

PROPERTY CONDITION ASSESSMENT REPORT

COMMERCIAL BUILDING



123 Main Street
City, State, Zip
NDDS Project 2311111
Date Issued: Month Day, 2023

Prepared For:

Property Investors



January 1, 2023

Property Investors

RE: Commercial Building

123 Main Street City, State, Zip

NDDS Project 2311111

Dear Sir/Madam,

National Due Diligence Services, a division of American Surveying and Mapping, Inc. (ASM) has completed a Property Condition Assessment (PCA) of the above referenced property. The PCA was conducted in accordance with the ASTM International (ASTM) *Standard Guide for Property Condition Assessments:* Baseline Property Condition Assessment Process E 2018-15 (the Standard), the applicable engagement letter with **Property Investors** ("Client") and generally accepted industry standards.

This report was prepared solely for the use of Client and any party specifically referenced in Section 2.5 User Reliance. No other party shall use or rely on this report or the findings herein, without the prior written consent of NDDS.

Please do not hesitate to contact us at 877-439-2582 if you have any questions or if we can be of further service to you.

Sincerely,

Ronnie Long

Assessments Director

Prepared By:

James Freely Senior Assessor Reviewed By:

Reviewer's Name Assessments Director

Systems Summary Table

Building Systems	Excellent	Good	Fair	Poor	Action	Cost Estimate to Repair/Replace
SITE IMPROVEMENTS	-	-	-	•		
Storm Drain System		Х			RM	\$0
Parking Pavement, Curbs & Gutters		Х			RR	\$21,611
Sidewalks		Х			RM	\$0
Utilities		Х			RM	\$0
Landscaping		X			RM	\$0
Site Lighting		X			RM	\$0
Site & Building Signage		Х			RM	\$0
Recreational Facilities / Amenities					NA	-
STRUCTURAL SYSTEMS AND BUI	LDING ENVELO	PE				
Foundation		Х			RM	\$0
Structural System/Floors		Х			RM	\$0
Exterior Walls, Patch & Paint		Х			RR	\$64,800
Windows & Frames			Х		RR	\$60,000
Stairs (Interior & Exterior)		Х			RM	\$0
Balconies & Upper floor Walkways					NA	-
Roof Coverings/Drainage				Х	IR / RR	\$5,000 / \$500,000
MECHANICAL, ELECTRICAL, PLUN	/BING, ELEVA	TOR FIRE 8	LIFE SAFI	TY		
HVAC			Х		IR / RR	\$5,000 / \$887,500
Electrical		Х			RR	\$279,000
Emergency Generator				Х	NA	-
Hot & Cold Water Distribution System		Х			RM	\$0
Domestic Water Boiler & Tank			Х		RR	\$64,620
Elevators			Х		RR	\$750,000
Gas Distribution System		Х			RM	\$0
Fire Suppression Systems			Х		RR	\$96,530
Fire Alarm Systems			Х		RR	\$82,255
INTERIOR ELEMENTS		-		-		
Common Area Finishes		Х			RR	\$6,000
Tenant Area Finishes (Walls, Floors, Ceilings, Etc.) and Appliances		Х	х	Х	RM	Tenant
Interior Doors & Frames		Х			RM	\$0
ADA (Americans for Disability Ac	t)					
Parking, Signage & Ramps		Х			IR	\$200
Exterior Stairs		Х			RM	\$0
Common Area Accessibility		Х			IR	\$20,000

^{*} Action: RM = Routine Maintenance, IR = Immediate Repair/Replacement, RR = Replacement Reserves, NA = Not Applicable,

^{**}Un-inflated Values, NA=Not Applicable

PROPERTY CONDITION ASSESSMENT SUMMARY

COMMERCIAL BUILDING

123 MAIN STREET

CITY, STATE, ZIP

NDDS PROJECT NO. 2311111

OPINION OF PROBABLE COST TO REMEDY PHYSICAL DEFICIENCIES/DEFERRED MAINTENANCE

	ITEM			IMMEDIATE COSTS	SHORT-TERM COSTS
Roof: Perform "Stop-Gap	" Repairs to Roofs			\$5,000	\$0
HVAC: Immediate O&M				\$5,000	\$0
Repair/Replace Damaged	Replace Damaged Glass at Fire Hose Panel Encasement			\$100	\$0
ADA: New Van Accessible	Van Accessible Parking Space			\$200	\$0
ADA: Install 1 ½" Diamete	iameter Handrail at 32" AAF			\$7,000	\$0
ADA: Install White on Bla	ck Car Operating Par	nel Braille		\$4,000	\$0
ADA: Install White on Bla	ck Car Operating Ent	rance Braille		\$5,000	\$0
ADA: New Accessible Wa	ter Coolers			\$4,00	\$0
	SUB-TOTAI	L OF ESTIMATED COS	STS	\$30,300	\$0
TOTAL EST	TIMATED PHYISCAL	DEFICIENCIES/DEFEI	ICIES/DEFERRED MAINT		\$30,300
CAPITAL REPLACEMENT RESERVES SUMMARY					
CAPITAL REPLACEMENT RESERVE TERM	TOTAL UNINFLATED RESERVE	ANNUAL UNINFLATED COST PER SF/Year	то	OTAL INFLATED RESERVE (2.5%)	ANNUAL INFLATED COST PER SF/Year (@2.5%)
12-Years	\$2,812,316	\$3.73		\$3,001,514	\$3.98

Conditions noted in the Property Condition Assessment Summary are representative of the overall conditions of the property. There may be more detail on specific assessment components in the Report text, therefore the Property Condition Assessment Summary should not be used as a standalone document.

Costs shown in tables are rough approximations of cost and should not be used for budgeting purposes. If more detailed, thorough, or accurate estimated costs are desired, the services of a professional cost estimator should be engaged.

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1. SUMMARY

Site Name: Commercial Building

Address: 123 Main Street

City, State, Zip

1.1. General Description

At the request of Client, NDDS has performed a Property Condition Assessment (PCA) of the property located at 123 Main Street City, State, Zip herein referred to as the "Subject".

The Subject is an approximately 48-year-old (completed in 1974), 8-story, 62,804 SFG, multi-tenant, mixed-use office building sited on a trapezoidal-shaped property consisting of a parcel of land totaling 0.92 acres. The Subject is located between Street, to the southwest, and Street, to the northeast, with the nearest major intersection being Street to the southeast. In plan, the building is rectangular in shape, the front of which faces southwest; however, for the purpose of this report, the front of the building faces west. Ingress and egress are provided via five locations, two Street and three along Street. Parking is provided via a combination of a 3-story, underbuilding parking garage and a 2-story, exterior parking garage for a total of reportedly 182 spaces. In addition, municipal parking is provided at grade along the street frontage of Street. As of September 30, the building was reportedly 94% occupied.

The buildings substructure reportedly consists of cast-in-place, reinforced concrete foundation walls and interior spread footings with a slab-on-grade. The superstructure is primarily constructed with reinforced concrete beams and columns with poured in place concrete floors. The predominate façade system consists of vertical strips of architectural precast concrete and black tinted windows in aluminum frames. The primary roofing consists of a BUR membrane atop a concrete roof deck. Heating is primarily provided via a central hot water boiler and air conditioning is provided via a direct expansion (DX) system consisting of two compressors and an associated BAC cooling tower atop the roof. Air control boxes utilize dual-duct mixing boxes with cold-hot decks around the perimeter and cooling only boxes within the ceiling plenum of the interior spaces. Domestic hot water is provided via a central gas-fired boiler located within the mechanical penthouse atop the roof. Electrical service for the building is provided by a 1,600-amp 277/480 volt, 3-phase, 4-wire service. The building has a diesel engine driven emergency generator atop the roof; however, it is non-operational. The subject is fully-protected by a wet-pipe fire sprinkler and standpipe system and a supervised fire alarm system. The building is complete with two geared traction elevators and two enclosed stairwells for vertical transportation.

A site diagram is provided in Appendix 1 of this report. Photographs of the Subject Property are provided in Appendix 2.

1.2. General Physical Condition

Generally, the Subject was considered to be in good condition with respect to the major structural systems; however, it was considered to be in fair condition with respect to the major mechanical systems. The roofs of the Subject were considered to be in poor condition with immediate

repairs/replacements required. The Subject exhibited normal and expected wear and tear commensurate with its age.

It was reported, and we did observe, that a number of improvements have been made within the last year or so such as:

Recent Capital Improvements: • Rear Parking Lot (100%)

• Adjacent Lot (65%)

• Restroom Renovations – 4th Floor (99%)

Planned Capital Improvements: • Elevator Cab Renovations

HVAC/Contingency

It is our opinion that the RUL of the property is at least an additional 35 years, and it can be used for its intended purposes for the same period, provided that: recommended repairs identified within this report are completed, physical improvements receive continuing maintenance, and the various components and/or systems are replaced or repaired in a timely basis as needed.

1.3. Opinion of Probable Cost

Based on the walk-through of the Subject Property, interviews conducted and information obtained while conducting this PCA, NDDS's opinion of the probable cost to address area of physical deficiency or deferred maintenance, that would be considered outside the normal on-going routine maintenance of a property, are provided in Table 1- Opinion of Probable Costs to Remedy Physical Deficiencies- Deferred Maintenance Schedule in Appendix C of this report.

As well, based on the walk-through survey of the Subject Property, interviews conducted and information obtained while conducting this PCA, NDDS estimates the following minimum capital reserves will be required for the Subject Property. A detailed capital replacement reserves is provided in Table 2- Capital Replacement Reserve Schedule in Appendix C of this report.

1.4. Deviations from the ASTM Guidelines

Based on the ASTM Guidelines, deviations from Standard are required to be discussed in the PCA Report. NDDS's deviations from the guides are intended to make the PCA more comprehensive and to meet the requirements of Client. The following is a list of the deviations from and additions to ASTM E2018-15.

- The condition of the building structures and components evaluated will be broken down into one of four categories:
 - 1) Poor Requiring action with 12 months;
 - 2) Fair –Serviceable, but showing age and wear and requiring maintenance, repair or replacement within the timeframe addressed in the Replacement Reserve Table;

- 3) Good No major signs of age or wear, but may be requiring maintenance, repair or replacement during the reserve term depending on the estimated remaining useful life (RUL) of the component; and
- 4) Excellent New or like new and not requiring replacement during the reserve term. These are terms not defined or outlined in the Standard.
- This PCA includes a Capital replacement reserves which estimates the minimum capital reserves
 necessary to maintain the Subject Property for its current usage. The inclusion of a Capital
 Replacement Reserve Schedule is not included in the Standard.
- This PCA includes a discussion of seismic considerations, mold and compliance with the Americans with Disabilities Act (ADA), all of which are non-scope considerations under the Standard.

1.5. Recommendations

Due to the building's age, some of the systems have either reached, will be exceeding their EULs within the next several years, or are now considered slightly functionally obsolete by today's design standards. Although, most of the deficiencies observed were considered minor, typical to high-rise office buildings, and do not jeopardize habitability or tenancy, it is advisable to budget monies for the expected accelerated increase in the rate of major systems necessitating replacement in the years to follow.

Noted material faults and/or physical deficiencies observed consist of, but are not limited to, the following:

- 1) Asphalt paved driveways typically have an EUL of 20 to 25 years depending on the quality of the original construction, level of maintenance, traffic and weather conditions. The EUL can be extended significantly with periodic sealing of the surfaces and proactive repair of cracks and potholes as they develop. Costs for periodic resurfacing, sealing, and striping of the asphalt-paved areas are included in the Capital Replacement Reserve Schedule. Costs for a 1-1/2" asphalt overlay during the reserve term are also included in the Capital Replacement Reserve Schedule.
- 2) Concrete parking lot and driveway areas within the garages typically have an EUL in excess of 25 years if constructed over a properly stabilized base and maintained regularly. Costs for ongoing repairs to the concrete-paved areas and periodic striping are included in the Capital Replacement Reserve Schedule.
- 3) The exterior glazing system was designed with aluminum sash members which are not a good choice for a curtain wall system. Continued maintenance with sealant application onto the system at the floor lines will be necessary throughout the reserve term and therefore budgeting for a <u>yearly</u> allowance has been included within the Capital Replacement Reserve Schedule. Refer to detailed Condition Survey on the Exterior Wall System assessment prepared by JA Weir Associates and published under separate cover.
- 4) Exterior maintenance, such as power-washing and painting is required every six to eight years depending on the quality of work performed, quality of materials used and weather

- conditions. Cost to paint the exterior facades during the term have been included in the Capital Replacement Reserve Schedule.
- 5) The ages of the roofs are unknown, but they appear to have surpassed their EUL of 15 years. The roof systems are also in poor condition and have aged past the point where preventative maintenance repairs will produce a return on dollars invested; therefore, replacement is required early in the reserve term and costs for work to tear the roofs off down to the concrete roof deck and install similar built-up roof systems have been included in the Capital Replacement Reserve Schedule. Of note, based on the year of construction (1974 which is pre-1980), there is a potential that asbestos-containing materials (ACMs) are present. Additional costs may be associated with the abatement and disposal of any asbestos containing roofing materials during the replacement of the roof. *Refer to detailed roof assessment prepared by Aslan Group and published under separate cover*.
- 6) At this time, prior to the replacement of the roof, we recommend the use of "stop gap" measures to ensure water tightness and to perform emergency leak repairs only until the roofs are replaced. A budget for "stop gap" leak repairs during the first year are included within the Physical Deficiencies/Deferred Maintenance Table 1. Refer to detailed roof assessment prepared by Aslan Group and published under separate cover.
- 7) The damage estimates outlined in Table 7 of the Report prepared by YA Engineering Services suggest a Scenario Expected Loss (SEL) of as high as 38% for the office building, which is in the "moderate" to "heavy" ranges that can result in severe structural damage, possibly included partial collapse and critical economic loss; structure likely to be closed for an extended period; repair may not be economically attractive. These estimates can be reduced by the implementation of seismic improvements or retrofits. In general, the expected seismic performance of nonductile concrete construction can be improved by wrapping the frame columns and beams in fiber composites and the addition of concrete shear walls or steel braced frames. These solutions would be applicable for this property. Structural drawings of the building and foundation are generally unavailable; and it is difficult to estimate the costs of such a retrofit. Without this information, it is not practical to estimate required quantities of materials to support a cost estimate at this time. Refer to detailed seismic risk assessment prepared by YA Engineering Services and published under separate cover.
- 8) The rebuilt reciprocating refrigeration compressor is considered relatively new and in good condition, and is not recommended for replacement during the 12-year capital reserve period of this report as a capital replacement measure due to condition. However, these compressors are relatively inefficient at about 1.0-kW per Ton. Newer variable speed "Bitzer" (made in Germany) screw type refrigeration compressors using refrigerant R134A operate at about ½ of the energy input. This capital replacement measure is offered as an "upgrade/betterment" alternative in the Capital Replacement Reserve Schedule. Refer to detailed assessment prepared by MEP and published under separate cover.
- 9) The <u>1500-kBtuh input gas-fired space heating hot water boiler</u> (manufactured in 2001) will reach the end of its EUL early within the reserve period. In addition, there is only one (1) space heating hot water boiler; therefore, no spare or redundant capacity is available. Hot

water for the heating system cannot be provided in case of boiler failure, boiler repair, or maintenance/service times. As an alternate, we suggest that when the boiler is replaced, two (2) ea. 1000-kBtuh input boilers (Raypak model MVB modulating vertical boiler, model H7-753A, 750-kBtuh input, minimum 86% efficiency) be installed instead of a single unit, as well as adding a second circulation pump. Costs for the replacement of the current boiler and the addition of a second boiler is included in the Capital Replacement Reserve Schedule. Refer to detailed assessment prepared by MEP and published under separate cover.

- 10) The original 1970s DX cooling coils will reach their EUL early within the reserve period. In lieu of costly wholesale replacement, we believe that coil life may be extended to last beyond 10 years by performing the following O&M measures: Replace old steel epoxy coated condensate drain pans with stainless steel, properly slope for good drainage, and wire bush and epoxy coat rusted steel coil frames, as well as steel coil tube-sheet ends. The original 1970s hot water coils will also reach their EUL early within reserve period. In lieu of costly wholesale replacement, we believe that coil life may be extended to last beyond 10 years by performing the following O&M measures: Open, clean and inspect unit, wire brush and coat any corroded areas, and clean hot water coils. Costs for these repair measures are included within the Capital Replacement Reserve Schedule. Refer to detailed assessment prepared by MEP and published under separate cover.
- 11) The original 1970s centrifugal type cold-hot deck supply air fan will reach the end of its EUL within the reserve period. In lieu of costly wholesale replacement, we believe that fan life may be extended to last beyond 10 years by performing the following O&M measures: Open, clean and inspect unit, wire brush and change all fan belts, sheaves, bearings and drive shafts, and test and replace motor as needed. Costs for these repair measures are included within the Capital Replacement Reserve Schedule. Refer to detailed assessment prepared by MEP and published under separate cover.
- 12) It is considered below industry standards and not in accordance with similar buildings in similar areas with similar uses to still use the current pneumatic controls and not have a programmable direct digital control (DDC) energy management system (EMS) for dual duct mixing boxes as well as a variable air volume (VAV) system conversion. Therefore, we recommend expansion of the existing Delta programmable direct digital control (DDC) energy management system to have remote Internet access to control all HVAC operations. This will require the conversion of the base system for existing rooftop equipment with expansion capabilities to include future tenant build-outs that convert old pneumatic dual duct (DD) mixing boxes/valves using independent pneumatic actuators to DD-VAV configured boxes with single DDC actuators-estimated 150 zones. Costs for this upgrade are included in the Capital Replacement Reserve Schedule. Refer to detailed assessment prepared by MEP and published under separate cover.
- 13) The main electric panel is a 1974 vintage (48-years old) panel-board. It is without a single main disconnect switch with GFIC (ground fault interruption circuit) protection, which would be required for today's Code. It is our opinion that the main switchgear may require replacement later within the reserve period of this report at age 56-years (in 8 years). We recommend replacement at that time of the exiting main distribution switchboard with a

- new assembly including "power break" type main switch with GFIC (ground fault interruption circuit) protection. Costs for replacement are included in the Capital Replacement Reserve Schedule. Refer to detailed assessment prepared by MEP and published under separate cover.
- 14) Infrared ("IR") thermo-graphic scans for main distribution or sub-panels have not been done (last service was in year-2020) in the past to identify any "hot spots" that might require repair/lug tightening or circuit breaker replacement. This is an O&M issue and costs for service this year and every three years is shown in the Capital Replacement Reserve Schedule, as it is a safety related issue. Refer to detailed assessment prepared by MEP and published under separate cover.
- 15) It also appears that an "ARC Flash" study has not yet been completed at subject building. This is a voluntary O&M issue, and costs for service is shown in the Capital Replacement Reserve Schedule, as it is a safety related issue. Refer to detailed assessment prepared by MEP and published under separate cover.
- 16) Based on the age of the domestic hot water boiler system and an EUL of approximately 15-years it is anticipated that the boiler will need to replaced early in the reserve term. Costs for replacement is included in the Capital Replacement Reserve Schedule. *Refer to detailed assessment prepared by MEP and published under separate cover.*
- 17) At the time of the replacement of the domestic hot water boiler discussed above, we also recommend that a standard-size 175-gallon insulated DHW storage tank be installed to accommodate the system per current industry standards. Costs for the new storage tank are included in the Capital Replacement Reserve Schedule. *Refer to detailed assessment prepared by MEP and published under separate cover.*
- 18) Any permitted tenant office remodels may require the plumbing fixtures to be upgraded to any then-current Cal-Green water efficiency standards. It appears all common area restroom fixtures are from a past 2019 era retrofit and may meet current CAL-Green water efficiency standards (fixtures had no labels); however, this cost is not shown in the capital reserve period cost tables of this report.
- 19) In general, the elevator equipment was found to be in fair condition for its age. Typically, an elevator control system has a useful life of 20 to 25 years; but due to the obsolete drives and machines of the current elevators, our conservative estimate of life expectancy for the existing controls and machines are 3 5 years with continued good and proper preventative maintenance. At that time, we recommend that new solid-state controllers with new solid state drives, new overhead gearless machines, new overspeed governors, new solid state closed loop door operators, and related door equipment, new CA ADA compliant signal fixtures, new wiring, new traveling cables, and misc. components be provided. It is also recommended that these components be modernized or replaced to provide reliable elevator service and allow this building to compete with newer buildings in the surrounding areas. Costs for this work is included in the Capital Replacement Reserve Schedule. *Refer to detailed Elevator assessment prepared by HKA and published under separate cover*.

- 20) In the interim, improvements to the elevator equipment can be made in adjustments to motor control for the traction elevators and the vibration and noise at high-speed operation, elevator 1 was very rough and noisy. The doors should be adjusted and serviced to provide smooth and quiet door operation. Adjustments to door dwell or hold open times will also allow compliance with disabled access requirements and provide consistent operation. Refer to detailed Elevator assessment prepared by HKA and published under separate cover.
- 21) Of note, the maintenance being performed by Star Elevator Company is average when compared to the industry standard. The governor rope on Elevator 1 is in need of shortening. The elevator maintenance contractor should make these adjustments under the terms of the full maintenance contract at no additional cost to the owner.
- 22) Interior common area finishes, such was walls and ceilings, can be repaired and painted as needed as part of the routine maintenance of the property. Periodic replacement of the carpeting is anticipated during the reserve term and an allowance for this replacement has been included in the Capital Replacement Reserve Schedule.
- 23) The National Fire Protection Association (NFPA) requires sprinkler head replacement every 50-years. It was noted that at least ¾ of the building contains original 1970s era sprinkler heads, which are now almost 48-years old, so an costs for sprinkler head replacements, with new 3-mm "quick release" type heads, have been included in the Capital Replacement Reserve Schedule. Refer to detailed assessment prepared by MEP and published under separate cover.
- 24) The firewater system is tagged as having last Regulation Four, 5-year testing and certification in June 2018, less than 5-years prior to date of inspection, indicating an up-to-date service, but due again within one (1) year of the date of inspection. This is included as an O&M measure in Year 1 of the reserve term as it is a health and safety related issue. Refer to detailed assessment prepared by MEP and published under separate cover.
- 25) The glass within the access panel to the fire house encasement on the 5th floor west stair well was damaged and should be replaced to prevent accidental harm to patron access with the stairwell. Costs for repairs are included within the Physical Deficiencies/Deferred Maintenance Table 1.
- 26) The existing 5820XL fire alarm control panel is fully functional, but will reach its EUL of approximately 20-years within the reserve period. Fire Lite by Honeywell offers a backwards-compatible FACP model ES200X, but it is possible that older generation sensors and detector devices may not be compatible and will also need replacement. Costs for replacement of the control panel has been included in the Capital Replacement Reserve Schedule. Refer to detailed assessment prepared by MEP and published under separate cover.
- 27) The subject Property was in compliance with the current number of ADA parking spaces required (6); however, NDDS recommends that at least one of the parking spaces located on the second or third floor of the underbuilding parking garage near the elevator bank be brought into compliance with proper identification signage and pavement stripping required

for a "van-accessible" ADA parking space. A cost for the installation is included in the Physical Deficiencies / Deferred Maintenance Table 1.

28) The elevators at the Subject appeared to be in general compliance with the ADA guidelines; however, the elevators were without "white on black" car operating and/or entrance panels in Braille and were without handrails. Costs for installation are included in the Physical Deficiencies / Deferred Maintenance Table 1.

No other building components or systems were identified that would require additional assessment prior to providing the opinion of probable costs to remedy physical deficiencies/deferred maintenance concerns at the Subject Property or to prepare the Capital Replacement Reserve Schedule.

Upon completion of the additional assessment recommended, it is possible that additional costs will be identified that will need to be included in either the opinion of probable cost to remedy physical deficiencies/deferred maintenance concerns at the Subject Property or in the Capital Replacement Reserve Schedule.

2. INTRODUCTION

2.1. Purpose

NDDS was retained to conduct this PCA of the Subject Property to assist in the acquisition and possibly for subsequent underwriting of a proposed mortgage reserve. The PCA was designed to provide an objective, professional opinion of the general condition of the property through the identification of areas of deferred maintenance and an estimation of the minimum ongoing reserves required to maintain the current usage of the property. Unless specifically noted in the report, the cost estimates included in this report do not include costs to reposition the property in any way. In addition, the PCA is not intended identify de minimis conditions that generally can be addressed through routine maintenance.

2.2. Scope of Work

This PCA was conducted in accordance with ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process E 2018-15 and any additional requirements of the client. The specific scope included the following:

<u>Documentation Review and Interviews</u> – The objective of the document review and interviews is to augment the walk-through survey and to assist NDDS in its understanding of the Subject Property and its identification of physical deficiencies. NDDS will review readily available records or documents to specifically identify, or assist in the identification of, physical deficiencies, as well as any preceding or ongoing efforts, or costs to investigate or remediate the physical deficiencies, or a combination thereof. NDDS will attempt to review information such as Certificates of Occupancy (COs), outstanding and recorded building and fire code violations, property-maintained maintenance records, inspection reports and warranties. This assessment, however, is not to be considered a regulatory or code compliance audit of the facility.

A property questionnaire will be provided to the property owner and/or owner's representative. The questionnaire will ask about general property information as well as specific questions regarding known code violations and the condition of the substructure, superstructure and roofs of all improvements, interior finishes, mechanical, electrical and plumbing elements (MEP) and the surrounding grounds.

Accuracy and completeness of information varies among information sources. It is not NDDS's obligation to independently verify the information provided or to identify mistakes or insufficiencies in the information provided. NDDS will, however, make reasonable effort to compensate for mistakes or insufficiencies of information reviewed that are obvious in light of other information obtained in the process of conducting the PCA or otherwise known to the consultant.

<u>Walk-Through Survey</u> – The objective of the walk-through survey is to visually observe the Subject Property so as to obtain information on material systems and components for the purposes of providing a brief description, identifying physical deficiencies to the extent that they are easily visible and readily accessible. A single visit will be made to the Subject Property during which time NDDS shall make a visual observation of material systems and components and identify physical deficiencies and any unusual features. An attempt will be made to inspect the exterior of each

major property improvement. On the interior of structures on the property, accessible common areas, expected to be used by occupants or the public, such as lobbies, hallways and restrooms, maintenance and repair areas, and a representative sample of occupant spaces, will be visually and/or physically observed. Observations of interior areas will generally be limited to 10% of occupiable spaces. The assessment of the building façade will be conducted from street or balcony level. The riding of scaffolding equipment is not part of the scope of work.

The walk-through will be conducted by a single assessor with a well rounded knowledge of pertinent building systems and components. The use of system subspecialists can frequently provide increased detail in reporting and insight into site conditions. Unless specified in the proposal, no such specialists will be retained in the performance of this work.

The condition of the building structures and components evaluated will be broken down into one of four categories: 1) Poor – Requiring action with 12 months; 2) Fair – Serviceable, but showing age and wear and requiring maintenance, repair or replacement within the timeframe addressed in the Replacement Reserve Table; 3) Good – No major signs of age or wear, but may be requiring maintenance, repair or replacement during the reserve term depending on the estimated remaining useful life (RUL) of the component; and 4) Excellent – New or like new and not requiring replacement during the reserve term.

The walk-through survey will focus on the following areas:

- Property/Site Features Observations will be made of the type, condition and adequacy of the general topography, storm water drainage, ingress and egress, paving, curbing and parking areas, flatwork, landscaping and appurtenances, recreation facilities, amenities and ancillary structures, and utilities.
- Structural Frame and Building Envelope Observations will be made of the type, condition and adequacy of the foundation, building frame, façade and curtain walls, and the roofing systems.
 Structural systems are frequently concealed and may be inaccessible during an assessment.
 When this occurs, NDDS's assessment will be limited to the identification of readily visible indicators of common problems
- Mechanical, Electrical and Plumbing Systems Observations will be made of the type, condition and adequacy of the heating, ventilation and air conditioning (HVAC) systems, electrical systems and plumbing systems.
- Vertical Transportation Observations will be made regarding the presence and condition of any elevators or escalators present on the property.
- Life Safety/Fire Protection Observations will be made of the type, condition and adequacy of sprinkler systems, fire alarm systems or any other life safety and fire protection systems.
- Interior Elements Observations will be made of the type, condition and adequacy of the interior finishes, fixtures, appliances and furnishings.

Accessibility – Depending on the applicability of the regulations, a Tier I Visual Survey will be conducted to determine if the property is in compliance with the Americans with Disabilities Act (ADA) or the Fair Housing Act (FHA). The Tier I survey includes a limited visual assessment of the property to assess if it is accessible and useable by people with disabilities. No measurements will be collected as part of the screening. This screening is not to be considered and in-depth survey or audit. As such, it should not be considered a verification of compliance or a guarantee of the identification of all possible ADA violations.

<u>Opinions of Probable Costs to Remedy Physical Deficiencies</u> – Based on the documentation review, interviews and walk-through survey conducted, NDDS will identify areas of physical deficiency and deferred maintenance.

Physical deficiency is defined as conspicuous defects or significant deferred maintenance of a Subject Property's material systems, components, or equipment as observed as a result of the field observer's walk-through survey. Included within this definition are material life-safety/building code violations and material systems, components, or equipment that are approaching, have reached, or have exceeded their typical EUL or whose RUL should not be relied upon in view of actual or effective age, abuse, excessive wear and tear, exposure to the elements, lack of proper or routine maintenance, etc. This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous minor repairs, normal operating maintenance, etc., and excludes de minimis conditions that generally do not constitute a material physical deficiency of the Subject Property. Deferred maintenance is defined as physical deficiencies that could have been remedied with routine maintenance, normal operating maintenance, etc., excluding de minimis conditions that generally do not present a material physical deficiency to the Subject Property.

NDDS will provide opinions of the probable cost to address the suggested remedies of the material physical deficiencies and deferred maintenance identified. Opinions of probable costs will be segregated between immediate and short-term costs.

Immediate Costs include (1) material existing or potential unsafe conditions, (2) material building or fire code violations, or (3) conditions that if left uncorrected, have the potential to result in or contribute to critical element or system failure within one year or will result most probably in a significant escalation of its remedial cost. Short-Term Costs will include the of probable costs to remedy physical deficiencies, such as deferred maintenance that may not warrant immediate attention, but require repairs or replacements that should be undertaken on a priority basis in addition to routine preventive maintenance. Such opinions of probable costs may include costs for testing, exploratory probing, and further analysis should this be deemed warranted by the consultant. The performance of such additional services is beyond the scope of this PCA. Generally, the time frame for such repairs is within one to two year.

Opinions of probable costs will only be provided for material physical deficiencies and not for repairs or improvements that could be classified as: (1) cosmetic or decorative; (2) part or parcel of a building renovation program (3) tenant improvements/finishes; (4) enhancements to reposition the Subject Property in the marketplace; (5) for warranty transfer purposes; or (6) routine or normal preventive maintenance, or a combination thereof. Opinions of probable costs that are either individually or in the aggregate less than a threshold amount of \$3,000 for like items are considered routine maintenance and are not included in this report. If there are more than four separate like

items that are below this threshold requirement, but collectively total over \$10,000, such items may be grouped and included.

These opinions are to assist the user of the report in developing a general understanding of the physical condition of the Subject Property. Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs will likely vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, and whether competitive pricing is solicited.

It is not the intent of this assessment for NDDS to prepare or provide exact quantities or identify the exact locations of items or systems as a basis for preparing the opinions of probable costs. Extrapolation of representative observations, conditions deemed by NDDS as highly probable, results from information received, or the commonly encountered expected useful lives (EULs) or RULs of the components or systems, or a combination thereof. The source of cost information utilized by NDDS may be from one or more of the following resources: (1) Client provided unit costs; (2) owner's historical experience costs; (3) consultant's cost database or cost files; (4) commercially available cost information such as published commercial data; (5) third party cost information from contractors, vendors, or suppliers; or (6) other qualified sources that the consultant determines appropriate.

NDDS will also generate a Capital Replacement Reserve Schedule. Capital replacement Reserves are for recurring probable expenditures that are not classified as operation or maintenance expenses. The capital replacement reserves should be budgeted for in advance on an annual basis. Capital reserves are reasonably predictable both in terms of frequency and cost. However, capital reserves may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within an estimated time period. Capital replacement Reserves exclude systems or components that are estimated to expire after the reserve term and that are not considered material to the structural and mechanical integrity of the Subject Property. Furthermore, systems and components that are not deemed to have a material effect on the use are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded. Replacement costs are solicited from ownership/property management, NDDS's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered. It is understood that a prudent owner would likely invest more than these minimum amounts.

2.3. Limitations and Exceptions

• The scope of work completed was designed solely to meet the needs of NDDS's Client. NDDS's recommendations and opinions of cost are only as of the date the walk-through performed, documentation reviewed and interviews conducted. Conditions at a property and the costs to remedy them can change significantly over a relatively short period of time due to levels of

maintenance, acts of nature and other factors. NDDS shall not be liable for any unattended usage of this report by another party.

- No PCA can wholly eliminate uncertainty regarding the potential for physical deficiencies and
 the performance of a property's building. There is an inherent subjective nature of opinions as
 to such issues as workmanship, quality of original installation, and estimating the RUL of any
 given component or system. This PCA was designed to reduce, but not eliminate the
 uncertainty regarding the potential for component or system failure, within reasonable limits
 of time and cost, and no warranty is implied.
- The PCA is intended to be a non-intrusive assessment. No destructive testing was completed and concealed areas, such as inside, plenums, behind walls or within machinery, were not accessed. As such, NDDS makes no warranties regarding exterior insulation and finishing systems (EIFS), curtain walls or other building skin conditions that would not be readily observable and, therefore, outside the scope of this assignment.
- This PCA does not constitute a regulatory or code compliance audit of the building systems of
 management systems that may be present at the Subject Property. Testing, measuring, or
 preparing calculations for any system or component to determine adequacy, capacity, or
 compliance with any standard is outside the scope of work.
- Information in this report, concerning past and current physical concerns, maintenance and replacement activities, and condition of spaces not observed or viewable, is from sources deemed to be reliable, including, but not limited to interviews with property owners, operators and tenants, interviews with municipal agencies and vendors; however, no representation or warranty is made as to the accuracy thereof. NDDS will have no ongoing obligation to obtain and include information that was not reasonably ascertainable, practically reviewable or provided to NDDS in a reasonable timeframe to formulate an opinion and complete the assessment by the agreed upon due date.
- While the general environmental setting of the property is described, this assessment is not intended to be a formal flood plain or wetland determination, and no warranty is made thereof. Any fungi or mold reference included in this report does not constitute a professional mold inspection and is not based upon any sampling, testing and/or abatement. NDDS merely notes the visual presence or absence of fungi or mold while in the course of preparing this report.

2.4. General Property Reconnaissance Information

Date of Assessment: October 19, 2022

Assessor: James Freely

A copy of the Professional Assessor's qualifications is included in

Appendix D.

Property Contact/Escort: Property Contact

Escort

Areas Accessed: Parking lots/garages, general grounds and similar surface

improvements were traversed at intervals sufficient to develop an understanding of their overall condition. The main roof and outside of the building was observed where access was available. Interior reconnaissance included all common areas such as the hallways and similar areas intended to be used by the public,

approximately 25% of the tenant spaces, all building

maintenance and storage areas.

Limitations: Access to the penthouse roof was not provided.

2.5. User Reliance

All reports, both verbal and written, are for the benefit of **Property Investors** (Client) and its successors and assigns. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of NDDS.

Property Investors (Client) may distribute the report to other parties without limitation; however, it is acknowledged that the report provided to third parties is for informational purposes only. NDDS will issue a reliance letter if requested.

3. GENERAL PROPERTY DESCRIPTION

3.1. Salient Property Information

Property Name: Commercial Building

Street Address: 123 Main Street

City, State, and Zip: City, State, Zip

Primary Use: Office / Mixed-Use / Zoning Designation "NBMU"

Building Age: Completed in 1974; 48 Years Old

Property Size: 0.92 Acres (Net) / 40,000 SF (ALTA/NSPS Land Title Survey)

Gross Building Size: 62,520 SF

Net Rentable Area: 62,058 SF

Number of Buildings: Two; One Building and One Parking Garage

Number of Stories: 8 and 2-Storys

Property Management: SSA Real Estate Management

Reported Occupancy: 94% of 41 Units

Date of Site Visit: October 19, 2022

NDDS Field Observer: James Freely, Senior Assessor

POC/Escorted By: Building Engineer

Weather: 70 to 80 degrees, Clear Skies

LOTS 10 AND 13 IN BLOCK 1, AS SHOWN ON THAT CERTAIN MAP

ENTITLED, "MILLS ESTATE NO. 1-A, CITY, COUNTY, STATE", FILED IN THE OFFICE OF THE COUNTY RECORDER OF COUNTY, STATE, ON

NOVEMBER 8, 1956, IN BOOK 46 OF MAPS AT PAGE 27.

3.2. Tenant and Lease Information

Tenants: See APPPENDIX F for list of Tenants as of September 30, 2022

Lease Information: NDDS was not provided any leases for review.

3.3. Utility and Service Providers

Potable Water: City Public Works - Water Division

Electricity: Pacific Gas & Electric (PG&E)

Natural Gas: Pacific Gas & Electric (PG&E)

Storm Water: City Public Works

Sanitary Sewer: City Public Works

HVAC Maintenance: Not Provided

Fire/Security: Not Provided

Roof Maintenance: Not Provided

4. DOCUMENT REVIEW AND INTERVIEWS

4.1. Interviews

Interviewee: Building Engineer

Pertinent Information: General Property Access and Building Engineer

Interviewee: Property Manager

Pertinent Information: Property Manager: Construction and renovation history for

the current renovations presently underway.

4.2. Building and Fire Departments

Building Department Contact: Chief Building Official

Pertinent Information: NDDS requested information pertaining to Certificates of

Occupancy and any outstanding code violations for the property. NDDS has not received a response from the building department as of the preparation of this report. It should be noted that municipal departments are often slow to respond to these type requests. Refer to the

Exhibits for a copy of the FOIL request sent.

Concerns: Request pending.

Recommendations: NDDS will forward any pertinent documents to client upon

receipt.

Fire Department Contact: Fire Chief

Pertinent Information: NDDS requested information regarding any outstanding

fire code violations for the property. NDDS has not received a response from the fire department as of the preparation of this report. It should be noted that municipal departments are often slow to respond to these type requests. Refer to the Exhibits for a copy of the FOIL

request sent.

Concerns: Request pending.

Recommendations: NDDS will forward any pertinent documents to client upon

receipt.

4.3. Zoning Department

Zoning Department Contact: Planning Manager

Zone: "NBMU" Mixed Use District

Zoning Compliance: NDDS requested information regarding the current zoning

of the property and whether the property is a legal conforming use or a legal non-conforming use according to density, parking, use and current codes. A response to our inquiry was received via e-mail from Assistant Planner, requesting payment in order to complete our Zoning verification letter. The reapplication of our Zoning request along with the required fee's can be submitted at a later date at the Client's request. Refer to the Exhibits for a copy of the FOIL request sent and the Planning Division's

response e-mail.

Concerns Request pending; however, the Subject Property appears

to be zoned "NBMU" Mixed Use District.

Recommendations: NDDS recommends client request a "Zoning Letter"

regarding Zone designation, parking requirements, and

outstanding violations (if any).

4.4. Previous Reports

Report Title: Property Condition Report

Prepared By: EBI Consulting

Date of Report: May 4, 2021

Concerns: No major concerns regarding the physical condition of the

Subject Property and improvements were noted in the

previous report.

5. SITE

5.1. Topography and Storm Water Drainage

Description

Topography: The site is located in a flat, urban setting surrounded by

contiguous buildings and sidewalks. Its topography is a non-issue. The parcel generally is level with the

contiguous parcels.

Surface Water Bodies: There are no surface water bodies on or immediately

adjacent to the Subject Property.

Drainage: Surface drainage is achieved through a combination of

pavement sheet flow to a system of interconnected catch basins. Storm waters discharge into the municipal storm

water system.

Observations/Comments

General Condition: Good

Age/Last Action: The topography and storm water drainage are original and

are maintained as part of the routine maintenance of the

facility.

Concerns

Signs of Ponding
 No significant areas of ponding were noted by or reported

to NDDS's assessor.

Signs of Erosion
 No significant areas of erosion were noted by or reported

to NDDS's assessor.

• Drainage Problems No major drainage problems were noted by or reported to

NDDS's assessor.

indicative of wetlands on the Subject Property. The majority of the property is covered with the building,

parking structures, paved driveways and perimeter landscaped areas. It is unlikely that portions of the Subject

Property would be classified as wetlands.

Other: No other significant concerns relating to topography or

storm water drainage were noted or reported.

Recommendations: The topography and storm water drainage poses no

adverse drainage condition to the other parcels, nor do the other parcels pose an adverse drainage condition to the Subject. It should be maintained as part of the routine

maintenance of the property.

5.2. Ingress and Egress

Description

Ingress and Egress: Ingress and egress to the property is provided via five

locations. Two along Street and three along Street. The southernmost curb cut on each of the municipal streets provides access to a driveway that runs along the entire length of the south side of the Subject. The other locations provide access to the parking garages along the associated

streets.

Signage: Property signage is minimal and primarily located above

the main entrance along Street and consists of back-lit, bold grey letters displaying the building name and address.

Observations/Comments

General Condition: Good.

Age/Last Action: The age of the signage was not reported, but is most likely

at least second generation.

Concerns

• Poor Ingress/Egress No concerns relating to property ingress or egress were

noted by or reported to NDDS's assessor.

• Poor Signage The signage identifying the building was clearly visible from

the road. No concerns regarding the property signage

were noted.

Other No other concerns relating to ingress to and egress from

the property were noted by or reported to the NDDS

assessor.

Recommendations: No actions regarding property signage or changes to the

ingress or egress from the Subject are recommended at this time. Site signage should continue to be handled as

part of the routine maintenance of the facility.

5.3. Paving, Curbing and Parking

Description

Curbing:

Driveways/Parking Areas:

The Subject's two primary driveways are paved with asphalt. The main driveway runs in the east-west direction along the entire south perimeter of the Subject property. The other is perpendicular to the main driveway and splits the parcel in half in the north-south direction. The remaining driveways and parking areas, including the parking garages, are paved with concrete.

On-site parking is provided for reportedly a total of 182 vehicles, of which 6 are designated for the disabled and located on the 2nd and 3rd floor underbuilding parking garage levels. Municipal parking is also located along Street Name with two additional ADA spaces across the street from the main building entrance.

Poured concrete curbs are present along the sidewalks of the two street frontages with associated curb cuts at driveway locations. Precast concrete wheel stops are provided for the covered parking spaces. The top level of the exterior parking garage has a poured in place curb that is approximately 1' high along its perimeter. Atop the curb

is a black painted metal guardrail.

Covered Parking: The Subject is improved with a three-level parking garage

> below approximately half of the first floor (north half), and the entire second and third floors of the building and projects out (north) in a trapezoidal shape approximately 21' to 28'. There is also a two-story parking garage that is approximately 110' by 115' at the east, rear half of the

Subject parcel.

No other significant features were present that related to

the driveways, parking areas or curbing.

Other:

Observations/Comments

General Condition: Good-to-Fair

Age/Last Action: Portions of the driveways and parking areas have been

> repaired or replaced as needed on an ongoing basis. Full scale replacement of the concrete curbs along the perimeter of the exterior parking garage reportedly

occurred with the past year.

Concerns

The striping at the property was clearly visible. No Faded Striping

concerns were noted.

Deficiencies observed consisted of weather erosion of Cracking/Alligatoring

> asphaltic fines from surface and paved areas are encumbered with isolated 1/4" or larger cracks. Localized alligatoring was observed near the east end of the asphalt

paved driveway along the south side of the parcel.

• Depressions/Potholes No major depressions or potholes were observed.

No concerns regarding insufficient parking were reported Insufficient Parking

> to the NDDS assessor. The number of parking spaces appeared adequate at the time of the site visit.

No other concerns relating to the driveways, concrete Other

paving, curbs and parking areas were noted.

Asphalt paved driveways typically have an EUL of 20 to 25 years depending on the quality of the original construction, level of maintenance, traffic and weather conditions. The EUL can be extended significantly with periodic sealing of the surfaces and proactive repair of cracks and potholes as they develop. Costs for periodic resurfacing, sealing, and striping of the asphalt-paved areas are included in the Capital Replacement Reserve Schedule. Costs for a 1-1/2" asphalt overlay during the reserve term are also included in the Capital Replacement Reserve Schedule.

Concrete parking lot and driveway areas within the garages typically have an EUL in excess of 25 years if constructed over a properly stabilized base and maintained regularly. Costs for ongoing repairs to the concrete-paved areas and

Recommendations:

periodic striping are included in the Capital Replacement Reserve Schedule.

5.4. Flatwork

Description

Sidewalks: Concrete sidewalks are limited to the two street frontages

along the east and west ends of the Subject. The sidewalks consist of standard poured concrete slabs with numerous

control joints.

Patios/Decks: No patios or decks are present at the Subject property.

Other: No other significant flatwork is present at the property.

Observations/Comments

General Condition: Good

Age/Last Action: The flatwork at the Subject Property varies in age from

original to recently installed on dates commensurate with the era of renovation and is maintained as part the routine

maintenance.

Concerns

• Significant Cracking None.

Heaving/Settlement
 No significant areas of heaving or settlement were

observed during the assessment.

• Trip Hazards No obvious potential trip hazards were noted.

Other
 No other significant concerns relating to the flatwork at the

Subject Property was noted by or reported to the NDDS

assessor.

Recommendations: Concrete flatwork generally has an EUL in excess of 25

years if constructed over a properly stabilized base and maintained regularly. No significant expenditures are anticipated during the evaluation period. The flatwork at the Subject Property should be addressed as part of

routine maintenance.

5.5. Landscaping and Appurtenances

Description

Landscaping: Landscaping is limited to mulched beds along the west

(front) and east sides of the building with a mixture of plants and bushes within mulched beds. There are a few mature trees along the south end of the exterior parking

garage.

Sprinkler System: Planting beds along the east and west ends of the building

are serviced by an in-ground irrigation system manufactured by Rain Dial. The controls are located in the main electrical room accessed from within the first floor of

the underbuilding garage.

Property Lighting: Property-owned, pole-mounted lighting and building-

mounted flood lights illuminate the driveways and parking lots. Incandescent or fluorescent light fixtures are present

near building entrances.

Fencing/Walls: There is a chain link fence along the entire length of the

south side of the parcel. Security fencing is also installed along the first floor of the exterior parking garages with associated automated roll up security doors and/or gates,

depending on location.

Other: The refuse containers are located at the north end of the

driveway in a designated area indicated with pavement

striping.

Observations/Comments

General Condition: Good

Age/Last Action: The landscaping and appurtenances the Subject Property

are original and are addressed as part routine

maintenance.

Concerns

Poor Landscaping
 No significant areas of overgrown or dead landscaping

were observed during the assessment.

• Inadequate Lighting NDDS completed its assessment during daylight hours. No

significant concerns relating to inadequate or nonfunctional lighting were reported to the NDDS assessor. No obvious damage to the lighting fixtures was observed. • Damaged Fences/Walls None.

Other
 No other significant concerns relating to the landscaping or

appurtenances were noted by or reported to the NDDS

assessor.

Recommendations: The landscaping and appurtenances should be addressed

as part of the routine maintenance of the Subject Property.

No further action is required at this time.

5.6. Ancillary Structures

Description

Ancillary Structures: The Subject Property does not contain any ancillary

structures other than the parking garages discussed in

Section 5.3.

6. STRUCTURAL FRAME, BUILDING ENVELOPE & SEISMIC ANALYSIS

6.1. Foundation

Description

Foundation: The original plans and specifications for the subject

building and parking garages were not provided. Based on visible parts of the structure and known foundation designs for similar buildings, the engineered foundation elements are assumed to consist of perimeter continuous footings or grade beams beneath the concrete walls and spread footings or deep pile systems beneath columns. The building also has an interior concrete slab-on-grade. No crawl spaces, basement areas or subterranean vaults

were observed.

Observations/Comments

General Condition: Good

Age/Last Action: The foundation is the original and are addressed as part

routine maintenance.

Concerns

• Cracks/Settlement No significant foundation cracks or settlement were noted

by or reported to NDDS's assessor.

• Insufficient Exposure The asphalt pavement covered significant portions of the

slab foundation. Generally accepted building practices recommended keeping the top four to six inches of the slab exposed to prevent water penetration and insect

infestation.

• Water Damage No major areas of flooding or water damage that would be

associated with concerns relating to the foundation were

noted by or reported to NDDS's assessor.

Other
 No additional concerns relating to the foundation at the

Subject Property were noted by or reported to NDDS's

assessor.

Recommendations: No significant concerns relating to the foundation were

noted and no major expenditures relating to the foundation are anticipated during the reserve term.

6.2. Building Frame

Description

Building Frame: The superstructure is constructed with reinforced concrete

bearing walls, beams and columns. CMU walls are also

utilized at the parking garage walls.

Decking Between Floors: Cast-in-place, reinforced concrete slabs are present at

each floor level.

Roof Framing/Decking: The roof of the main building consists of a cast-in-place,

reinforced concrete slab. The roof of the mechanical penthouse consists of corrugated metal decking supported

by a series of C-channel steel joists.

Observations/Comments

General Condition: Good

Age/Last Action: The framing is original and maintained as needed.

Concerns

Wall Cracks
 No significant signs of cracking were observed on the

interior or exterior walls. No history of cracking was

reported to the assessor.

Bowed Walls
 No evidence of bowed walls was noted by or reported to

NDDS's assessor.

Sagging Ceilings/Floors
 No evidence of sagging ceilings or floors was noted by or

reported to NDDS's assessor.

• Sticking Doors/Windows No sticking doors and were noted that would indicate

significant movement of the buildings.

Deteriorated Framing
 No deteriorated framing or support members were

observed by or reported to the NDDS assessor.

early 1980s. Certain types of fire-retardant treated plywood rapidly deteriorate when exposed to excessive heat and humidity or may cause nails or metal fasteners to corrode. Common signs of fire-retardant plywood include darkening of the wood and the presence of a powder-like substance, warping of the roof and the curling of shingles. No indications of fire-retardant plywood were noted.

No other concerns relating to the framing or decking at the Subject Property were noted by or reported to NDDS's

assessor.

Recommendations: No significant concerns relating to the building frame and

decking were noted by or reported to NDDS's assessor. Our general observations of the rooflines and sidewalls revealed them to be level and plumb, respectively, to the unaided eye. We did not observe any deficiencies with respect to the building's structural framing system that

warrant repair.

No significant expenditures are anticipated during the

reserve term.

6.3. Façades or Curtain Wall

For a detailed description of the facade systems and recommendations, refer to *Condition Survey* on the Exterior Wall System report prepared by JA Weir Associates, dated October 19, 2022, published under separate cover.

Description

Other

Exterior Walls: No architectural drawings or details on the exterior wall

were available at the time of this review. From site observations, the building façade consists of vertical strips of beige painted architectural precast concrete with black

tinted windows in aluminum frames. The exterior walls of the parking garage are of painted CMU. The mechanical penthouse atop the roof is clad with a beige painted exterior stucco system on an unknown substrate.

Fascia/Soffits/Trim: Soffits for the shallow setbacks of the two main entrances

are of painted gypsum board panels with recessed lighting

fixtures.

Doors/Windows: Fenestration typically consists of a vertically aligned

window system with black tinted insulated glass. Units are fixed and inoperable. Frames consists of dark bronz anodized aluminum. Window sills are integral with the

window frame.

Main public entrances are glazed aluminum medium stile swing doors with overhead closers, exterior pulls, with interior panics and 1" insulating vision glass. Finishes of the doors is clear (silver) anodized. Service doors are set into openings in the concrete wall panel and are painted

steel frames.

Stairs/Walkways/Landings: Concrete stairs with aluminum handrails are provided at

east (rear) entrance. There is also a concrete stair system at the southwest corner of the exterior parking garage that leads to the lower/grade level. No elevated walkways are

present.

Other: No other significant components to the facades were

noted.

Observations/Comments

General Condition: Good

Age/Last Action: The structural components of the facades, including the

exterior walls and windows, are original. The exterior paint

finish is at least second generation.

Concerns

Use of EIFS
 An exterior insulation and finish system (EIFS), also

referred to as synthetic stucco, refers to a multi-layered exterior wall system consisting of a base coat, mesh and insulation board, and a finish coat that are mechanically secured or glued to plywood or another substrate. Research has discovered that if water enters the EIFS wall system through surface penetrations, around flashings at architectural details and past caulked joints around

window and door openings, the structural wood framing and sheathing can rot. No evidence of EIFS was observed.

Deteriorated Wood
 Wood is not present on the exterior façade or trim.

• Glass in Glazing Systems The glass is in an overall acceptable condition with no

major issues reported by the engineering staff or

observed during this review.

• Damaged Masonry The CMU walls were in good condition. No significant

deterioration or cracking of the pointing was noted.

Water Penetration
 No evidence of active water penetration through walls,

around windows and doors, or in any other manner related to the façade of the building, was observed by or reported

to NDDS's assessor.

Other
 No other significant concerns relating to the facades at the

Subject Property were noted by or reported to NDDS's

assessor.

Recommendations:

The exterior glazing system was designed with aluminum

sash members which are not a good choice for a curtain wall system. Continued maintenance with sealant application onto the system at the floor lines will be necessary throughout the reserve term and therefore budgeting for a yearly allowance has been include within

the Capital Replacement Reserve Schedule.

Exterior maintenance, such as power-washing and painting is required every six to eight years depending on the quality of work performed, quality of materials used and weather conditions. Cost to paint the exterior facades during the term have been included in the Capital

Replacement Reserve Schedule.

The remaining portions of the facade should be monitored and addressed as part of the routine maintenance of the

Subject Property.

6.4. Roofing

For a detailed description of the roofing systems and recommendations, refer to Roof Systems Report prepared by The Alsan Group, dated October 26, 2022, and published under separate cover.

Description

Roofing System: The main roof of the building consists of a smooth surface

modified bitumen membrane over perlite insulation

and a concrete slab. The approximate area of the roof is 11,000 SF. Access to the roof was provided via the penthouse.

The roof of the mechanical penthouse consists of a BUR with a granular cap sheet applied over rigid insulation and a corrugated metal roof deck. The approximate area of the roof is 1,600 SF. Access to the penthouse roof was not provided; however, was observed from atop a ladder that did not extend above the roof level.

Drainage:

The roof design of the main building is that of a flat roof slightly pitched towards internal roof drains that tie underground into the city's storm water system. Through wall over flow scuppers are provided along the perimeter off the roof in the event that the roof drains are clogged.

The roof design of the penthouse that of a flat roof slightly pitched towards a beige painted gutter and leader system. The leaders drain onto the main roof and subsequently into the city's storm water system.

Parapets/Coping:

Parapet walls are approximately 42" high and are an extension of the precast concrete sidewall system. Flashing consists of a granular surfaced modified bitumen that runs up and over the parapet and terminates under a sheet metal coping. Counter flashing is of a cant, mastic sealant. The wall flashings at the four walls of the mechanical penthouse extend approximately eight inches (8") up from the roof surface and terminates under a metal counterflashing.

Other:

Roof appurtenances consist of a penthouse for mechanical equipment, steel or aluminum dunnage, an electrical generator, air handlers, ductwork pipes, antennas, equipment rails, pitch pans, plumbing vents, vent stacks, and window washing equipment.

Observations/Comments

General Condition: Poor

Age/Last Action:

The roofing systems atop the main roof and penthouse roof are at least second generation and appear to be at least 15 years old. They are patched or repaired as needed

on an ongoing basis as part of the routine maintenance of the facility.

Concerns

No leaks were noted by or reported to NDDS's assessor. Leaks

 Significant Ponding Evidence of prior ponding water was noted in several areas of the roof; however, there was no standing water during the time of our site visit.

• Evidence of Repairs The roof appears to have received on-going roofing repairs in recent years.

• Area of Roof Damage There were several "anomalies" observed from atop the roof, such as small punctures in the roof membrane, splits in the mechanical curb flashings, granule loss of the field membrane atop the penthouse roof, etc. These are more thoroughly identified in the report prepared by *The Alsan*

Group.

The gutters and downspouts were in fair condition considering their age.

> No other significant concerns relating to the roofing systems were noted.

> The ages of the roofs are unknown, but they appear to have surpassed their EUL of 15 years. The roof systems are also in poor condition and have aged past the point where preventative maintenance repairs will produce a return on dollars invested; therefore, replacement is required early in the reserve term and costs for work to tear the roofs off down to the concrete roof deck and install similar built-up roof systems have been included in the Capital Replacement Reserve Schedule.

> Of note, based on the year of construction (1974 which is pre-1980), there is a potential that asbestos-containing materials (ACMs) are present. Additional costs may be associated with the abatement and disposal of any asbestos containing roofing materials during the replacement of the roof.

> At this time, prior to the replacement of the roof, we recommend the use of "stop gap" measures to ensure water tightness and to perform emergency leak repairs only until the roofs are replaced. A budget for "stop gap"

Damaged Gutters

Other

Recommendations:

leak repairs during the first year are included within the Physical Deficiencies/Deferred Maintenance Table 1.

In addition, activities including, but not limited to, keeping drains clear and repairing leaks promptly, should be done as part of routine maintenance.

6.5. Seismic Analysis

For a detailed description of the seismic analysis and recommendations, refer to the Seismic Risk Assessment Report prepared by YA Engineering Services, dated October 31, 2022, and published under separate cover.

Description

Lateral Resistance:

Main Building: Based on visual observations, the structure is classified as combination of reinforced concrete shear walls with a secondary system of concrete moment-frames. The primary vertical load carrying systems are comprised of two-way concrete slabs at the roof and floor levels spanning to an interior core of concrete walls and concrete columns. All gravity loads are carried to the foundation systems by the concrete walls and concrete columns. The primary lateral force-resisting system consists of the concrete slabs at the roof and floor levels performing as rigid diaphragms that distribute lateral loads to the concrete shear walls.

Parking Structure: The structure is classified as combination of reinforced concrete shear walls and concrete masonry shear walls with a rigid diaphragm. The primary vertical load carrying system is comprised of a two-way concrete slab supported by perimeter masonry walls lining the south, west and north elevations, a concrete wall at the east elevation, and interior and perimeter concrete columns. All gravity loads are carried to the foundation systems by the concrete walls, perimeter masonry walls and interior/perimeter concrete columns. The primary lateral force-resisting system consists of the concrete slab at the roof deck level performing as a rigid diaphragm that distributes lateral loads to the masonry and concrete shear walls.

Observations/Comments

General Condition: Good

Age/Last Action: The date of construction (1974) employs outdated seismic

design requirements, which do not include modern seismic

design forces and detailing methods.

Concerns: The date of construction (1974) employs outdated seismic

design requirements, which do not include modern seismic design forces and detailing methods. Deficiencies could include but are limited to non-ductile seismic detailing of concrete elements and large spacing between the steel

reinforcement of column ties.

The office building structure has an irregular shape in elevation. The transition between the parking levels to the reduced footprint at the upper levels can focus loads and intensify the damage to the building at these areas.

Based upon our findings and analysis, the office building's structural systems could lose vertical load carrying capacity when subjected to the expected design-basis seismic forces, while the parking structure is not expected to be at risk for stability.

Wall Cracks

• X The date of construction (1974) employs outdated seismic

design requirements, which do not include modern seismic design forces and detailing methods. Deficiencies could include but are limited to non-ductile seismic detailing of concrete elements and large spacing between the steel

reinforcement of column ties.

Sagging Ceilings/Floors
 No evidence of sagging ceilings or floors was noted by or

reported to NDDS's assessor.

Sticking Doors/Windows
 No sticking doors and were noted that would indicate

significant movement of the buildings.

Deteriorated Framing
 No deteriorated framing or support members were

observed by or reported to the NDDS assessor.

Other

No other concerns relating to the framing or decking at the Subject Property were noted by or reported to NDDS's assessor.

Recommendations:

Overall, the site has a low probability for geologic hazards that may lead to widespread earthquake-related damage summarized by known hazards. Based on these findings, the site meets the site stability requirements as determined by the 2017 Seismic Evaluation and Retrofit of Existing Buildings (Standard ASCE/SEI 41-17).

The damage estimates outlined in Table 7 of the Report prepared by YA Engineering Services suggest a Scenario Expected Loss (SEL) of as high as 38% for the office building, which is in the "moderate" to "heavy" ranges that can result in severe structural damage, possibly included partial collapse and critical economic loss; structure likely to be closed for an extended period; repair may not be economically attractive. These estimates can be reduced by the implementation of seismic improvements or retrofits. In general, the expected seismic performance of nonductile concrete construction can be improved by wrapping the frame columns and beams in fiber composites and the addition of concrete shear walls or steel braced frames. These solutions would be applicable for this property. Structural drawings of the building and foundation are generally unavailable; and it is difficult to estimate the costs of such a retrofit. Without this information, it is not practical to estimate required quantities of materials to support a cost estimate at this time.

7. MECHANICAL, ELECTRICAL AND PLUMBING SYSTEM

7.1. Heating, Ventilation and Air Conditioning

For a detailed description and list of equipment, refer to the *Mechanical – H.V.A.C., Electrical, Plumbing, & Fire Protection Systems* report prepared by Maximum Energy Professionals (MEP), dated October 24, 2022, and published under separate cover.

Description

Heating System: Heating is generated utilizing a single 1500-kBtuh input

gas-fired hot water boiler, with a single 1.5-Hp circulation

pump to the air hander unit.

Air Conditioning System:

Air conditioning is provided using a direct expansion (DX) refrigeration system consisting of two (2) reciprocating type 75-Hp refrigeration compressors. Heat rejection is accomplished using a water-cooled evaporative condenser with a VFD fan.

Supplemental air conditioning is utilized via several conventional and "VRF" split-systems for select tenant IT/Server rooms, each with exterior condensing unit and interior fan coil. The sixth-floor tenant lab area uses two (2) air-cooled chilled water condensers

Ventilation System:

The building uses a dual-duct air supply system, with separate cold decks and hot decks. A single air volume 40-Hp centrifugal supply air fan circulates air for both the cold deck and hot deck. Air control boxes inside occupied spaces are dual-duct mixing boxes with cold-hot decks around perimeter and cooling only boxes in interior spaces.

A rooftop dual 3/4-Hp reciprocating compressor provides control air. There is a limited direct digital control (DDC) programmable energy management system (EMS) installed with a graphical user interface computer to control the compressors, evaporative condenser, cold and hot decks, and boiler. Installed cooling index is estimated at 439-SF per Ton.

Observations/Comments

General Condition:

Fair / Below Industry Standards

Age/Last Action:

The H.V.A.C. systems are of various ages and manufacturers. The compressors are the original to the building, but were rebuilt by "Brainerd" in approximately 2019. One of the compressors has a newer 75-Hp motor, but the other compressor appears to be the original. The BAC cooling towers are second generation and were replaced in 1995 (approximately 27 years old). The hot water boiler was manufactured by Thermo-Pak in 2002 (approximately 20-years old). The air supply system is also most likely original to the buildings construction.

Concerns

• Inoperable Equipment

All of the systems and equipment observed were operable at the time of the assessment. No significantly obsolete equipment was noted. No concerns regarding inoperable equipment was reported to NDDS by the property contacts.

• Insufficient Capacity

No concerns regarding the capacity of the HVAC systems for the original intended use were reported to NDDS. The units appeared adequately sized for the original or proposed usage of the property.

• Use of CFC Refrigerants

As of July 1, 1992, it became illegal to intentionally vent CFC refrigerants to the atmosphere, and the manufacture of CFC refrigerants was phased out in 1995. CFC refrigerants include R 11, R 12, R 113, R 114 and R 115. The two 585-ton chillers are using R-134a, which is an acceptable refrigerant. The 169-ton chiller is using R-11. The rooftop units serving the Subject Property are utilizing R-22 refrigerant. R-22 is a hydro-chlorofluorocarbon (HCFC) refrigerant that cannot be intentionally vented to the atmosphere and is scheduled to be phased out of production in 2030. The packaged units will require replacement by 2030, and should be replaced with a unit that utilizes an acceptable refrigerant.

Other

No additional concerns relating to the HVAC system at the Subject Property were noted by or reported to NDDS's assessor.

Recommendations:

The rebuilt reciprocating refrigeration compressor is considered relatively new and in good condition, and is not recommended for replacement during the 12-year capital reserve period of this report as a capital replacement measure due to condition. However, these compressors are relatively inefficient at about 1.0-kW per Ton. Newer variable speed "Bitzer" (made in Germany) screw type refrigeration compressors using refrigerant R134A operate at about ½ of the energy input. This capital replacement measure is offered as an "upgrade/betterment" alternative in the Capital Replacement Reserve Schedule.

The 1500-kBtuh input gas-fired space heating hot water boiler (manufactured in 2001) will reach the end of its EUL early within the reserve period. In addition, there is only one (1) space heating hot water boiler; therefore, no spare or redundant capacity is available. Hot water for the heating system cannot be provided in case of boiler failure, boiler repair, or maintenance/service times. As an alternate, we suggest that when the boiler is replaced, two (2) ea. 1000-kBtuh input boilers (Raypak model MVB modulating vertical boiler, model H7-753A, 750-kBtuh

input, minimum 86% efficiency) be installed instead of a single unit, as well as adding a second circulation pump. Costs for the replacement of the current boiler and the addition of a second boiler is included in the Capital Replacement Reserve Schedule.

The original 1970s DX cooling coils will reach their EUL early within the reserve period. In lieu of costly wholesale replacement, we believe that coil life may be extended to last beyond 10 years by performing the following O&M measures: Replace old steel epoxy coated condensate drain pans with stainless steel, properly slope for good drainage, and wire bush and epoxy coat rusted steel coil frames, as well as steel coil tube-sheet ends. The original 1970s hot water coils will also reach their EUL early within reserve period. In lieu of costly wholesale replacement, we believe that coil life may be extended to last beyond 10 years by performing the following O&M measures: Open, clean and inspect unit, wire brush and coat any corroded areas, and clean hot water coils. Costs for these combined repair measures are included withing the Capital Replacement Reserve Schedule.

The original 1970s centrifugal type cold-hot deck supply air fan will reach the end of its EUL within the reserve period. In lieu of costly wholesale replacement, we believe that fan life may be extended to last beyond 10 years by performing the following O&M measures: Open, clean and inspect unit, wire brush and change all fan belts, sheaves, bearings and drive shafts, and test and replace motor as needed. Costs for these repair measures are included within the Capital Replacement Reserve Schedule.

It is considered below industry standards and not in accordance with similar buildings in similar areas with similar uses to still use the current pneumatic controls and not have a programmable direct digital control (DDC) energy management system (EMS) for dual duct mixing boxes as well as a variable air volume (VAV) system conversion. Therefore, we recommend expansion of the existing Delta programmable direct digital control (DDC) energy management system to have remote Internet access to control all HVAC operations. This will require the conversion of the base system for existing rooftop equipment with expansion capabilities to include future tenant build-outs that convert old pneumatic dual duct (DD) mixing boxes/valves using independent pneumatic

actuators to DD-VAV configured boxes with single DDC actuators-estimated 150 zones. Costs for this upgrade are included in the Capital Replacement Reserve Schedule.

7.2. Electrical

For a detailed description and list of equipment, refer to the *Mechanical – H.V.A.C., Electrical, Plumbing, & Fire Protection Systems* report prepared by Maximum Energy Professionals (MEP), dated October 24, 2022, and published under separate cover.

Description

Level of Service: Electrical service enters the building below grade into the main electrical room from a pad mounted transformer along the south side of the exterior parking garage. The main electrical room is accessed from within the first-floor

of the underbuilding garage. Electrical power consists of a 1,600 amp, 277Y/480 volt 3-phase, 4-wire service. Step down transformers on each floor supply 120/208V

electricity level for plug outlet circuits.

Wiring: All branch circuit wiring observed and reported was

copper.

Overload Protection: Overload protection is provided by circuit breakers. Each

occupied tenant space floor contains an original 1974 "I-E-M, Industrial Electric Manufacturing Co." 277/480V "L" sub-panel rated at 225A maximum. "L" panels distribute electricity to 277V lighting circuits and were observed as

about 90% full.

Each tenant floor (4 through 8) has a main circuit panel located in a locked room within the public restroom closest

to the elevator bank.

Metering: The main electric meter for the building is located on the

main electrical panel in the first-floor mechanical room. Floors contain some "E-mon D-mon" digital type submeters but it was not made clear if they are operational or

used.

Other: There is an original 1970s vintage diesel engine driven

emergency power generator rated at 55-kW located atop the main roof. This unit is in extremely poor condition and staff believes it in non-operational. The main distribution panel has a 1st floor garage level emergency generator plug connection, which would be anticipated to be used in

case of long-term power outage.

Observations/Comments

General Condition: Good to Fair

Age/Last Action: The electrical system is original and is maintained as part

of the routine maintenance of the facility.

Concerns:

• Insufficient Capacity No concerns regarding the capacity of the electrical system

was reported to NDDS.

• Aluminum Wiring No aluminum branch wiring was observed.

• Inappropriate Receptacles In general, ground fault current interrupt (GFCI) were

required by code to be installed in areas near water sources, such as in bathrooms and kitchens. In the areas

observed, NDDS noted GFCI receptacles were present.

Other
 No additional concerns relating to the electrical system at

the Subject Property were noted by or reported to NDDS's

assessors.

Recommendations: The main electric panel is a 1974 vintage (48-years old)

panel-board. It is without a single main disconnect switch with GFIC (ground fault interruption circuit) protection, which would be required for today's Code. It is our opinion that the main switchgear may require replacement later within the reserve period of this report

at age 56-years (in 8 years). We recommend replacement at that time of the exiting main distribution switchboard with a new assembly including "power break" type main switch with GFIC (ground fault interruption circuit) protection. Costs for replacement are included in the

Capital Replacement Reserve Schedule.

Infrared ("IR") thermo-graphic scans for main distribution or sub-panels have not been done (last service was in year-2020) in the past to identify any "hot spots" that might require repair/lug tightening or circuit breaker replacement. This is an O&M issue and costs for service this year and every three years is shown in the Capital Replacement Reserve Schedule, as it is a safety related

issue.

It also appears that an "ARC Flash" study has not yet been completed at subject building. This is a voluntary O&M issue, and costs for service is shown in the Capital Replacement Reserve Schedule, as it is a safety related issue.

7.3. Plumbing

For a detailed description and list of equipment, refer to the *Mechanical – H.V.A.C., Electrical, Plumbing, & Fire Protection Systems* report prepared by Maximum Energy Professionals (MEP), dated October 24, 2022, and published under separate cover.

Description

Supply Piping: Domestic water is provided by the municipal utility into

the building through a 3-in. supply line with a back-flow prevention device. Water is circulated to the building using incoming utility line pressure, and no booster pumps are used. Natural gas is provided to the building through a 3-in. metered service with a welded low-pressure steel riser. Water piping inside the structure was

observed as copper tubing.

Waste Piping: Sewage piping was not documented but is estimated to

flow by gravity into a cast iron lateral to the east of the

parcel.

Hot Water Production: Domestic hot water is generated via a gas-fired water

heater boiler rated at 1,336,000-Btuh input located within the mechanical penthouse atop the main roof. There is no

associated hot water storage tank.

Other: No other significant components to the plumbing systems

were noted.

Observations/Comments

General Condition: Good

Age/Last Action: The supply and waste piping is original and is maintained

as part of the routine maintenance of the facility. The central hot water boiler was manufactured by RayPak in

2004 and is therefore approximately 18-years old.

Concerns:

Inoperable Equipment

All of the systems and equipment observed were operable at the time of the assessment. No significantly obsolete equipment was noted. No concerns regarding inoperable equipment was reported to NDDS by the property contacts.

• PB Piping

Polybutylene (PB) piping was used extensively in the south and west during the 1980s. Major problems with this piping were reported and numerous class-action suits resulted. The problems arise because the plastic fittings used with PB piping allegedly corrode when they come in contact with the chlorine in tap water. This problem can often be remedied by replacing the cemented plastic fittings with compression fittings. Newer installations that employ copper or brass fittings and manifold systems are typically quite reliable. No PB piping was noted by or reported to the NDDS assessor.

• ABS Piping

Acrylonitrile-butadiene-styrene (ABS) pipe is rigid black plastic pipe used to drain sinks, tubs, showers, toilets, washing machines and dishwashers. Six class action complaints allege that ABS pipe manufactured at certain times between 1984 and 1990 by Polaris Pipe Co. ("Polaris"), Gable Plastics, Inc. ("Gable"), Centaur Mfg., Inc. ("Centaur"), Centaur Marketing, Inc. a/k/a Phoenix Extrusion Co. ("Phoenix"), and Apache Plastics, Inc. ("Apache") is defective and may leak. The overwhelming majority of the allegedly defective ABS pipe at issue is located in State

No ABS piping was noted by or reported to the NDDS assessor.

Galvanized Piping

Galvanized pipe is defined as "a steel pipe or wrought-iron pipe, of standard dimensions, which has been galvanized by coating it with a thin layer of zinc." Galvanized piping has been utilized as a water supply system throughout the country, and is not limited to certain dates of construction. Galvanized piping systems typically exhibit corrosion more quickly than other plumbing systems. Galvanized steel piping is still in use, however, it is not installed in modern construction. It oxidizes from the inside out, the oxidation (rust) reduces the interior diameter of the pipe, restricting the flow of water and it usually first leaks at threaded joints

where the pipes are joined. Galvanized pipe corrodes more quickly when it comes in direct contact with copper; dielectric couplers are special connectors to prevent galvanic action or electrolysis.

No evidence of galvanized piping was noted by or reported to the NDDS assessor.

Deterioration/Leaks

No evidence of wide spread deterioration of or leaks in the supply and waste piping was observed by or reported to the NDDS assessor.

• Insufficient Water Pressure

No concerns associated with insufficient water pressure were observed by or reported to the NDDS assessor.

• Blocked Drainage

No concerns associated with blocked waste water drains were observed by or reported to the NDDS assessor.

• Inadequate Hot Water

No concerns associated with the quantity or quality of the hot water supply were observed by or reported to the NDDS assessor.

• Other

No additional concerns relating to the plumbing system at the Subject Property were noted by or reported to the NDDS assessor.

Recommendations:

Based on the age of the domestic hot water boiler system and an EUL of approximately 15-years it is anticipated that the boiler will need to replaced early in the reserve term. Costs for replacement is included in the Capital Replacement Reserve Schedule.

At the time of the replacement of the domestic hot water boiler discussed above, we also recommend that a standard-size 175-gallon insulated DHW storage tank be installed to accommodate the system per current industry standards. Costs for the new storage tank are included in the Capital Replacement Reserve Schedule.

Any permitted tenant office remodels may require the plumbing fixtures to be upgraded to any then-current Cal-Green water efficiency standards. It appears all common area restroom fixtures are from a past 2019 era retrofit and may meet current CAL-Green water efficiency standards

(fixtures had no labels); however, this cost is not shown in the capital reserve period cost tables of this report.

7.4. Elevators and Escalators

For a detailed description and list of equipment, refer to the *Elevator & Escalator Systems* report prepared by HKA Elevator Consulting, Inc., dated October 27, 2022, and published under separate cover.

Description

Elevators: The building is served by two geared traction passenger

elevators with 8 stops that are equipped with solid state controllers with F5 Drives and AC motors. Each operate at a speed of 350 FPM and have a capacity of 2500lbs. Car doors are the single speed side opening type, and controllers are the solid-state type. Cab interior finishes consist of raised plastic laminate wall panels and stainless-steel front returns, with an egg grate aluminum drop ceiling. Elevator equipment is located within the

mechanical penthouse atop the roof.

Escalators: No escalators are present at the Subject Property.

Other: The building utilizes an electric vertical platform lift that

has a 750 lb. capacity for ADA handicap access at the east

(rear) entrance adjacent to the stairs.

Observations/Comments

General Condition: Fair

Age/Last Action: The elevator transportation systems were originally

manufactured and installed by Westinghouse Elevator Company in 1973 and modernized by Star Elevator Company in 2008. The elevator door systems is

approximately 14 years old.

The ADA lift was manufactured by Garaventa Genesis and installed to conform to current ADA compliance

requirements.

Concerns

Inoperable Equipment
 It should be noted that neither of the emergency elevator

phones were operating as intended.

• Out of Date Inspection The inspection certificates for the two elevators were last

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inspected on 06/16/2021 by the State, Department of

Industrial Relations, Division of Occupational Safety & Health and have since expired as of 06/16/2022.

An annual cylinder test was performed by Star Elevator on the ADA lift on 09/20/2021. Of note, the lift was currently out-of-order.

The F5 Motor Drives and Westinghouse 28 geared machines are obsolete. Elevator 1 is showing considerable wear in the groove for the drive sheave.

In general, the elevator equipment was found to be in fair condition for its age. Typically, an elevator control system has a useful life of 20 to 25 years; but due to the obsolete drives and machines of the current elevators, our conservative estimate of life expectancy for the existing controls and machines are 3 - 5 years with continued good and proper preventative maintenance. At that time, we recommend that new solid-state controllers with new solid-state drives, new overhead gearless machines, new overspeed governors, new solid state closed loop door operators, and related door equipment, new CA ADA compliant signal fixtures, new wiring, new traveling cables, and misc. components be provided. It is also recommended that these components be modernized or replaced to provide reliable elevator service and allow this building to compete with newer buildings in the surrounding areas. Costs for this work is included in the Capital Replacement Reserve Schedule.

In the interim, improvements can be made in adjustments to motor control for the traction elevators and the vibration and noise at high-speed operation, elevator 1 was very rough and noisy. The doors should be adjusted and serviced to provide smooth and quiet door operation. Adjustments to door dwell or hold open times will also allow compliance with disabled access requirements and provide consistent operation.

Of note, the maintenance being performed by Star Elevator Company is average when compared to the industry standard. The governor rope on Elevator 1 is in need of shortening. The elevator maintenance contractor should make these adjustments under the terms of the full maintenance contract at no additional cost to the owner.

Other

Recommendations:

8. INTERIOR ELEMENTS

8.1. Common Areas

Description

Interior Finishes:

The main lobby is located along the entire south half of the first floor of the building and is primarily accessed via two main doors along the east (front) and west (rear) elevations. Lobby finishes consist of: white painted gypsum board walls and ceilings, rectangular ceramic tile flooring and CFL lighting. Amenities consist of a touch screen building directory and two leather benches across from the elevator bank. There are four individual tenant spaces off of the main lobby, one of which is La Matcha Café that has a light breakfast and lunch menu and specialty drinks that serves the public.

Typical corridors on tenant floors 4 through 8 are finished with commercial grade carpet flooring, wall surfaces of painted gypsum board, and ceilings consisting of a 2' x 2' acoustical tile ceiling on and exposed grid with recessed LED lighting. Corridor doors are typically of solid wood.

There are two sets of "All Gender Restrooms" on each of the tenant floors. Toilet rooms have a floor mounted vitreous toilet with a flushometer and a single wall hung lavatory. There are no vanities or countertops. Finishes consist of ceramic tile flooring, partial height wet wall ceramic tiling and painted gypsum board walls and ceilings with recessed can lighting. The restroom closest to the elevator bank has a locked door to the electrical room on each tenant floor.

There are two fire-rated stairwells, both of which serve as a means of protected egress in the event of a fire. The far west stairwell provides access to the mechanical penthouse atop the roof. Stairwell walls are constructed of concrete with a painted, textured grey and white finish. Stairs are made of metal stringers with precast concrete treads. Handrails are painted metal. Observed doors are complete with self-closing hardware and have a 1.5-hour fire-resistance rating.

Observations/Comments

General Condition: Good

Age/Last Action: The common area finishes are at least second generation

and appear to be relatively new.

Concerns

• Damaged Walls/Ceilings No significant damage to the walls and ceilings of the

common areas was noted during the assessment.

with no significant areas of damage or wear observed.

Other
 No other concerns relating to the interior finishes of the

common areas were noted by or reported to the NDDS

assessor.

Recommendations: Interior common area finishes, such was walls and ceilings,

can be repaired and painted as needed as part of the routine maintenance of the property. Periodic replacement of the carpeting is anticipated during the reserve term and an allowance for this replacement has been included in the Capital Replacement Reserve

Schedule.

8.2. Tenant Spaces

See APPENDIX F for Tenant Rent Roll as of September 30, 2022

Suite	RSF	Tenant	Occupied
101	715	Optofluidics, Inc	Yes
102	577	La Match Café	Yes
404	2,781	CSASPR BIOTECH	No
405	1,137	CSASPR BIOTECH	No
505	1,532	Kevin U. Consani DDS	Yes
506	1,092	Neptune Medical Inc.	Yes
508	3,288	Neptune Medical Inc.	Yes
603	1,398	CSASPR BIOTECH	No
604	1,300	CSASPR BIOTECH	No
607	1,093	CSASPR BIOTECH	No
701	1,681	Optofluidics, Inc.	Yes
804	1,272	Neptune Medical Inc. Yes	

Description

Interior Finishes: The interiors are finished out to meet the specific needs of

the tenant. Generally speaking, interiors typically include an acoustical tile suspended ceiling on an exposed 2' x 2' or 2' x 4' grid; carpeted or vinyl floors; and painted gypsum board walls over steel studs. Interior office doors are of stained wood or glass finish. Select tenant spaces

contained their own individual restrooms.

Observations/Comments

General Condition: Good to (Vacant/Under Renovation)

Age/Last Action: The interior finishes in the tenant areas are replaced as

need on an ongoing basis. The areas are usually addressed as part of the tenant make-ready between tenants. Painting of walls and ACT replacement is generally handled as part of routine maintenance, while flooring is replaced

as needed.

Concerns

Damaged Walls/Ceilings
 No significant damage to the walls and ceilings of the

tenant areas was noted during the assessment.

> good condition with no significant areas of damage or wear observed. Several of the vacant tenant spaces had older/dated floor and wall finishes, wall call coverings and

cabinets/countertops.

Other
 No other concerns relating to the interior finishes of the

common areas were noted by or reported to the NDDS

assessor.

Recommendations: Lease agreements hold tenants responsible for all interior

FF&E. Going forward, no significant reserve term

replacements are anticipated.

9. LIFE SAFETY/FIRE PROTECTION

9.1. Sprinklers and Standpipes

For a detailed description and list of equipment, refer to the *Mechanical – H.V.A.C., Electrical, Plumbing, & Fire Protection Systems* report prepared by Maximum Energy Professionals (MEP), dated October 24, 2022, and published under separate cover.

Description

Fire Sprinklers and Standpipes: The building is fully sprinklered with a supervised overhead

wet-sprinkler system. The system is complete with a fire department connection and OS&Y valves that are tamper

switch protected. In addition, fire protection is provided by cabinet-enclosed fire extinguishers in the common corridors and fire extinguishers within each tenant space. The main fire sprinkler riser is located on the west wall of the underbuilding garage. Fire hydrants are also located along the municipal streets.

Each of the two stairwells have a 6-in. wet sprinkler riser with a flow alarm sensor and anti-tamper valve switch at each floor. There is a separate wet standpipe installed for hose connection at each floor and rooftop. Firewater is circulated at incoming utility line pressure; no booster pumps are used. Sprinkler heads contain numerous original 1970s bi-metallic type (48-years old) heads, but newer common area and tenant improvements have 2020, 3-mm glass-bulb quick release type of heads.

Observations/Comments

General Condition: Good

Age/Last Action: The fire sprinkler system is original and is maintained as

part of the routine maintenance of the facility.

Concerns

• Inoperable Equipment There were no obvious visual indications of inoperable fire

sprinkler equipment. According to the property contact,

the system is fully operable.

• Insufficient Water Pressure According to the property contact, the water pressure at

the Subject Property is sufficient to operate the fire

sprinkler systems.

• Out of Date Inspections The firewater system is tagged as having last Regulation

Four, 5-year testing and certification in June 2018, less than 5-years prior to date of inspection, indicating an upto-date service, but due again within one (1) year of the

date of inspection.

We also noticed that the fire extinguishers in the common areas had tags, which are also tested or serviced annually

and most recently inspected on June 28, 2022.

• Other The glass within the access panel to the fire house

encasement on the 5th floor, west common stairwell was

damaged.

Recommendations:

The National Fire Protection Association (NFPA) requires sprinkler head replacement every 50-years. It was noted that at least ¾ of the building contains original 1970s era sprinkler heads, which are now almost 48-years old, so an costs for sprinkler head replacements, with new 3-mm "quick release" type heads, have been included in the Capital Replacement Reserve Schedule.

The firewater system is tagged as having last Regulation Four, 5-year testing and certification in June 2018, less than 5-years prior to date of inspection, indicating an upto-date service, but due again within one (1) year of the date of inspection. This is included as an O&M measure in Year 1 of the reserve term as it is a health and safety related issue.

The glass within the access panel to the fire house encasement on the 5th floor west stair well was damaged and should be replaced to prevent accidental harm to patron access with the stairwell. Costs for repairs are included within the Physical Deficiencies/Deferred Maintenance Table 1.

9.2. Alarm Systems

For a detailed description and list of equipment, refer to the *Mechanical – H.V.A.C., Electrical, Plumbing, & Fire Protection Systems* report prepared by Maximum Energy Professionals (MEP), dated October 24, 2022, and published under separate cover.

Description

Fire Alarm Systems:

The main fire alarm control panel is a "Silent Knight" (by Honeywell), Intelli Knight model 5820XL. This is an analogue/digital addressable system that provides an alarm for any of the following types of alarms: firewater flow switches, firewater tamper sensors, pull (manual) stations, common/corridor area smoke detectors located at elevator lobbies, and duct smoke detectors (systems 2000-CFM and larger per code). The FACP also has integrated elevator control and recall function capability. Firewater riser flow sensor also has an exterior bell alarm. An FACP "Sequence of Operations" was not obtained at this

The FACP automatically dials out to offsite security

monitoring central station. There are handicapped audiovisual horn/strobe devices in all building common area spaces. These horn devices varied in age and type, but some appeared to be old (+20 years) and may not be compatible with today's requirements for frequency and volume.

Observations/Comments

General Condition: Good

Age/Last Action: The fire alarm control panel (FACP) was retrofit in 2008.

The FACP system is monitored and serviced by "San Francisco Fire Protection Co." (Account no. 29304) and was last annual tested and certified on September 1, 2022.

Concerns:

• Inoperable Equipment While fully functional, this FACP is considered obsolete, as

it is no longer manufactured.

• Other None

Recommendations: The existing 5820XL fire alarm control panel is fully

functional, but will reach its EUL of approximately 20-years within the reserve period. Fire Lite by Honeywell offers a backwards-compatible FACP model ES200X, but it is possible that older generation sensors and detector devices may not be compatible and will also need replacement. Costs for replacement of the control panel has been included in the Capital Replacement Reserve

Schedule.

9.3. Other Systems

Description

System: No other significant, property-owned life safety or fire

protections systems are present at the Subject Property.

10. ADDITIONAL CONSIDERATIONS

10.1. Natural Hazards

Description

Seismic Zone: Zone 4

United States Seismic Zones Map – See Appendix

Flood Plain Designation: Zone X / 0.2 PCT Annual Chance Flood Hazard

Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) Panel No. 06081C0132F, dated

April 5, 2019

Wind Zone and Hurricane: Wind Zone I (130 mph)

Hurricane Susceptible Region: No

Wind Zones in the United States - See Appendix F

Observations/Comments

Age/Last Action: No seismic or wind upgrades were noted or reported at the

Subject Property. It is assumed that construction was completed in accordance with the codes applicable as of

the date of construction.

Seismic Concerns: Properties located in Zones 3 or 4 are considered

potentially vulnerable to significant impact from earthquake activity. The Subject Property is located in one

of these zones of elevated risk of seismic activity.

Wind or Hurricane P

Concerns:

Properties located in high Wind Zones III or IV, a Special Wind Region or a Hurricane Susceptible Region are considered potentially more vulnerable to significant impact from wind and hurricanes (high wind, storm surge, etc.). The subject property is <u>not</u> located in a hurricane

susceptible region.

Recommendations: Given the seismic zone for the area including the Subject

Property, a Probable Maximum Loss (PML) assessment of the property was conducted. Refer to the report by YA Engineering Services, dated November X, 2022, and

published under separate cover.

Based on the wind zone map reviewed, the subject property appears to be located in Zone I, up to 130 mph and is not located within a Hurricane Susceptible Region. Therefore, wind/hurricane damage protection/insurance

may not be required.

Based on the flood map reviewed, the research indicated that the property is located in Flood Hazard Zone X. Therefore, flood insurance purchase is not required in this

zone according to FEMA.

10.2. Microbial Contamination (Mold)

Description

A visual screening for suspect mold was conducted. The screening was limited to observations in the areas walked and should not be considered a comprehensive survey of the property. No sampling was conducted. No assessment or assessment behind walls or in any other generally inaccessible areas was performed. Inquiries were made of the owner and/or property manager regarding any knowledge of past and current leaks at the property, any known mold issues, and any tenant complaints regarding health problems, musty odors or water leaks. When applicable, areas of reported or likely water leaks or water intrusion/penetration were inspected.

Observations/Comments

Concerns: No concerns were noted or reported.

Recommendations: No further action is required.

10.3. Americans with Disabilities Act

For a more detailed and tabulated description, refer to our NDDS *Americans With Disabilities Act Compliance Review*, dated November XX, 2022, and published under separate cover.

Title III of the Americans with Disabilities Act of 1990 (ADA) prohibits discrimination on the basis of disability by public accommodations and requires places of public accommodation and commercial facilities to be designed, constructed and altered in compliance with the accessibility standards outlined in the regulations. Places of public accommodation are facilities, or portions thereof, that are operated by a public entity, whose operations affect commerce and would be open to the public. General categories include: 1) Hotels or other place of lodging; 2) Restaurants other establishments serving food or drink; 3) Theaters or other places of exhibition or entertainment; 4) Convention centers or other places of public gathering; 5) Grocery stores or other sales or rental establishments; 6) Banks or other service establishments; 7) Bus terminals or other transportation stations; 8) Museums or other places of public display; 9) Parks or other places of amusement; 10) Nurseries, schools or other places of education; 11) Day care centers or other social service centers; and, 12) Bowling alleys or other places of exercise or recreation. Commercial facilities include facilities whose operations will affect commerce and are intended for non-residential use by a private entity such as manufacturing facilities and office buildings. Private clubs and residences are not covered under the ADA. A facility can be a mixture of any of these categories, for example a manufacturing facility that has an extensive customer service operation would be considered a public accommodation at the service area and a commercial facility for the remainder of the facility.

All places of public accommodation and commercial facilities constructed for first occupancy after January 26, 1993 must be constructed to be accessible. Any alteration made to a place of public accommodation or commercial facility after January 26, 1992, must be made so as to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and useable by individuals with disabilities. Alterations include, but are not limited to, remodeling, renovations, rehabilitation, reconstruction, historic restoration, changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reroofing, painting or wallpapering, asbestos removal, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.

A public accommodation is required to remove architectural barriers in existing facilities, prior to the making of any alterations, where such removal is readily achievable, i.e., easily accomplished and able to be carried out without much difficulty or expense. Examples include, but are not limited to, providing designated handicapped parking spaces, adding small ramps and curb cuts, widening doorways, rearranging furniture, adding raised markings on elevators, installing grab bars in toilet stalls and rearranging toilet partitions to increase maneuvering space. If not readily achievable, alternative methods of providing service, such as access to the management office, must be offered. Alternative methods include, but are not limited to, installing an intercom system between the leasing office and an accessible area, or relocating activities to accessible locations. The determination as to whether removal of a barrier or an implementation of a component or system is readily achievable is often a business decision, which is based on the resources available to the owner or tenants, and contingent upon the timing of implementation. Determination of whether barrier removal is readily achievable is on a case-by-case basis; the United States Department of Justice did not provide numerical formulas or thresholds of any kind to determine whether an action

is readily achievable. It is the property owner's burden to prove that a modification is not readily achievable, or would pose an undue financial or administrative burden.

On July 23, 2004, the Architectural and Transportation Barriers Compliance Board (also known as the Access Board) published a final rule adopting revised guidelines to implement the ADA and the Architectural Barriers Act (ABA) in the Federal Register. 69 Fed. Reg.44083. These guidelines became effective on October 21, 2004 as guidance for the ADA standard-setting agencies (Department of Justice and Department of Transportation) and the ABA standard-setting agencies (Department of Defense, Department of Housing and Urban Development, the General Services Administration, and the U.S Postal Service). Each of these standard-setting agencies is required to publish enforceable regulations that include design standards that consistent with the Access Board's guidelines. The Access Board's guidelines have no legal effect on the public until the standard-setting agencies have completed their rule making process.

The Department of Justice has published an Advance Notice of Proposed Rulemaking (ANPRM) to begin the process of revising the Department's ADA regulations to adopt design standards that are consistent with the revised ADA Accessibility Guidelines published by the Access Board.

The ANPRM is the first of three steps in the regulatory process and is designed to solicit public comment on several issues relating to the potential application of the revised guidelines and to obtain background information needed for the regulatory impact analysis (a report analyzing the economic costs and benefits of a regulatory action) that will accompany the proposed and final rules. The ANPRM will be followed by notice of proposed rulemaking (NPRM) and a final rule.

Parking Facility

The term "parking facility" is used instead of the term "parking lot" in the ADA guidelines so that it is clear that both parking lots and parking structures are required to comply with these requirements. The number of parking spaces required to be accessible is to be calculated separately for each parking facility; the required number is not to be based on the total number of parking spaces provided in all of the parking facilities provided on the site. Each parking facility should comply with the following table:

Parking Requirements:	Total Spaces	Total ADA	ADA Van
Proposed in ()	1-25	1	1
	26-50	2	1
	51-75	3	1
	76-100	4	1
	101-150	5	1
	151-200	6	1
	201-300	7	1(2)
	301-400	8	1(2)
	401-500	9	2
	501-1000	2% of total	1 of 8 (1 of 6)
	> 1000	20, plus 1 for each 100, or fraction thereof, over 1,000	1 of 8 (1 of 6)

Description

Parking Facilities:

The Subject is improved with a three-level underbuilding parking garage at the first to third floors that extends out in a trapezoidal shape 21 to 28 feet to the northernmost property line. The Subject also has a two-level concrete parking garage on the eastern half of the parcel. According to management, parking is provided for approximately 182 vehicles, 6 of which are ADA designated within the underbuilding parking garage. There are 4 ADA designated spaces closet to the elevator bank on the 2nd parking level and 2 closest to the elevator bank on the 3rd level. None of these spaces are designated as "Van" accessible.

There are also striped parking spaces along the west side of Street Name, directly across from the Subject for public use. Of these spaces, 2 ADA spaces are striped closest to the main entrance to the building.

Observations/Comments

Concerns

• Insufficient Spaces

The number of ADA parking spaces at the Subject Property meets the current and proposed regulations; however, there are no "Van" accessible ADA parking spaces, of which at least one is required per the Table above.

• Poor Location of Spaces

The accessible parking spaces were appropriately located at grade along Street Name near the main entrance and the elevator banks within the underbuilding garage of the building.

• Inadequate Signage

Each ADA parking space had the required vertical signage, with the international symbol of accessibility, and corresponding pavement demarcations.

Recommendations:

The Subject property was in compliance with the current number of ADA parking spaces required (6); however, NDDS recommends that at least one of the parking spaces located on the second or third floor of the underbuilding parking garage near the elevator bank be brought into compliance with proper identification signage and pavement striping required for a "van-accessible" ADA parking space. A cost for the installation is included in the Physical Deficiencies / Deferred Maintenance Table 1.

Path of Travel

There should be at least one accessible route provided within the boundary of the Subject Property from public transportation stops accessible parking spaces, passenger loading zones, if provided, and public streets and sidewalks. An accessible route means having an adequate number of properly located, ADA compliant curb cuts, ramps and entrances with the appropriate signage.

Description

Accessible Path: The accessible paths at the Subject Property are adequate.

No further action is required at this time.

Restrooms

Restroom facilities should accommodate the disabled with respect to the existence of toilet stalls that appear to be designed for accessibility, lavatories or sink at accessible heights with adequate clearance underneath, and compliant emergency fire alarms and strobes.

Description

Restrooms: There are two sets of "All Gender Restrooms" on each of

the tenant floors located near the elevator bank in the common corridors. Toilet rooms are for single use and have a floor mounted vitreous toilet with a flushometer and a single wall hung lavatory. There are no vanities or countertops to allow for wheel chair access below. Finishes consist of ceramic tile flooring, partial height wet wall ceramic tiling and painted gypsum board walls and

ceilings with recessed can lighting.

Observations/Comments

Concerns:

• Improper Location Restrooms were located directly to the south of the

elevator bank on each of the common tenant floor

corridors.

• Inaccessible Restrooms None noted.

Inadequate Sinks
 All exposed pipes below the sinks were adequately

insulated and the sink handles are operable without grasping, pinching or twisting. The height of the sinks was

also

• Insufficient Signage Signage appeared to be adequate.

Recommendations:

No further action is required following upgrades to the proposed upgrades to the exterior stairs at the 3420 Building with funds included in the original contract for construction.

Elevators

Elevators should have call buttons with visual signals to indicate when a call is registered and answered; interior control buttons designated by Braille and by raised standard alphabet characters for letters and Arabic symbols for numerals; emergency controls grouped at the bottom of the control panel; interior panel floor buttons with visual signals which light when each call is registered and extinguish when each call is answered; visual and audible signaling provided at each floor stop; doors with a reopening device that will stop and reopen a car door if the door becomes obstructed; and an emergency two-way communications system, which does not require voice communication.

For a detailed description and list of equipment, refer to the Elevator & Escalator Systems report prepared by HKA Elevator Consulting, Inc. published under separate cover.

Description

Elevators: There were two passenger elevators that provide vertical

transportation to the eight floors of the building.

Observations/Comments

Concerns:

Improper Call Buttons
 The call buttons on each floor were in general compliance

with visual signals indicating when a call is registered and is answered. The call buttons were at a height that would be considered accessible to someone in a wheelchair.

• Improper Hand Rails The elevator was without handrails. The handrails in the

elevators must be 1½" diameter tubes at 32" AAF.

• Improper Interior Controls The interior control panels appeared to be in general

compliance with the ADA guidelines, with emergency controls grouped at the bottom, floor indicators with visual signals and audible signaling at each floor stop. The control panels were accessible to someone in a wheelchair. However, the elevators were without "white on black" car

operating and/or entrance panels in Braille.

• Inadequate Doors The doors of the elevators were at least 32 inches wide and

had reopening devices that stop and reopen the door in

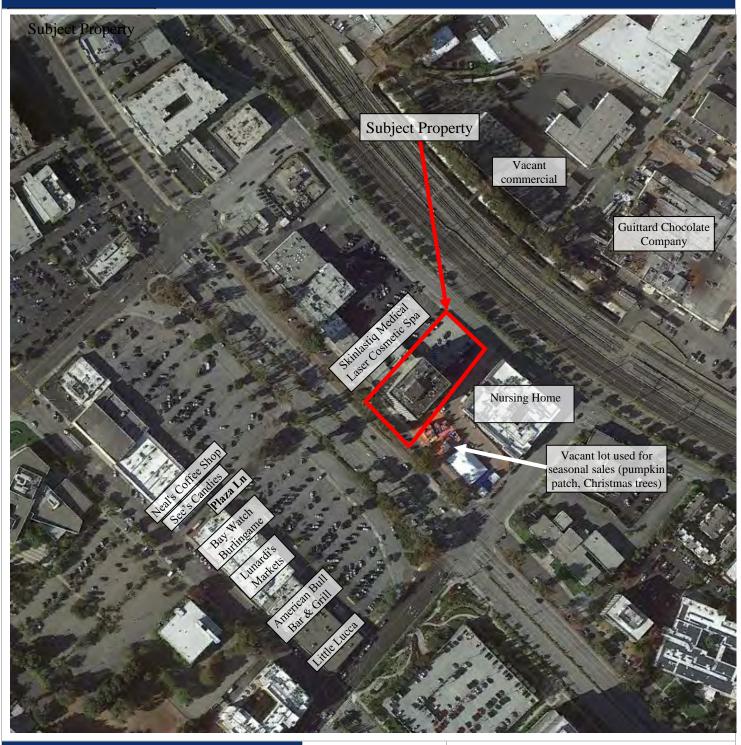
the event they are stopped by a person or object.

Recommendations:

The elevators at the Subject appeared to be in general compliance with the ADA guidelines; however, the elevators were without "white on black" car operating and/or entrance panels in Braille and were without handrails. Costs for installation are included in the Physical Deficiencies / Deferred Maintenance Table 1.

APPENDIX A PROPERTY MAPS, DRAWING, AND DESCRIPTION

PROPERTY DIAGRAM



COMMERCIAL BUILDING 123 MAIN STREET CITY, STATE, ZIP

NDDS PROJECT 2311111

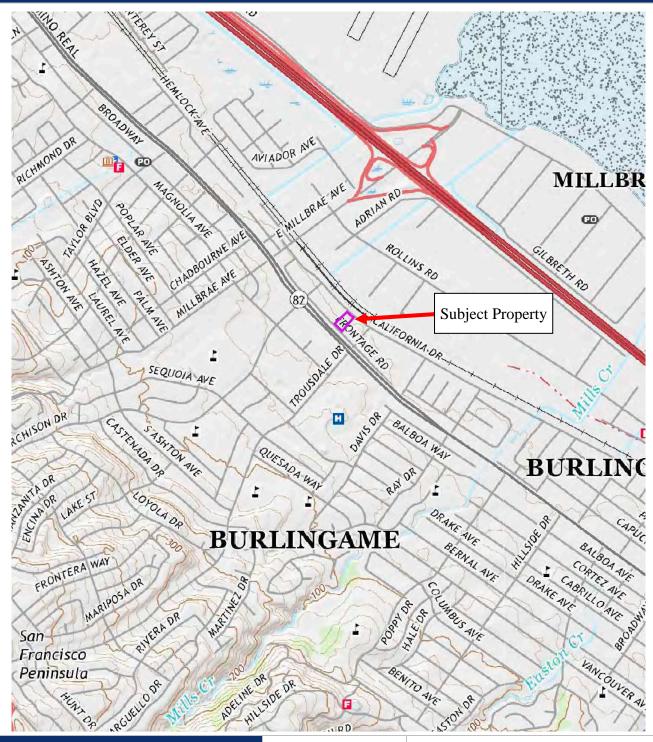
↑ N

FIGURE 2

NOT TO SCALE



TOPOGRAPHIC MAP



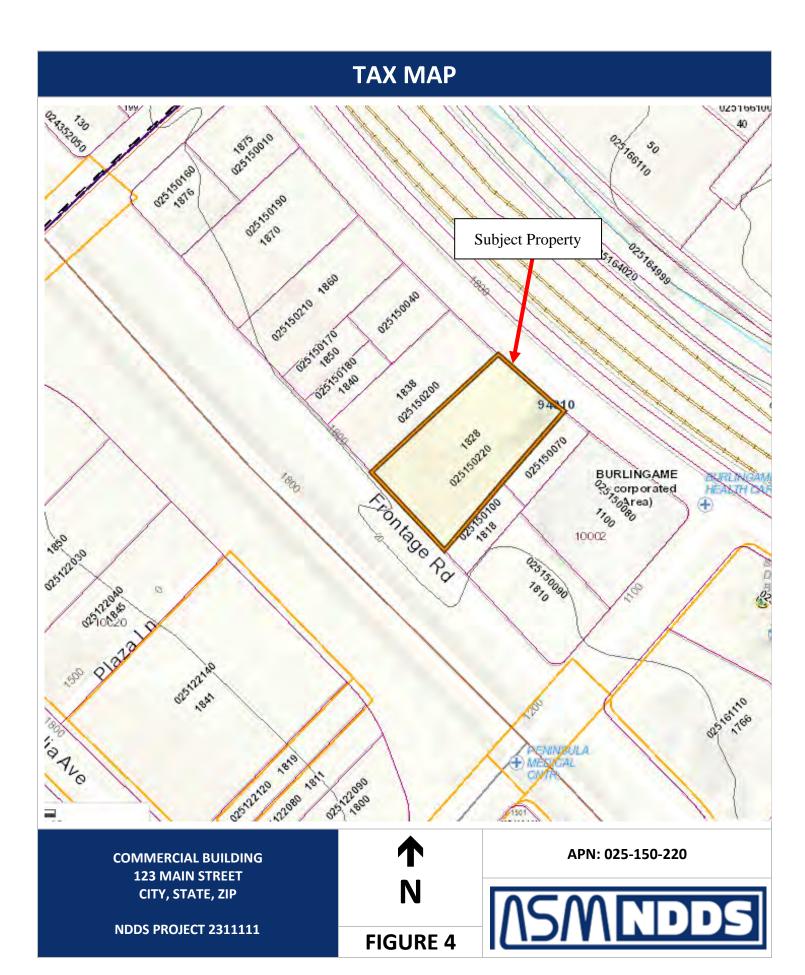
COMMERCIAL BUILDING 123 MAIN STREET CITY, STATE, ZIP

NDDS PROJECT 2311111

N FIGURE 3

U.S.G.S 7.5-MINUTE MAP
NORTH AMERICAN DATUM OF 1983 (NAD83)





ZONING MAP City of Burlingame ZONING MAP Updated 11/30/2021 Downtown Specific Plan **Proposed Zoning Districts** Downtown Specific Plan Districts R1 - Low Density Residential R2 - Medium Density Residential BAC - Burlingame Ave. Commercial R3 - Medium/High Density Residential BMU - Bayswater Mixed Use R4 - High Density Residential CAC - Chapin Ave. Commercial C1 - General Commercial CAR - California Auto Row **Subject Property** BFC - Bayfront Commercial DAC - Donnelly Commercial I/I - Innovation Industrial HMU - Howard Mixed Use BRMU - Broadway Mixed Use MMU - Myrtle Mixed Use CMU - California Drive Mixed Use NBMU - North Burlingame Mixed Use City Boundary Caltrain PR - Parks and Recreation Highway/Freeway P/I - Public/Institutional TP/B - Tidal Plain/Bay Overlay Areas Anita Road R-3 Commercial Residential Downtown Parking Sector Hillside Area CITY OF Multi-Unit Residential MILLBRAE Open Space Easement R-4 Incentive Rollins Road Residential **COMMERCIAL BUILDING**

CITY, STATE, ZIP **NDDS PROJECT 2311111**

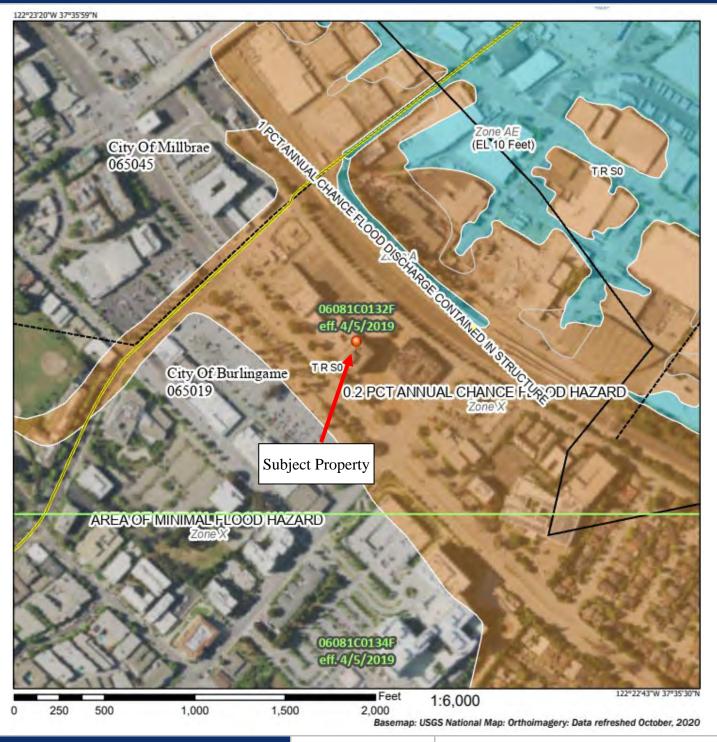
123 MAIN STREET

FIGURE 5

ZONE: "NBMU" NORTH MIXED USE DISTRICT



FLOOD MAP



COMMERCIAL BUILDING 123 MAIN STREET CITY, STATE, ZIP

NDDS PROJECT 2311111



FIGURE 6

FEMA MAP NO.: 06081C0132F DATE: 4/5/2019



APPENDIX B PROPERTY PHOTOGRAPHS

NSM NDDS



.. Southernmost entrance to the Subject Property looking north.



Northernmost entrance to the Subject Property looking east.



3. Southernmost entrance to the Subject Property looking north. Note the exterior parking Garage.



4. Northernmost entrance to the Subject Property looking south. Note the exterior parking Garage.



5. Middle entrance to the Subject Property looking south. Note the exterior parking Garage.



6. Asphalt paved driveway along the south end of the Subject, looking east.

NSM NDDS



7. Asphalt paved driveway along the south end of the Subject, looking west.



Top level of the exterior concrete paved parking garage, looking east. Also note the two asphalt paved driveways.



9. North end of the asphalt paved driveway. Note the refuse containers and the typical catch basin.



10. Underbuilding parking along the south end of the building, looking west.



11. Underbuilding parking.



12. Entrance ramp to the second level parking garage looking west.





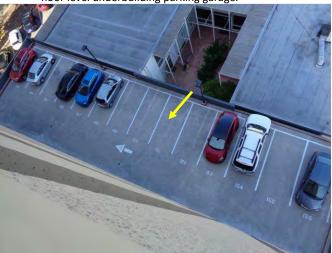
13. Ramp to the third level parking garage.



14. ADA parking stalls near the elevator bank on the second floor level underbuilding parking garage.



15. ADA parking stalls near the elevator bank on third floor level underbuilding parking garage.



16. Third floor (top) level of the underbuilding parking garage extension. Looking down and to the north.



17. Third floor (top) level of the underbuilding parking garage extension. Looking east.



18. Stairs leading to the lower level of the exterior parking garage.

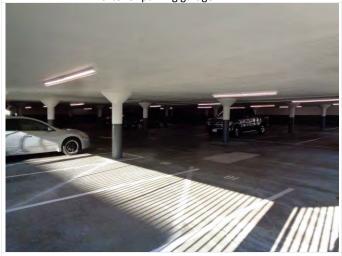




19. Southernmost mandoor to the lower level of the exterior parking garage



20. Northernmost mandoor to the lower level of the exterior parking garage



21. Lower level of the exterior parking garage.



22. Lower level of the exterior parking garage.



23. ADA parking stalls near the main entrance to the building.



24. ADA parking stalls near the main entrance to the building.





25. Typical pole mounted lighting fixture.



26. Typical landscaping at the west end of the building.



27. Landscaping irrigation controls.



28. View of the west (front) and south facades of the building, looking northeast.



29. View of the west (front) and north facades of the building, looking southeast.



30. View of the east (rear) and north facades of the building, looking southwest.





31. View of the east (rear) and south facades of the building, looking northeast.



32. Close up of the typical building façade.



33. Close up of the typical building façade.



34. Penthouse atop the roof.



35. West end of the roof, looking south.



36. South end of the roof, looking east.





37. East end of the roof, looking north.



38. North end of the roof, looking west.



39. Typical condition of the BUR membrane.



40. Typical parapet and through wall overflow scupper.



41. Typical interior roof drain.



42. Typical exhaust vent atop the roof.





43. Typical window washing equipment support anchor atop the roof.



44. West half of the penthouse roof, looking southwest.



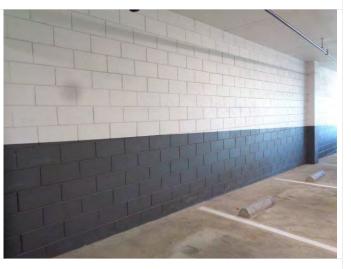
45. East half of the penthouse roof, looking southeast.



46. Typical concrete floor framing.



47. Typical precast concrete wall panel.



48. Typical CMU wall.





49. Typical concrete column.



50. Partial view of the penthouse roof framing.



51. Main (west) entrance to the building



52. Rear (east) entrance to the building.



53. Typical service door.



54. First floor lobby, looking west. Note the La Matcha Café.





55. First floor lobby, looking east.



56. Digital directory in the first floor lobby.



57. Elevator bank in the first floor lobby.



58. Typical elevator bank in the underbuilding parking garage.



59. Typical elevator bank in the tenant floor main corridors.



60. Typical tenant floor corridor. Note the "All Gender Restroom" entrances.





61. Typical tenant floor corridor.



62. One of two typical interior stairways.



63. Typical "All Gender Restroom".



64. La Mocha Café tenant finishs.



65. Typical tenant finishes.



66. Typical tenant finishes.





67. Typical tenant finishes.



68. Typical tenant finishes. Note that this tenant space was being renovated.



69. Typical tenant finishes. Note that this tenant space was vacant.



70. Gas-fired hot water boiler for the heating system.



71. Refrigeration compressors for the air conditioning system.



72. BAC cooling tower atop the roof.





73. Centrifugal supply air fan.



74. Dunnage for tenant equipment.



75. Tenant HVAC equipment.



76. Main electrical transformer for the building.



 $\label{eq:continuous} \textbf{77. Main electrical panel and distribution panels}.$



78. Main electrical panel and switch gear. Also note the building electric meter.





79. Typical step-down transformer on each of the tenant floor levels.



80. Typical distribution panel.



81. Emergency electrical back-up generator atop the roof. Note that this reportedly was not in use.



82. Domestic hot water boiler.



83. Geared traction elevator motors.



84. Elevator control panels.





85. Air compressor.



86. Gas meter.



87. Typical chemical storage container within a tenant space.



88. Main fire sprinkler riser.



89. Typical standpipe within a common stairwell.



90. Typical firehose encasement. Note that the glass panel within the 5^{th} floor, west common stairwell was damaged.





91. Entrance to the F.A.C.P. room and main electric room located within the first level of the underbuilding garage.



92. Main fire alarm control panel.



93. Addressable panel in the main lobby.



94. Fire department connections along the west (front) elevation.



 $95. \ Typical \ cabinet \ enclosed \ fire \ extinguisher.$



96. Fire hydrant at the northeast corner of the Subject, looking south.

APPENDIX C PHYSICAL DEFICIENCY/DEFERRED MAINTENANCE AND CAPITAL RESERVE SCHEDULE



TABLE 1 1/1/2023

OPINION OF PROBABLE COSTS TO REMEDY PHYSICAL DEFICIENCIES - DEFERRED MAINTENANCE TABLE

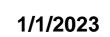
Commercial Building
123 Main Street
City, State, Zip
NDDS Project # 2311111

ITEM	QUANTITY	UNIT	UNIT COST	IMMEDIATE COSTS	SHORT TERM COSTS	COMMENTS
"Stop-Gap" Repairs to Roofs	1	LS	\$5,000	\$5,000		We recommend the use of "stop gap" measures to ensure water tightness and to perform emergency leak repairs only until the roofs are replaced.
HVAC: Immediate: O&M:	1	LS	\$5,000	\$5,000		Install high-speed internet router and connect to existing Delta EMS module in penthouse to allow owner and management remote access to existing energy management system.
Repair/Replace Damaged Glass Panel	1	EA	\$100	\$100		The glass within the access panel to the fire hose encasement on the 5th floor west stair well was damaged and should be replaced to prevent accidental harm to patron access with the stairwell.
ADA: New Van Accessible Parking Space	1	EA	\$200	\$200		No van-accessible parking is provided. Reconfigure/stripe one space in the 2nd or 3rd level parking garage closest to the elevator.
ADA: Install 1½" Diameter Handrail at 32" AAF	2	EA	\$3,500	\$7,000		ADA: Install 1 ½" Diameter Handrail at 32" AAF
ADA: Install White on Black Car Operating Panel Braille	2	EA	\$2,000	\$4,000		ADA: Install White on Black Car Operating Panel Braille
ADA: Install White on Black Car Operating Entrance Braille	2	EA	\$2,500	\$5,000		ADA: Install White on Black Car Operating Entrance Braille
ADA: New Accessible Water Coolers	5	EA	\$800	\$4,000		The current drinking fountains in the common corridors are not ADA-accessible. Provide accessible water coolers at all multi-tenant floors (5 at \$1,500 each).

ESTIMATED COST \$30,300 \$0

Total Physical Deficiencies - Deferred Maintenance:

\$30,300





Commercial Building
123 Main Street
City, State, Zip
NDDS Project # 2311111

TABLE 2

CAPITAL REPLACEMENT RESERVE SCHEDULE

Projected Term: 12
Building Age: 48
No. of Buildings: 1

Gross/Net SF: 62,805
Facility Type: Office

								NESE	INVES	CHEDO								Facility Typ	e:	Office
ITEM	EUL	EFF AGE	RUL	QUANTITY	UNIT	UNIT COST	SECTION NO.	2022	2023	2024	2025	PITAL REPLACE 2026	MENT RESERVES	S SCHEDULE - C 2028	OST PER YEAR 2029	2030	2031	2032	2033	SUMMARY TOTAL RESERVES
ITE							NO.													
sphalt Seal (Driveways)	6	2	4	9,200	SF	ОВ	5.3	-	-	-	-	-	-	-	-	-	-	-	-	\$0
Pavement Striping	6	2	4	182	Stall	ОВ	5.3	-	-	-	-	-	-	-	-	-	-	-	-	\$0
1/2" Asphalt Overlay (Driveways)	20	10	20	9,200	SF	ОВ	5,3	-	-	-	-	-	-	-	-	-	-	-	-	\$0
Concrete Maintenance (Parking Garages)	4	2	2	ALLOW	LS	ОВ	5.4	-	-	-	-	-	-	-	-	-	-	-	-	\$0
EXTERIOR																				
Re-Paint Exterior Sidewall Surfaces	7	3	4	32,400	SF	\$1.25	6.3	-	-	-	32,400	-	-	-	-	-	-	32,400	-	\$64,800
Exterior Window Glazing (Allowance)	1	0	1	ALLOW/YR	EA	\$5,000	6.3	-	-	-	\$30,000	-	-	-	-	-	-	\$30,000	-	\$60,000
ROOFING																				
BUR - Rip Off & Replace	15	20	0	1	LS	500,000	6.4	-	\$500,000	-	-	-	-	-	-	-	-	-	-	\$500,000
MECHANICAL SYSTEMS																				
Replace Refrigeration Compressors	50	48	2	2	Comp	\$95,000	7.1	-	\$190,000	-	-	-	-	-	-	-	-	-	-	\$190,000
Replace Space Heating Hot Water Boiler	20	20	0	1,500	kBtuh	\$65	7.1	\$97,500	-	-	-	-	-	-	-	-	-	-	-	\$97,500
Refurbish DX Cooling & Hot Water Heating Coils	45	48	0	2	Coils	\$75,000	7.1	\$150,000	-	-	-	-	-	-	-	-	-	-	-	\$150,000
Refurbish Cold Deck / Hot Deck Supply Air Fan	45	48	0	1	Fan	\$75,000	7.1	\$75,000	-	-	-	-	-	-	-	-	-	-	-	\$75,000
nstall Phase-2 DDC Energy Management System	50	49	1	150	Zones	\$2,500	7.1	-	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	-	-	-	-	-	-	\$375,000
ELECTRICAL																				
New Main Electrical Panel	58	48	10	1	1600A	\$250,000	7.2	-	-	-	-	-	-	-	\$250,000	-	-	-	-	\$250,000
Perform Infrared ("IR") Thermo-Graphic Scans	4	3	1	1	IR	\$3,500	7.2	\$3,500	-	-	\$3,500	-	-	\$3,500	-	-	\$3,500	-	-	\$14,000
PLUMBING																				
Replace Domestic Hot Water Boiler	15	18	0	1,336	kBtuh	\$45	7.3	\$60,120	-	-	-	-	-	-	-	-	-	-	-	\$60,120
New 175-gal DHW Storage Tank	15	1	14	1	EA	\$4,500	7.3	\$4,500	-	-	-	-	-	-	-	-	-	-	-	\$4,500
ELEVATORS																				
Overhaul Gearless Traction Elevator	25	22	3	2	EA	\$500,000	7.4	-	-	\$1,000,000	-	-	-	-	-	-	-	-	-	\$1,000,000
Jpdate Elevator Cab Finishes	15	12	3	2	EA	\$25,000	7.4	-	-	\$25,000	\$25,000	-	-	-	-	-	-	-	-	\$50,000
NTERIOR																				
Common Worn Common Area Carpeting	7	2	5	250	SY	\$12.00	8.1	-	-	-	-	\$3,000	-	-	-	-	\$3,000	-	-	\$6,000
FIRE SAFETY/FIRE PROTECTION																				
Complete Regulation Four, 5-Year Test & Cert.	5	4	1	1	EA	\$7,500	9.1	\$7,500	-	-	-	-	\$7,500	-	-	-	-	\$7,500	-	\$22,500
eplace Sprinkler Heads	50	48	2	49,353	SF	\$1.50	9.1	-	\$74,029.50	-	-	-	-	-	-	-	-	-	-	\$74,030
eplace Fire Alarm Control Panel	20	14	6	65,804	SF	\$1.25	9.2	-	-	-	-	-	-	-	\$82,255	-	-	-	-	\$82,255
Motos							I I BURIEL C ===	4000 100	4000 000	A4 400 500	A407.000	A=0.000	400	40 -00	A222 2==		40	Aco 000	4	A0 0==
Notes:							UNINFLATED on factor 2.5%			\$1,100,000 105.06%	\$165,900 107.69%	\$78,000 110.38%		\$3,500 115.97%	\$332,255 118.87%		\$6,500 124.89%	\$69,900 128.01%	\$0 131.21%	\$3,075,705 -
2.						TO CUMULATIVE TO	TAL INFLATED	\$398,120 \$398,120		\$1,155,688	\$178,656	\$86,097	\$93,341	\$4,059	\$394,947	\$0	\$8,118	\$89,478	\$0	\$3,268,509

efinitions

AVE. EUL - Average Expected Useful Life

EFF. AGE - Effective Age (Estimated)

RUL - Remaining Useful Life (Estimated)

EA - Each; Var. - Var

LS - Lump Sum

SF - Square Feet; LF-Linear Feet

TI - Tenant Improvement
OB-Operations Budget

RESERVE SUMMARYTotal UninflatedTotal InflatedTotal Reserves\$3,075,705\$3,268,509Per SF Reserves (All Years)\$48.97\$52.04Per SF (Per Year)\$4.08\$4.34

APPENDIX D PERSONAL QUALIFICATIONS

INTERVIEW/QUESTIONNAIF	APPENDIX E RE DOCUMENTATIO	N/CORRESPONDENCE

Property Condition Assessment Pre Survey-Questionnaire

Return to: National Due Diligence Services
A division of American Surveying and Mapping Inc.,
Corporate Headquarters – 221 Circle Dr Maitland FL
32751



Telephone: 407-425-7979 Fax: 407-426-974

Property Location Street, City & Sta				Tax	(
Primary Use	·					
Site Area		Building Area	Number of Buildings	Nur Uni	mber of ts	
Other Improvements						
Energy Star, LEED, Others						
Occupancy		ilding area or number of units, w	hat portion is			
Vacant □ SF □ Units	List each unit					
Un-rentable □ SF □ Units	List each unit					
Management De	tails	Name	Phone	E-ma	ail	
Owner						
Property Manage	r					
Maintenance Sup	ervisor					
Are full time main	tenance staff e	mployed at the Property by Prope	erty Management? □	Yes □ No		
Are any improver	nents covered b	y warranty?			(Indicate all which apply)	
□ Roof		☐ Building Envelope	□ Boilers	□ HV/	AC equipment	
		pliances (Describe)				
□ Other improvements (Describe)						
Regulatory Status						
Has a certificate	of occupancy be	een received? □ Yes □ No	If yes, date?			
Is the property in	compliance wi	th building, fire and zoning depa	rtment requirements?			
•	•	ding building, fire, orzoning requi			(Indicate all which apply)	
□ Violat □ Other	ion	☐ Corrective Action Notice	□ Citation	□ Demand	□ Complaint	
(Describe)						
Utility Service Providers						
Domestic Water			Fuel Oil (if applicable)			
Sanitary Sewer			Propane (if applicable)			
Electricity			Solid Waste (if applicable)			
Natural Gas (if applicable)			Hazardous Waste (if applicable)			
	ollowing which stic water well	are present at the property. □ Septic System	□ Waste Treatmen	t □ Lift S	Station	

Additional Property Inf	ormation					
Year Built						
Last Major Remodel	Year	Describe				
□ Yes □ No	Are you aware of past of	pr present fire, flooding or mo	ld at the property?			
□ les □ lvo	(Describe)	or process and, needing or me	a at the property.			
	Are there any tenant co	mplainta which have not had	n recolved?			
□ Yes □ No	(Describe)	mplaints which have not bee	n resolved?			
□ Yes □ No	Are you aware of any re (Describe)	ecurring tenant complaints?				
	,					
□ Yes □ No	Are you aware of water		Ul anges			
	□ Basement □ Walls, windo		vl space □ Foundation f □ Other			
	(Describe)	one and decis				
le one or more of the fall	owing propert at the prop	orth ()	(Indicate all which apply)			
Electrical:	owing present at the prop □ Fuses	erty <i>?</i> □ Aluminum branch wiri	(Indicate all which apply) □ Federal Pacific Electric Circuit Breakers			
Building Envelo	pe: 🗆 EIFS	□ Synthetic Stucco	☐ Hardboard Siding			
Plumbing:	□ ABS piping		□ Polybutylene piping			
Others:		ant plywood roof sheathing oam Roof Insulation				
		ncore wall heaters manufact	ured before 1993			
		re sprinkler heads				
	□ Tectum Ro	of Decking				
Documentation						
Are as-built plans availa	able for review? □ Yes □	No				
•	ng been completed previo	<u> </u>	(Indicate all which apply)			
	ndition Assessment	☐ Termite/Wood-boring				
□ Roof Assessment □ Damage Assessment (Fire, flood, parking garage, foundation, structuration □ Indoor Air Quality (Including mold) □ Other						
(Describe)	(aum) (meruumg meru)					

Recent Improvements Describe capital expend	itures completed in the pr	evious three years			
		•			
Planned Improvements Describe capital expend	s itures planned in the next	three years			
The above information	on is true, correct and	complete to the	best of my kno	wledge and belief	
Signature		_	Date	_	
Name		_			
Title		_			

APPENDIX F SUPPORTING DOCUMENTS

SECTION

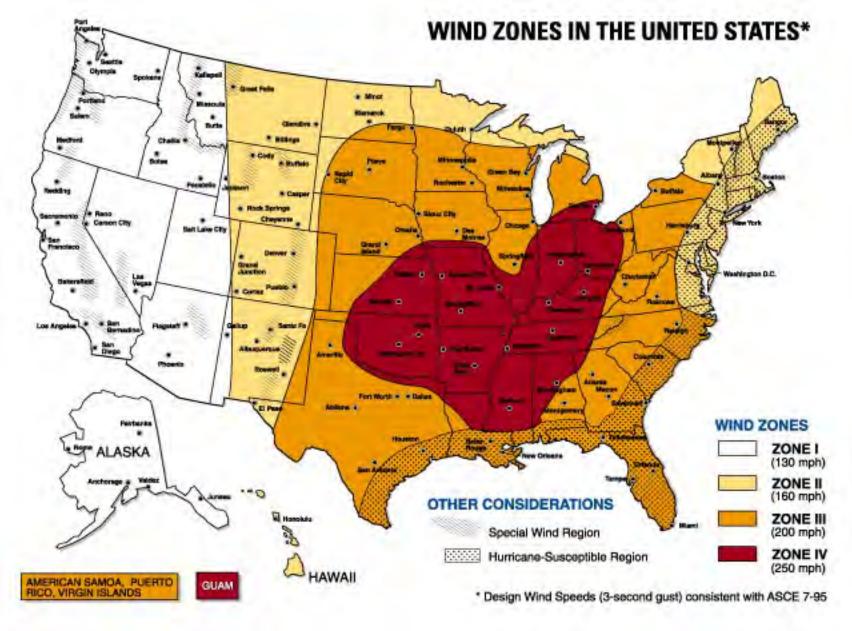
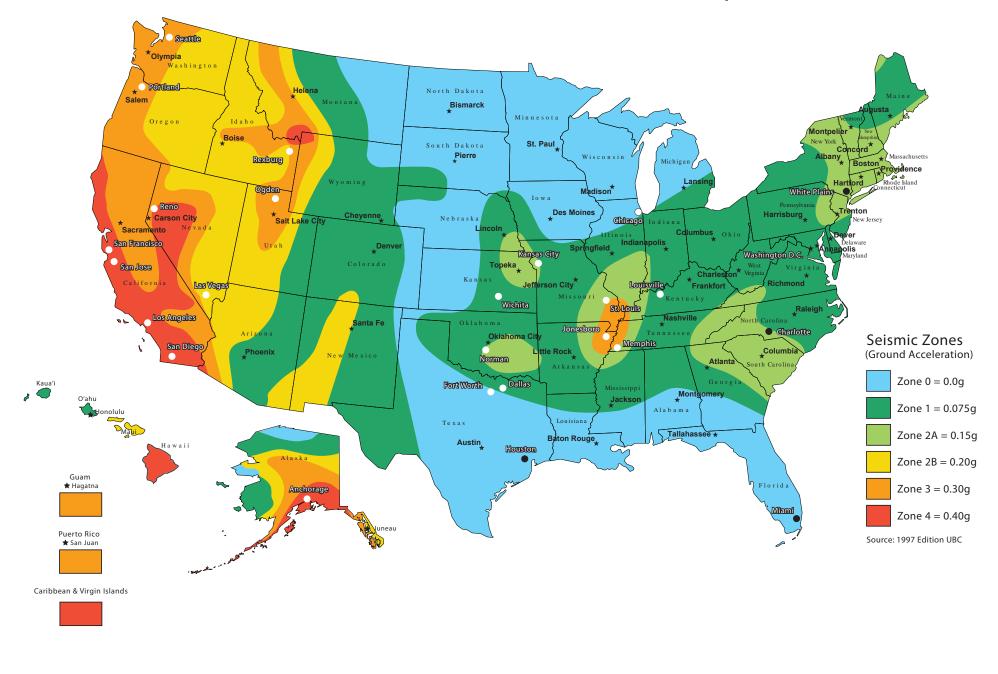


Figure I.2 Wind zones in the United States

United States Seismic Zones Map





CONDITION SURVEY ON THE EXTERIOR WALL SYSTEM

OF

COMMERCIAL BUILDING

123 Main Street City, State, Zip

FOR:

ASM / NDDS

221 Circle Drive Maitland, Florida 32751

Date of Review 1 January 2023

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1.0 Introduction

On 19 October 2022, JA Weir Associates (JAWA) conducted observations of the Peninsula Life building located at 123 Main Street City, State, Zip for the purpose of evaluating the current state of the existing exterior cladding system. This survey consisted of exterior observations from:

- vantage points around the property
- interior spaces
- the garage deck on the east elevations
- the building roof
- lower building garage deck
- the grounds surrounding the building

The weather on this date was clear and moderate with temperatures in the 70° range during the site review. No precipitation was observed at the building site on this date.

This condition survey was not a 100% review of the exterior wall or interior spaces. It also did not include any destructive investigation in areas that could not be reviewed due to interior or exterior finishes. Bearing this in mind, we have had to combine our findings with the reporting by the building engineering staff which was taken in good faith. We cannot, however, be held responsible for the accuracy of this reporting or any concealed conditions that could not be reviewed.

Whenever possible we check to confirm Code compliance with the exterior wall systems. This is not always possible due to the existence of interior finishes or lack of access to certain areas.

2.0 Reference Documents and Information Reviewed

 No documents pertinent to the building or exterior wall were available for review during the site walk or after.

3.0 Relevant Standards

- AAMA 2605, Voluntary Specifications, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels
- ASTM C1048, Standard Specification for Heat-Treated Flat Glass_Kind HS, Kind FT Coated and Uncoated Glass
- ASTM C1376, Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass
- ASTM E2018, Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process
- CPSC 16 CFR 1201, Safety Standard for Architectural Glazing Materials
- GANA Glazing Manual, Latest Edition

4.0 General Façade Description

No drawings were available for review at the time of this condition survey.

<u>123 Main Street</u> is a eight story structure with exterior cladding consisting of a combination of the following materials or systems as described in this report.

- architectural precast concrete panels; thin shell design
- glazed aluminum curtain wall system; conventionally glazed

The building façade consists of vertical strips of architectural precast concrete and glazed aluminum sash made into a curtain wall. Precast concrete panels are typically U shaped sitting proud of the curtain wall with a porous finish. Curtain wall is anchored to the precast and contains clear vision and back painted spandrel glass. Building entries are on the ground floor on the east and west sides of the building.

REVIEW DATE: 1/1/23

5.0 Façade Condition Assessment

Overall, the building façade is in good, though aged condition. No reports of leakage were received from engineering though many ceiling tiles had evidence of previous leaks. Deficiencies such as listed below were observed and will need to be addressed to keep the system performing.

Exterior glazing system was designed with aluminum sash members which are not a good choice for a
curtain wall system. Continued maintenance with sealant application onto the system at the floor lines
will be necessary throughout the evaluation period.

6.0 <u>Vertical Façade Elements</u>

6.1 Architectural Thin Shell Precast Concrete

- The thin shell precast concrete panels were designed as a standard architectural precast panel with no apparent internal steel cage as would be used in current design. Panels are U shaped to provide some rigidity.
- Construction and anchorage of panels is unknown as there were no drawings available and no unfinished areas to view from the interior.
- Panels were constructed with a porous texture and, reportedly, have been recently painted.

Survey Condition and Analysis

 The architectural thin shell precast concrete is in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review.

6.2 Glazed Aluminum Curtain Wall

- Field assembled standard stick system with nominal 2" x 2" framing members known in the
 industry as "sash" glazing. Sash has no real structural properties so would be anchored to the
 precast on a regular basis. It is unknown if it is attached to the structure but this seems doubtful.
- Sash framing which meet at the floor lines are stacked and sealed with silicone.
- The glass is retained in the system by conventional means of capture glazing with gaskets supporting the glass on each side.
- The curtain wall has been sealed with silicone over the exterior of the glazing gaskets in a
 process called "wet sealing". This effectively conceals and protects the older gasket and
 provides a watertight barrier around the perimeter of the glass.
- Exposed aluminum is finished with an acid etching known as anodizing, dark bronze in color. In many cases the interior has been painted over with the same paint as used on the interior walls.
- Sash framing is rarely designed to accept or drain water. Weep holes were observed in some horizontal framing members in this system.

Survey Condition and Analysis

- The glazed aluminum curtain wall system is in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review. A list of minor issues follows.
- Sash framing is not designed for a curtain wall application so routine maintenance will be required on the stacked joint at the floor line and on the wet seals on the exterior.

6.3 Glazed Aluminum Windows (or Window Wall)

- Standard, center glazed storefront members of 13/4" by 4".
- The glass is retained in the system by conventional means of capture glazing with resilient gaskets. The system is exterior glazed with the removable stop at the sill to allow for drainage.
- Exposed aluminum is finished with an anodic finish, dark bronze in color.

REVIEW DATE: 1/1/23 PAGE 4 • Storefront systems weep water out through joints at the ends of the removable glazing stops at the sill of the glass.

Survey Condition and Analysis

• The glazed aluminum window system is in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review.

6.4 Glass and Glazing

- General
 - a) This project was reportedly built in 1974 before the safety glazing code came into effect. Given this, it is unknown if the typical vision glass which comes down to the floor level is tempered as there were no markings found. This would not be an issue as the construction would be grandfathered though any breakage should be replaced with tempered glass.
- Vision Glass
 - a) Monolithic, ¼" thick clear glass.
 - b) Tempered knock out lites for fire department use were installed in the system which was required by Code at the time of construction and remains required unless the smoke evacuation system is revised. These are identified with reflective decals visible from the exterior.
- Spandrel Glass
 - a) Monolithic, 1/4" thick clear glass with the inboard (#2) surface painted black.
 - b) Heat treatment unknown.
- Ground Floor Vision Glass
 - a) Monolithic, 1/4" thick clear wire glass in storefront windows.
 - b) Insulating glass units mof unknown manufacture constructed of a ¼" clear outboard lite and a ¼" clear inboard lite separated by an aluminum spacer which forms a hermetically sealed and desiccated air space.

Survey Condition and Analysis

• The glass is in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review.

7.0 Building Base and Entry

7.1 Aluminum Ground Floor Storefront

- Standard, center glazed storefront members of 2" by 4".
- The glass is retained in the system by conventional means of capture glazing with resilient gaskets. The system is exterior glazed with the removable stop at the sill to allow for drainage.
- Exposed aluminum is finished with an anodic finish, clear (silver) in color.
- Storefront systems weep water out through joints at the ends of the removable glazing stops at the sill of the glass.

Survey Condition and Analysis

 The ground floor storefront system is in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review.

8.0 Exterior Doors

8.1 Entrance Doors

 Main Entrances: Glazed aluminum medium stile swing doors with overhead closers, exterior pulls, interior panics and 1" insulating vision glass. Finish of the doors is clear (silver) anodized.

REVIEW DATE: 1/1/23

Survey Condition and Analysis

- The exterior doors are in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review.
- Routine maintenance is anticipated during the evaluation period on the doors due to their constant use.

9.0 General Façade Elements - Soft Materials

9.1 Exterior Sealant Joints

- No staging drops were undertaken on the exterior of the building so the exact condition of the exterior sealant joints could not be fully determined.
- Seals within the precast and between systems are polyurethane and in good condition.
- Seals on the glazed aluminum system are silicone and in varying states of condition.

Survey Condition and Analysis

- The exterior sealant joints are in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review. A list of minor issues follows.
- Routine maintenance and touch up sealing is anticipated for the silicone during the evaluation period.
- Urethane is reportedly new and should last the evaluation period.
- Urethane does not adhere to silicone so, if leakage becomes evident in ceiling tiles at the windows, cleaning and repair of seals at the floor level will become necessary.

9.2 Building Insulation and Fire Safing

No insulation or fire safing was observed in the façade.

Survey Condition and Analysis

Condition unknown.

10.0 General Façade Elements – Specialty Systems

10.1 Steel Screens

- Steel bird screens have been installed in precast openings in the garage.
- Screens appear to have been painted black previously.

Survey Condition and Analysis

- The steel bird screens are in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review. A list of minor issues follows.
- One screen was observed to have rusted through and will need repair (under the cost threshold).

11.0 Façade Roof Elements

11.1 Parapet Wall and Coping

- Parapet wall is constructed of the overrun of the precast and curtain wall systems.
- The coping at the roof(s) is formed, sheet metal finished to match the precast. Splices are lapped and sealed by what appears to be a urethane sealant which also has been painted.

Survey Condition and Analysis

• The parapet and coping systems are in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review.

REVIEW DATE: 1/1/23

11.2 Roof Penthouse

The roof penthouse is clad with an exterior stucco system on unknown substrate.

Survey Condition and Analysis

• The roof penthouse stucco cladding is in an overall acceptable condition with no major issues reported by the engineering staff or observed during this review.

11.3 Swing Stage Equipment

- The building has provision for rental swing stage equipment with davits installed onto the roof structure.
- Davit arms were not observed.

Survey Condition and Analysis

The swing stage davits showed no signs of deterioration.

11.4 Lightning Protection

• No lightning protection was observed on the building or penthouse roofs.

11.5 Aircraft Lighting

No aircraft warning lites were observed on the building or penthouse roofs.

PAGE 7

JA WEIR ASSOCIATES

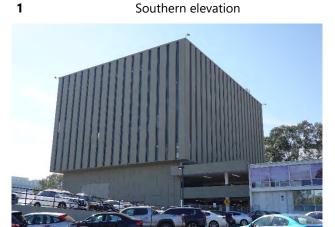
Appendices 12.0

JA WEIR ASSOCIATES

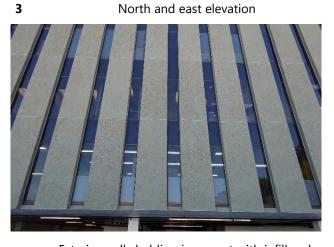
12.1 Appendix A, Photographic Record













5 Exterior wall cladding is precast with infill sash framing constructed into a curtain wall

Glazing system sill sets onto a finished aluminum flashing. Perimeter seals appear to be urethane.



7 "Stack" joint in the glazing system at the floor line of the building



Intermediate horizontal member with spandrel over vision



9 Water stains in the ceiling tile beneath where the urethane and silicone seals come in contact



10 Water stains in the ceiling tile



11 Water stains in the ceiling tile

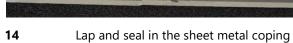


12 Water stains in the ceiling tile





13 Water stain in the ceiling tile







15 Parapet wall with davits behind

16 Stucco penthouse cladding





17 Main entrance

18 Parking lot entrance

JA WEIR ASSOCIATES

Appendix B, Opinion of Probable Cost 12.2

JA WEIR ASSOCIATES

In accordance with the issues noted in the report, the following cost estimates have been identified with a cost threshold of \$2,500 per incident. These costs do not address the cost of general conditions such as fees, permits, supervision, hoisting, garbage removals, etc.

Listing of Maintenance and Upkeep items:

EXTERIOR WALL CONDITION SURVEY ON Commercial Building City, State

REVIEW DATE: 1/1/23 PAGE 14

THE ALSAN GROUP

Waterproofing and Roof Consulting Services

1148 Ferguson Avenue Saint Louis, MO 63130 Tel: (314) 353-8800 amyneeter@alsangroup.net

January 1, 2023

National Due Diligence 221 Circle Drive Maitland, Florida 32751

Attn:

Re: Due Diligence Roof Inspection for:

123 Main Street City, State, Zip

- Approx. 11,000 sq. ft. of low sloped roofing on 8th floor main roof.
- Approx. 1,600 sq. ft. of low sloped roofing on mechanical penthouse.

Dear Sir/Madam,

As per your request, on January 1, 2023, I inspected the two roof areas at the above referenced property. No destructive testing was performed; this was a visual inspection only.

History and Construction

The history and construction of this eight (8) story office building was obtained through visual observation, Internet research, and from written and/or verbal information supplied by others. The building was erected in 1974. The exterior construction consists of decorative structural concrete panels and vertical curtain windows. Access to the main roof was achieved through a penthouse door. Access to the mechanical penthouse roof was achieved using a twenty four foot (24') extension ladder.

The nomenclature of the main roof, established by viewing a large puncture, appears to be as follows:

- Structural concrete deck
- One inch (1") perlite roof insulation
- Two (2) plies of roofing felts
- One (1) ply of torch applied APP smooth surface modified bitumen membrane

The main roof terminates on all sides into approximately thirty six inch (36") tall parapet walls. The torch applied granular surfaced modified bitumen runs up and over the walls and terminates under a metal coping cap. In the interior, the main roof terminates at the base of all four (4) walls of the mechanical penthouse. The wall flashings extend approximately eight inches (8") up from the roof surface and terminates under a metal counterflashing. Drainage is accomplished by six (6) interior roof drains with eight (8) through wall overflow drains.

The nomenclature of the penthouse roof appears to be as follows:

- Metal deck
- Rigid insulation (type unknown)
- Built up roofing with a granular cap sheet

The roof terminates on all four (4) sides into edge metal. Drainage is accomplished by two (2) gutters with downspouts that empty onto the main roof.

The roof surfaces contain the following equipment, protrusions, and penetrations:

- Seven (7) exhaust vents
- One (1) cooling tower
- One (1) generator
- Two (2) air handlers
- Two (2) ductwork pipes
- Seven (7) large antennas
- Eight (8) equipment rails
- Twenty seven (27) pitch pans
- One (1) equipment curb
- Three (3) plumbing vents
- One (1) vent stack
- Fourteen (14) pipes
- Three (3) abandoned pitch pans

Waterproofing and Roof Consulting Services

Conditions

The ages of the roofs are unknown, but they appear to be fifteen plus (15+) years old. The roof systems are in poor condition with no reported leaks. The underlying perlite roof insulation on the main roof is likely wet and deteriorated in several areas. (It is common for aged, deteriorated roofs over concrete decks to leak and hold moisture without the water passing through the concrete and entering the interior of the building, manifesting into a reported leak.) In addition, the following anomalies were observed:

- 1. There are several small punctures in the roof membrane.
- 2. Granules are releasing from the penthouse field membrane, exposing the underlying fiberglass scrim. The granule loss is severe.
- 3. There are numerous small splits in the mastic seal where the main roof ties into the parapet walls.
- 4. There are splits in the mechanical curb flashings.
- 5. Heavy equipment curbs and concrete blocks are missing protective pads and rest directly on the roof membrane.
- 6. Abandoned, heavy steel antenna stands sit directly on the roof membrane.
- 7. Antenna legs bolted to through the roof and into the concrete deck are improperly, insufficiently waterproofed with caulk.
- 8. Multiple abandoned pitch pans are split/open.
- 9. Several pipes are insufficiently sealed using only mastic.
- 10. Debris, organic and other, is present on the roof.
- 11. Abandoned PVC pipes, a concrete block, and a wood support block were left on the roof, resting directly on the membrane.
- 12. Evidence of ponding water was noted in several areas of the roof.
- 13. The mastic seals around multiple, assorted equipment has split.
- 14. An exhaust vent on the penthouse roof is severely rusted and is missing its cap.
- 15. A pipe chase is low (too close to the deck) and open.

Summary and Recommendations:

The ages of the roofs are unknown, but they appear to be fifteen plus (15+) years old. The roof systems are in poor condition and have aged past the point where preventative maintenance repairs will produce a return on dollars invested. Use "stop gap" measures to insure water tightness of the roofs. Perform emergency leak repairs only until the roofs are replaced. Budget five thousand dollars (\$5,000.00) for "stop gap" leak repairs during the first year of the hold. Anticipate the need for roof replacement in 2023-2024. Budget approximately five hundred thousand dollars (\$500,000.00) to tear the roofs off down to the deck and install similar built up roof systems.

Waterproofing and Roof Consulting Services

Notes:

- The roofing industry, along with many other facets of construction, are experiencing severe material shortages, shipment delays and have seen multiple price increases since spring 2021. Additional increases in material costs are anticipated. All budgets are based on estimated pricing as of the date of this report.
- Currently, some roofing projects are being delayed nine (9) months or longer, as contractors wait for back ordered materials. If the intention is to replace any of the roofs in 2023, the replacement process should be started as soon as practical.
- Drainage inspection consists of a visual examination of the roof level drain components, checking for observable physical damages and obstructions. Alsan recommends that all buildings have drain flow calculations performed by an architect or engineer, to confirm that the existing drainage system meets current code requirements.

The presented periods are shown in ranges, wherever applicable, with the understanding that the actual life can be shortened or extended, depending upon weather, repairs, building usage, foot traffic, etc. The anticipated life also assumes that the recommended rehabilitation efforts will be undertaken within a reasonable period, and that annual professional roof inspections and maintenance will be performed.

Enclosed with this report are photographs of noted details and conditions. After your review, should any questions arise, please feel free to contact our office. I look forward to being of further service to you.

Respectfully submitted, The Alsan Group

Ken Walken

Ken Walker



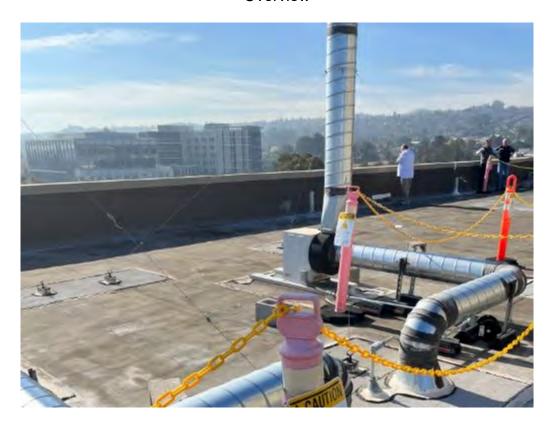
Overview



Overview



Overview



Overview/equipment details

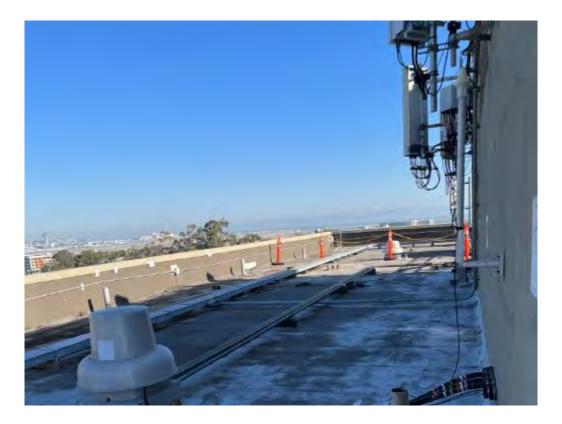




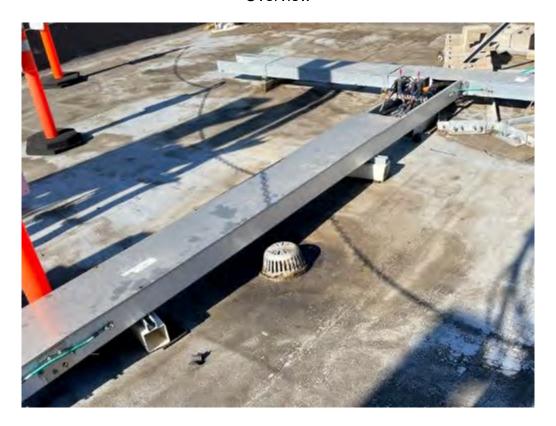
Overview



Overview



Overview



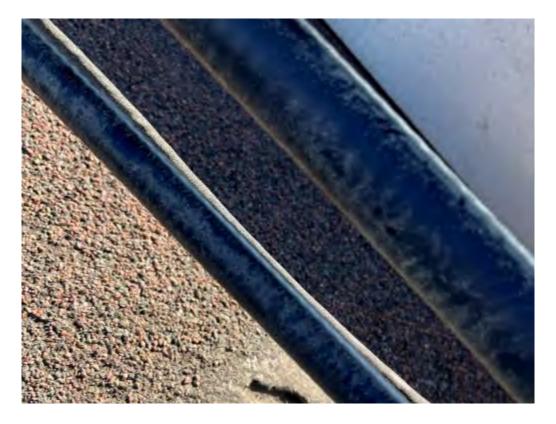
Typical interior roof drain



Typical overflow drain



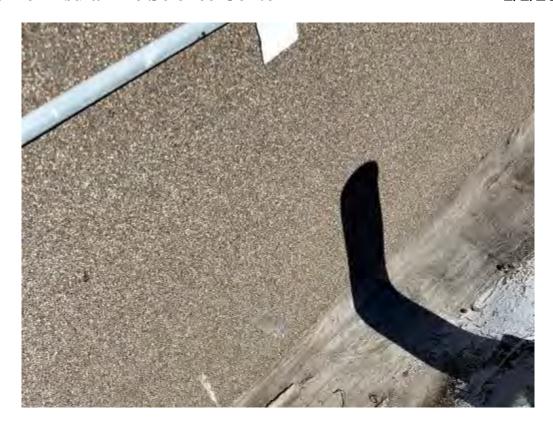
Typical penthouse field membrane sheets/extensive granule loss with exposed scrim



Hole in membrane



Parapet wall flashing & coping cap details



Mastic seal at parapet wall flashing and main roof



Split in curb flashing



Equipment set directly on membrane (no pad)



Support rail flashing detail



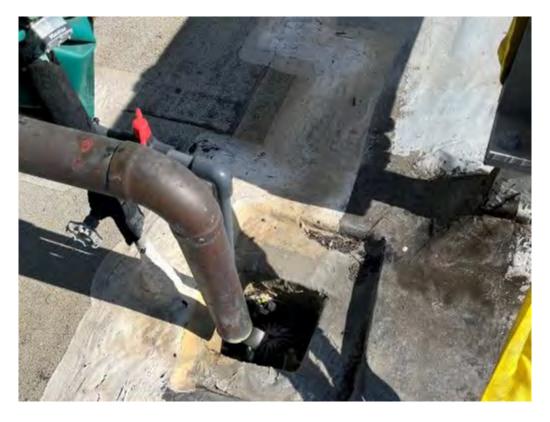
Heavy antenna mount set directly on membrane



Antenna support rail improperly bolted through membrane



Abandoned pitch pan detail



Cooling tower drain detail



Improper plumbing vent flashing



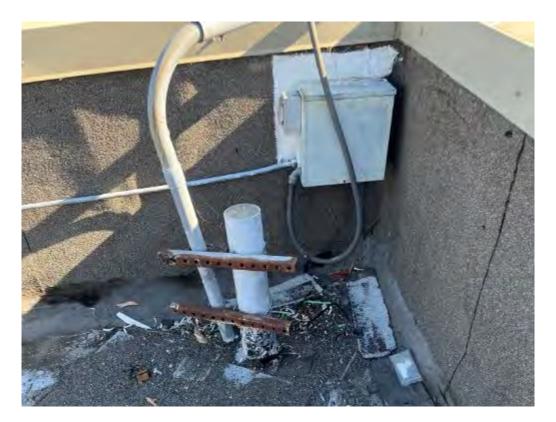
Pitch pan detail at support cable



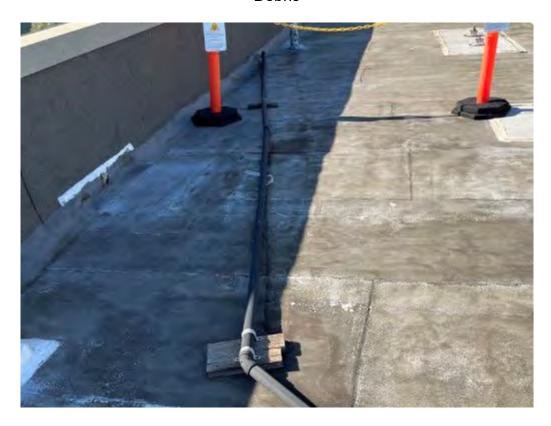
Interior drain details



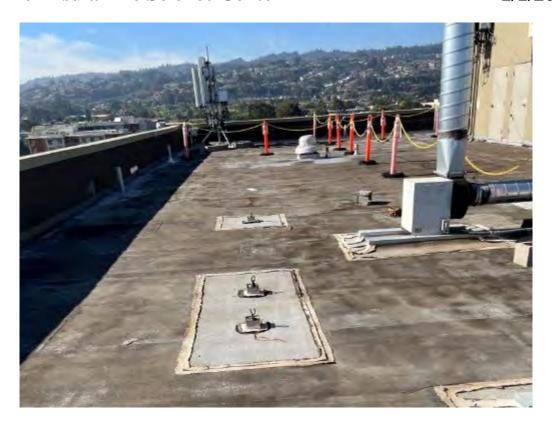
Organic and other debris



Debris



Abandoned PVC drain line



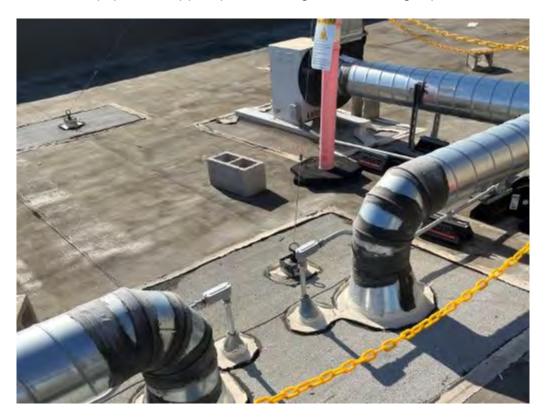
Overview/pitch pan flashing details



Air handler flashing detail



Equipment support post flashing detail/flashing repairs



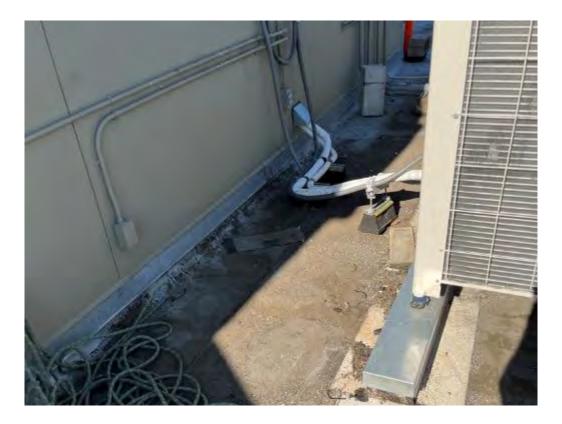
Ductwork penetration flashing detail



Penthouse wall flashing & counterflashing details



Walkway detail



Evidence of ponding water



Evidence of ponding water



Small punctures in membrane



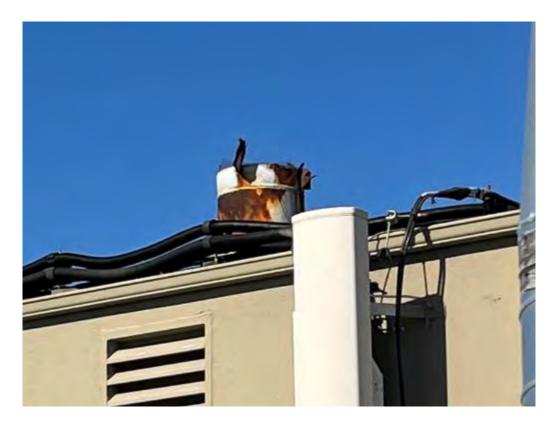
Splits developing at mastic seal around cooling tower



Flashing detail at window washing davits



Antenna support leg mounted through roof



Missing flue cap on penthouse roof



Puncture in membrane



Splits at perimeter mastic roof tie-in



Overflow detail



Open pipe penetration



Debris/abandoned concrete block/displaced or abandoned wood support block



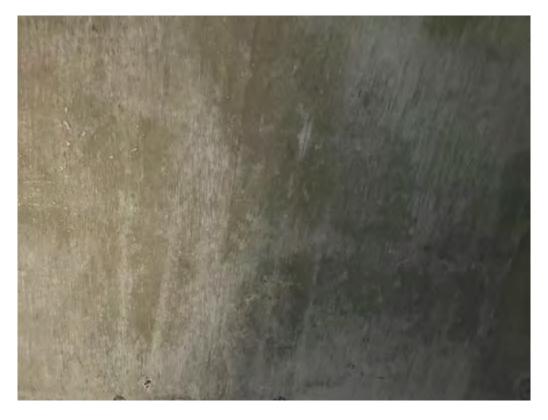
Puncture in membrane



Interior view showing the underside of the metal deck for penthouse roof



Abandoned antenna components



Interior view showing the underside of the concrete roof deck



Concrete roof deck detail





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PROPERTY CONDITION ASSESSMENT REPORT:

MECHANICAL – H.V.A.C., ELECTRICAL, PLUMBING, & FIRE PROTECTION SYSTEMS

"Commercial Building"
123 Main Street City, State, Zip



Prepared for:



MEP Project

January 1, 2023

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1.0 EXECUTIVE SUMMARY

Maximum Energy Professionals (MEP) was retained for the purpose of preparing the Mechanical (HVAC), Plumbing, Electrical, and Fire Protection portions of this "physical asset" or "property condition assessment" report.

GENERAL BUILDING DESCRIPTION: "Commercial Building" 123 Main Street City, State, Zip: 65,804-SF, 8-Floors above grade medical office building (MOB): Floor 1: Retail and lobby, Floors 2-3: Parking: Floors 4-8 Medical offices, plus attached 2-level parking garage structure. Building was originally built in year 1974, with renovations in years 2016 and 2022.

123 Main Street, a well-established medical/dental building in the heart of City across street from new Mills Peninsula Hospital, represents a unique opportunity for physicians affiliated with the hospital to be as close as possible to campus. Also, its convenience, identity and abundant garage and street parking make it an excellent neighborhood location for a variety of practices. The property has an on-site lab and pharmacy, as well as lunch spot. The property is located across street from new, state-of-the-art Mills Peninsula Hospital, just south of Millbrae Avenue. It is very close to Hwy 101, SFO, and the Millbrae BART/Caltrain station.

MECHANICAL: Base building is cooled using a direct expansion (DX) refrigeration system consisting of two (2) reciprocating type 75-Hp refrigeration compressors (rebuilt in approximately year 2019 using R22 replacement "low-GWP" refrigerant). Heat rejection is accomplished using a replacement water-cooled evaporative condenser (1995) with factorycoated steel case and basin with VFD fan. Building uses a dual-duct air supply system, with separate cold decks and hot decks. The systems have not been converted to variable air volume (VAV). A single original 1974 vintage constant air volume 40-Hp centrifugal supply air fan circulates air for both the cold deck and hot deck. Cold deck uses original 1070s era DX cooling coils. The hot deck contains original 1970s vintage hot water heating coils. Space heating hot water is generated in a single 2002 replacement 1500-kBtuh input gas-fired hot water boiler, with single 1.5-Hp circulation pump to the air hander unit. Air control boxes inside occupied spaces appear to be original dual-duct mixing boxes with cold-hot decks around perimeter and cooling only boxes in interior spaces. All interior dual-duct mixing boxes are original 1970s vintage with pneumatic control thermostats and damper actuators. A rooftop dual ³/₄-Hp reciprocating compressor provides control air (estimated 2001). There is a limited direct digital control (DDC) programmable energy management system (EMS) installed with graphical user interface "front end" computer to control compressors, evaporative condenser, cold and hot decks, and boiler. Installed cooling index is estimated at 439-SF per Ton, slightly above expected value.

NOTE: Brokers sales brochure states this building uses a "chilled water system"- this is not correct.

PLUMBING: Public utility provides domestic water into the building through a 3-in. service line with new back-flow prevention device. Water is circulated to the building using incoming utility line pressure, and no booster pumps are used. Water piping inside structure was observed as copper tubing. Hot water for front office restrooms is generated in a rooftop



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gas fired water heater boiler (2004), rated at 1336-kBtuh input; there is no hot water storage tank. Sewage piping was not documented but is estimated to flow by gravity into a cast iron lateral (estimated as 6-in.) to the east. Roof is sloped so that all storm water drainage flows to perimeter area covered drains with no adjacent covered overflow drains. Natural gas is provided to building through a 3-in. metered service with welded low-pressure steel riser.

ELECTRICAL: Public utility provides electrical power into facility via a pad-mounted transformer. Building receives 277Y/480-Volt, 3-phase, 4-wire electricity from utility that is routed via buried wires and conduits into an original 1970s era single-metered distribution switchboard rated at 1600-Amps for use in lighting and equipment circuits. Transformers on each floor supply 120/208V electricity level for plug outlet circuits. Emergency egress lighting for base building offices and exit points is battery-pack fixtures, and there is a rooftop diesel engine driven generator that appears to be out-of-service. Lighting in common areas has been mostly converted to LED in common area corridors, and lobby uses CFLs. Newer tenant spaces have also been converted to LED, but older tenant improvement areas may contain 4-ft. F032 T8 fluorescent lamps, as do storage and machine rooms. Common area lights, interior lights including lobby, and exterior lights, are controlled using single circuit mechanical timer. Power index is estimated at 20-Watts per SF.

FIRE LIFE SAFETY: Overhead firewater sprinklers serve entire building structure. A main 6-in. lateral from City supply line enters property at the north plot limit and circulates the parcel, feeding distributed hydrants and firewater into the structure, without an exterior post inspect valve (PIV), but with fire truck hose connections (FDC) and new inline-type back-flow prevention device. Building has a stairwell 6-in. wet sprinkler riser, with flow alarm sensor and anti-tamper valve switch at each floor. There is a separate wet standpipe installed for hose connection at each floor and rooftop. Firewater is circulated at incoming utility line pressure; no booster pumps are used. Sprinkler heads contain numerous original 1970s bi-metallic type (48 years old) heads, but newer common area and tenant improvements have 2020, 3-mm glass-bulb quick release type of heads. Building has a retrofit (2008) fully functional, but obsolete, analogue/digital addressable type fire alarm control panel FACP that annunciates firewater flow, tamper switches, PIV, AC unit duct smoke detectors, manual pull stations, and elevator lobby smoke detectors, which were also replaced at that time. There are older-style audio-visual horn/strobe alarm devices located throughout the building.

DOCUMENT REVIEW/ACCESS: Drawings reviewed: None; no plans were made available at the time of inspection. Specifications/other Documents reviewed: Site floor plans only were provided.

The following people or organizations were interviewed by MEP staff during the site visit and/or report preparation: Building Engineer.

Access: A CA/UT/NV/AZ/OK registered professional engineer reviewed M-E-P systems on site on January 1, 2023. All areas were made available for inspection. However, buried sewer line and buried water line were not accessible. Subject building was vacant at time of inspection.



UTILITY SERVICE SUMMARY TABLE:

UTILITY	UTILITY PROVIDER	SERVICE SIZE	ADEQUACY
Electric	Pacific Gas & Electric (PG&E)	1600-Amp, 277Y/480-Volt, 3-phase, 4-Wire metered service	Adequate
Water	City Public Works- Water Division	3-In. Domestic Water 6-In. Firewater	Adequate
Sewer	City Public Works	Unknown, estimated 6-in. Main sanitary sewer connection lateral	Adequate
Natural Gas	Pacific Gas & Electric (PG&E)	3-in. low pressure metered utility service	Adequate

2.0 MECHANICAL/ HVAC SYSTEMS

2.1 HEATING, VENTILATION, AIR CONDITIONING (H.V.A.C.) SYSTEM SUMMARY

EQUIPMENT AGES: The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and California Energy Commission (CEC) guidelines state the estimated normal lives, Repair/Overhaul, and General Maintenance frequencies of various types of equipment to be as follow

EQUIPMENT TYPE	GENERAL MAINTENANCE FREQUENCY (YEARS)	REPAIR OR OVERHAUL FREQUENCY (YEARS)	REPLACEMENT FREQUENCY (YEARS)	PRESENT AGE OF EQUIPMENT (YEARS)
Recip. Refrig. compressors	1	10	30	3
Centrifugal Fan	1	10	40	48
HW Heat Air Handler unit	1	10	35	48
DX Al-CU Coil, Steel frame	1	10	40	48
DD Air Box with DDC controls	1	10	40	38
hot water boiler	1	10	20	20
Split system AC: CU & FCU	1	10	20	2 - 26
Gas-fired water heater boiler	1	5	20	18

(Ages as of 10/01/2022)

INSTALLED COOLING CAPACITY: ASHRAE published cooling load check figures for "Large Commercial – Office Building" buildings are: 360-Square Feet (SF)/Ton (Low), 280-SF/Ton (Average), and 190-SF/Ton (High).

INSTALLED AIR CIRCULATION CAPACITY: ASHRAE published check figures for "Large Commercial – Office Building" air circulation quantities are as follows: East-West-South Zones: 0.25 CFM (i.e. cubic feet per minute)/SF Low, 0.50 CFM/SF Average, 0.90 CFM/SF High; North Zones: 0.25 CFM/SF Low, 0.50 CFM/SF Average, 0.80 CFM/SF High; Internal Zones: 0.80 CFM/SF Low, 1.10 CFM/SF Average, 1.80 CFM/SF High.



HEATING CAPACITY FACTOR: Accepted range of heating capacity for this location is between 20 and 40-Btu per SF. Heating capacity factor is based on installed hydronic hot water boiler output capacity and/or gas furnace capacity.

M-E-P Indices					Note
Conditioned Area	ı	65,804	Sq. Ft.		
Cooling Index		439	SF per Ton		1
Supply Air Index		N/a	CFM per SF		2
Heating Index		18.2	BTU per SF		
Notes:	1. Uses 1-H	p per compress	or Hp		
	2. Fan CFM	not obtained,	cannot be est	imated	
Power Index:		18.19	Watts per Sl	F at 0.90	-PF

NOTES: 1) At 439-SF per Ton, building may be considered "under-cooled" but possibly adequate for coastal cooler proximity location.

FRESH AIR VENTILATION CAPACITY: Outside air is introduced through rooftop built-up air-handler unit that appears to have full 0-100% outside air economizers, with a design minimum ventilation rate generally set at about 10% of supply airflow. Economizer uses pneumatic damper controllers.

No ventilation measurements were taken as part of this survey scope of work. Therefore no conclusion can be made to the actual amount of the building ventilation.

The American Society of Heating, Refrigeration Air-conditioning Engineers, ASHRAE, outdoor ventilation air intake standards was recently revised. Previous ventilation rate Table 62-2007 was revised into new Table 62.1-2010, which is summarized below:

		Standard	62.1-2010		Old 62-2001
Space Use	Occupants (CFM per Person)	Area (CFM per SF)	Density (Per 1000-SF)	Combined (CFM per Person)	CFM per Person
Office Space	5	0.06	5	17	20
Conference Rm.	5	0.06	50	6	20
Reception areas	5	0.06	30	7	15
Lobbies	5	0.06	150	5	15
Pharmacy	5	0.18	10	23	20



2.2 BASE BUILDING MECHANICAL EQUIPMENT:

<u>Rooftop Equipment Map</u>: Unit numbers shown on equipment tables correspond to this site plan: NOTE: This plan uses same numbering as site equipment tags.

<u>Cooling</u>: In each tower, the base building is cooled using a direct expansion (DX) refrigeration system consisting of two (2) "Carrier" reciprocating type refrigeration compressors. These compressors have original 1977-1978 serial numbers, but they were completely rebuilt by "Brainerd" in about year 2019. One compressor has a newer 75-Hp motor, but the second compressor seems to have the original motor.

At that time the original refrigerant R22 medium-pressure type compressors were retrofit with R22 replacement refrigerants, possibly including R422, which has equivalent properties. It also appears the DX cooling coils still have original R22 expansion valves.

Heat rejection in each tower is accomplished using an older 1995 replacement water-cooled "Baltimore Air Coil (BAC)" forced draft type evaporative condenser with steel case and steel water basin. All surfaces appear to contain "Balti-bond" original factory coating. While not accessible, the evaporative condenser has either a 10 or 15-Hp fan motor with "ABB" VFD



fan controlled by a water temperature "aquastat". Unit also has an integral 1.5-Hp basin water circulation pump.

Evaporative condenser has a "Water One" auto-sensor/auto-injection system for chemical water treatment.

Evaporative condenser is in good shape for its age (27 years) with the following issues observed: Rust on steel drive shaft, shaft bearing at far left (motor side) is making noise and may need replacement, there is little or no corrosion on the water basin, no water leaks noted, unit sits on spring isolators with seismic restraint, and there are rust and corrosion on the steel support beams.

Heating: Space heating hot water is generated in a single 2002 replacement low efficiency hydronic gas-fired hot water boiler, rated at 1,500-kBtuh input with 80% thermal efficiency, which is below the CA Tile XXIV (24) minimum energy efficiency standard of 84%. Boiler has a single 1.5-Hp inline type circulation pump to the air hander unit that appears to be a recent replacement. Note there is no redundancy in the hot water production systems.

<u>Air delivery</u>: Subject building uses a "dual-duct" (also called "double-duct") air supply system, with separate cold decks and hot decks. The system is original and has not been converted to variable air volume (VAV) by addition of VFDs to cold and hot deck fans, as is common with similar buildings in the area.

Cold deck cooling coils are original 1970s copper tube/aluminum fin type with original R22 expansion valves, using original galvanized condensate collection pans. Pans are slightly warped and do not fully drain. Corrosion and rusting were noted on pans. Galvanized steel tube-sheet ends are moderately rusted from condensate, as are the bottoms of the steel coil support frames. There is moderate corrosion on the aluminum tube fins near the bottom of the coils.

Hot deck hot water heating coils are also original 1970s copper tube/aluminum fin type with very light, if any, corrosion noted.

Supply air for both cold deck and hot deck is provided by a common original 1970s "Trane" 40-Hp centrifugal fan. This is a constant air volume system and there is no VFD.

Outside air is introduced through the rooftop "built-up" type custom air hander system. Penthouses in each tower contain a full 0-100% outside air economizer damper control system including return air, and outside air dampers still appear to use pneumatic dampers. Filters are 24"x24"x2"-deep standard MERV-8 pleated type.

Air control boxes inside occupied spaces appear to be original dual-duct mixing boxes with cold-hot decks around perimeter and cooling only boxes in interior spaces. Although not fully accessible, it seems the mixing boxes were observed as still using original 1970s pneumatic damper actuators with pneumatic zone thermostats.



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<u>Supplemental HVAC Systems</u>: There are also several conventional and "VRF" split-systems for tenant IT/Server rooms, each with exterior condensing unit and interior fan coil that vary in manufacture date between 1996 and 2020. Sixth floor tenant lab area uses two (2) air-cooled chilled water condensers.

<u>Smoke Control</u>: As this may be considered not a high-rise structure, smoke control for stairwell/elevator shaft pressurization and smoke evacuation exhaust is not required.

<u>Ventilation/Exh</u>aust: There are two (2) newer appearing rooftop centrifugal type exhaust fans used for 6th floor laboratory space. In addition, base building contains seven (7) original 1979s small rooftop axial type exhaust fans for use in restroom exhaust stacks and machine/elevator/boiler rooms.

Garage exhaust: Garage structures are "open sided" and there are no exhaust fans installed.

The 2015 International Building Code outlines what defines an "open" parking garage in Section 406.5.2: Exterior side of the structure shall have uniformly distributed openings on two or more sides. Area of these openings shall be at least 20% of the total perimeter wall area of each tier. Aggregate length of the openings shall be at least 40% of the perimeter of the tier (Exception: Not required if openings are uniformly distributed over two opposing sides of the building). If these requirements are met, the garage is considered open is assumed to be naturally ventilated. If they are not, the garage is required to be mechanically ventilated.

<u>HVAC Controls</u>: There is a programmable direct digital control (DDC) energy management system (EMS) installed at this location. However, all VAV box zone controls and hot-water reheat coil hot water control valves are pneumatic, and the EMS does not control, or even monitor, those space temperatures.

All floors 1-8 still remain as original 1970s pneumatic double-duct mixing boxes with pneumatic damper controls. These zones are controlled using old-fashioned 1970s era "Honeywell" or "Barber Colman" dual-pipe, generally "direct-acting" pneumatic thermostats.

Compressed air for pneumatic controls is provided by a rooftop penthouse dual ³/₄-Hp reciprocating air compressor, with storage tank and attached refrigerated air dryer unit. It appears the air compressor is a replacement unit installed in approximately 2001.

There is a retrofit energy management system (EMS) with distributed modular direct digital control (DDC) modules manufactured by "Delta" model DFM440. It seems this model is discontinued by manufacturer. These are multi-functional I/O [input/output] modules that each contains up to six (6) DDC universal outputs at either 0-10V, or 4-20MA format. So this appears to be a generic open-protocol, possibly BAC-net compatible programmable EMS.

There is a limited function DDC "front end" programmable computer terminal control software installed noted as "Delta" "Envision" which was last updated in about year 2019. The energy management system (EMS) is remotely controlled by the installer, "Emcor Mesa". There is no Internet router installed, and the owner and facility engineer have no remote access to the system except by plugging in a laptop into an RJ45 terminal with a cable.



When accessed, the EMS has graphical user interface screens that control the following functions:

Return Air (RA) temperature reset RA temperature monitor Hot water temperature reset Cold deck static pressure set point Hot deck static pressure set point Compressor #2 status "AC1" status Outside air (OSA) boiler lock-out temperature set Cold deck temperature Hot deck temperature Supply air fan status Compressor #1 status Boiler/HW Pump status "AC2" status

<u>Equipment Tables</u>: The following Equipment Inventory Table(s) summarize equipment observed on site. This inventory is for major equipment noted and is not guaranteed to be a complete listing of every mechanical device present.

DIRECT E	XPANSION REFRI	GERATION CO	OMPRESSOR SC	HEDULE								
Commercia	al Building											
ID	Туре	Mfgr.	Model	Serial	Motor HP	Refrig.	Year	Age	EUL	RUL	Location	Area Served (Notes)
CC-1	Reciprocating	Carrier	5H60-A219	78127 (1)	75.0	R-44/55	1978	5	20	15	Penthouse	DX Cooling coils
CC-2	Reciprocating	Carrier	5H60-A219	77456 (2)	75.0	R-44/55	1977	5	20	15	Penthouse	DX Cooling coils
Total:					150.0							
NOTES:	1. CC-1: Rebuilt by "Brainerd" in 2018, Original 1970s motor											
	2. CC-2: Rebuilt by "Brainerd" in 2018, Replacement motor											

WATER/C	OOLED EVAPORA	TIVE CONDNE	SER SCHEDULI	E								
Commercia	al Building											
ID	Туре	Mfgr.	Model	Serial	Constructio	n	Year	Age	EUL	RUL	Location	Area Served, Notes
EC-1	Forced draft	BAC	VC1-150P	U09554580	Coated stee	el, VFD fan	2009	11	20	9	Roof	Refrig. Compressors
NOTES:	1. Rusted drive sl	haft										
	2. Bearing noise			5. Spring Iso	lator support	S						
	3. Balti-Bond coati	ing		6. Rust on st	teel support t	frame						
	4. Little or no corrosion on basin 7. "Water of			7. "Water one	e" chemical t	reatment wit	h auto se	nsor and	auto injed	ctor		

GAS-FIRE	ED HTDRONIC HO	WATER BOIL	ER SCHEDULE									
Commerci	al Building											
ID	Туре	Mfgr.	Model	Serial	kbh In	kbh Out	Year	Age	EUL	RUL	Location	Area Served
B-1	Water Tube	Thermo PAK	GWA1500	12T21	1,500.0	1,200.0		2020	20	0	Penthouse	Hot deck coils
Total:					1,500.0	1,200.0						
NOTES:	1. With HWP-1 Inli	ine (1.5-Hp) and	Bellino DDC 3-w	ay HW Control	l Valve							
	2. 80% Thermal et	ffieciency, does	not meet CA Title	XXIV (24) mir	nium boielr e	efficiency sta	ndard of 8	84%, is n	ot BA AC	MD pre-c	certfied for emis	sions



FAN UNI	T SCHEDULE												
Commerc	ial Building												
ID	Туре	Air Supply	Mfgr.	Model	Serial Number	Fan (Hp)	Airflow (CFM)	Year	Age	EUL	RUL	Location	Areas Served/ Comments
SAF-1	Centrifugal	Const. Vol.	Trane	Type AF Size 49	U3L31513	40.00	N/a	1973	47	45	0	Penthouse	Hot-cold decks
NOTES: Note 1. No VFD													

AIR COMP	PRESSOR SCHED	ULE										
Commercia	al Building											
ID	Туре	Mfgr.	Model	Serial	# Comprs	Motor Hp	Year	Age	EUL	RUL	Location	Area Served
CAC-1	Reciprocating	No nameplate	N/n	N/n	2.0	0.75	2001	19	20	1	Penthouse	Pneumatic controls
Total:					2.0	0.8						
NOTES:	1. CAC-1 with RAD-1 Hankinson 3YA43A Refrigerated Air Dryer											

		EQUIPMENT SCH									
uilding											
Equip. Type	Mfgr.	Model No.	Serial No.	Cooling (Tons)	Refrig.	Year	Age (Years)	Eff. Life (Years)	R U L (Years)	Location	Service/ Notes
Cond. Unit	Carrier	38YCB060	N/n	5.0	R22	1996	24	20	0	Garage	Overhead
Cond. Unit	Ductless	DA1215-H1	D2001244802	1.0	R410A	2020	0	20	20	Garage	
Cond. Unit	Carrier	38YCB060	4496F00483	5.0	R22	1996	24	20	0	Garage	
PMENT											
VRF Cond. Unit	IC I/Hitachi	TVAHP096	JA2A0016	8.0	R410A	2020	0	20	20	Roof	"Amazon"
Air Cld. Condenser	Bohn	No nameplate	N/n				2020	20	0	Roof	6th Floor Lab
Air Cld. Condenser	Bohn	No nameplate	N/n				2020	20	0	Roof	6th Floor Lab
			<u> </u>								
				19.0							
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HVAC General Notes:

BAAQMD Boiler Regulations: BA AQMD (Bay Area Air Quality Management District) Regulation 9 requires permits for natural gas & LPG-fired boilers including Rule 6 for natural gas-fired boilers up to 2-Million BTU/hour input and Rule 7 for boilers greater than 2-Million BTU/hour input.

Regulation 9, Rule 6 (2007) for smaller natural gas fired water heaters and boilers was recently modified to provide NOx emission standards that go into effect 2009 through 2013. Emissions limits only apply to new heaters/ boilers for units up to 2-Million BTU/hour input.

Regulation 9, Rule 7 (2007) for larger natural gas fired water heaters and boilers above 2-Million Btuh input, was recently modified to provide NOx emission standards that go into effect 2011 and later. New thermal efficiency requirements go into effect 2009 through 2011. Any boiler that under the old rules did not require a permit must be registered by 2011. NOx emission standards apply to both EXISTING and new boilers, also known as the "retrofit rule".

However boilers that use less than 10% of their annual maximum capacity Therms are exempt from Rule 7, calculated as BTU per hour maximum input x 8760 hours x 0.10 / 100,000-Btu per Therm.



Rule 7 Emission limits are now as follows for boilers commonly found in commercial uses:

 Input: Greater than 2, less than 5-MMBTU/Hour input: 30-ppm NOX; Effective date 01/01/2011 or 10 years after manufacturer date if before 1/1/2011.

• Input: Greater than 5, less than 10-MMBTU/Hour input: 15-ppm NOX; Effective date 01/01/2012 or 10 years after manufacturer date if before 1/1/2012.

General equipment replacement notes: 1) When replacing AC units, specify high energy efficiency ratio (EER) equipment that meets or exceeds then current CA Title XXIV (24) energy efficiency standards and non-CFC refrigerant. Anchor equipment to building framing in accordance with then current CA Building Code seismic design standards and include vibration isolation components. Connect all condensate drain lines with proper tap/vent, and slope to trapped receptacle per Code. Specify factory coated "Luvata" or equal condenser coil coating within 10 mile of coastline. Replace thermostats with Title 24 compliant components. 2) When replacing boilers, specify high thermal efficiency (84% minimum AFUE) equipment that meets or exceeds then current CA Title XXIV (24) energy efficiency standards. Also replace any hot water circulation pumps. Install all flue stacks in according to Code clearance requirements.

Comments/Recommendations: Mechanical HVAC systems observations: 1) The rebuilt reciprocating refrigeration compressor is considered relatively new and in good condition, and is not recommended for replacement during the 12-year capital reserve period of this report as a capital replacement measure due to condition. However, these compressors are relatively inefficient at about 1.0-kW per Ton. Newer variable speed "Bitzer" (made in Germany) screw type refrigeration compressors using refrigerant R134A operate at about ½ of the energy input. This capital replacement measure is offered as an "upgrade/betterment" alternative in the capital reserve table.

- 2) Space heating hot water 1500-kBtuh input boiler (2001) will reach end of nominal published life age later early within the 12-year capital reserve period of this report, does not meet BA AQMD rules, and is less efficient than minimum state standards. There is only one (1) gas-fired space heating hot water boiler per tower; no spare or redundant capacity is available. Heating hot water cannot be provided in case of boiler failure, boiler repair, or maintenance/service times. As an alternate, we suggest that when the boiler is replaced two (2) ea. 1000-kBtuh input boilers (suggest Raypak model MVB modulating vertical boiler, model H7-753A, 750-kBtuh input, minimum 86% efficiency) be installed instead of a single unit, as well as adding a second pump.
- 3) Original 1970s cooling coils will reach end of nominal published life age early within the 12-year capital reserve period of this report. In lieu of costly wholesale replacement, we believe that coil life may be extended to last beyond 10 years by performing the following O&M measures: Replace old steel epoxy coated condensate drain pans with stainless steel, properly slope for good drainage, and wire bush and epoxy coat rusted steel coil frames, as well as steel coil tube-sheet ends.
- 4) Original 1970s hot water coils will also reach end of nominal published life age early within the 12-year capital reserve period of this report. In lieu of costly wholesale replacement, we believe that coil life may be extended to last beyond 10 years by performing the following O&M measures: Open, clean and inspect unit, wire brush and coat any corroded areas, and clean hot water coils.



5) Original 1970s centrifugal type cold-hot deck fan will reach end of nominal published life age early within the 12-year capital reserve period of this report. In lieu of costly wholesale replacement, we believe that fan life may be extended to last beyond 10 years by performing the following O&M measures: Open, clean and inspect unit, wire brush and change all fan belts, sheaves, bearings and drive shafts, and test and replace motor as needed.

6) It is considered below industry standards and not commensurate with similar buildings in similar areas with similar uses to still use pneumatic controls and not have a programmable direct digital control (DDC) energy management system (EMS) for dual duct mixing boxes as well as a variable air volume (VAV) system conversion.

Recommend expansion of the existing Delta programmable direct digital control (DDC) system to have remote Internet access to control all HVAC operations. Convert base system for existing rooftop equipment with expansion capabilities to include future tenant build-outs that convert old pneumatic dual duct (DD) mixing boxes/valves using independent pneumatic actuators to DD-VAV configured boxes with single DDC actuators-estimated 150 zones.

- M1. Immediate: O&M: Install high-speed Internet router and connect to existing Delta EMS module in penthouse to allow owner and management remote access to existing energy management system.
- M2. Short-term (1-4 Years) Capital upgrade/ betterment (optional): Replace two (2) inefficient 75-Hp reciprocating refrigeration compressors with dual "Bitzer" (made in Germany) screw type refrigeration compressors using refrigerant R134A, and replace cooling coils DX expansion valves.
- M3. Short-term (1-4 Years) Capital replacement: Anticipate replacement of 1500-kBtuh input gas fired space heating hot water boiler (2001) with 2 ea. 750-kBtuh boilers, replace pump, and add second pump. Specify BA AQMD pre-certified boilers with minimum CA Title 24 efficiency (Raypak model MVB modulating vertical boiler, model H7-753A, 750-kBtuh input, minimum 86% efficiency or equal).
- M4. Short-term (1-4 Years): O&M: Refurbish DX cooling coils and hot water heating coils to extend life: Replace old steel epoxy coated condensate drain pans with stainless steel, properly slope for good drainage, and wire bush and epoxy coat rusted steel coil frames, as well as steel coil tube-sheet ends.
- M5. Short-term (1-4 Years): O&M: Refurbish cold deck/hot deck supply air fan: Open, clean and inspect unit, wire brush and change all fan belts, sheaves, bearings and drive shafts, and test and replace motor as needed. Add VFD with motor starter bypass in anticipation of conversion for VAV operation.
- M6. Short and long-term (1-12 Years): Install Phase-2 DDC energy management system for conversion of old 1970s pneumatic DD mixing air boxes to DDC damper actuators with full zone temperature reset capability in tenant spaces. Can be done floor by floor or as tenant leases expire. (Estimated 150 VAV zones).



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3.0 PLUMBING SYSTEMS

3.1 DOMESTIC WATER: Local water district provides metered domestic/potable water service to the building from the western parkway. Domestic water supply enters the property through a 3-in. buried copper pipeline for use in restrooms and tenant spaces. An above-grade "Ames" stainless steel inline type back-flow prevention device was located. Water is circulated to the building using incoming utility line pressure, and no booster pumps are used. Water piping inside the offices is copper where visible. Building contains distributed "Haws" refrigerated drinking fountains.

The California Code of Regulations, Title 17, specifies where back-flow prevention devices must be installed to protect the public drinking water systems from contamination. Generally these devices are installed at industrial, commercial, and institutional facilities like hospitals, restaurants, public parks, and auto shops, and at multi-family facilities. Back-flow prevention devices also are required on the potable water systems at facilities that use recycled water for irrigation or other non-potable uses. T17 requires that commercial, industrial, irrigation, and multi-family facilities must install RP devices on their potable water service lines. A reduced pressure principal (RP) assembly offers sophisticated protection against back siphonage and back-pressure in domestic water service lines. The RP device has a relief valve located between two check valves. The relief valve will discharge water should either check valve fail. The RP device requires annual testing.

3.2 DOMESTIC HOT WATER: Domestic hot water (DHW) is generated in a rooftop gas-fired water heater "Raypak" boiler manufactured in 2004, and rated at 1,336,000-Btuh input.

DOMESTIC	C HOT WATER BO	ILER SCHEDU	LE									
Commercial Building												
ID	Туре	Mfgr.	Model	Serial	Input	Recovery GPH@100	Year	Age	EUL	RUL	Location	Area Served
DHWB-1	CU Fin Tube	Raypak	WH21336	0401216880	1,336.0	1,328.0	2004	16	15	0	Penthouse	Restrooms
Total:					1,336.0	1,328.0						
NOTES:	Note 1. No storage	tank - with 0.7	5-Hp inline circula	ation pump, 0.2	5-Hp circula	ition pump ai	nd timer c	v erride				

- 3.3 IRRIGATION WATER: A separate metered municipal irrigation water service was not located at the subject building. There are multiple PVC irrigation circuits with control valves and a "Rain Dial" programmable timer panel installed, as well as buried PVC water distribution pipes.
 - 3.3.1 Water Wells: None.
 - 3.1.1 Reclaimed Water Service: None.
- 3.4 SANITARY SEWER: No drawings or documentation showing underground plumbing and sewer services were obtained. It appears the building uses a conventional separate waste stack, waste vent arrangement with one (1) estimated 6-in. exit lateral towards the east. There are dual clean out connections adjacent to the east entry door. All sewage flows by gravity. Buried sewer pipe material is not known but assumed to be cast iron. No sewage ejector pumps are used. Observed sewer lines are service weight cast iron above grade with banded



"hubless" fittings. Staff did opine of sewer line condition or any past hydro-jet cleanings and say it is never needed.

- 3.5 STORM WATER DRAINAGE: Storm water runoff from building roof is directed by roof-slope towards the perimeter roof surface into covered drains with without any adjacent covered overflow drains. Each drain has leaders constructed of cast iron and "hubless" banded fittings that route storm water from the rooftop into the below-grade municipal collection system. Storm water at grade for surface parking areas is routed via graded slopes, curbs, and swales to grate-covered collection basins located in the front parking lot.
- 3.6 RESTROOM FIXTURES: Common area restrooms plumbing fixtures are vitreous clay with ceramic surface, except for lavatory sinks. All common area restrooms have been inverted to "unisex" configuration and there are no urinals. It appears the restrooms conversion occurred recently, possibly in year 2019 or more recently. Water closets (toilets) are "Kohler" floor-mounted with manual flush valves. Lavatories (sinks) are counter-mounted with single-valve handle hot-cold water faucets. Status of handicap restroom access is not within the scope of this report.

Existing CALGreen Water Efficiency Standards: Water Closets: • Single-flush: maximum flush volume of 1.28 GPF • Dual-flush: Effective flush volume of 1.28-GPF (2:1 flush ratio) • Water Sense performance for tank-type toilets. Urinals: Maximum flush volume of 0.5-GPF Maximum flush volume of 0.125-GPF. Lavatory Faucets Max: 1.5-GPM @ 60PSI Max: 1.0-GPM @ 60PSI, Min: 0.8-GPM @ 20 PSI Min: 0.5-GPM @ 20 PSI. Lavatory faucets in common and public use areas: Max: 0.5-GPM @ 60PSI.

3.7 NATURAL GAS: Regional public utility provides natural gas service. Gas enters in a buried 1-in. medium-pressure supply line, through pressure reduction valve, and meter no. #61722692, into a 3-in. welded steel buried building supply line for use in rooftop boilers. There is a seismic earthquake shut-off valve (EQV) installed. Gas piping is noted as black steel with threaded connections on rooftop. NOTE: There is a possible small gas leak at this location due to the odor noted near the meter.

There is no current State or Federal Code or regulation requiring natural gas earthquake (seismic) shut-off valves. Many Cities/Counties in State for example require automatic gas shut off valves to be installed for a variety of reasons, including point of sale transactions and remodeling and addition work. Several insurance companies also require or strongly suggest installing these proactive gas safety devices, with some offering substantial discounts on insurance rates. Some local municipalities located throughout the nation now require natural gas earthquake (seismic) shut-off valves. The Cities now require seismic valve, as an example, as do many Bay Area agencies including County.

3.7.1 Propane: None. 3.7.1 Fuel Oil: None.

3.8 MISCELLANEOUS PLUMBING SYSTEMS:

- 3.8.1 Pool/Spa: None.
- 3.8.2 Commercial Laundry: None.
- 3.8.3 Commercial Kitchen: None. There is small first floor café without cooking/hood exhaust system.
- 3.8.4 Water Features: None.



Comments/Recommendations: Plumbing systems conclusions: 1) No conclusions may be made regarding the condition of the underground storm water and sanitary sewer lines. It is possible that further inspection may result in a recommendation to hydro-jet clean or camera-inspect buried lines as needed.

- 2) Water heater boiler will reach end of EUL 15-years end-of-expected useful life age, and replacement is anticipated early within the 12-year capital reserve period of this report. There is no standard-size 175-gallon insulated DHW storage tank, and this is recommended as part of the boiler replacement project.
- 3) Any permitted tenant office remodels may require the plumbing fixtures to be upgraded to any then-current Cal-Green water efficiency standards. It appears all common area restroom fixtures are from a past 2019 era retrofit and may meet current CAL-Green water efficiency standards (fixtures had no labels); this cost is not shown in the capital reserve period cost tables of this report. 4) There is already an EQV on the incoming natural gas supply line (after the meter).
 - P1. Short-term (1-4 Years): Anticipate replacement of rooftop gas-fired 1336-kBtuh input water-heater boiler; specify Raypak WH or equal, pre-certified for BA AQMD emissions, minimum efficiency to meet or exceed CA Title XXIV (24) energy efficiency standards. NOTE: Must be done prior to 2030 when CA State bans all gas-fired appliances. Also anticipate addition of 175-gallon outdoor DHW storage tank, Raypak model RSS or equal.

4.0 ELECTRICAL SYSTEMS

4.1 ELECTRIC POWER DISTRIBUTION: Regional public utility provides electrical power to subject property via an exterior pad-mounted transformer located on the eastern portion of the property, PG&E number T-1382.

Utility supplies 277Y/480-Volt, 3-phase, 4-wire electric power via buried wires and conduits into an interior first-floor metered distribution switchboard. This switchboard is an original 1970s era panel assembly manufactured by "I-E-M, Industrial Electric Manufacturing Co.". This is a 3-section panel board assembly with the following sections noted as follows:

- 1. Section #1 is a pull section rated at 1600-Amp supply/1600A section.
- 2. Section #2 is the meter section rated at 1600-Amp supply/1600A section and contains PG&E "smart" billing meter no. 1010267016, with an original 1970s era 1600A circuit breaker type main disconnect switch with ground fault interruption circuit (GFIC) protection.
- 3. Section #3 is the central distribution section, also rated at 1600-Amp supply/1600A section. This section also contains a circuit breaker board that provides electricity to the following 277/480V circuits:



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225A to panel 3HA (3rd Floor)
50A to panel PA
70A to fifth floor cellular
250A to unknown/not labeled
125A to E-power ATS (Automatic Transfer Switch)
175A to panel 5L (8th floor)
400A to motor control center MCC (penthouse)
250A to panels 3L (6th floor) and 4L (7th floor)
250A to panels 1L (4th floor) and 2L (5th floor)
150A to panel P (1st floor)

Note: Main distribution panel has a 1st floor garage level emergency generator plug connection.

Each occupied tenant space floor contains an original 1974 "I-E-M, Industrial Electric Manufacturing Co." 277/480V "L" sub-panel rated at 225A maximum. "L" panels distribute electricity to 277V lighting circuits and were observed as about 90% full. Floors contain some "E-mon D-mon" digital type sub-meters but it was not made clear if they are operational or used.

Each floor also contains an original 1974 base building 75-kVA transformer that produces 120Y/208V, 3-phase, 4-wire power level for adjacent "R" sub-panels. The "R" sub-panels distribute 120V electricity to power plug outlet circuits and were observed as about 100% full. Over time, subsequent to original construction, tenants have added additional 45 and 75-kVA transformers and 120/208V sub-panels on each floor connected to the existing "L" panels.

Building is not maintaining the service for Infrared ("IR") thermo-graphic scans on main distribution and sub-panels to identify any "hot spots" that might require repair/lug tightening or circuit breaker replacement.

Common area restrooms inspected contained power plugs near sinks without GFIC (ground fault interruption circuit) protection. It appears all electric wiring is copper, but panel lugs could be steel or aluminum.

Installed power index is estimated at 18-Watts per SF using 65,804-SF and assumed power factor of 0.90 (excluded garage floor areas).

4.2 EMERGENCY POWER: Emergency egress lighting and fire life safety devices for base buildings is battery-pack wall-mounted fixtures with lighted LED type exit signs. Fire alarm control alarm panel has an integral battery.

There is an outdoor rooftop original 1970s vintage diesel engine driven emergency power generator rated at 55-kW. This unit is in extremely poor condition and staff believes it in non-operational. Main distribution panel has a 1st floor garage level emergency generator plug connection, which would be anticipated to be used in case of long-term power outage, but there would be a delay in delivering a generator.



DIESEL EN	NGINE DRIVEN E	.E										
Commercia	l Building											
ID	Engine Mfgr.	Gen Set Mfgr.	Model	Serial	kW	kVA	Year	Age	EUL	RUL	Location	Area Served
EMG-1	Kohler	Kohler	55RH772	791050A54	55.0	62.5	1979	41	30	0	Rooftop	OUT OF SERVICE
Total:					55.0	62.5						
NOTES:												

4.3 LIGHTING: Lighting voltage appears to be 277V, 3-phase. Almost all of the public/common areas have been converted to LED lights, as has any tenant suite improvement project since about 2019. Most, if not all, tenant areas have been converted to LED lamps. Base building storage rooms and machine/mechanical room areas contain 4-ft. F032 T8 lamps. The following types of lighting fixtures were observed:

Parking lot poles: LED

Parking garage levels: 4-ft. LED Common area hallways: 3-ft. LED

Exit signs: LED

Elevators: 2-ft. F017 T8 fluorescent lamps

Stairwells: 4-ft. LED without any n motion detectors

Restrooms: Can fixture LED lamps with occupancy sensor/motion detector switches

Machine/Equipment/storage rooms: 4-ft. F032 T8 fluorescent lamps

There is no central common area "house" lighting control system installed. Exterior lights are controlled using an original 7-day mechanical timer. Generally speaking, subject building lighting may have to be upgraded to current CA Title XXIV (24) Non-residential lighting and lighting control standards for any future permitted improvements.

- 4.4 SECURITY: Security systems observed included a CCTV (closed circuit television) security system at building entry/exit points including garage structure and lobby levels. There is a proximity "HID" RFID type magnetic card key system with an "Altronix" security controller panel installed.
- 4.5 COMMUNICATIONS: Telephone utility service is by "AT&T". Main phone lines enter in multi-pair copper wire bundles, capacity not known, but seem adequate for present tenant uses. High-speed fiber optic telecommunications cables are installed from "Time Warner" into the building. Future tenants would arrange for their own high-speed broadband telecommunication systems.

Comments/Recommendations: Electrical systems observations: 1) Main electric panel is a 1974 vintage (48 years old) 1600A, 277/480 panel-board without a single main 1600A disconnect switch with GFIC (ground fault interruption circuit) protection, which would be required for today's Code. There is no published useful life age for electric switchgear. It is our opinion that the main switchgear may require replacement later within the 12-year capital reserve period of this report at age 56-years.

Per "Schneider Electric": There are no set limits per standards of the life of electrical panel equipment. The components, like a circuit breaker have a limited performance (10,000 mechanical operations, 10,000 load



current and 50 maximum short circuit operations). After that the breaker can be replaced. The enclosure, bussing, etc. has a 15-30 year life span, but that is not a mandatory requirement. It is not uncommon to have 50 years and older switchgear in service and working well.

We recommend replacement at that time of this old main distribution switchboard with a new assembly including "power break" type main switch with GFIC (ground fault interruption circuit) protection.

- 2) Infrared ("IR") thermo-graphic scans for main distribution or sub-panels have not been done (last service was in year-2020) in the past to identify any "hot spots" that might require repair/lug tightening or circuit breaker replacement. This is an O&M issue, but is shown in the Capital Reserve table, as it is a safety related issue.
- 3) It also appears that "ARC Flash" study has not yet been completed at subject building. This is a voluntary O&M issue, and is also shown in Capital Reserve table as a recommended measure for safety.

National Electrical Code (NFPA 70, Sec. 110.16) requires an employer to protect both in-house and contracted workers from electric shock and arc flash. OSHA recommends and consults national consensus standard NFPA 70E, Standard for Electrical Safety in the Workplace, for compliance in this regard. Among NFPA 70E requirements, the equipment owner is required to field-label electrical equipment with a label containing the available incident energy or required level of personnel protective equipment.

Please be aware that as future tenant office spaces are built out, or permitted remodels are approved, they will be subject to the more stringent requirements of State & Federal Non-residential Energy Efficiency Standards that requires ever-more efficient fixtures and increased lighting controls.

Controlled receptacles required within 6 ft. of an uncontrolled receptacle (office space); additional infrastructure and connection to occupancy control system. Dimming required on all luminaries with certain exceptions. Mandatory daylight control and daylight control systems for rooms > 120 watts of lighting. Mandatory step dimming and occupancy controls in stairwells and corridor. Security lighting allowance removed. Reduction of allowable "night lighting". Life Safety lighting requires occupancy control (requires detailing; coordination to ensure proper operation). Disaggregation of electrical loads for new electrical distribution / panels over 50kVA. Requires separate panels to isolate electrical loads by type OR branch circuit metering required. Demand response capable lighting (networked lighting controls required).

- E1: Short-term (1-4 Years): Year-10: Recommend replacement of old 1970s era 1600A, 277/480 panel-board without main switch with new 1600A, 277/480V panel-board, including 1600A "power break" type main switch with GFIC (ground fault interruption circuit) protection.
- E2. Short-term (Year 1 and ongoing every 3 years): Immediate O&M Health and safety: Perform Infrared ("IR") thermo-graphic scans for main distribution or sub-panels to identify any "hot spots", provide lug tightening as needed, and continue on an every-three-year basis.
- E3. Short-term (1-4 Years): Health and Safety O&M: Perform "ARC Flash" study and circuit labeling in accordance with National Electrical Code (NFPA 70, Sec. 110.16).



5.0 FIRE PROTECTION/LIFE SAFETY SYSTEMS

5.1 FIREWATER SYSTEMS: Firewater is supplied by the municipal utility from the eastern parkway through a 6-in. buried line with a stainless steel inline type "Ames" model DC Derringer 6-in. back-flow prevention device. This appears to be a recent retrofit device. There is a 4-head FDC (fire department truck hose connection) located on the incoming firewater pipeline. Incoming pipeline also has anti-tamper valve switches.

The California Code of Regulations, Title 17, specifies where backflow prevention devices must be installed to protect the public drinking water systems from contamination. Generally these devices are installed at industrial, commercial, and institutional facilities like hospitals, restaurants, public parks, and auto shops, and at multi-family facilities. T17 requires that firewater service lines, at a minimum, must have a DCDA (Double Check Detector Assembly) installed. If chemicals are added to the fire system, an RPDA (Reduced Pressure Detector Assembly) must be installed. The device requires annual testing.

There is a no exterior PIV (post inspect valve). The buried firewater line loops the property and supplies distributed hydrants and building sprinkler risers in a 6-in. buried pipe. The subject building is fully covered by overhead firewater sprinklers. Firewater is circulated to the building using incoming utility line pressure, and no booster pumps are used.

This building has a 6-in. interior western stairwell wet sprinkler interior riser from the first floor to the rooftop. The wet sprinkler riser contains a flow alarm sensor and anti-tamper valve switch at each floor, as well as on the main incoming pipeline. Wet sprinkler riser also has hose connections at each floor and rooftop.

There is a 6-in. standpipe in the alternate eastern stairwell that also has hose connections at each floor and rooftop. Original hose stations have been removed. All interior firewater piping is black steel with threaded connections, even on large 6-in pipeline risers. Incoming utility service pipeline pressure gauge read 76-psig at time of inspection.

Firewater system is tagged as having last Regulation Four, 5-year testing and certification by "Cintas" in June 2018, less than 5-years prior to date of inspection, indicating an up-to-date service, but due again within one (1) year of the date of inspection.

Sprinkler heads are a mix of the following observed devices: 1) Garage and stairwells as well as the majority of the structure contain original 1970s vintage "Grinnell" bi-metallic fusible link heads; 2) Some newer built-out tenant areas now use "Tyco" 3-mm glass bulb "quick release" 155°F heads stamped 2020.

There are distributed dry type extinguishers located throughout the building noted as having last annual test and certification by "Cintas" on May 28, 2022, less than a year prior to inspection date, indicating an up-to-date service.

5.2 FIRE ALARM SYSTEMS: Fire alarm control panel (FACP) is a retrofit 2008 fully addressable analogue/digital type noted as "Silent Knight" (by Honeywell), Intelli Knight



model 5820XL. While fully functional, this FACP is considered obsolete, as it is no longer manufactured. Lobby contains a "Silent Knight" keyboard remote annunciator panel.

This is an analogue/digital addressable system that provides an alarm for any of the following types of alarms: firewater flow switches, firewater tamper sensors, pull (manual) stations, common/corridor area smoke detectors located at elevator lobbies, and duct smoke detectors (systems 2000-CFM and larger per code). FACP also has integrated elevator control and recall function capability. Firewater riser flow sensor also has an exterior bell alarm. An FACP "Sequence of Operations" was not obtained at this location.

FACP system is monitored and serviced by "San Francisco Fire Protection Co." (Account no. 29304) last annual tested and certified on January 1, 2023.

FACP automatically dials out to offsite security monitoring central station. There are handicapped audio-visual horn/strobe devices in all building common area spaces. These horn devices varied in age and type, but some appeared to be old (+20 years) and may not be compatible with today's requirements for frequency and volume.

NOTE: No longer produced after 2013. "Silent Knight" (by Honeywell), Intelli Knight 5820XL is the first fire alarm system to provide revolutionary value and performance in addressable sensing technology. The 5820XL FACP offers exclusive, built-in digital communication, distributed intelligent power, a modular design and an expanded, easy to use interface. Powerful features such as drift compensation and maintenance alert are delivered in this powerful Fire Alarm Control Panel from Silent Knight.

Description: 5820XL is an intelligent addressable fire alarm control panel. The basic 5820XL system can be expanded by adding modules, and includes the following features: Built in support for 99 detectors and 99 modules, expandable to 396 detectors and 396 modules using System Sensor protocol; Uses standard wire—no shielded or twisted pair required; Built-in digital communicator; Central station reporting by point or by zone; Built-in annunciator with 80-character LCD display.

The basic 5820XL system can be expanded by adding modules such as 5860 remote annunciator, 5815XL signaling line circuit expander, 5824 serial/parallel printer interface module (for printing system reports), and 5895XL intelligent power module. 5820XL supports SD or SK devices. The 5820XL also features a powerful built-in dual line fire communicator that allows for reporting of all system activity to a remote monitoring location.

Features include: • Built in support for 99 SK detectors and 99 SK modules, expandable to 396 SK detectors and 396 SK modules using System Sensor protocol; • Built in support for 127 SD devices, expandable to 508 SD devices using the SD protocol. • Uses standard wire-no shielded or twisted pair required; • Built-in digital communicator; • Central station reporting by point or by zone; • Built-in synchronization for appliances from AMSECO®, Gentex®, Faraday, System Sensor, and Wheelock®; • FlexputTM I/O circuits • Supports Class B (Style 4) and Class A (Style 6) configuration for SLC, SBUS, and Flexput circuits; • 13 pre-programmed output cadences (including ANSI-3.41) and 4 programmable outputs; • Built-in annunciator with 80-character LCD display; • RS-485 bus provides communication to system accessories; • Built-in RS-232 and USB interface for programming via PC; • Built-in Form C trouble relay rated at 2.5 amps at 27.4 VDC; • Improvements in SKSS software deliver five times faster uploads/downloads.

Comments/Recommendations: Fire life safety system observations: 1) No observed or reported deficiencies were noted with present fire life safety system. 2) No testing or evaluation of possible MIC (microbial induced corrosion) inside firewater lines was made (outside of included PCA scope). 3) The fire life safety section of this report is a mechanical-



electrical-plumbing overview and must not be taken as a detailed survey of every device and functionality.

- 4) Firewater system is tagged as having last Regulation Four, 5-year testing and certification in June 2018, less than 5-years prior to date of inspection, indicating an up-to-date service, but due again within one (1) year of the date of inspection. This is included as an O&M measure in Year 1 of the 12-year capital reserve period as it is a health and safety related issue.
- 5) The existing 5820XL fire alarm control panel is fully functional but obsolete and may require replacement within the 12-year capital reserve period of this report. The National Fire Protection Association (NFPA) recommends FACP replacement every 20 years, which falls within the 12-year capital reserve period of this report. Fire Lite by Honeywell offers a backwards-compatible FACP model ES200X, but it is possible that older generation sensors and detector devices may not be compatible and will also need replacement.
- 6) The National Fire Protection Association (NFPA) also requires sprinkler head replacement every 50-years. It was noted that at least ¾ of the building contains original 1970s era sprinkler heads, which are now almost 48-years old, so an allowance for sprinkler head replacements must be included early within the 12-year capital reserve period of this report.
 - F1. Short-term (1-4 Years). O&M, Health and safety: Perform and complete Regulation Four, 5-year testing and certification on or about June 2023.
 - F2. Long-term (5-12 Years): Capital, Safety: Anticipate replacement of 48 year old bimetallic fusible link type fire sprinkler heads, estimated ¾ of building area, with new 3-mm "quick release" type heads.
 - F3. Long-term (5-12 Years): Capital, Safety: Anticipate replacement of 5820XL model fire alarm control panel with then-current Honeywell analogue/digital type FACP (ES200X or equal), and replace any older audio-visual devices as well as non-compatible sensors and detector devices.

6.0 COST OPINIONS / REPLACEMENT COST WORKSHEETS/ LIMITATIONS

6.1 COST TABLES: Please refer to TABLE 1: "IMMEDIATE REPAIR AND DEFERRED MAINTENANCE EXPENDITURES: and TABLE 2: "REPLACEMENT RESERVE SCHEDULE" for the costs associated with the recommendations contained in this report.

Budget cost opinions were prepared for needed present and future repairs, rehabilitation, replacement, and deferred maintenance and shown on the following attached page(s). Cost opinions for major replaceable or repairable components, including equipment, roofing, and building components are based on the estimated remaining useful life. Cost opinions are based on either (1) published construction cost data, (2) quotes or documentation on previous work, or (3) cost data compiled or used by MEP for similar mechanical-electrical-plumbing and fire-life safety related items. The following table provides a summary of cost opinions for present and future items needing repair, replacement and/or correction for the site facilities and the existing building in constant dollars for the report date. All costs are stated in constant 2022 dollars.



6.2 PROPERTY CONDITION REPORT LIMITATIONS: MARKETABLE ENGINEERED PROJECTS, LLC dba Maximum Energy Professionals (MEP) was retained for the purpose of preparing the Mechanical (HVAC), Plumbing, Electrical and Fire Life Safety summary portions of this "physical asset" or "property condition assessment" report.

In this report, examination of units was performed using visual external inspections, discussions with on and off-site personnel as available, and review of any records and drawings supplied by the client and the examinations are valid only for the date and time the inspections were made. No internal inspections of equipment / switchgear opening were performed. No performance testing, emissions leak testing or electrical load survey was done. Obvious external Code violations were noted, as applicable, but no internal code inspection such as testing installed electrical loading of circuit breakers was included. Also, the conclusions and recommendations presented are based on the results of the on-site inspections and initial assessment investigations which were performed at the subject property and information regarding design information which was supplied to MEP by building personnel & owner's representatives, plus review of construction drawings.

The results of the site investigation are necessarily limited to this specific location and are valid only for the specific times at which the inspection was performed. In all cases, a standard of professional care commensurate with other professionals practicing similar tasks in similar areas was exercised in obtaining, reviewing, interpreting, and verifying all available information. Although such standards of professional care were followed, some possibility exists, as with all property assessments, that a presently unknown factor may become known at a future date. Any such new information must be evaluated at that time, within the context of the information presented herein, and within the context of the then existing regulations. Since such evaluations could potentially alter these conclusions, this report shall not be regarded as a guarantee that no potential repair or maintenance items or costs or hidden HVAC, plumbing, electrical, or fire-life-safety equipment conditions, beyond that which were detected during this property condition assessment, are present at this site. All cost opinions are in constant dollars as of the date of the report, with no inflation or escalation added.

7.0 PHOTOS AND PHOTO LOG

Please refer to the following pages that contain a Photo Log summarizing the photos taken at this location of relevant Mechanical, Electrical, Plumbing, and Fire Life Safety equipment showing typical equipment condition and any visible areas of concern, as applicable.





TABLE 1 IMMEDIATE REPAIR AND DEFERRED MAINTENANCE EXPENDITURES

MEP Project No. January 1, 2023

Property: Commercial Building

123 Main Street City, State, Zip

Year Built 65,804

Total Area (SF)

No. of Buildings:







ITEM	QUANTITY	UNIT TYPE	UNIT COST	IMMEDIATE COST	COMMENTS		
Immediate Year 2022							
No fire-life-safety code, health & safety, or immediate deferred maintenance deficiencies noted				\$0 \$0 \$0 \$0			
TOTAL ESTIMATED COST				\$0			

TABLE 2 REPLACEMENT RESERVE SCHEDULE

MEP Project No. 22-205 DATE 1/1/23

Definitions

EUL: Expected Useful Life

EFF AGE: Effective age

RUL: Remaining Useful Life

Quantity: Total Quantity Onsite

Property: Commercial Building 123 Main Street City, State, Zip







 Projected Term:
 12

 Building Age
 46

 No. of Buildings:
 1

 Gross S.F. (Estd)
 65,804

					COST PER YEAR 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 SUMMARY															
		EFF			UNIT		SECTION/	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
ITEM	EUL	AGE	RUL	QTY.	TYPE	UNIT COS	РНОТО НО.	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	RESERVES
MECHANICAL SYSTEMS																				
M1. Immediate: O&M: Install high-speed internet router and connect to existing Delta EMS module in penthouse to allow owner and	1	1	0	1	Rtr	\$ 5,000	2.2	\$ 5,000												\$5,000
AZ: Short-term (1-4 Years) Capital upgrader betterment (optional): Replace two (2) inefficient 75-Hp reciprocating refrigeration compressors with dual "Bitzer" (made in Germany) screw type effigeration compressors using refrigerant R134A, replace cooling	50	48	2	2	Comp	\$ 95,000	2.2		\$190,000											\$190,000
A3. Short-term (1-4 Years) Capital replacement: Anticipate pplacement of 1500-kBuh input gas fired space heating hot water older (2001) with 2 ea. 750-kBuh bollers, replace pump, and add cecond pump. Specify BA AQMD pre-certified bollers with minimum CA fittle 24 efficiency (Raypak model MWB modulating vertical boller.)	20	20	0	1,500	kBtuh	\$ 68	5 2.2	\$97,500												\$97,500
44. Short-term (1-4 Years): O&M: Refurbish DX cooling coils and hot vater heating coils to extend life: Replace old steel epoxy coated condensate drain pans with stainless steel, properly slope for good trainage, and wire bush and epoxy coat rusted steel coil frames, as	45	48	0	2	coils	\$ 75,000	2.2	\$150,000												\$150,00
45. Short-term (1-4 Years): O&M: Refurbish cold deck / hot deck upply air fan: Open, clean and inspect unit, wire brush and change all an belts, sheaves, bearings and drive shafts, and test and replace notor as needed. Add VFD with motor starter bypass in anticipation of	45	48	0	1	Fan	\$ 75,000	2.2	\$75,000												\$75,000
M6. Short and long-term (1-12 Years): Install Phase-2 DDC energy nanagement system for conversion of old 1970s pneumatic DD mixing it boxes to DDC damper actuators with full zone temperature reset apability in tenant spaces. Can be done floor by floor or as tenant	50	49	1	150	zones	\$ 2,500	2.2		\$75,000	\$75,000	\$75,000	\$75,000	\$75,000							\$375,000
PLUMBING SYSTEMS																				
21. Short-term (1-4 Years): Anticipate replacement of rooftop gas-fired 3364-Bthi input water-heater boiler; specify Raypak WH or equal, pre-pertified for BA AGMD emissions, minimum efficiency to meet or exceed 2A Title XXIV (24) energy efficiency standards. NOTE: Must be done rior to 2030 when CA State bans all gas-fired appliances. Also anticipate addition of 175-gallon outdoor DHW storage tank, Raypak		18	0	1,336	kBtuh	\$ 45	3.1	\$ 60,120												\$60,120
ELECTRICAL SYSTEMS																				\$
E1: Short-term (1-4 Years): Year-10: Recommend replacement of old 1970s era 1600A, 277/480 panel-board without main switch with new 600A, 277/480V panel-board, including 1600A "power break" type	58	48	10	1	1600A Swbrd	\$ 250,000	4.1										\$ 250,000			\$250,000
 Short-term (Year1 and ongoing every 3 years): Immediate O&M – lealth and safety: Perform Infrared ("IR") thermo-graphic scans for nain distribution or sub-panels to identify any 'hot spots', provide lug 	4	3	1	1	IR	\$ 3,500	4.1	\$ 3,500			\$ 3,500			\$ 3,500			\$ 3,500			\$14,00
E3. Short-term (1-4 Years): Health and Safety O&M: Perform "ARC Flash study and circuit labeling in accordance with National Electrical Code (NEPA 70, Sec. 110.18)	20	19	1	1	ARC	\$ 15,000	4.1	\$ 15,000												\$15,00
FIRE PROTECTION/LIFE SAFETY SYSTEMS																				\$1
1. Short-term (1-4 Years). O&M, Health and safety: Perform and complete Regulation Four, 5-year testing and certification on or about	5	4	1	1	5-Yr Reg 4	\$ 7,500	5.1	\$ 7,500												\$7,50
une 2023 2. Long-term (5-12 Years): Capital, Safety: Anticipate replacement of 8 year old bi-metallic fusible link type fire sprinkler heads, estimated ¼ f building area, with new 3-mm "quick release" type heads.	50	48	2	49,353	Sq. Ft.	\$ 1.50	5.1		\$74,030										1.1	\$74,03
3. Long-term (5-12 Years): Capital, Safety: Anticipate replacement of 820XL model fire alarm control panel with then-current Honeywell antogue/digital type FACP (ES200X or equal), and replace any older udio-visual devices as well as non-compatible sensors and detector	20	14	6	65,804	Sq. Ft.	\$ 1.25	5.2								\$82,255					\$82,25
	<u> </u>	1			<u> </u>	TOT.	AL UNINFLATED	\$413.620	\$339.030	\$75.000	\$78.500	\$75.000	\$75.000	\$3,500	\$82,255	\$0	\$253,500	\$0	\$0	\$1,395,40
						Inflatio	n Factor @ 2.5%	100.00%	102.50%	105.06%	107.69%	110.38%	113.14%	115.97%	118.87%	121.84%	124.89%	128.01%	131.21%	-
					CI		OTAL INFLATED OTAL INFLATED		\$347,505 \$761.125		\$84,536 \$924,458	\$82,786 \$1.007,244	\$84,856 \$1.092.100	\$4,059 \$1.096,159	\$97,775 \$1.193.934	\$0 \$1.193.934		\$1.510.521	\$0 \$1.510.521	

 RESERVE SUMMARY
 Total Uninflated
 Total Inflated

 Total Reserves
 \$1,395,405
 \$1,510,521

 Per SF Reserves (All Years)
 \$21,212
 \$22,95

 Per SF (Per Year)
 \$1.77
 \$1.91







23670 Hawthorne Bl. Suite 204 Torrance, CA 90505

Tel: 310.782.1410 Fax: 310.782.0031

PROPERTY CONDITION ASSESSMENT PHOTOS

"Commercial Property"
123 Main Street City, State, Zip

Mechanical – Electrical – Plumbing – Fire Life Safety



Report Date:

October 21, 2022



MEP Project



1. 1 of 3 first floor garage level air-cooled split system AC condensing units



2. Typical original 1970s vintage pneumatic wall mounted thermostats



3. Rooftop steel, "Balitbond" coated evaporative condenser unit (2009)



4. Note rusted drive shaft on evaporative condenser



5. Evaporative condenser sits on spring isolator supports, not rusting on steel support frames



6. Evaporative condenser uses an auto-sensor / auto injection chemical water treatment system





7. VFD variable speed drive for condenser fan with water temperature controller aquastat



8. Reciprocating refrigeration compressor #2: 1977 but rebuilt, 75-Hp, Replacement motor



9. Reciprocating refrigeration compressor #1: 1978 but rebuilt, 75-Hp, original motor



10. Single supply air fan for cold and hot decks, no VFD constant speed. 40-Hp



11. Outside air filter bank, 2-in. pleated, standard efficiency



12. Cold deck DX cooling coils, corrosion and rusting of steel frames and condensate collection pan





13. Gas-fired space heating hot water hydronic boiler (2012) poor condition



14. Inline type space heating hot water circulation pump to hot deck



15. Older dual-reciprocating compressor pneumatic control air compressor



16. Gas fired domestic hot water boiler, 2004, rusted exterior case

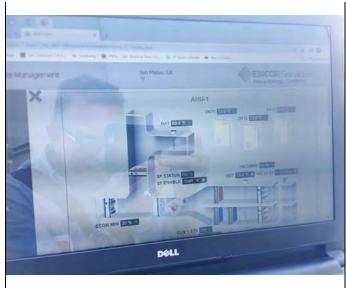


17. Cold deck interior space mixing box damper controller with pneumatic actuator

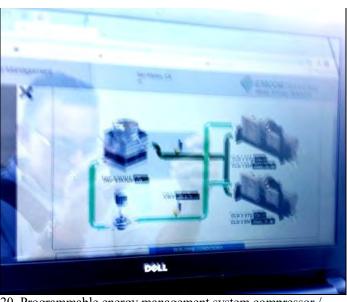


18. Retrofit (2019) "Delta" direct digital control (DDC) modules





19. Programmable energy management system built-up air handler system control screen



20. Programmable energy management system compressor / condenser control screen



21. Typical of axial type rooftop exhaust fans



22. Rooftop Laboratory tenant exhaust fans



23. Tenant owned air-cooled condenser units for 6th Laboratory space



24. "Amazon" owned VRF type condenser unit





25. Incoming 3-in. potable water utility service pipeline with new stainless-steel back-flow prevention device



26. Incoming metered utility natural gas service with seismic EQV



27. Stairwell cast iron roof drain down-comer with clean out connection



28. Recent updated "unisex" restroom fixtures



29. Note single rooftop covered drain, no adjacent over-flow drains installed

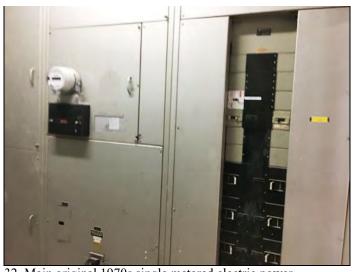


30. Exterior pad-mounted utility high-voltage transformer supplies 277/480V electricity into subject building





31. Original 1979 diesel engine driven 55-kW E-power generator, Out-of-service



32. Main original 1970s single metered electric power distribution switchboard, 1600A, 277/480V



33. Penthouse HVAC equipment motor control center, 400A, 480V



34. Typical floor original 225a, 277/480V panels and 225A, 120/208V sub-panels



35. 7-day old fashioned mechanical timer for exterior and parking lights



36. Typical of battery pack type emergency egress light fixtures





37. Incoming 6-in. firewater utility service pipeline with new stainless-steel back-flow prevention device



38. Exterior 4-head FDC (fire department hose connections)



39. Lobby level fire alarm control panel keyboard annunciator



40. 2008 addressable fire alarm control panel (FACP)



41. Typical wall mounted manual "pull" station alarm device



42. Typical upgraded LED Exit sign fixture





43. Typical ceiling mounted newer vintage audio-visual horn/strobe alarm device



44, Stairwell 6-in. wet standpipe with hose connection at every floor and rooftop



45. Alternate stairwell wet sprinkler firewater riser with flow alarm sensor and floor branch line



January 1, 2023

Seismic Risk Assessment Report

123 Main street City, State, Zip

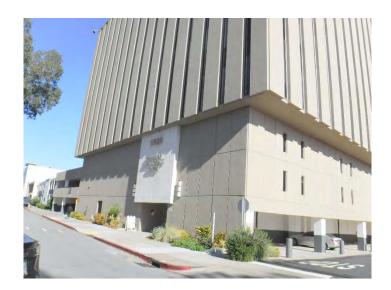
YAES Project No. ES-20221626

Prepared For:

Mr. Ronnie Long National Due Diligence Services 221 Circle Drive Maitland, Florida 32751

Prepared By:

YA Engineering Services, Inc. Los Angeles, California



Lynsey Willadsen LaScola, PE Senior Managing Engineer

YAES No. ES- 20221626 January 1, 2022

Executive Summary

At the request of National Due Diligence Services, YA Engineering Services, Inc. (YAES) performed a seismic risk assessment (probable maximum loss model) in conformance with the scope and limitations of the *Standard Guide for Seismic Risk Assessments* (ASTM E2026-16a) and the *Standard Practice for Probable Maximum Loss (PML)* (ASTM E2557-16a). A Level 1 assessment was conducted for the site improvements located at 123 Main Street City, State, Zip based on the property evaluation performed by Ms. Lynsey Willadsen LaScola, PE from YAES on October 26, 2022.

The subject property consists of an eight-story office building and a two-level parking structure, both constructed in 1974. The lateral force-resisting systems consist of concrete slab diaphragms that transfer earthquake lateral loads to a combination of concrete shear walls, and/ or masonry shear walls. Based on the date of construction, and no drawings available for review, some degree of non-ductile detailing could be present.

The seismic risk assessment includes a determination of seismic ground motion hazard and calculation of the building damageability (probable maximum loss model), that quantifies potential financial risk. The building damageability was developed using the methodology based on the *Earthquake Damage Evaluation Data for California* (ATC 13) and the *Commentary on the Use of ATC-13 Earthquake Damage Evaluation Data for Probable Maximum Loss Studies of California Buildings* (ATC 13-1), along with more current publications on building performance after seismic events and their related building code implementation. The seismic ground motion hazard parameters for a postulated 475-year return period seismic event and the corresponding composite loss estimates for the subject buildings are listed in Table 1.

Based on our analysis, the site meets the site stability requirements of ASCE/SEI 41-17. However, the office building's structural systems could lose vertical load-carrying capacity when subjected to the expected design-basis seismic forces, while the parking structure is expected to remain stable.

Table 1: Composite Seismic Risk to Subject Buildings

0.57 g
9.1
36 %
> 40 %

^{*}Modified Mercalli Intensity (MMI) Scale, 1931.

YAES No. ES- 20221626 January 1, 2023

Introduction

The purpose of a seismic risk assessment is to understand the seismic-induced hazard at a given property and evaluate the extent of risk it poses.

The following seismic risk assessment is in conformance with the scope and limitations of ASTM E2026-16A and ASTM E2557-16A for a Level 1 assessment. Building damageability is defined in the ASTM standards as a percentage of building replacement value and is expressed as the expected (median) loss and upper (90% confidence level) loss. The loss estimates represent a statistical model of financial risk. The seismic performance of the site improvements is based on several factors including: 1) the site seismicity, 2) vintage of the structures, 3) type of construction utilized, 4) building physical configurations, 5) condition of the structures, and 6) irregularities that may cause the structure to perform better or worse than the model data provided for similar buildings in past earthquakes.

The estimated level of earthquake ground shaking at the site is defined on a probabilistic basis with a 475-year return interval, which equates to a 10% probability of exceedance in 50 years. The 475-year return interval is standard for the seismic risk industry and represents the strength of the earthquake induced shaking that has 0.2% chance (1/475) of occurring during any given year.

Site Improvements

The subject site improvements consist of an eight-story office building and a two-level parking structure located at 123 Main Street City, State, Zip. Figure 1 shows an aerial view of the site and building designations. Figure 2 through Figure 5 show exterior building elevation views. The buildings' salient information is summarized in Table 2. The site was visited on January 1, 2023 by Ms. Lynsey Willadsen LaScola, PE from YAES.

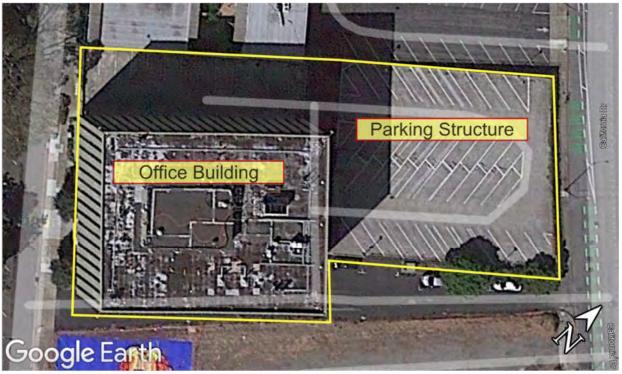


Figure 1: Aerial photograph of the site improvements at 1828 El Camino Real (Google Earth).

Table 2: Site Improvements Summary

Location: 123 Main Street City, State, Zip

Construction type: Office Building: Reinforced Concrete Shear Walls with Rigid Diaphragm

(ATC 13-1 Class 8 & ASCE 41-17 Class C2)

Parking Structure: Combination of Reinforced Concrete & Masonry Shear Walls

(ATC 13-1 Class 6/9 & ASCE 41-17 Class C2/RM2)

Date of Construction: 1974 (per client information)

Construction Design Code: 1970 Edition of the Uniform Building Code (Assumed)

Total Approximate Building Area: 65,058 net rental square feet (per client information)



Figure 2. Office Building west and south elevation.



Figure 3. Office Building west elevation and street front.



Figure 4. Office Building east elevation.



Figure 5. Parking structure east elevation.



Figure 6. Parking structure north elevation.



Figure 7. Parking structure south elevation.

Building Construction

Office Building

Based on visual observations, the structure is classified as combination of reinforced concrete shear walls with a secondary system of concrete moment-frames per the ATC 13-1 and the Standard ASCE/SEI 41-17. The structure is rectangular in shape and is comprised of three levels of parking and a grade level lobby with retail tenants supporting 5-levels of a reduced footprint utilized as office space.

The primary vertical load carrying systems are comprised of two-way concrete slabs at the roof and floor levels spanning to an interior core of concrete walls and concrete columns. (Figure 8). All gravity loads are carried to the foundation systems by the concrete walls and concrete columns (Figure 9).

The primary lateral force-resisting system consists of the concrete slabs at the roof and floor levels performing as rigid diaphragms that distribute lateral loads to the concrete shear walls. (Figures 10 and 11). The office floor levels 5 to 8 have slabs that cantilever out from the perimeter concrete column line that create an elevation irregularity (figures 12 and 13)

Based on visible parts of the structure and known foundation designs for similar buildings, the engineered foundation elements are assumed to consist of perimeter continuous footings or grade beams beneath the concrete walls and spread footings or deep pile systems beneath columns. The building also has an interior concrete slab-on-grade.



Figure 8. Two-way concrete slab supported by concrete walls and columns.



Figure 9. Concrete columns supporting the elevated concrete slab.



Figure 10. Concrete shear wall core.



Figure 11. Transverse concrete wall.



Figure 12. Office building levels 5 to 8 transition from parking levels.



Figure 13. Irregular elevation with office section rising from parking levels.

Parking Structure

The structure is classified as combination of reinforced concrete shear walls and concrete masonry shear walls with a rigid diaphragm per the ATC 13-1 and the Standard ASCE/SEI 41-17. The primary vertical load carrying system is comprised of a two-way concrete slab supported by perimeter masonry walls lining the south, west and north elevations, a concrete wall at the east elevation, and interior and perimeter concrete columns. (Figure 14). All gravity loads are carried to the foundation systems by the concrete walls, perimeter masonry walls and interior/perimeter concrete columns (Figure 15).

The primary lateral force-resisting system consists of the concrete slab at the roof deck level performing as a rigid diaphragm that distributes lateral loads to the masonry and concrete shear walls (Figures 16 and 17).

Based on visible parts of the structure and known foundation designs for similar buildings, the engineered foundation elements are assumed to consist of masonry retaining walls at subgrade elevations, perimeter continuous footings beneath the walls and spread footings beneath columns. The building also has an interior concrete slab-on-grade.



Figure 14. Concrete slab supported by concrete columns.



Figure 16. East elevation concrete shear wall.



Figure 15. . Concrete slab supported by concrete columns.



Figure 17. Perimeter masonry shear and retaining walls.

Document Review

The following design documents were provided for review:

 August 17, 2022. Liquefaction Potential Evaluation Report: Michelucci & Associates, Inc., Geotechnical Consultants, 1801 Murchison Drive, Suite 210, Burlingame, California (10 pages)

YAES No. ES- 20221626 January 1, 2023

Seismic Risk Assessment

Geohazards & Site Stability

Geological site hazards (geohazards) were derived from the Seismic Performance Prediction Platform (SP3) Site Hazard Program. The program pulls site specific data from geological public domain websites including the qualitative characteristics of the subject site summarized in Table 3. The SP3 report is included in the Appendix.

Overall, the site has a low probability for geologic hazards that may lead to widespread earthquake-related damage summarized by known hazards. Based on these findings, the site meets the site stability requirements as determined by the 2017 *Seismic Evaluation and Retrofit of Existing Buildings* (Standard ASCE/SEI 41-17).

Table 3: Site Geohazards Summary

Soil Class:	$D(V_{S30} = 309 \text{ m/s})$
Liquefaction:	Low Probability (per the Michelucci & Associates Liquefaction Evaluation Report)
Landslide:	Low Probability (site was noted as graded relatively flat)
Fault Rupture:	Low Probability (not located in a known fault rupture zone)
Tsunami:	Not present in a Tsunami Inundation Zone

Seismic Ground Motion Hazard

The objective of the seismic ground motion hazard assessment is to characterize the earthquake ground motions at the site with a specified probability of being exceeded in a specified time interval. For this assessment, the ground motion values are expressed as Peak Ground Accelerations (PGA) and were determined from the United States Geologic Survey, 2014 Ground Motion Hazard maps via their unified hazard online tool; the Dynamic: Conterminous U.S. 2014 (v4.2.0) edition was used. For the subject site, the PGA is 0.57 g.

Ground motion can be expressed on an intensity scale, referred to as the Modified Mercalli Intensity (MMI), which correlates shaking intensity with the potential effects on people, built structures, and the natural environment (Table 4). For this assessment, the ground acceleration is translated to MMI using the Trifunac and Brady (1975) relationships to determine the loss estimates. The MMI scale translation from the PGA for this site is 9.1. A summary of the site seismicity data is presented in Table 5.

YAES No. ES- 20221626 January 1, 2023

Table 4: Modified Mercalli Intensity Scale*

Intensity	Shaking	Description/Damage to the Built Environment
I to IV	Light	Not significant to structures.
V	Moderate	A few instances of cracked plaster and cracked windows.
VI	Strong	A few instances of fallen plaster. Damage slight in poorly constructed buildings.
VII	Very Strong	Damage negligible in buildings of good design and construction, slight to moderate in well-built ordinary structures; considerable in some poorly built or under designed structures; some chimneys broken at roof line.
VIII	Severe	Damage slight in buildings designed to be earthquake resilient and considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, column, monuments, walls.
IX	Violent	Damage slight in specially designed structures; welled-designed frame structures thrown out of plumb. Damage great in substantial buildings with partial collapse. Buildings shifted off foundations.
Х	Extreme	Some well-built wooden structures destroyed; most ordinary masonry and frame structures destroyed with foundations.

Table 5: Site Seismicity Summary

Probability:	10% in 50 Years (475-Year Return Interval)
Ground Acceleration:	0.57g
MMI:	9.1

Building Damageability & Stability

The seismic risk assessment methodology used to evaluate the building is based on the ATC 13 and the ATC 13-1 along with more current publications on building performance after seismic events and their related building code implementation. The ATC-13 beta distribution data and methodology are used to evaluate the expected performance of average construction. The documents provide the data on statistical damage curves for average buildings within various classifications that can be expressed as a seismic risk interval with characteristic median (50% non-exceedance value of damage) and upper loss (90% non-exceedance value) values. The median loss, scenario expected loss (SEL), is representative of an average damage value expected for the same building with the same attributes and vulnerability, thus 50% of the buildings would have a lower loss and 50% would have a higher loss. The scenario upper loss (SUL) is representative of the 90% confidence level where 90% of the representative building type would have a lower loss and 10% would have a higher loss.

YAES No. ES- 20221626 January 1, 2023

The SEL and SUL are increased or decreased based on the attributes of the property that differ from average buildings. A summary of the correlation of building seismic risk (or *building damageability*), estimated loss, and expected damage is provided in Table 6.

Table 6: Damage State Definitions

Building Damageability	Estimated Loss	Expected Damage
Slight to Light	0% – 10%	Potential architectural damage, light & easily repairable; minimal disruption of use, if any.
Light to Moderate	10% – 20%	Limited damage, with some localized structural damage.
Moderate	20% – 30%	Substantial structural damage, with potential for localized collapse; structure likely to be closed for inspection and until critical repairs are completed.
Heavy	30% – 60%	Severe structural damage, possibly included partial collapse and critical economic loss; structure likely to be closed for an extended period; repair may not be economically attractive.
Major to Destroyed	> 60%	Severe structural damage leading to partial or total structural collapse and possibly complete economic loss.

The subject buildings have been assessed and loss estimates are based on the ATC 13-1 damage curve for reinforced concrete shear walls (office building) and reinforced masonry shear wall construction (parking structure). The buildings' seismic risk attributes and deficiencies are as follows:

Positive Building Characteristics

Both Structures: Visible lateral system elements were observed to be in good condition.
 Although vintage, a complete load path was determined to exist.

Negative Building Characteristics

- Both Structures: The date of construction (1974) employs outdated seismic design requirements, which do not include modern seismic design forces and detailing methods. Deficiencies could include but are limited to non-ductile seismic detailing of concrete elements and large spacing between the steel reinforcement of column ties.
- Office Building: The structure has an irregular shape in elevation. The transition between the parking levels to the reduced footprint at the upper levels can focus loads and intensify the damage to the building at these areas.

The tables below summarize our findings for the building damageability derived from the replacement value of the subject buildings on site; Table 7 illustrates the individual building loss and Table 8 illustrates the site composite loss.

Table 7: Seismic Risk to Subject Buildings

Scenario Expected Loss (SEL)	Office Building Parking Structure	38% 17%
Scenario Upper Loss (SUL)	Office Building Parking Structure	> 40% 28%

Table 8: Composite Seismic Risk to Subject Buildings

Based upon our findings and analysis, the office building's structural systems could lose vertical load carrying capacity when subjected to the expected design-basis seismic forces, while the parking structure is not expected to be at risk for stability.

Retrofit Recommendation - Office Building

The damage estimates outlined given can be reduced by the implementation of seismic improvements or retrofits. In general, the expected seismic performance of nonductile concrete construction can be improved by wrapping the frame columns and beams in fiber composites and the addition of concrete shear walls or steel braced frames. These solutions would be applicable for this property. Structural drawings of the building and foundation are generally unavailable; and it is difficult to estimate the costs of such a retrofit. Without this information, it is not practical to estimate required quantities of materials to support a cost estimate.

References

ASTM E2026-16a, Standard Guide for Seismic Risk Assessment of Buildings, ASTM International, West Conshohocken, PA, 2016 ASTM E2557-16a, Standard Practice for Probable Maximum Loss (PML) Evaluations for Earthquake Due-Diligence Assessments, ASTM International, West Conshohocken, PA, 2016

ATC-13 Earthquake Damage Evaluation Data for California, Applied Technology Council, Redwood City, CA, 1985

ATC-13-1 Commentary on the Use of ATC-13 Earthquake Damage Evaluation Data for Probable Maximum Loss Studies of California Buildings, Applied Technology Council, Redwood City, CA, 2002

ASCE/SEI 41-17 Seismic Evaluation and Retrofit of Existing Buildings, American Society of Civil Engineers, Reston, VA, 2017 Wood, H. O., and Neumann, Frank (1931). Modified Mercalli Intensity Scale of 1931: Seismological Society of America Bulletin, v. 21, no. 4, p. 277-283.

Trifunac, M. D. and Brady, A. G. A study on the duration of strong earthquake ground motion. Bulletin of the Seismological Society of America, 65 (3). pp. 581-626. June 1975

APPENDIX A. SP3 SITE HAZARDS REPORT



1. INTRODUCTION

This report was generated using SP3-SiteHazards of the SP3 Platform. It was created by aggregating publically available data at the specified site location with the goal of easily understanding and reporting on site hazards. Each data source is cited and the report is subject to the limitations and accuracy of those data sources.

2. SITE LOCATION

Address: 123 Main Street City, State, Zip **Latitude:** 37°35'44"N (37.595698°)

Longitude: 122°23'1"W (-122.3836698°)

3. SITE STABILITY SUMMARY

Soil:

#1 - USGS Vs30 Database Soil Type D #2 - Geological Survey Vs30 (2015) C/D

#3 - U.S. Geological Survey Vs30 Boring Data for Nearby Sites Per boring data figure.

Liquefaction:

Moderate Liquefaction #1 - Bay Area Liquefaction Hazard #2 - State Liquefaction Liquefaction Hazard

Landslide:

#1 - U.S. Geological Survey Landslide - Induced by Causes Other than Not in a mapped Landslide Earthquake, Shape Data zone. #2 - U.S. Geological Survey Professional Paper 1183, Landslide Moderate Landslide Overview Hazard #3 - Western US Landslide High Landslide Hazard Not in a mapped Landslide #4 - State Landslide zone.

#5 - U.S. Geological Survey Landslide - Induced by Causes Other than Not in a mapped Landslide Earthquake, Point Data

Fault Rupture:

Not in a mapped Fault #1 - Alquist-Priolo Earthquake Fault Zoning Act Rupture zone.

Tsunami:

Not in a mapped Tsunami #1 - Bay Area Tsunami zone. Not in a mapped Tsunami

#2 - State Tsunami

zone.



4. SOIL

Definitions of Site Class

The site class bins used for assigning soil types are as follows:

	Site Class	Site Class Based on VS30* (m/sec)	ASCE 7 Site Class Definition Vs30 (m/sec)
Α	Hard Rock	≥1695	≥1500
A/B	A/B Boundary	1315-1695	
В	Rock	945-1315	760-1500
B/C	B/C Boundary	660-945	
С	Very dense soil and soft rock	460-660	360-760
C/D	C/D Boundary	315-460	
D	Stiff soil	225-315	180-360
D/E	D/E Boundary	165-225	
E	Soft clay soil	<165	<180

^{*}Non-overlapping ranges for known Vs30 to define Site Class as proposed by Bozornia & Bertero, 2006 [https://www.crcpress.com/Earthquake-Engineering-From-Engineering-Seismology-to-Performance-Based/Bozorgnia-Bertero/p/book/9780849314391]

Data Source #1 - USGS Vs30 Database Soil Type

The following soil types are estimated based on the typography of your site location.

The estimate of soil for this site is as follows:

• Vs30 = 309 m/s

• Soil Class: D [225 - 315]

Source: U.S. Geologic Survey, Global Vs30 Model [https://earthquake.usgs.gov/data/vs30]



Data Source #2 - California Geological Survey Vs30 (2015)

The following shows the Vs30 and soil Site Class from the California Geological Survey (2015 release).

Based on the map below, this site is located in a Site Class \mathbf{C}/\mathbf{D} zone.



Source: California Geological Survey [https://maps.conservation.ca.gov/cgs/DataViewer]



Data Source #3 - U.S. Geological Survey Vs30 Boring Data for Nearby Sites

The following map provides any available soil boring data (with Vs30 estimates) for nearby sites. This comes from a database of Vs30 boring data compiled by the U.S. Geological Survey and other governmental agencies for 3,020 sites in the United States.



Source: U.S. Geological Survey [https://earthquake.usgs.gov/data/vs30/us/]

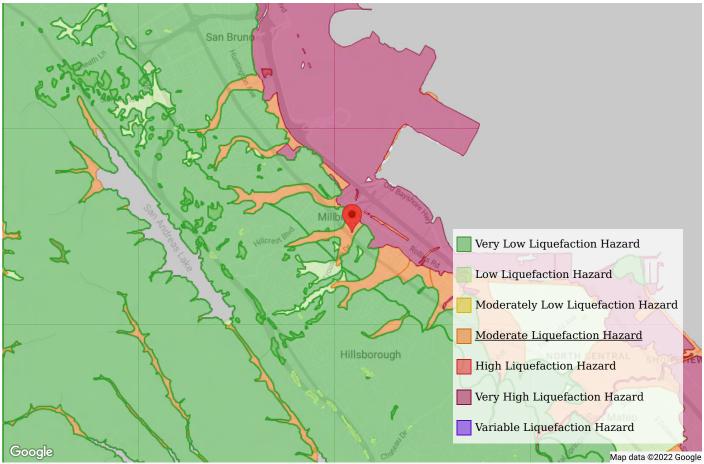


5. LIQUEFACTION

Liquefaction areas are delineated with respect to the underlying geological materials in a particular area. These maps are meant to provide information on where liquefaction may occur in a future earthquake (but not necessarily that it will occur for this specific site). This map provides a pre-screening approach for liquefaction potential, but a site-specific soil assessment would be needed if a more precise understanding of liquefaction potential is desired.

Data Source #1 - Bay Area Liquefaction

Based on the map below, this site is located in a Moderate Liquefaction Hazard zone.



Source: Association of Bay Area Governments [http://resilience.abag.ca.gov/earthquakes/]



Data Source #2 - California State Liquefaction

Based on the map below, this site is located in a ${\bf Liquefaction}~{\bf Hazard}$ zone.



 $\textbf{\textit{Source:}} \ \textit{California Geological Survey} \ [\underline{\textit{http://maps.conservation.ca.gov/cgs/informationwarehouse}}]$



6. LANDSLIDE

Landslide susceptibility indicates the severity of seismically induced landslide potential in an area.

Data Source #1 - U.S. Geological Survey Landslide - Induced by Causes Other than Earthquake, Shape Data



Source: U.S. Geological Survey [https://www.sciencebase.gov/catalog/item/61f326dfd34e622189b93308]



Data Source #2 - U.S. Geological Survey Professional Paper 1183, Landslide Overview

Based on the map below, this site is located in a **Moderate Landslide Hazard** area.



Source: U.S. Geological Survey [https://www.sciencebase.gov/catalog/item/4f4e4ad5e4b07f02db6838e7]



Data Source #3 - Western US Landslide

Based on the map below, this site is located in a **High Landslide Hazard** area.



Source: US EPA/ORD/NERL/ESD Landscape Ecology Branch

[https://databasin.org/datasets/f0afa0e04e58465fa2047be930e323bc]



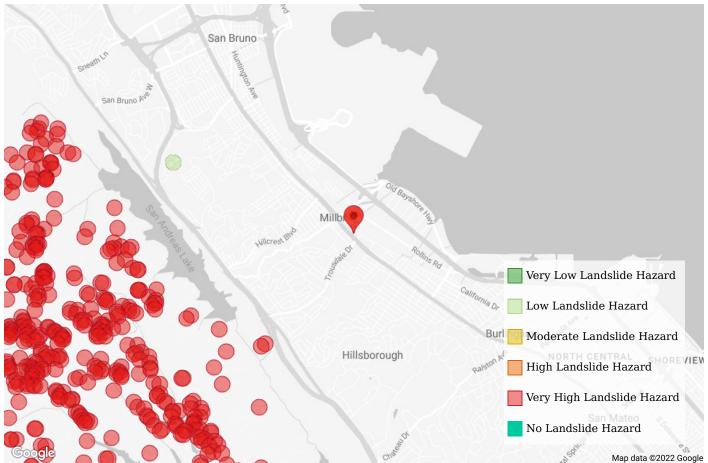
Data Source #4 - California State Landslide



Source: California Geological Survey [http://maps.conservation.ca.gov/cgs/informationwarehouse]



Data Source #5 - U.S. Geological Survey Landslide - Induced by Causes Other than Earthquake, Point Data



Source: U.S. Geological Survey [https://www.sciencebase.gov/catalog/item/61f326dfd34e622189b93308]



7. TSUNAMI

Google

Tsunami inundation zones are determined by modeling a group of maximum considered tsunami events. It is noted that these maps do not meet disclosure requirements for real estate transactions nor for any other regulatory purpose (please see associated disclaimers from California Geological Survey).

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Data Source #1 - Bay Area Tsunami

Source: Association of Bay Area Governments [http://resilience.abag.ca.gov/open-data/]

Map data ©2022 Google



Data Source #2 - California State Tsunami



Source: California Geological Survey [https://www.conservation.ca.gov/cgs/tsunami/maps#counties]



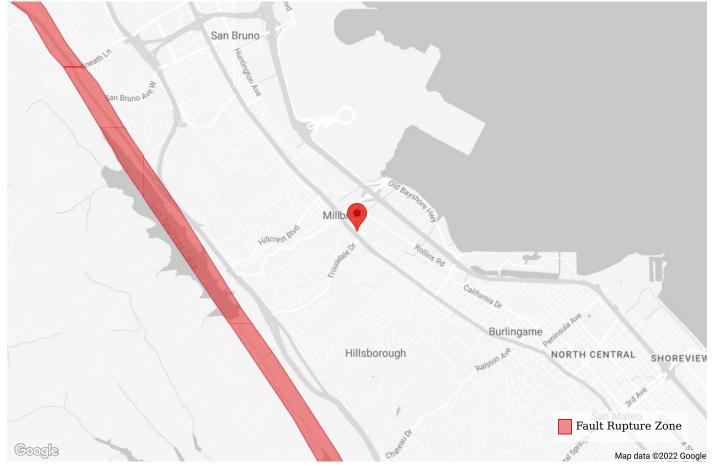
8. FAULT RUPTURE

Surface fault rupture (aka. fault rupture) is the result of fault movement that breaks to the surface of the earth either suddenly during earthquakes, or slowly due to a process known as fault creep, and is the result of tectonic movement that originates deep in the Earth. See https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Publications/SP_042.pdf for more information.

Data Source #1 - Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist (CGS) to establish earthquake fault zones around the surface traces of active faults and to issue appropriate maps. CGS has identified earthquake fault zones in thirty-seven California counties, affecting more than one hundred cities. The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults.

Based on the map below, this site is Not in a mapped Fault Rupture Zone

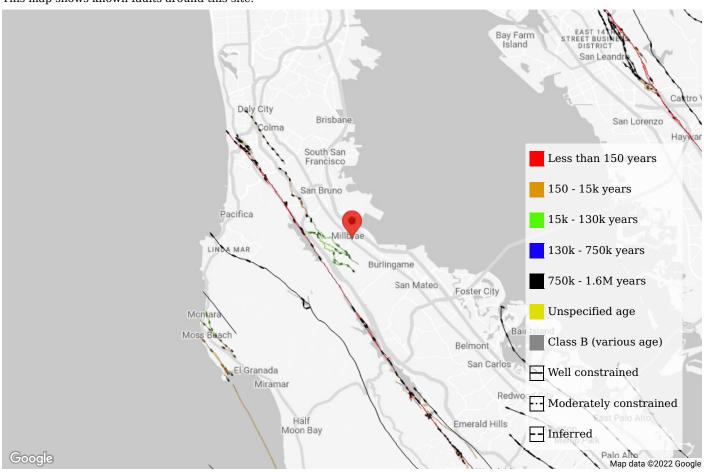


Source: California Geological Survey [http://maps.conservation.ca.gov/cgs/informationwarehouse]



Data Source #1 - U.S. Geological Survey Faults

This map shows known faults around this site.



Years shown in legend represent typical return period of characteristic earthquakes on the faults.

Source: U.S. Geological Survey [https://earthquake.usgs.gov/hazards/qfaults/]



10. GROUND SHAKING DISAGGREGATION

The following are the faults and possible future earthquake events that contribute to the 10% in 50 year hazard.

Fault Name and Rupture	Magnitude	Distance from Site [mi]	Azimuth	Epsilon	Percent Contribution
UC33brAvg_FM32					45.47%
San Andreas (Peninsula) [9]	7.79	1.78	233.84	0.23	32.72%
Pilarcitos [7]	7.27	4.18	220.63	0.64	1.84%
San Gregorio (North) [8]	7.65	8.35	252.53	1.07	3.40%
Hayward (So) [7]	7.30	17.02	55.25	1.90	1.55%
UC33brAvg_FM31					44.41%
San Andreas (Peninsula) [9]	7.79	1.78	233.84	0.23	32.41%
Pilarcitos [7]	7.39	4.18	220.63	0.61	1.03%
San Gregorio (North) [8]	7.66	8.35	252.53	1.07	3.47%
Hayward (So) [7]	7.30	17.02	55.25	1.91	1.55%
UC33brAvg_FM31 (opt)					5.06%
UC33brAvg_FM32 (opt)					5.05%

Source: U.S. Geologic Survey, Dynamic: Conterminous U.S. 2014 (update) (v4.2.0)

[https://earthquake.usgs.gov/hazards/interactive/]

*Vs30: 259 m/s (Site class D)



11. GROUND SHAKING HAZARDS

The shaking hazard for your site is presented below in terms of peak ground acceleration (PGA) and spectral acceleration (Sa) at periods 0.2s and 1.0s. Where available the shaking hazard is provided for the Site Class specific to this location (based on estimated U.S. Geological Survey Site Class) and site classes B/C and D.

The Modified Mercalli Index (MMI) is also provided according to Trifunac & Brady (1975) based upon PGA. This method is applicable to intensity levels between IV and X; lower intensity levels are approximate.

Intensity This Site: Site C			te Class D	Baseline for Site Class B/C				Baseline for Site Class D					
Exceedance Probability	Return Period [years]	PGA [g]	Sa (T=0.2s) [g]	Sa (T=1.0s) [g]	ммі	PGA [g]	Sa (T=0.2s) [g]	Sa (T=1.0s) [g]	ммі	PGA [g]	Sa (T=0.2s) [g]	Sa (T=1.0s) [g]	ммі
50% in 30 years	43	0.1501	0.3765	0.1739	7.2	0.1036	0.2294	0.0630	6.6	0.1501	0.3765	0.1739	7.2
50% in 50 years	72	0.2096	0.5133	0.2565	7.7	0.1514	0.3385	0.0948	7.2	0.2096	0.5133	0.2565	7.7
50% in 75 years	108	0.2678	0.6460	0.3471	8.0	0.2024	0.4559	0.1309	7.6	0.2678	0.6460	0.3471	8.0
50% in 100 years	144	0.3153	0.7414	0.4298	8.3	0.2478	0.5598	0.1651	7.9	0.3153	0.7414	0.4298	8.3
20% in 50 years	224	0.3997	0.9142	0.5913	8.6	0.3343	0.7584	0.2352	8.3	0.3997	0.9142	0.5913	8.6
10% in 30 years	285	0.4510	1.0150	0.6981	8.8	0.3914	0.8900	0.2848	8.6	0.4510	1.0150	0.6981	8.8
10% in 50 years	475	0.5677	1.2379	0.9755	9.1	0.5266	1.2086	0.4116	9.0	0.5677	1.2379	0.9755	9.1
10% in 75 years	712	0.6746	1.4492	1.2155	9.4	0.6558	1.5127	0.5273	9.3	0.6746	1.4492	1.2155	9.4
5% in 50 years	975	0.7545	1.5997	1.4416	9.5	0.7494	1.7498	0.6346	9.5	0.7545	1.5997	1.4416	9.5
3% in 50 years	1642	0.9083	1.8799	1.8082	9.8	0.9350	2.2195	0.8129	9.8	0.9083	1.8799	1.8082	9.8
2% in 50 years	2475	1.0332	2.1347	2.1572	10.0	1.0779	2.5784	0.9819	10.0	1.0332	2.1347	2.1572	10.0
1.5% in 50 years	3308	1.1196	2.3055	2.3859	10.0	1.1838	2.8666	1.0922	10.0	1.1196	2.3055	2.3859	10.0
1% in 50 years	4975	1.2534	2.5505	2.7365	10.0	1.3507	3.3165	1.2685	10.0	1.2534	2.5505	2.7365	10.0

Source: U.S. Geologic Survey, Dynamic: Conterminous U.S. 2014 (update) (v4.2.0)

[https://earthquake.usgs.gov/hazards/interactive/]

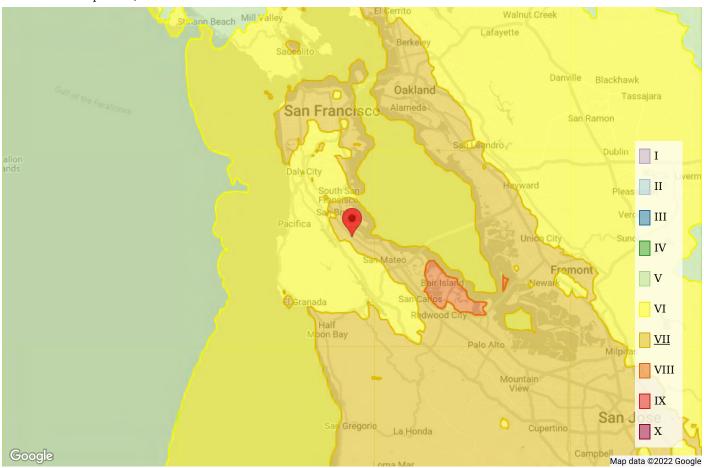


12. SHAKE MAPS

Shake maps present the intensity of seismic shaking over geographic regions during significant earthquakes. The following map(s) provide information on the intensity of shaking demand from past seismic events that are pertinent to this site. Note that these maps estimate the intensity of shaking between observed data points and that a specific site may have experienced a different level of shaking in the event(s) presented below.

Data Source #1 - Loma Prieta Earthquake - M 6.9 (10/17/1989)

Based on the map below, this site is located in an MMI VII Zone for this event.



Source: U.S. Geological Survey [https://earthquake.usgs.gov/earthquakes/eventpage/nc216859#shakemap]

Mapped Values at Site Location:

MMI: 6.8

PGA: 0.24 (g)

PGV: 22 (cm/s)

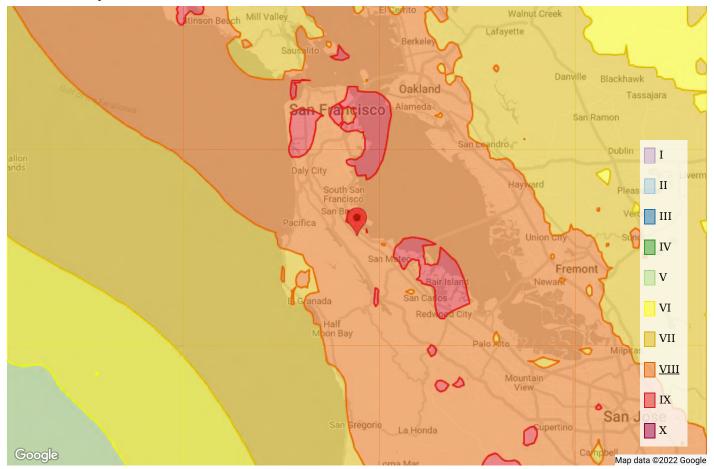
Sa (T = 0.3s): 0.4 (g)

Sa (T = 1.0s): 0.28 (g)



Data Source #2 - 1906 San Francisco Earthquake - M 7.8 (4/8/1906)

Based on the map below, this site is located in an MMI ${\bf VIII}$ Zone for this event.



Source: U.S. Geological Survey [https://earthquake.usgs.gov/earthquakes/events/1906calif/shakemap/]

Mapped Values at Site Location:

MMI: 8

PGA: 0.48 (g)

PGV: 42 (cm/s)

Sa (T = 0.3s): 1.2 (g)

Sa (T = 1.0s): 0.56 (g)



Ground Shaking Scale Descriptions

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very Strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: U.S. Geologic Survey

APPENDIX B. ASTM SUMMARY FINDINGS

ASTM Summary Findings Form

(Appendix X4- ASTM E2557-16a)

Property Name: Commercial Property

Property Address: 123 Main Street City, State, Zip

Report Title & Date: Seismic Risk Assessment Report (October 31, 2022)

Site Visit Performed By/Date: Ms. Lynsey Willadsen LaScola, PE CA#76430, YA

Engineering Services, Inc. on the January 1, 2023.

Evaluation Performed by: Same as Above

Technical Review by: YA Engineering Serices

The following design documents were provided for review:

Design Documents Reviewed:

 August 17, 2022. Liquefaction Potential Evaluation Report: Michelucci & Associates, Inc., Geotechnical Consultants, 1801 Murchison Drive, Suite 210, Burlingame, California (10 pages)

Methods to Determine Site Ground Motion & Site Stability: USGS 2014 v4.2.1 Ground Motion Data and SP3 Software Platform for publicly available site hazard data.

PML Defined As: Structural damage expressed as a percentage of replacement cost with a single hazard level (ground motion) and degree of confidence. The design basis earthquake (DBE) or that which a ground motion with a 10% probability of exceedance in 50-years (a 475-year return period) was utilized for the hazard level and the confidence level is defined as a scenario expected loss (SEL) or the median damage level.

Analysis Methods/Procedures Used to Determine PML: ATC 13-1, Commentary On The Use Of ATC 13 Earthquake Damage Evaluation Data For Probable Maximum Loss Studies Of California Buildings, 2002.

Analysis Methods/Procedures Used to Determine Building Stability: ASCE/SEI 41-17, *Seismic Evaluation and Retrofit of Existing Buildings*, 2017; Tier 1 (No calculations).

ASTM E2026 & E2557 Levels of Review: Level 1: BS1-Building Stability Level 1, G1-Seismic Ground Motion Hazard Assessment Level 1, SS1-Site Stability Level 1 & BD1- Building Damageability Level 1.

This report does not include any exceptions to the ASTM Requirements.

ASTM Required Statement:

The YA Engineering Services team has performed a probable maximum loss (PML) evaluation for an earthquake due diligence assessment in conformance with the scope and limitations of ASTM Guide E2026 and Practice E2557 for a Level 1 Assessment of the 1828 El Camino Real Building. There are no exceptions to, or deletions from, ASTM requirements. This PML evaluation for an earthquake due diligence assessment has determined the composite PML to be **36%** where the PML is defined as the scenario expected loss (SEL). The office building **does not meet** the building stability requirements as determined by the ASCE 41-17, Tier 1 checklist while the parking structure **meets** the requirements. The site **meets** the site stability requirements.

The undersigned hereby acknowledges that the above referenced report is considered an engineering work product, and as such, confirmed that she is qualified by licensing and experience to conduct such review. Furthermore, the report was prepared by or under the direction supervision of the undersigned as specified by state laws or codes including, but not limited to, the site visit, determination of building stability, and estimate of the probable maximum loss. The information and opinions in the report are subject to the limitations and qualifications contained therein.

Name: Lynsey Willadsen

Company: YA Engineering Services, Inc.

License No: CA PE#76430

Registration Title: CA Professional (Civil) Engineer



www.YAFServices.com

Important Information About Your Seismic Risk Assessment

(Appendix X5- ASTM E2557-16a)

123 Main Street City, State, Zip (ES-20221626)

January 1, 2023

Seismic Reports are Performed for Specific Purposes, Clients, and Projects

Seismic risk assessment reports are intended to meet the specific needs of their clients. A seismic report prepared for a particular client may not fulfill the needs of a different client such as a lender, an insurance company, or the owner. Because each seismic report is unique, no one should rely on your seismic report without first conferring with the engineer who prepared it. No one, not even the intended client, should apply the report for any purpose or project except the one for which it was originally prepared.

ASTM Standards

Seismic risk assessment reports should be based on the following ASTM Standards:

- ASTM E2026-16a Standard Guide for Seismic Risk Assessments of Buildings
- ASTM E2557-16a Standard Practice for Probable Maximum Loss (PML) Evaluations for Earthquake Due-Diligence Assessments

Reference of the standards in a report does not constitute an adequate report. The report should follow the scope and requirements for qualifications of the preparer.

Basic Report Requirements

As a minimum, each report should contain the following:

- Property information and description of buildings,
- Review of seismic hazards at the site.
- A list of documents reviewed, such as design drawings,
- · Level of Review provided by the report,
- Estimation of building loss, the definition of the loss, and the analysis and methods used to determine loss,
- Determination of building stability (collapse potential) and methods used to reach opinion, and
- Qualifications of the reviewer and those conducting the site visit (if different).

Know the Level of Investigation

The ASTM Standards provide for four levels of investigation, each with decreasing uncertainty:

• Level 0 is often referred to as a screening level or desktop review and is based on general information about the building type, characteristics, and site information. It is

- considered to have a high uncertainty level. It is generally provided by in-house PCA or Environmental firms, insurance brokers, or through data entry in seismic risk programs.
- Level 1 is generally considered an engineering cursory review, including a review of construction documents and site visit by a practicing structural engineer. It is considered to have a moderate uncertainty level.
- Level 2 is considered a detailed evaluation with a moderately low uncertainty level. It is generally conducted by a practicing professional engineer with specific knowledge of the particular building systems.
- Level 3 is considered an exhaustive engineering review with minimum uncertainty. It is performed by engineering firms with demonstrated, substantial understanding and experience in the specific technical issues for the specific type of structure.

Qualifications of the Reviewer Can Vary

Each Level of ASTM review allows for different qualifications of the reviewer and those conducting site visits. Simply having professional license does not qualify an individual, as those individuals may be experienced or licensed in an unrelated field such as mechanical, electrical, or environmental engineering. For Levels 1 and higher, both the person preparing the report (Senior Assessor) AND the person performing the site visit (Field Assessor) should be a registered Professional Engineer (PE) with primary experience in the design and analysis of building structural systems, and preferably a registered Structural Engineer (SE) in a State with that designation.

Read the Entire Report

Serious problems have occurred because those relying on a seismic report did not read the entire report. Do not rely on an executive summary. Do not read selected elements only. In many cases, clients look for an acceptable "PML" value without reading the definition of the loss, or understanding that there may be building or site stability issues which may result in high risk to life-safety.

Conditions Can Change

A seismic report is based on the conditions of the property and knowledge of seismic hazards at the time the report was prepared. Do not rely on a seismic report whose adequacy may have been affected by: the passage of time wherein damage such as settlement or the deterioration of the structural systems may have occurred; natural disasters such as earthquakes, wind, or floods; or man-made changes such as the modification to the building or lateral force resisting systems. Always contact the engineer before relying on the report.

Most Findings are Professional Opinions

Professional Engineers review drawings, conduct site observations, perform analyses of buildings, then apply their professional judgement to render an opinion regarding the potential seismic loss and building stability. Hiring a qualified professional with a complete scope of services will result in seismic risk assessment reports that are comprehensive, reliable and have lower uncertainty.

APPENDIX C. RESUMES





Lynsey Willadsen LaScola PE

Senior Managing Engineer

Department Engineering

Tel: (805) 704-5387 **Email**: lynsey.lascola@yaeservices.com

Locations Los Angeles, CA

Biography

Ms. Lynsey Willadsen LaScola is a detail-oriented, team player with over fifteen (15) years of professional experience in various areas of the structural engineering and structural seismic risk fields. Ms. LaScola is well versed in the various Seismic Risk Assessment (SRA) methodologies and reporting confidence levels. She was on the team that was awarded the 2013 seismic risk update of the Fannie Mae Multifamily Guide which implemented the industry change of seismic zone qualifications to peak ground acceleration (PGA) for site risk. She was part of the 2016 update of the ASTM E2026/E2557 Practice and Guide for Seismic Risk Assessment industry group for development. She has performed hundreds of structural and seismic risk assessments (SRA) of numerous building construction and occupancy types. She has experience in deterministic loss studies and various SRA methodologies including the Applied Technology Council (ATC)-13-1, Thiel-Zsutty, SP3 Software and ST-Risk software. Ms. LaScola additionally has experience in seismic retrofit design, structural investigation of existing buildings, and various tenant improvements utilizing the International Building Code, the California Building Code and the ASCE Standard 41-17, Seismic Evaluation and Retrofit of Existing Buildings.

Education

 California Polytechnic University | San Luis Obispo, CA Bachelors of Science - Civil Engineering (Structures)

Professional Experience

- 2021 Current | Senior Managing Engineer | YA Engineering Services
- 2020 2021 | Seismic Engineering Lead | J.S. Held LLC
- 2005 2019 | Vice President & Managing Director of Real Estate Services | J.S. Dyer & Associates, Inc.

Areas of Practice

- Damage Assessment
- Earthquake Engineering
- Seismic Evaluations and Retrofit Design
- Seismic Risk Assessment
- Structural Analysis

Representative Consulting Assignments

- Seismic Risk
 - California & Hawaii | Various Resort Properties
- Seismic Retrofit
 - Brisbane, CA | Old Country Road Tuck-Under Parking Retrofit
- Seismic Retrofit
 - Orange Country, CA | Orange County Retail Complex Seismic Retrofits
- Seismic Retrofit
 - Los Angeles | Vermont Street Residential



- Seismic Risk & Seismic Retrofit
 California, Oregon, Washington | Industrial Building Portfolios
- Seismic Risk
 San Diego, CA | EOP Portfolio
- Seismic Retrofit
 Newport Beach, CA | Feasibility Study of a High-Rise Hotel for Seismic Retrofit

Licenses

- California | C76430 | Professional Engineer
- Nevada | 28862 | Civil Engineer







George McCluskey

PE. SE

Senior Project Manager

Department

Engineering

Tel: (916) 847-6179

Email: george.mccluskey@yaeservices.com

Locations

San Francisco, CA Sacramento, CA

Biography

George McCluskey is a structural engineer with 16 years of experience including building analysis, design, construction of new structures. His forensic engineering experience includes structural damage assessments of existing industrial, residential, and commercial structures from various causes including earthquake, fire, vehicle impacts, construction defect, among others. He also has experience with civic/public, educational and healthcare facilities and has performed building envelope damage assessments related to wind/hail and water intrusion damage.

Education

- University of California | Davis, CA
 Master of Science Civil Engineering (Structural)
- California Polytechnic State University | San Luis Obispo, CA
 Bachelor of Science Architectural Engineering

Professional Experience

- 2021 Current | Senior Project Manager | YA Engineering Services
- 2015 2021 | Structural Engineer | Envista Forensics
- 2006 2015 | Senior Associate | Buehler & Buehler Structural Engineers

Areas of Practice

- Building Code Upgrade Review
- Building Envelope
- Condition Assessment
- Construction Administration
- Damage Assessment
- Earthquake Engineering
- Failure Analysis
- Repair and Rehabilitation Design
- Roofing
- Structural Analysis

Representative Consulting Assignments

- College Classroom Building Building Envelope Assessment
 Oakland, CA | Evaluation of water damage to interior finishes in a newly constructed college building.
- Commercial Property Project Construction Defect Assessment
 Carmel, CA | Evaluation of damage from construction activity at a property under development.
- Concrete/Asphalt Plant Facility Structural Damage Assessment Hilo, HI | Evaluation of wind damage to three industrial structures.
- Wood-Framed Residential Building Fire Damage Assessment
 Houston, TX | Evaluation of fire damage and repair recommendations to a
 residential condominium building.



- Metal Buildings Hail Damage Assessment
 Snyder, TX | Evaluation of the metal roofs of several agricultural buildings for damage from a hailstorm.
- Manufacturing Facility Fire Damage Assessment
 Irapuato, Mexico | Evaluation of damage and repair recommendations for a steel and metal framed factory.
- Nuclear Maintenance Facility Concrete Damage Assessment
 Pearl Harbor, HI | Evaluation of damage to the concrete walls in a newly constructed concrete building.
- Multi-Family Housing Wind Damage Assessment
 Las Vegas, NV | Evaluation of wind damage to roofing and exterior finishes of multiple buildings in a residential complex.
- Residential Condominium Complex Construction Defect Assessment Kona, HI | Evaluation of damage to cladding assembly at several building in a condominium complex.
- Masonry Building Partial Building Collapse
 Ardmore, OK | Evaluation of the partial collapse of an existing unreinforced masonry building as a result of construction work in an adjacent lot.
- Masonry/Steel Warehouse Foundation Damage Assessment Honolulu, HI | Evaluation of foundation damage at two warehouse buildings.
- Residential Tower Structural Damage Assessment
 Honolulu, HI | Evaluation of damage to concrete walls in a 40-story residential building.
- Industrial Warehouse Vehicle Impact damage Assessment
 Union City, CA | Evaluation of damage from a partial collapse of the roof of a building due to a vehicle impact.
- Commercial Retail Chain Properties Vandalism/Fire Damage Assessment Santiago, Chile | Evaluation of building damage for international retail chain stores due to political violence.
- Residential Tower Construction Defect Assessment
 Honolulu, HI | Evaluation of the construction of a canopy at the ground level of a residential tower.
- Wood-Framed School Property Tornado Damage Assessment Dallas, TX | Evaluation of tornado damage to the roof of a school.
- Airport Parking Structure Structural Damage Assessment
 Kahului, HI | Evaluation of the partial collapse of concrete formwork that resulted in damage to a concrete mat slab.
- Transit Terminal Structural Damage Assessment
 San Francisco, CA | Evaluation of damage to the steel superstructure of a transportation terminal.

Licenses

- Arizona | 62315 | Structural Engineer
- California 77344 and 6223 Professional Engineer (Civil and Structural)
- Colorado | 52619 | Civil Engineer
- Hawaii | 16914 | Structural Engineer
- Nevada | 24299 | Structural Engineer
- Oklahoma | 29108 | Structural Engineer
- Oregon | 96570 | Civil Engineer
- Texas | 122869 | Civil Engineer
- Washington | 53459 | Civil Engineer





AMERICANS WITH DISABILITIES ACT COMPLIANCE REVIEW



Commercial Building

123 Main Street

City, State, Zip

Date Issued: January 1, 2023

NDDS Project No. 2311111

Prepared For:

Property Investor



January 1, 2023

Property Investor

RE: Americans with Disability Act Compliance

Review Commercial Building

123 Main Street City, State, Zip

NDDS Project No: 2311111

National Due Diligence Services (NDDS), a division of American Surveying and Mapping, Inc. (ASM) is pleased to provide the results of our Americans with Disability Act (ADA) Compliance Review of the Commercial Building property located in City, State. This serves as an Addendum to NDDS's Property Condition Assessment, NDDS Project Number 2311111, performed on January 1st as directed.

We appreciate the opportunity to provide engineering services to **Property Investor**. Please do not hesitate to contact us at 877-439-2582 if you have any questions or if we can be of further service to you.

Ronnie Long

Assessments Director

Prepared by:

James Freely Senior Assessor Reviewed by:

Ronnie Long

Assessments Director

1.0 INTRODUCTION

Title III of the Americans with Disabilities Act requires public accommodations to provide goods and services to people with disabilities on an equal basis with the rest of the general public. The goal is to afford every individual the opportunity to benefit from our country's businesses and services and to afford our businesses and services the opportunity to benefit from the patronage of all Americans.

By January 26, 1992, architectural and communication barriers were required to be removed in public areas of existing facilities when their removal was readily achievable-in other words, easily accomplished and able to be carried out without much difficulty or expense. Public accommodations that must meet the barrier removal requirement include a broad range of establishments (both for-profit and nonprofit)-such as hotels, restaurants, theaters, museums, retail stores, private schools, banks, doctors' offices, and other places that serve the public. People who own, lease, lease out, or operate places of public accommodation in existing buildings are responsible for complying with the barrier removal requirement.

The removal of barriers can often be achieved by making simple changes to the physical environment. However, the regulations do not define exactly how much effort and expense are required for a facility to meet its obligation. This judgment must be made on a case-by-case basis, taking into consideration such factors as the size, type, and overall financial resources of the facility, and the nature and cost of the access improvements needed. These factors are described in more detail in the ADA regulations issued by the Department of Justice.

The process of determining what changes are readily achievable is not a one-time effort; access should be re-evaluated annually. Barrier removal that might be difficult to carry out now may be readily achievable later. Tax incentives are available to help absorb costs over several years.

1.1 Purpose of This Checklist

The goal of the survey process is to plan how to make an existing facility more usable for people with disabilities. The Department of Justice recommends the development of an Implementation Plan, specifying what improvements you will make to remove barriers and when each solution will be carried out: "Such a could serve as evidence of a good faith effort to comply."

1.2 Technical Requirements

This checklist details some of the requirements found in the ADA Accessibility Guidelines (ADAAG). However, keep in mind that full compliance with ADAAG is required only for new construction and alterations. The requirements are presented here as a guide to help you determine what may be readily achievable barrier removal for existing facilities. Whenever possible, ADAAG should be used in making readily achievable modifications. If complying with ADAAG is not readily achievable, you may undertake a modification that does not fully comply with ADAAG, as long as it poses no health or safety risk.

1.3 What This Checklist is Not

This checklist does not cover all of ADAAG's requirements; therefore, it is not for facilities undergoing new construction or alterations. In addition, it does not attempt to illustrate all possible barriers or propose all possible barrier removal solutions. ADAAG should be consulted for guidance in situations not covered here.

The checklist does not cover Title III's requirements for nondiscriminatory policies and practices and for the provision of auxiliary communication aids and services. The communication features covered are those that are structural in nature.

1.4 Priorities

This checklist is based on the four priorities recommended by the Title III regulations for planning readily achievable barrier removal projects:

Priority 2 Access to goods and services

Priority 3 Access to restrooms

Priority 4 Any other measures necessary

2.0 QUESTIONS & SOLUTIONS

Priority 1 Accessible Approach/Entrance

People with disabilities should be able to arrive on the site, approach the building, and enter as freely as everyone else. At least one route of travel should be safe and accessible for everyone, including people with disabilities.

Route of Travel (ADAAG 4.3, 4.4, 4.5, 4.7)	Yes - Compliant	No - Not Compliant	Not Applicable
Is there a route of travel that does not require the use of stairs?	Х		
Possible Solutions:			
Not required			
Is the route of travel stable, firm and slip-resistant?	Х		
Possible Solutions:			
Not required			
Is the route at least 36 inches wide?	Х		
Possible Solutions:			
Not required			
Can all objects protruding into the circulation paths be detected by a person with a visual disability using a cane?	x		
Note: In order to be detected using a cane, an object must be within 27 inches of t must be higher than 80 inches to provide clear head room. It is not necessary to re from the wall.			
Possible Solutions:			
Not required			
Do curbs on the route have curb cuts at drives, parking, and drop-offs?	Х		
Possible Solutions:			
Not required			

Ramps (ADAAG 4.8)	Yes - Compliant	No – Not Compliant	Not Applicable
Are the slopes of ramps no greater than 1:12?	Х		
Note: Slope is given as a ratio of the height to the length. 1:12 means for every increases one inch. For a 1:12 maximum slope, at least one foot of ramp length is	•	•	amp, the height
Possible Solutions:			
Not required			
Do all ramps longer than 6 feet have railings on both sides?	Х		
Possible Solutions:			
Not required			
Are railings sturdy, and between 34 and 38 inches high?	Х		
Possible Solution			
Not required			
Is the width between railings or curbs at least 36 inches?	X		

Ramps (ADAAG 4.8)	Yes - Compliant	No – Not Compliant	Not Applicable
Possible Solutions:			
Not required			
Are ramps non-slip?	X		
Possible Solutions:			
Not required			
Is there a 5-foot-long level landing at every 30-foot horizontal length of ramp, at the top and bottom of ramps and at switchbacks?	X		
Possible Solutions:			
Not required			
Does the ramp rise no more than 30 inches between landings?	Х		
Possible Solutions:			
Not required			

Parking and	Drop-Off Are	as (ADAAG 4.6)	Yes - Compliant	No – Not Compliant	Not Applicable
		accessible parking spaces available (8 feet ss aisle for Van)?		X	
		the appropriate number to designate, the tabler lots with more than 100 spaces, refer to ADAAG		e ADAAG require	ements for new
Total spaces Acc	cessible				
1 to 25	1 space	1 Van			
26 to 50	2 spaces	1 Van			
51 to 75	3 spaces	1 Van			
76 to 100	4 spaces	1 Van			
101 to 150	5 spaces	1 Van			
151 to 200	6 spaces	1 Van			
Possible Soluti	ons:				
Not required					
Note: At least or	ne of every 6 ac	cessible spaces must be van-accessible (with a mi	nimum of one van	-accessible space	in all cases).
Possible Soluti	ons:				
2nd or 3rd floo identification	or of the under signage and p	le" spaces provided. recommends that at lead the recommend that at lead the recommend that at lead the recommends that at lead the recommend that at lead the recommends that at lead	ank, be brough	t into complian	
entrance?	о актоо ран		х		
Possible Soluti	ons:			•	•
Not required					
Are the access	ible spaces clo	sest to the accessible entrance?	Х		
Possible Soluti	ons:				
Not required					
	•	rked with the International Symbol of sreading "Van Accessible" at van spaces?		x	

Parking and Drop-Off Areas (ADAAG 4.6)	Yes - Compliant	No – Not Compliant	Not Applicable
Possible Solutions:			
There are no "Van Accessible" spaces provided. recommends that at least one of the parking spaces located on the 2nd or 3rd floor of the underbuilding parking garage, near the elevator bank, be brought into compliance with proper identification signage and pavement stripping required for a "van-accessible" ADA parking space.			
Is there an enforcement procedure to ensure that accessible parking is used only by those who need it?	x		
Possible Solutions:			
Not required			

Entrance (ADAAG 4.13, 4.14, 4.5)	Yes - Compliant	No – Not Compliant	Not Applicable
If there are stairs at the main entrance, is there also a ramp or <u>lift</u> , or is			
there an alternative accessible entrance?	X		
Note: Do not use a service entrance as the accessible entrance unless there is no c	ther option.		
Possible Solutions:			
Not required			
Do all inaccessible entrances have signs indicating the location of the nearest accessible entrance?	X		
Possible Solutions:			
Not required			
Can the alternate accessible entrance be used independently?	X		
Possible Solutions:			
Not required			
Does the entrance door have at least 32 inches clear opening (for a double door, at least one 32-inch leaf)?	x		
Possible Solutions:			
Not required			
Is there at least 18 inches of clear wall space on the pull side of the door, next to the handle?	X		
Note: A person using a wheelchair or crutches needs this space to get close enoug	h to open the doc	or.	
Possible Solutions:			
Not required			
Is the threshold edge 1/4-inch high or less, or if beveled edge, no more than ¾-inch high?	X		
Possible Solutions:			
Not required			
If provided, are carpeting or mats a maximum of 1/2-inch high?	Х		
Possible Solutions:			
Not required			
Are edges securely installed to minimize tripping hazards?	Х		

Entrance (ADAAG 4.13, 4.14, 4.5)	Yes - Compliant	No – Not Compliant	Not Applicable
Possible Solutions:			
Secure carpeting or mats at edges.			
Is the door handle no higher than 48 inches and operable with a closed fist (see next page)?	x		
Possible Solutions:			
Not required			
Can doors be opened without too much force (exterior doors reserved; maximum is 5 lbf for interior doors)?		x	
Possible Solutions:			
Most doors require force in excess of 5 lbf (measured doors ranged from work can be performed by in-house personnel.	m 7 to 19 lbf).	Re-adjust door	closures – this
If the door has a closer, does it take at least 3 seconds to close?	Х		
Possible Solutions:			
Not required			

Priority 2 Access to Goods and Services

Ideally, the layout of the building should allow people with disabilities to obtain materials or services without assistance.

Horizontal Circulation (ADAAG 4.3)	Yes - Compliant	No – Not Compliant	Not Applicable
Does the accessible entrance provide direct access to the main floor, lobby, or elevator?	X		
Possible Solutions:			
Not required			
Are all public spaces on an accessible route of travel?	X		
Possible Solutions:			
Not required			
Is the accessible route to all public spaces at least 36 inches wide?	X		
Possible Solutions:			
Not required			
Is there a 5-foot circle or a T-shaped space for a person using a wheelchair to reverse direction?	X		
Possible Solutions:			
Not required			

Doors (ADAAG 4.13)	Yes -	No – Not	Not
	Compliant	Compliant	Applicable
Do doors into public spaces have at least a 32-inch clear opening?	х		

Doors (ADAAG 4.13)	Yes - Compliant	No – Not Compliant	Not Applicable
Possible Solutions:			
Not required			
On the pull side of doors, next to the handle, is there at least 18 inches of clear wall space so that a person using a wheelchair or crutches can get near to open the door?	x		
Possible Solutions:			
Not required			
Can doors be opened without too much force (5 lbf maximum for interior doors)?		x	
Possible Solutions:			
Most doors require force in excess of 5 lbf (measured doors ranged from work can be performed by in-house personnel.	m 7 to 19 lbf).	Re-adjust door	closures – this
Are door handles 48 inches high or less and operable with a closed fist?	Х		
Possible Solutions:			
Not required			
Is the threshold edge 1/4-inch high or less, or if beveled edge, no more than ¾-inch high?	Х		
Possible Solutions:			
Not required			

Emergency Egress (ADAAG 4.28)	Yes - Compliant	No – Not Compliant	Not Applicable
If emergency systems are provided, do they have both flashing lights and audible signals?	x		
Possible Solutions: Not required			

Rooms and Spaces (ADAAG 4.2, 4.4, 4.5)	Yes - Compliant	No – Not Compliant	Not Applicable
Are all aisles and pathways to materials and services at least 36 inches wide?	x		
Possible Solutions: Not required			
Is there a 5-foot circle or T-shaped space for turning a wheelchair completely?	X		
Possible Solutions: Not required			
Is carpeting low-pile, tightly woven, and securely attached along edges?	Х		
Possible Solutions: Not required			
In circulation paths through public areas, are all obstacles canedetectable (located within 27 inches of the floor or higher than 80 inches, or protruding less than 4 inches from the wall)?	x		

Rooms and Spaces (ADAAG 4.2, 4.4, 4.5)	Yes -	No – Not	Not
	Compliant	Compliant	Applicable
Possible Solutions: Not required			

Signage for Goods and Services (ADAAG 4.30)	Yes -	No – Not	Not
	Compliant	Compliant	Applicable
Different requirements apply to different types of signs.			x

If provided, do signs designating permanent rooms and spaces where goods and services are provided comply with the appropriate requirements for such signage? (See specifications below.)

- $\cdot \textit{Signs mounted with centerline 60 inches from floor.}$
- $\cdot \ \textit{Mounted on wall adjacent to latch side of door, or as close as possible.}$
- \cdot Raised characters, sized between 5/8 and 2 inches high, with high contrast.
- \cdot Braille text of the same information.
- \cdot If pictogram is used, it must be accompanied by raised characters and Braille

Possible Solutions:

Not required

Directional and Informational Signage	Yes - Compliant	No – Not Compliant	Not Applicable
The following questions apply to directional and informational signs that			
fall under Priority 2.	X		
If mounted about 80 inches, do they have letters at least 3 inches high, with high o	contrast, and non	-glare finish?	
Possible Solutions:			
Not required			
Do directional and informational signs comply with legibility			
requirements?	X		
(Building directories or temporary signs need not comply.)			
Possible Solutions:			
Not required			

Controls (ADAAG 4.27)	Yes - Compliant	No – Not Compliant	Not Applicable
Are all controls that are available for use by the public (including electrical, mechanical, cabinet, game, and self-service controls) located at an accessible height?	x		
Note: Reach ranges: The maximum height for a side reach is 54 inches; for a forwa is 15 inches for a front approach and 9 inches for a side approach.	rd reach, 48 inche	es. The minimum i	eachable height
Possible Solutions: Not required			
Are they operable with a closed fist?	Х		
Possible Solutions: Not required			

Seats, Tables, and Counters (ADAAG 4.2, 4.32, 7.2)	Yes - Compliant	No – Not Compliant	Not Applicable
Are the aisles between fixed seating (other than assembly area seating) at least 36 inches wide?			x
Possible Solutions: Not applicable.			
Are the spaces for wheelchair seating distributed throughout?			Х
Possible Solutions: Not applicable.			
Are the tops of tables or counters between 28 and 34 inches high?			X
Possible Solutions: Not applicable.			
Are knee spaces at accessible tables at least 27 inches high, 30 inches wide, and 19 inches deep?			x
Possible Solutions: Not applicable.			
At each type of cashier counter, is there a portion of the main counter that is no more than 36 inches high?			х
Possible Solutions:			
Not applicable.			
Is there a portion of food-ordering counters that is no more than 36 inches high, or is there space at the side for passing items to customers who have difficulty reaching over a high counter?			х
Possible Solutions: Not applicable.			

Vertical Circulation (ADAAG 4.1.3(5), 4.3)	Yes - Compliant	No – Not Compliant	Not Applicable
Are there ramps, lifts, or elevators to all levels?	X		
Possible Solutions:			
Not required			
On each level, if there are stairs between the entrance and/or elevator and essential public areas, is there an accessible alternate route?	X		
Possible Solutions:			
Not required			

Stairs (ADAAG 4.9)	Yes - Compliant	No – Not Compliant	Not Applicable
The following questions apply to stairs connecting levels not serviced by an elevat	or, ramp, or lift.		
Do treads have a non-slip surface?	X		
Possible Solutions:			
Not required			
Do stairs have continuous rails on both sides, with extensions beyond the top and bottom stairs?	x		

Stairs (ADAAG 4.9)	Yes - Compliant	No – Not Compliant	Not Applicable
Possible Solutions:			
Not required			

Elevators (ADAAG 4.10)	Yes - Compliant	No – Not Compliant	Not Applicable
Are there both visible and verbal or audible door opening/closing and floor indicators (one tone = up, two tones = down)?	X		
Possible Solutions:			
Not required			
Are the call buttons in the hallway no higher than 42 inches?	Х		
Possible Solutions:			
Not required			
Do the controls inside the cab have raised and Braille lettering?		X	
Possible Solutions:			
Install White on Black Car Operating Panel Braille			
Is there a sign on both door jambs at each floor identifying the floor in raised and Braille letters?		x	
Possible Solutions:			
Not Install White on Black Car Operating Entrance Braille			
If an emergency intercom is provided, is it usable without voice communication?	X		
Possible Solutions:			
Not required			
Is the emergency intercom identified by Braille and raised letters?	Х		
Possible Solutions:			
Not required			

Lifts (ADAAG 4.2, 4.11)	Yes - Compliant	No – Not Compliant	Not Applicable
Can the lift be used without assistance? If not, is a call button provided?	X		
Possible Solutions:			
Not required – However, the lift is currently inoperable.			
Is there at least 30 by 48 inches of clear space for a person in a wheelchair to approach to reach the controls and use the lift?	X		
Possible Solutions:			
Not required			
Are controls between 15 and 48 inches high (up to 54 inches if a side approach is possible)?	X		
Possible Solutions:			
Not required			

Priority 3 Usability of Restrooms

When restrooms are open to the public, they should be accessible to people with disabilities.

Getting to the Restrooms (ADAAG 4.1)	Yes - Compliant	No – Not Compliant	Not Applicable
If restrooms are available to the public, is at least one restroom (either one for each sex, or unisex) fully accessible?	X		
Possible Solutions:			
Not required			
Are there signs at inaccessible restrooms that give directions to accessible ones?			×
Possible Solutions:			
Not required – All restrooms are accessible.			

Doorways and Passages (ADAAG 4.2, 4.13, 4.30)	Yes - Compliant	No – Not Compliant	Not Applicable
Is there tactile signage identifying restrooms?	X		
Note: Mount signs on the wall, on the latch side of the door, complying with requi	rements for perm	nanent signage.	
Possible Solutions:			
Not required.			
Are pictograms or symbols used to identify restrooms, and, if used, are raised characters and Braille included below?	x		
Possible Solutions:			
Not required.			
Is the doorway at least 32 inches clear?	Х		
Possible Solutions:			
Not required.			
Are doors equipped with accessible handles (operable with a closed fist), 48 inches high or less?	x		
Possible Solutions:			
Not required.			
Can doors be opened easily (5 lbf maximum force)?		X	
Possible Solutions:			
Most doors require force in excess of 5 lbf (measured doors ranged from work can be performed by in-house personnel.	m 7 to 19 lbf).	Re-adjust door	closures – this
Does the entry configuration provide adequate maneuvering space for a person using a wheelchair?	x		
Note: A person using wheelchair needs 36 inches of clear width for forward most shaped space to make turns. A minimum distance of 48 inches clear of the door statibule.		•	•
Possible Solutions:			
Not required.			
Is there a 36-inch-wide path to all fixtures?	X		

Doorways and Passages (ADAAG 4.2, 4.13, 4.30)	Yes - Compliant	No – Not Compliant	Not Applicable
Possible Solutions:			
Not required.			

Stalls (ADAAG 4.17)	Yes - Compliant	No – Not Compliant	Not Applicable
Is the stall door operable with a closed fist, inside and out?			Х
Possible Solutions: Not required. Note: Each public "All-Gender" restroom is an individual r	oom. No stall d	oors are requir	ed.
Is there a wheelchair-accessible stall that has an area of at least 5 feet by 5 feet, clear of the door swing, OR is there a stall that is less accessible but that provides greater access than a typical stall (either 36 by 69 inches or 48 by 69 inches)?	x		
Possible Solutions: Not required.			
In the accessible stall, are there grab bars behind and on the side wall nearest to the toilet?	х		
Possible Solutions: Not required.			
Is the toilet seat 17 to 19 inches high?	Х		
Possible Solutions: Not required.			

Lavatories (ADAAG 4.19, 4.24)	Yes - Compliant	No – Not Compliant	Not Applicable
Does one lavatory have a 30-inch-wide by 48-inch-deep clear space in	•		
front?	X		
Note: A maximum of 19 inches of the required depth may be under the la	vatory.		
Possible Solutions:			
Not required.			
Is the lavatory rim no higher than 34 inches?	Х		
Possible Solutions:			
Not required.			
Is there at least 29 inches from the floor to the bottom of the lavatory apron (excluding pipes)?	х		
Possible Solutions:		l	l
Not required.			
Can the faucet be operated with one closed fist?	Х		
Possible Solutions:		•	•
Not required.			
Are soap and other dispensers and hand dryers within reach ranges (see page 7) and usable with one closed fist?	x		
Possible Solutions:			
Not required.			

Lavatories (ADAAG 4.19, 4.24)	Yes - Compliant	No – Not Compliant	Not Applicable
Is the mirror mounted with the bottom edge of the reflecting surface 40 inches high or lower?	x		
Possible Solutions: Not required.			

Priority 4) Additional Access

Note that this priority is for items not required for basic access in the first three priorities. When amenities such as drinking fountains and public telephones are provided, they should also be accessible to people with disabilities.

Drinking Fountains (ADAAG 4.15)	Yes - Compliant	No – Not Compliant	Not Applicable
Is there at least one fountain with clear floor space of at least 30 by 48 inches in front?	x		
Possible Solutions: Not required.			
Is there one fountain with its spout no higher than 36 inches from the ground, and another with a standard height spout (or a single "hi-lo" fountain)?		x	
Possible Solutions: Height of spout is approximately 40" where observed. Provide accessib	le water cooler	s at all multi-te	nant floors.
Are controls mounted on the front or on the side near the front edge, and operable with one closed fist?		x	
Possible Solutions: Not applicable.			
Is each water fountain cane-detectable (located within 27 inches off the floor or protruding less than 4 inches from the wall, into the circulation path?		x	
Possible Solutions: Not applicable.			

Telephones (ADAAG 4.31)	Yes - Compliant	No – Not Compliant	Not Applicable
If pay or public use phones are provided, is there clear floor space of at least 30 by 48 inches in front of at least one?			x
Possible Solutions: Not required. Note: No public phones were provided.			
Is the highest operable part of the phone no higher than 48 inches (up to 54 inches if a side approach is possible)?			x
Possible Solutions: Not required.			
Does the phone protrude no more than 4 inches into the circulation space?			x
Possible Solutions: Not required.			

Telephones (ADAAG 4.31)	Yes - Compliant	No – Not Compliant	Not Applicable
Does the phone have push-button controls?			х
Possible Solutions:			
Not required.		_	
Is the phone hearing-aid compatible?			х
Possible Solutions:			
Not required.			
Is the phone adapted with volume control?			х
Possible Solutions:		•	
Not required.			
Is the phone with volume control identified with appropriate signage?			х
Possible Solutions:			
Not required.			
If there are four or more public phones in the building, is one of the phones equipped with a text telephone (TT or TDD)?			x
Possible Solutions:			
Not required.			
Is the location of the text telephone identified by accessible signage bearing the International TDD Symbol?			x
Possible Solutions:			
Not applicable.			

3.0 ESTIMATED COMPLIANCE COSTS

Item Description and Recommendation	Estimated Cost
No van-accessible parking is provided. Reconfigure/stripe one space in the 2 nd or 3 rd level parking garage closest to the elevator.	\$200
Most doors require force in excess of 5 lbf (measured doors ranged from 7 to 19 lbf). Re-adjust door closures – this work can be performed by in-house personnel (no cost).	\$0
Install 1 ½" Diameter Handrail at 32" AAF	\$7,000
Install White on Black Car Operating Panel Braille	\$4,000
Install White on Black Car Operating Entrance Braille	\$5,000
The current drinking fountains in the common corridors are not ADA-accessible. Provide accessible water coolers at all multi-tenant floors (5 sets at \$1,500 each).	\$7,500
Total	\$23,700

4.0 CERTIFICATION

National Due Diligence Services (NDDS), a division of American Surveying and Mapping, Inc. (ASM) has completed an Americans With Disability (ADA) Compliance Review of the Subject Property, Peninsula Life Center, located at 123 Main Street City, State, Zip.

The opinions NDDS expresses in this report were formed utilizing the degree of skill and care ordinarily exercised by any prudent architect or engineer in the same community under similar circumstances. NDDS assumes no responsibility or liability for the accuracy of information contained within this report that has been obtained from the Client or the Client's representatives, from other interested parties, or from the public domain. The conclusions presented represent NDDS's professional judgment based on information obtained during the course of this assignment. NDDS's evaluations, analyses, and opinions are not representations regarding the design integrity, structural soundness, or actual value of the property. Factual information regarding operations, conditions, and test data provided by the Client or the Client's representative has been assumed to be correct and complete. The conclusions presented within this report are based on the data provided, observations made, and conditions that existed specifically on the date of the assessment.

National Due Diligence Services (NDDS), a division of American Surveying and Mapping, Inc. (ASM) that NDDS has no undisclosed interest in the subject property, that NDDS's relationship with the Client is at arms-length, and that NDDS's employment and compensation are not contingent upon the findings or estimated costs to remedy any noted deficiencies due to deferred maintenance and/or any noted component or system replacements.

RELIANCE

All reports, both verbal and written, are for the benefit of **Property Investor** its successors and assigns. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of NDDS/ASM.

Property Investor may distribute the report to other parties without limitation; however it is acknowledged that the report provided to third parties is for informational purposes only. NDDS/ASM will issue a reliance letter if requested.