EXHIBIT R

PROPERTY ASSESSMENT REPORT

FOR

SAN BERNARDINO COUNTY

303 W. 5TH STREET DESIGN-BUILD PROJECT

PROJECT NUMBER 10.10.1699

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Property Assessment of

303 W 5th St, San Bernardino, CA

IMEG #23005335.00

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Property Assessment
for
303 W. 5th St
San Bernardino, CA

IMEG #23005335.00
September 25, 2022

A. Introduction

IMEG was contracted by San Bernardino County to conduct a study and assessment of the existing mechanical, plumbing, fire protection, electrical, structural, site/civil, and building envelope architectural systems, at the existing 23300 square foot floor area, two story office building and located at 303 W. 5th St in San Bernardino. The existing mechanical/HVAC, plumbing and fire protection systems; existing electrical power, lighting, and fire alarms systems; existing parking lot, existing structural systems were observed by various design professionals at a site visit conducted on August 22, 2023 and August 29th, 2023. Systems were analyzed for current condition, required immediate repairs or replacements, and expected required repairs or replacements within the next five to ten years. A professional cost estimate outlining immediate needs and future needs is provided in this report.

Overall, the building is in fair to good condition considering its approximate 46-year age. The mechanical HVAC systems have either exceeded or approaching their useful life expectancy based on manufacturer's and American Society of Heating, Refrigeration and Airconditioning Engineers (ASHRAE) data. Equipment failure and associated repairs or replacement can be expected in the next few years. The plumbing infrastructure systems (waste, vent, hot and cold water, natural gas) are in good serviceable condition. Plumbing fixtures will require replacement and reconfiguration to meet ADA and water conservation requirements. The building is fully fire sprinklered and fire sprinkler system is in good serviceable condition. The electrical systems (power, lighting, fire alarm, voice/data) are operational; however, ADA upgrades are required for convenience outlets and switch locations, the lighting systems do not meet current energy efficiency requirements and the power and fire alarm systems have exceeded their useful and reliable life expectancy of 25 years. Voice and data systems should be upgraded upon tenant improvements. Architecturally, the existing roofing is modified bitumen roll roofing over foam insulation on fireproofed metal decking, and appears to have been patched in several places. Original construction plans specifying the original roofing are not available. The existing envelope consists of stucco, scored concrete masonry units, aggregate exposed concrete, and aluminum-framed curtainwall glazing. Original construction plans specifying the original envelope materials are not available. In general, the exterior envelope is in very good condition and appears to be performing well. The normal places to look for compromises to envelope systems is at the joints between and within materials.

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Costs for immediate needs for the building have been estimated at [redacted] and costs for needs over the next 5 to 10 years are estimated at [redacted] See below for detailed analysis of each system.

B. Structural Systems

1. Observations/Assessments

a. The majority of the structural system was hidden by building finishes. No drawings were available for our review of the building structure and therefore all observations and findings are based on our site visit observations and what was able to be seen. Significant or relevant observations where structural systems could be viewed include the following:

1) The roof appears to be 1 ½" metal deck, with wide-flange steel beams spaced at approximately 7'-0" O.C.
2) Reinforced CMU shear walls appear to be located on the North-West and South-East corners of the building, the entire South wall, plus the walls surrounding the stairs and elevator. Refer to the CMU shear wall layout plan in Appendix B.
3) Twelve (12) columns appear to support the central/middle part of the building. Ten (10) of these columns, appear to be from the original construction of the building, and two (2) of these columns, appear to have been added in a retrofit to the structure, see Appendix B.
4) The rooftop MEP units appear to be mostly located on curbs with visible anchorage.
5) There is evidence of ponding visible in several corners of the roof, see Appendix B.
6) The main gas line on top of the roof appears to have no seismic bracing or load bearing support, see Appendix B.
7) During the overall site walkthrough, no to minimal observations of cracking or settlement were observed around the building.

2. Probable Maximum Loss (PML) & Seismic Risk Assessment

a. Introduction:

1) This PML study is the result of an evaluation by IMEG of the existing office building at 303 W. 5th Street, San Bernardino, CA. The objectives of this evaluation are:
   a) Review the available existing construction documents for this building and identify the primary vertical and lateral load-resisting systems.

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b) A review of general geologic information and fault maps of the area, to assess the site seismic hazard.

c) Estimate the Probable Maximum Loss (PML) percentage for the structure based on our preliminary findings. This estimate is for an earthquake event having a return period of 475 years.

b. Site Seismicity:

1) 303 W. 5th Street is located in the seismically active region of San Bernardino County in Southern California as shown in Figure 1. There are many active and potentially active faults in the vicinity, the most significant being the San Jacinto Fault just south of the site. It is anticipated that this area will experience a significant earthquake in the next 30 to 50 years, and therefore this building will experience moderate to severe ground shaking. The fault map in Figure 1 below shows the location of the site relative to nearby faults.

2) The site is indicated to be in an area of high potential liquefaction.

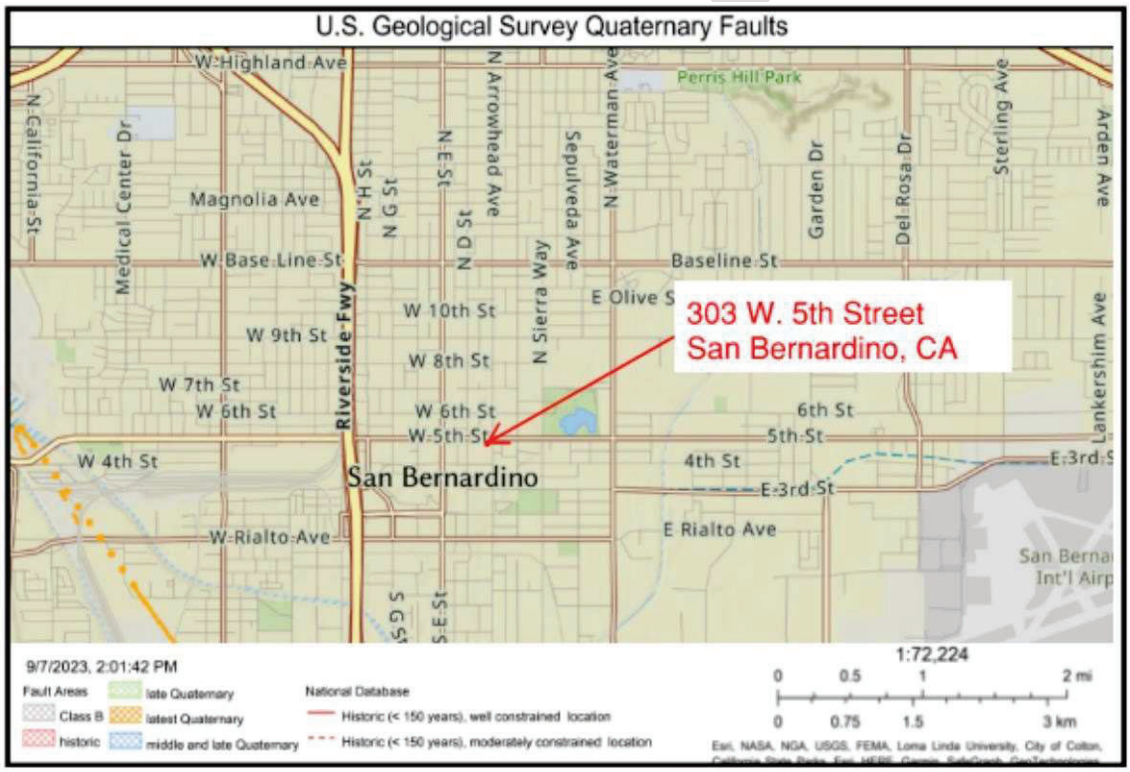

Figure 1: Fault Map near 303 W. 5th Street

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c. Estimate of Probable Maximum Loss

1) The Probable Maximum Loss (PML) is defined as the ratio of the expected repair cost to the replacement cost of the facility. This is a technique developed for the insurance industry to help determine level of coverage against damage in a seismic event. The PML estimate represents the expected damage which will not be exceeded nine out of ten times for a given class of buildings for a given size earthquake. The PML is derived on the basis of structure type, location, and conditions specific to the buildings and site. The PML is not a prediction of the absolute loss to this structure, but rather an aggregate of anticipated losses to this structure type.

2) We have utilized the loss analysis program ST-Risk to compute the PML. This program utilizes recognized techniques in accordance with ASTM Standard E2026 to determine a range of loss. The PML is determined based on the ground shaking intensity of an earthquake as defined using the Modified Mercalli Intensity (MMI) Scale (see Appendix C). The scale ranges from an intensity of I, generally not felt at all, to a maximum of XII, where damage in the area is generally total and widespread. The anticipated loss at a given location depends on the general type and quality of the given structure as well as the expected maximum size of earthquake.

3) The Probable Maximum Loss (PML) for the structure is reported for two levels of confidence:

a) a mean (expected) estimates of building damage consistent with ASTM E2026 terminology for Scenario Expected Loss (SEL), and (2) a 90th percentile confidence level estimate of building damage consistent with ASTM #2026 terminology for Scenario Upper Loss (SUL). The PML for both the SEL and the SUL result from this building subjected to an earthquake having a 10% probability of being exceeded in a 50-year period (475-year return period) is summarized in Table 1. Appendix C provides a summary of the PML analysis including a summary of the evaluation parameters used in the analysis.

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Table 1: Probable Maximum Loss Summary for 303 W 5th St, San Bernardino, CA

Portion of Structure	SEL (Scenario Expected Loss)	SUL (Scenario Upper Loss)
303 W 5th St Office Building (Ground floor CMU shear walls w/ Rigid Diaphragm)	20%	32%
303 W 5th St Office Building (2nd floor CMU shear walls w/ Flexible Diaphragm)	14%	25%
303 W 5th St Office Building Aggregate	17%	29%

3. Findings/Recommendations

a. Based on the site walkthrough, we have the following conclusions:

1) The overall building appears to be in reasonably good condition and similar to other buildings of the same type and period of construction.
2) MEP units need to be replaced in the future (5 to 10 years) as per MEP professional recommendations. Structural anchorage and roof framing analysis/strengthening may be required for the new equipment support.
3) Support should be provided for the gas line that lacks proper support and bracing.
4) The two columns in the parking area that appear to be from a prior building renovation or retrofit should remain in place.
5) Rooftop drainage should be cleaned and verified at all locations to prevent ponding on the roof. Adequate roof slope and drainage should also be confirmed.

C. Mechanical Systems

1. Observations/Assessment

a. The building is served by a combination of (2) 5-ton rooftop heat pump, (1) outdoor hot water boiler, (1) air-cooled chiller, (1) indoor air handler and variable air volume (VAV) boxes.

The two (2) existing York rooftop heat pumps are approximately 16 years old, in fair to poor condition, and have exceeded their expected 15-year service life expectancy based on ASHRAE data. Both units do not have provisions for fresh air intakes nor economizers/power exhausts, which is a code violation. Condensate was found to be leaking from both unit cabinets, which is indicative that the drain pan is clogged or cracked.

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The existing hot water boilers are approximately 17 years old, in fair to poor condition, but have not exceeded expected 24-year service life expectancy based on ASHRAE data. The internal pump of boiler is running while outside is 100 °F, which indicates the control sequence of the boiler is incorrect. Heating hot water pump motor is 8-year-old and appears to be operable. Boiler pump motor appears to be operable but is close to the end of expected 20-year service life. Boiler pump name plate is not found but it is assumed to be roughly the same service age with boiler.

The existing air-cooled chiller is approximately 16 years old, in fair to poor condition, but has not exceeded expected 20-year service life expectancy based on ASHRAE data. Chiller pump appears to be operable but is close to the end of expected 20-year service life. Chiller pump name plate is not found but it is assumed to be roughly the same service age with chiller.

The existing indoor air handler is a built-up double duct air handler comprised of three (3) centrifugal fans; one (1) 50 HP motor; chilled water coils and duct furnaces for heating deck which was abandoned and capped off. The service life of existing indoor air handler is unsure because the manufacturer has been inactive. However, the service life of air handler is estimated to be more than 40 years based on as built drawing. The control system is determined to be in disrepair by visual inspection.

In the telephone/computer room Liebert unit thermostat was noticed but the air conditioning unit was found to be missing. All HVAC units are controlled by basic programmable thermostats located in the spaces served.

b. The existing air distribution system appears to be constructed of sheet metal ductwork with duct wrap insulation and various lengths of flexible ductwork. Air distribution devices are combination of perforated lay-in T-bar type diffuser in office space and surface mount grills in restrooms. It appears that the existing ductwork system is in need of cleaning as many air distribution devices show evidence of unfiltered air. The age of ductwork and insulation at downstream of vav box was found to be cleaner than those at upstream of vav box. Sheet metal ductwork systems have a 30-year service life expectancy and duct wrap insulation has a 24-year service life expectancy based on ASRAE data.

c. The building restrooms are served by ceiling mounted exhaust fan that does not appear to be functional. The fan appears to be controlled by a wall-mount time clock. Exhaust fan has 20-year service life expectancy based on ASHRAE data. The roof ventilator/gravity vents on roof were found to be abandoned and in some instances roofed over.

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d. Available capacity of HVAC units:

1) AH-1
   a) Manufacturer: DYNE
   b) Model: MG-370
   c) Serial Number: 3206
   d) Capacity: 100 Tons
   e) Age: Assumed to be original to the buildings, approximately 45 years.
   f) ASHRAE Equipment life expectancy: 18 to 25 years for built up air handler components.

2) CH-1
   a) Manufacturer: Carrier
   b) Model: 30RBA0706 - - - 0 - - - 3
   c) Serial Number: 2807083537
   d) Capacity: 66.2 Tons
   e) Age: 16 years
   f) ASHRAE Equipment life expectancy: 20 years

3) BLR-1
   a) Manufacturer: Raypak
   b) Model: H-1083A-CCCHCBC
   c) Serial Number: 0688103785
   d) Capacity: 1083 MBH
   e) Age: 17 year
   f) ASHRAE Equipment life expectancy: 24 years

4) RTU-1
   a) Manufacturer: York
   b) Model: B1HA060A46B
   c) Serial Number: (S) N0E7763650
   d) Capacity: 5 Tons
   e) Age: 16 years
   f) ASHRAE Equipment life expectancy: 15 years

5) RTU-2
   a) Manufacturer: York
   b) Model: B1HA060A46B
   c) Serial Number: (S) N0E7763653
   d) Capacity: 5 Tons
   e) Age: 16 years
   f) ASHRAE Equipment life expectancy: 15 years

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2. Findings/Recommendations

a. Immediate Needs

1) Refurbish Air Handler including but not limited to below:

a) New motors with variable frequency drives

b) Replace centrifugal Fans with fan wall system.

c) Chilled Water Coils

d) Remove hot deck and abandoned duct furnaces.

e) Outside air/Return air dampers, linkage and controls.

f) Air Filters

g) Clean and paint cabinet, replace insulation.

2) Replace all existing thermostats with San Bernardino County standard Energy Management System controls.

3) Provide new control sequence for boiler, chiller and air handler.

4) Service chiller.

5) Service Boiler.

6) Service chilled water and hot water pump.

7) The existing air distribution ductwork system should be professionally cleaned and sealed.

8) Replace all exhaust fan.

9) IT Room does not have independent cooling. A budget should be established for a cooling only system provided to IT room.

10) Repair leaking condensate in each roof mounted heat pump unit.

b. 5 - 10 Year Recommendations

1) The existing York units have exceeded their service life expectancy. Although the units appear to be operational, all will need to be replaced in the near future or upon equipment failure. Each new replacement unit will require a new roof curb, fresh air intake and economizer/power exhaust assembly for equipment 4 tons and higher in capacity. New filtered fresh air intakes should be added to the existing equipment to comply with code requirements and indoor air quality standards.

2) The vav box, diffusers, grilles, registers, ductwork, and duct wrap insulation should be replaced with future tenant improvements.

3) Replace chiller pumps, boiler pumps, boilers, chillers.

4) Replace boiler.

5) Replace chilled water and hot water pumps.

6) Replace ductwork with interior renovations or remodel work.

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D. Plumbing/Fire Protection Systems

1. Observations/Assessments

a. Plumbing/Fire Protection on First Floor

1) The water service enters the building on the south of the first floor in room 117. The domestic water system is constructed of copper piping and in good serviceable condition.
2) The building is served by natural gas and the gas meter assembly is located at the exterior southwest corner of the building. The gas meter yard is not accessible, but the meter sizing is considered to be sufficient by visual inspection. The gas piping system within the building appears to be black steel.
3) The building is fully fire sprinklered and the fire riser assembly is located at the exterior west side of the building. The fire riser assembly is in good condition.
4) The building waste and vent system appears to be constructed of cast iron no-hub pipe and fittings. The visible above grade piping is in good condition.
5) The main public toilet rooms are serviced by flush-valve type water closet and in good condition however they do not appear to be ADA compliant. See architectural section for more information on ADA requirements.
6) The private toilet rooms are served by flush-tank type water closet and in fair condition however they do not appear to be ADA compliant. See architectural section for more information on ADA requirements.
7) Four drinking fountains were noticed and are in good condition and appear to meet ADA requirements.
8) The existing janitor closet mop sink is in poor condition.
9) The existing water heater system is a 40-gallon A.O. Smith Ultra-Low Nox Atmospheric Vent Tall Natural Gas Water Heater. The water heater is in good serviceable condition. Abandoned water heater sits in the mechanical room and should be removed.
10) Kitchen sink with Insinkerator badger disposal is in fair serviceable condition.

b. Plumbing on Roof:

1) Condensate piping of two York heat pumps is not drained to plumbing vent or roof drain.
2) Gas Piping is hanging on the air and not properly supported on the roof.

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3) Combination of primary and secondary roof drains are in poor conditions. The drains were found to either be clogged, have damaged cover or missing covers.
4) Vent pipe coming from private restrooms are found to be constructed of plastic pipe.

2. Findings/Recommendations

a. Immediate Needs
1) Reroute condensate drain piping on roof to new approved roof receptors. Connections to HVAC equipment shall have proper traps, air vents and cleanouts.
2) Provide support to gas piping line on the roof so that piping is protected in seismic event.

b. 5 - 10 Year Recommendations
1) Replace mop sink in Janitor's closet with compliant model.
2) Replace all plumbing fixtures in public and private restrooms to comply with ADA and water efficiency requirements.
3) Replace faucets to comply with ADA and water efficiency requirements.
4) Rearrange sprinkler head with future tenant improvements.
5) Replace hose bibb.
6) Replace roof drains.

E. Electrical Systems

1. Observations/Assessments

a. Power:
1) Building has 800A,480/277V, 3 Phase, 4 Wire main electrical service located at first floor electrical room. Main service serves various electrical panels throughout building including elevators. According to the manufacturer, the age of the equipment when it was manufactured was between 1979-1981. The age of the existing original equipment is more than 42 years old. Based on the last renovation as-built plans and calculations, the building service has capacity to serve a modern facility or building. The existing peak demand load reached up to 231Amps. The existing switchboard has a capacity of 800Amps and was less than 30% loaded based on existing capacity.

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2) The SCE utility transformer found at the parking lot area has a capacity of 500KVA based on the nameplate. The primary service from the utility is 12KV and transformed to 480/277V, 3P, 4W. The transformer is installed on an existing 8'x10' transformer slab/box.

3) Branch circuits electrical panels are located on each floor to serve various tenant spaces. Original electrical equipment are located in main electrical room at the first floor and at the combination electrical/communication room at the second floor. There are also electrical panels found along the 2nd floor stair closet. There are newer panels that have been added in the building during the last renovation dated in 2001.

4) The lighting and HVAC loads are fed by a 480V system. An MCC is located at the mezzanine level of the second floor along the access to the roof. The MCC is rated at 600A, 3P, 3W which feeds the pumps and 112.5KVA step-down transformer is provided to serve general receptacles and miscellaneous loads. Refer to the Electrical sketch for the existing electrical equipment layout.

5) Existing main service board and panels are in working condition. Main service board has adequate spare load and physical capacity for future load addition. Most of original panels does not have any physical capacity to add loads. The equipment is in operating condition.

6) Building has power receptacles located in common spaces, in offices, restrooms, and in utility spaces. Mounting height of original receptacles are at 12" above finished floor to center of device plate, which is lower than current ADA mounting height requirement of 15" above finished floor to bottom of device plate.

b. Lighting

1) The existing lighting in the building consisted of fluorescent T-12 and T-8 lamps and electromagnetic ballasts and fluorescent down lights. Majority of the original light fixtures are 2x4 recessed fixtures with prismatic lens and T8 fluorescent lamps. The toilets, storage and utility rooms have surface mounted fluorescent light fixtures. Light fixtures in first floor parking and utility spaces are surface fluorescent fixtures with standard toggle switches and some are via time clocks. The light fixtures along the roof parapets are halogen spotlights lighting the parking area.

2) The lighting controls found at most spaces are wall mounted manual toggle switches. The switches are mounted at more than 48" above finish floor.

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3) The lighting system found in the building are mostly consisting of fluorescent T-8 lamp fixtures, with exception to the utility spaces, which still has T-12 fluorescent fixtures. It appears that the previous 2001 renovation has converted the T12 fluorescent fixtures to T-8 fluorescent fixtures. The original lighting not part of the renovation was kept as T12 fluorescent types. These T-12 fluorescent fixtures may still have a magnetic ballast that contains PCBs. The fluorescent T12 lamps have been discontinued from production and T-8 is slowly being phased out.
4) The emergency fixtures, along path of egress, found in the building appear to be provided with back-up battery packs within. Some fixtures were manually tested, and the battery were non-functional.
5) The exit lights are lit, and some were provided with bug-eye fixtures integral to the signage along path of egress. The exist lights are provided with integral battery packs. However, due to age, the battery packs may no longer be reliable or functional.
6) Some recessed fixtures' lens diffuser has shown discoloration due to age.
7) The illumination levels within the building appears adequate based on the room usage. The as-built also shown the locations of the emergency lighting fixtures with built-in battery backup and appears to be providing an acceptable coverage and illumination. Light readings were not performed during the site assessment.
8) Lighting fixtures in most of spaces does not comply with current Title 24 requirement due to wattage/ sf allocation per spaces.
9) The lighting controls in most of the spaces do not comply with current Title 24 requirement due to the non-existence of diming capability, automatic sensing devices, and photo sensing devices along the window areas.

c. Telecom/Data System

1) Voice/Data: The main telephone service is located in electrical room at first floor. Each tenant space has local data distribution system as required per each tenant space. First floor tent space has main data room located in tenant space to serve first floor. The main telephone service appears in good condition. First floor voice/data room and distribution system appears in good condition. Second floor and Third floor voice/data distribution system in poor condition.
2) Security:
    a) Main security panel is located in electrical room at second floor. Building has motion detector and door contacts at selected areas only. The keypad control is at the first-floor elevator lobby. The security system appears in poor condition but not adequate for building.

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d. Fire Alarm System

1) The building has Silent Knight 5104B manual fire alarm system. Main fire alarm panel is in combination electrical/communication room at second floor. There is no remote annunciator found at main entrance lobby at first floor. Manual pull stations are located at exit doors. However, it appears not to meet the proper coverage along the path of egress. Few audio devices are located only in common path of egress neat the pull stations. Smoke detectors are located only at the second level electrical/communication room where the fire alarm panel is located. There are no visual notification devices found in the building. There are no smoke detectors found at each elevator lobby for elevator re-call and addressable control modules in elevator room for elevator re-call. The fire alarm panel appears to be a newer system and does have a current California State Fire Marshal listing and recent battery testing last year. Although the system is still functional, the system does not provide adequate coverage per current ADA/NFPA requirement.

2. Findings/Recommendations

a. Immediate Needs - Power

1) The equipment lacking preventive maintenance may add to accelerated component failure. However, to save cost, for immediate action, the existing equipment may be kept if they are tested, thru thermal scanning, retorquing of lugs and bolts, and cleaning. The panels that were installed during the 2001 renovation may be kept. Due to the panels that have no physical spare capacity, it is also recommended to add another panel to provide for future growth.

2) The general receptacle outlet mounting heights shall be adjusted to meet the current ADA mounting height requirements (ADA 308.2 to 308.3.2). Provide additional receptacles as required per tenant improvement.

3) All the receptacle outlets at proximity to the sink, roof or at the parking garage shall be replaced with GFCI type. Add receptacle outlets on roof within 25’ of mechanical unit.

4) The existing circuiting may also need to be recircuited to ensure each multiple hot conductors ran in single conduit be provided with dedicated neutral.

5) The original feeders shall be megger tested to ensure that the conductor insulations are still intact. Otherwise, replace the feeder conductors when test results fail. Refer to the single line diagram for the equipment and feeder size information.

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6) There are HVAC equipment that may be recommended to be replaced immediately; remove and rewire feeders to the equipment together with replacing disconnect switches and replacing with VFD, variable frequency drives.

b. 5 - 10 Year Recommendation - Power

1) For the long-term plan, replace the existing original equipment installed in the early 80's due to age and reliability.

c. Immediate Needs - Lighting

1) The existing lighting system with fluorescent fixtures, although T-8 fluorescent lamps are considered energy efficient, are recommended to be replaced with LED fixtures with electronic drivers to meet current Title 24 requirements and better energy efficiency. The T-8 fluorescent lamps will be phased out. The fixtures' drivers and control shall be dimmable type with automatic occupancy sensors and daylight sensors where required. Emergency fixtures with integral 90-minute battery packs shall be provided along path of egress.
2) The emergency bug-eye lighting needs to be replaced with new LED type to obtain uniformity, new back up batteries and equal life expectancy.
3) The existing exit signage shall be all replaced with lit type with battery backup batteries to obtain uniformity and equal life expectancy (CBC section 1013.3).
4) The mounting heights of the lighting controls shall be within the parameters of the current ADA mounting heights requirements. No higher than 48" above finished floor to top of the device plate and no lower than 15" to bottom of device plate (ABA 308.2 to 308.3.2).
5) The exterior lighting shall be replaced with LED type and photocell controls.
6) The lighting circuits shall be rewired to provide dedicated neutral per hot circuit if shared within single conduit.
7) Provide lighting controls compatible with the fixture LED and drivers. Controls shall be with automatic sensors, dimming, with manual override. There are options to provide wired or wireless control devices. Provide photo light sensors indoors where there are windows to accommodate the zoning requirement per title 24.

d. 5 - 10 Year Recommendations - Lighting

1) No long term recommendations. Lighting should be replaced with immediate needs.

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e. Immediate Needs - Fire Alarm

1) The fire alarm system is recommended to be replaced with a newer addressable type and model. The minimum required system is a manual system with supplemental automatic detecting devices to meet the Fire Marshall requirements. All the devices are old and need to be replaced with new to comply with the current code. It is recommended to separate the intrusion/burglar alarm from the fire panel. Provide new wires and circuits shall be in conduits. It is recommended to have one main panel in the building which is to be in the electrical room. All building floors shall be supplied with remote power supplies serving the notification devices.

2) There shall be proper coverage for both initiating and notification devices. Supplemental smoke detectors shall be provided at utility rooms, elevator machine rooms, elevator lobbies, and storage rooms. Duct detectors shall be provided at supply ducts with more than 2000CFM. Replace tamper switches and flow switch with new to match new fire alarm panel. Provide manual pull stations at exit doors and at locations within 100 feet of path of egress corridors.

3) Provide visual/strobe devices at common public areas to comply with ADA requirements. Public areas can be along the corridors, restrooms, lobbies, and the like. Along with the visual notification, shall also be provided with horn devices.

f. 5 - 10 Year Recommendations - Fire Alarm

1) No long term recommendations. Fire alarm should be replaced with immediate needs.

g. Immediate Needs - Telecom/Data System

1) Voice/Data:

a) It is recommended to provide new voice/data system at all floors per new Owner requirement. Keep existing voice/data system at second floor until new system is in place. Keep the location of the main service backbone entrance. Replace the existing telecommunication backboard with new with fire treated listing. Horizontal cabling including the ports shall be replaced with newer CAT6A type cables to replace the antiquated Cat5e cable ratings. CAT6A can provide better bandwidth capacity than the old CAT4E cables. The telephone VOIP (voice over internet protocol) system shall be provided per new Owner requirements. The system shall have the single backbone and horizontal cable solutions including wiring management to gain better uniformity and single warranty.

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2) Security System

a) It is recommended to replace the security system with new and independent from other systems. The security panel can be of the same manufacturer as the fire alarm system to keep a single monitoring company. The peripheral devices shall also be replaced with new such as motion sensors, CCTV cameras, and door contact switches.

3) A/V:

a) It is recommended to provide new A/V system in conference rooms and training rooms as required per new tenant.

b) Provide Assistive Listening Devices on conference rooms.

h. Telecom/Data System - 5 to 10 Year Recommendations

1) Paging/Public Address:

a) It is recommended to provide new paging system throughout the building per new tenant requirement.

2) Clock:

a) The clock system is all battery type; however, it is recommended to have wireless atomic clocks in the campus such that all clocks will be synchronized and uniform at each room where they are required by the new Owner.

F. Civil/Site Systems

1. Observations/Assessments

Site Location: The site is located east of the I-215 freeway at the intersection of West 5th Street and North Arrowhead Ave. The reference site coordinates are 34°06'29"N and 117°17'24"W. The site can be accessed from public access points or existing drives at W. 5th Street or N. Arrowhead Ave. See Appendix H – Exhibit Civil #1.

a. Existing Building Access: The building is accessible from doors located on the North, East and West sides of the building. The pedestrian main access door is located on the W. 5th Street, northeast side of the building adjacent to the public sidewalk with access to the lobby area, and a secondary entrance to the lobby area is at the N. Arrowhead Ave, east side of the building. On the northwest side of the building the pedestrian access is through the parking lot where a designated path of travel connects the public sidewalk, parking lot and building entrance on the west side of the building. Inside the first-floor parking lot there are two roll up garage doors next to each other and a pedestrian access door with access to the building elevator, and further east, there is a pedestrian access door that has stairs with two steps from the sidewalk to the door level. A temporary prefab metal ramp is installed at this access door from the asphalt level to the door level.

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b. East Building Access: On the East side of the building, adjacent to N. Arrowhead Ave, there is a driveway with access to the first-floor parking lot which is at ground level and under the building. The building perimeter was fenced before 2007, and the fence is welded and constructed with footings and the driveway entrance is totally blocked. To use the east driveway, it will be necessary to remove the entire fence and footings. The trench drain along the driveway is completed clogged and needs maintenance. It appears the trench drain discharges to a curb drain on the south side of the driveway. The driveway approach is obsolete and does not meet the current ADA accessibility code or the City of San Bernardino standard detail 203 – Driveway Approach.

The public access on the east side of the building is locked with an iron gate at the access to the lobby glass door. At the public sidewalk adjacent to the first gate the concrete pavement slopes from 6% to 7,6% in the running direction exceeding the 1:20 required per California Building Code 11B-403.3 however, this access is not assigned to be an ADA path of travel. From the iron gate to the lobby glass door the pavement is relatively flat.

There are damaged curb sections and red painted curb indicating no parking along the public right of the way. There is a bus stop on the sidewalk in front of the building with a metal bench, trash can and bus stop sign.

The landscape area next to the driveway approach contains water valves, that apparently are used for irrigation lines, and is missing a backflow preventer. Further investigation is necessary to identify the location of service utility lines and further underground utility investigation.

c. North Building Access: The north building access is from the public sidewalk along W. 5th Street to the main lobby glass door. The landing in front of the door is 5,3% slope exceeding the 2,08% maximum per CBC 11B-405.7 – Landings, and the lower landing is on the public sidewalk. To designate the lobby main access door as an ADA accessible path of travel, a ramp with handrails and landing shall be constructed following the CBC 11B-405 – Ramps. See Appendix H – Exhibit Civil #2.

d. West Building Access: The west building access is from the existing parking lot, which is accessible from the W. 5th Street driveway. From the parking lot to the building door there is an iron fence and a pedestrian gate which is blocked when the parking lot sliding gate is open, causing an extreme hazardous condition. The pedestrian swing gate does not comply with the CBC 11B-404 Doors, Doorways, and Gates. The pavement in front of the pedestrian gate is painted indicating a path of travel up to the ADA designated parking stalls and public

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sidewalk. From the iron gate to the building door the pavement is under the 2,08% slope per the CBC 11B-402 – Accessible Routes and 11B-403 – Walking Surfaces. The landing at the pedestrian gate transitions from concrete pavement and asphalt pavement with irregular slopes and cracked concrete pavement and does not comply with the CBC 11B-302 - Floor or Ground Surfaces. There is a small landscape area with overgrow plants overgrowing the sidewalk area that needs maintenance. There is no intercom or doorbell system from outside of the building.

e. Exterior West Parking Lot: On the west side of the building there is a parking lot with asphalt pavement and parking stalls with pavement markings, ADA parking markings, ADA parking sign per the CBC 11B-502.6 - Identification, large trees within the landscape islands with curb, CMU perimeter wall and a trash enclosure area. The parking lot is accessible from W. 5th Street through an obsolete and damaged driveway approach which does not meet the current ADA accessibility code or the City of San Bernardino standard detail 203 – Driveway Approach. The west side and the rear side of the parking lot is surrounded by CMU wall approximately 5 feet tall and the frontage adjacent to the W. 5th Street is secured by an iron fence approximately 6 feet tall and does not have a gate to be closed after business hours. The asphalt seal coating to cover the cracks and the pavement is past its life cycle and needs to be reconstruct full depth with new base and new asphalt layer. Further testing may be required to confirm this. Trash collector trucks use the parking lot to access the trash enclosure areas and the new pavement shall designed support large vehicle loads. On the south side of the parking lot there is a pedestrian gate with access to a public parking lot. The public parking lot is about 2 feet lower in elevation than the site parking lot.

   The two designated ADA parking stalls are in the middle of the parking lot and the users need to cross the parking lot to access the building which is not recommend. There are no truncated domes along the path of travel crossing the parking lot per CBC 11B-247 - Detectable Warnings and Detectable Directional Texture and the asphalt pavement slopes varies from 1,5% to 2,6% slope exceeding the maximum 2,08% slope per the CBC 11B-403.

   On the rear side of the building there is a gas meter inside the trash enclosure, or the trash bin is temporary located in the enclosure for the gas meter area. The surface pavement is concrete with less than 2,08% slope per CBC 11B-403 – Walking Surfaces, however, the gate does not comply with CBC 11B-404 – Doors, Doorways and Gates. There is a chain link fence at the trash enclosure and the roof does not allow the trash bin to be fully open.

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There is a second trash enclosure in the parking lot and adjacent to the building. This trash enclosure does not have roof and it was constructed with CMU wall and security iron fence over the wall with double swing gate. The pavement inside the enclosure area is concrete and outside of the door landing is asphalt pavement with slopes from 2% to 2.25% exceeding the maximum 2,08% per CBC 11B-403.

f. Interior Parking Lot at Building First Floor: The building ground level is mainly occupied by a parking lot with access to the front lobby area and four other access points to the rear side of the building. The surface pavement is asphalt and concrete curb islands to protect the building columns. There are concrete wheel stops for each parking stall and the parking stall pavement is painted with white stripes.. The asphalt layer is deteriorating and needs to be replaced however, the base or subgrade structure does not seem to be compromised and a grind and overlay with new asphalt layer would be the most beneficial approach. Since the parking lot is all covered by the building there does not appear to be an adequate storm drain system for eventual storm water runoff. There are building stormdrain downspouts in the building columns connected to an underground stormdrain system which we assume, discharges to the curb drain on N. Arrowhead Ave. The parking lot drainage sheet flows from west to east with the surface slopes between 1% and 3%. The runoff is intercepted by a clogged trench drain on the driveway along the N. Arrowhead Ave and eventually discharged to the street. There are not any apparent signs of a storm water mitigation system on this site.

There are two designated ADA parking stalls on the east side of the parking lot with missing identification signage per CBC 11B-502.3.3 and missing a curb ramp per CBC 11B-502.3. Currently the user will need to run behind a parking stall, and it is not recommended. The pavement surface is relative flat and under the 2,08% slope.

On the northeast side of the parking lot there is an electrical/ switchgear room and a maintenance room with grade difference over 1-1/2 inches from the interior finish floor to the asphalt pavement and does not comply with 11B-303.2.

g. Adjacent Dirt Lot: On the west side of the existing exterior parking lot there is a vacated dirt lot that is part of this property. The lot is 84.58 feet wide by 134.50 feet deep and is missing about thirty-four feet of CMU wall on the rear end. The west CMU wall is adjacent to the exterior parking lot and the east CMU wall is adjacent to a restaurant parking lot. There is approximately twenty feet of the wall adjacent to the restaurant parking lot that is damaged and tilted and will need to be reconstructed.

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The access to the lot is from W. 5th Street with two nonstandard driveway approach that do not follow the City of San Bernardino Standard detail 203 – Driveway Approach. The entire site frontage the curb is red painted as no parking and sections of the sidewalk are damaged or broken causing a trip hazard for pedestrians.

California Building Code references: The California Building Code Chapter (CBC) Section 11B – Accessibility to Public Buildings, Public Accommodations, Commercial Buildings and Public Housing is the guideline for this site assessment and the CBC item 11B-202.1 - General, describes the projects that shall comply with the current code, and it reads: Additions and alterations to existing buildings or facilities shall comply with Section 11B-202.

1. *Per the California Building Code section 202 – Definitions, the word alteration is defined as: Any construction or renovation to an existing structure other than repair or addition. [DSA-AC] A change, addition or modification in construction, change in occupancy or use, or structural repair to an existing* building *or facility. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.*
2. *It is important to note that the accessibility improvements will be the owner's decision and not a requirement by the CBC code. However, any alteration on the site will trigger the accessibility renovation to the primary accessible path of travel or the affected area. Recommendations and minimum quantities to improve site accessibility are provided in this report and shown in Appendix H – Exhibit Civil #3.*

2. Findings/Recommendations

The following recommendations are based on the minimum construction or reconstruction items to improve building access from the public sidewalk to the access doors and from the private parking lot to the access doors for ADA accessibility. Please note, these recommendations are done without the benefit of a Geotechnical Investigation for grading and pavement recommendation and we would highly recommend that an investigation be conducted prior to beginning any design efforts or preparation of construction documents.

a. The Main Pedestrian Access: Located on the building north side and adjacent to the public right of way, as shown on Appendix H - Exhibit Civil #2. The following are the recommending items for repair: (Note: All dimensions and quantities are approximate only)

1) Removal of concrete pavement162 s.f.
2) Removal of landscape (10 feet x 6 feet)

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3) Removal of decorative iron fence and planter curb (20 feet)
4) Removal of flag pole and its footing.
5) New ADA ramp with handrails on both sides (8 ft long x 5ft wide) and 6ft x 6ft landing on top and bottom of the ramp.
6) New concrete pavement (130 s.f.)
7) Signage for ADA path of travel
8) New swing double door threshold

b. The Building First-Floor: The majority is an asphalt pavement parking lot with concrete curb islands. The old and deteriorated asphalt pavement shall be removed and reconstructed as described below: (Note: All dimensions and quantities are approximate only)
1) Grind 2 inches of existing asphalt pavement (16,500 s.f.)
2) New 2 inches of asphalt pavement (16,500 s.f.)
3) New concrete wheel stops (38 units)
4) New parking lot striping for 38 parking spaces
5) New curb ramp type 1 per SPPWC.
6) Signage for ADA path of travel

c. The Exterior West Parking Lot: Adjacent to the building having sheet flow storm drainage runoff towards 5th Street with the majority under 2% slope. There are irregular crossing slopes exceeding 2% maximum allowed for accessibility. To make this area ADA compliant, we are proposing paving reconstruction , as shown on Appendix H - Exhibit Civil #3 per the items described below. (Note: All dimensions and quantities are approximate only)
1) Removal of existing asphalt pavement full depth (150 feet x 111,5 feet)
2) Construction of asphalt pavement full depth (150 feet x 111,5 feet)
3) New gates for the two trash enclosure areas
4) New truncated domes (150 feet x 3 feet)
5) New ADA diagonal parking lot stripping for 150 feet x 4 feet
6) New parking lot ADA sign with post and footing
7) Remove existing pedestrian gate and iron fence (20 feet long)
8) Remove existing sliding vehicular gate, rail, and footings (30 feet long)

d. The West Dirt Lot Parking Lot: Bounded by a free-standing CMU wall with damaged spots, apparently by vehicles bumping the wall from the adjacent parking lot. Initial thoughts from SB County is to convert the empty lot to a parking lot and below are the considerations for a new parking lot construction:
1) Remove existing mulch, landscape and grub the area (140 feet x 85 feet)
2) New grading and subgrade preparation (140 feet x 85 feet)
3) New 3 inches asphalt pavement over 6 inches base (130 feet x 85 feet)

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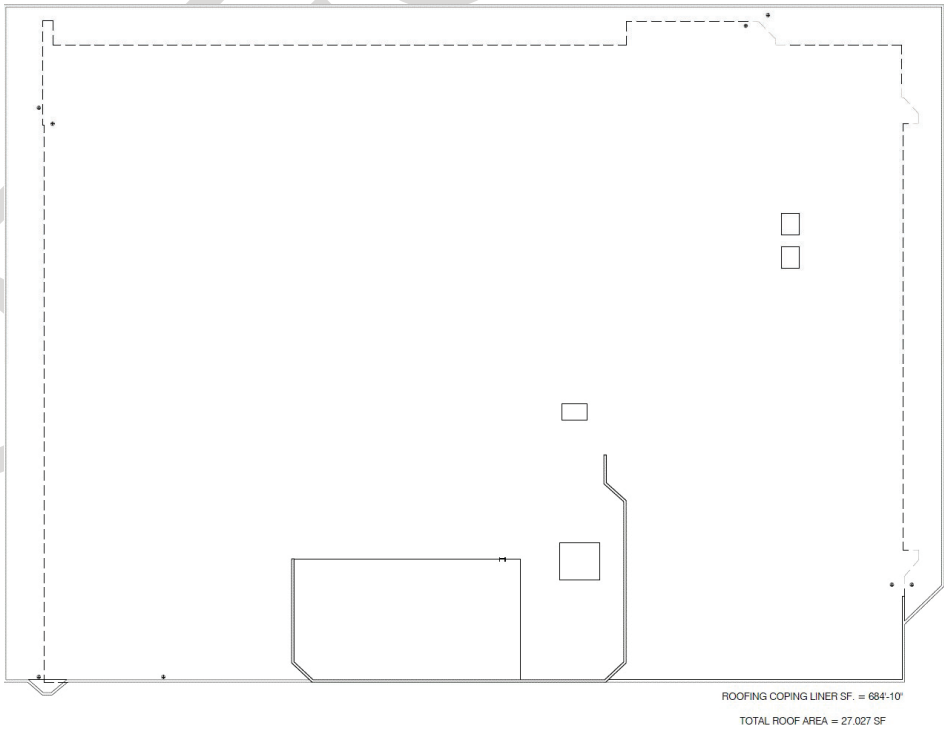
4) New parking lot striping
5) Landscape area with infiltration basin and irrigation system (10 feet x 85ft)
6) Removal of CMU wall (5 feet high) to combine the two parking lots (150 feet)
7) Removal and reconstruction of damaged CMU wall (20 feet long x 5 feet high)
8) Construction of new CMU wall at the rear side of the lot (5 feet high x 34 feet)
9) 35 wheel-stops
10) Removal and reconstruction of two new driveways on 5th Street.

G. Architectural

1. Observations/Assessment

a. Roof

1) This report is limited to non-invasive visual assessments. If further investigation is required, it might necessitate invasive destructive investigation and selected demolition.
2) The roof comprises 27,027 s.f. and 684.9 linear feet of galvanized metal coping.



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3) A visual inspection was conducted in the morning of August 23, 2023. The weather was clear, warm and calm.

2. Roof Inspection Findings:

a. Access to the roof is through a mechanical area with uneven floor surface and then up a short ships ladder.

b. The vast majority of the roof surface is uneven, rippled with slack, bubbled, and squishy. The roof surface has good positive slope except near the drains where it flattens.

c. The roof trusses appear to be telegraphing ridges on the roof surface.

d. Several patched areas were left with scraps of patching materials and dried buckets of tar still sitting on the roof surface.

e. The flashings have been haphazardly patched with black tar.

f. The coping is rusty, but in general, in fair condition. A few seams have been patched with black tar. Electrical conduit is attached to the metal coping inside and top surface.

g. Roof drains are in place, but stains on the roof surface indicate prior drain blockage. Overflow drains drop through the overhang so that rain overflow drops 2 stories to the sidewalk below.

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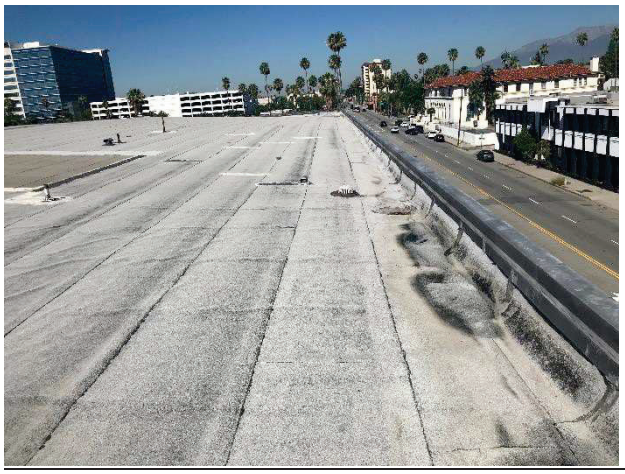


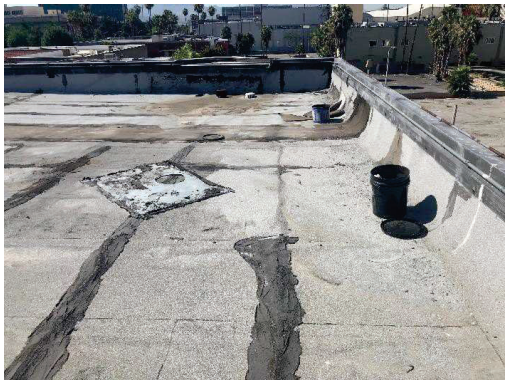
3. Expectations and Recommendations

   a. Roofs require safe access, so the path of travel to the roof access through the mechanical space requires some modification to allow clear and even walking space. The concrete housekeeping pads cannot be removed unless the equipment is removed from those pads, so a floor level “catwalk” can be constructed over the changes in floor level.

ADOPTED

b. The entire roof requires a full tear-off replacement down to the metal deck. The metal deck should be inspected, because it appears that it may be undersized. If the deck weakness is causing the truss telegraphing, the deck can be reinforced with on overlay deck of material appropriate to the fire resistance rating desired.

c. The “squishy” condition is either deteriorated foam insulation or an insufficient product selected for roof insulation in the first place. All insulation should be replaced with 2” minimum of rigid foam (polyisocyanurate is the usual choice) with a ½ inch of cementitious cover board.



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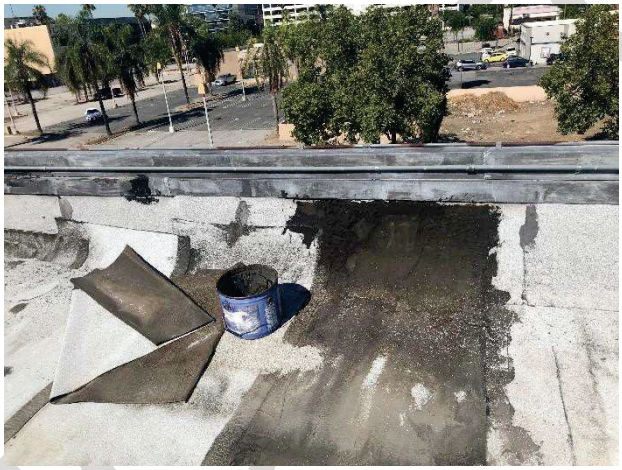
d. A roof of this size for important government functions should use a single-ply membrane roofing, such as TPO or PVC. The thickness should be based on the desired warranty. Typically, government functions request a 20-50 year warranty. A 60 mil thickness is recommended, including replacing all flashings with similar material. The white surface of 2-color membrane should face up to obtain the greatest solar reflectivity, which will help reduce heat gain in the building.


Coping should be removed and single-ply membrane flashing run over the top of the parapets with new coping place over that flashing.




NOT FOR

Some roof drain leakage was noted in the interior of the offices. Roof drain piping should be fully inspected. The existing piping appears to be cast iron, which may be replaced with PVC piping where rusted or damaged piping is recommended to be replaced anyway.

NOT FOR BID

Envelope Assessment

This report is limited to non-invasive visual assessments. If further investigation is required, it might necessitate invasive destructive investigation and selected demolition.

Glazing

The primary joints at 303 W. 5th Street are adjacent to the glazing. All of the glazing joints, frames, seals, and glass were inspected on both exterior and interior. The glazing is ¼ inch thick tempered safety glazing with a manually applied film tint. The stamped glazing specification indicates it meets both ANSI-Z 97.1 – 2015 Class A and CPSC 16 CFR 1201 Category II Standards. This standard requires the glazing can resist the impact of 400 lbs-force, a 100 lb bag dropped from 48 inch height, and indicates the installation of the glazing meets the sill height and glass area requirements in this use.

NOT FOR

Standard/Regulatio		Safety Glazing Standards: CPSC 16 CFR 1201 and ANSI 97.1-2015 Applicable to Exposed Surface Area of one side of the lite
16 CRF CPSC 1201	Category I 150 lb. - force (100 lb. bag dropped from 18 in. height)	Less or equal to 9FT2 - Storm or Combination doors - Doors -Glazed panels regulated by IBC section 2406.4.2: Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge of the glazing is within a 24 in. arc or either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 in. above the walking surface shall be considered hazardous location (not applicable to lites greater than 9 ft2).
	Category II 400 lb. - force (100 lb. bag dropped from 48 in. height)	Greater than 9FT2 - Doors, storm doors, sliding into patio doors indoor glazing - Sliding patio doors (9 ft. or less) - Doors and enclosures regulated by section 2406.4.5 (9ft. or less) - Glazing in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers, and infoor our outdoor swimming pools where the bottom of the exposed edge of the glazing is less than 60 in. measured vertically above any standing or walking surface shall be considered hazardous location. This shall apply to single glazing and all panes in multiple glazing.
ANSI Z97.1-2015	Class B 150 lb. - force (100 lb. bag dropped from 18 in. height)	Less or equal to 9FT2 - Glazed panel regulated by section 2406.4.2* * From the International Building Code (IBC) chapter 24 "Glass and Glazing" section "2406" Safety Glazing".
	Class A 400 Lb. - Force (100 lb. bag dropped from 48 in. height)	Less or equal to 9FT2 - Doors and enclosures regulated by section 2406.5 Greater than 9FT2 - Glazed panels regulated by IBC section 2406.4.2* - Glazed panels regulated by IBC section 2406.4.3* Glazing in an individual fixed or operable panel that meets all of the following shall be considered hazardous location 1) Exposed area or an individual pane is greater than 9FT2 2) Bottom edge of the glazing is less than 18 in. above the floor 3) The top edge of the glazing is greater than 36 in. above the floor 4) One or more walking surface(s) are within 36 in. measured horizontally and in a straight line of the plane of the glazing. -Glazed panels regulated by IBC section 2406.4.5

Specific conditions of concern are noted below.

General - The film tint application was poorly applied and includes peeling edges that were not properly adhered, bubbling and rippling, scratched areas, and poorly trimmed edges. Recommend removing existing film tint and reapplying new film tint.

Room 163 - Deteriorated weather seal. Signs of moisture penetration and/or condensation residue. Recommend replacing seal.

Room 141 - Deteriorated weather seal. Recommend replacing seal.

Room 140 - Deteriorated weather seal. Recommend replacing seal.

<u>Storefront Doors</u>
Both sets of aluminum storefront double doors in the ground floor lobby were lacking weather stripping all around and in the center where the two door leaves meet. Dirt and debris blown in were evident on the lobby floor near the doors. Recommend adding full weather stripping to all exterior doors.

<u>Stucco Joints</u>
Staining on the stucco tells the story of moisture seeping between stucco joints. Mild weather will prevent any significant damage, but all joints should be maintained. Recommend caulking stucco joints and cleaning stains from stucco.

NOT FOR

Accessibility Assessment

For access path of travel from the parking area to the building, refer to the Civil/Site Assessment. For elevators, refer to the Elevator Assessment.

This report is limited to non-invasive visual assessments. If further investigation is required, it might necessitate invasive destructive investigation and selected demolition.

Introduction
The existing conditions pertaining to accessibility focused on access into and through the building's primary paths of travel to necessary functions. Original construction plans specifying door hardware, mounting and work surface heights, reach ranges, stair construction and controls features were not available for inspection. Analysis and assessment is based on physical measurement and observation.

Thresholds
All door entrance thresholds are compliant with current accessibility requirements.

Ramps/Sloped Walkways
A single sloped corridor exists on the ground level on the south side of the building connecting a required egress stairway to a required exit access to the exterior. The slope is 4.166 percent which is below the maximum of 5 percent.

Stairs
Both sets of stairs between the ground and upper floor are compliant with riser heights and tread depth, handrail heights and extensions, guardrail heights, clear width, and required nosing materials. The main stair on the north side of the building between the public lobby and the existing service window is lacking a handrail at the bottom on the north side of the stair.

NOT FOR BID

Casework

Only a few rooms contain existing casework. All countertop worksurfaces are compliant with current accessibility requirements assuming applicability of side approach use. Reach range for upper cabinets exceeded the maximum allowable. Mailroom cubbies offer some slots withing allowable reach ranges.

Restrooms

The only restrooms available are on the 2nd floor. The restrooms have several non-compliant conditions.

Men's Group Restroom – Center of water closet in ADA stall is too far from the side wall (23 inches); ADA stall door does not have sufficient clearance area outside the stall; no inner vestibule door exists (removed from frame), but the vestibules are too small for two doors in sequence anyway; The urinal is above accessible height range; Mirrors are mounted too high (including shelf); Door to corridor required more than 5 lbs pressure to open (the door catches on the closer arm); lockers in the vestibule offer accessible reach range.

Women's Group Restroom - Center of water closet in ADA stall is too far from the side wall (23 inches); Mirrors are mounted too high (including shelf); ADA stall door does not have sufficient clearance area outside the stall; doors in the vestibule are too close together to both swing into the vestibule; both doors require more than 10 lbs pressure to open (the corridor door catches on the closer arm); lockers in the vestibule offer accessible reach range.

Single Occupant Restroom within Room 115 – Non-compliant grab bar placement; Center of water closet in ADA stall is too close to the side wall (17.5 inches); Mirror is mounted too high; Door required more than 5 lbs pressure to open.

Single Occupant Restroom within Room 155 – Non-compliant grab bar placement; Water closet seat height is too low (16 inches); Mirror is mounted too high; Door required more than 5 lbs pressure to open.

Women Single Occupant Restroom 161 – Room is labeled "not accessible", but grab bars are provided and ample space exists inside for clearance of ADA single use restroom; Non-compliant grab bar placement; Mirror is mounted too high; Door required more than 5 lbs pressure to open.

Men Single Occupant Restroom 162 – Room is labeled "not accessible", but grab bars are provided and ample space exists inside for clearance of ADA single use restroom; Non-compliant grab bar size and placement; Mirror is mounted too high; Door required more than 5 lbs pressure to open.

Women Single Occupant Restroom 164 – Room is labeled "not accessible", but grab bars are provided and ample space exists inside for clearance of ADA single use restroom; Non-compliant grab bar placement; Mirror is mounted too high; Water closet is too far from side wall (19 inches); Door required more than 5 lbs pressure to open.

Men Single Occupant Restroom 165 – Room is labeled "not accessible", but grab bars are provided and ample space exists inside for clearance of ADA single use restroom; Non-compliant grab bar size and placement; Mirror is mounted too high; Door required more than 5 lbs pressure to open.

Single Occupant Restroom 101A – Partition is awkward. This must be a single occupant restroom, but the partition suggests multiple occupants. The room has no room sign indicating restroom; Water closet seat too close to side wall (17.5 inches); Water closet seat is too high (19 inches); Mirror is mounted too high; Door required more than 5 lbs pressure to open.

NOT FOR BID

Restroom Recommendations:

Renovate all restrooms replacing fixtures and partitions, doors and door hardware, and plumbing accessories.

Drinking Fountains
All existing drinking fountains are compliant.

Signage
Most office room signs do not include room names and only feature the room number. However, all signs include braille and are mounted within the acceptable height. Some rooms are not signed. Exit signs are missing. Many signs have paint on them when walls around the signs were repainted. Recommend replacing signs appropriate to the new use.

Fire Extinguishers/Cabinets
Fire extinguishers and semi-recessed cabinets are mounted at the compliant height, but all require the user to break glass to access the fire extinguisher exposing them to potential injury. Recommend replacing cabinets with models using doors.

Fire and Life Safety Assessment

This report is limited to non-invasive visual assessments. If further investigation is required, it might necessitate invasive destructive investigation and selected demolition.

Fire Alarm and Fire Sprinkler systems are not included in this assessment.

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The building 2nd floor area is approximately 23,540 s.f. As a Group B occupancy, the current California Building Code allows 150 square feet of gross building area per occupant. For the purpose of this assessment only, the 2nd floor office accommodates 157 occupants. The building is fully sprinklered and appears to be Type I construction.

2022 CBC Table 1017.2 allows B-Group occupancies 300 feet of exit access travel distance. No location in the building has an exit access travel distance greater than the maximum. The longest distance appears to be 261.6 feet (Room 142 to the north exit).

Egress corridor width, stair width and egress exit width are all greater than the minimum allowed for the occupant load (23.7 inches minimum calculated < 44 inches minimum).

Fire extinguishers are distributed throughout the 2nd floor within the 50 feet maximum travel distance to any occupant. The fire extinguishers have been maintained and received their most recent inspection on 4/21/2023 by Champion Fire Systems, Inc. out of Rancho Cucamonga.

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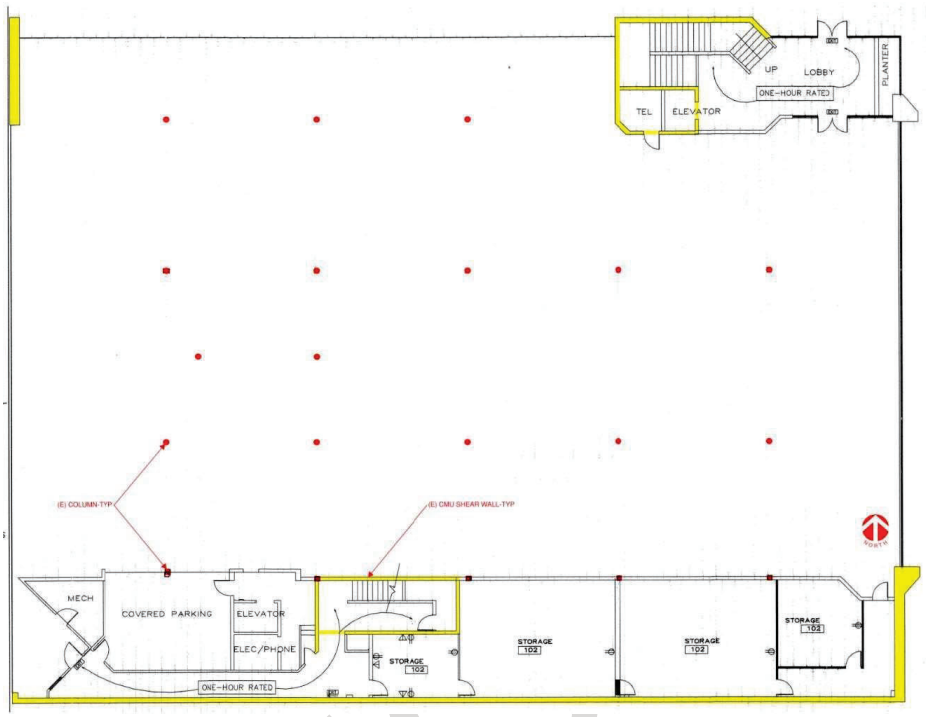

Photo S1 - CMU shear wall and column layout plan

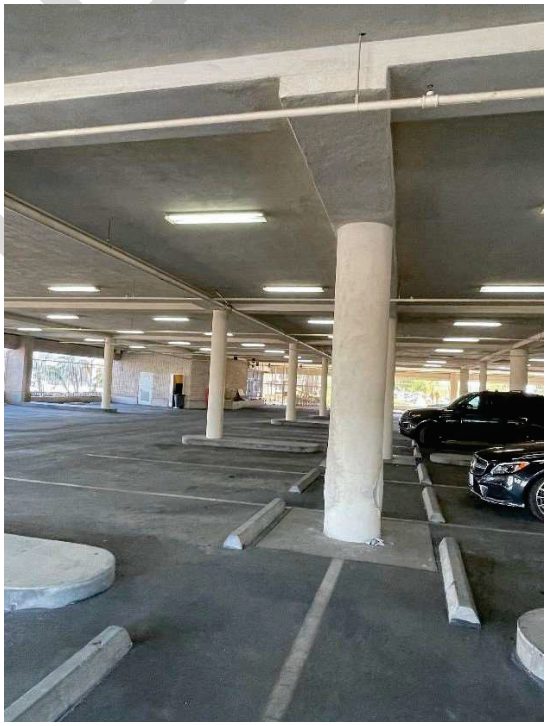

Photo S2 – View of two columns added in previous retrofit

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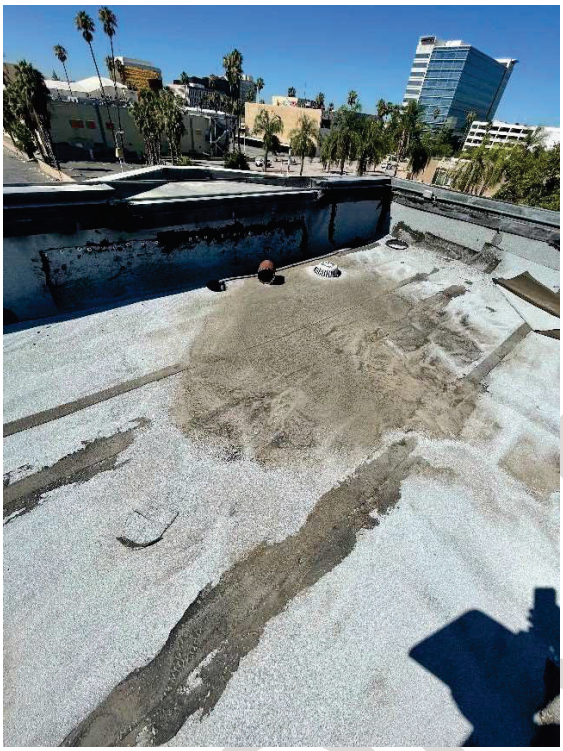

Photo S3 – View of ponding on corners of roof

Photo S4 - View of main gas line with no seismic bracing support

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COUNTY PROPERTY ASSESSMENT - 303 W. 5TH STREET - Seismic Risk Anal

Company Name: San Bernadino County
Building Name: 303 W. 5th Street
Street Address: 303 W. 5th Street
San Bernadino, CA, USA 92401

Date: September 19, 2023
Job Number: 23005335.00
Engineer: Craig Chamberlain, S.E.
PE Number/State: CA SE 4588

INFORMATION SOURCES

SiteVisit: Craig Chamberlain, Raymond Wang_Gerardo Carranza
Date: August 29, 2023
Interviewed: n/a
Docs Reviewed: Documents of the existing building were not avaialble for our review.

BUILDING DESCRIPTION

Building Classification: RM2(5AA) - Reinforced Masonry Bearing Walls w/ Stiff Diaphragms
Occupancy: Office
Latitude/Longitude: 34.1080 -117.2900
Region: USA: California
Region Version: 3.20
Evaluation Lifetime (yrs): 50
Uniform Building Code Design Edition: 1976
Year Constructed: 1980
Year Retrofitted: n/a
Building Height (ft): 31
Fundamental Period (s): 0.300000
Area (sf): 46,000
Replacement Cost ($):
Plan Dimensions: 177ft x 131ft
Exterior North-South Walls: Reinforced CMU and metal stud
Exterior East-West Walls: Reinforced CMU and metal stud
Roof Deck/Framing: Roof is metal deck spanning between steel beams.
Intermediate Floors/Framing: 2nd floor appears to be a concrete flat slab.
Ground Floors: slab on grade
Columns: Concrete columns
Foundation: Presumed to be spread foundations.
Basement Levels: None.
Parking Structure: Ground floor parking exists on 2/3 to 3/4 of the ground floor area.

LATERAL FORCE RESISTING SYSTEM

Floors/Roof: Roof is a flexible, metal deck diaphragm. The 2nd floor appears to be a concrete flat slab.
Walls/Braces: The building lateral system appears to be a reinforced CMU wall LFRS.

BUSINESS INTERRUPTION

Max. Loss With No BI:
Min. Loss At Abandonment:
BI Months At Abandonment:
BI Revenue Loss Rate($/Month):

NOT FOR BID

Company Name:	San Bernadino County	**Date:**	September 19, 2023
Building Name:	303 W. 5th Street	**Job Number:**	23005335.00
Street Address:	303 W. 5th Street San Bernadino, CA, USA 92401	**Engineer:**	Craig Chamberlain, S.E.
		PE Number/State:	CA SE 4588

GEOTECHNICAL DESCRIPTION

Provider: none provided.
Date:
UBC Soil Class: Unknown [Assuming - D]
Liquefaction Resilience: Moderate
Liquefaction Susceptibility: High
Depth to Water Table (ft): Unknown [Assuming - 15]
Landslide Susceptibility: Very Low

Topography:
Soil Conditions:

COMMENTS

Comments: Office area of the building is only 26,000sf. The remaining total building square feet is enclosed ground floor parking.

NOT FOR BID

Company Name: San Bernadino County
Building Name: 303 W. 5th Street
Street Address: 303 W. 5th Street
San Bernadino, CA, USA 92401

Date: September 19, 2023
Job Number: 23005335.00
Engineer: Craig Chamberlain, S.E.
PE Number/State: CA SE 4588

MODIFIED FEMA-310 WORKSHEET

RM2(5AA)Reinforced Masonry Bearing Walls w/ Stiff Diaphragms

Category	Range	Typical	Modifier
GENERAL BUILDING FEATURES			
Complete load path	T, F	T	T
Interior mezzanines adequately braced	N/A, T, F	T	T
No strength irregularity	T, F	T	T
No soft story	T, F	T	T
No geometrical irregularities	T, F	T	T
No mass irregularity	T, F	T	T
No vertical discontinuities	T, F	T	T
Only minor torsion	T, F	T	F
Deflection compatibility	T, F	F	T
LATERAL FORCE RESISTING SYSTEM			
Redundancy	T, F, 0-10	0	1
Shear stress check of shear walls	T, F, 0-15	5	T
Reinforcing steel	T, F, 0-5	2	2
Adequate reinforcing at openings	N/A, T, F, 0-5	2	2
Stable wall proportions	T, F, 0-5	2	2
CONNECTIONS			
Adequate wall anchorage	T, F, 0-10	5	5
Walls doweled into foundation	T, F, 0-10	0	0
Adequate girder to column/wall connection	T, F, 0-15	8	8
Wood ledgers not in cross grain bending	N/A, T, F, 0-10	5	N/A
Adequate anchor spacing	T, F, 0-10	5	5
FLOOR DIAPHRAGMS			
Topping slab	N/A, T, F, 0-5	2	N/A
Adequate diaphragm transfer to shear wall	T, F, 0-10	5	5
Limited diaphragm openings at shear walls	N/A, T, F, 0-5	2	2
Limited diaphragm openings at exterior shear walls	N/A, T, F, 0-5	2	2
Reinforcing at re-entrant corners	N/A, T, F, 0-10	0	0
Adequate reinforcing at openings	N/A, T, F, 0-5	0	0
Collectors	T, F, 0-5	2	2
Topping slab to walls and frames	N/A, T, F, 0-5	2	N/A

NOT FOR BID

Company Name: San Bernadino County
Building Name: 303 W. 5th Street
Street Address: 303 W. 5th Street
San Bernadino, CA, USA 92401

Date: September 19, 2023
Job Number: 23005335.00
Engineer: Craig Chamberlain, S.E.
PE Number/State: CA SE 4588

MODIFIED FEMA-310 WORKSHEET

Category	Range	Typical	Modifier
ROOF DIAPHRAGM (ONLY IF 5 STORIES OR LESS)			
Topping slab	N/A, T, F, 0-5	2	N/A
Adequate diaphragm transfer to shear wall	T, F, 0-10	5	5
Limited diaphragm openings at shear walls	N/A, T, F, 0-5	2	2
Limited diaphragm openings at exterior shear walls	N/A, T, F, 0-5	2	2
Reinforcing at re-entrant corners	N/A, T, F, 0-10	0	0
Adequate reinforcing at openings	N/A, T, F, 0-5	0	0
Collectors	T, F, 0-5	2	2
Topping slab to walls and frames	N/A, T, F, 0-5	2	N/A
UNUSUAL CONDITIONS			
Little deterioration of masonry units	T, F, 0-5	2	2
Little deterioration of masonry joints	T, F, 0-5	2	2
Insignificant cracks in masonry walls	T, F, 0-5	2	2
Little deterioration of concrete	T, F, 0-5	2	2
Little foundation damage	T, F, 0-5	2	2
Little foundation deterioration	T, F, 0-5	2	2
Adequate overturning resistance	T, F, 0-5	2	2
Ties between foundation elements	N/A, T, F, 0-5	2	2
Lateral force on deep foundations	N/A, T, F, 0-5	2	N/A
Pole buildings	N/A, T, F, 0-5	0	N/A
Insignificant sloping at site	N/A, T, F, 0-5	0	0
SITE DEPENDENT HAZARDS - ACTIVE FAULTS			
Surface fault rupture	N/A, 0-50	0	0
NONSTRUCTURAL EXTERIOR 'WALLS'			
Cladding, glazing, veneer	N/A, T, F, 0-10	5	4
Chimneys	N/A, T, F, 0-5	5	N/A
NONSTRUCTURAL INTERIOR 'WALLS'			
Partitions (HC tile)	N/A, T, F, 0-10	0	N/A
Partitions (pre-cast panels..)	N/A, T, F, 0-10	5	2
EXTERIOR ORNAMENTATION			
Parapets, cornices, and appendages	N/A, T, F, 0-10	0	0

NOT FOR BID

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Job Number: 23005335.00
Engineer: Craig Chamberlain, S.E.
PE Number/State: CA SE 4588

MODIFIED FEMA-310 WORKSHEET

Category	Range	Typical	Modifier
INTERIOR ORNAMENTATION			
Building contents and furnishings	T, F, 0-10	5	2
Ceiling systems	T, F, 0-5	5	2
Light fixtures	T, F, 0-5	5	2
MECHANICAL AND ELECTRICAL SYSTEMS			
Mechanical and electrical equipment	T, F, 0-10	5	5
Piping and sprinklers	T, F, 0-5	2	2
Ducts	T, F, 0-5	2	2
Elevators	N/A, T, F, 0-5	2	2
HAZARDOUS EXPOSURES - MATERIALS			
No hazardous materials	N/A, T, F, 0-10	0	0
OCCUPANCY (TYPE: OFFICE)			
Interior Construction	-5-5	0	-3
SITE DEPENDENT CHARACTERISTICS			
UBC Soil Class	A - E	D	Unknown
Liquefaction Resilience	Low - High	Low	Moderate
Liquefaction Susceptibility	V. Low-V. High	Very Low	High
Depth to Water Table (ft)	0-1000+	15	Unknown
Landslide Susceptibility	V. Low-V. High	Very Low	Very Low

NOT FOR BID

Company Name:	San Bernadino County	**Date:**	September 19, 2023
Building Name:	303 W. 5th Street	**Job Number:**	23005335.00
Street Address:	303 W. 5th Street	**Engineer:**	Craig Chamberlain, S.E.
	San Bernadino, CA, USA 92401	**PE Number/State:**	CA SE 4588

VULNERABILITY SUMMARY

Component Modifier Summary

Base Class 90% Fractile Loss at MMI=IX (% of Value): 34

Modifiers to Base Class Loss

Item	Group Modifier (% of Loss)	Sigma (% of Loss)
1. Occupancy type:	-3	1.0
2. Connections:	0	1.3
3. Walls:		
A. Exterior	-1	3.1
B. Interior	-3	1.8
4. Diaphragms:		
A. Floor(s)	0	1.4
B. Roof	0	1.4
5. Ornamentation:		
A. Exterior	0	1.7
B. Interior	-3	1.6
6. Mechanical/electrical systems:	0	3.4
7. Unusual conditions:	0	2.8
8. Hazardous exposures:		
A. Tank and overhanging walls	0	1.7
B. Pounding and adjacent buildings	0	0.0
9. Site dependent hazards:		
A. Proximity of active fault	0	12.8
Total	-10	14.5

Modified Base Class 90% Fractile Loss at MMI=IX (% of Value): 31

Loss vs MMI

MMI	Loss to Facilities (% of Value)	
	90% Frac. Loss	Mean
V	0	0
VI	2	1
VII	12	7
VIII	21	13
IX	31	19
X	36	22
XI	41	25
XII	45	28

NOT FOR BID

SB COUNTY PROPERTY ASSESSMENT - 303 W. 5TH STREET

Company Name: San Bernadino County
Building Name: 303 W. 5th Street
Street Address: 303 W. 5th Street
San Bernadino, CA, USA 92401

Date: September 19, 2023
Job Number: 23005335.00
Engineer: Craig Chamberlain, S.E.
PE Number/State: CA SE 4588

RISK SUMMARY

Expected Loss Table

Probability of Exceedance	MMI	Loss to Facilities (% of Value)			BI (months)
		PL	SUL	SEL	
50.0% in 30 years 43 year return period	VII	5	11	7	N/A
10.0% in 30 years 285 year return period	VIII-IX	18	28	17	N/A
2.0% in 30 years 1485 year return period	IX	77	77	77	N/A
10.0% in 50 years 475 year return period	VIII-IX	25	32	20	N/A
2.0% in 50 years 2475 year return period	IX-X	86	86	86	N/A

Event and Fault Table

Close and Significant Seismic Sources	Maximum Magnitude	Closest Distance (km)	Max. MMI	Max. SUL *	Max. SEL *	Maximum Business Interuption (months)	Percent Contribution **
San Jacinto;SBV	7.1	2.9	VIII-IX	25	16	N/A	14
San Jacinto;SBV+SJV	7.3	2.9	VIII-IX	26	16	N/A	9
San Jacinto;SBV+SJV+A+C	7.8	2.9	VIII-IX	27	17	N/A	9
San Jacinto (SB to C)	7.7	2.9	VIII-IX	27	17	N/A	6
San Jacinto;SBV+SJV+A	7.6	2.9	VIII-IX	27	17	N/A	3
San Jacinto;SBV+SJV+A+CC	7.8	2.9	VIII-IX	27	17	N/A	<1
San Jacinto;SBV+SJV+A+CC+B+SM***	7.9	2.9	VIII-IX	27	17	N/A	<1
San Jacinto;SBV+SJV+A+CC+B	7.8	2.9	VIII-IX	27	17	N/A	<1
California Gridded	7.0	5.0	VIII-IX	24	15	N/A	2
Imp Extensional Gridded, Char, Strike Slip	7.0	5.0	VIII-IX	24	15	N/A	<1
Imp Extensional Gridded, Char, Normal	7.0	5.0	VIII	23	14	N/A	<1
Imp Extensional Gridded, GR, Normal	7.0	5.0	VIII	23	14	N/A	<1
San Gorgornio Shear Gridded	7.6	5.0	VIII-IX	26	16	N/A	3
S. San Andreas;SM+NSB	7.4	7.1	VIII	23	14	N/A	4
S. San Andreas;NSB+SSB	7.2	7.1	VIII	22	14	N/A	4
S. San Andreas;SM+NSB+SSB	7.6	7.1	VIII	23	14	N/A	3

* Losses to individual events are from shaking only.
** Percent contributions are for the probabilistic 475 year return period risk.
*** Event causing highest loss (from shaking only)

Average Annual Loss (% of Repl. Cost): 0.433381 **Business Interruption Average Annual Loss ($): 0**
Return Period of Major Liquefaction/Landslide: 675 Years

NOT FOR BID

Company Name:	San Bernadino County	**Date:**	September 19, 2023
Building Name:	303 W. 5th Street	**Job Number:**	23005335.00
Street Address:	303 W. 5th Street San Bernadino, CA, USA 92401	**Engineer:** **PE Number/State:**	Craig Chamberlain, S.E. CA SE 4588

DISCLAIMERS and OTHER INFORMATION

RESULTS DISCLAIMER

This report, and the analyses, estimates and conclusions are based on scientific data, mathematical and empirical models, and experience of engineers, geologist and geotechnical specialist, using the input specified by the software licensee. Actual losses experienced during any earthquake may differ substantially from these estimates. Neither Fugro Consultants, Inc., Degenkolb Engineers, nor any third party supplier of information to this software can be held liable for any inaccuracies in the results obtained by ST-RISK.

SPRINKLER DAMAGE

Substantial building facilities loss has occurred in recent large earthquakes due to fire sprinkler damage. The figures presented herein may not adequately account for these potential losses. If the modifier for sprinklers in the Mechanical and Electrical Systems section of the Modified FEMA-310 Worksheet was 3 or higher, or '?', a more detailed evaluation of potential sprinkler damage should be made and additional loss anticipated.

THIRD PARTY DATA

Much of the data in this report is derived from data provided by the California Geological Survey (CGS), the US Geological Survey (USGS), the Geological Survey of Canada (GSC), as well as other parties. Most of the original data received was modified to make compatible with ST-RISK. None of these parties can be held liable for any inaccuracies inherent in the data or inherent in the modifications.

NOT FOR BID

Company Name:	San Bernadino County	**Date:**	September 19, 2023
Building Name:	303 W. 5th Street	**Job Number:**	23005335.00
Street Address:	303 W. 5th Street San Bernadino, CA, USA 92401	**Engineer:**	Craig Chamberlain, S.E.
		PE Number/State:	CA SE 4588

GLOSSARY

MMI	Modified Mercalli Intensity - A measure of ground motion intensity based on human perception of motion and observed structural damage.
PML	Probable Maximum Loss - A measure of seismic risk expressed as a percentage of replacement loss. Due to inconsistencies between the definition PML in recent standards and previous widespread practice, ST-RISK no longer identifies a particular results as being the PML. Instead, decision makers should identify the result that corresponds to the specific definition of PML that they are using.
PL	Probable Loss - For a given time interval, or return period, this is the amount of loss that a property is expected to meet or exceed on an average basis. This combines the probability distribution of hazard with the full damage distribution, representing the best overall assessment of risk.
SUL	Scenario Upper Loss - The percentage monetary loss (damage/replacement cost x 100) that has a 10 percent chance of being exceeded given any defined ground shaking intensity.
SEL	Scenario Expected Loss - The expected, or mean, percentage monetary loss (damage/replacement cost x 100) that is predicted given any defined ground shaking intensity.
Mean Loss	The expected, or average, percentage monetary loss (damage/replacement cost x 100) that is predicted for a given ground shaking level.
BI	Business Interruption / Loss-of-Use - The number of months that the facility is out of operation.
Base Class Loss	The percentage monetary loss for 90% fractile (damage/replacement cost x 100) assigned to a building class that accounts for type of construction and important construction deficiencies.
Modified Base Class Loss	The percentage monetary loss for 90% fractile assigned to a building class that accounts for the Base Class Loss and location and minor construction deficiencies.
Probability of Exceedance	The probability that the ground shaking level or damage level will be exceeded.
Event Causing Highest Loss	The highest level of intensity due only to shaking that is experienced when considering all earthquakes given a median predicted shaking level.
Maximum Considered Earthquake (MCE)	Loss associated with a 2% in 50 year probability of exceedence.
Uniform Building Code (UBC)	Loss associated with a 10% in 50 year probability of exceedence as defined by new building design provisions found in the Uniform Building Code.
% Contribribution	Percent contribution of fault or fault segment to the 475-year return period risk.

NOT FOR BID

COUNTY PROPERTY ASSESSMENT - 303 W. 5TH STREET - Seismic Risk Anal

Company Name: San Bernadino County
Building Name: 303 W. 5th Street
Street Address: 303 W. 5th Street
San Bernadino, CA, USA 92401

Date: September 19, 2023
Job Number: 23005335.00
Engineer: Craig Chamberlain, S.E.
PE Number/State: CA SE 4588

INFORMATION SOURCES

SiteVisit: Craig Chamberlain, Raymond Wang_Gerardo Carranza
Date: August 29, 2023
Interviewed: n/a
Docs Reviewed: Documents of the existing building were not avaialble for our review.

BUILDING DESCRIPTION

Building Classification: RM1(5AA) - Reinforced Masonry Bearing Walls w/ Flexible Diaphragms
Occupancy: Office
Latitude/Longitude: 34.1080 -117.2900
Region: USA: California
Region Version: 3.20
Evaluation Lifetime (yrs): 50
Uniform Building Code Design Edition: 1976
Year Constructed: 1980
Year Retrofitted: n/a
Building Height (ft): 31
Fundamental Period (s): 0.300000
Area (sf): 46,000
Replacement Cost ($):
Plan Dimensions: 177ft x 131ft
Exterior North-South Walls: Reinforced CMU and metal stud
Exterior East-West Walls: Reinforced CMU and metal stud
Roof Deck/Framing: Roof is metal deck spanning between steel beams.
Intermediate Floors/Framing: 2nd floor appears to be a concrete flat slab.
Ground Floors: slab on grade
Columns: Concrete columns
Foundation: Presumed to be spread foundations.
Basement Levels: None.
Parking Structure: Ground floor parking exists on 2/3 to 3/4 of the ground floor area.

LATERAL FORCE RESISTING SYSTEM

Floors/Roof: Roof is a flexible, metal deck diaphragm. The 2nd floor appears to be a concrete flat slab.
Walls/Braces: The building lateral system appears to be a reinforced CMU wall LFRS.

BUSINESS INTERRUPTION

Max. Loss With No BI:
Min. Loss At Abandonment:
BI Months At Abandonment:
BI Revenue Loss Rate($/Month):

NOT FOR BID

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		PE Number/State:	CA SE 4588

GEOTECHNICAL DESCRIPTION

Provider: none provided.
Date:
UBC Soil Class: Unknown [Assuming - D]
Liquefaction Resilience: Moderate
Liquefaction Susceptibility: High
Depth to Water Table (ft): Unknown [Assuming - 15]
Landslide Susceptibility: Very Low

Topography:
Soil Conditions:

COMMENTS

Comments: Office area of the building is only 26,000sf. The remaining total building square feet is enclosed ground floor parking.

NOT FOR BID