



## Project Specific Approach and Methodology

### Firm Methodology

Economic and social pressures demand organizations embrace new approaches for facility management with a move toward managing facilities holistically. There is an increased accountability, sustainability and stewardship calling for organizations to **create and use knowledge to improve facility performance** and meet objectives that focus on the bottom line.

### Primary Objectives

Faithful+Gould recognizes the overriding objective of this project is to assist in making strategic decisions that focus on mission goals and opportunities, and to maximize precious funding and resources. The project team will plan, program and deliver the project requirements with the City's key objectives in mind.

Our solutions will assist the City in providing a roadmap of current and future needs which drives informed, sustainable business decisions by creating knowledge through the capture, management and analysis of raw property and operating data. With our extensive experience working with a wide range of public and private sector clients, we have developed an approach which ensures comprehensive and defensible assessments, accurate cost and useful life projections, and prioritized/return-on-investment focused recommendations that have proven to provide a higher likelihood of budget approval success.

### Project Approach and Work Plan

Faithful+Gould's published approach and methods for conducting and developing maintenance and capital budgets are recognized nationally as a benchmark for assessing and inventorying facility assets and conditions.

This approach is based on many years of solving problems that face a facility manager. Our technical team provides engineering experience dedicated to the focal issue of facility assessments and effective utilization of the information collected.

### Project Approach

Our approach to conducting facility assessments is founded on the concept that facility assets are typically diverse and should be viewed and managed as a portfolio and that facility assessments should **always be based upon actual conditions and not statistical benchmarks.**

We consider that there are five key steps of effective management of facility assets:

- Establish baseline asset inventory and important management information or features of the assets
- Establish meaningful baseline data about asset conditions through a detailed, structured assessment process
- Estimate short and long-range asset renewal needs using the data obtained from actual field analysis
- Utilize decision-support models to determine alternate reinvestment rates to obtain desired asset conditions
- Communicate the asset condition and impact on mission support to governing boards, senior management, and line management responsible for maintaining the portfolio

This model forms a coordinated process that enables the facility manager to consistently plan and manage capital assets. This process enables the facility manager to:



- Assess facilities in a consistent manner using established performance standards and methods
- Develop, manage, budget and implement short and long-term management plans
- Conduct a comparative analysis of assets based on condition, use, value and mission
- Report on the urgency of asset conditions and provide vital information needed to analyze and prioritize critical asset and facility needs
- Provide detailed management reports necessary to validate and/or forecast funding and facility requirements for governing boards and senior management

Faithful+Gould's approach to Facilities Condition Assessment and Maintenance Analysis is key to our success in delivering strategic advice to clients for more than 20 years. Our deliverable is best described through the six phases of our project approach shown below which outlines the key high-level tasks and milestones.

#### Six Phase Approach



#### Phase 1

##### Assessment Planning

The planning phase consists of gathering existing facility asset data and establishing points of communication and access prior to the assessment team's arrival on each site. The first step in planning for this project will be to understand current policies, procedures and prioritization and how it will affect the project. Working with the City's facilities staff, our team will assist and develop project-specific policies and procedures to ensure consistent, relevant and quality product deliverables. Included in this phase, Faithful+Gould will interview key City staff to better understand the assets' usage, maintenance history and related items that effect its rate of consumption (i.e., wear and tear) that reduces its useful life. This phase will incorporate multiple sources of information to assist the assessment team in making field determinations.

These sources consist of:

- Existing asset and facility data sources
- Facility and maintenance personnel interviews where possible
- Maintenance history review where available
- Client-specific Lifecycle determinations

#### Phase 2

##### On-Site Data Capture

With the knowledge and insight from the planning phase, our assessment team will carry out a thorough condition assessment of all capital assets owned or managed by the City listed in Table 1 of the RFQ.

**We will utilize the latest mobile computing technologies with the use of handheld devices operating custom-designed remote assessment software. The technology not only provides efficiency in the capturing of data but reassurance to the City that each assessor is working to quality-**



assured procedures by capturing data in the same way to a pre-defined scope and workflow developed to meet the goals of the project.

Our assessment teams will inspect and inventory all major infrastructure components for all facilities, and make a visual assessment of current condition, average remaining useful life expectancy and required maintenance and repair works in accordance with the developed scope.

We recommend utilizing a recognized industry standard hierarchy for classification of assets called UNIFORMAT II as illustrated in the following table where a selection of the asset codes are listed.

**Example UNIFORMAT II Classification**

A. SUBSTRUCTURE	B. SHELL	C. INTERIORS	D. SERVICES
A10 Foundations A20 Basement	B10 Superstructure B20 Exterior Closure B30 Roofing	C10 Interior Construction C20 Stairs C30 Interior Finishes	D10 Conveying D20 Plumbing D30 HVAC D40 Fire Protection D50 Electrical
E. EQUIPMENT & FURNISHINGS	F. SPECIAL CONSTRUCTION	G. SITE IMPROVEMENTS	H. ACCESSIBILITY
E10 Equipment E1030 Vehicular E20 Furnishings	F10 Special Construction F20 Selective Building Construction	G10 Site Preparation G20 Site Improvements G30 Site Mechanical Utilities G40 Site Electrical Utilities	H10 Accessibility

We understand that UNIFORMAT II has three major levels of asset classifications with a suggested Level 4. Faithful+Gould recognizes the need for accurate detailed replacement costs of identified assets. Therefore we have developed a detailed Level 5 library of equipment to enable realistic accurate repair and replacement costs to be applied to the assessment study. Below is an extract of the asset library we have developed illustrating that accurate replacement costs should not be applied to UNIFORMAT Level 4 D3021 Boilers, as there are many different boiler installations all with varied cost rates.

Unifomat Level 1	Unifomat Level 2	Unifomat Level 3	Unifomat Level 4	Level 5 Asset Description	EUL	Unit	Replace Rate
D Services	D30 HVAC	D3020 Heat Generating Systems	D3021 Boilers	HW/Steam - Electric - 205 to 716 MBH Range	30	MBH	\$52.75
				HW/Steam - Electric - 1010 to 4505 MBH (30 to 134 BHP)	30	MBH	\$42.40
				HW - Oil/Gas - 0 to 205 MBH Range	30	MBH	\$0.00
				HW - Oil/Gas - 205 to 716 MBH Range	30	MBH	\$48.00
				HW - Oil/Gas - 1010 to 4505 MBH (30 to 134 BHP)	30	MBH	\$36.35
				Steam Boiler - 0 to 2000 MBH Range	30	MBH	\$28.00
				Steam Boiler - Over 2000 MBH Range	30	MBH	\$22.65
				Furnace - Electric	30	MBH	\$52.00
				Furnace - Gas	30	MBH	\$42.00
			Furnace - Oil	30	MBH	\$58.00	
			D3023 Auxiliary Equipment	Baseboard Convection Heaters - Electric	20	LF	\$0.00
				Baseboard Radiation Heaters - Hydronic	20	LF	\$110.00
				Cast Iron Radiators	50	LF	\$133.00
				Space Heaters with Fan	15	MBH	\$120.00
				Cabinet Heaters with Blower	15	EACH	\$1,450.00
Fin-Tube Convectors - Wall	20	LF		\$330.00			



### Phase 3

#### Analysis of Asset Inventory Data

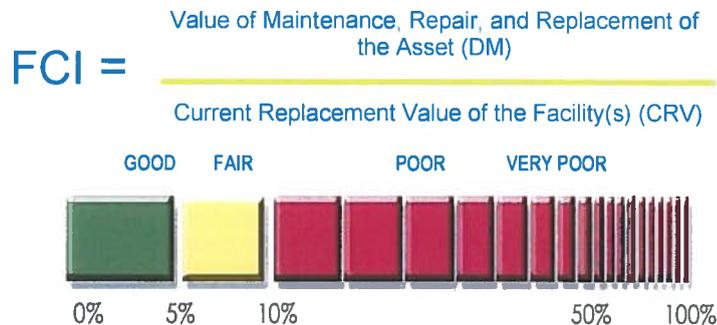
Our approach is centered on understanding the component deficiency, failure modes and triggers of each asset equipment and facility system or land improvement in order to develop a comprehensive management tool for the future implementation of the program recommendations. Utilizing benchmark data sets for establishing typical expected useful-life data, we will establish baseline data and develop a current benchmark Facility Condition Index (FCI) and lifecycle assessment.

In order to develop an accurate facility condition assessment and maintenance analysis, Faithful+Gould does not rely upon published statistical estimated useful life (EUL) data which does not take into account site specific factors. We understand that repairs and asset replacements needs may be required due to a number of contributing factors such as age, maintenance levels, location, exposure and the utilization of the asset or system. **Our experienced assessors will make the necessary adjustments to the benchmark data to reflect the conditions and factors associated with deficiency to provide a more realistic lifecycle assessment and capital expenditure plan.**

For each asset we will determine:

- Install or Purchase Date
- Estimated Useful Life (EUL) (*Expected life from time of install to expected replacement*)
- Level of Preventative Maintenance (*maintenance performed on the asset which may result in an extended life*)
- Geographic Location (*Atmospheric and environmental conditions greatly affect the EUL of equipment. Eg. equipment located in coastal towns have significantly reduced EUL*)
- Utilization Rate (*The EUL of assets can be significantly affected by the rate of utilization. Vehicles is one example however building assets such as finishes, door closing devices, etc. will vary from a typical EUL if the utilization rate changes*)
- Cause of failure/deterioration (*Is the asset deteriorating in line with age? Or is some other factor causing an accelerated rate of deterioration?*)

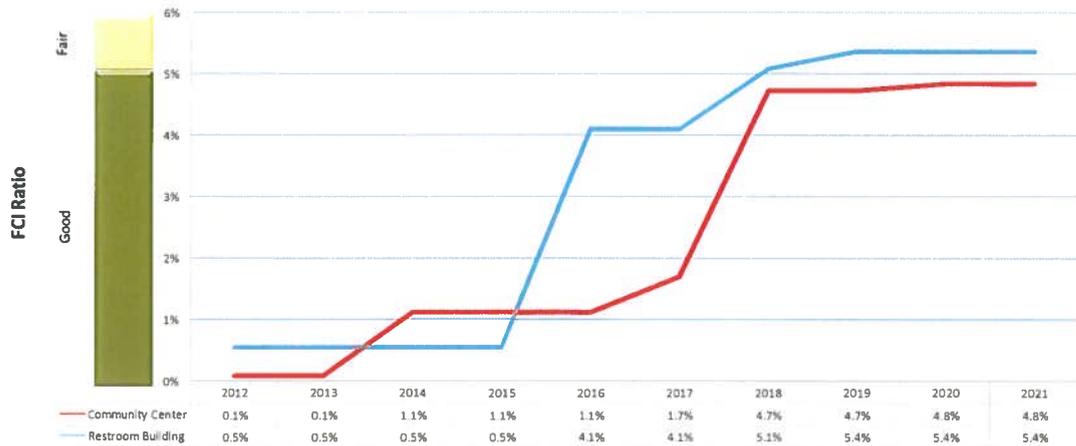
Faithful+Gould recommends utilizing the Facility Condition Index (FCI) to benchmark the condition of the assets across the City's portfolio. We propose to calculate the FCI for the assets, illustrating the current and likely condition of the systems and equipment over time. The FCI is used in Facilities Management to provide a benchmark to compare the relative condition of a group of facilities or assets. The FCI is primarily used to support asset management initiatives of federal, state and local government facilities organizations. The following graphic illustrates the FCI calculation. The higher the value of repairs, the higher the FCI will be.





The following is an example of the FCI chart included in the Executive Summary of each report.

**FCI Chart**



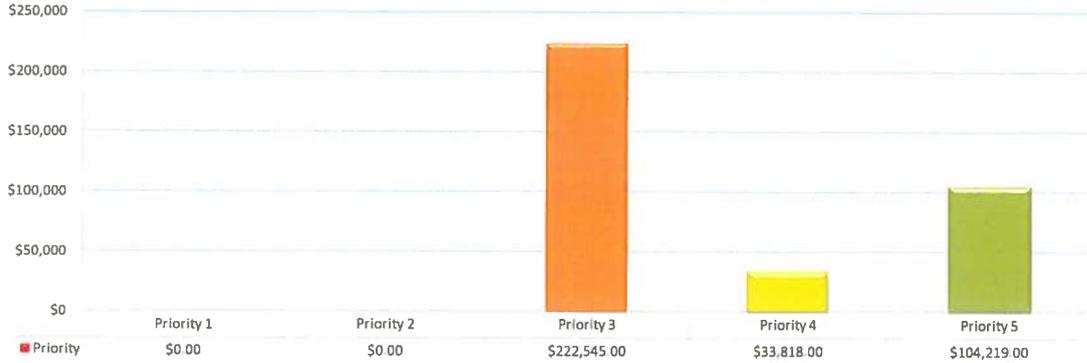
The development of a methodology to determine the priority of each deficiency is crucial to the success of any capital improvement plan. Through consultation with the City's Executive Team and facilities staff, we will develop a capital asset strategy by creating prioritization and deficiency categories that will be applied to each identified deficiency or plan item. This will create additional consideration factors to provide strategic analysis and stakeholder reporting on different work priorities and potential budget streams. The following Priorities and Deficiency categories are suggested and can be applied to each identified repair action. From experience, a facility condition assessment and maintenance analysis often exceeds year-by-year the available budget or resources to implement the actions. With an understanding of priority or criticality of each action, the City will be able to effectively apply available funding to the most urgent and needed actions based upon criticality and will be able to develop a list of less critical actions that could be deferred to future fiscal years.

**PRIORITY CATEGORIES (Suggested)**

<b>Priority 1</b> Life Safety/Code Compliance/ADA:	<ul style="list-style-type: none"> <li>• Compromises staff or public safety or when a system requires to be upgraded to comply with current codes and standards</li> </ul>
<b>Priority 2</b> Currently Critical:	<ul style="list-style-type: none"> <li>• A system or component is inoperable or compromised and requires immediate action</li> </ul>
<b>Priority 3</b> Necessary / Not Critical:	<ul style="list-style-type: none"> <li>• Maintain the integrity of the facility or component and replace those items, which have exceeded their expected useful life</li> </ul>
<b>Priority 4</b> Image/Reputation:	<ul style="list-style-type: none"> <li>• Used to maintain the appearance of a system due to image/reputation</li> </ul>



The following is an example of the necessary expenditure required based on the criticality or priority of the action included in the Executive Summary of each report.

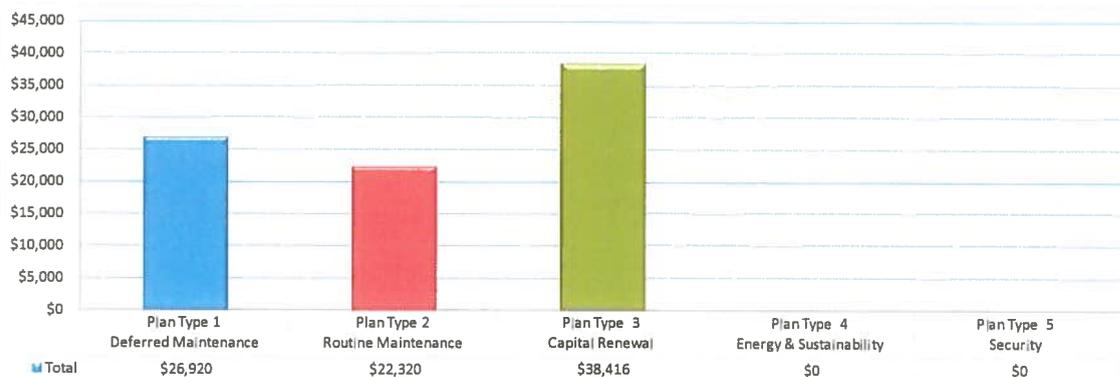


We have illustrated below typical or suggested deficiency categories:

**DEFICIENCY CATEGORIES (Suggested)**

<b>Plan Type 1</b> 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> 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> 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> Energy & Sustainability	<ul style="list-style-type: none"> <li>When the repair or replacement of equipment or systems are recommended to improve energy and sustainability performance</li> </ul>

The following is an example of the necessary expenditure required based on the suggested plan type criteria included in the Executive Summary of each report.





**Phase 4  
 Report Preparation**

Following completion of the project kick-off, site-based data collection and analysis of the collected data, we will prepare comprehensive narrative and statistical reports. The focus of the reports will be to provide comprehensive and defensible information that will support strategic decisions about the economic use and viability of the facilities and assets by determining whether individual assets or facilities require replacement, repair or alteration.

The reports will contain an executive summary, condition analysis and text to describe the assets' conditions. Tables and charts will summarize the prioritized budget expenditure for repair, maintenance and lifecycle component replacement needs over a suggested 10-year study period. We will develop detailed cost information supporting the inventory and replacement value of the assets.

Appendixes will contain structured spreadsheets with capital asset inventory data, cross referenced digital photo logs in support of the deficiencies noted during the assessment, methodologies, scope and definitions used.

**Example Executive Summary Capital Expenditure Forecast Chart**



In addition, we will provide a separate Executive Summary report combining the results of all City asset inventory assessments providing an executive overview with charts and tables to enable strategic decision-making about the level of funding required for each building over the planning horizon and provide a holistic view of citywide facilities and assets.

**Phase 5  
 Quality Control**

The Faithful+Gould team will perform a management overview function throughout the project to ensure that the activities meet the commitments and the intent of the City. We will utilize the strict quality standards developed by the Integrated Organization for Standardization (ISO) in accordance with our ISO 9001 quality assurance practice.

We recognize the importance of a collaborative approach and value client input and feedback at key milestones of the project. Reports will be issued to facility staff on a phased basis, throughout the duration of the project. Our project team will meet with facility staff and walk through the initial phase reports to provide an opportunity to review the content and layout and make any necessary



amendments to the deliverable. The City will also have the opportunity to be engaged in client reviews of each phase throughout the course of the project to ensure the project and deliverables are meeting the expectations of the City.

## Phase 6

### Preparation of Strategic Plan

The Faithful+Gould Strategic Facility Consulting (SFC) service will provide the City with a solution to support your business decisions. We will work with and assist the City in preparing a strategic plan to correct the deficiencies and actions identified through the assessments that will provide a foundation for informed decision-making in regard to asset, facilities and infrastructure condition, multi-year capital budgeting, potential revenue sources, cost saving measures, capital project planning and functional adequacy.

Our deliverable will include an evaluation of routine/preventative maintenance practices and a development of an annual maintenance budget that is detailed and defensible.

In collaboration with the City, our proven and experienced team will deliver the proposed solution which will increase long-term use, value of facility assets and will provide a better understanding of ongoing operating costs and maintenance budgets.

A draft report will be submitted to the City staff for review and input prior to circulating it for public comments and presentation at the City's board meetings. This allows proper disclosure and discussion of the Study's findings and recommendations by the stakeholders and community, and the opportunity for final testimony prior to finalizing the facility condition assessment and maintenance analysis.

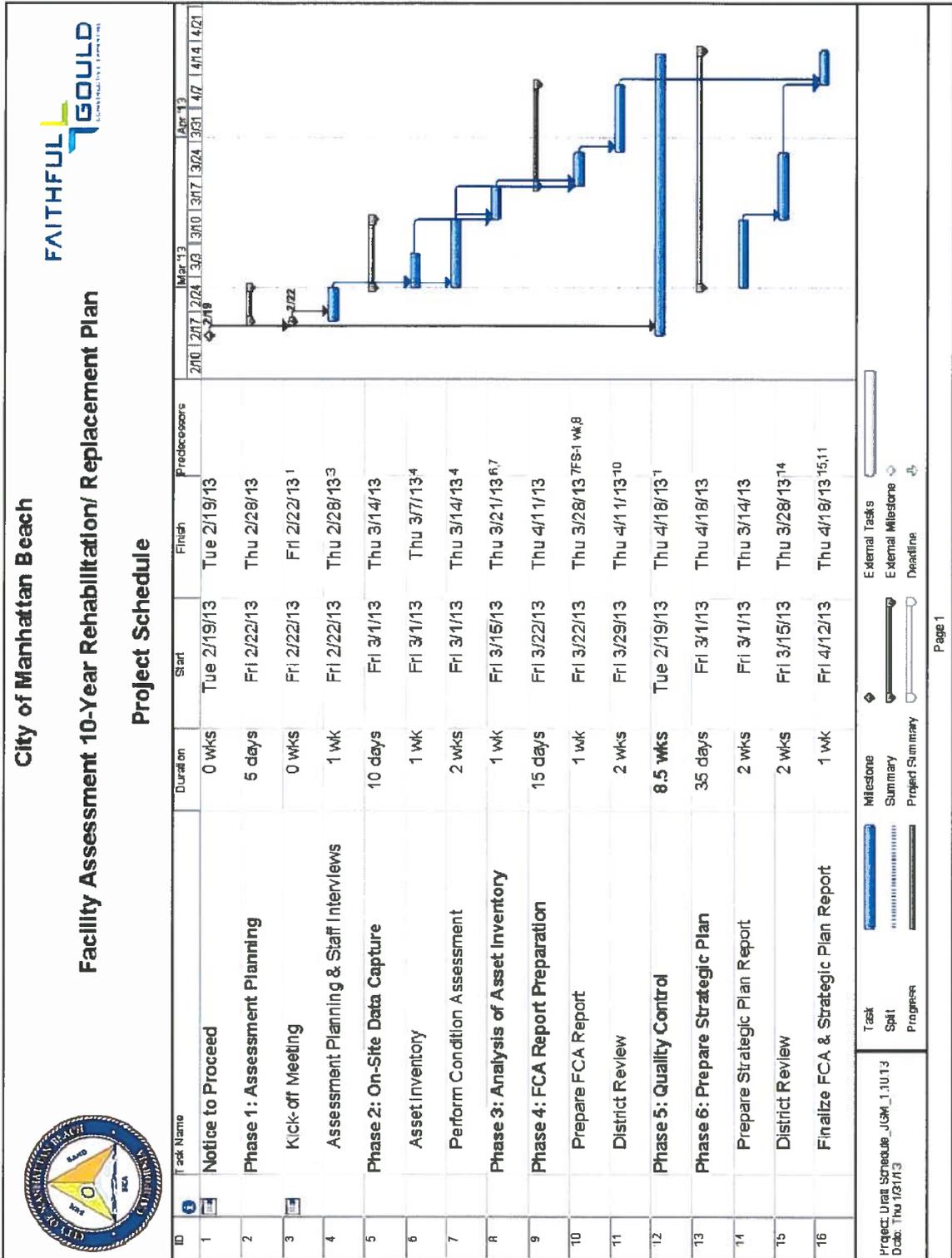
### Presentation of Results

The deliverable will give knowledge about the facilities through the capture, management and analysis of the assessment data. This will be a comprehensive report, and will also include an Executive Summary for stakeholder reporting and strategic planning.

We will prepare and present a presentation of findings to the City's staff and Board as required.

## Preliminary Schedule

The schedule on the following page provides a summary of our Work Plan. As we move forward with gathering your input, we will refine the schedule to meet your needs and project objectives.





## Cost and Hourly Rate Schedule

Shown below we have provided an analysis of the estimated hours and costs for individual tasks as depicted in the Scope of Work. We have also included an hourly rate schedule for the personnel to be assigned to this project.



### Facility Assessment and Replacement Fee Schedule

Name	Project Title	Billing Rate	Task #1	Task #2	Task #3	Task #4	Task #5	Task #6	Task #7	Total Units (hrs)	TOTAL DOLLARS BUDGETED	
			Project Management	Project Kick-Off	Data Collection and Review	Assessment	Report	Cost Estimates	Presentation			
<b>LABOR</b>			<b>Hours</b>									
Dean Leonard	Project Manager	\$160	32	4	8	8	16		6	74	\$11,840	
Richard Neadler	Lead Arch Assessor	\$130		4	8	32	48	4		96	\$12,480	
Andrew McClintock	Sr. Arch Assessor	\$130			8	32	48	4		92	\$11,960	
John Bailey	Sr. MEP Assessor	\$130			8	32	48	4		92	\$11,960	
Richard Rankin	Sr. MEP Assessor	\$130			8	32	48	4		92	\$11,960	
Zaif Ismail	Chief Estimator	\$145						16		16	\$2,320	
<b>TOTAL LABOR COST, by subtask</b>			<b>32</b>	<b>8</b>	<b>40</b>	<b>136</b>	<b>208</b>	<b>32</b>	<b>6</b>	<b>467</b>	<b>\$62,520</b>	



### Seismic Fee Schedule

City Hall	\$4,300
Joslyn Center	\$3,200
Manhattan Heights Center	\$3,200
<b>Grand Total:</b>	<b>\$10,700</b>



### Lead & Asbestos Surveys Fee Schedule

Building	Address	Fee
City Hall	1400 Highland Avenue	\$1,980
Fire Station 1 & Police Station	400-420 15 <sup>th</sup> Street	\$1,980
Fire Station 2	1400 Manhattan Beach Boulevard	\$1,650
Public Works Yard	3621 Bell Avenue	\$1,980
City Hall Annex, Post Office	421 15 <sup>th</sup> Street	\$1,650
Pier Comfort Station	100 Manhattan Beach Boulevard	\$1,320
Pier Roundhouse	100 Manhattan Beach Boulevard	\$1,320
Scout House	1601 Valley Drive	\$1,650
Live Oak Park	1902 Valley Drive	\$1,650
Sand Dune Park	3800 Bell Avenue	\$1,320
Creative Arts Center	1560 Manhattan Beach Boulevard	\$1,650
Marine Avenue Park	1625 Marine Avenue	\$1,650
Manhattan Village Soccer Field	1800 Parkview Avenue	\$550
Polliwog Park	1601 Manhattan Beach Boulevard	\$1,320
Marine Avenue Sports Complex	1600 Marine Avenue	\$550
<b>Grand Total:</b>		<b>\$22,220</b>