

Citywide
Facility Condition Assessment

Report of
Facility Condition Assessment

For
City of Manhattan Beach
Manhattan Heights Park
1600 Manhattan Beach Boulevard, Manhattan Beach, CA



*September 4, 2013
(Rev A)*

Provided By:

Faithful+Gould, Inc.

Provided For:



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SECTION 1 - EXECUTIVE SUMMARY

INTRODUCTION

In accordance with the agreement held between City of Manhattan Beach, dated May 9, 2013 and Faithful+Gould Inc, this completed report provides a comprehensive Facility Condition Assessment of the Manhattan Heights Park located at 1600 Manhattan Beach Boulevard, Manhattan Beach, CA (The Facility). The facility consisted of the following buildings:

-  Community Center
-  Building 6 and Restrooms
-  Building 7

This report provides a summary of the facility information known to us at the time of the study, the scope of work performed, an equipment inventory, evaluation of the visually apparent condition of the Property and an expenditure forecast of expenditures anticipated over the next 10 years. The expenditure forecast does not account for typical planned maintenance items such as changing filters to fan coil units and only considers deficiencies above a \$500 aggregated value.

Our cost rates to produce life cycle and replacement cost estimates are based on our knowledge of the local regional market rates. Our line item costs assume that the work will be undertaken by either in-house or by direct sub-contract labor. Identified recommended works that are required during the ten-year study period have been included with an allowance of 25% for professional fees and general contractor overhead/profit and management costs (where applicable).

Charts EX-1 through to EX-5 provides a summary of the anticipated primary expenditures over the 10 year study period. Further details of these expenditures are included within each respective report section and within the 10 year expenditure forecast, in Appendix A.

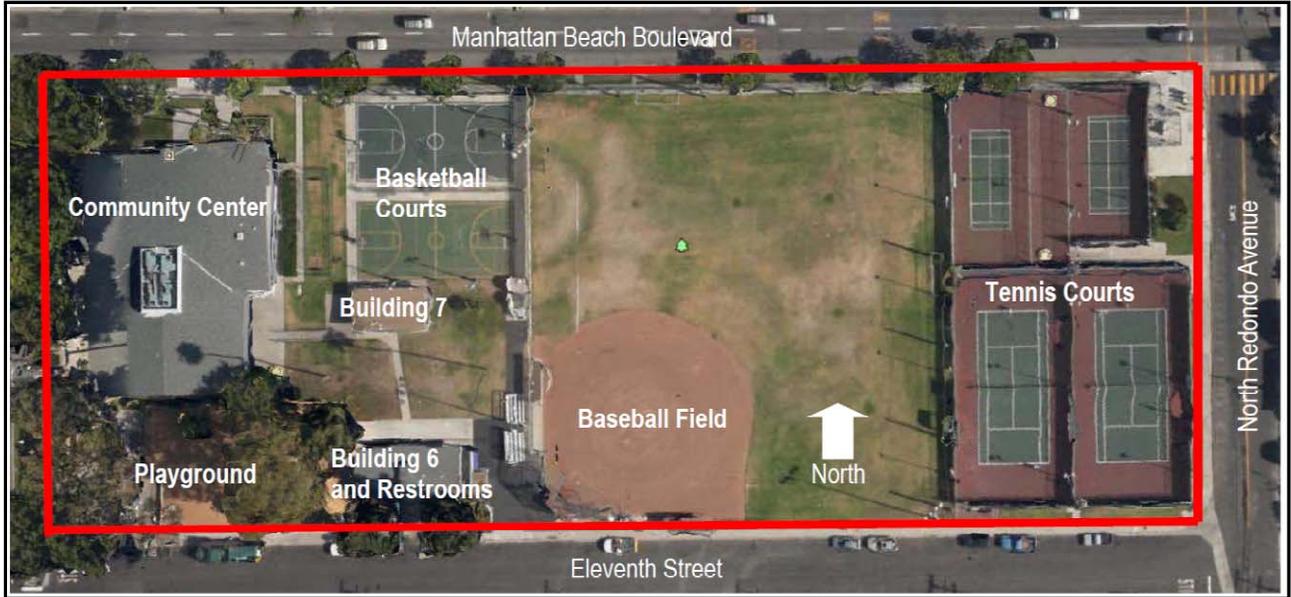
The report also calculates the Facility Condition Index (FCI) of each building based upon the calculated FCI. Further discussion of the Facility Condition Index is detailed in the sections below. The FCI does not include the general site systems, however we have still included repair and replacement costs so that they can be represented in the study.

This report was completed in general accordance with the ASTM E2018-08 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process.

PROJECT DETAILS

On May 17, 2013, Mr. Richard Needler of Faithful+Gould visited the facility to observe and document the condition of each building and the site components. During our site visit, Faithful+Gould was assisted by Mr. Doug Foster, Senior Facilities Maintenance Technician for the City of Manhattan Beach.

Overview of the Buildings at the Facility



— Assumed site boundary

BUILDING SUMMARY

Table EX-1 Facility Details

BUILDING NAME:	Community Center	LAT/LONG:	33° 53' 13" N / 118° 23' 05" W
ADDRESS:	1600 Manhattan Beach Boulevard, Manhattan Beach, CA 90278	OCCUPANCY STATUS:	
HISTORIC DISTRICT:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	OCCUPIED <input checked="" type="checkbox"/> VACANT <input type="checkbox"/> PARTIALLY <input type="checkbox"/>	
HISTORIC BUILDING:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	GROSS SQUARE FOOTAGE OF LAND: 133,152 (estimated) Whole Facility	
GROSS SQUARE FOOTAGE OF BUILDING:	7,391	YEAR OF CONSTRUCTION: 1970, Renovated 2012	
CURRENT REPLACEMENT VALUE:	\$2,025,800	BUILDING EUL: 100+ Years	
		BUILDING RUL: 57+ Years	
		NUMBER OF STORIES: 1	
BUILDING USE:	Recreation		

BUILDING DESCRIPTION

The Community Center is part of the Manhattan Heights Park facility and is located along the west side of the park. The site as a whole was developed in 1948, with the Community Center being constructed in 1970.

The building has a laminated wood-beam framed roof supported on steel and wood columns, with lightweight wood-framed walls, enclosed with painted stucco and wood siding, and brick veneer. The sloped roof has asphalt shingle roofing, draining over the roof's edge. The floors are concrete slabs-on-grade, with reinforced concrete spread footing foundations. Windows are wood framed with fixed single pane glazing and doors are automatic sliding, glazed storefront types, single-leaf flush metal and wood personnel doors. The interior finishes of the building include flooring of vinyl and quarry tile and carpet, painted plaster, gypsum board and concrete masonry walls and ceilings of acoustical tile and painted gypsum board.

The heating and cooling for the building is provided by three rooftop gas-fired package HVAC units. Hot domestic water is provided by one 48 gallon gas-fired water heater. The electrical system is supplied underground to a 120/240-volt, 400-amp electrical main distribution panel with meter located in a closet at the west side of the building. The building's interior sub-panels supply the power needs within the building. The lighting typically consisted of surface mounted fluorescent lamped fixtures. The building is not provided with an electronic security system, but does have a wet-pipe fire sprinkler system and a fire alarm system.



Table EX-2 Facility Details

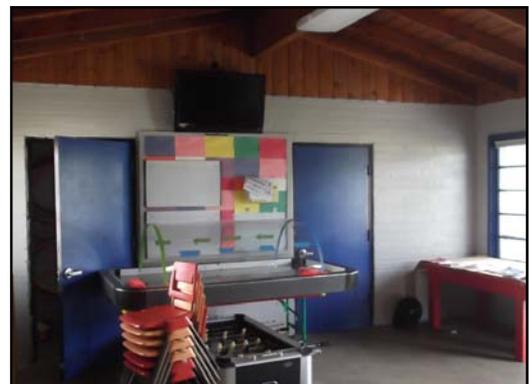
BUILDING NAME:	Building 6 and Restrooms	LAT/LONG:	33° 53' 12" N / 118° 23' 04" W
ADDRESS:	1600 Manhattan Beach Boulevard, Manhattan Beach, CA 90278	OCCUPANCY STATUS:	
HISTORIC DISTRICT:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	OCCUPIED <input checked="" type="checkbox"/> VACANT <input type="checkbox"/> PARTIALLY <input type="checkbox"/>	
GROSS SQUARE FOOTAGE OF BUILDING:	1,040	HISTORIC BUILDING:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
GROSS SQUARE FOOTAGE OF LAND:		YEAR OF CONSTRUCTION:	1970
CURRENT REPLACEMENT VALUE:	\$202,641	BUILDING EUL:	100+ Years
BUILDING USE:	Recreation	BUILDING RUL:	57+ Years
		NUMBER OF STORIES:	1

BUILDING DESCRIPTION

The Building 6 and Restrooms building forms a part of the Manhattan Heights Park facility and is located along Eleventh Street at the south side of the park. We understand that the site as a whole was developed in 1948, with the Building 6 and Restrooms structure being constructed in 1970.



The building has wood rafter roof construction supported on the painted concrete masonry exterior walls. The roof steep-sloped, with asphalt shingle roofing. The floor is a cast-in-place reinforced concrete slab-on-grade with the perimeter walls supported on concrete spread footings. Windows are wood-framed, single-pane casement, single-hung and hopper type units and doors are single-leaf flush metal doors. The interior finishes of the building include sealed concrete and ceramic tiled floors and painted concrete masonry walls; the exposed wood roof framing is the ceiling.



Heating is provided by a Utility gas-fired unit heater suspended from the roof framing; cooling is not provided. Domestic hot water is not provided in the building. Restrooms provided with stainless steel and vitreous china fixtures are located at each end of the building.

The electrical system is supplied overhead to an exterior main distribution panel with meter on the rear (south) wall of the building. The service is reported to be 120/240-volts, 200-amps, supplying the power needs within the building. The lighting is typically surface mounted fluorescent lamped fixtures. The building is not provided with an electronic security system, fire sprinkler system or an emergency generator.

Table EX-3 Facility Details

BUILDING NAME:	Building 7	LAT/LONG:	33° 53' 13" N / 118° 23' 04" W
ADDRESS:	1600 Manhattan Beach Boulevard, Manhattan Beach, CA 90278	OCCUPANCY STATUS:	
HISTORIC DISTRICT:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	OCCUPIED <input type="checkbox"/> VACANT <input checked="" type="checkbox"/> PARTIALLY <input type="checkbox"/>	
HISTORIC BUILDING:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
GROSS SQUARE FOOTAGE OF BUILDING:	560	GROSS SQUARE FOOTAGE OF LAND:	133,152 (estimated) Whole Facility
CURRENT REPLACEMENT VALUE:	\$36,141	YEAR OF CONSTRUCTION:	1970
		BUILDING EUL:	100+ Years
		BUILDING RUL:	57+ Years
BUILDING USE:	Recreation	NUMBER OF STORIES:	1

BUILDING DESCRIPTION

The Building 7 structure is a part of the Manhattan Heights Park facility and is located in the center of the park, adjacent to the Community Center and basketball courts. We understand that the site as a whole was developed in 1948, with the Building 7 being constructed in 1970.

The building has concrete masonry load-bearing walls supporting a wood-framed roof, with steel-reinforced concrete footings and slab-on-grade floor. The roof covering is asphaltic fiberglass shingles over wood plank roof decking. The exterior walls are painted, with two painted flush steel doors in steel frames. The windows are wood framed and single paned, covered with metal grilles.



The interior of the facility has painted concrete masonry walls, carpet flooring and exposed wood roof framing ceiling. Heating is provided by one wall-mounted gas-fired unit heater; cooling is not provided in the building. The plumbing system is limited to a janitor's sink; domestic hot water is not provided. The electrical service is supplied underground to a main distribution panel located on the side of the building; service is reported to be 120/240-volts, 200-amps. The lighting consisted of suspended fluorescent fixtures. The building does not contain fire sprinkler, fire alarm, or security systems.



SEISMIC STRUCTURAL ASSESSMENT

During the assessment period a seismic/structural condition assessment of the building was also conducted. The assessment was undertaken by Atkins and their full report can be reviewed Appendix E. Overall no major distress or damages to the structure and non-structural components of the building require immediate repair or mitigation. The only concern relates to the possible water damage. Minor cracking in the slabs on grade noted in the present structural inventory poses no immediate concerns about the buildings structural performance or safety, and can be repaired with patching with cement based mortar or epoxy materials.

Compared with buildings of similar vintage and type of construction, the overall condition of the buildings appears to be in very good condition and well maintained. There is no obvious outstanding structural issue that requires immediate mitigation except for those mentioned here and in the complete report.

Expenditure relating to the structural issues mentioned above has been included within this report.

BUILDING EXPENDITURE SUMMARY

The building expenditure summary section provides an executive overview of the findings from the assessments. Charts EX-1 through to EX-3 provides a summary of anticipated expenditures over the study period. In addition, we have scheduled key findings highlighting key items of significance and their anticipated failure year. Chart EX-4 provides a cursory review and assessment of the major site assets to further assist the City in understanding the condition of the park over all. We have scheduled key findings highlighting key items of significance and their anticipated failure year. Further details of these expenditures and others are included within each respective report section and within the expenditure forecast, in Appendix A of this report.

Community Center

The results illustrate a total anticipated expenditure over the study period of circa \$261,846

Chart EX-1 Building Expenditure Summary ^{1 & 2}



KEY FINDINGS

-  B Shell: Repaint exterior wall surfaces at an estimated cost of \$28,210 in years 2015 and 2019
-  C Interiors: Repaint interior walls and ceilings at an estimated cost of \$89,700 in years 2015 and 2019
-  C Interiors: Replace carpeting at an estimated cost of \$8,505 in year 2018

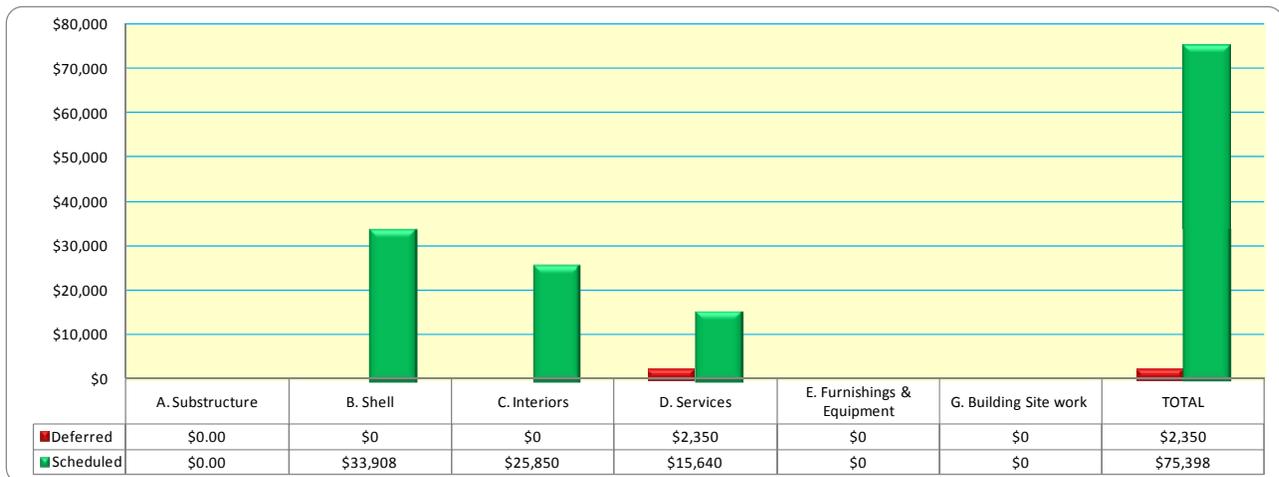
¹ All costs presented in present day values

² Costs represent total anticipated values over the 10 year study period

Building 6 and Restrooms

The results illustrate a total anticipated expenditure over the study period of circa \$77,748.

Chart EX-2 Building Expenditure Summary ^{1 & 2}



KEY FINDINGS

-  B Shell: Conduct exterior repairs at an estimated cost of \$7,800 in year 2014
-  B Shell: Replace wood-framed windows at an estimated cost of \$6,640 in year 2014
-  B Shell: Replace asphalt roofing shingles at an estimated cost of \$4,498 in year 2015
-  C Interiors: Repaint interior wall surfaces at an estimated cost of \$12,025 in years 2015 and 2019
-  D Services: Reconfigure restrooms for disabled access at an estimated cost of \$10,000 in year 2014

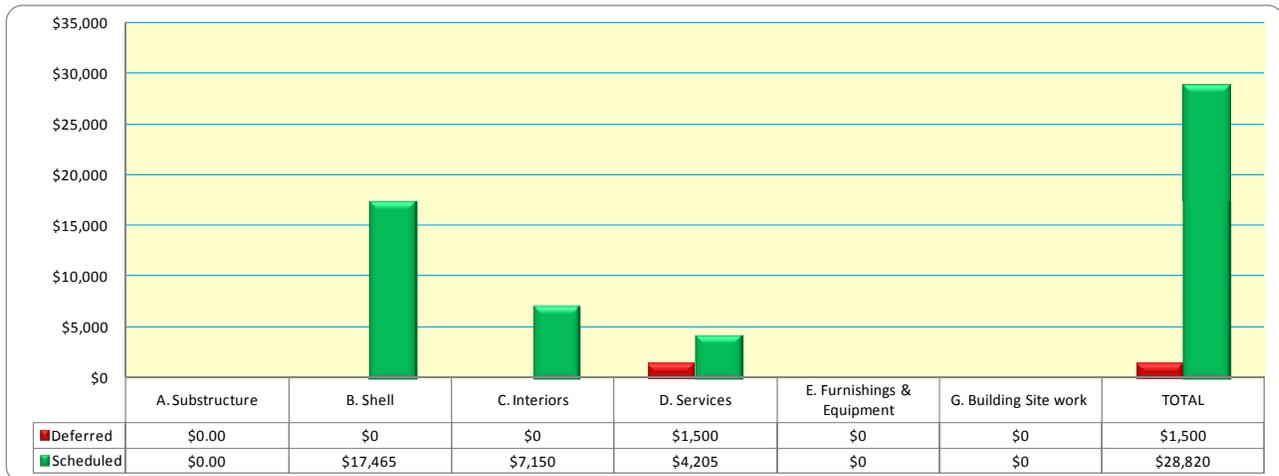
¹ All costs presented in present day values

² Costs represent total anticipated values over the 10 year study period

Building 7

The results illustrate a total anticipated expenditure over the study period of circa \$30,320.

Chart EX-3 Building Expenditure Summary ^{1 & 2}



KEY FINDINGS

- ✦ B Shell: Conduct exterior repairs at an estimated cost of \$5,175 in years 2014
- ✦ B Shell: Repaint exterior wall surfaces at an estimated cost of \$4,485 in years 2015 and 2019
- ✦ B Shell: Replace wood-framed windows at an estimated cost of \$3,320 in year 2014
- ✦ C Interiors: Repaint interior wall surfaces at an estimated cost of \$3,025 in years 2015 and 2019
- ✦ D Services: Replace electrical panel at an estimated cost of \$2,500 in year 2014

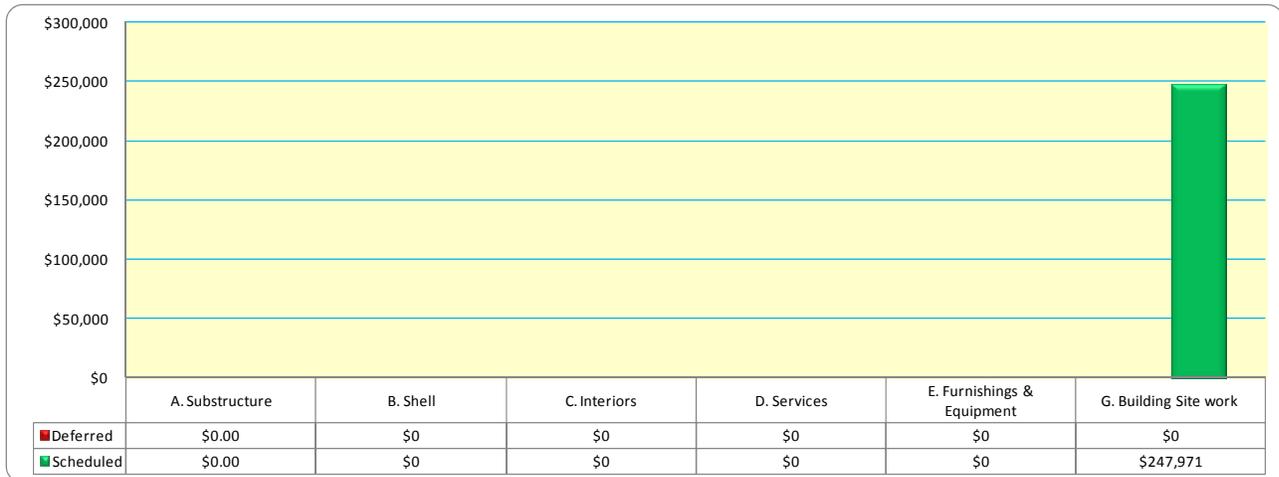
¹ All costs presented in present day values

² Costs represent total anticipated values over the 10 year study period

Site Systems

The results illustrate a total anticipated expenditure over the study period of circa \$247,971.

Chart EX-4 Building Expenditure Summary ^{1 & 2}



KEY FINDINGS

- ✚ G Building Sitework: Mill and resurface the asphalt pavement at an estimated cost of \$3,000 in year 2015
- ✚ G Building Sitework: Replace sections of chain link fencing at an estimated cost of \$3,434 in year 2018
- ✚ G Building Sitework: Replace the dumpster enclosure at an estimated cost of \$2,500 in year 2017
- ✚ G Building Sitework: Recoat and restripe the athletic courts at an estimated cost of \$37,137 in year 2022
- ✚ G Building Sitework: Replace light fixtures at an estimated cost of \$200,000 in year 2014

¹ All costs presented in present day values

² Costs represent total anticipated values over the 10 year study period

Chart EX-5 illustrates a summary of yearly anticipated expenditures over the cost study period for each of the Manhattan Heights Park buildings and site systems. A detailed breakdown of anticipated expenditures is contained within Appendix A of this report.

Chart EX-5 Expenditure Forecast ^{1 & 2}



¹ All costs presented in present day values

² Costs represent total anticipated values over the 10 year study period

This chart highlights significant expenditure for the Manhattan Heights Park buildings and site systems within years 2018, 2020 and 2022 primarily due to the following systems which are expected to reach their Estimated Useful Life (EUL) and therefore due for replacement. The lines represent the total expenditure for each year, and are a useful tool to indicate the magnitude of the impending issues the buildings will face.

Community Center

Year 2015

-  Repaint exterior surfaces
-  Repaint interior surfaces

Year 2019

-  Repaint exterior surfaces
-  Repaint interior surfaces

Site Systems

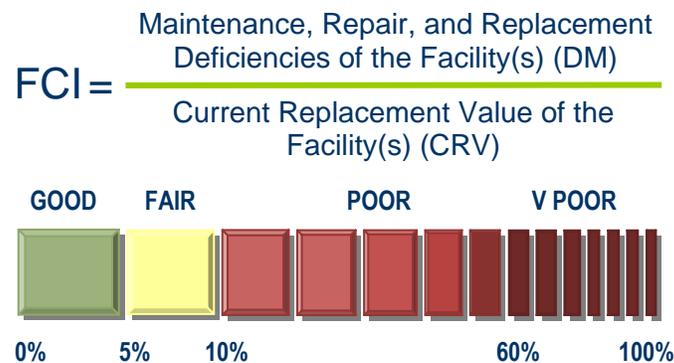
Year 2014

-  Replace light fixtures

INTERPRETING RESULTS

In this report we have calculated the **Facility Condition Index (FCI)** for the facility; illustrating the likely condition of the systems and equipment should the required funding not be expended over the cost study period. The FCI is used in Facilities Management to provide a benchmark to compare the relative condition of a group of facilities. The FCI is primarily used to support asset management initiatives of federal, state, and local government facilities organizations.

The FCI is the ratio of accumulated Deferred Maintenance (DM) (total sum of required and recommended works) to the Current Replacement Value (CRV) for a constructed asset calculated by dividing DM by CRV. The range is from zero for a newly constructed asset, to one for a constructed asset with a DM value equal to its CRV. Acceptable ranges vary by "Asset Type", but as a general guideline the FCI scoring system is as follows:



The FCI is a relative indicator of condition, and should be tracked over time to maximize its benefit. It is advantageous to define condition ratings based on ranges of the FCI. There are a set of ratings: GOOD (under 0.05 (under 5%)), FAIR (0.05 to 0.10 (5% to 10%)), POOR (over 0.10 (over 10%)) and V-POOR (over 0.60 (over 60%)) based on evaluating data from various clients at the time of the publication. Table EX-4 will help interpret the results:

Table EX-4 FCI Scoring System

Condition	Definition	Score	Percentage Value
GOOD	In a new or well maintained condition, with no visual evidence of wear, soiling or other deficiencies	0.00 to 0.05	0% to 5%
FAIR	Subject to wear, and soiling but is still in a serviceable and functioning condition	0.05 to 0.10	5% to 10%
POOR	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 0.10	Greater than 10%
V-POOR	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal now necessary	Greater than 0.60	Greater than 60%

If the FCI rating is 60% or greater then replacement of the asset/building should be considered instead of renewal.

Table EX-5 provides calculations of the FCI for each of the Manhattan Heights Park buildings (excluding the site system expenditure costs); illustrating both the current condition of the buildings and the likely condition of the buildings should the required funding not be expended over the study period. The results of the study indicate that currently the buildings are similar in their condition, with all starting in the GOOD condition rating, and each finishing in the POOR and V.POOR condition rating.

Table EX-5 Facility Condition Index

Building Name	FCI	Gross Square Foot (GSF)	CRV per GSF	Current Replacement Value (CRV)	Deferred Maintenance Value (DM)	FCI Ratio	Property Condition
Community Center	Current FCI Ratio	7,391	\$274	\$2,025,800	\$12,873	0.6%	GOOD
Community Center	Year 10 FCI Ratio	7,391	\$274	\$2,025,800	\$261,846	12.9%	POOR
Building 6 and Restrooms	Current FCI Ratio	1,040	\$195	\$202,641	\$2,350	1.2%	GOOD
Building 6 and Restrooms	Year 10 FCI Ratio	1,040	\$195	\$202,641	\$77,748	38.4%	POOR
Building 7	Current FCI Ratio	560	\$65	\$36,141	\$1,500	4.2%	GOOD
Building 7	Year 10 FCI Ratio	560	\$65	\$36,141	\$30,320	83.9%	V.POOR

Chart EX-6 indicates the affects of the FCI ratio per year, assuming the required funds and expenditures **ARE** made to address the identified works and deferred maintenance each year. As explained the buildings are in a similar condition at this current time, starting in the GOOD condition rating. Two of them will fall into the POOR condition rating and one into the FAIR condition rating during the study period.

Chart EX-6 Year by Year Effects of FCI over the Study Period

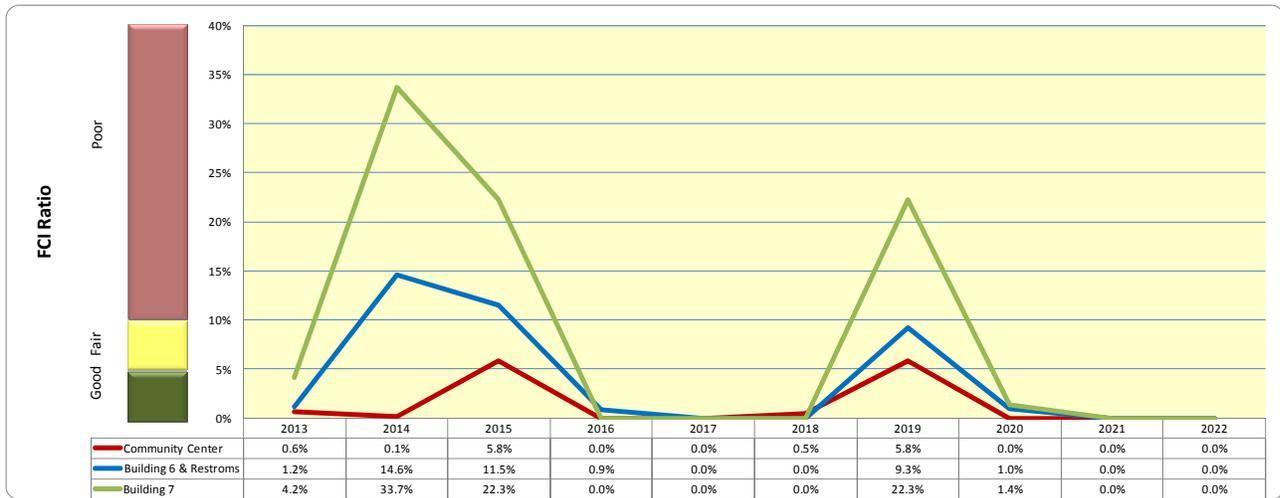
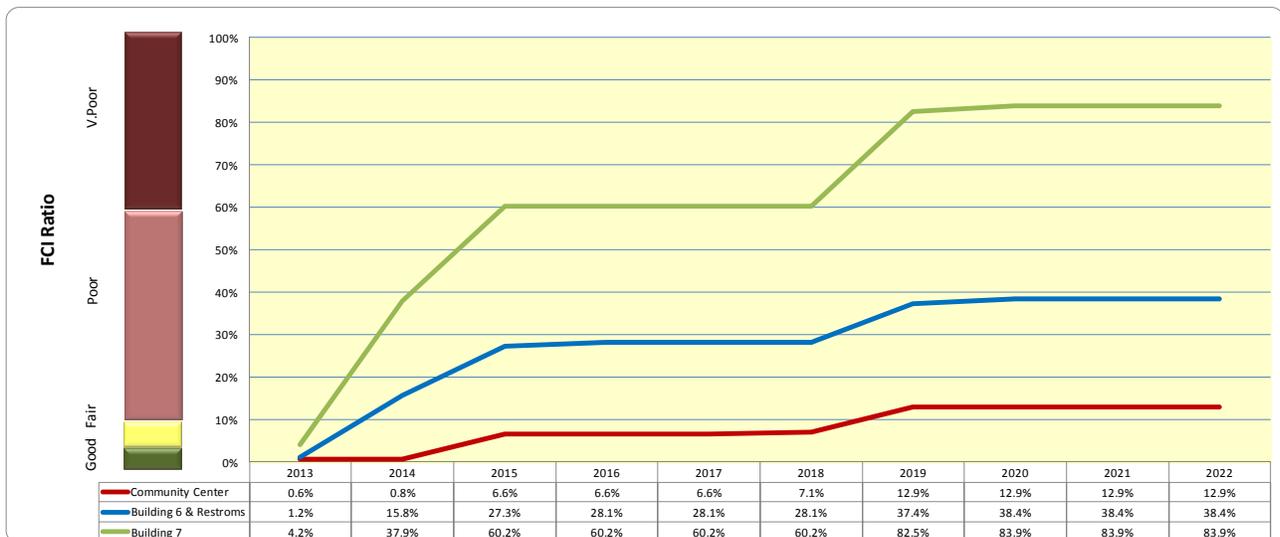


Chart EX-7 indicates the cumulative effects of the FCI ratio over the study period assuming the required funds and expenditures are **NOT** provided to address the identified actions and deferred maintenance each year. The building each start in the GOOD condition rating however over time will all fall into the POOR condition rating.

Chart EX-7 Cumulative Effects of FCI over the Study Period



PRIORITIZATION OF WORK

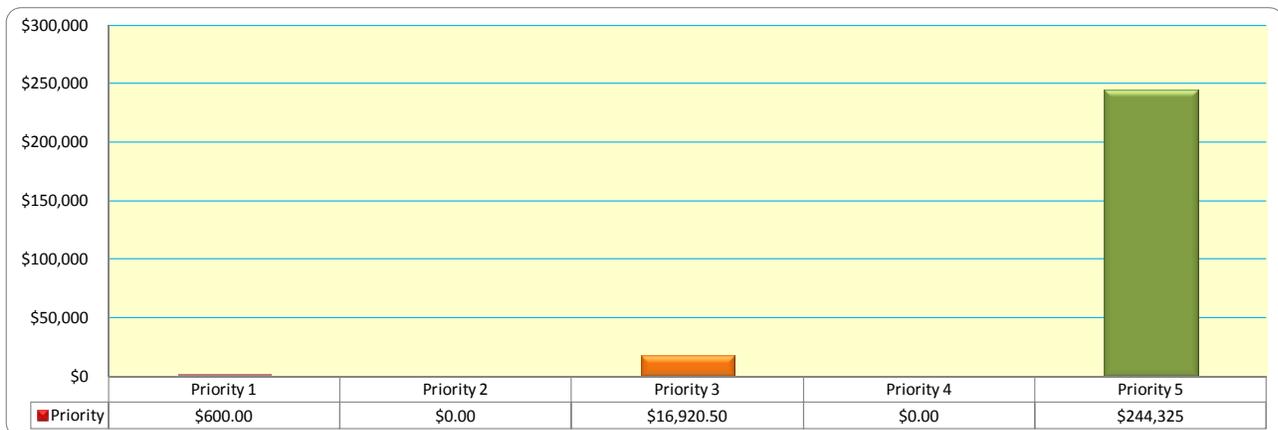
Faithful+Gould has prioritized the identified work in order to assist with analyzing the deficiencies found during the assessments. The following Priorities are shown below:



Chart EX-8 through to EX-11 illustrates the breakdown of expenditure according the priority coding providing an opportunity to strategically plan and effectively direct funding to the highest priority for each building and the site systems.

Community Center

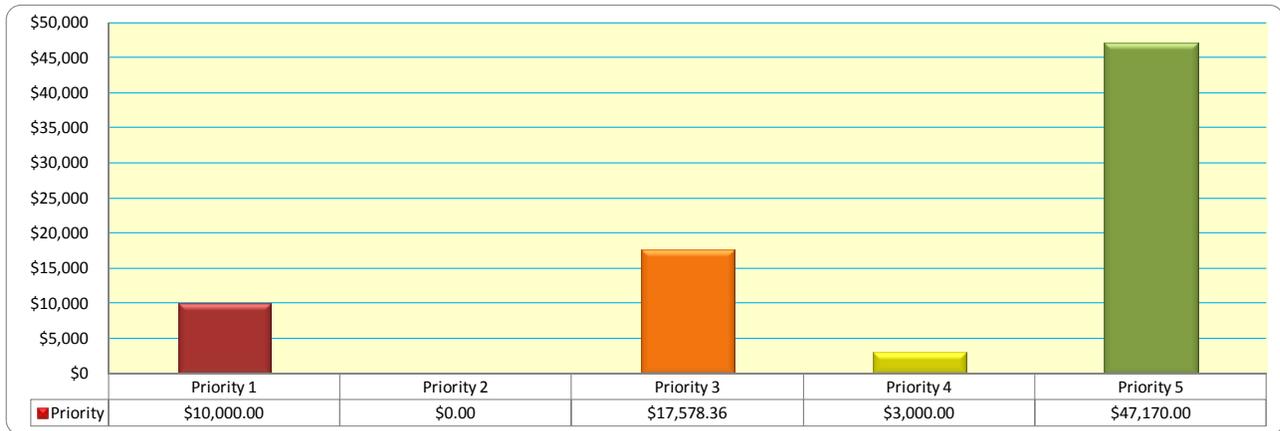
Chart EX-8 Cumulative Prioritization of Work



Priority 5 requires the most amount of expenditure in this study. This category illustrates that the majority of the work which needs to be undertaken is associated with the appearance of the building.

Building 6 and Restrooms

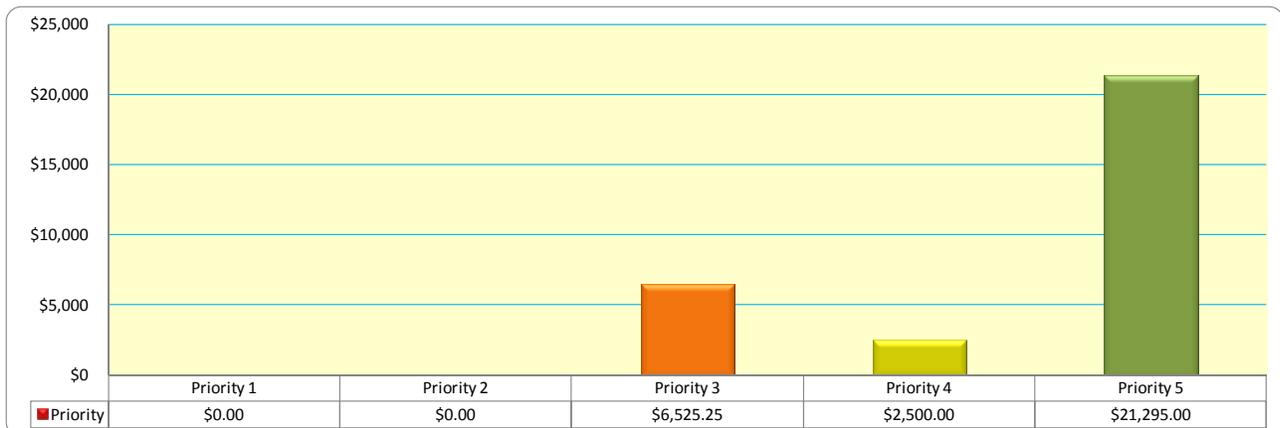
Chart EX-9 Cumulative Prioritization of Work



Priority 5 appears to require the most amount of expenditure in this study. These categories illustrate that the majority of the work which needs to be undertaken is associated with maintaining the appearance of the building.

Building 7

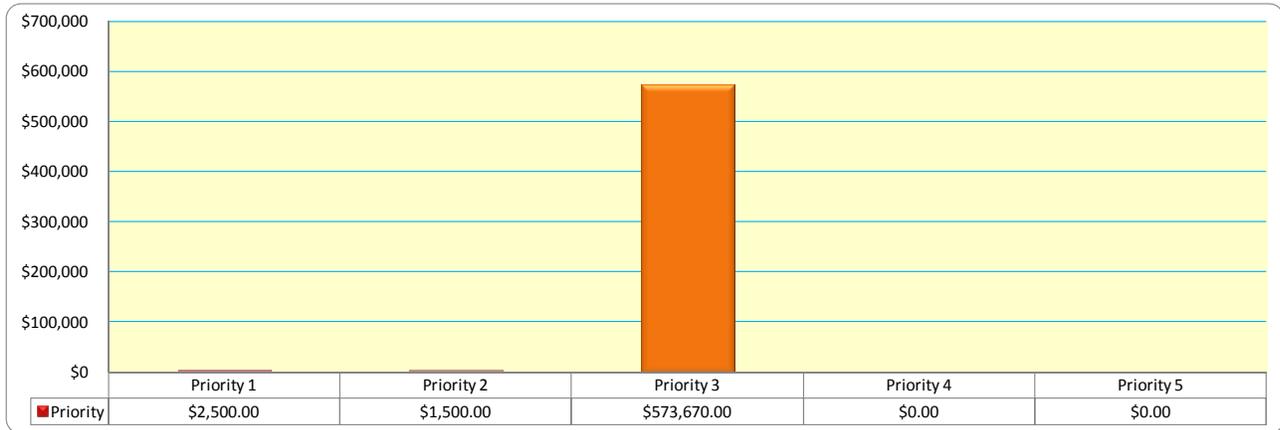
Chart EX-10 Cumulative Prioritization of Work



Priority 5 appears to require the most amount of expenditure in this study. These categories illustrate that the majority of the work which needs to be undertaken is associated with maintaining the appearance of the building.

Site Systems

Chart EX-11 Cumulative Prioritization of Work



Priority 3 requires the most amount of expenditure in this study. The expenditures relate to maintaining the site, replacing components at the end of useful life.

Charts EX-12 through to EX-15 illustrate the buildings' expenditure per priority code, per each year within the 10 year study period.

Community Center

Chart EX-12 Year by Year Cumulative Prioritization of Work



Chart EX-12 illustrates that there are two key years for Priority 5 coding, at the mid-term in the study period.

Building 6 and Restrooms

Chart EX-13 Year by Year Cumulative Prioritization of Work

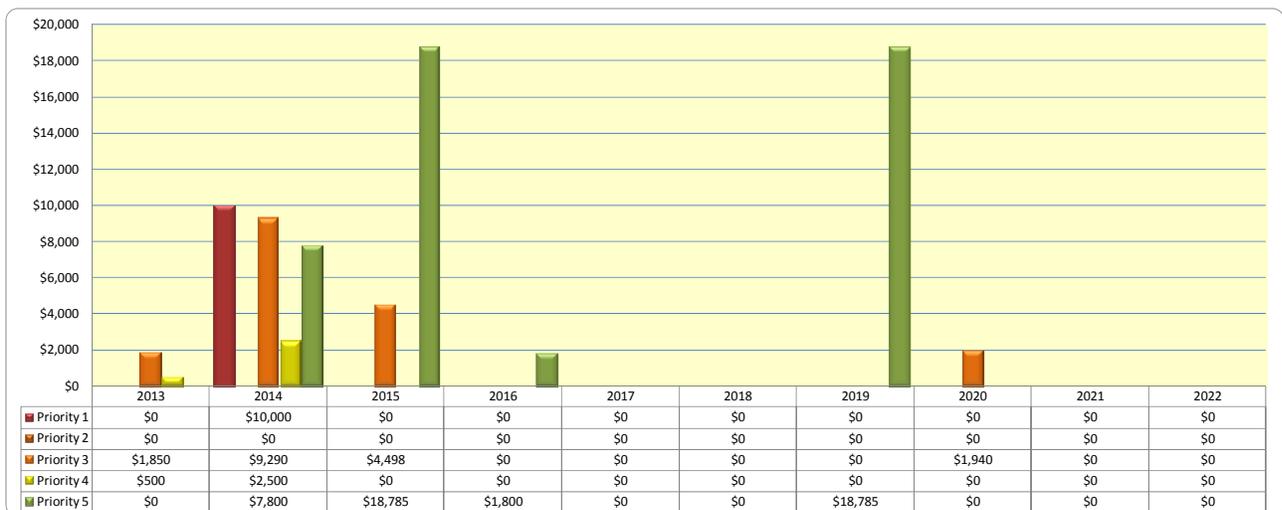


Chart EX-13 illustrates that there are a number of key years for Priority 5 coding throughout the study period.

Building 7

Chart EX-14 Year by Year Cumulative Prioritization of Work

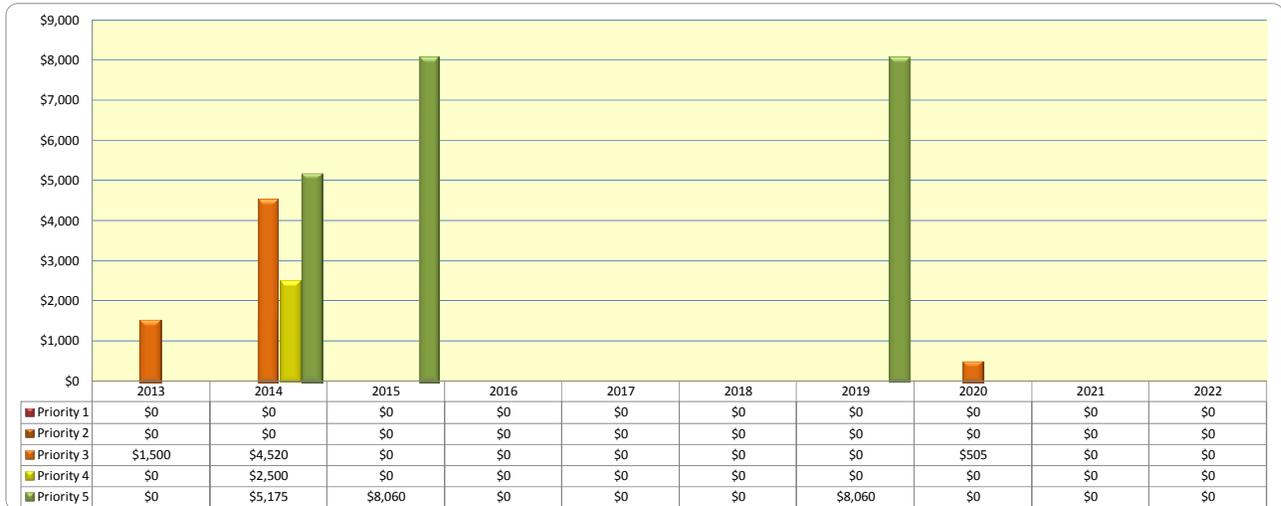


Chart EX-14 illustrates that there are several key years for Priority 5 coding throughout the study period.

Site Systems

Chart EX-15 Year by Year Cumulative Prioritization of Work

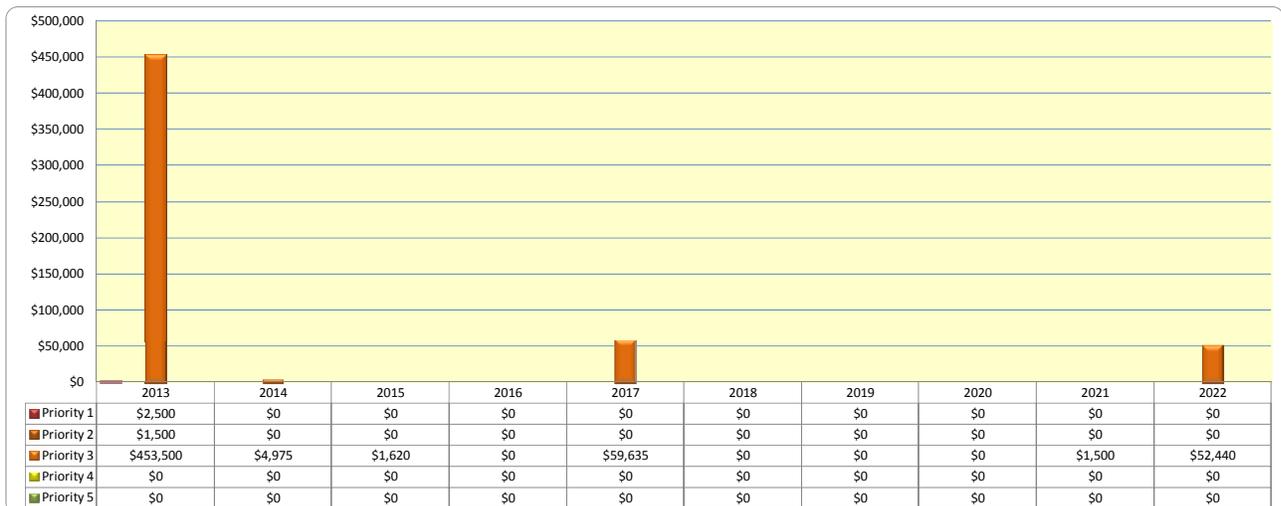


Chart EX-15 illustrates that there is one main expenditure year for Priority 3 coding at the start of the study period.

PLAN TYPES

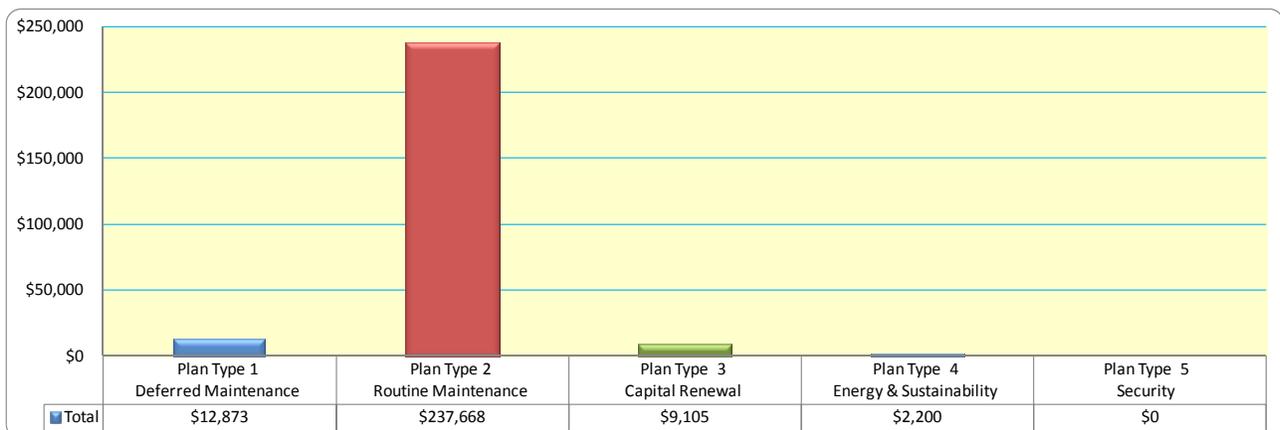
Faithful+Gould has prioritized the identified work according to the Plan Type or deficiency categories in order to assist with analyzing the deficiencies found during the assessments. The following Plan Types are shown below:

Plan Type 1 Deferred Maintenance	<ul style="list-style-type: none"> •Maintenance that was not performed when it was scheduled or past its useful life resulting in immediate repair or replacement
Plan Type 2 Routine Maintenance	<ul style="list-style-type: none"> •Maintenance that is planned and performed on a routine basis to maintain and preserve the condition
Plan Type 3 Capital Renewal	<ul style="list-style-type: none"> •Planned replacement of building systems that have reached the end of their useful life
Plan Type 4 Energy & Sustainability	<ul style="list-style-type: none"> •When the repair or replace of equipment or systems are recommended to improve energy and sustainability performance.
Plan Type 5 Security	<ul style="list-style-type: none"> •When a system requires replacement due to a security risk or requirement

Chart EX-16 through to EX-19 illustrates the amount of expenditure, per category within the 10 year study period. These figures include each of the buildings and the site systems.

Community Center

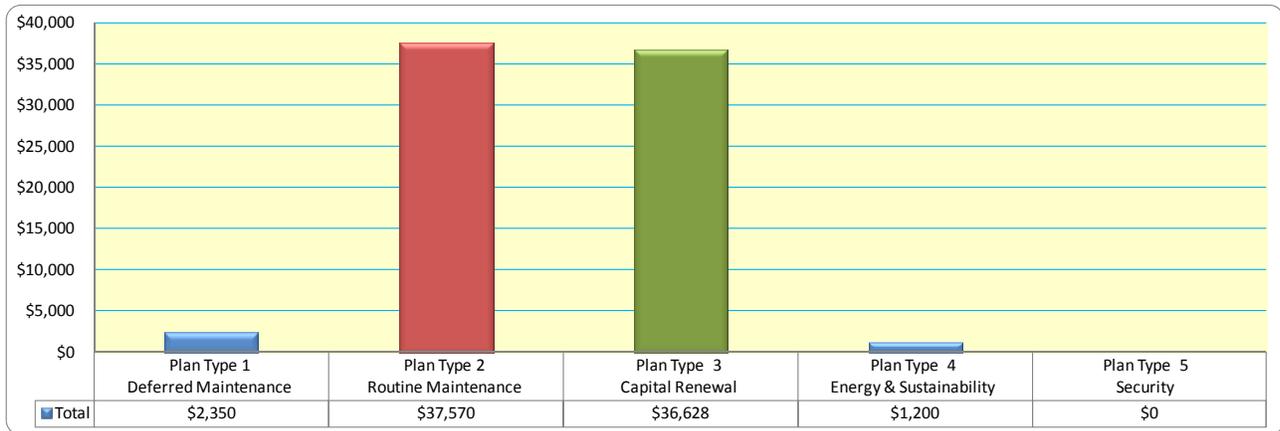
Chart EX-16 Cumulative Expenditure per Category of Works



Plan Type 2 – Routine Maintenance appears to require the most amount of expenditure in this study.

Building 6 and Restrooms

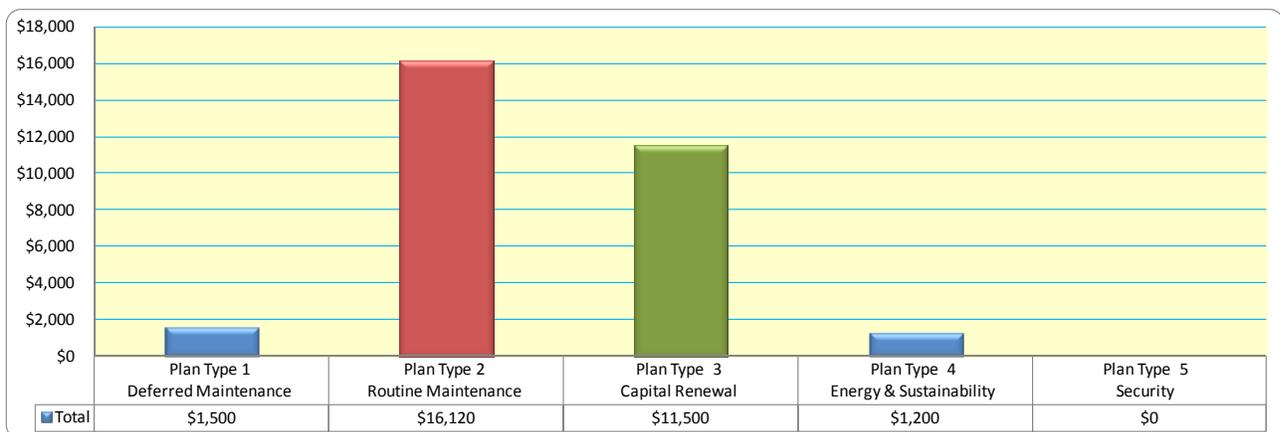
Chart EX-17 Cumulative Expenditure per Category of Works



Plan Type 2 – Routine Maintenance appears to require the most amount of expenditure in this study.

Building 7

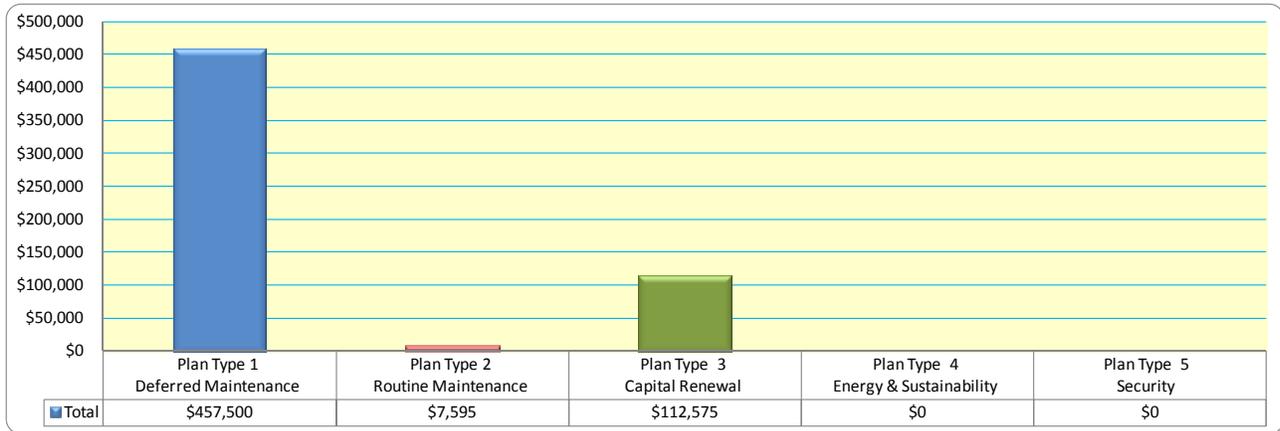
Chart EX-18 Cumulative Expenditure per Category of Works



Plan Type 2 – Routine Maintenance appears to require the most amount of expenditure in this study.

Site Systems

Chart EX-19 Cumulative Expenditure per Category of Works



Plan Type 1 – Deferred Maintenance appears to require the most expenditure in this study.

Chart EX-20 through to EX-23 illustrates the amount of expenditure, per category, per each year within the 10 year study period.

Community Center

Chart EX-20 Year by Year Cumulative Expenditure per Category of Works



Chart EX-20 illustrates that there are two key years for Plan Type 2 – Routine Maintenance.

Building 6 and Restrooms

Chart EX-21 Year by Year Cumulative Expenditure per Category of Works



Chart EX-21 illustrates that there are two key years for Plan Type 2 – Routine Maintenance.

Building 7

Chart EX-22 Year by Year Cumulative Expenditure per Category of Works



Chart EX-22 illustrates that there are two key years for Plan Type 2 – Routine Maintenance.

Site Systems

Chart EX-23 Year by Year Cumulative Expenditure per Category of Works



Chart EX-23 illustrates that there is one key year for Plan Type 1 – Deferred Maintenance.

SECTION 2 - A SUBSTRUCTURE

A10 FOUNDATIONS

DESCRIPTION

The description of the respective structural systems for each building is based upon our observation of exposed portions of the building structure. There were limited original construction drawings available for review.

A1010 STANDARD FOUNDATIONS

Community Center, Building 6 and Restrooms & Building 7

A1011 Wall Foundations

The buildings are most likely placed on steel-reinforced concrete footings, either separate spread footings or footings that were constructed as part of the concrete slabs-grade, and at interior masonry walls, by thickened sections of the floor slabs.

A1030 SLABS-ON-GRADE

Community Center, Building 6 and Restrooms & Building 7

A1031 Standard Slab on Grade

The floors of each building consist of cast-in-place concrete slabs-on-grade, typically 4" thick and reinforced with welded wire fabric. The slabs may have been thickened at the perimeter walls as part of the exterior wall foundations. Information was unavailable regarding the designed compressive strength of the concrete.

CONDITION

A1010 STANDARD FOUNDATIONS

Community Center, Building 6 and Restrooms & Building 7

A1011 Wall Foundations

The load-bearing wall structures and floors appeared to be in good condition. Therefore, we assume that the concrete supports are also in good condition. We do not anticipate that any actions will be necessary during the study period.



A1030 SLABS-ON-GRADE

Community Center, Building 6 and Restrooms & Building 7

A1031 Standard Slab on Grade

The cast-in-place concrete slabs at each of the buildings appeared to be generally in good condition. We do not anticipate any expenditure during the cost study period, which relates to their replacement. However the Community Center was observed to have minor cracking present in various locations. This has been detailed in the structural report in Appendix E. The necessary repair expenditure has been included in the study period.

PROJECTED EXPENDITURES

Identified recommended works that are required during the 10 year study period are scheduled below. We recommend budgeting for additional project costs of between 25%-30% to allow for professional fees and general contractor overhead/profit and management costs.

Community Center

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
A1031	Standard Slab on Grade	Undertake crack repairs within slab	30	LF	\$20.00	\$600	2014	3
Total Anticipated Expenditure for A Substructure						\$600		

SECTION 3 - B SHELL

B10 SUPERSTRUCTURE

DESCRIPTION

The description of the respective structural systems for each building is based upon our observation of exposed portions of the building structures. There were limited construction drawings available to review.

B1020 ROOF CONSTRUCTION

B1022 Pitched Roof Construction

Community Center

This building has a sloped roof constructed with laminated and arched wood beams, approximately 8" wide and of varying depth, with solid wood purlins and supported by perimeter steel and wood columns (reference Photograph 4 in Appendix B). The arched wood beams are spaced at 12' on center and support approximately 1"-thick solid wood sheathing.

Building 6 and Restrooms & Building 7

These buildings have sloped roofs framed with 2" x 6" or 2" x 8" solid wood rafters, supported on perimeter concrete masonry load-bearing walls and, at Building 6 and Restrooms, a central 4" x 10" ridge beam (reference Photographs 13 and 19 in Appendix B). The wood rafters are typically spaced at 24" on center and support 1" thick solid wood sheathing.

B1030 STRUCTURAL FRAME

Community Center, Building 6 and Restrooms & Building 7

B1031 Wood Frame Structure

The buildings have wood-framed roof construction consisting of arched laminated wood beams or sloped solid wood joists, with solid wood sheathing and supported on wood and steel columns or concrete masonry walls.

CONDITION

B1020 ROOF CONSTRUCTION

B1022 Pitched Roof Construction

Community Center

The pitched roof structural construction appeared to be in good condition. There were no visible signs of distress or instability noted. We do not anticipate any expenditure during the cost study period which relates to replacement of the structure.

Building 6 and Restrooms & Building 7

The pitched roof structural construction appeared to be in good condition. There were no visible signs of distress or instability noted. We do not anticipate any expenditure during the cost study period which relates to replacement of the structure.

B1030 STRUCTURAL FRAME

Community Center, Building 6 and Restrooms & Building 7

B1031 Wood Frame Structure

The buildings' light wood framed roof construction appeared to be in fair to good condition. We do not anticipate any expenditure during the study period which relates to replacement of the structural.

B20 EXTERIOR ENCLOSURES

DESCRIPTION

B2010 EXTERIOR WALLS

B2011 Exterior Wall Construction

Community Center

The building has exterior walls of painted cementitious stucco with metal lath, T1-11 plywood siding and brick veneer, which are typically placed over plywood or solid wood sheathing and building paper, with painted wood trim (reference Photographs 1 through 3 in Appendix B). The drawings available for reference do not indicate insulation within the exterior walls.

Building 6 and Restrooms & Building 7

The buildings have exterior walls of painted concrete masonry supporting the roof's structural framing (reference Photographs 7 to 12 and 15 through 17 in Appendix B). The walls are uninsulated.

B2020 EXTERIOR WINDOWS

B2021 Windows

Community Center

The windows at the building consist of wood-framed and aluminum-framed windows with fixed single glazing (reference Photographs 2 and 3 in Appendix B).

Building 6 and Restrooms & Building 7

The windows at the buildings consist of fixed, single-hung and hopper-type, wood-framed windows with single pane glazing (reference Photographs 7, 8 and 15 in Appendix B). Most of the windows are covered with metal security grilles attached to the frames.



B2030 EXTERIOR DOORS

B2031 Glazed Doors & Entrances

Community Center

The building's main entrance is an aluminum-framed storefront-type system with a pair of 2'-6" x 7' automatic sliding doors with fixed sidelights (reference Photograph 20 in Appendix B).

B2032 Solid Exterior Doors

Community Center

The building contains eleven swinging single-leaf flush metal doors in steel frames; some with louvers and with painted finishes, at exits from the auditorium, activity rooms, office, kitchen and utility rooms (reference Photograph 2 and 3 in Appendix B). Door hardware consisted of lever handles and closers.

Building 6 and Restrooms & Building 7

The buildings have swinging flush metal doors in steel frames, painted finishes (reference Photographs 7, 8, 14 and 15 in Appendix B). Door hardware consisted of level handles.

CONDITION

B2010 EXTERIOR WALLS

B2011 Exterior Wall Construction

Community Center

The building's exterior walls are in good condition, as the building was renovated in 2013. The painted surfaces appeared to be in good condition. However, based on the EUL of 4 years for exterior painting at this building, we recommend budgeting for re-painting and replacement of sealants in the early in the study period, to maintain appearance and protect the wood trim.

Building 6 and Restrooms & Building 7

The buildings' painted concrete masonry walls are in fair condition, with locations of cracking, chipped and spalled masonry and faded painted surfaces. The wood fascia and soffits of both buildings, the siding at the gable ends and on the cupola of Building 6 and Restrooms are deteriorated, with water damage and missing sections. Screening walls at each end of Building 6 and Restrooms, at the restroom entrances, have deteriorated plywood siding with faded paint. We recommend completion of fascia, soffit, siding and screening wall repairs to address the locations of deterioration, as well as repainting of the facades in the near term. Based on an EUL of 4 years, we recommend repainting of the early in the study period.



B2020 EXTERIOR WINDOWS

B2021 Windows

Community Center

The windows are in good condition, with no indication of deterioration or deficiency noted. Based on an EUL of 4 years for painted surfaces, we recommend repainting of the window frames at the time of façade repainting. The caulking at the perimeter of the window units was generally in good condition but with an estimated useful life of 10- to 15-years, replacement of the sealants is recommended at the time of repainting, late in the period of study.

Building 6 and Restrooms & Building 7

The windows are in poor to fair condition, with locations of deteriorated wood framing and trim noted, as well as window panes with cracking. Based on an EUL of 30 years for wood windows and the observed condition of the windows, we recommend replacement of the windows in both buildings with similar wood-framed window units by the mid-term of the study period.

The caulking at the perimeter of the window units was generally in fair condition, with an estimated useful life of 10- to 15-years, we recommend replacement of the sealants at the time of exterior repainting.

B2030 EXTERIOR DOORS

B2031 Glazed Doors & Entrances

Community Center

The automatic entrance doors appeared to be in good condition, operating properly. With an EUL of 15 years for the operational mechanism of automatic doors, we do not anticipate any expenditure during the study period.

B2032 Solid Exterior Doors

Community Center

In general, the operation of the doors was satisfactory, operating without any difficulty. Re-painting, at the time of other exterior re-painting, will be necessary to maintain appearance and to protect the metal surfaces.

Building 6 and Restrooms & Building 7

In general, the doors are in poor to fair condition, with some operating with difficulty. Severe corrosion was observed on the base of the doors and frames at the restroom entrances of the Building 6 and Restrooms structure. We recommend replacement of the doors and frames at these locations. Re-painting, at the time of other exterior re-painting, will be necessary to maintain appearance and to protect the metal surfaces.

B30 ROOFING

DESCRIPTION

B3010 ROOF COVERINGS

B3011 Roof Finishes

The facility contains three separate buildings, each with sloped roofs, as shown on the following aerial plan:

Overview of Roof Locations & Configurations



Note: Aerial plan taken from before the 2012 remodel.

Community Center

The sloped, gabled roof of the building contains multi-tab asphaltic fiberglass shingle roofing (reference Photographs 5 and 6 in Appendix B). We understand that the roofing was installed in 2012, possibly over older roofing. Storm water drainage is directly over the roof edge, except at a portion of the east side of the building. A mechanical equipment enclosure is located in the center of the building and is fabricated of painted T1-11 plywood siding on wood framing. The roof area within the enclosure is a modified bitumen cap sheet, which is also used as base flashing at curbs and framing penetrations.

Building 6 and Restrooms

The building has a sloped, gabled roof containing multi-tab asphaltic fiberglass shingle roofing (reference Photograph 12 in Appendix B), installed in circa 1984. The center of the roof contains a cupola with painted T1-11 plywood siding, wood trim and asphaltic fiberglass shingle roofing. Storm water drainage is to gutters and downspouts.

Building 7

The sloped shed-type roof of the building contains modified bitumen cap sheet roofing with a mineral granules surface (reference Photographs 15 and 18 in Appendix B). The roofing was installed in circa 2012. Storm water drainage is directly over the roof's edge.

B3016 Gutters & Downspouts

Community Center

Storm water drainage from a portion of the roof at the building's east side contains an aluminum gutter and downspout, draining to grade.

Building 6 and Restrooms

Storm water drainage from the roof is to aluminum gutters and downspout on the north and south, draining to grade.

Table B30-1 provides a summary of the roof coverings:

Table B30-1 Summary of Roof Coverings

Roof Component	Community Center	Building 6 & Restrooms	Building 7
Age *	1 Year (2013)	29 Years * (1984)	1 Year (2012)
Roof Area (total / approx. square footage)	11,188	1,428	798
Application / Membrane	Asphaltic Fiberglass Shingles	Asphaltic Fiberglass Shingles	Modified Bitumen Cap sheet
Manufacturer / Model	Unknown	Unknown	Unknown
Surface	Granular Surfaced	Granular Surfaced	Granular Surfaced
Deck Type	Wood Plank	Wood Plank	Wood Plank
Insulation	Foil-Faced Batts (R-19)	None	None
Cover Board	None	None	None
Drainage	Over Roof Edge / Aluminum Gutters & Downspouts	Over Roof Edge / Aluminum Gutters & Downspouts	Over Roof Edge
Overflow Scuppers	None	None	None
Base Flashings	Upturned Membrane	None	None
Cap Flashings	None	None	None
Perimeter Enclosure	None	None	None
Warranty (Manufacturer)	Unknown	Unknown	Unknown
Warranty (Contractor)	Unknown	Unknown	Unknown

*Actual install date unknown.

CONDITION

B3010 ROOF COVERINGS

B3011 Roof Finishes

Community Center

The roofing of the building is in good condition, with no deficiencies noted. Based on an EUL of 20-years, we do not anticipate major repairs or replacement of the roofing during the study period.

Building 6 and Restrooms

The roofing is in poor to fair condition, with locations of leaking, damaged shingles and flashing reported. Based on conditions and an EUL of 20 years, we recommend replacement of the shingle roofing and repairs as necessary to the roof deck in the near term of the study period.

Building 7

The building's roofing is in good condition; the roof covering was recently replaced in 2012. Based on conditions and an EUL of 20 years, we do not anticipate replacement during the study period.

B3016 Gutters & Downspouts

Community Center

The gutters and downspouts are in good condition, with no significant deficiencies noted. No major repairs or replacements are anticipated during the term of study.

Building 6 and Restrooms

The gutters and downspouts are in fair condition, with detached anchors and locations of denting noted. We recommend budgeting for the replacement of the gutters and downspouts at the time of roofing replacement, in the near term of the study period.

PROJECTED EXPENDITURES

Identified recommended works that are required during the 10 year study period are scheduled below. We recommend budgeting for additional project costs of between 25%-30% to allow for professional fees and general contractor overhead/profit and management costs.

Community Center

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
B2011	Exterior Wall Construction	Repaint exterior wall surfaces, fascia, soffits & trim; replace sealants	8,680	SF	\$3.25	\$28,210	2015	5
B2011	Exterior Wall Construction	Repaint exterior wall surfaces, fascia, soffits & trim; replace sealants	8,680	SF	\$3.25	\$28,210	2019	5
Total Anticipated Expenditure for B Shell						\$56,420		

Building 6 and Restrooms

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
B2011	Exterior Wall Construction	Repair masonry; replace deteriorated fascia, soffit, siding and trim; replace sealants	2,080	SF	\$3.75	\$7,800	2014	5
B2011	Exterior Wall Construction	Repaint exterior painted surfaces	2,080	SF	\$3.25	\$6,760	2015	5
B2011	Exterior Wall Construction	Repaint exterior painted surfaces	2,080	SF	\$3.25	\$6,760	2019	5
B2021	Windows	Replace the wood framed single-paned windows	8	EACH	\$830	\$6,640	2014	3
B2032	Solid Exterior Doors	Replace flush steel doors and frames	2	EACH	\$725	\$1,450	2014	3
B3011	Roof Finishes	Replace asphalt shingle roof covering	1,428	SF	\$3.15	\$4,498	2015	3
Total Anticipated Expenditure for B Shell						\$33,908		

Building 7

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
B2011	Exterior Wall Construction	Repair masonry; replace deteriorated fascia, soffit, siding and trim; replace sealants	1,380	SF	\$3.75	\$5,175	2014	5
B2011	Exterior Wall Construction	Repaint exterior painted surfaces	1,380	SF	\$3.25	\$4,485	2015	5
B2011	Exterior Wall Construction	Repaint exterior painted surfaces	1,380	SF	\$3.25	\$4,485	2019	5
B2021	Windows	Replace the wood framed single-paned windows	4	EACH	\$830	\$3,320	2014	3
Total Anticipated Expenditure for B Shell						\$14,465		

SECTION 4 - C INTERIORS

C10 INTERIOR CONSTRUCTION

DESCRIPTION

C1010 PARTITIONS

C1011 Fixed Partitions

Community Center

The building contains wood- and metal-stud framed partitions with gypsum board and concrete masonry walls (reference Photographs 21 to 24 in Appendix B). The partitioning separates the primary activities spaces from restrooms, storage, kitchen and recreation areas within the building.

Building 6 and Restrooms

The building contains wood-stud framed partitions with gypsum board and interior concrete masonry walls (reference Photograph 26 in Appendix B). The partitioning separates the primary activities space from the restrooms and storage rooms within the building.

C1020 INTERIOR DOORS

C1021 Interior Doors

Community Center

The building generally contains single leaf, flush panel wood doors in metal frames.

Building 6 and Restrooms

The building contains single leaf, flush panel wood doors in metal frames (reference Photograph 26 in Appendix B).

Community Center and Building 6 and Restrooms

C1023 Interior Door Hardware

The doors contained steel and aluminum hardware, typically consisting of lever door handles and door closers.



CONDITION

C1010 PARTITIONS

C1011 Fixed Partitions

Community Center

The interior fixed partitions all appeared to be in good condition, with no deficiencies found in relation to the wall structures.

Building 6 and Restrooms

The interior masonry walls all appeared to be in good condition, with no deficiencies found in relation to the wall structures.

C1020 INTERIOR DOORS

C1021 Interior Doors

Community Center

The interior doors appeared to be in good condition with no deficiencies noted.

Building 6 and Restrooms

The interior doors and partitions appeared to be in good condition with no deficiencies noted.

Community Center and Building 6 and Restrooms

C1023 Interior Door Hardware

The hardware at each of the doors appeared satisfactory with no issues of deterioration or failure noted. The operation of the door handles, locks and hinged swing were noted to be in fair to good condition. We do not anticipate any major expenditure during the study period.



C30 INTERIOR FINISHES

DESCRIPTION

C3010 WALL FINISHES

C3012 Wall Finishes to Interior Walls

Community Center

Interior walls at the building typically have painted gypsum wallboard finishes, with locations of brick veneer, and ceramic tile (reference Photographs 21 through 25 in Appendix B).

Building 6 and Restrooms

Interior walls at the building typically have painted finishes, with ceramic tile in the restrooms (reference Photographs 26 and 27 in Appendix B).

Building 7

Interior walls at the building typically have painted finishes (reference Photograph 29 in Appendix B).

C3020 FLOOR FINISHES

C3023 Flooring

Community Center

The flooring in the building primarily consists of vinyl tile, with quarry tile in the kitchen area, ceramic tile in the restrooms and carpet in the office and activity rooms (reference Photographs 21 through 25 in Appendix B).

Building 6 and Restrooms

The flooring in the building is primarily carpet throughout, with ceramic tile in the restrooms (reference Photograph 26 through 28 in Appendix B).

C3030 CEILING FINISHES

C3031 Ceiling Finishes

Community Center

The ceiling finishes throughout the building predominantly consist of acoustical tile, with locations of painted gypsum board and exposed roof structure (reference Photographs 21 and 23B in Appendix B).

Building 6 and Restrooms & Building 7

The buildings do not have ceiling systems, with the roof structural systems exposed.

CONDITION

C3010 WALL FINISHES

Community Center

C3012 Wall Finishes to Interior Walls

Interior wall finishes are in good condition generally throughout the building, as the building was renovated in 2013. The typical EUL of interior painted walls is five-years, and therefore, we recommend re-painting of all the previously painted walls in the mid-term of the study period, to maintain the appearance of the building and work areas.

Building 6 and Restrooms

The wall finishes are in poor to fair condition, with locations of marking and staining noted. We recommend painting of the interior walls in the near-term of the study period, and based on a EUL of 4 years at this building.

Building 7

The wall finishes are in poor to fair condition, with locations of marking and staining noted. We recommend painting of the interior walls in the near-term of the study period, and based on a EUL of 4 years at this building.

C3020 FLOOR FINISHES

Community Center

C3023 Flooring

The flooring appeared to be in good overall condition. However, with an EUL of 10 years for carpeting, we recommend budgeting for its replacement during the mid-term of the study period to maintain the appearance of the building.

Building 6 and Restrooms

C3023 Flooring

The flooring is in fair condition, with locations of staining noted in the carpeting and cracking grouted joints and missing ceramic tiles in the restrooms. With an EUL of 10 years for carpeting, an estimated age of at 5 or more years, we recommend replacing the carpeting by the mid-term of the study period. With an EUL of more than 50 years for ceramic tile, we recommend completion of tile repairs in the near term as part of routine maintenance, as an operational expense.



C3030 CEILING FINISHES

Community Center

C3031 Ceiling Finishes

The ceiling finishes are in good condition. Painted surfaces usually have an EUL of 4 years; therefore, we anticipate that the ceilings will require re-painting at time of repainting of the wall finishes.

PROJECTED EXPENDITURES

Identified recommended works that are required during the 10 year study period are scheduled below. We recommend budgeting for additional project costs of between 25%-30% to allow for professional fees and general contractor overhead/profit and management costs.

Community Center

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	27,600	SF	\$3.25	\$89,700	2015	5
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	27,600	SF	\$3.25	\$89,700	2019	5
C3023	Flooring	Replace carpet flooring	189	SY	\$45	\$8,505	2018	5
Total Anticipated Expenditure for C Interiors						\$187,905		

Building 6 and Restrooms

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
C3012	Wall Finishes to Interior Walls	Repaint interior wall surfaces	3,700	SF	\$3.25	\$12,025	2015	5
C3012	Wall Finishes to Interior Walls	Repaint interior wall surfaces	3,700	SF	\$3.25	\$12,025	2019	5
C3023	Flooring	Replace carpet flooring	40	SY	\$45	\$1,800	2016	5
Total Anticipated Expenditure for C Interiors						\$25,850		



Building 7

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
C3012	Wall Finishes to Interior Walls	Repaint interior wall surfaces	1,100	SF	\$3.25	\$3,575	2015	5
C3012	Wall Finishes to Interior Walls	Repaint interior wall surfaces	1,100	SF	\$3.25	\$3,575	2019	5
Total Anticipated Expenditure for C Interiors						\$7,150		

SECTION 5 - D SERVICES

D20 PLUMBING

DESCRIPTION

D2010 PLUMBING FIXTURES

D2011 Water Closets

Community Center

The building contains four floor-mounted vitreous china tank-less water closets with hands-free automatic flush valves (reference Photograph 25 in Appendix B).

Building 6 and Restrooms

The building contains two floor-mounted stainless steel tank-less water closets with manual flush valves (reference Photograph 28 in Appendix B).

D2012 Urinals

Community Center

The men's restroom contains two vitreous china wall-mounted waterless urinals (reference Photograph 24 in Appendix B).

Building 6 and Restrooms

The men's restroom contains one vitreous china wall-hung waterless urinal (reference Photograph 27 in Appendix B).

D2013 Lavatories

Community Center

The building contains four wall-mounted vitreous china lavatories (reference Photograph 24 in Appendix B). The lavatories have single-handle lever-type, non-metering faucets.

Building 6 and Restrooms

The building contains two wall-mounted stainless steel lavatories (reference Photograph 27 in Appendix B). The lavatories have single-handle push-type, metering faucets.

D2014 Sinks

Community Center

The building contains a three basin stainless steel sink and countertop in the kitchen and two stainless steel sinks recessed in base cabinets in activity rooms.

Building 7

The building contains one floor mounted janitor's sink.

D2018 Drinking Fountains and Coolers

Community Center

There is a wall-mounted water cooler within the main entrance foyer recreation, adjacent to the restrooms.

D2020 DOMESTIC WATER DISTRIBUTION

D2021 Cold Water Service

Community Center

Cold water piping throughout the building consisted of copper tubing; the cold water service for the facility is supplied directly from the street main's pressure. A tap is made to the water line downstream of a meter and routed to the plumbing fixtures and equipment via this copper pipe work.

D2022 Hot Water Service

Community Center

Domestic hot water is provided in the kitchen area and restrooms, generated via a natural-gas-fueled water heater located in a closet adjacent to the kitchen area at the east side of the building (reference Photograph 30 in Appendix B).

Table D20-1 provides a summary of the water heater:

Table D20-1 Summary of the Domestic Water Heating Equipment at the Community Center

Location	Manufacturer	Model #	Serial #	Fuel / Rating	Capacity	≈ Year of Installation
Closet, East Side	Bradford White	U50T55FR3N	JB16257170	Natural Gas / 55,000 BTUH	48 GAL	2013

D2021 Cold Water Service

Building 6 and Restrooms

Cold water piping throughout the building consisted of copper tubing; the cold water service for the facility is supplied directly from the street main's pressure. A tap is made to the water line and routed to the plumbing via this copper pipe work.

Building 7

Cold water piping in the building consisted of copper tubing; the cold water service for the facility is assumed to be supplied from a tap of the Building 6 and Restroom's service line, supplied at the street main's pressure.

D2030 SANITARY WASTE

D2031 Waste Piping

Community Center Building 6 and Restrooms & Building 7

Waste piping was not observed at the buildings, but is assumed to consist of 2" to 4" diameter cast iron material.

D2090 OTHER PLUMBING SYSTEMS

D2091 Gas Distribution

Community Center

The building is provided with natural gas service, typically 1" diameter steel piping, with the service meter at the southeast corner of the building. The service is provided for HVAC, plumbing and kitchen equipment.

Building 6 and Restrooms

The building is provided with natural gas service, typically 1" diameter steel piping, with the service meter at the east side of the building. The service is provided for HVAC equipment.

Building 7

The building is provided with natural gas service, typically 1" diameter steel piping, tapped from the service to the Building 6 and Restrooms structure. The service is provided for HVAC equipment.

CONDITION

D2010 PLUMBING FIXTURES

Community Center

D2011 Water Closets

The water closets are in good condition and appeared to be low-flow-type models. The water closets flushed properly and did not have cracks in the china. With a typical EUL of 35 years, we do not anticipate that there will be a need for their end-of-useful-life replacement during the study period. Within the Community Center, each of the men's and women's restrooms contained one disabled accessible water closet stall.

D2012 Urinals

The waterless urinals appeared to be in good condition. The urinals appeared to be operating properly and no cracking in the china was noted. Therefore, based upon observed conditions and with a typical EUL of 35 years, we anticipate that there will be no requirement for end-of-useful-life fixture replacement during the study period. The Community Center's men's restroom contained a disabled accessible urinal.

D2013 Lavatories

The lavatories and faucets appeared to be in good condition. The faucets appeared to be low-flow models and the sinks drained properly and did not have any cracks in the china. Therefore, based upon observed conditions and with a typical EUL of 35 years, we do not anticipate that there will be a requirement for their replacement during the study period. Each of the restrooms contained disabled accessible lavatories. The City maintenance personnel requested that we include for changing out the motion sensor faucets with regular manual as the building users are having issues.

D2014 Sinks

The sinks appeared to be in good condition. Based on observed conditions and with a typical EUL of 35 years, we do not anticipate the need for significant repair or replacement during the study period.

D2018 Drinking Fountains and Coolers

The drinking fountain appeared to be in good condition. Based upon observed conditions, we do not anticipate that there will be a requirement for its replacement during the study period. The drinking fountain has been provided with sufficient clearance for access by the disabled.

Building 6 and Restrooms

D2011 Water Closets

The water closets are in good to fair condition, but did not appear to be low-flow-type models. The water closets flushed properly and did not have appreciable damage. With a typical EUL of 35 years, we do not anticipate that there will be a need for their end-of-useful-life replacement during the study period.

Because of the limitations of the building and its original design, the men's and women's restrooms do not contain fully disabled accessible water closet stalls. However, efforts have been made to provide accessibility, including installation of grab bars and outward swinging stall doors; the accessible restrooms within the Community Center are available only during regular hours of operation. We recommend renovation of the restrooms to provide single occupancy, disabled accessible restroom facilities in the near term of the study period.

D2012 Urinals

The waterless urinal appeared to be in good condition. The urinal appeared to be functioning properly and no cracking in the china was noted. Therefore, based upon observed conditions and with a typical EUL of 35 years, we anticipate that there will be no requirement for end-of-useful-life fixture replacement during the study period. The urinal does not appear to be accessible to the disabled due to fixture height and layout; we recommend relocation of the fixture at the time of renovation of the restroom, to provide a disabled accessible restroom facility.

D2013 Lavatories

The lavatories and faucets appeared to be in good to fair condition. The faucets appeared to be low-flow models and the sinks drained properly and did not have other damage. Therefore, based upon observed conditions and with a typical EUL of 35 years, we do not anticipate that there will be a requirement for their replacement during the study period. The lavatories are not fully accessible to the disabled due to the lack of piping insulation; we recommend modifications to the fixture at the time of renovation of the restroom, to provide a disabled accessible restroom facility.

D2020 DOMESTIC WATER DISTRIBUTION

Community Center

D2021 Cold Water Service

The domestic water systems appeared to be in good condition. No major problems were observed that could be attributed to age or deferred maintenance and not issues with the system were reported. With an EUL of 50 years, major repairs or replacements are not anticipated during the study period.

D2022 Hot Water Service

The domestic water heater appeared to be in good condition. It was observed to be functional and operating properly. Water heaters generally have a typical EUL of 10 to 15 years; the water heater was installed in 2013 and will not require replacement during the study period.

Building 6 and Restrooms and Building 7

D2022 Hot Water Service

There is no hot water present at these buildings, therefore after requests from City maintenance personnel we have included for units and associated piping at the start of the study period.

Building 6 and Restrooms

D2021 Cold Water Service

Cold water piping consisted of copper tubing, with no indications of leaks or deterioration observed. With an EUL of 50 years and piping age of more than 40 years, budgeting for the replacement of the service piping is recommended for the late term of the study period.

Building 7

The limited cold water piping consisted of copper tubing, with a drinking fountain reportedly removed due to broken drains in recent years. With an EUL of 50 years and piping age of more than 40 years, budgeting for the replacement of the service piping is recommended for the late term of the study period.

D2030 SANITARY WASTE

Community Center Building 6 and Restrooms & Building 7

D2031 Waste Piping

No visually apparent problems with the sanitary waste piping were observed. With sanitary waste piping having an EUL of more than 50 years, the replacement of the service piping is not anticipated during the study period.

After discussions with the City maintenance personnel we understand that a number of the City buildings have been having issues with sewer blockages and pipe deterioration, therefore we have been requested to include for camera inspections of the drainage/sewer system at the buildings.



D2090 OTHER PLUMBING SYSTEMS

Community Center Building 6 and Restrooms & Building 7

D2091 Gas Distribution

There were no apparent items of concern with the gas distribution systems. With natural gas distribution systems having an EUL of more than 50 years, the replacement of the service piping is not anticipated during the study period. However, it does require relocation from its current position in Building 6.

D30 HVAC

DESCRIPTION

D3040 AIR DISTRIBUTION SYSTEMS

D3041 Air Distribution Systems

Building 7

The conditioned air from the building's unit heater is directly from the unit, without ducts for transfer grilles.

Community Center

The conditioned air is distributed throughout the building by rigid interior metal ducts located above the ceilings, within attic space and in walls, and through flexible duct connections to diffusers/grilles in the ceilings and walls (reference Photograph 34 in Appendix B).

Building 6 & Restrooms

The conditioned air from the central space's unit heater is directly from the unit, without ducts for transfer grilles.

D3042 Exhaust Ventilation Systems

Community Center

Ventilation of the restrooms, kitchen and auditorium is provided by rooftop exhaust fans, manufactured by Greenheck and installed in 2013. Ventilation of the kitchen range is provided by a stainless steel hood, with Ansul fire protection system and rooftop exhaust fan (reference Photograph 33 in Appendix B). Refer to Table D30-1 for a summary of the exhaust ventilation equipment.

Building 6 & Restrooms

The building's restrooms are ventilated via operable windows, without use of mechanical systems.

D3050 TERMINAL AND PACKAGED UNITS

D3051 Terminal Self-Contained Units

Building 6 & Restrooms

The building contains a gas-fired unit heater suspended from the roof framing within the central activity room (reference Photograph 35 in Appendix B). The unit, manufactured by Utility, is a heating only unit. Refer to the following Table D30-2 for further details of the terminal unit.

Table D30-2 Summary of the HVAC Equipment at Building 6 and Restrooms

Location	Equipment Type	Manufacturer	Model #.	Serial #	Capacity / Rating	Fuel Type	Year of Installation
Activity	Unit Heater	Utility	Unknown	Unknown	Unknown	Gas	1970

Building 7

The building contains a gas-fired unit heater wall mounted within the central activity room (reference Photograph 36 in Appendix B). The unit, manufactured by Mission Appliance Corp., is a heating only unit. Refer to the following Table D30-3 for further details of the terminal unit.

Table D30-3 Summary of the HVAC Equipment at Building 7

Location	Equipment Type	Manufacturer	Model #.	Serial #	Capacity / Rating	Fuel Type	Year of Installation
Activity Room	Unit Heater	Mission Appliance Corp.	SunAir 57 25	29759	25,000 BTUH	Gas	1970

D3052 Package Units

Community Center

The building is heated and cooled by three rooftop package units. The units provide direct exchange cooling, with natural gas fired heating sections, installed in 2013 (reference Photographs 31 and 32 in Appendix B). The units, manufactured by Trane, are curb-mounted and located within a painted plywood siding rooftop enclosure. Refer to the following Table D30-1 for further details of the equipment.

Table D30-1 Summary of the HVAC Equipment at Community Center

Location	Equipment Type	Manufacturer	Model #.	Serial #	Capacity / Rating	Fuel Type	Year of Installation
East Facade	(2) Air Curtain	Berner Intl.	ASN10 36AAP	ASN1036A AP/W 09870381	¾ HP / 2,400 CFM	Elec	2013
Rooftop	Package HVAC Unit	Trane	YHC048 E3RLA13	120512 013L	4 Tons Cooling	Elec / Gas	2013
Rooftop	Package HVAC Unit	Trane	YCD181F3L 044	120610 639D	15 Tons Cooling	Elec / Gas	2013
Rooftop	Package HVAC Unit	Trane	YCD181F3L 044	120610 696D	15 Tons Cooling	Elec / Gas	2013
Rooftop	Make-Up Air Unit	Greenheck	PVF100H	Unknown	100,000 BTUH	Gas	2013
Rooftop (Kitchen)	Exhaust Fan KEF-1	Greenheck	CUBE-141- 5-6	12744434 1202	2,500 CFM	Elec	2013
Rooftop	Exhaust Fan RF-1	Greenheck	GB-240-20- X	12744435 1202	8,000 CFM	Elec	2013
Rooftop	Exhaust Fan RF-2	Greenheck	GB-180-10- X	12744436 1202	4,500 CFM	Elec	2013
Rooftop	Exhaust Fan RF-3	Greenheck	GB-180-10- X	12744437 1202	4,500 CFM	Elec	2013

D3060 HVAC INSTRUMENTATION AND CONTROLS

D3069 Other Controls & Instrumentation

Community Center

The building users are able to control the room temperature via separate wall mounted electronic thermostats controlling each rooftop unit.

Building 6 & Restrooms and Building 7

The building users are able to control the room temperature via unit-mounted or wall-mounted thermostats, controlling each unit heater.

CONDITION

D3040 AIR DISTRIBUTION SYSTEMS

Community Center

D3041 Air Distribution Systems

The conditioned air is distributed throughout the building by rigid interior metal ducts located above the ceilings, within attic space and in walls, and through flexible duct connections to diffusers/grilles in the ceilings and walls (reference Photograph 34 in Appendix B).

Only a small proportion of the ducting in the building was reviewed but that portion was noted to be in fair to good condition with no deficiencies. We recommend that the duct work is cleaned every 5 years starting at the start of the study period, as it was unclear when they were last cleaned.

D3042 Exhaust Ventilation Systems

Ventilation of the restrooms, kitchen and auditorium is provided by rooftop exhaust fans, manufactured by Greenheck and installed in 2013. Ventilation of the kitchen range is provided by a stainless steel hood, with Ansul fire protection system and rooftop exhaust fan (reference Photograph 33 in Appendix B). Refer to Table D30-1 for a summary of the exhaust ventilation equipment.

Building 6 & Restrooms

D3041 Air Distribution Systems

The conditioned air from the central space's unit heater is directly from the unit, without ducts or transfer grilles.

D3042 Exhaust Ventilation Systems

The building's restrooms are ventilated via operable windows, without use of mechanical systems.

Building 7

D3040 Air Distribution Systems

The conditioned air from the building's unit heater is directly from the unit, without ducts or transfer grilles.



D3050 TERMINAL AND PACKAGED UNITS

Community Center

D3052 Package Units

The rooftop package heating and cooling units, installed during the recently completed renovation project, are in good condition. However, the skirt around the HVAC equipment is too high and must be addressed; an additional 12" – 18" is required. With a typical EUL of fifteen to twenty years for this type of equipment, replacement of the units is not anticipated during the study period.

Building 6 & Restrooms and Building 7

D3051 Terminal Self-Contained Units

The unit heaters appeared to be in fair to poor condition, although were not operated during our assessment. The units appear to be original equipment, installed in approximately 1970 and are therefore more than 40 years old. The typical EUL of equipment such as this is twenty years and, because it has exceeded useful, should be replaced in the near term.

D3060 HVAC INSTRUMENTATION AND CONTROLS

D3069 Other Controls & Instrumentation

The thermostats appeared to be in fair to good condition and functional. We are unaware of any particular issues with the controls, but for the Building 6 and Restroom and Building 7 structures, anticipate their replacement at the time of replacement of the terminal units.



D40 FIRE PROTECTION

DESCRIPTION

D4010 SPRINKLERS

Community Center

D4011 Sprinkler Water Supply

The building contains a wet-pipe fire sprinkler system, with ceiling pendant heads supplied from an exterior riser at the northeast corner of the building (reference Photograph 38B in Appendix B). System water supply is provided by municipal main pressure, without the use of a fire pump, and water flow is monitored by a local fire system. The service main, with check valve assembly, post valve indicator and Siamese hose connections, is located at the northeast corner of the building (reference Photograph 37 in Appendix B).

D4020 STANDPIPES

Community Center

D4024 Fire Hose Equipment

The building contains wall-recessed cabinets with fire hoses and standpipe hose connections.

D4030 FIRE PROTECTION SPECIALTIES

Community Center, Building 6 & Restrooms and Building 7

D4031 Fire Extinguishers

Multipurpose portable wall-mounted handheld fire extinguishers were provided throughout the buildings.



CONDITION

D4030 FIRE PROTECTION SPECIALTIES

D4010 SPRINKLERS

Community Center

D4011 Sprinkler Water Supply

The system appears to be fully operational and in good condition. We understand it is maintained by a contracted service provider and was last tested in early 2013. We do not anticipate a need for significant repairs or component replacement during the study period.

D4020 STANDPIPES

Community Center

D4024 Fire Hose Equipment

The fire hose cabinets, fire hoses and standpipe hose connections appeared to be in fair condition, however it is not clear when they were last tested. We do not anticipate a need for significant repairs or component replacement during the study period. However, we noted locations where access to the cabinets was obstructed by equipment or furniture and recommend that the code-required clearances be maintained in front of all fire hose cabinets. A complete inspection is recommended early in the study period and necessary tests should be undertaken.

D4030 FIRE PROTECTION SPECIALTIES

Community Center, Building 6 & Restrooms and Building 7

D4031 Fire Extinguishers

The fire extinguishers appeared to be in good condition. We understand that they are maintained on a yearly basis by DCS Testing & Equipment, a contracted service provider and were last inspected in early 2013. We do not anticipate a need for significant replacement of fire extinguishers during the study period.

D50 ELECTRICAL

DESCRIPTION

The following information was obtained through our visual observations of each of the buildings' systems. The electrical systems include the service entrance equipment, exterior and interior panel boards, safety switches, lighting fixtures, and fire alarm systems. Limited drawings detailing electrical systems were available for review.

D5010 ELECTRICAL SERVICE & DISTRIBUTION

Community Center, Building 6 & Restrooms and Building 7

D5012 Low Tension Service & Dist.

The buildings are served by underground 120/240-Volt, single-phase, 3-wire electrical service, to and enclosed main distribution panel and meter at the Community Center and to exterior metered panels located on the exterior walls of the Building 6 and Restrooms. Building 7 uses 120 volt 2-20amp circuit from 100amp panel located in the south side of Building 6. Interior panel boards with multiple breakers provide power to building power receptacle, lighting and equipment loads, varying from 100- to 800-amp capacities.

D5020 LIGHTING & BRANCH WIRING

Community Center, Building 6 & Restrooms and Building 7

D5021 Branch Wiring Devices

The branch wiring devices at each of the buildings included wall-mounted switches and power receptacles that would be generally associated with these types of buildings. Branch wiring is assumed to be distributed in Electric Metallic Tubing (EMT), with some flexible metal conduit likely utilized within walls and ceilings.

D5022 Lighting Equipment

Community Center

The interior lighting within the building is provided by surface-mounted and suspended 4' long, two-lamped fluorescent fixtures (reference Photographs 21 and 23 in Appendix B). The florescent fixtures typically contain T8 32-watt lamps and electronic ballasts. The lighting is controlled via occupancy sensors and local switching in the respective rooms.

Building 6 and Restrooms & Building 7

D5022 Lighting Equipment

The interior lighting within the buildings is provided by surface-mounted 4' long, two-lamped fluorescent fixtures (reference Photographs 26 and 29 in Appendix B). The florescent fixtures typically contain T8 32-watt lamps and electronic ballasts. The lighting is controlled via local switching in the respective rooms.

D5030 COMMUNICATIONS & SECURITY

Community Center

D5033 Telephone Systems

Telephone systems are present within the office areas of the building.

D5090 OTHER ELECTRICAL SYSTEMS

Community Center

D5037 Fire Alarm Systems

The building is provided with a Honeywell fire alarm system, with the control panel located in the main entrance foyer. The system includes manual pull stations, smoke detectors and audible/visible notification devices, as well as fire sprinkler system water flow-monitoring switches (reference Photograph 40 in Appendix B).

D5092 Emergency Light & Power Systems

Illuminated exit signs, located along egress pathways, and emergency lighting fixtures, all of which are hard-wired into the electrical system and have battery back-up power, are provided in the building.

Building 6 and Restrooms & Building 7

D5092 Emergency Light & Power Systems

Illuminated exit signs, located above exterior doors, are provided in the buildings.

CONDITION

D5010 ELECTRICAL SERVICE AND DISTRIBUTION

Community Center, Building 6 and Restrooms & Building 7

D5012 Low Tension Service & Dist.

The electrical equipment was noted to be in fair condition, with the exterior service panels at the Building 6 and Restrooms and Building 7 structures appearing to be original equipment. Electrical distribution systems tend to have a typical EUL of 30 years, but the useful life can be extended through preventive maintenance. However, since the service panel equipment for the Building 6 and Restrooms and Building 7 structures is more than 40 years old, we anticipate the need to replace the equipment during the cost study period. Furthermore the equipment is reported to be insufficient for the present loading requirements.



D5020 LIGHTING & BRANCH WIRING

Community Center, Building 6 and Restrooms & Building 7

D5021 Branch Wiring Devices

The general receptacles and wiring appeared to be in good to fair condition within the buildings. We do not anticipate a need for significant repair or replacement during the cost study period.

Community Center

D5022 Lighting Equipment

The interior lighting was observed to be in good condition and all fixtures were operating properly with no broken lenses or deteriorated housings. With an EUL for lighting fixtures of 20- to 25-years, no significant repairs or replacements are anticipated during the study period.

Building 6 and Restrooms & Building 7

D5022 Lighting Equipment

The interior lighting was observed to be in fair to good condition and all fixtures were operating properly with some broken lenses. The lighting fixtures appear to be replacements of original fixtures and, with an EUL for lighting fixtures of 20- to 25-years, no significant repairs or replacements are anticipated during the study period. Installation of occupancy sensor controls would provide energy savings for the buildings, but the cost to install such devices is estimated to fall below the threshold for the capital expenditure forecast; we recommend installation of occupancy sensor lighting controls as an operational expense. Furthermore the broken lenses will also be replaced as an operational expense as the cost of their replacement is anticipated to fall below the threshold level of \$500.

D5030 COMMUNICATIONS & SECURITY

Community Center

D5033 Telephone Systems

The existing telephone equipment was observed to be in good condition. We do not anticipate significant repairs or replacements during the cost study period.

D5090 OTHER ELECTRICAL SYSTEMS

Community Center

D5037 Fire Alarm Systems

The fire alarm system, which appears to have been installed as part of the recent renovation project, is in good condition. However the system duct detectors are incorrect for their application as they are not easily visible or accessible. They should be replaced early in the study period.

D5092 Emergency Light & Power Systems

The exit sign and emergency lighting systems appeared to be in fair condition. We do not anticipate the need for significant repairs or replacement during the cost study period.

Building 6 and Restrooms & Building 7

D5092 Emergency Light & Power Systems

The illuminated exit signs appeared to be fair condition. We do not anticipate the need for significant repairs or replacement during the cost study period.

PROJECTED EXPENDITURES

Identified recommended works that are required during the 10 year study period are scheduled below. We recommend budgeting for additional project costs of between 25%-30% to allow for professional fees and general contractor overhead/profit and management costs.

Community Center

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
D2013	Lavatories	Replace motion sensor faucets with manual operation	4	EACH	\$220	\$880	2013	3
D2018	Drinking Fountains and Coolers	Replace drinking fountain	1	EACH	\$2,545	\$2,545	2013	3
D2031	Waste Piping	Undertake camera inspection of sewer lines	1	LS	\$1,000	\$1,000	2013	3
D3041	Air Distribution Systems	Clean ductwork	7,391	SF	\$0.25	\$1,848	2013	3
D3041	Air	Clean ductwork	7,391	SF	\$0.25	\$1,848	2018	3

	Distribution Systems							
D3052	Package Units	Undertake alterations to skirt upstand at the rooftop package unit system	1	EACH	\$2,200	\$2,200	2014	3
D5037	Fire Alarm Systems	Replace duct detectors with more suitable visible units	1	LS	\$600	\$600	2013	1
Total Anticipated Expenditure for D Services						\$10,921		

Building 6 and Restrooms

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
D2011	Water Closets	Reconfigure the restrooms for disabled access	1	LS	\$10,000	\$10,000	2014	1
D2021	Cold Water Service	Replace water service piping	96	LF	\$20.21	\$1,940	2020	3
D2022	Hot Water Service	Install new water heater	1	EACH	\$500	\$500	2013	3
D2031	Waste Piping	Undertake camera inspection of sewer lines	1	LS	\$1,000	\$1,000	2013	3
D2091	Gas Distribution	Relocate gas meter	1	LS	\$850	\$850	2013	3
D3051	Terminal Self-Contained Units	Replace gas-fired unit heater	1	EACH	\$1,200	\$1,200	2014	3
D5012	Low Tension Service & Dist.	Replace electrical panel	1	EACH	\$2,500	\$2,500	2014	4
Total Anticipated Expenditure for D Services						\$17,990		

Building 7

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
D2021	Cold Water Service	Replace water service piping	25	LF	\$20.21	\$505	2020	3
D2022	Hot Water Service	Install new water heater	1	EACH	\$500	\$500	2013	3
D2031	Waste Piping	Undertake camera inspection of sewer lines	1	LS	\$1,000	\$1,000	2013	3
D3051	Terminal Self-Contained Units	Replace gas-fired wall-mounted unit heater	1	EACH	\$1,200	\$1,200	2014	3

D5012	Low Tension Service & Dist.	Replace electrical panel	1	EACH	\$2,500	\$2,500	2014	4
Total Anticipated Expenditure for D Services						\$5,705		

SECTION 6 - E EQUIPMENT & FURNISHINGS

E20 FURNISHINGS

DESCRIPTION

E1090 OTHER EQUIPMENT

Community Center

E1093 Food Service Equipment

The building's kitchen contains commercial food service equipment, including gas range and oven, exhaust hood, steam table, warming cabinet, freezer, refrigerator and ice maker, as well as stainless steel multi-compartment sink, countertop/table and hand sink (reference Photograph 22 in Appendix B).

E2010 FIXED FURNISHINGS

Community Center

E2012 Fixed Casework

The building contains wood-constructed fixed base and wall cabinet casework (reference Photograph 23B in Appendix B). The cabinets consist of hardwood frames with plastic-laminate-faced plywood interior panels, doors and drawers, with hinges, pulls and locking hasps.

CONDITION

E1020 INSTITUTIONAL EQUIPMENT

Community Center

E1093 Food Service Equipment

The kitchen equipment is in fair to good condition, appearing to have been installed during the recent renovation project. With an EUL of 20 to 30 years for commercial kitchen equipment, major repairs or replacement of equipment are not expected during the study period. However the floor drain is an issue and also modification of the warming oven has been requested for safety issues, therefore we have included for these works near-term in the study period.



E2010 FIXED FURNISHINGS

Community Center

E2012 Fixed Casework

The fixed casework appeared to be in good condition and suitable for its use. Cabinets have a typical EUL of twenty-years and based on our observations, significant repairs or replacements are not anticipated during the study period.

PROJECTED EXPENDITURES

Identified recommended works that are required during the 10 year study period are scheduled below. We recommend budgeting for additional project costs of between 25%-30% to allow for professional fees and general contractor overhead/profit and management costs.

Community Center

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
E1093	Food Service Equipment	Fix floor drain and also undertake modifications to warning oven	1	LS	\$6,000	\$6,000	2013	3
Total Anticipated Expenditure for E Equipment & Furnishings						\$6,000		

SECTION 8 - G SITEWORK

F10 SITE IMPROVEMENTS

In addition to the buildings located at the site, we have also undertaken a cursory review and assessment of the major site assets to further assist the City in understanding the condition of the site over all. The FCI calculations which are located in the Executive Summary do not include any likely cost that has been shown in this section.

DESCRIPTION

G2030 PEDESTRIAN PAVING

G2031 Paving & Surfacing

Variable width concrete walkways are located throughout the park site, at the public roadways, along the on-site buildings, leading to the playground, and along the tennis and basketball courts and playing fields (reference Photographs 41 and 45 in Appendix B). We were not provided with construction specifications or original installation details for the paving; therefore specific concrete mix, design strength, or its suitability for its existing use is not known.

Additional surfacing, using wood mulch, is provided at the children's playground area and at the climbing wall at the park's southwest corner (reference Photograph 43 in Appendix B). Asphalt surfacing is used between the Building 6 and Restrooms structure and the baseball field, to provide maintenance vehicle access to the property (reference Photographs 47 and 49 in Appendix B).

G2033 Concrete Steps

Reinforced concrete ramps and stairs are located within the park to provide access for an adjoining parking area to the west and from sidewalks to the east entrances of the Community Center (reference Photographs 51 and 52 in Appendix B). The steps and ramps typically have galvanized or painted metal handrails at the center and along each side.

G2040 SITE DEVELOPMENT

G2041 Fences & Gates

The site contains chain link fencing along its southern and eastern boundaries and portions of the north and west boundaries, separating the playing fields from the basketball court areas, at the tennis and paddle ball courts, and around the playground and climbing wall (reference Photographs 41, 44, 45, 46 and 48 in Appendix B). The fencing varies in height from 4' at the playground, approximately 12' at the tennis courts and more than 12' at portions of the playing fields. The fencing at the tennis courts has vinyl privacy screening, as do portions of the fencing around the baseball playing fields. Netting is installed at the east side of the baseball field, between the playing field and tennis courts, at a height of 24 feet.

G2042 Retaining Walls

There are concrete and concrete masonry retaining walls at the east side of the park, primarily along the site's boundary with the Creative Arts Center (reference Photographs 50, 51 and 53 in Appendix B) and along Manhattan Beach Boulevard. The walls vary in height from 2' to more than 6'. In some locations, the walls are topped with galvanized metal guard railings of approximately 3'-6" in height.

G2044 Signage

Identification sign is located at the front of the site.

G2045 Site Furnishings

There are numerous site furnishings throughout the park, including metal picnic tables/benches, precast concrete benches, and waste receptacles, prefabricated metal bleachers at the baseball playing field and small manufactured storage sheds adjacent to the playing fields and basketball courts (reference Photographs 41 and 42 in Appendix B). A wood framed waste dumpster enclosure, with painted wood siding walls and gates and asphalt shingled roof is located to the east of the Building 6 and Restrooms structure.

G2047 Playing Fields

The park includes the following playing fields, courts and playground areas (reference Photographs 41 through 46 in Appendix B):

- ✦ One baseball field at the center of the park
- ✦ A playground at the park's southwest corner
- ✦ A climbing wall adjacent to the playground
- ✦ Two tennis courts at the east side of the park
- ✦ Two paddle ball courts adjacent to the tennis court
- ✦ Two basketball courts at the west side of the park, near the Community Center

The baseball playing field is chain link fence enclosed, with dirt infields and grass outfields, high-intensity discharge (HID) 1,500-watt metal halide lighting fixtures on metal poles of 30' to 40' in height, roofed seating dugouts and an illuminated scoreboard.

The playground is chain link fence enclosed, with metal, timber and plastic play equipment and swings suspended from a steel frame. The climbing wall is a chain link fence-enclosed area with wood mulch surfacing.

The tennis courts are chain link fence enclosed, with two-color surface coating and white striping, nets, metal benches and HID 1,000-watt metal halide lamped lighting fixtures on 30' metal poles.



The basketball courts are enclosed by the fencing on the north and east boundaries, with color surface coating and adjustable height goals and have HID 1,000-watt metal halide lamped lighting fixtures on 30' steel poles.

G2050 LANDSCAPING

G2055 Planting

Landscaping was prevalent at the park's perimeter and adjacent to the playground and consisted of shrubs, ground cover, and mature shade trees.

G2057 Irrigation Systems

The landscaped areas throughout the park are irrigated via a below-grade, automatic irrigation system. The irrigation system is reportedly supplied with recycled water through the below-grade PVC piping and controllers. Pop-up-type sprinkler heads are scattered throughout the site.

CONDITION

G2030 PEDESTRIAN PAVING

G2031 Paving & Surfacing

The concrete pedestrian walkways throughout the park appeared to be in good condition, with only minor issues of cracking and surface spalling observed. The walkways will likely require routine maintenance and section replacement during the study period and these should be addressed on an as-needed basis as part of routine maintenance and funded as an operational expense.

The wood mulch surfaced areas are adequately supplied, and should be replenished during the term of study as an operational expense. The asphalt paved areas are in fair condition, with large open cracking developing. With a typical EUL of 25 years for asphalt pavement, we recommend budgeting for the milling and resurfacing of the asphalt paved areas in the near term.

G2033 Concrete Steps

The concrete stairs and ramps appeared to be in good condition, with no significant issues of cracking or settlement observed. The railings will require routine maintenance, including repainting, and this should be addressed on an as-needed basis as part of regular maintenance and funded as an operational expense.

G2040 SITE DEVELOPMENT

G2041 Fences & Gates

The chain link fencing throughout the park generally appeared to be in good to fair condition, with some sections of fencing deformed or detached and with posts and horizontal rails detached and with peeling paint. The dates of installation of the fencing are not known, but with an EUL of 40 years, we recommend budgeting for partial replacement of the material during the study period, with other repairs completed as needed as an operational expense.

G2042 Retaining Walls

The retaining walls appeared to generally be in fair condition, with limited locations of cracking, but with no locations of displacement or insufficiency noted. Medium cracks also appear in the lower planter retaining walls at the north-east corner; the structural report in Appendix E details the issues. With an EUL of more than 30 years, no significant repairs or replacement are anticipated during the study period, however minimal repair costs has been included.

G2044 Signage

The identification signage appeared to be in fair overall condition. We understand that there is a requirement for standardizing all of the monument signage at each of the parks; therefore we have included for new signage at each of the parks to meet these requirements.

G2045 Site Furnishings

The site furnishings appeared to be in good to fair overall condition. Repairs necessary during the study period should be addressed on an as-needed basis, as part of routine maintenance and funded as operational expenses. The wood framed waste dumpster enclosure is considered to be fair condition, with locations of damaged and deteriorated wood and peeling paint observed. We recommend budgeting for the replacement of the enclosure using similar materials by the mid-term of the study period.

G2047 Playing Fields

The baseball playing field appeared to be in fair condition. The HID lighting and illuminated scoreboard, although not in use during our assessment, appeared to be in fair condition and will require preventive maintenance during the study period.

The playground and climbing wall areas are in fair condition. Repairs and component replacement that may be required during the study period should be addressed on an as-needed basis as operational expenses.

The tennis and paddle ball courts are in good to fair condition, the court coating, striping and equipment appearing to have been installed in recent years. With an EUL of 12 to 15 years, the need for the reapplication of the court coating and striping is anticipated in the late term of the study period. The HID lighting will require preventive maintenance during the study period, which should be addressed on an as-needed basis as an operational expense.

The basketball courts are in good condition, but like the tennis courts' EUL of 12 to 15 years, the recoating of the courts will be needed in the late-term of the study period. The HID lighting will require preventive maintenance during the study period, which should be addressed on an as-needed basis as an operational expense.

G2050 LANDSCAPING

G2055 Planting

The planted materials are in good overall condition, although they will require routine maintenance and replacements during the study period and these conditions should be addressed on an as-needed basis as part of maintenance and funded as operational expenses.

G2057 Irrigation Systems

The irrigation system appears to be in good to fair condition. There were no operational issues reported and no particular items of disrepair noted. We do not anticipate significant repairs or replacements during the study period.

G40 SITE ELECTRICAL UTILITIES

DESCRIPTION

G4020 SITE LIGHTING

G4021 Fixtures & Transformers

Exterior lighting throughout the site consisted primarily of pole-mounted fixtures utilizing high-intensity discharge (HID) lamping. Lighting at the baseball fields includes 1,500-watt metal halide lighting fixtures on metal poles of 30' to 40' in height. The tennis court lighting includes 1,000-watt metal halide lamped lighting fixtures on 30' metal poles. The basketball courts, like the tennis courts, have 1,000-watt metal halide lamped lighting fixtures on 30' steel poles (reference Photographs 41, 45 and 46 in Appendix B). Additional site lighting is provided by wall-mounted fixtures at the buildings, many of which utilize LED lamps. Utility transformers are pole- and pad-mounted types, along the public roadways and on site concrete pads.

CONDITION

G4020 SITE LIGHTING

G4021 Fixtures & Transformers

The building mounted lights appeared to be approximately 5 years of age and in poor condition and should be replaced. The pole mounted lights appeared to be in fair overall condition. However due to the difficulties in maintenance as a result of ground conditions, they should be changed to LED fittings. However the painted surfaces are in poor condition and the poles are beginning to rust and corrode. We have included for replacement of fixtures and posts near-term in the study period to maintain suitable light levels.

PROJECTED EXPENDITURES

Identified recommended works that are required during the 10 year study period are scheduled below. We recommend budgeting for additional project costs of between 25%-30% to allow for professional fees and general contractor overhead/profit and management costs.

Element No. Item	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
G2031	Paving & Surfacing	Mill and resurface the asphalt pavement	200	SY	\$15.00	\$3,000	2015	3
G2041	Fences & Gates	Replace sections of chain link fencing	140	LF	\$24.53	\$3,434	2018	3
G2042	Retaining Walls	Crack repair	30	LF	\$30.00	\$900	2014	3
G2044	Signage	Replace monument signage	1	EACH	\$1,000	\$1,000	2014	3
G2045	Site Furnishings	Replace the dumpster enclosure	1	LS	\$2,500	\$2,500	2017	3
G2047	Playing Fields	Resurface the tennis, paddle ball and basketball courts	30,440	SF	\$1.22	\$37,137	2022	3
G4021	Fixtures and Transformers	Replace lighting system with Musco Eco lighting and conduct repairs	1	LS	\$200,000	\$200,000	2014	3
Total Anticipated Expenditure for G Building Sitework						\$247,971		

Appendix A

Ten-Year
Expenditure Forecast
2013 - 2022

10 YEAR EXPENDITURE FORECAST

Manhattan Heights Park - Community Center
 1600 Manhattan Beach Boulevard
 Manhattan Beach, CA
 Rev A



Element No.	Component Description	Estimated Useful Life or Replacement Cycle (Yrs)	Remaining Useful Life (Yrs)	Quantity	Unit of Measurement	Unit Cost	Plan Type	Priority	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	Total	Combined Total
						\$			1	2	3	4	5	6	7	8	9	10	Deferred	Scheduled	
A. SUBSTRUCTURE																					
A1031	Undertake crack repairs within slab	N/A	1	30.00	LF	\$20.00	Capital Renewal	3	\$0	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$600
A. SUBSTRUCTURE SUB-TOTALS									\$0	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$600
B. SHELL																					
B2011	Repaint exterior wall surfaces, fascia, soffits & trim; replace sealants	4	2	8,680.00	SF	\$3.25	Routine Maintenance	5	\$0	\$0	\$28,210	\$0	\$0	\$0	\$28,210	\$0	\$0	\$0	\$0	\$56,420	\$56,420
B. SHELL SUB-TOTALS									\$0	\$0	\$28,210	\$0	\$0	\$0	\$28,210	\$0	\$0	\$0	\$0	\$56,420	\$56,420
C. INTERIORS																					
C3012	Repaint interior walls and ceiling surfaces	4	2	27,600.00	SF	\$3.25	Routine Maintenance	5	\$0	\$0	\$89,700	\$0	\$0	\$0	\$89,700	\$0	\$0	\$0	\$0	\$179,400	\$179,400
C3023	Replace carpet flooring	10	5	189.00	SY	\$45.00	Capital Renewal	5	\$0	\$0	\$0	\$0	\$0	\$8,505	\$0	\$0	\$0	\$0	\$0	\$8,505	\$8,505
C. INTERIORS SUB-TOTALS									\$0	\$0	\$89,700	\$0	\$0	\$8,505	\$89,700	\$0	\$0	\$0	\$0	\$187,905	\$187,905
D. SERVICES																					
D2013	Replace motion sensor faucets with manual operation	10	0	4.00	EACH	\$220.00	Deferred Maintenance	3	\$880	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$880	\$0	\$880
D2018	Replace drinking fountain	20	0	1.00	EACH	\$2,545.00	Deferred Maintenance	3	\$2,545	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,545	\$0	\$2,545
D2031	Undertake camera inspection of sewer lines	N/A	0	1.00	LS	\$1,000.00	Deferred Maintenance	3	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$1,000
D3041	Clean ductwork	5	0	7,391.00	SF	\$0.25	Deferred Maintenance	3	\$1,848	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,848	\$0	\$1,848
D3041	Clean ductwork	5	5	7,391.00	SF	\$0.25	Routine Maintenance	3	\$0	\$0	\$0	\$0	\$0	\$1,848	\$0	\$0	\$0	\$0	\$0	\$1,848	\$1,848
D3052	Undertake alterations to skirt upstand at the rooftop package unit system	15	1	1.00	EACH	\$2,200.00	Energy & Sustainability	3	\$0	\$2,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,200	\$2,200
D5037	Replace duct detectors with more suitable visible units	15	0	1.00	LS	\$600.00	Deferred Maintenance	1	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$0	\$600
D. SERVICES SUB-TOTALS									\$6,873	\$2,200	\$0	\$0	\$0	\$1,848	\$0	\$0	\$0	\$0	\$6,873	\$4,048	\$10,921
E. EQUIPMENT & FURNISHING																					
E1093	Fix floor drain and also undertake modifications to warning oven	15	0	1.00	LS	\$6,000.00	Deferred Maintenance	3	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,000	\$0	\$6,000
E. EQUIPMENT & FURNISHING SUB-TOTALS									\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,000	\$0	\$6,000
F. SPECIAL CONSTRUCTION AND DEMOLITION																					
F. SPECIAL CONSTRUCTION AND DEMOLITION SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G. BUILDING SITEWORK																					
G. BUILDING SITEWORK SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Z. GENERAL																					
Z. GENERAL SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expenditure Totals per Year									\$12,873	\$2,800	\$117,910	\$0	\$0	\$10,353	\$117,910	\$0	\$0	\$0	\$12,873	\$248,973	\$261,846
Total Cost (Inflated @ 4% per Yr.)									\$12,873	\$2,912	\$127,531	\$0	\$0	\$12,596	\$149,194	\$0	\$0	\$0	\$12,873	\$292,233	\$305,106

10 YEAR EXPENDITURE FORECAST

Manhattan Heights Park - Building 6 and Restrooms
 1600 Manhattan Beach Boulevard
 Manhattan Beach, CA



Rev A

Element No.	Component Description	Estimated Useful Life or Replacement Cycle (Yrs)	Remaining Useful Life (Yrs)	Quantity	Unit of Measurement	Unit Cost	Plan Type	Priority	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	Total	Combined Total
						\$			1	2	3	4	5	6	7	8	9	10	Deferred	Scheduled	
A. SUBSTRUCTURE																					
A. SUBSTRUCTURE SUB-TOTALS																					
B. SHELL																					
B2011	Repair masonry; replace deteriorated fascia, soffit, siding and trim; replace sealants	10	1	2,080.00	SF	\$3.75	Capital Renewal	5	\$0	\$7,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,800	\$7,800
B2011	Repaint exterior painted surfaces	4	2	2,080.00	SF	\$3.25	Routine Maintenance	5	\$0	\$0	\$6,760	\$0	\$0	\$0	\$6,760	\$0	\$0	\$0	\$0	\$13,520	\$13,520
B2021	Replace the wood framed single-paned windows	30	1	8.00	EACH	\$830.00	Capital Renewal	3	\$0	\$6,640	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,640	\$6,640
B2032	Replace flush steel doors and frames	20	1	2.00	EACH	\$725.00	Capital Renewal	3	\$0	\$1,450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,450	\$1,450
B3011	Replace asphalt shingle roof covering	20	2	1,428.00	SF	\$3.15	Capital Renewal	3	\$0	\$0	\$4,498	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,498	\$4,498
B. SHELL SUB-TOTALS																					
C. INTERIORS																					
C3012	Repaint interior wall surfaces	4	2	3,700.00	SF	\$3.25	Routine Maintenance	5	\$0	\$0	\$12,025	\$0	\$0	\$0	\$12,025	\$0	\$0	\$0	\$0	\$24,050	\$24,050
C3023	Replace carpet flooring	10	3	40.00	SY	\$45.00	Capital Renewal	5	\$0	\$0	\$0	\$1,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,800	\$1,800
C. INTERIORS SUB-TOTALS																					
D. SERVICES																					
D2011	Reconfigure the restrooms for disabled access	10	1	1.00	LS	\$10,000.00	Capital Renewal	1	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$10,000
D2021	Replace water service piping	50	7	96.00	LF	\$20.21	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,940	\$0	\$0	\$0	\$1,940	\$1,940
D2022	Install new water heater	10	0	1.00	EACH	\$500.00	Deferred Maintenance	4	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
D2031	Undertake camera inspection of sewer lines	N/A	0	1.00	LS	\$1,000.00	Deferred Maintenance	3	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$1,000
D2091	Relocate gas meter	N/A	0	1.00	LS	\$850.00	Deferred Maintenance	3	\$850	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$850	\$0	\$850
D3051	Replace gas-fired unit heater	20	1	1.00	EACH	\$1,200.00	Energy & Sustainability	3	\$0	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200	\$1,200
D5012	Replace electrical panel	30	1	1.00	EACH	\$2,500.00	Capital Renewal	4	\$0	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500	\$2,500
D. SERVICES SUB-TOTALS																					
E. EQUIPMENT & FURNISHING																					
E. EQUIPMENT & FURNISHING SUB-TOTALS																					
F. SPECIAL CONSTRUCTION AND DEMOLITION																					
F. SPECIAL CONSTRUCTION AND DEMOLITION SUB-TOTALS																					
G. BUILDING SITEWORK																					
G. BUILDING SITEWORK SUB-TOTALS																					
Z. GENERAL																					
Z. GENERAL SUB-TOTALS																					
									\$2,350	\$29,590	\$23,283	\$1,800	\$0	\$0	\$18,785	\$1,940	\$0	\$0	\$2,350	\$75,398	\$77,748
									\$2,350	\$30,774	\$25,183	\$2,025	\$0	\$0	\$23,769	\$2,553	\$0	\$0	\$2,350	\$84,304	\$86,654

10 YEAR EXPENDITURE FORECAST

Manhattan Heights Park - Building 7
 1600 Manhattan Beach Boulevard
 Manhattan Beach, CA



Rev A

Element No.	Component Description	Estimated Useful Life or Replacement Cycle (Yrs)	Remaining Useful Life (Yrs)	Quantity	Unit of Measurement	Unit Cost	Plan Type	Priority	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	Total	Combined Total	
						\$			1	2	3	4	5	6	7	8	9	10	Deferred	Scheduled		
A. SUBSTRUCTURE																						
A. SUBSTRUCTURE SUB-TOTALS																						
									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
B. SHELL																						
B2011	Repair masonry; replace deteriorated fascia, soffit, siding and trim; replace sealants	7	1	1,380.00	SF	\$3.75	Capital Renewal	5	\$0	\$5,175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,175	\$5,175
B2011	Repaint exterior painted surfaces	4	2	1,380.00	SF	\$3.25	Routine Maintenance	5	\$0	\$0	\$4,485	\$0	\$0	\$0	\$4,485	\$0	\$0	\$0	\$0	\$0	\$8,970	\$8,970
B2021	Replace the wood framed single-paned windows	30	1	4.00	EACH	\$830.00	Capital Renewal	3	\$0	\$3,320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,320	\$3,320
									\$0	\$8,495	\$4,485	\$0	\$0	\$0	\$4,485	\$0	\$0	\$0	\$0	\$17,465	\$17,465	
C. INTERIORS																						
C3012	Repaint interior wall surfaces	4	2	1,100.00	SF	\$3.25	Routine Maintenance	5	\$0	\$0	\$3,575	\$0	\$0	\$0	\$3,575	\$0	\$0	\$0	\$0	\$0	\$7,150	\$7,150
									\$0	\$0	\$3,575	\$0	\$0	\$0	\$3,575	\$0	\$0	\$0	\$0	\$7,150	\$7,150	
D. SERVICES																						
D2021	Replace water service piping	50	7	25.00	LF	\$20.21	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$505	\$0	\$0	\$0	\$0	\$505	\$505
D2022	Install new water heater	20	0	1.00	EACH	\$500.00	Deferred Maintenance	3	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
D2031	Undertake camera inspection of sewer lines	N/A	0	1.00	LS	\$1,000.00	Deferred Maintenance	3	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$1,000
D3051	Replace gas-fired wall-mounted unit heater	20	1	1.00	EACH	\$1,200.00	Energy & Sustainability	3	\$0	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200	\$1,200
D5012	Replace electrical panel	30	1	1.00	EACH	\$2,500.00	Capital Renewal	4	\$0	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500	\$2,500
									\$1,500	\$3,700	\$0	\$0	\$0	\$0	\$0	\$505	\$0	\$0	\$1,500	\$4,205	\$5,705	
E. EQUIPMENT & FURNISHING																						
E. EQUIPMENT & FURNISHING SUB-TOTALS																						
									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
F. SPECIAL CONSTRUCTION AND DEMOLITION																						
F. SPECIAL CONSTRUCTION AND DEMOLITION SUB-TOTALS																						
									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
G. BUILDING SITEWORK																						
G. BUILDING SITEWORK SUB-TOTALS																						
									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Z. GENERAL																						
Z. GENERAL SUB-TOTALS																						
									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
									\$1,500	\$12,195	\$8,060	\$0	\$0	\$0	\$8,060	\$505	\$0	\$0	\$1,500	\$28,820	\$30,320	
									\$1,500	\$12,683	\$8,718	\$0	\$0	\$0	\$10,198	\$665	\$0	\$0	\$1,500	\$32,264	\$33,764	

10 YEAR EXPENDITURE FORECAST

Manhattan Heights Park Site Systems
 1600 Manhattan Beach Boulevard
 Manhattan Beach, CA



Rev A

Element No.	Component Description	Estimated Useful Life or Replacement Cycle (Yrs)	Remaining Useful Life (Yrs)	Quantity	Unit of Measurement	Unit Cost	Plan Type	Priority	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	Total	Combined Total	
						\$			1	2	3	4	5	6	7	8	9	10	Deferred	Scheduled		
A. SUBSTRUCTURE																						
A. SUBSTRUCTURE SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
B. SHELL																						
B. SHELL SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
C. INTERIORS																						
C. INTERIORS SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
D. SERVICES																						
D. SERVICES SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
E. EQUIPMENT & FURNISHING																						
E. EQUIPMENT & FURNISHING SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
F. SPECIAL CONSTRUCTION AND DEMOLITION																						
F. SPECIAL CONSTRUCTION AND DEMOLITION SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
G. BUILDING SITEWORK																						
G2031	Mill and resurface the asphalt pavement	20	2	200.00	SY	\$15.00	Capital Renewal	3	\$0	\$0	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000	\$3,000
G2041	Replace sections of chain link fencing	15	5	140.00	LF	\$24.53	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$3,434	\$0	\$0	\$0	\$0	\$0	\$0	\$3,434	\$3,434
G2042	Crack repair	N/A	1	30.00	LF	\$30.00	Capital Renewal	3	\$0	\$900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900	\$900
G2044	Replace monument signage	10	1	1.00	EACH	\$1,000.00	Capital Renewal	3	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$1,000
G2045	Replace the dumpster enclosure	10	4	1.00	LS	\$2,500.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500	\$2,500
G2047	Resurface the tennis, paddle ball and basketball courts	15	10	30,440.00	SF	\$1.22	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,137	\$0	\$37,137	\$37,137
G4021	Replace lighting system with Musco Eco lighting and conduct repairs	15	10	1.00	LS	\$200,000.00	Capital Renewal	3	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$200,000
G. BUILDING SITEWORK SUB-TOTALS									\$0	\$201,900	\$3,000	\$0	\$2,500	\$3,434	\$0	\$0	\$0	\$37,137	\$0	\$247,971	\$247,971	
Z. GENERAL																						
Z. GENERAL SUB-TOTALS									\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expenditure Totals per Year									\$0	\$201,900	\$3,000	\$0	\$2,500	\$3,434	\$0	\$0	\$0	\$37,137	\$0	\$247,971	\$247,971	
Total Cost (Inflated @ 4% per Yr.)									\$0	\$209,976	\$3,245	\$0	\$2,925	\$4,178	\$0	\$0	\$0	\$52,857	\$0	\$273,181	\$273,181	

Appendix B

Photographs



Photograph 1

View of the north façade of the Community Center



Photograph 2

View of the west façade of the Community Center



Photograph 3

View of the south façade of the Community Center



Photograph 4

View of the roof framing of the Community Center.



Photograph 5

View of roofing and equipment screening walls of the Community Center



Photograph 6

View of roofing and equipment screening walls of the Community Center



Photograph 7

View of the north façade of Building 6 and Restrooms



Photograph 8

View of the south façade of Building 6 and Restrooms



Photograph 9

View of the deteriorated soffit of Building 6 and Restrooms



Photograph 10

Detail view deteriorated gable siding on Building 6 and Restrooms



Photograph 11

View of cracking in the masonry of Building 6 and Restrooms



Photograph 12

Detail view of the roofing and cupola siding on Building 6 and Restrooms



Photograph 13

View of the roof framing of Building 6 and Restrooms



Photograph 14

View of deteriorated door and frame at the restroom in Building 6 and Restrooms



Photograph 15

View of the north and east facades of Building 7



Photograph 16

View of deterioration in the fascia of Building 7



Photograph 17

View of deterioration in the fascia of Building 7



Photograph 18

View of the roofing of View of deterioration in the fascia of Building 7



Photograph 19

View of the roof framing in Building 7.



Photograph 20

View of the main entrance doors and foyer of the Community Center



Photograph 21

View of the auditorium in the Community Center



Photograph 22

View of the kitchen in the Community Center



Photographs 23A and 23B

Views of the activity rooms in the Community Center



Photograph 24

View of the men's restroom in the Community Center



Photograph 25

View of the men's restroom in the Community Center



Photograph 26

View of the Building 6 and Restrooms interior



Photograph 27

View of the men's restroom in Building 6 and Restrooms



Photograph 28

View of the men's restroom in Building 6 and Restrooms.



Photograph 29

View of the Building 7 interior



Photograph 30

View of the domestic water heater in the Community Center



Photograph 31

View of the rooftop package HVAC units on the roof of the Community Center



Photograph 32

View of the rooftop package HVAC units on the roof of the Community Center



Photograph 33

View of the exhaust fans on the roof of the Community Center



Photograph 34

View of the attic space ductwork in the Community Center



Photograph 35

View of the unit heater in Building 6 and Restrooms



Photograph 36

View of the unit heater in Building 7



Photograph 37

View of the fire water line valves, post indicator valve and Siamese hose connection



Photographs 38A and 38B

Views of the fire sprinkler riser (right) and fire hose cabinet in the Community Center



Photograph 39

View of the electrical service panel and meter on the south façade of Building 6 and Restrooms

Photograph 40

View of the electrical service panel and meter on the east façade of Building 7



Photograph 41

Overview of site, looking east toward the basketball courts, baseball field and tennis courts



Photograph 42

Overview of site, looking southeast toward Building 7, the baseball field and tennis courts





Photograph 43

View of the playground



Photograph 44

View of the climbing wall



Photograph 45

View of one of the paddle ball courts



Photograph 46

View of the baseball field



Photograph 47

View of the bleachers at the baseball field



Photograph 48

View of chain link fencing deterioration



Photograph 49

View of the cracking in the asphalt pavement



Photograph 50

View of retaining wall and guard rails along the north side of the site



Photograph 51

View of one ramp with railings at the west side of the site



Photograph 52

View of stairs at the west side of the site



Photograph 53

View of the retaining wall at the west side of the site



Photograph 54

View of the dumpster enclosure adjacent to Building 6 and Restrooms

Appendix C

Asset Inventory



ASSET INVENTORY
Manhattan Heights Park

D20 PLUMBING

Community Center

Location	Equipment Type	Manufacturer	Model #	Serial #	Fuel / Rating	Capacity	≈ Year of Installation
Closet East Side	Domestic Water Heater	Bradford White	U50T55 FR3N	JB1625 7170	Natural Gas / 55,000 BTUH	48 Gal	2013

D30 HVAC

Community Center

Location	Equipment Type	Manufacturer	Model #.	Serial #	Capacity / Rating	Fuel Type	≈ Year of Installation
East Facade	(2) Air Curtain	Berner Intl.	ASN10 36AAP	ASN1036A APW 09870381	¾ HP / 2,400 CFM	Elec	2013
Rooftop	Package HVAC Unit	Trane	YHC048 E3RLA13	120512 013L	4 Tons Cooling	Elec / Gas	2013
Rooftop	Package HVAC Unit	Trane	YCD181F3L 044	120610 639D	15 Tons Cooling	Elec / Gas	2013
Rooftop	Package HVAC Unit	Trane	YCD181F3L 044	120610 696D	15 Tons Cooling	Elec / Gas	2013
Rooftop	Make-Up Air Unit	Greenheck	PVF100H	Unknown	100,000 BTUH	Gas	2013
Rooftop (Kitchen)	Exhaust Fan KEF-1	Greenheck	CUBE-141-5-6	12744434 1202	2,500 CFM	Elec	2013
Rooftop	Exhaust Fan RF-1	Greenheck	GB-240-20-X	12744435 1202	8,000 CFM	Elec	2013

Rooftop	Exhaust Fan RF-2	Greenheck	GB-180-10- X	12744436 1202	4,500 CFM	Elec	2013
Rooftop	Exhaust Fan RF-3	Greenheck	GB-180-10- X	12744437 1202	4,500 CFM	Elec	2013

Building 6 and Restrooms

Location	Equipment Type	Manufacturer	Model #.	Serial #	Capacity / Rating	Fuel Type	≈ Year of Installation
Activity	Unit Heater	Utility	Unknown	Unknown	Unknown	Gas	1970

Building 7

Location	Equipment Type	Manufacturer	Model #.	Serial #	Capacity / Rating	Fuel Type	≈ Year of Installation
Activity Room	Unit Heater	Mission Appliance Corp.	SunAir 57 25	29759	25,000 BTUH	Gas	1970

Unknown = Access limited or equipment had no name plates present.

Assumed = Based on size of unit and area it serves / or possible year installed.

Appendix D

Document Review and
Warranty Information

DOCUMENT REVIEW & WARRANTY INFORMATION
Manhattan Heights Park

In addition to the completion of our visual evaluation, Faithful+Gould interviewed the various representatives from the City of Manhattan Beach (where possible), and reviewed the following documentation:

Manhattan Heights Park Community Center renovation drawings, prepared by Douglas Andersen, dated August 18, 2011

Manhattan Heights Park site plan, utilities plan, electrical plans, prepared by the City of Manhattan Beach Public Works Department, dated November 11, 2000

Comprehensive Energy Audit; PE Consulting; dated October 13, 2009

Roofing Evaluation Report; Tremco Inc.; dated June 4, 2013

Appendix E

Seismic Structural Report





SEISMIC/STRUCTURAL CONDITION ASSESSMENT OF MANHATTAN HEIGHTS COMMUNITY CENTER

**1600 Manhattan Beach Blvd.
Manhattan Beach, CA 90266**

I. INTRODUCTION

This report summarizes the results of a seismic/structural condition assessment of the existing Manhattan Beach Community Center building located at the above referenced address. The review was conducted in accordance with the structural life safety requirements of the current California Building Code (2010 edition), other relevant engineering standards such as the FEMA guidelines, and the prevalent structural engineering practice. The purpose of the seismic/structural condition assessment is to determine the subject building's general structural conditions, adequacy with respect to its occupancy and use, remaining serviceable life expectancy, needs for near term capital repairs/replacements/upgrades, and recommended time frame for capital improvement work.

The findings and recommendations of this report are based on an on-site observation conducted on May 17, 2013 and a review of the following documents:

- Record architectural renovation drawings for Manhattan Heights Community Center by Andresen Architecture Inc., dated 08/18/2011.
- Record architectural floor plan drawings for Manhattan Heights Community Center by Public Works Department, drawn by A.S. Hunter, dated 08/12/1996.

The structural systems and elements of the building were determined based on a review of the aforementioned available architectural drawings and data collected during the on-site visual observation. Structural analysis based on the current building code's structural life safety requirements was conducted to establish a baseline structural asset model to support the assessment of the existing structure's load resisting adequacy, serviceable life expectancy, and needs for near term capital repairs/replacements/upgrades. The data and findings from the field observation and desktop analysis were evaluated to develop the engineer's opinions and recommendations for future capital improvements and time frames.

II. DESCRIPTION OF EXISTING BUILDING STRUCTURES

Originally designed in 1968, presumably based on the 1967 Uniform Building Code, the Manhattan Heights Community Center is a 6,800 s.f. one-story wood frame structure dedicated in 1970. The facility was architecturally renovated in 2011 in compliance with the 2010 California Building Code (2009 IBC). The renovations included an update to existing restrooms to comply with ADA and add enhanced ventilation, a complete remodel of the kitchen, the addition of new flooring and a fire sprinkler system throughout, a new sound system in the auditorium, and a complete replacement of the HVAC system to be mounted on the roof. The building structure was not part of the renovation. The primary structural construction material is wood, with partial brick masonry finish. The structural system consists of wood rafters supported by glue-laminated (Glu-Lam) wood arches and wood posts and stud walls on slabs on grade and shallow foundation.

The Community Center is bounded by Manhattan Park to the east, a small playground to the south, and a library to the west, raised and separated by a 6' tall retaining wall (Fig 1). The building footprint is 108'-6" long (north-south direction) by 85'-0" wide (east-west direction) by 16'-4" tall (finished floor to the peak of the roof) (Fig. 2). The (2) roof mounted HVAC systems extend an additional 3'-4" above the roof line and are concealed by wooden screen walls (Fig 3).

The roof framing system consists of glulam arches (running north-south) that extend to a cantilevered fascia on the north end of the building. These glulam arches span 48'-4" in the large auditorium (Fig 4) and provide framing for the north half of the building. The remaining framing consists of sloped wooden girders (running east-west) on the south portion of the building providing a covered overhand and again extending to cantilevered fascia on each end (Fig. 5). The main roof framing is supported by wooden columns that bear on presumably treated wooden stubs (Fig 6). The sub members follow typical wood construction and are covered with asphalt shingles.

The exterior walls of the building are plywood shear walls finished with a plaster veneer. At the north end of the building (main entrance), the walls are finished with brick veneer to provide a decorative facade and act as screen walls from the street.

Lateral forces from wind and earthquake are collected by the wooden roof diaphragm and distributed to the plywood shear walls around the building perimeter.

III. EXISTING STRUCTURAL CONDITIONS

No major distress or damages to the structural and non-structural components of the building were visible during the on-site observation. Minor cracking was noted to have occurred in the plaster along the east side of the building which has since been repaired (Fig 7). Additionally a medium (1/8") sized crack was observed at the intersection of the 2 perpendicular roof framing systems (Fig 8). Such cracking is probably the result of past building movement due to seismic motions and the discontinuity between systems. Judging by the limited extent of the cracking, the effect on the structural/seismic life safety is negligible.

Minor cracking was also noted during the on-site observation in the slab on grade at various locations around the building. The most notable occurs at the base of a column supporting the overhang at the south end of the building. Large (3/4") gaps have formed at the control joints along the east side of the building and can be attributed to minor soil settlement or heaving over time and does not pose a structural concern (Fig 9). Medium size cracks also appear multiple times in the low planter retaining walls located at the north-east corner of the building and along the front property line. These can be attributed to root growth and/or seismic movement. The extent of the cracking is very minor and poses no structural life safety concerns.

An indication of possible minor water damage was observed at the north-east corner of the building indicated by a slight bulging in the stucco veneer (Fig 10). While very minor, a more invasive investigation may be warranted in future capital improvement measures to determine the presence/extent of the damage and to mitigate against a potential for mold. Currently it does not pose any structural life safety concerns.

Finally, at the time of the site visit there was roughly 2 feet of excavated soil adjacent to slab on grade along the east side of the building. With no temporary shoring, the soil has the opportunity to deteriorate under the slab and could cause additional cracking and settlement if not addressed.

Compared with buildings of similar vintage and type of construction, the overall condition of the Community Center appears to be very good and well maintained. There is no obvious outstanding structural issue that requires immediate mitigation except for the previously mentioned excavation adjacent to slab on grade and indication of possible water infiltration.

IV. EXPECTED STRUCTURAL PERFORMANCE AND RISK

Structurally, the existing Manhattan Heights Community Center is expected to perform well against the day to day occupancy loads within a time frame of 10 years in the short term and 30 years in the long term. The building's risk exposure to earthquake is less predictable due to the uncertainties in predicting future seismic motion intensities. Based on modern seismic risk and hazard evaluation methodologies, we would estimate the Community Center's potential structural damage due to future severe seismic activities to be approximately 15% of its structural replacement dollar value.

It was noted that the equipment in the kitchen was not braced laterally and good practice would advise some form of lateral bracing to ensure against overturning and possible personal injury in the event of an earthquake (Fig 13).

V. ESTIMATED COST FOR REPAIR AND UPGRADE

Currently, there are no outstanding structural issues within the Manhattan Heights Community Center that require immediate repair or mitigation again except for the temporary excavation and a further investigation into the possible water damage. The minor cracking in the slabs on grade noted in the present structural inventory poses no immediate concerns about the building's structural performance or safety, and can be repaired with patching with cement based mortar or epoxy materials. Depending on the City's capital improvement budgets, such minor repair can be included in the City's mid-term (4-6 years) or short term (1-3 years) capital improvement programs. The estimated cost for such repair is summarized in the following table:

Item	Unit Cost	Quantity	Estimate Cost
Crack Repair in Planter Retaining Wall	\$30	30 feet	\$900
Crack Repair in Slab	\$20	30 feet	\$600

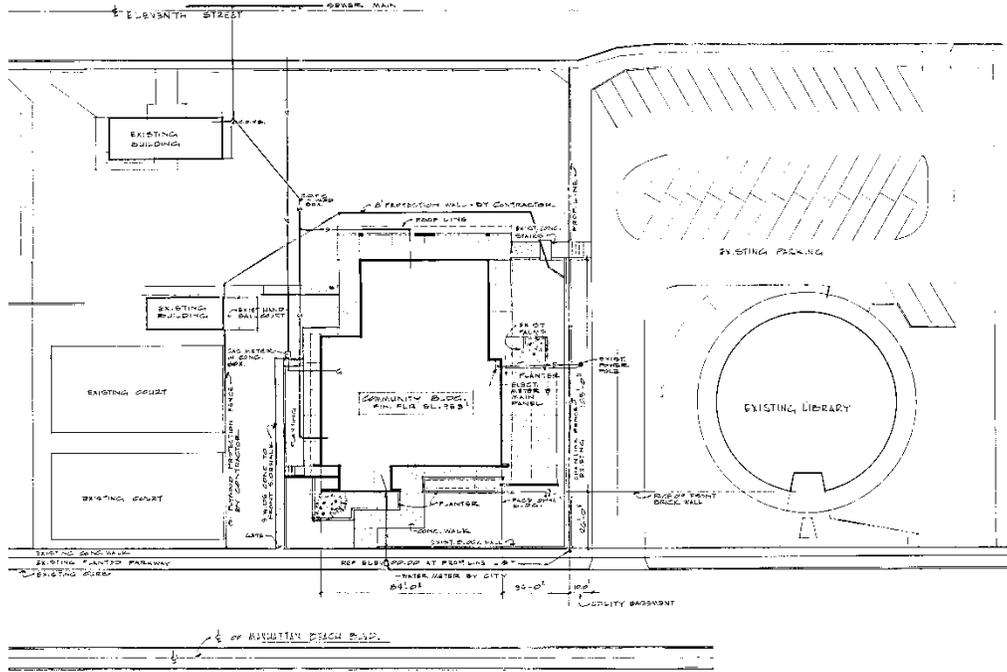


Figure 1: Site Layout

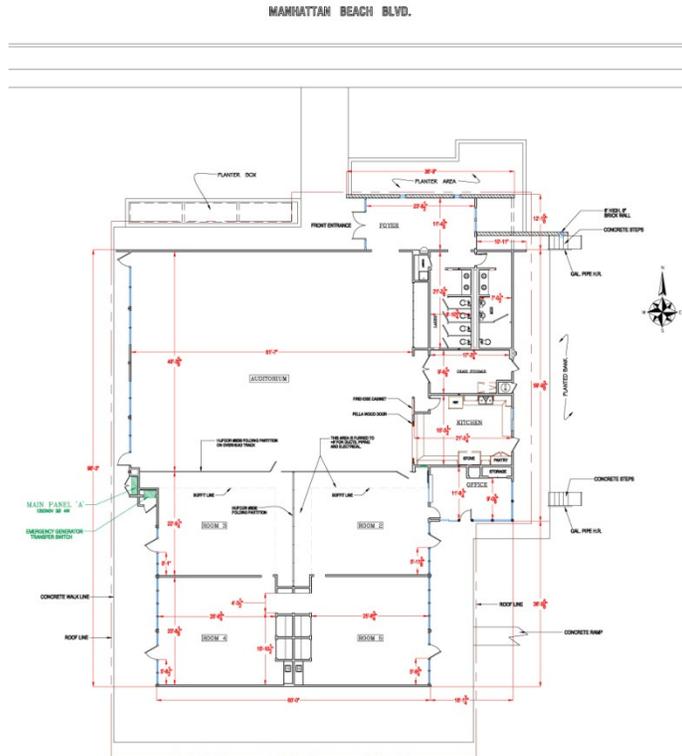


Figure 2: Floor Plan Dimensions



Figure 3: HVAC Unit & Screen Wall



Figure 4: Glulam Arches in Auditorium



Figure 5: Slanted Girders at Overhand



Figure 6: Typical Wooden Col. Support



Figure 7: Patched Cracks in Stucco



Figure 8: Crack between Roof Framing



Figure 9: Cracks and Heaving/Settlement in Slab on Grade



Figure 10: Bulging Stucco



Figure 11: Temporary Excavation



Figure 12: Crack in Low Retaining Walls



Figure 13: Unsupported Equipment

Appendix F

Glossary of Terms

Acronyms & Glossary of Terms

CMU	Concrete Masonry Unit
BUR	Built-Up Roof
EIFS	Exterior Insulation and Finish System
EPDM	Ethylene Propylene Diene Monomer
SC	Solid Core Doors
HM	Hollow Metal Doors
MH	Man Holes
ABC	Aggregate Base Course
EMT	Electrical Metallic Conduit
EUL	Estimated Useful Life
RUL	Recommended Useful Life
EOL	End of Life
FCI	Facility Condition Index
CRV	Current Replacement Value
DM	Deferred Maintenance
SF	Square Foot
SY	Square Yards
PSF	Pounds-Per-Square-Foot
PSI	Pounds-Per-Square-Inch
NFPA	National Fire Protection Association
FACP	Fire Alarm Control Panel
NAC	Notification Appliance Circuit
FCC	Fire Command Center
HVAC	Heating Ventilating and Air conditioning
VAV	Variable Air Volume
AHU	Main Air Handling Units
HP	Horse Power
FSS	Fuel Supply System
MDP	Main Distribution Panel
SES	Service Entrance Switchboard's
NEMA	National Electrical Manufactures Association
HID	Intensity Discharge
EMT	Electrical Metallic Tubing
KVA	kilovolt-ampere
RO	Reverse Osmosis
BTU/HR	British Thermal Units per Hour
kW	Kilowatt
FPM	Feet per Minute (Elevator Speed)
Amp	Amperage

Acronyms & Glossary of Terms

BTU – British Thermal Unit; the energy required to raise the temperature of one pound of water by one degree.

Building Envelope - The enclosure of the building that protects the building's interior from the outside elements, namely the exterior walls, roof and soffit areas.

Building Systems – Interacting or independent components or assemblies, which from single integrated units, that comprise a building and its site work, such as, pavement and flatwork, structural frame, roofing, exterior walls, plumbing, HVAC, electrical, etc.

Caulking – Soft, putty-like material used to fill joints, seams, and cracks.

Codes – See building codes.

Component – A fully functional portion of a building system, piece of equipment, or building element.

Deferred Maintenance – Physical deficiencies that cannot be 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.

Expected Useful Life (EUL) – The average amount of time in years that an item, component or system is estimated to function when installed new and assuming routine maintenance is practiced.

Facility – All or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property located on site.

Flashing – A thin, impervious sheet of material placed in construction to prevent water penetration or to direct the flow of water. Flashing is used especially at roof hips and valleys, roof penetrations, joints between a roof and a vertical wall, and in masonry walls to direct the flow of water and moisture.

Remaining Useful Life (RUL) – A subjective estimate based upon observations, or average estimates of similar items, components, or systems, or a combination thereof, of a number of remaining years that an item, component, or system is established to be able to function in accordance with its intended purpose before warranting replacement. Such period of time is affected by the initial quality of an item, component, or system, the quality of the initial installation, the quality and amount of preventative maintenance exercised, climatic conditions, extent of use, etc.

Thermal Resistance (R) – A unit used to measure a material's resistance to heat transfer. The formula for thermal resistance is: $R = \text{Thickness}(\text{in inches})/K$

Structural Frame – The components or building systems that support the building's nonvariable forces or weights (dead loads) and variable forces or weights (live loads).

Warranty – Legally enforceable assurance of quality or performance of a product or work, or of the duration of satisfactory performance. Warranty guarantee and guaranty are substantially identical in meaning; nevertheless, confusion frequently arises from supposed distinctions attributed to guarantee (or guaranty) being exclusively indicative of duration of satisfactory performance or of a legally enforceable assurance furnished by a manufacturer or other third party. The uniform commercial code provisions on sales (effective in all states except Louisiana) use warranty but recognize the continuation of the use of guarantee and guaranty.