation around the perimeter. Boiler is standard efficiency propane fired boiler located on the second floor. There are three zones – two on the first floor one on the second, zoning is by pumps. There is no mechanical ventilation in the building. The bathroom does have an exhaust fan that appears to be operational.

Plumbing:

Plumbing fixtures appear to be ADA compliant. There are no drinking fountains in the building. There is a 40 Gallon propane fired water heater in the second floor mechanical space to heat domestic water.

Sprinkler: The building does not have a fire protection system installed.

MECHANICAL / PLUMBING / SPRINKLER SYSTEMS RECOMMENDATIONS

Replace boiler with propane condensing high efficiency unit. New boiler can be located in the same location as the existing boiler.

Replace exhaust fan in all bathroom as a minimum.

Install heat recovery ventilation for entire building.

ELECTRICAL SYSTEMS

Power Distribution: The electrical service that serves the building is overhead from a pole mounted transformer voltage is 120/240V single phase. The main panel is a Federal Pacific 100A main breaker panel located in the front exterior wall. Utility meter is located at side of the building. Much of the wiring and electrical distribution equipment (panel) in the building has exceeded its service life and is in poor condition. All electrical wiring in the original portion of the building should be replaced.

Receptacles: The quantity of outlets is insufficient for a modern office space, additional receptacles need to be added around the room to facilitate power needs for technology.

General Lighting: The lighting is a combination of T12 fluorescent. The majority of the lighting could be upgraded to more energy efficient LED type. These types of fixtures will save on re-lamping costs and energy usage costs.

Exit and Egress Lighting: There are very few emergency lights in the building. There are fluorescent exit signs at the main exits but more are needed to comply with current codes. Emergency battery lighting needs to be added to the facility to meet NFPA 101 Life Safety Code on the interior and exterior. Existing exit signs should be replaced and supplemented to meet NFPA 101 Life Safety Code.

Fire Alarm System: The fire alarm devices in this building are connected back to a central panel located in the Annex Building. There are horn/strobes located throughout the facility but does not comply with current NFPA and ADA codes. Additional devices need to be added to bring the system up to current NFPA and ADA codes.

ELECTRICAL SYSTEMS RECOMMENDATIONS

Replace all original wiring and receptacles with new.

Replace panel

Install new LED lighting.

Install code required emergency and exit signs.

PHOTO DOCUMENTATION

Exterior back wall pack light.





Electrical meter



Window AC unit



Boiler with zone pumps





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Propane fired Water heater



Exhaust ductwork from bathroom exhaust fan



Telephone backboard



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MECHANICAL / PLUMBING / SPRINKLER SYSTEMS

Mechanical / HVAC:

Heating system is hydronic (hot water) baseboard with finned tube radiation around the perimeter. Boiler is standard efficiency propane fired boiler. There is no mechanical ventilation in the building. The bathroom does have an exhaust fan that appears to be operational.

Plumbing:

Plumbing fixtures are generally old, in poor condition and non-ADA compliant. The building has a well and the pneumatic tank located in the boiler room. There are no drinking fountains in the building. There is a 40 Gallon electric water heater in the mechanical room in the back of the building for heat domestic water.

Sprinkler:

The building does not have a fire protection system installed.

MECHANICAL / PLUMBING / SPRINKLER SYSTEMS RECOMMENDATIONS

Replace boiler with propane condensing high efficiency unit. New boiler can be located in the same location as the existing boiler.

Replace exhaust fan in all bathroom as a minimum.

Install heat recovery ventilation for entire building.

Replace all plumbing fixtures with ADA compliant fixtures.

ELECTRICAL SYSTEMS

Power Distribution: The electrical service that serves the building is overhead from a pole mounted transformer 120/240V single phase 100A main breaker panel located in the storage room. Utility meter is located at side of the building. Much of the wiring and electrical distribution equipment (panel) in the building has exceeded its service life and is in poor condition. All electrical wiring in the building should be replaced.

Annex

November 21, 2016

Receptacles: The quantity of outlets is insufficient for a modern office space, additional receptacles need to be added around the room to facilitate power needs for technology.

General Lighting: The lighting is a combination of T12 fluorescent. The majority of the lighting could be upgraded to more energy efficient LED type. These types of fixtures will save on re-lamping costs and energy usage costs.

Exit and Egress Lighting: There are very few emergency lights in the building. There are fluorescent exit signs at the main exits but more are needed to comply with current codes. Emergency battery lighting needs to be added to the facility to meet NFPA 101 Life Safety Code on the interior and exterior. Existing exit signs should be replaced and supplemented to meet NFPA 101 Life Safety Code.

Fire Alarm System: There is a fire alarm system in the building the fire alarm panel is located in the storage room. Fire alarm system consists of Silent knight 5207 panel that serves the site (including Annex, Town Hall and Library) and there is an exterior annunciator used for fire department response on this building. There are horn/strobes located throughout the facility but does not comply with current NFPA and ADA codes. Additional devices need to be added to bring the system up to current NFPA and ADA codes.

ELECTRICAL SYSTEMS RECOMMENDATIONS

Replace all original wiring and receptacles with new.

Replace panel

Install new LED lighting.

Install code required emergency and exit signs.

PHOTO DOCUMENTATION

Propane Tank For all buildings



Annex

November 21, 2016



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Overhead service



Overhead Service



Meter



Annex

November 21, 2016

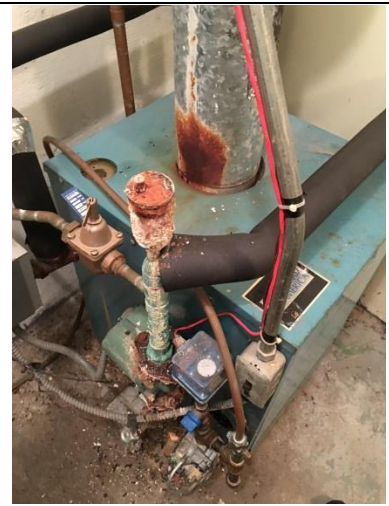


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Existing Federal Pacific panel



Burnham Boiler



Pneumatic Pressure Well tank





Domestic Water heater



Fire alarm annunciator



South side looking back towards Library



EXISTING MECHANICAL CONDITIONS SUMMARY

The items listed below are based on our site visit on Nov 10, 2016. Our review is based on current conditions and anticipated future use of these building. In the context of current mechanical code references, we used 2009 International Energy Code (IECC). NFPA31, 90A, 90B and 96 are also referenced where applicable. Minimum required ventilation requirements are from the 2009 International Mechanical Code.

MECHANICAL / PLUMBING / SPRINKLER SYSTEMS

Mechanical / HVAC:

Heating system is propane fired furnaces ducted into the areas. One standard efficiency furnace serves the majority of the building that has an associated AC unit ducted into the basement that is changed over in summer. There is a newly installed high efficiency unit located in the most recent addition in the basement children's area. Neither system provides mechanical ventilation in the building. The bathroom does have an exhaust fan that appears to be operational.

Plumbing: Plumbing fixtures are ADA compliant with the exception of the flush handle on the toilet is located on the wrong side of the tank. There is a 6 Gallon electric water heater in the basement to heat domestic water.

Sprinkler: The building does not have a fire protection system installed.

MECHANICAL / PLUMBING / SPRINKLER SYSTEMS RECOMMENDATIONS

Replace one furnace with propane condensing high efficiency unit. New unit can be located in the same location as the existing furnace.

Replace exhaust fan in all bathroom as a minimum.

Install heat recovery ventilation for entire building.

Replace all plumbing fixtures with ADA compliant fixtures.

ELECTRICAL SYSTEMS

Power Distribution: The electrical service that serves the building is overhead from a pole mounted transformer 120/240V single phase 200A main breaker panel located in the basement. Utility meter is located at side of the building.

Receptacles: The quantity of outlets is insufficient for a modern office space, additional receptacles need to be added around the room to facilitate power needs for technology.

General Lighting: The lighting is a combination of T12 fluorescent. The majority of the lighting could be upgraded to more energy efficient LED type. These types of fixtures will save on re-lamping costs and energy usage costs.

Library

November 21, 2016

Exit and Egress Lighting: There are emergency lights in the building. There are exit signs at the main exits but more are needed to comply with current codes. Emergency battery lighting needs to be added to the facility to meet NFPA 101 Life Safety Code on the interior and exterior. Existing exit signs should be replaced and supplemented to meet NFPA 101 Life Safety Code.

Fire Alarm System: The fire alarm devices in this building are connected back to a central panel located in the Annex Building. There are horn/strobes located throughout the facility but does not comply with current NFPA and ADA codes. Additional devices need to be added to bring the system up to current NFPA and ADA codes.

ELECTRICAL SYSTEMS RECOMMENDATIONS

Install new LED lighting.

Install code required emergency and exit signs.

PHOTO DOCUMENTATION

Exterior electrical meter





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Exterior ducted AC unit



Flexible Ducts into basement



Radon Fan





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Exterior Bulkhead



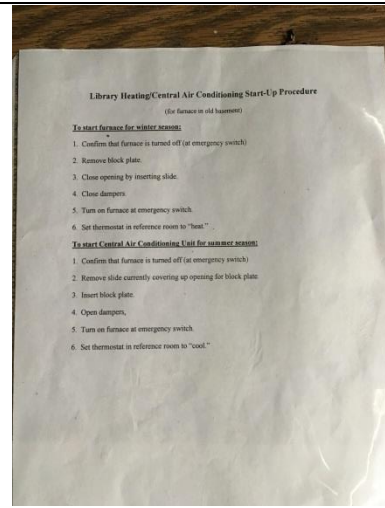
Standard Efficiency Furnace – original portion of the building



Basement ductwork



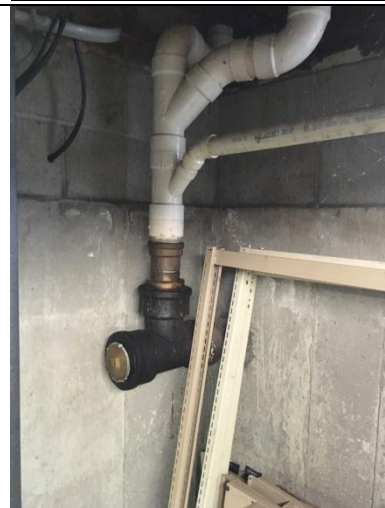
Winter /summer changeover operational sheet



Electrical panel



Sewer exit in basement



Domestic water heater in basement



Security and Fire alarm wiring in basement



Radon Piping in Basement





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Lighting original portion



Kitchenette



Standard ungrounded outlet





Exit and emergency lighting



ADA Toilet flush handle on wrong side of tank



ADA compliant sink





Security panel



Typical horn strobe





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Subpanel in basement of addition



Newly installed High Efficiency furnace children's area.



EXISTING MECHANICAL CONDITIONS SUMMARY

MECHANICAL / PLUMBING / SPRINKLER SYSTEMS

Mechanical / HVAC: Empire Propane Fired wall heater located on the first floor

Plumbing: None

Sprinkler: None

ELECTRICAL SYSTEMS

Power Distribution: 100A , 120/240 New panel

General Lighting: Mostly incandescent lighting, track head for displays.

Fire Alarm System: None

RECOMMENDATIONS

None

PHOTO DOCUMENTATION

UPPER FLOOR LIGHTING	
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Upper Floor exit lighting



Electrical panel



Propane fired Heater



EXISTING MECHANICAL CONDITIONS SUMMARY

MECHANICAL / PLUMBING / SPRINKLER SYSTEMS

Mechanical / HVAC: None

Plumbing: None

Sprinkler: None

ELECTRICAL SYSTEMS

Power Distribution: Appears to be all newly rewired circuit from Town Hall wiring is new MC cable.

General Lighting: New Motion activated T8 fluorescent.

Fire Alarm System: None

RECOMMENDATIONS

None

PHOTO DOCUMENTATION

TYPICAL RADIATOR:
Knox Box



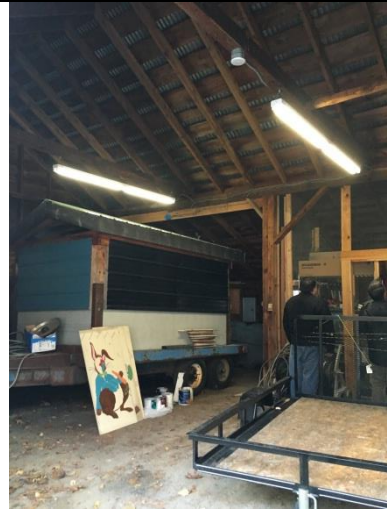


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Front Exterior flood light



Motion detector activated lights



Hobo Barn

November 21, 2016