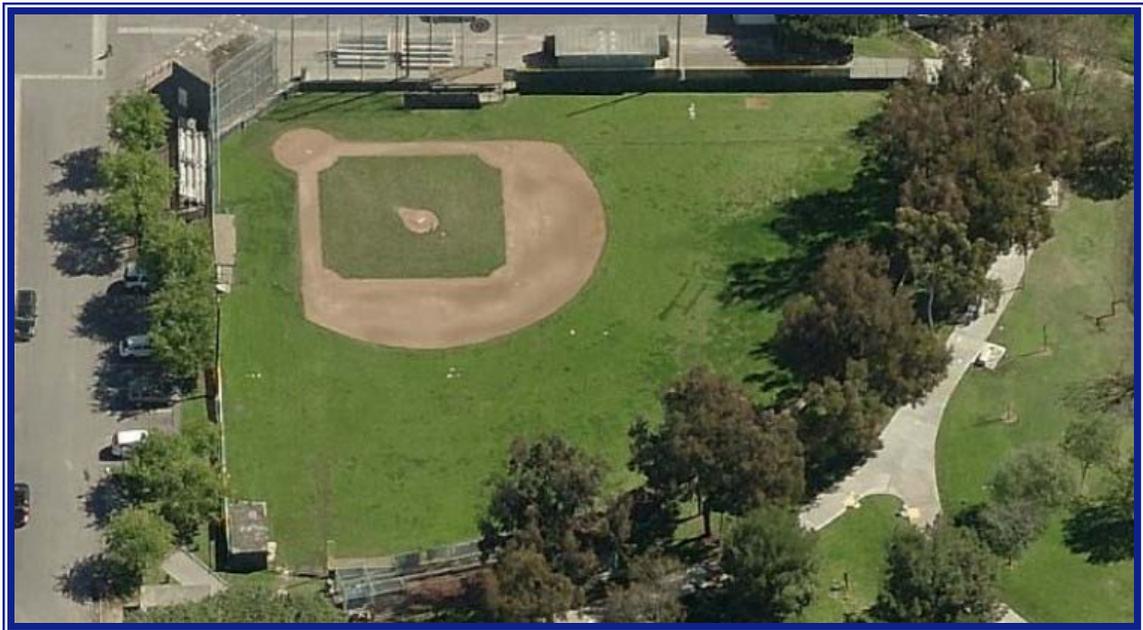


Citywide  
Facility Condition Assessment

Report of  
Facility Condition Assessment

For  
Premier Baseball Field  
18<sup>th</sup> Street and North Herrin Avenue, Manhattan Beach, CA



*August 23, 2013  
(Rev A)*

Provided By:

**Faithful+Gould, Inc.**

Provided For:



## TABLE OF CONTENTS

|                                        |           |
|----------------------------------------|-----------|
| <u>SECTION 1 - EXECUTIVE SUMMARY</u>   | <u>2</u>  |
| <u>SECTION 2 - A SUBSTRUCTURE</u>      | <u>22</u> |
| <u>SECTION 3 - B SHELL</u>             | <u>24</u> |
| <u>SECTION 4 - C INTERIORS</u>         | <u>32</u> |
| <u>SECTION 5 - D SERVICES</u>          | <u>36</u> |
| <u>SECTION 7 - G BUILDING SITEWORK</u> | <u>43</u> |

## APPENDICES

|                                                            |
|------------------------------------------------------------|
| <u>APPENDIX A 10-YEAR EXPENDITURE FORECASTS</u>            |
| <u>APPENDIX B FACILITY PHOTOGRAPHS</u>                     |
| <u>APPENDIX C ASSET INVENTORY</u>                          |
| <u>APPENDIX D DOCUMENT REVIEW AND WARRANTY INFORMATION</u> |
| <u>APPENDIX E GLOSSARY OF TERMS</u>                        |

## 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 Premier Baseball Field located at 18<sup>th</sup> Street and North Herrin Avenue, Manhattan Beach, CA (The Facility). The facility consisted of the following buildings:

- Restrooms
- Storage Building

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 EX-4 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 15, 2013, Mr. Jeffrey Dillon of Faithful+Gould visited the facility to observe and document the condition of the 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

|                                          |                                                                          |                                                                                                                                             |                                                                     |
|------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>BUILDING NAME:</b>                    | Premier Field Restrooms                                                  | <b>LAT/LONG:</b>                                                                                                                            | 33° 89' 17" N / -118° 38' 53" W                                     |
| <b>ADDRESS:</b>                          | 18 <sup>th</sup> Street and N Herrin Avenue<br>Manhattan Beach, CA 90266 | <b>OCCUPANCY STATUS:</b><br>OCCUPIED <input checked="" type="checkbox"/> VACANT <input type="checkbox"/> PARTIALLY <input type="checkbox"/> |                                                                     |
| <b>HISTORIC DISTRICT:</b>                | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>      | <b>HISTORIC BUILDING:</b>                                                                                                                   | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> |
| <b>GROSS SQUARE FOOTAGE OF BUILDING:</b> | 344                                                                      | <b>GROSS SQUARE FOOTAGE OF LAND:</b>                                                                                                        | 46,000 (estimated) Entire Facility                                  |
| <b>CURRENT REPLACEMENT VALUE:</b>        | \$84,624                                                                 | <b>YEAR OF CONSTRUCTION:</b>                                                                                                                | 1986                                                                |
|                                          |                                                                          | <b>BUILDING EUL:</b>                                                                                                                        | 60 Years                                                            |
|                                          |                                                                          | <b>BUILDING RUL:</b>                                                                                                                        | 33 Years                                                            |
| <b>BUILDING USE:</b>                     | Restrooms                                                                | <b>NUMBER OF STORIES:</b>                                                                                                                   | 1                                                                   |

**BUILDING DESCRIPTION**

The Premier Baseball Field Restrooms are located at along North Herrin Avenue just south of the intersection of 18<sup>th</sup> Street and North Herrin Avenue and was constructed in circa 1986.



The building has a wood joist roof construction which is supported via concrete masonry units that have a decorative split face finish. The low-slope roof area contained a BUR roof covering. The floor consisted of a cast-in-place reinforced slab-on-grade concrete slab. Windows are limited to mesh covered openings at each elevation and doors consisted of hollow core steel units.

The interior finishes of the building contained unfinished concrete masonry unit walls, the exposed concrete slab-on-grade floor and the painted roof framing and sheathing at the ceilings.



The building is not provided with heating or cooling. Ventilation is via the window openings. Hot water is also not provided to the facility. The Main Distribution Panel is a Crouse Hinds unit that is rated at 120/208 volts at 60-amps. The interior lighting is generally provided by surface mounted two lamp 4' fluorescent fixtures with T8 watt bulbs and electronic ballasts.

The does not building contains a wet-pipe sprinkler system, fire alarm system or an intruder security alarm.

**Table EX-2 Facility Details**

|                                          |                                                                          |                                                                                                                 |                                    |
|------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------|
| <b>BUILDING NAME:</b>                    | Premier Field Storage Building                                           | <b>LAT/LONG:</b>                                                                                                | 33° 89' 17" N / -118° 38' 53" W    |
| <b>ADDRESS:</b>                          | 18 <sup>th</sup> Street and N Herrin Avenue<br>Manhattan Beach, CA 90266 | <b>OCCUPANCY STATUS:</b>                                                                                        |                                    |
| <b>HISTORIC DISTRICT:</b>                | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>      | OCCUPIED <input checked="" type="checkbox"/> VACANT <input type="checkbox"/> PARTIALLY <input type="checkbox"/> |                                    |
| <b>HISTORIC BUILDING:</b>                | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>      |                                                                                                                 |                                    |
| <b>GROSS SQUARE FOOTAGE OF BUILDING:</b> | 200                                                                      | <b>GROSS SQUARE FOOTAGE OF LAND:</b>                                                                            | 46,000 (estimated) Entire Facility |
| <b>CURRENT REPLACEMENT VALUE:</b>        | \$19,200                                                                 | <b>YEAR OF CONSTRUCTION:</b>                                                                                    | 1986                               |
|                                          |                                                                          | <b>BUILDING EUL:</b>                                                                                            | 60 Years                           |
|                                          |                                                                          | <b>BUILDING RUL:</b>                                                                                            | 33 Years                           |
| <b>BUILDING USE:</b>                     | Storage                                                                  | <b>NUMBER OF STORIES:</b>                                                                                       | 1                                  |

**BUILDING DESCRIPTION**

The Storage Building is located at the northern end of the baseball field located at Premier Field at 18<sup>th</sup> Street and North Herrin Avenue and was constructed in circa 1986.

The building has a wood joist roof construction which is supported via concrete masonry unit walls that have a decorative split face finish. The low-slope roof area contained a BUR roof covering. The floor consisted of a cast-in-place reinforced slab-on-grade concrete slab. There are no windows at the building and the doors are limited to the two hollow core steel units at the front elevation.



The interior finishes of the building contained the concrete-slab-on grade and the inner side of the concrete masonry unit perimeter walls.

The building is provided with electric service rated at 120/240 volts and 30 amps.

The building does not contain HVAC, domestic water, wet-pipe sprinkler system, fire alarm system, intruder security alarm or emergency generator.

## BUILDING EXPENDITURE SUMMARY

The building expenditure summary section provides an executive overview of the findings from the assessments. Charts EX-1 and EX-2 provide 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-3 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. In addition, 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.

### Premier Baseball Field Restrooms

The results illustrate a total anticipated expenditure over the study period of circa \$69,306.

Chart EX-1 Building Expenditure Summary <sup>1 & 2</sup>



## KEY FINDINGS

- ✚ B Shell: Repaint exterior wall surfaces at an estimated cost of \$894 in years 2013, 2017 and 2021
- ✚ B Shell: Replace the BUR covering at an estimated cost of \$5,850 in year 2019
- ✚ C Interiors: Repaint interior wall and ceiling surfaces at an estimated cost of \$4,225 in years 2013, 2017 and 2021
- ✚ G Building Sitework: Repair and paint the masonry walls at an estimated cost of \$1,225 in year 2014
- ✚ G Building Sitework: Replace the dugout roofs at an estimated cost of \$1,890 in year 2014

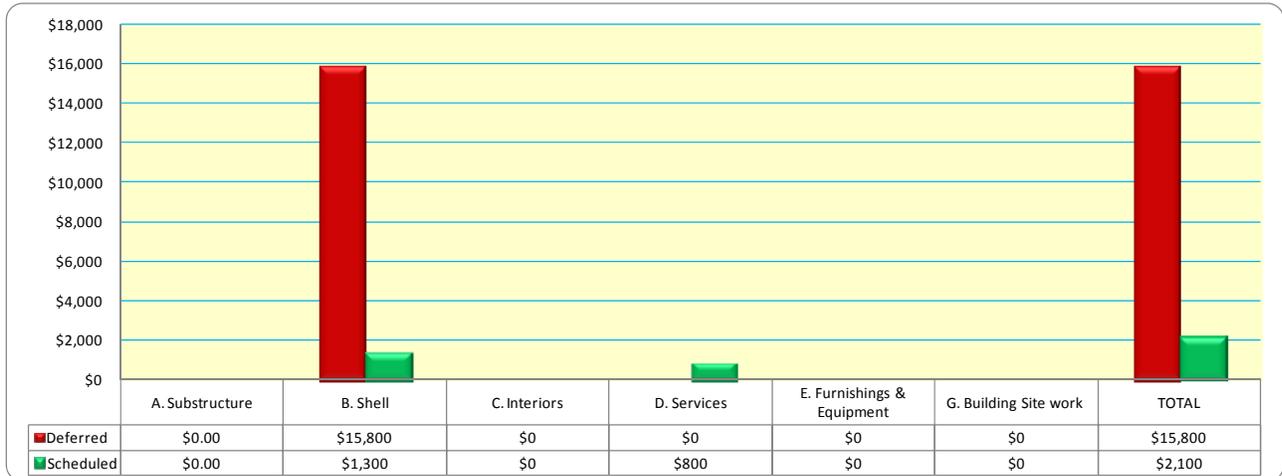
<sup>1</sup> All costs presented in present day values

<sup>2</sup> Costs represent total anticipated values over the 10 year study period

**Premier Baseball Field Storage Building**

The results illustrate a total anticipated expenditure over the study period of circa \$17,900.

**Chart EX-2 Building Expenditure Summary <sup>1 & 2</sup>**



**KEY FINDINGS**

- ✚ B Shell: Replace roof deck and repair structural issues at an estimated cost of \$3,800 in year 2013
- ✚ B Shell: Replace the exterior fascia at an estimated cost of \$4,000 in year 2013
- ✚ B Shell: Replace the doors and frame at an estimated cost of \$4,200 in year 2013
- ✚ B Shell: Replace the BUR covering at an estimated cost of \$3,150 in year 2013

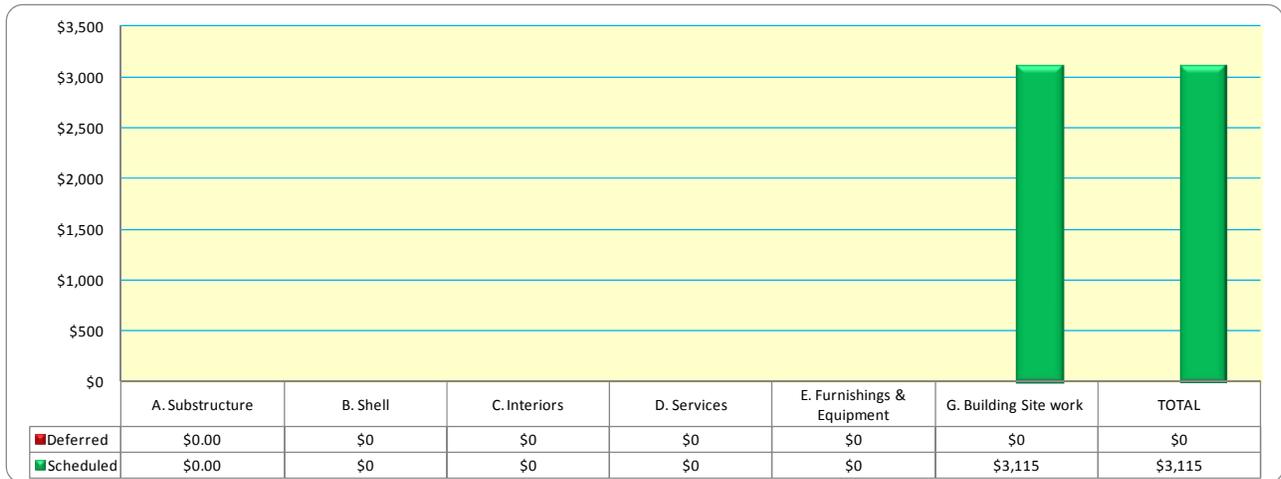
<sup>1</sup> All costs presented in present day values

<sup>2</sup> 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 \$3,115.

**Chart EX-3 Building Expenditure Summary <sup>1 & 2</sup>**



**KEY FINDINGS**

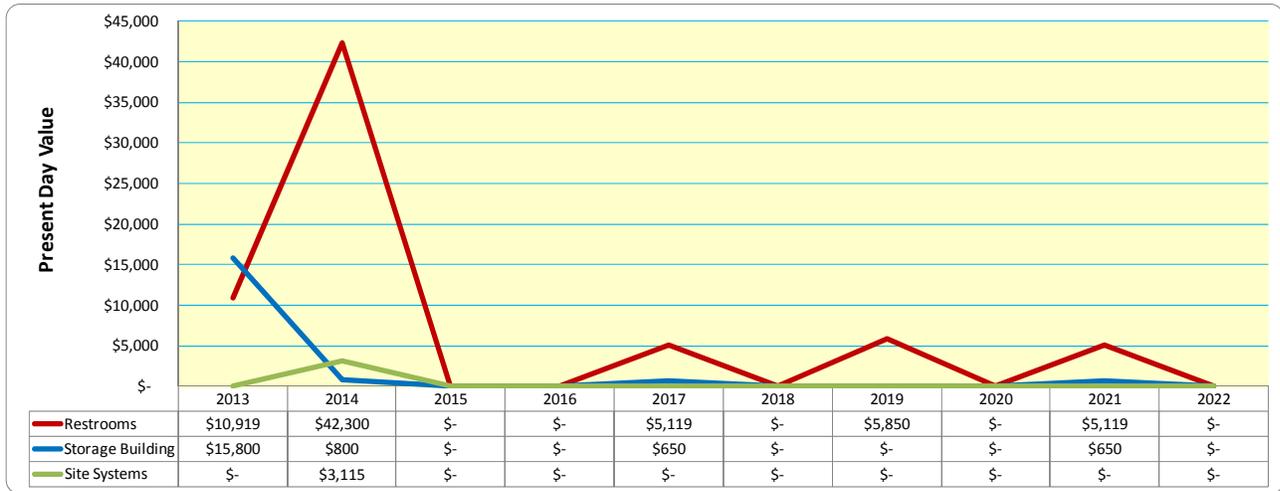
- + G Building Sitework: Repair and paint the masonry walls at an estimated cost of \$1,225 in year 2014
- + G Building Sitework: Replace the dugout roofs at an estimated cost of \$1,890 in year 2014

<sup>1</sup> All costs presented in present day values

<sup>2</sup> Costs represent total anticipated values over the 10 year study period

Chart EX-4 illustrates a summary of yearly anticipated expenditures over the cost study period for the two buildings. A detailed breakdown of anticipated expenditures is contained within Appendix A of this report.

Chart EX-4 Expenditure Forecast <sup>1 & 2</sup>



<sup>1</sup> All costs presented in present day values

<sup>2</sup> Costs represent total anticipated values over the 10 year study period

This chart highlights expenditure for the buildings within year 2014 due to the following systems which are expected to reach their Estimated Useful Life (EUL) and therefore due for replacement. The line represents the total expenditure for each year and is a useful tool to indicate the magnitude of the impending issues the building will face.

Restrooms

Storage Building

Year 2014

Year 2014

- + Renovate restrooms
- + Replace all doors and frames
- + Repair the masonry retaining walls
- + Replace the dugout awning roofs

- + Renovate restrooms
- + Replace all doors and frames
- + Repair the masonry retaining walls



Table EX-4 provides a calculation of the FCI for the building illustrating both the current condition of the building and the likely condition of the building should the required funding not be expended over the study period. The results of the study indicate that currently the buildings contain a POOR and V.POOR facility condition index ratings.

**Table EX-4 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 |
|------------------|-------------------|-------------------------|-------------|---------------------------------|---------------------------------|-----------|--------------------|
| Restrooms        | Current FCI Ratio | 344                     | \$246       | \$84,624                        | \$0                             | 12.9%     | <b>POOR</b>        |
| Restrooms        | Year 10 FCI Ratio | 344                     | \$246       | \$84,624                        | \$12,103                        | 81.9%     | <b>V.POOR</b>      |
| Storage Building | Current FCI Ratio | 200                     | \$96        | \$19,200                        | \$8,137                         | 82.3%     | <b>V.POOR</b>      |
| Storage Building | Year 10 FCI Ratio | 200                     | \$96        | \$19,200                        | \$10,787                        | 93.2%     | <b>V.POOR</b>      |

Chart EX-5 indicates the effects of the FCI ratio per year, assuming the required funds and expenditures **ARE** made to address the identified works each year. As explained, the restroom building has a POOR condition rating (above 10%) and the storage building has a V.POOR (above 60%) at the start of the study period. They each return to GOOD condition if the work is completed.

Chart EX-5 Year by Year Effects of FCI over the Study Period

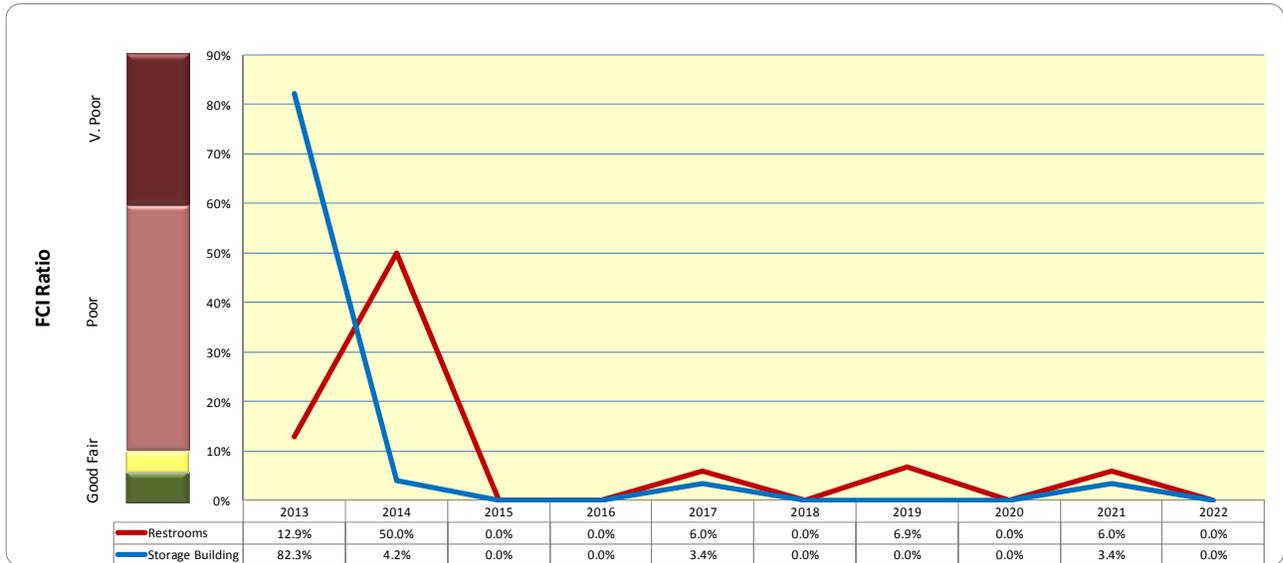
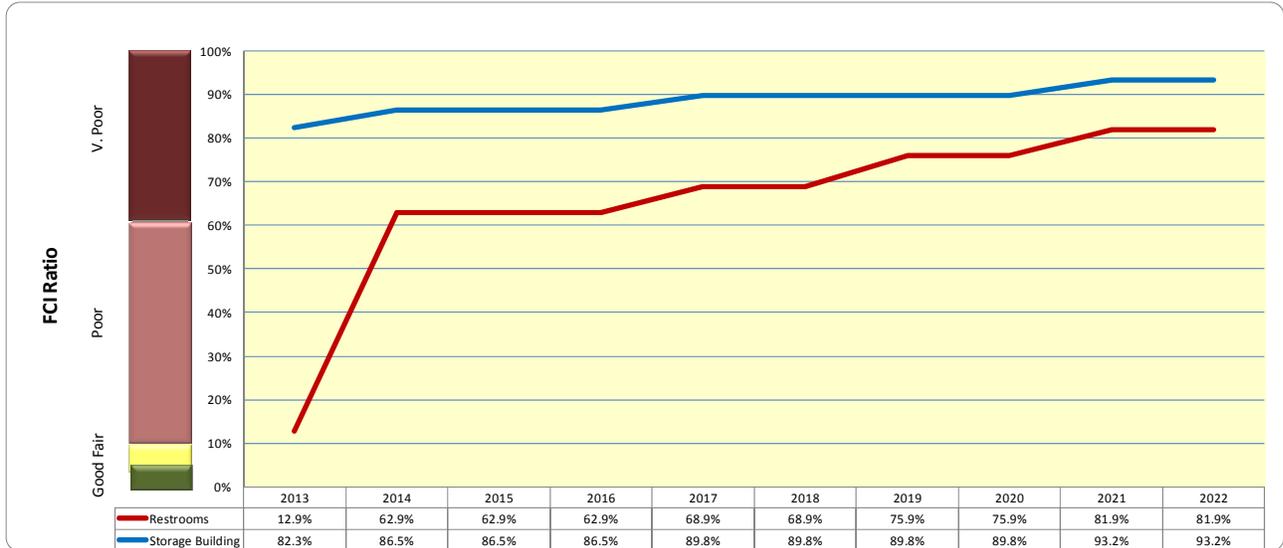


Chart EX-6 indicates the cumulative effects of the FCI ratio over the study period assuming the required funds and expenditures are **NOT** provided to address the identified works and deferred maintenance each year. The results of the study indicate that both building fall into the V.POOR condition rating early in the study period if no works are undertaken.

Chart EX-6 Cumulative Effects of FCI over the Study Period



**PRIORITIZATION OF WORK**

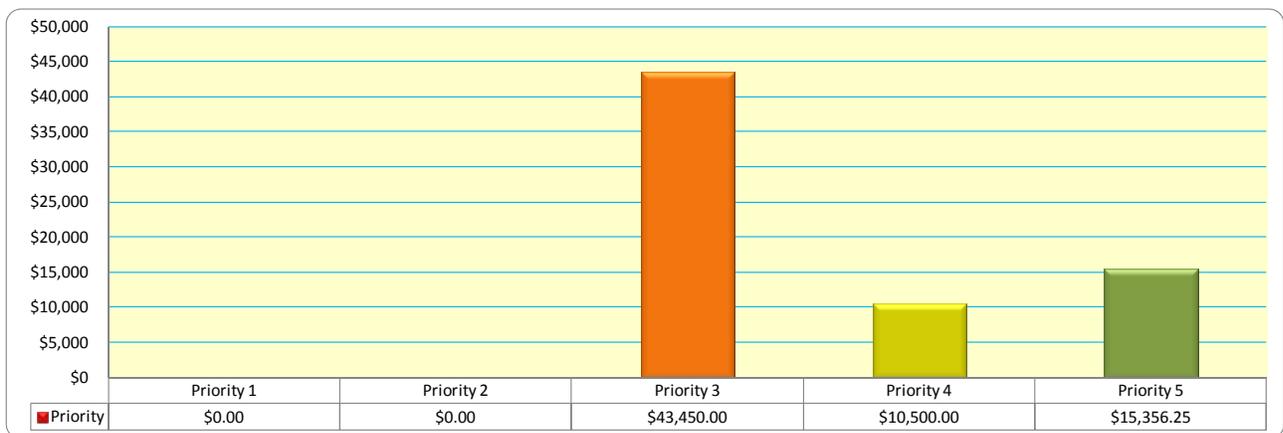
Faithful+Gould has prioritized the identified work in order to assist with analyzing the deficiencies found during the assessments. The following Priorities are shown below:

|                                                       |                                                                                                                              |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Priority 1 - Life Safety/ Code Compliance/ADA:</b> | •Compromises staff or public safety or when a system requires to be upgraded to comply with current codes and standards.     |
| <b>Priority 2 – Currently Critical:</b>               | •A system or component is inoperable or compromised and requires immediate action                                            |
| <b>Priority 3 – Necessary / Not Critical:</b>         | •Maintain the integrity of the facility or component and replace those items, which have exceeded their expected useful life |
| <b>Priority 4 – Recommended:</b>                      | •Necessary for optimal performance of the facility or component                                                              |
| <b>Priority 5 – Appearance:</b>                       | •Used when a system has degraded and requires refurbishment                                                                  |

Charts EX-7 through EX-9 illustrates the breakdown of expenditure according the priority coding providing an opportunity to strategically plan and effectively direct funding to the highest priority.

**Restrooms**

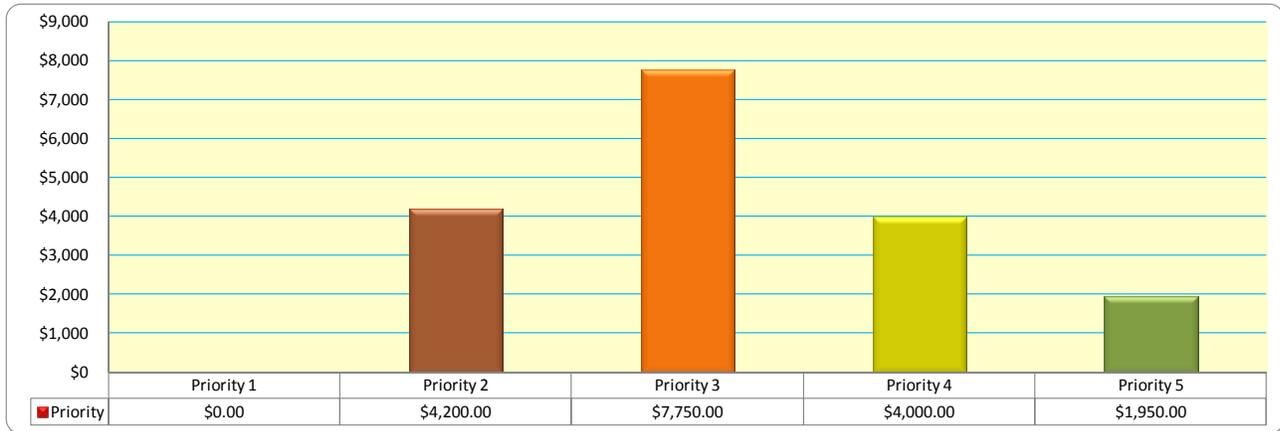
Chart EX-7 Cumulative Prioritization of Work



Priority 3 appears to require the most amount of expenditure in this study. This category illustrates that the work which needs to be undertaken is to maintain the integrity of the assets.

**Storage Building**

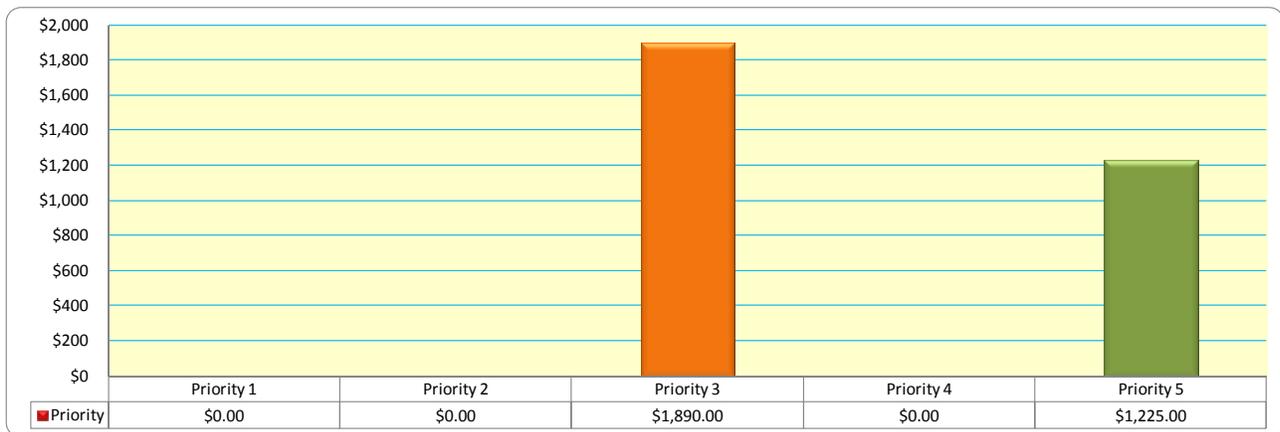
**Chart EX-8 Cumulative Prioritization of Work**



Priority 3 appears to require the most amount of expenditure in this study. This category illustrates that the work which needs to be undertaken is to maintain the integrity of the assets.

**Site Systems**

**Chart EX-9 Cumulative Prioritization of Work**



Priority 3 appears to require the most amount of expenditure in this study. This category illustrates that the work which needs to be undertaken is to maintain the integrity of the assets.

Charts EX-10 through EX-12 illustrates the expenditure per priority code, per each year within the 10 year study period.

**Restrooms**

**Chart EX-10 Year by Year Cumulative Prioritization of Work**

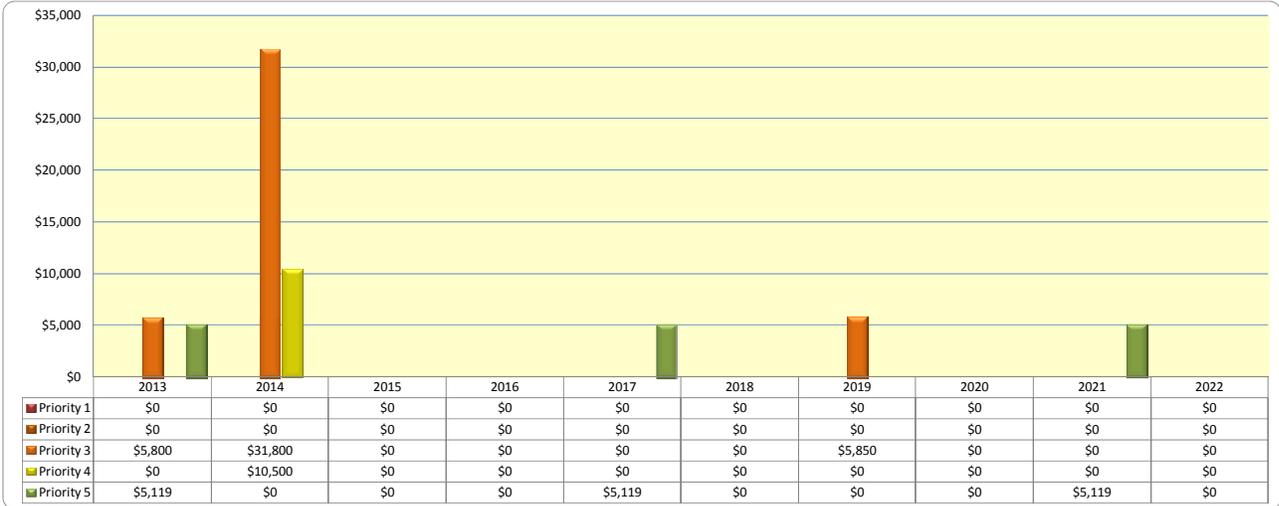


Chart EX-10 illustrates that there is one key year for Priority 3 expenditure in year 2014.

**Storage Building**

**Chart EX-11 Year by Year Cumulative Prioritization of Work**

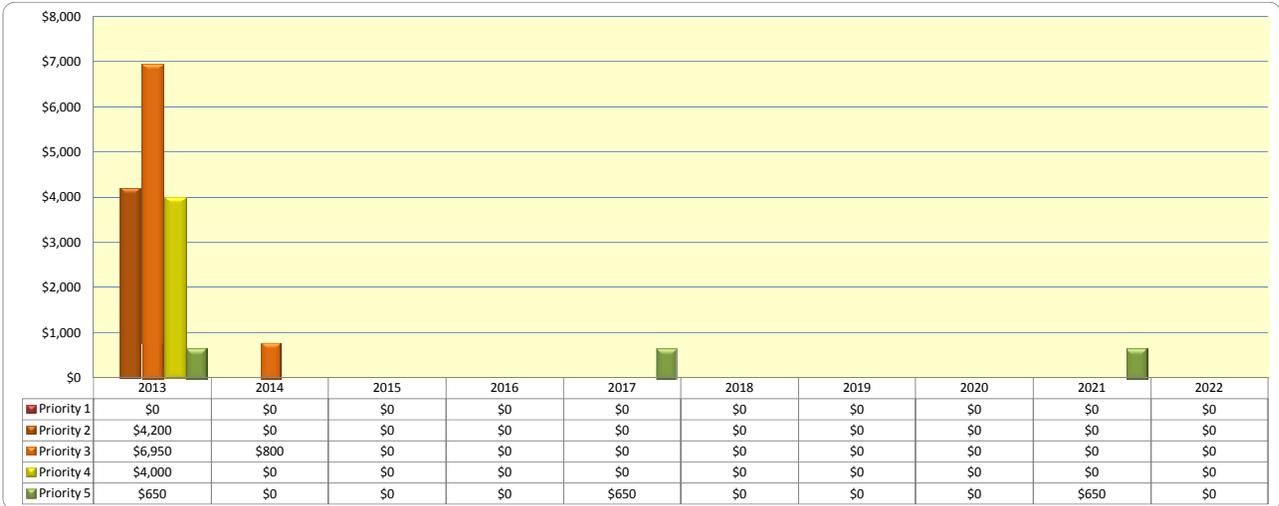


Chart EX-11 illustrates that there is one key year for Priority 3 expenditure in year 2013.

Site Systems

Chart EX-12 Year by Year Cumulative Prioritization of Work

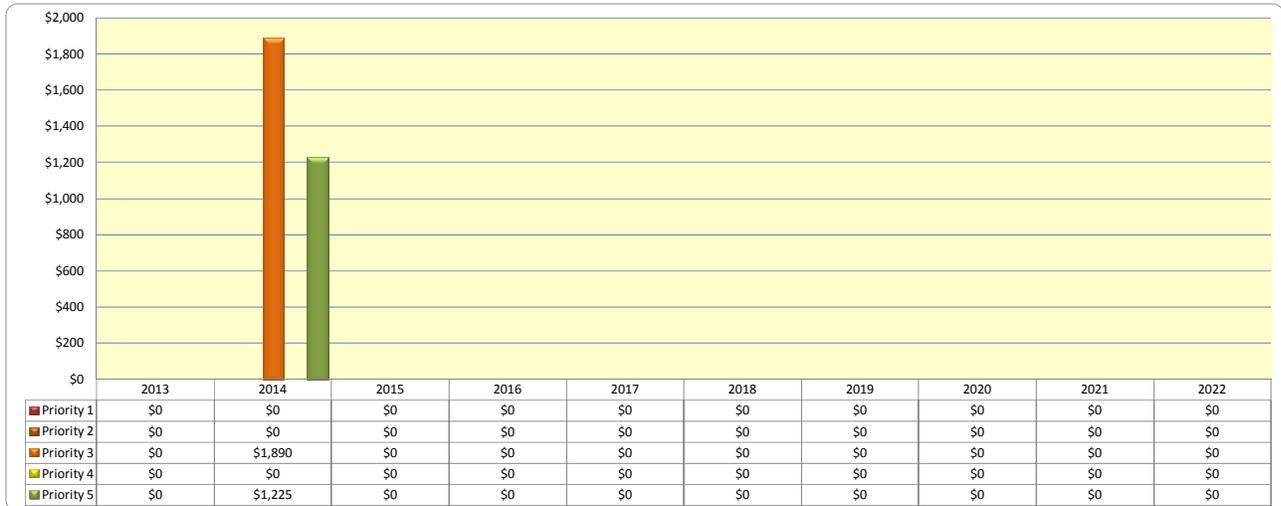


Chart EX-12 illustrates that there is one key year for both Priority 3 and 5 expenditure in year 2014.

**PLAN TYPES**

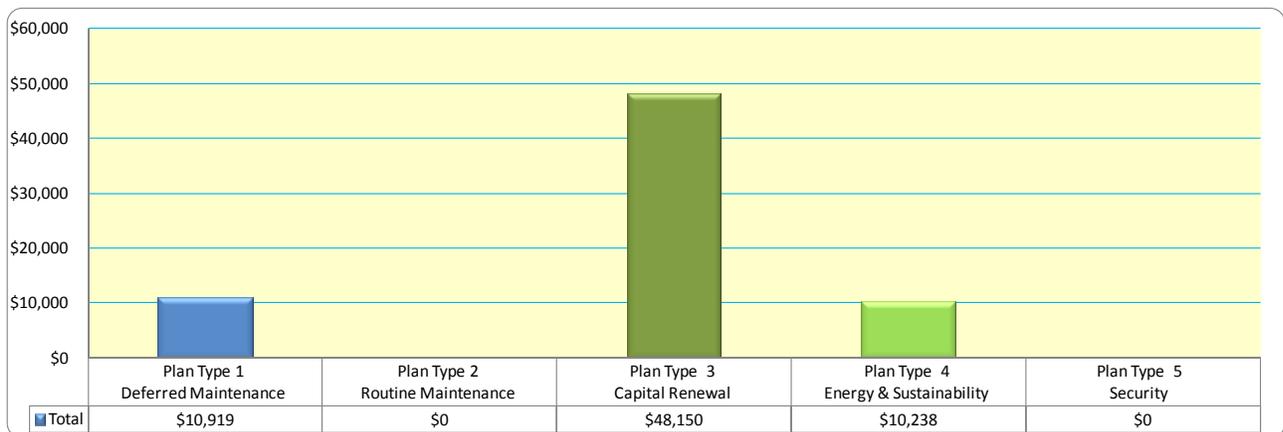
Faithful+Gould has prioritized the identified work according to the Plan Type or deficiency categories in order to assist with analyzing the deficiencies found during the assessments. The following Plan Types are shown below:

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

Charts EX-13 through EX-15 illustrate the breakdown of expenditure according to the Plan Type or deficiency categories providing an opportunity to strategically plan and effectively direct funding.

**Restrooms**

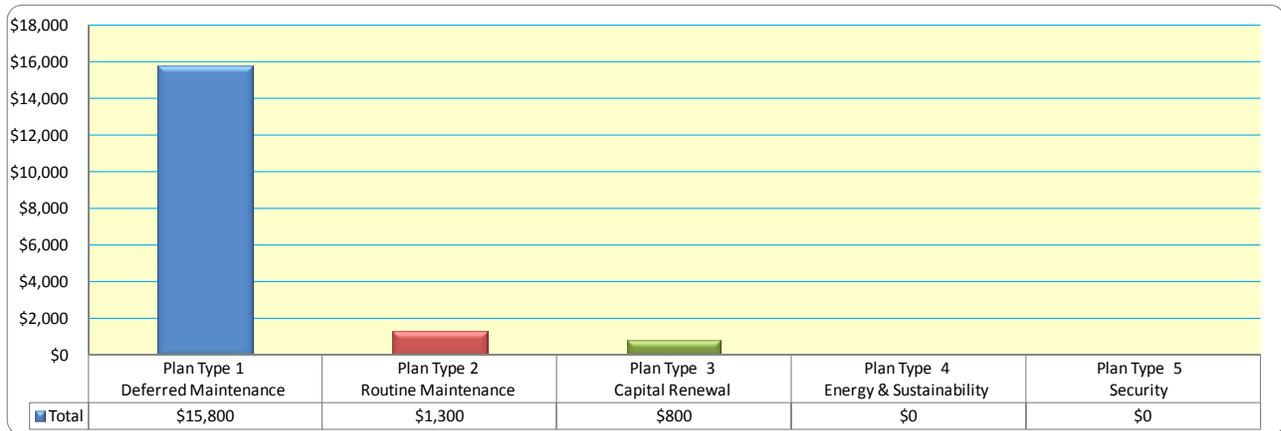
Chart EX-13 Cumulative Expenditure by Plan Type



Plan Type 3 – Capital Renewal appears to require the most expenditure in this study.

**Storage Building**

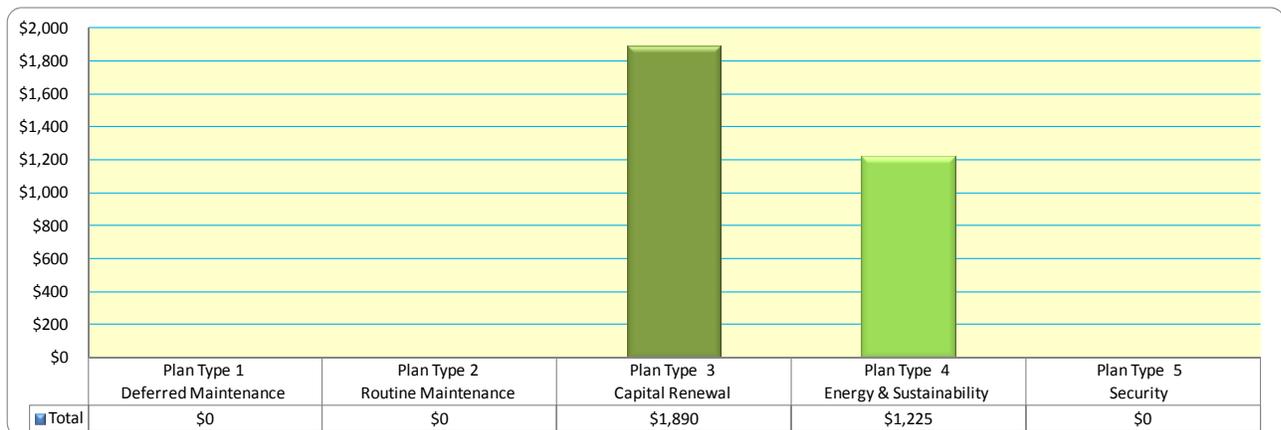
**Chart EX-14 Cumulative Expenditure by Plan Type**



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

**Site Systems**

**Chart EX-15 Cumulative Expenditure by Plan Type**



Plan Type 3 – Capital Renewal appears to require the most expenditure in this study.

Charts EX-16 through EX-18 illustrate the amount of expenditure, per category, each year within the 10 year study period.

**Restrooms**

**Chart EX-16 Yearly Expenditure by Plan Type**



Chart EX-16 illustrates that Plan Type 3 – Capital Renewal requires expenditure in year 2014.

**Storage Building**

**Chart EX-17 Yearly Expenditure by Plan Type**



Chart EX-17 illustrates that Plan Type 1 – Deferred Maintenance requires expenditure in year 2013.

Site Systems

Chart EX-18 Yearly Expenditure by Plan Type



Chart EX-18 illustrates that Plan Type 3 – Capital Renewal requires the most expenditure in year 2014.

## SECTION 2 - A SUBSTRUCTURE

### A10 FOUNDATIONS

#### DESCRIPTION

The description of the respective structural systems for the building is based upon our observation of exposed portions of the building structure. There were no structural drawings available to review.

#### A1010 STANDARD FOUNDATIONS

##### Restroom & Storage Building

##### A1011 Wall Foundations

The exterior walls are supported by reinforced concrete spread footings. We are unaware of the designed compressive strength of the concrete.

#### A1030 SLABS-ON-GRADE

##### Restroom & Storage Building

##### A1031 Standard Slab on Grade

The first floor level of the buildings consisted of cast-in-place concrete slab-on-grade, reinforced with welded wire fabric. We assume that the floor slabs are 4" thick over an aggregate base. The slabs are assumed to contain a thickened edge at their perimeter. We are unaware of the designed compressive strength of the concrete.

#### CONDITION

#### A1010 STANDARD FOUNDATIONS

##### Restrooms & Storage Building

##### A1011 Wall Foundations

The floor structures appeared to be in good condition therefore we assume that the masonry supports are also in good condition. We do not anticipate that any actions will be generated during the study period.



**A1030 SLABS-ON-GRADE**

*Restrooms & Storage Building*

A1031 Standard Slab-on-Grade

The cast-in-place concrete slab at the building appeared to be in good condition. We do not anticipate any expenditure during the cost study period, which relates to its replacement.

**PROJECTED EXPENDITURES**

No projected expenditures are identified for A Substructure during the study period.

## SECTION 3 - B SHELL

### B10 SUPERSTRUCTURE

#### DESCRIPTION

The description of the respective structural systems for the buildings is based upon our observation of exposed portions of the building structure. There were no structural drawings available to review.

### B1020 ROOF CONSTRUCTION

#### B1021 Flat Roof Construction

##### Restrooms

The low-sloped roof sections consist of 4" x 6" wood joists which are also supported via the perimeter and interior load bearing walls and in turn support the plywood deck and roof covering (reference Photograph 3 in Appendix B). The wood joists span east to west and spaced at 24" centers. The roof covering can be viewed in the roof covering section of this report.

##### Storage Building

The low-sloped roof sections consist of 2" x 10" wood joists which are also supported via the perimeter walls and in turn support the plywood deck and roof covering (reference Photograph 4 in Appendix B). The wood joists span north to south and spaced at 16" centers. The roof covering can be viewed in the roof covering section of this report.

#### CONDITION

### B1020 ROOF CONSTRUCTION

##### Restrooms & Storage Building

#### B1021 Flat Roof Construction

The low-sloped roof construction at the buildings appeared to be in fair condition. After discussions with the City maintenance personnel we understand that the buildings will need the plywood deck replacing and some structural repair issues taken care of when their roof coverings are replaced. As far as we know from discussions with the City maintenance personnel, that these issues are not urgent.



**B20 EXTERIOR ENCLOSURES**

**DESCRIPTION**

The description of the respective exterior enclosures structural systems for the building is based upon our review of available drawings, and our observation of exposed portions of the building structure. There were no drawings available to review.

**B2010 EXTERIOR WALLS**

B2011 Exterior Wall Construction

Restrooms

The building is enclosed with split-faced concrete masonry units and wood trim (reference Photographs 1 and 5 in Appendix B). The wood trim contained a painted finish. There are CMU privacy walls at each end of the building at the restroom entrances (reference Photograph 1 in Appendix B).

Storage Building

The building is enclosed with split-faced concrete masonry units and wood trim (reference Photograph 2 in Appendix B). The wood trim contained a painted finish.

**B2020 EXTERIOR WINDOWS**

Restrooms

B2021 Windows

The windows at the building were open air chain-link grille installed at all elevations.

**B2030 EXTERIOR DOORS**

Restrooms & Storage Building

B2039 Other Doors & Entrances

The buildings contained single and double hollow metal doors and frames at the mechanical room entrances and the entrance to the storage building (reference Photographs 1, 2 and 5 in Appendix B). Door hardware consisted of push / pull or knob handles.

## CONDITION

### B2010 EXTERIOR WALLS

#### B2011 Exterior Wall Construction

##### Restrooms

The exterior wall systems at the building appeared to be in fair condition with generally no major signs of deterioration, water ingress or general failure noted (reference Photograph 6 in Appendix B). The exterior painted surfaces are worn and have not been recently painted. Based on an EUL for this building of 4 years, as well as observed conditions, painting will be necessary near- mid- and late-term in the study period to maintain the appearance and protect the exterior walls.

##### Storage Building

The exterior wall systems at the building appeared to be in poor to fair condition. We observed various degrees of damage and rot to the wood fascia and the painted surfaces were worn at all painted surfaces (reference Photograph 7 in Appendix B). Based on an EUL for this building of 4 years painting, as well as current observed conditions, we recommend near term repair of the siding and repainting of the exterior surfaces near-, mid- and late-term to maintain the appearance and protect the exterior walls.

### B2020 EXTERIOR WINDOWS

##### Restrooms

#### B2021 Windows

The exterior window units appeared to be in fair condition and there were no major deficiencies observed. We do not anticipate any actions for their replacement as they will last beyond the study period.

### B2030 EXTERIOR DOORS

##### Restrooms

#### B2031 Other Doors & Entrances

The metal doors appeared to be in fair condition and there were no observed issues. In general the operation of the doors was satisfactory and operated without any difficulty. Re-painting concurrent with the building exterior will be necessary to maintain the doors. We understand that there are current issues and historical issues with the doors and frames and therefore we have included for their replacement. Also, the mechanical room door does not have lever hardware and we recommend replacing the knob handle with lever type to comply with ADA requirements.



*Storage Building*

The metal door appeared to be in poor condition with corrosion along the lower edges and we recommend near-term replacement. Additionally, we recommend that the new door is equipped with lever type to comply with ADA requirements.

B30 ROOFING

DESCRIPTION

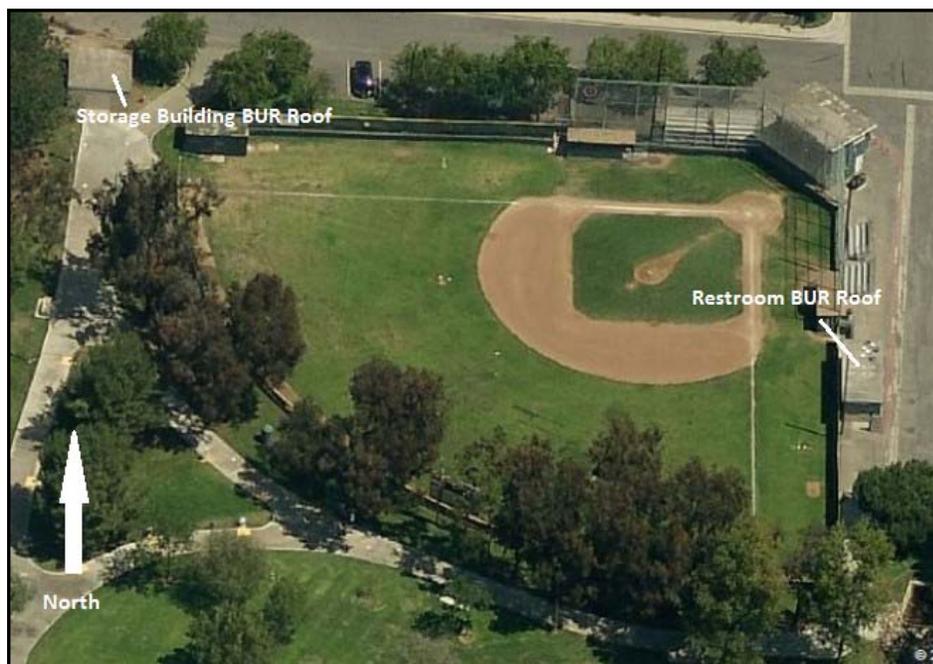
B3010 ROOF COVERINGS

*Restroom and Storage Building*

B3011 Roof Finishes

The buildings facility contained low-sloped pitched roofs; these roof areas are shown on the following aerial plan:

Overview of Roof Locations & Configurations



The low sloped roof areas at the Restrooms and Storage Building contained asphaltic Built-Up Roof (BUR) with a mineral cap sheet surface (reference Photographs 8 and 9 in Appendix B). We understand that the restroom roof was installed in 1999 and the storage building roof was installed in circa 1991.

Table B30-1 Summary of Roof Coverings

| Roof Component                                | Restrooms                                    | Storage Building                             |
|-----------------------------------------------|----------------------------------------------|----------------------------------------------|
| Age                                           | 1999                                         | 1991                                         |
| Roof Area<br>(total / approx. square footage) | 390                                          | 210                                          |
| Application/ Membrane                         | BUR                                          | BUR                                          |
| Manufacturer / Model                          | Tremco                                       | Tremco                                       |
| Surface                                       | Mineral Surface Cap Sheet and Loose Granules | Mineral Surface Cap Sheet and Loose Granules |
| Deck Type                                     | Plywood                                      | Plywood                                      |
| Insulation                                    | None                                         | None                                         |
| Cover Board                                   | None                                         | None                                         |
| Drainage                                      | Edge                                         | Edge                                         |
| Overflow Scuppers                             | None                                         | None                                         |
| Base Flashings                                | None                                         | None                                         |
| Cap Flashings                                 | None                                         | None                                         |
| Perimeter Enclosure                           | None                                         | None                                         |
| Warranty (Manufacturer)                       | Tremco                                       | Tremco                                       |
| Warranty (Contractor)                         | Unknown                                      | Unknown                                      |

**CONDITION**

**B3010 ROOF COVERINGS**

B3011 Roof Finishes

Restrooms

The low sloped roof area appeared to be in fair to good overall condition. These types of roof covering have a typical EUL of 20-years and based on observed conditions and roof material ages we anticipate that the roof will require mid to late-term replacement. We are unaware or could not visually see any possible areas of water ingress.

Storage Building

The low sloped roof area appeared to be in poor overall condition. These types of roof covering have a typical EUL of 20-years and based on an age of 22-years and the observed poor condition of the roof surface we anticipate that the roof will require immediate replacement. We are unaware or could not visually see any possible areas of water ingress.

**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.

Restrooms

| Element No.                               | Building Element           | Recommendation                                 | Qty | Unit | Rate     | Cost     | Year | Priority Code |
|-------------------------------------------|----------------------------|------------------------------------------------|-----|------|----------|----------|------|---------------|
| B1021                                     | Flat Roof Construction     | Replace roof deck and repair structural issues | 1   | LS   | \$5,200  | \$5,200  | 2013 | 3             |
| B2011                                     | Exterior Wall Construction | Repaint exterior painted surfaces              | 275 | SF   | \$3.25   | \$894    | 2013 | 5             |
| B2011                                     | Exterior Wall Construction | Repaint exterior painted surfaces              | 275 | SF   | \$3.25   | \$894    | 2017 | 5             |
| B2011                                     | Exterior Wall Construction | Repaint exterior painted surfaces              | 275 | SF   | \$3.25   | \$894    | 2021 | 5             |
| B2031                                     | Other doors & Entrances    | Replace all doors and frames                   | 1   | LS   | \$10,500 | \$10,500 | 2014 | 4             |
| B3011                                     | Roof Finishes              | Replace the BUR covering                       | 390 | SF   | \$15.00  | \$5,850  | 2019 | 3             |
| Total Anticipated Expenditure for B Shell |                            |                                                |     |      |          | \$24,231 |      |               |

*Storage Building*

| Element No.                               | Building Element           | Recommendation                                 | Qty | Unit | Rate    | Cost     | Year | Priority Code |
|-------------------------------------------|----------------------------|------------------------------------------------|-----|------|---------|----------|------|---------------|
| B1021                                     | Flat Roof Construction     | Replace roof deck and repair structural issues | 1   | LS   | \$3,800 | \$3,800  | 2013 | 3             |
| B2011                                     | Exterior Wall Construction | Replace the wood fascia                        | 80  | SF   | \$50    | \$4,000  | 2013 | 4             |
| B2011                                     | Exterior Wall Construction | Repaint exterior trim and doors                | 200 | SF   | \$3.25  | \$650    | 2013 | 5             |
| B2011                                     | Exterior Wall Construction | Repaint exterior trim and doors                | 200 | SF   | \$3.25  | \$650    | 2017 | 5             |
| B2011                                     | Exterior Wall Construction | Repaint exterior trim and doors                | 200 | SF   | \$3.25  | \$650    | 2021 | 5             |
| B2031                                     | Exterior Doors             | Replace the exterior door frame                | 1   | EACH | \$4,200 | \$4,200  | 2013 | 2             |
| B3011                                     | Roof Finishes              | Replace the BUR covering                       | 210 | SF   | \$15.00 | \$3,150  | 2013 | 3             |
| Total Anticipated Expenditure for B Shell |                            |                                                |     |      |         | \$17,100 |      |               |

## SECTION 4 - C INTERIORS

### C10 INTERIOR CONSTRUCTION

#### DESCRIPTION

#### C1010 PARTITIONS

##### Restrooms

##### C1011 Fixed Partitions

The building 2" x 4" wood framed partitions between the men's and women's restrooms and the central plumbing chase.

##### C1014 Site Built Toilet Partitions

The men's and women's restroom areas contained toilet partitions constructed with faux slate acrylic panels (reference Photograph 10 in Appendix B).

#### CONDITION

#### C1010 PARTITIONS

##### C1011 Fixed Partitions

The interior fixed partitions all appeared to be in fair to good condition. There were no deficiencies found in relation to the wall structures. The fixed partitions are suitable for the current use.

##### C1014 Site Built Toilet Partitions

The toilet partitions all appeared to be in fair to good condition. There were no deficiencies found in relation to the partition structures. The toilet partitions are suitable for the current use.

C30 INTERIOR FINISHES

DESCRIPTION

C3010 WALL FINISHES

C3012 Wall Finishes to Interior Walls

Restrooms

Interior walls at the building generally contained painted concrete masonry units, painted gypsum drywall and stainless steel panels behind the plumbing fixtures (reference Photograph 10 in Appendix B).

Storage Building

Interior walls at each of the building generally consisted of the unfinished perimeter wall framing and sheathing system.

C3020 FLOOR FINISHES

C3024 Flooring

The flooring at building interiors consisted of the unfinished concrete slab-on grade.

C3030 CEILING FINISHES

C3031 Ceiling Finishes

Restrooms

The ceiling at the building consisted of the painted exposed roof framing and sheathing components (reference Photograph 3 in Appendix B).

Storage Building

The ceiling at the building consisted of the unfinished exposed roof framing and sheathing components (reference Photograph 4 in Appendix B).

## CONDITION

### C3010 WALL FINISHES

#### C3012 Wall Finishes to Interior Walls

##### Restrooms

Interior wall finishes appeared to be in fair condition generally throughout the building, with minor marks and damages observed. The typical EUL of interior painted walls is 4 years, and based on our observations we recommend re-painting of all the previously painted walls near-, mid- and late-term in the study period to maintain the appearance of the building interior areas.

##### Storage Building

Interior wall finishes appeared to be in fair to good condition generally throughout the building. The interior walls are unfinished and therefore their refinishing is not included.

### C3020 FLOOR FINISHES

#### C3024 Flooring

##### Restroom and Storage Building

The concrete floors appeared to be in fair condition throughout the buildings. The floors should remain serviceable throughout the study period.

### C3030 CEILING FINISHES

#### C3031 Ceiling Finishes

##### Restrooms

The painted roof framing and sheathing appeared to be in fair to good condition. Painted surfaces usually have a typical EUL of five-years, and therefore we have recommended mid-term repainting of the ceilings concurrent with the interior walls.

C3031 Ceiling Finishes

Storage Building

The unfinished roof framing and sheathing appeared to be in fair to good condition. We anticipate that they will not need repairs 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.

Restrooms

| Element No.                                   | Building Element                | Recommendation                             | Qty | Unit | Rate    | Cost     | Year | Priority Code |
|-----------------------------------------------|---------------------------------|--------------------------------------------|-----|------|---------|----------|------|---------------|
| C3012                                         | Wall Finishes to Interior Walls | Repaint interior wall and ceiling surfaces | 650 | SF   | \$6.50* | \$4,225  | 2013 | 5             |
| C3012                                         | Wall Finishes to Interior Walls | Repaint interior wall and ceiling surfaces | 650 | SF   | \$6.50* | \$4,225  | 2017 | 5             |
| C3012                                         | Wall Finishes to Interior Walls | Repaint interior wall and ceiling surfaces | 650 | SF   | \$6.50* | \$4,225  | 2021 | 5             |
| Total Anticipated Expenditure for C Interiors |                                 |                                            |     |      |         | \$12,675 |      |               |

\* Increase unit cost as per City request

Storage Building

No projected expenditures are identified for C Interiors during the study period.

## SECTION 5 - D SERVICES

### D20 PLUMBING

#### DESCRIPTION

### D2010 PLUMBING FIXTURES

#### D2011 Water Closets

##### Restrooms

The building contained wall hung mounted stainless steel tank-less water closets with manual flush valves within the men's and women's restrooms (reference Photograph 11 in Appendix B).

#### D2012 Urinals

The men's room contained a vitreous china wall hung waterless urinal (reference Photograph 12 in Appendix B).

#### D2013 Lavatories

The building contained wall mounted stainless steel lavatories (reference Photograph 12 in Appendix B). The lavatories generally consisted of single-handle lever type, non-metering faucets. Water is supplied via copper pipe work and drained through cast iron pipe work and fittings.

### D2020 DOMESTIC WATER DISTRIBUTION

##### Restrooms

#### D2021 Cold Water Service

Cold water piping throughout the building consisted of a copper pipe system. We believe the cold water service for the facility is supplied directly from the street pressure. Taps are made to the water line downstream of the meter and routed to plumbing fixtures and equipment via copper pipe work. The water enters the facility at the west elevation.

### D2030 SANITARY WASTE

##### Restrooms

#### D2031 Waste Piping

Waste piping observed at the building consisted of 2" diameter galvanized and cast iron.

## CONDITION

### D2010 PLUMBING FIXTURES

#### Restrooms

##### D2011 Water Closets

The water closets and flush valves appeared to be in good condition. The water closets contained water saving flush valves that operated properly. The restrooms contained ADA compliant water closets.

We have recommended a full upgrade / renovation of the restrooms during the study period which will include full replacement of the fixtures and a major floor plan modification.

##### D2012 Urinals

The urinals appeared to be in fair condition. The urinals and flush valves appeared to be in fair condition. The urinals contained water saving flush valves that operated properly. The restrooms contained ADA compliant urinals.

We have recommended a full upgrade / renovation of the restrooms during the study period which will include full replacement of the fixtures and a major floor plan modification.

##### D2013 Lavatories

The lavatories and faucets appeared to be in fair condition. The sinks drained properly. The lavatories appeared to be ADA compliant and have water saving faucets installed.

We have recommended a full upgrade / renovation of the restrooms during the study period which will include full replacement of the fixtures and a major floor plan modification.

### D2020 DOMESTIC WATER DISTRIBUTION

#### Restrooms

##### 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 and deferred maintenance.



**D2030 SANITARY WASTE**

Restrooms

D2031 Waste Piping

No visually apparent problems with the sanitary waste piping were observed. 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 building.



D30 HVAC

**DESCRIPTION**

Restrooms

D3042 Exhaust Ventilation Systems

The ventilation system at the building was limited to the four window openings with fencing grates along the upper portions of all elevations.

**CONDITION**

Restrooms

D3042 Exhaust Ventilation Systems

No visually apparent problems with the ventilation system were observed at the building. No issues have been reported regarding performance; therefore we believe the system will provide adequate ventilation

D50 ELECTRICAL

**DESCRIPTION**

The following information was obtained through our visual observations of each of the building systems. The electrical systems include the service entrance equipment, panel boards, safety switches, motor controls, lighting fixtures, and security systems.

D5010 ELECTRICAL SERVICE & DISTRIBUTION

Restrooms & Storage Building

D5012 Low Tension Service & Dist.

The restroom building is serviced by a 60-amp, 120/240-Volt, single-phase, 3-wire metered panel which is located in the central plumbing chase with the meter located along the rear exterior elevation (reference Photograph 13 in Appendix B).

The storage building is serviced by a 30-amp, 120/240-Volt, single-phase, 3-wire metered panel which is located in the building interior.

D5020 LIGHTING & BRANCH WIRING

Restrooms & Storage Building

D5021 Branch Wiring Devices

The branch wiring devices at the buildings included switches, receptacles and other devices that would be generally associated with these types of buildings. Branch wiring was observed to typically be distributed in Electric Metallic Tubing (EMT) and flexible metal conduit.

D5022 Lighting Equipment

The interior lighting within the building is provided by surface mounted 4' fluorescent fixtures (reference Photograph 14 in Appendix B). The florescent fixtures all contained T8 lamps and electronic ballasts. All of the in-room lighting is controlled via local switching in the respective rooms.

## CONDITION

### D5010 ELECTRICAL SERVICE AND DISTRIBUTION

#### Restrooms & Storage Building

##### D5012 Low Tension Service & Dist.

The electrical equipment was noted to be in fair condition. Electrical distribution systems generally have a typical EUL of thirty-years, however the panels appear to be in good condition and well maintained and due to observed conditions and an estimated remaining life of over 15-years we anticipate that there will be no replacement actions required during the study period. Individual panels at the building are also anticipated to be serviceable throughout the study period.

### D5020 LIGHTING & BRANCH WIRING

#### Restrooms & Storage Building

##### D5021 Branch Wiring Devices

The general receptacles and wiring appeared to be in fair condition within the buildings. We do not anticipate a requirement for their replacement during the cost study period.

##### D5022 Lighting Equipment

The interior lighting was observed in to be in fair to good fair to good condition and all fixtures were operating properly with no broken lenses or deteriorated housings. No actions will be generated during the study period and we anticipate the light fixtures will be replaced on an as needed basis. The lighting is controlled by manual switches. We understand that the City have requested that the fixtures be updated to LED fixtures with motion sensors.

**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.

Restrooms

| Element No.                                  | Building Element   | Recommendation                             | Qty | Unit | Rate     | Cost     | Year | Priority Code |
|----------------------------------------------|--------------------|--------------------------------------------|-----|------|----------|----------|------|---------------|
| D20                                          | Plumbing           | Renovate restrooms                         | 1   | LS   | \$30,000 | \$30,000 | 2014 | 3             |
| D2031                                        | Waste Piping       | Undertake camera inspection of sewer lines | 1   | LS   | \$600    | \$600    | 2013 | 3             |
| D5022                                        | Lighting Equipment | Replace interior lighting                  | 1   | LS   | \$1,800  | \$1,800  | 2014 | 3             |
| Total Anticipated Expenditure for D Services |                    |                                            |     |      |          | \$32,400 |      |               |

Storage Building

| Element No.                                  | Building Element   | Recommendation            | Qty | Unit | Rate  | Cost  | Year | Priority Code |
|----------------------------------------------|--------------------|---------------------------|-----|------|-------|-------|------|---------------|
| D5022                                        | Lighting Equipment | Replace interior lighting | 1   | LS   | \$800 | \$800 | 2014 | 3             |
| Total Anticipated Expenditure for D Services |                    |                           |     |      |       | \$800 |      |               |

## SECTION 7 - G BUILDING SITEWORK

### G20 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

### G2020 PARKING LOTS

#### G2021 Bases and Sub-Bases

The main facility parking lot is located at the northern end of the site and can be accessed from North Herrin Avenue to the east (reference Photographs 15 in Appendix B). The parking lot and paving around the site has an asphalt surface with white line striping denoting areas of parking stalls. We were not provided with the original specification details of the paving and therefore cannot comment on the specific asphalt mix type, classification or its suitability for its existing use. Table G20-1 provides a summary of the site systems.

**Table G20-1 Schedule of Site Systems**

| System Type  | System Surface | Location | Measurement | No. of Parking Spaces | No. of Disabled Parking Spaces |
|--------------|----------------|----------|-------------|-----------------------|--------------------------------|
| Parking Area | Asphalt        | North    | 325 SY      | 8                     | 0                              |

#### G2021 Bases and Sub-Bases

The rear drive aisle leading to the Storage Building is comprised of concrete pavement (reference Photograph 16 in Appendix B). We were not provided with the original specification details of the paving and therefore cannot comment on the specific concrete mix type, classification or its suitability for its existing use.

### G2030 PEDESTRIAN PAVING

#### G2031 Paving & Surfacing

The site contained cast-in-place concrete walkways throughout including at the perimeter of the restroom building and along the baseball field sidelines (reference Photograph 17 in Appendix B).

## G2040 SITE DEVELOPMENT

### G2041 Fences & Gates

The baseball field was surrounded by 12' in height chain link fence at the north east and west perimeter with 10' high chain link fencing at the southern end of the field (reference Photograph 18 in Appendix B). The perimeter of the restroom area was enclosed by 4' to 10' high chain link fencing. There is a batting cage at the right field area that is constructed of 10' high chain link fencing and the backstop is comprised of chain link fence approximately 25' high (reference Photograph 19 in Appendix B).

### G2042 Retaining Walls

The wall is 33" in height concrete masonry unit along the right and left field perimeters (reference Photographs 20 in Appendix B). The walls have a painted finish.

### G2044 Signage

There is an electronic scoreboard beyond center field fence (reference Photograph 21 in Appendix B).

### G2045 Site Furnishings

There are metal benches at each dugout area and metal bleachers are located behind the dugouts (reference Photographs 17 and 22 in Appendix B).

### G2049 Miscellaneous Structures

There are awning structures at each of the dugout areas (reference Photograph 23 in Appendix B). The structures are wood framed with asphalt shingles covered roofs.

## G2050 LANDSCAPING

### G2056 Planters

Landscaping consisted of shrubs and ground cover, with a number of mature trees located throughout the park.

### G2057 Irrigation Systems

The landscape areas throughout the site are irrigated via a below grade automatic irrigation system. The irrigation system is supplied recycled water by below grade PVC piping and a controller located in the restroom building. Pop-up type sprinkler heads are scattered throughout the site.



**CONDITION**

**G2020 PARKING LOTS**

G2021 Bases and Sub-Bases

The concrete and asphalt paved areas throughout the main site appeared to be in fair condition. All areas of the asphalt should undergo asphaltic-based seal coat and the re-application of surface markings every three-years to extend the life of the pavements beginning in year one. However, sealing and restriping of the asphalt parking area will fall below the threshold of \$500 and therefore has not been included within this cost study. Future repairs should be addressed on an as-needed basis as part of routine maintenance and funded as an operational expense.

**G2030 PEDESTRIAN PAVING**

G2031 Paving & Surfacing

The walkways were in fair to good condition with no issues observed and no reported instances of disrepair. We do not anticipate replacement during the study period.

**G2040 SITE DEVELOPMENT**

G2041 Fences & Gates

The fences throughout the facility appeared to be in fair condition with no issues observed and no reported instances of disrepair. The fencing will require routine maintenance and should be addressed on an as-needed basis as part of routine maintenance and funded as an operational expense.

G2042 Retaining Walls

The concrete masonry walls appeared to be in poor fair condition with cracking and spalled block prevalent (reference Photograph 24 in Appendix B). We recommend near term repair and painting of the walls to maintain their structural integrity.

G2044 Signage

The scoreboard appeared to be in fair overall condition and will require routine maintenance and should be addressed on an as-needed basis as part of routine maintenance and funded as an operational expense.

G2045 Site Furnishings

The benches and bleachers appeared to be in fair overall condition. Future repairs should be addressed on an as-needed basis as part of routine maintenance and funded as an operational expense.

G2049 Miscellaneous Structures

The dugout awnings were in poor to fair overall condition. However, the asphalt shingle roofing is in poor condition and we recommend near-term replacement to deter damage to the structures.

G2050 LANDSCAPING

G2056 Planters

The planted materials are in fair to good overall condition. The plant materials will require routine maintenance and replacement and should be addressed on an as-needed basis as part of routine maintenance and funded as an operational expense.

G2057 Irrigation Systems

The irrigation system at the park is in good condition. No issues were observed and no reported instances of disrepair. We do not anticipate replacement 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.

| Element No.                                           | Building Element        | Recommendation                     | Qty | Unit | Rate   | Cost    | Year | Priority Code |
|-------------------------------------------------------|-------------------------|------------------------------------|-----|------|--------|---------|------|---------------|
| G2042                                                 | Retaining Walls         | Repair and paint the masonry walls | 350 | LF   | \$3.50 | \$1,225 | 2014 | 5             |
| G2049                                                 | Miscellaneous Structure | Replace the dugout awning roofing  | 280 | SF   | \$6.75 | \$1,890 | 2014 | 3             |
| Total Anticipated Expenditure for G Building Sitework |                         |                                    |     |      |        | \$3,115 |      |               |

# Appendix A

Ten-Year  
Expenditure Forecast  
2013 - 2022

10 YEAR EXPENDITURE FORECAST

Restrooms  
18th Street and North Herrin Avenue  
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 |                |         |          |
| <b>A. SUBSTRUCTURE</b>                                   |                                                |                                                  |                             |          |                     |             |                      |          |          |          |      |      |         |      |         |      |         |      |          |           |                |         |          |
| <b>A. SUBSTRUCTURE SUB-TOTALS</b>                        |                                                |                                                  |                             |          |                     |             |                      |          | \$0      | \$0      | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$0      |           |                |         |          |
| <b>B. SHELL</b>                                          |                                                |                                                  |                             |          |                     |             |                      |          |          |          |      |      |         |      |         |      |         |      |          |           |                |         |          |
| B1021                                                    | Replace roof deck and repair structural issues | 15                                               | 0                           | 1.00     | LS                  | \$5,200.00  | Deferred Maintenance | 3        | \$5,200  | \$0      | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$5,200  | \$0       | \$5,200        |         |          |
| B2011                                                    | Repaint exterior wall painted surfaces         | 4                                                | 0                           | 275.00   | SF                  | \$3.25      | Deferred Maintenance | 5        | \$894    | \$0      | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$894    | \$0       | \$894          |         |          |
| B2011                                                    | Repaint exterior wall painted surfaces         | 4                                                | 4                           | 275.00   | SF                  | \$3.25      | Routine Maintenance  | 5        | \$0      | \$0      | \$0  | \$0  | \$894   | \$0  | \$0     | \$0  | \$894   | \$0  | \$0      | \$1,788   | \$1,788        |         |          |
| B2031                                                    | Replace all doors and frames                   | 20                                               | 1                           | 1.00     | LS                  | \$10,500.00 | Capital Renewal      | 4        | \$0      | \$10,500 | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$0      | \$10,500  | \$10,500       |         |          |
| B3011                                                    | Replace the BUR covering                       | 20                                               | 6                           | 390.00   | SF                  | \$15.00     | Capital Renewal      | 3        | \$0      | \$0      | \$0  | \$0  | \$0     | \$0  | \$5,850 | \$0  | \$0     | \$0  | \$0      | \$5,850   | \$5,850        |         |          |
| <b>B. SHELL SUB-TOTALS</b>                               |                                                |                                                  |                             |          |                     |             |                      |          | \$6,094  | \$10,500 | \$0  | \$0  | \$894   | \$0  | \$5,850 | \$0  | \$894   | \$0  | \$6,094  | \$18,138  | \$24,231       |         |          |
| <b>C. INTERIORS</b>                                      |                                                |                                                  |                             |          |                     |             |                      |          |          |          |      |      |         |      |         |      |         |      |          |           |                |         |          |
| C3012                                                    | Repaint interior wall and ceiling surfaces     | 4                                                | 0                           | 650.00   | SF                  | \$6.50      | Deferred Maintenance | 5        | \$4,225  | \$0      | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$4,225  | \$0       | \$4,225        |         |          |
| C3012                                                    | Repaint interior wall and ceiling surfaces     | 4                                                | 4                           | 650.00   | SF                  | \$6.50      | Routine Maintenance  | 5        | \$0      | \$0      | \$0  | \$0  | \$4,225 | \$0  | \$0     | \$0  | \$4,225 | \$0  | \$0      | \$8,450   | \$8,450        |         |          |
| <b>C. INTERIORS SUB-TOTALS</b>                           |                                                |                                                  |                             |          |                     |             |                      |          | \$4,225  | \$0      | \$0  | \$0  | \$4,225 | \$0  | \$0     | \$0  | \$4,225 | \$0  | \$4,225  | \$0       | \$4,225        | \$8,450 | \$12,675 |
| <b>D. SERVICES</b>                                       |                                                |                                                  |                             |          |                     |             |                      |          |          |          |      |      |         |      |         |      |         |      |          |           |                |         |          |
| D20                                                      | Renovate restrooms                             | 15                                               | 1                           | 1.00     | LS                  | \$30,000.00 | Capital Renewal      | 3        | \$0      | \$30,000 | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$0      | \$30,000  | \$30,000       |         |          |
| D2031                                                    | Undertake camera inspection of sewer lines     | N/A                                              | 1                           | 1.00     | LS                  | \$600.00    | Deferred Maintenance | 3        | \$600    | \$0      | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$600    | \$0       | \$600          |         |          |
| D5022                                                    | Replace interior lighting                      | 20                                               | 1                           | 1.00     | LS                  | \$1,800.00  | Capital Renewal      | 3        | \$0      | \$1,800  | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$0      | \$1,800   | \$1,800        |         |          |
| <b>D. SERVICES SUB-TOTALS</b>                            |                                                |                                                  |                             |          |                     |             |                      |          | \$600    | \$31,800 | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$600    | \$31,800  | \$32,400       |         |          |
| <b>E. EQUIPMENT &amp; FURNISHING</b>                     |                                                |                                                  |                             |          |                     |             |                      |          |          |          |      |      |         |      |         |      |         |      |          |           |                |         |          |
| <b>E. EQUIPMENT &amp; FURNISHING SUB-TOTALS</b>          |                                                |                                                  |                             |          |                     |             |                      |          | \$0      | \$0      | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$0      | \$0       | \$0            |         |          |
| <b>F. SPECIAL CONSTRUCTION AND DEMOLITION</b>            |                                                |                                                  |                             |          |                     |             |                      |          |          |          |      |      |         |      |         |      |         |      |          |           |                |         |          |
| <b>F. SPECIAL CONSTRUCTION AND DEMOLITION SUB-TOTALS</b> |                                                |                                                  |                             |          |                     |             |                      |          | \$0      | \$0      | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$0      | \$0       |                |         |          |
| <b>G. BUILDING SITEWORK</b>                              |                                                |                                                  |                             |          |                     |             |                      |          |          |          |      |      |         |      |         |      |         |      |          |           |                |         |          |
| <b>G. BUILDING SITEWORK SUB-TOTALS</b>                   |                                                |                                                  |                             |          |                     |             |                      |          | \$0      | \$0      | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$0      | \$0       |                |         |          |
| <b>Z. GENERAL</b>                                        |                                                |                                                  |                             |          |                     |             |                      |          |          |          |      |      |         |      |         |      |         |      |          |           |                |         |          |
| <b>Z. GENERAL SUB-TOTALS</b>                             |                                                |                                                  |                             |          |                     |             |                      |          | \$0      | \$0      | \$0  | \$0  | \$0     | \$0  | \$0     | \$0  | \$0     | \$0  | \$0      | \$0       |                |         |          |
| <b>Expenditure Totals per Year</b>                       |                                                |                                                  |                             |          |                     |             |                      |          | \$10,919 | \$42,300 | \$0  | \$0  | \$5,119 | \$0  | \$5,850 | \$0  | \$5,119 | \$0  | \$10,919 | \$58,388  | \$69,306       |         |          |
| <b>Total Cost (Inflated @ 4% per Yr.)</b>                |                                                |                                                  |                             |          |                     |             |                      |          | \$10,919 | \$43,992 | \$0  | \$0  | \$5,988 | \$0  | \$7,402 | \$0  | \$7,005 | \$0  | \$10,919 | \$64,388  | \$75,306       |         |          |

10 YEAR EXPENDITURE FORECAST

Storage Building  
18th Street and North Herrin Avenue  
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 | Deferred | Scheduled |                |  |
| A. SUBSTRUCTURE                                   |                                                |                                                  |                             |          |                     |            |                      |          |          |           |           |           |           |           |           |           |           |           |          |           |                |  |
| A. SUBSTRUCTURE SUB-TOTALS                        |                                                |                                                  |                             |          |                     |            |                      |          | \$0      | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0      |           |                |  |
| B. SHELL                                          |                                                |                                                  |                             |          |                     |            |                      |          |          |           |           |           |           |           |           |           |           |           |          |           |                |  |
| B1021                                             | Replace roof deck and repair structural issues | 15                                               | 0                           | 1.00     | LS                  | \$3,800.00 | Deferred Maintenance | 3        | \$3,800  | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$3,800  | \$0       | \$3,800        |  |
| B2011                                             | Replace of the wood fascia                     | 15                                               | 0                           | 80.00    | SF                  | \$50.00    | Deferred Maintenance | 4        | \$4,000  | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$4,000  | \$0       | \$4,000        |  |
| B2011                                             | Repaint the exterior trim and doors            | 4                                                | 0                           | 200.00   | SF                  | \$3.25     | Deferred Maintenance | 5        | \$650    | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$650    | \$0       | \$650          |  |
| B2011                                             | Repaint the exterior trim and doors            | 4                                                | 4                           | 200.00   | SF                  | \$3.25     | Routine Maintenance  | 5        | \$0      | \$0       | \$0       | \$0       | \$650     | \$0       | \$0       | \$0       | \$650     | \$0       | \$0      | \$1,300   | \$1,300        |  |
| B2031                                             | Replace the exterior door and frame            | 25                                               | 0                           | 1.00     | EACH                | \$4,200.00 | Deferred Maintenance | 2        | \$4,200  | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$4,200  | \$0       | \$4,200        |  |
| B3011                                             | Replace the BUR covering                       | 20                                               | 1                           | 210.00   | SF                  | \$15.00    | Deferred Maintenance | 3        | \$3,150  | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$3,150  | \$0       | \$3,150        |  |
| B. SHELL SUB-TOTALS                               |                                                |                                                  |                             |          |                     |            |                      |          | \$15,800 | \$0       | \$0       | \$0       | \$650     | \$0       | \$0       | \$0       | \$650     | \$0       | \$15,800 | \$1,300   | \$17,100       |  |
| C. INTERIORS                                      |                                                |                                                  |                             |          |                     |            |                      |          |          |           |           |           |           |           |           |           |           |           |          |           |                |  |
| C. INTERIORS SUB-TOTALS                           |                                                |                                                  |                             |          |                     |            |                      |          | \$0      | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0      |           |                |  |
| D. SERVICES                                       |                                                |                                                  |                             |          |                     |            |                      |          |          |           |           |           |           |           |           |           |           |           |          |           |                |  |
| D5022                                             | Replace interior lighting                      | 20                                               | 1                           | 1.00     | LS                  | \$800.00   | Capital Renewal      | 3        | \$0      | \$800     | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0      | \$800     | \$800          |  |
| D. SERVICES SUB-TOTALS                            |                                                |                                                  |                             |          |                     |            |                      |          | \$0      | \$800     | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$800    | \$800     |                |  |
| E. EQUIPMENT & FURNISHING                         |                                                |                                                  |                             |          |                     |            |                      |          |          |           |           |           |           |           |           |           |           |           |          |           |                |  |
| E. EQUIPMENT & FURNISHING SUB-TOTALS              |                                                |                                                  |                             |          |                     |            |                      |          | \$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      |           |                |  |
| G. BUILDING SITEWORK                              |                                                |                                                  |                             |          |                     |            |                      |          |          |           |           |           |           |           |           |           |           |           |          |           |                |  |
| G. BUILDING SITEWORK SUB-TOTALS                   |                                                |                                                  |                             |          |                     |            |                      |          | \$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      |           |                |  |
| Expenditure Totals per Year                       |                                                |                                                  |                             |          |                     |            |                      |          | \$15,800 | \$800     | \$0       | \$0       | \$650     | \$0       | \$0       | \$650     | \$0       | \$15,800  | \$2,100  | \$17,900  |                |  |
| Total Cost (Inflated @ 4% per Yr.)                |                                                |                                                  |                             |          |                     |            |                      |          | \$15,800 | \$832     | \$0       | \$0       | \$760     | \$0       | \$0       | \$890     | \$0       | \$15,800  | \$2,482  | \$18,282  |                |  |

10 YEAR EXPENDITURE FORECAST

Site Systems  
18th Street and North Herrin Avenue  
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 | 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                              |                                      |                                                  |                             |          |                     |           |                     |          |          |           |           |           |           |           |           |           |           |           |          |           |                |         |         |         |
| G2042                                             | Repair and paint the retaining walls | 10                                               | 1                           | 350.00   | LF                  | \$3.50    | Routine Maintenance | 5        | \$0      | \$1,225   | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0      | \$1,225   | \$1,225        |         |         |         |
| G2049                                             | Replace the dugout awning roofing    | 10                                               | 1                           | 280.00   | SF                  | \$6.75    | Capital Renewal     | 3        | \$0      | \$1,890   | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0      | \$0       | \$1,890        | \$1,890 |         |         |
| G. BUILDING SITEWORK SUB-TOTALS                   |                                      |                                                  |                             |          |                     |           |                     |          | \$0      | \$3,115   | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0      | \$0       | \$3,115        | \$3,115 |         |         |
| 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      | \$3,115   | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0      | \$0       | \$0            | \$3,115 | \$3,115 |         |
| Total Cost (Inflated @ 4% per Yr.)                |                                      |                                                  |                             |          |                     |           |                     |          | \$0      | \$3,240   | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0       | \$0      | \$0       | \$0            | \$0     | \$3,240 | \$3,240 |

# Appendix B

## Photographs



**Photograph No. 1**

View of the front elevation of the building.



**Photograph No. 2**

View of the side elevation.



**Photograph No. 3**

View of the restroom building roof framing.



**Photograph No. 4**

View of the storage building roof framing.



**Photograph No. 5**

View of the exterior finishes of the restrooms.



**Photograph No. 6**

View of the painted wood trim at the restrooms.



**Photograph No. 7**

View of the rotted wood fascia at the storage building.



**Photograph No. 8**

View of the storage building roof.



**Photograph No. 9**

View of the restroom BUR roof.



**Photograph No. 10**

View of the toilet partitions.



**Photograph No. 11**

View of a water closet.



**Photograph No. 12**

View of a urinal and lavatory.



**Photograph No. 13**

View of the typical interior finishes.



**Photograph No. 14**

View of the typical interior lighting at the restrooms.



**Photograph No. 15**

View of the parking area.



Photograph No. 16

View of the concrete pavement.



Photograph No. 17

View of a concrete walkway and dugout bench.



Photograph No. 18

View of the chain link fencing.



Photograph No. 19  
View of the batting cage.



Photograph No. 20  
View of the CMU wall.



Photograph No. 21  
View of the scoreboard



**Photograph No. 22**

View of one of the aluminum bleachers.



**Photograph No. 23**

View of one of the dugout awnings.



**Photograph No. 24**

View of the typical condition of the CMU walls.

# Appendix C

## Asset Inventory

**ASSET INVENTORY****D20 PLUMBING**

| Location        | Equipment Type | Manufacturer     | Model #  | Serial #           | Fuel/ Rating   | Capacity         | Year |
|-----------------|----------------|------------------|----------|--------------------|----------------|------------------|------|
| Interior Closet | Water Heater   | General Electric | GG30T6XA | GELN0303V1<br>1767 | Natural<br>Gas | 30 US<br>Gallons | 2003 |

**D30 HVAC**

| Location                  | Equipment Type          | Manufacturer | Model No.     | Serial No. | Capacity (Heat and Cool) | Fuel     | Year |
|---------------------------|-------------------------|--------------|---------------|------------|--------------------------|----------|------|
| Roof Level                | Packaged Heat Pump Unit | Carrier      | 50HS-036      | 4394G40152 | 3 Tons                   | Electric | 2012 |
| Pad Mounted – Dial A Ride | Packaged Heat Pump Unit | Carrier      | 50JS-036      | 1404G41346 | 3 Tons                   | Electric | 2006 |
| Pad Mounted – Post Office | Packaged Heat Pump Unit | BDP          | 655ANX-036000 | 4294G40559 | 3 Tons                   | Electric | 2005 |

**G40 SITE ELECTRICAL UTILITIES**

| Location         | Equipment Type | Manufacturer | Model No. | Serial No. | Capacity / Rating    | Year |
|------------------|----------------|--------------|-----------|------------|----------------------|------|
| Exterior Cabinet | Main Supply    | Murray       | NA        | NA         | 120/240 V<br>600 Amp | 1995 |

# **Appendix D**

## Document Review and Warranty Information



## **DOCUMENT REVIEW & WARRANTY INFORMATION**

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:

City of Manhattan Beach Roof Report dated 2013

# Appendix E

## 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.