

CITY OF SEATTLE

RESOLUTION _____

..title

A RESOLUTION relating to funding for construction and long-term operations and management of public spaces on the Central Waterfront; reaffirming the overall funding plan for the Central Waterfront Improvements and the principles that will guide implementation of these improvements; outlining the process for formation of a Local Improvement District and completion of a fundraising plan for philanthropy; and identifying a framework for an agreement with the non-profit Friends of Waterfront Seattle to operate and manage public spaces on the Central Waterfront.

..body

WHEREAS, in January 2011, the Seattle City Council (Council) adopted Resolution 31264, creating the Central Waterfront Committee (CWC) to oversee development of the waterfront conceptual design and framework plan, ensuring robust and innovative public engagement, identifying public and private funding sources, and establishing the foundation for a lasting civic partnership; and

WHEREAS, in August 2012, the Council adopted Resolution 31399, which stated the City's support of the Central Waterfront Concept Design and Framework Plan based on broad and inclusive public engagement over two years; and

WHEREAS, Resolution 31399 endorsed a Central Waterfront Strategic Plan (Strategic Plan), which established a funding plan and set of action steps to implement improvements to Seattle's Central Waterfront, including endorsement of a funding strategy which called for leveraging a mix of public, private, and philanthropic sources to achieve the public's vision for the Central Waterfront; and

WHEREAS, through Resolution 31399 Council recognized that other cities had successfully established relationships with non-profit organizations to provide consistent, strong leadership to realize visionary plans for complex signature public spaces; and

1 WHEREAS, the Strategic Plan recommended that the City develop long-term relationships with
2 third-party, non-profit entities to perform a range of services, including operations,
3 maintenance, and programming to provide a safe, accessible, and high-quality parks
4 experience to the public; and

5 WHEREAS, via Resolution 31399, the City supported the creation of the non-profit Friends of
6 Waterfront Seattle (Friends) to advocate for implementing the Central Waterfront
7 Framework Plan and Concept Design;

8 WHEREAS, Friends was incorporated in 2012 to champion the “Waterfront Seattle” Program
9 through outreach initiatives, to raise the funds necessary to complete its construction and
10 to ensure the Central Waterfront Improvement Program’s long-term success as a vibrant
11 public destination through ongoing maintenance and programming; and

12 WHEREAS, in March 2014 the Central Waterfront Committee, citing other cities’ successful
13 arrangements with non-profit organizations in managing public spaces, recommended the
14 City consider a direct contract with Friends to perform a range of services for the
15 renovated Central Waterfront, including operations and management; and

16 WHEREAS, in August 2014, Seattle voters approved creation of the Seattle Park District, and
17 funds collected by the District pay for operations and maintenance of Seattle parks,
18 including an annual \$3.5 million budget dedicated to operation and maintenance of the
19 Central Waterfront parks and public spaces; and

20 WHEREAS, in 2015, Seattle City Council adopted Ordinance 124865 authorizing execution of
21 an Agreement for Activation and Programming of Westlake Park and Occidental Square
22 Park, which transferred programming, management, concessions, and most permitting

responsibilities of Westlake Park and Occidental Square Parks to the Downtown Seattle Association (DSA); and

WHEREAS, since the signing of that Agreement, the DSA has partnered with Friends, Seattle Parks Foundation, Alliance for Pioneer Square, and the Parks and Recreation Department to successfully demonstrate that non-profit partnerships for programming and activation of public spaces can increase access, vibrancy, and safety for all users; and

WHEREAS, since July 2015, Friends has been working with the City to implement a pilot program to provide programming and activation along certain sections of the Central Waterfront; and

WHEREAS, in September 2016, the City and Friends entered into a joint funding agreement to construct the Pier 62/63 Phase 1 Rebuild, in which Friends committed to contributing \$8 million of the \$29 million cost; and

WHEREAS, in the Pier 62/63 Phase 1 Rebuild joint funding agreement, the City and Friends indicated their intent to enter into an Operating Agreement for the Operation and Maintenance of the renovated Piers; and

WHEREAS, the City and Friends seek to develop a partnership to provide operations and management services to the Central Waterfront in order to protect the investment of public and private individuals and organizations; NOW, THEREFORE,

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SEATTLE, THE
MAYOR CONCURRING, THAT:**

Section 1. Central Waterfront Guiding Principles. The City intends to complete the planned improvements to the Central Waterfront consistent with the Central Waterfront Guiding Principles (Guiding Principles) endorsed in Resolution 31264, creating a public asset that

1 engages the entire city, remains focused on public uses and activities that attract people from all
2 walks of life, and provides a “waterfront for all.”. The City’s funding plan and subsequent efforts
3 to complete the Central Waterfront improvements will be guided by the Guiding Principles
4 called for in that resolution. The City expects outcomes from the Central Waterfront
5 Improvements to be consistent with the City’s Race and Social Justice Initiative, such as:

- 6 • improved public spaces that encourage use by people of all ages, incomes, and
7 abilities, and support free expression; and
- 8 • public access to high-quality parks and recreation, enhanced by regular
9 programming, concessions that support the public’s use and enjoyment of the Central
10 Waterfront, and free public access to civic and cultural events; and
- 11 • living wage jobs associated with operating and maintaining waterfront parks and
12 public spaces for local citizens regardless of their age, ethnicity, gender, or sexual
13 orientation.

14 Section 2. Overall Funding Plan. The City Council (Council) reaffirms its endorsement of
15 an integrated funding plan for the waterfront which leverages a range of funding sources to pay
16 for the Central Waterfront Improvement Program. This plan, previously endorsed in Resolution
17 31399, includes a Local Improvement District (LID) for certain components of the Central
18 Waterfront Improvement Program to be funded by property assessments to be levied upon
19 benefited properties, philanthropic donations raised by the Friends of Waterfront Seattle
20 (Friends), and substantial investments from The City of Seattle (City) and State of Washington.
21 Since that time, City commitments to the Central Waterfront Improvement Program have been
22 reflected in the City’s Capital Improvement Plan (CIP), and State commitments have been

1 formalized in a Funding Agreement between the City and the State that was approved by Council
2 and executed on August 2, 2017.

3 Section 3. Local Improvement District. The City intends to create a LID in 2018 to fund a
4 portion of the Central Waterfront Improvement Plan. The LID assessment amounts will be
5 determined through the development of a special benefit analysis, in which a licensed real estate
6 appraiser or appraisers will undertake an analysis that identifies the special benefit to real estate
7 in the downtown area associated with the improvements included with the LID. The LID will
8 assess downtown property owners for a portion of the special benefit.

9 The Office of the Waterfront (OW), the Department of Finance and Administrative
10 Services (FAS) and the City Clerk's Office will utilize a review process that will provide
11 affected property owners the opportunity for review and comment of the proposed plans, as
12 described in Attachment A.

13 Section 4. Philanthropic Campaign Plan. Since adoption of the Waterfront Strategic Plan
14 in 2012, Friends has worked to lay the foundation for a successful capital campaign to raise \$100
15 million in private philanthropy to help fund the Central Waterfront Improvement Program.
16 Friends is committed to raising these funds and is confident that capacity and interest are in place
17 in the donor community in the Seattle region to allow the Friends to achieve its goal. Friends and
18 the City have entered into an early campaign for the Pier 62 Rebuild, and Friends has exceeded
19 its milestones for fundraising for that initial project and have raised \$5.1 million as of July 31,
20 2017.

21 The City and Friends recognize that philanthropy and the LID leverage each other and
22 that funding milestones for each are mutually reinforcing. Friends' fundraising efforts to date
23 have confirmed that Friends' ability to meet the overall goal for philanthropic support depends

1 upon (i) confidence that the Central Waterfront capital improvements will be funded as described
2 in Section 2 above, including the funding identified in the Funding Plan to be provided by the
3 LID, (ii) the full scope of improvements being completed by the City, and (iii) sufficient funding
4 for operations and maintenance retained over time consistent with the current plan. Similarly, the
5 City's successful formation of the LID is supported by a strong early indication of a successful
6 philanthropic capital campaign with indications that the total philanthropic goal of \$100 million
7 will be met over time. Subject to these conditions and prior to the introduction of the LID
8 formation ordinance to Council, Friends will submit to the City Budget Director for the City's
9 approval a Fundraising Plan for the \$100 million philanthropic campaign anticipated in the
10 Funding Plan. The Director of the OW and the City Budget Director will inform Mayor and
11 Council regarding the results of their review of the Fundraising Plan and its approval or
12 rejection. The parties will work together to ensure the Fundraising Plan, including a pledge and
13 payment schedule, is realistic, has clear goals and milestones, and provides sufficient funding to
14 meet the cash flow needs of construction. The parties currently anticipate that this plan will
15 include initial pledges representing no less than 25% of the total amount of Friends' fundraising
16 commitment. The parties anticipate these pledges will be confirmed prior to the formation of the
17 LID, with the City Budget Director having opportunity to review these commitments. These
18 initial pledges will include funds raised as part of the early campaign for the Pier 62 Rebuild.
19 The City Budget Director will monitor progress on the Fundraising Plan and inform the Mayor
20 and Council of the status of the fundraising on a regular basis. OW will coordinate with Friends
21 to support its implementation and administration of the Fundraising Plan.

22 Section 5. Partnership for Management and Operations. The Central Waterfront Strategic
23 Plan, endorsed by Council through Resolution 31399 in 2012, cited the benefits other cities have

1 found in collaborating with nonprofit entities for the operations and management of urban parks
2 and public spaces. In that same resolution, the City supported the creation of the non-profit
3 Friends of Waterfront Seattle to advocate for implementing the Central Waterfront Framework
4 Plan and Concept Design. In 2012, Friends was created as a 501(c)(3) non-profit organization.
5 Since then, the City has further formalized a relationship with Friends through contractual
6 agreements for outreach, operating of the Waterfront Space, programming and activation on the
7 Central Waterfront, and the joint funding of Pier 62/63.

8 Building on these past actions, the City recognizes that partnerships with non-profit
9 organizations like Friends will support the success of the Central Waterfront as a public space,
10 provide opportunities to enhance daily maintenance, provide special programming, and expand
11 access to the waterfront park consistent with the City’s Guiding Principle to create a “waterfront
12 for all.”

13 To this end, the City intends to work with Friends to reach an agreement for the long-
14 term provision of high quality operation and management services commensurate with the
15 quality of programming envisioned in the public planning for the waterfront and as reflected in
16 the improvements included in the Central Waterfront Improvement Program. The City and
17 Friends have developed a relationship in the stewardship of waterfront parks and open spaces
18 which supports an overall role for Friends in overseeing operations and management of the
19 finished park. OW and the Parks and Recreation Department (SPR) will work towards an
20 agreement to formalize Friend’s role as the primary non-profit operation and management
21 provider for the Central Waterfront Improvement Program in the form of an Operating
22 Agreement. It is anticipated that this Agreement will include the provision of maintenance by a

dedicated and consistent team of SPR staff, funded through a \$3.5 million Seattle Park District (District) allocation. and will build on the following principles:

Section 6. Future Legislative Actions. In order to advance the final elements of the Waterfront Funding Plan, including forming a LID, and developing a partnership for operations and management between the City and Friends, the Council understands that staff from OW, working in collaboration with its partners and other City departments, plan to submit the following items for legislative action:

1. LID Formation. A series of legislative actions will be necessary to form the LID. The City intends to submit the following, commencing in 2018: a resolution stating Council's intent to form the LID; an ordinance to form the LID that will include a preliminary LID assessment roll; a resolution setting assessment roll hearing date(s); and a subsequent ordinance to confirm and levy the final LID assessment roll. OW and FAS intend to submit all necessary legislation to support the timing of a LID formation and assessment roll confirmation as outlined in Attachment A.
2. Fundraising Plan. In 2018, a legislative action setting forth the manner by which the City will accept the payments made by Friends in accordance with the pledge and payment schedule outlined in the Fundraising Plan to be submitted to the City Budget Director for the City's approval.
3. City/Friends Operating Agreement: In 2018, OW, SPR and Friends will jointly develop a long-term agreement for operating and maintaining park elements of the Central Waterfront. The Operating Agreement, which will be formalized by the City through an ordinance, is anticipated to include the following elements:

1 a. Maintenance. A scope of work that identifies baseline maintenance to be
2 provided by the appropriate City department as well as enhanced maintenance
3 to be provided by a dedicated and consistent team of SPR staff working in
4 partnership with Friends. OW, SPR, and Friends will jointly develop this
5 scope of work and a staffing plan. It will include the following, subject to
6 bargaining where necessary:

- 7 i. A scope and level of service for all aspects of the new waterfront
8 public spaces jointly agreed upon by Friends, OW and SPR.
- 9 ii. Staffing levels to support maintenance of waterfront public spaces,
10 utilizing the \$3.5M in dedicated baseline funding from the District,
11 subject to future review and adjustment to reflect actual costs and
12 inflation. All staff funded by the District will be full City employees
13 and receive all compensation, benefits, and representation accorded to
14 City staff in comparable positions. Friends will identify and commit to
15 fill key management positions necessary to successfully oversee
16 maintenance operations, including an Operations Director.
- 17 iii. Protocols for Friends to request work changes and provide SPR
18 direction in a way that allows for timely maintenance and meets the
19 agreed upon level of service.
- 20 iv. Protocols for Friends to provide input into the selection of SPR staff
21 and request staffing changes, and to integrate volunteer opportunities
22 that supplement park operations.

1 v. Protocols for work locations, conditions, and attire which achieve the
2 goal of a dedicated waterfront maintenance team under the leadership
3 of Friends, including training as appropriate to perform the necessary
4 duties at the agreed upon level of service.

5 b. Programming and Activation. To successfully provide a strong and diverse
6 activation and programming schedule, protocols will be established that allow
7 Friends to permit and program waterfront spaces, host free public events, and
8 manage concessions. Friends shall be required to host a minimum number of
9 free public events each year in partnership with community-based
10 organizations across the city. Any event revenues shall support park
11 operations and programming. Any permit requests related to free speech
12 demonstrations will be handled in a similar manner as in the SPR and
13 Downtown Seattle Association (DSA) contract for the operations and
14 management of Westlake and Occidental parks with Friends managing all
15 permitting requests except for those relating to free speech demonstrations,
16 which would be managed by SPR.

17 c. Phasing. Allowance for phased operation and management of elements of the
18 Waterfront Improvement Program as they are finished.

19 d. Budget. An integrated funding plan for operations of the park spaces that
20 includes, but is not limited to, the District's \$3.5 million budget allowance for
21 the Central Waterfront Improvement Program; revenue generated and
22 expended by Friends through concessions, permitting, and special events; and
23 private fundraising by Friends.

- 1 e. Accountability. A set of annual reporting requirements that provide
2 accountability and information to the City and the public including: an annual
3 report to Council; data and performance metrics on the level of public use and
4 enjoyment of waterfront public spaces; and an accounting of funds and
5 leveraging through partnerships.
- 6 f. City Oversight and Participation. Participation by professional City staff in
7 Friends organization and operations including two (2) permanent ex-officio
8 seats on Friends' Board of Directors, one to be the Superintendent of SPR and
9 one to be the Director of OW (or Mayor's designee).
- 10 g. Agreement Review. A term of no less than five (5) years, at which point both
11 parties will review and adjust the Operating Agreement as necessary to ensure
12 it meets the goals as stated therein.
- 13 h. Oversight Committee. Creation of an Oversight Committee concurrent with
14 the opening of the waterfront park improvements that will review status of
15 park maintenance, daily programming, special events, public safety, and other
16 operational aspects to advise the Council, the Mayor, SPR, and Friends on a
17 regular basis.
18

Adopted by the City Council the _____ day of _____, 2017,
and signed by me in open session in authentication of its passage this _____ day of
_____, 2017.

President _____ of the City Council

The Mayor concurred the _____ day of _____, 2017.

Edward B. Murray, Mayor

Filed by me this _____ day of _____, 2017.

Monica Martinez Simmons, City Clerk

(Seal)

Attachments:

Attachment A – Timeline for LID Formation and Assessment Roll Confirmation

WATERFRONT SEATTLE

INITIAL OPERATIONS & MAINTENANCE REPORT

NOVEMBER 2015

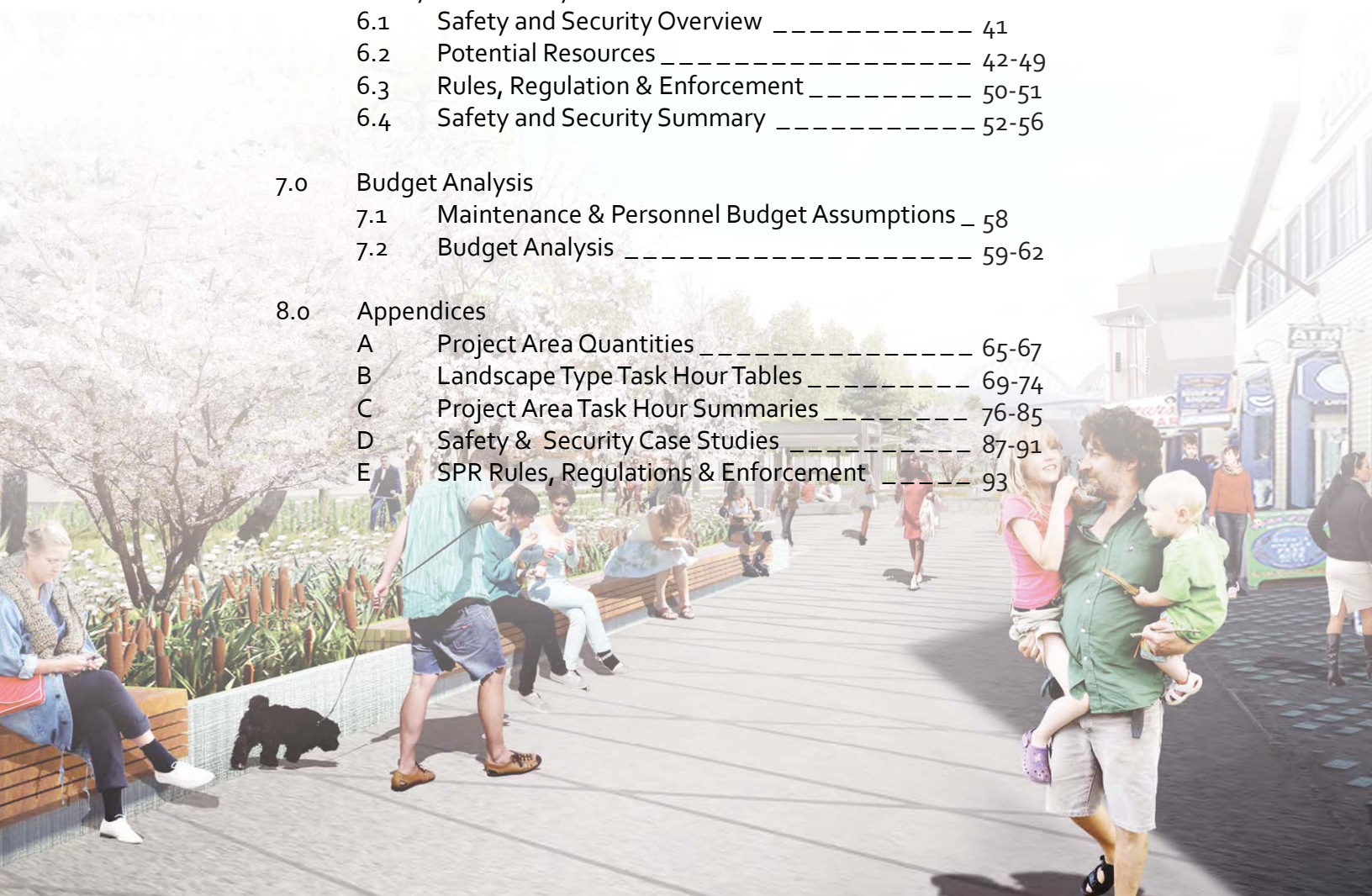
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CONTENTS

1.0	Introduction_____	5
2.0	Maintenance Framework	
2.1	Scope & Individual Project Areas_____	7
2.2	Methodology_____	8
2.3	Landscape Types & Categories_____	9-15
2.4	Maintenance Scope & Exclusion Areas _____	16
3.0	Maintenance Tasks and Standards of Care	
3.1	Standards of Care Summary _____	18-19
3.2	Standards of Care _____	20-25
3.3	Master Task Hour Summary _____	26
4.0	Maintenance Equipment and Materials _____	28-30
5.0	Maintenance & Operations Facilities	
5.1	Facilities Overview_____	32
5.2	Potential Facility Locations_____	33-35
5.3	Facility Space Needs_____	36-39
6.0	Safety and Security	
6.1	Safety and Security Overview _____	41
6.2	Potential Resources _____	42-49
6.3	Rules, Regulation & Enforcement _____	50-51
6.4	Safety and Security Summary _____	52-56
7.0	Budget Analysis	
7.1	Maintenance & Personnel Budget Assumptions _	58
7.2	Budget Analysis _____	59-62
8.0	Appendices	
A	Project Area Quantities _____	65-67
B	Landscape Type Task Hour Tables _____	69-74
C	Project Area Task Hour Summaries _____	76-85
D	Safety & Security Case Studies _____	87-91
E	SPR Rules, Regulations & Enforcement _____	93



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SECTION 1.0

INTRODUCTION



1.0 Introduction

The purpose of this report is to provide an estimate of maintenance expenses and to identify the resources necessary for maintenance and operations of the Waterfront Seattle project. This report is the first in a series of steps that will ultimately result in an Operations and Maintenance Plan for the Waterfront.

ETM Associates (ETM) worked closely with the Office of the Waterfront to determine the project scope and evaluate the project components to define the various landscape types that will be found within the Waterfront Seattle project and to understand the maintenance needs for each. The design development drawings (30% and 60% DD, January -September 2104) upon which this Maintenance Report is based were provided by James Corner Field Operations (JCFO).

The document carefully considers each landscape type in the current Waterfront Seattle program design and the maintenance tasks, hours, personnel, materials, and supplies necessary to maintain the site. In developing the budget estimate, ETM accounted for standard maintenance practices (mowing, tree care, etc.) as well as site specific requirements and Seattle's unique environment. Considerations have also been provided for safety, security, and facility needs to support Waterfront operations and maintenance. This report provides a detailed assessment of operations and maintenance costs that reflect the current level of program design and can help to inform decision making as the project design develops. A preferred operating model, specific roles and responsibilities have not been finalized at the time of this report submission and will be finalized in the future. The findings in this report should be updated to reflect design revisions as the program reaches final design.

The Operations & Maintenance Report is organized into the following sections:

Section 2: **Maintenance Framework** defines the extent of the Seattle Waterfront project, landscape categories and describes the typical landscape types throughout the project area.

Section 3: **Maintenance Tasks and Standards** of care identifies key assumptions and decisions that influence maintenance costs. Maintenance standards have been developed for the landscape types in order to estimate time required to maintain the project areas.

Section 4: **Maintenance Equipment & Materials** discusses equipment and material needs.

Section 5: **Maintenance & Operations Facilities** provides potential facility locations and space needs to accommodate multiple scenarios of daily operations.

Section 6: **Safety and Security** discusses potential staffing, technology & programming resources, case studies of Seattle public space security programs, and initial safety & security recommendations.

Section 7: **Budget Analysis** provides an operations and maintenance budget for the completed Waterfront Seattle program based on the defined standards of care and operating assumptions.

SECTION 2.0

MAINTENANCE FRAMEWORK

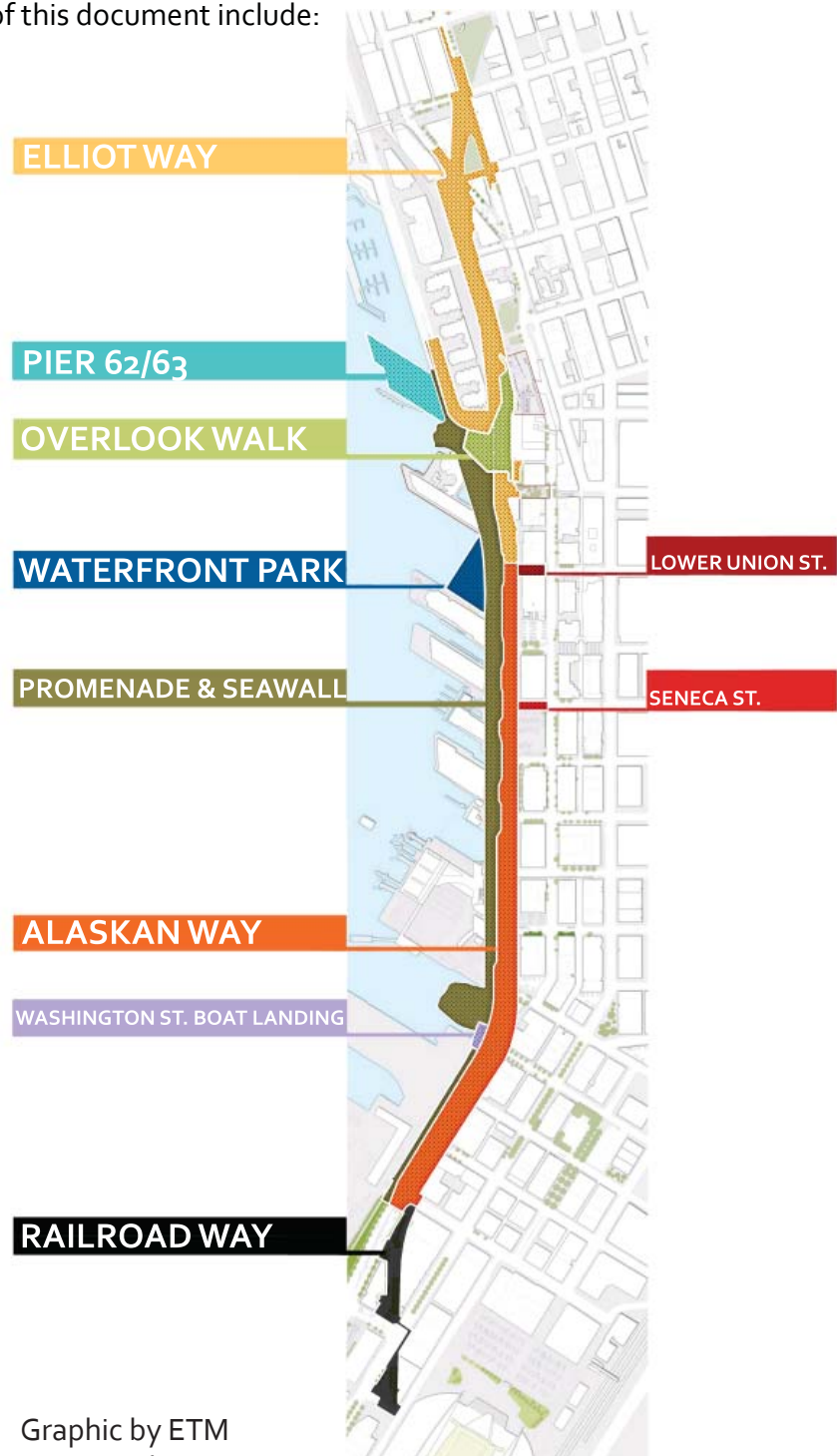


2.1 Scope & Individual Project Areas

The project spans the Waterfront from Railroad Way along Alaskan Way/Elliott Way north to Battery Street. It includes the rebuilt Elliott Bay Seawall, over eight acres of new and improved public open space, improved connections between center city neighborhoods and Elliott Bay, critical utility infrastructure, and new Alaskan Way and Elliott Way surface streets to serve all modes of travel.

The project areas within the scope of this document include:

- Promenade
- Alaskan Way
- Elliott Way
- Lower Union Street
- Overlook Walk
- Waterfront Park
- Railroad Way
- Seneca Street
- Pier 62/63
- Washington Street Boat Landing



Graphic by ETM
Basemap by JCFO

2.2 Methodology

The first critical step in defining a maintenance plan is to create a framework tailored specifically to the project design and intent. For the purposes of this report, ETM and the Office of the Waterfront defined several landscape categories to be maintained each with a sub-set of landscape types, such as paving areas and planting beds, which are used as the basis for estimating annual maintenance costs.

Annual maintenance tasks were developed for each landscape type along with an estimated number of hours needed for maintenance of one (1) unit of each landscape type. The hours per unit were then multiplied by the total number of units of each landscape type. This enabled ETM to determine an estimated total number of hours needed for annual maintenance of the Waterfront project. The hours were then used as the basis for determining annual personnel costs.

This report is based on JCFO's current level of design plans dated January thru September of 2014, with assumptions regarding materials and quantities based upon illustrative project drawings and basis of design reports. Detailed task summaries and estimated hours for each landscape type can be found in Appendix B.

2.3 Landscape Categories and Types

The Waterfront project lends itself to a classification of six (6) broad landscape categories which are listed below:

- Paved Areas (P)
- Planting (PL)
- Furnishing & Site Amenities (F)
- Play Areas (PA)
- Infrastructure (I)
- Structures/Building Space (S)

Each of the six (6) landscape categories are further divided into landscape types which account for all project components, yet simplify the complex project into clearly defined maintenance groups, each with specific maintenance tasks, frequencies and standards. A summary table of the individual landscape types is provided below in Figure 2.1. Detailed tables depicting all project design elements and their respective landscape types are provided in Appendix A.

Paved Areas
P1 - Asphalt & Concrete Paving
P2 - Mortar Set Inlay Paving
P3 - Dry-Laid Paving
P4 - Boardwalk

Planting
PL1 - Trees
PL2 - Shrubs
PL3 - Perennial Planting Areas
PL4 - Groundcover Planting Areas
PL5 - Vine Planting along Screen
PL6 - Habitat Beach
PL7 - Bioretention Cells
PL8 - Lawn Areas

Structures/Building Spaces
S1 - Kiosks
S2 - Concrete Structures
S3 - Maintenance Facilities
S4 - Restrooms
S5 - Restrooms (Attended)
S6 - Elevators
S7 - Building Maintenance

Furnishing & Site Amenities
F1 - Furnishing
F2 - Moveable Furnishing
F3 - Trash & Recycling
F4 - Railing, Fencing & Screens
F5 - Planter Walls
F6 - Signage and Wayfinding
F7 - Artwork & Sculpture

Play Areas
PA1 - Sand Play Area
PA2 - Rubber Surface Play Area

Infrastructure
I1 - Irrigation
I2 - Water Feature
I3 - Site Drainage
I4 - Storm Filter Catch basins
I5 - Catch basins
I6 - Pole Lighting
I7 - Pedestrian Lighting

Figure 2.1 Summary table of landscape types

2.4 Maintenance Scope & Exclusion Areas

Several areas, elements, or specific maintenance responsibilities are not included within the maintenance scope for the following reasons:

- The O&M Report seeks to create a clearly defined area for Waterfront Seattle operations and maintenance activities.
- Some assets are excluded where existing agencies have clear, strong competencies – such as signals, bridge structures and arterial asphalt.
- The defined area for Waterfront Seattle operations and maintenance activities acknowledges integration with existing neighborhoods and parks.

The areas or elements excluded from the scope of this maintenance report include:

- Roadway or vehicle parking area maintenance and cleaning (other than E/W pedestrian crossings with inlay pavers)
- Roadway curbing maintenance and cleaning
- Traffic signal maintenance
- Roadway signage maintenance
- Underground electrical utilities
- Roadway and cycle track lighting fixtures (pole lighting)
- Inspection and maintenance of pier structure (pier decking and pedestrian amenities only)
- Major maintenance of concrete structures (pedestrian overpass, stairs)
- Maintenance and cleaning of interior vendor spaces of the Promenade kiosks

Note: The above are not included in ongoing (annual) maintenance estimates or long-term life-cycle replacement cost estimates. Maintenance and repair of these elements/features will not be the responsibility of Waterfront Seattle managers and will be performed by City of Seattle operating departments or other entities.

Project Area Exclusions

Bell Street: The Waterfront program's Bell Street project is contiguous with the Bell Street Park and is a natural fit to become a part of the existing park, consistent with SDOT and Parks partnership agreement.

Lenora Street Bridge: The Waterfront program will design and build the Lenora Street Bridge project, but will be owned and maintained by the Port of Seattle.

Columbia Street: Columbia Street project improvements will establish an important transit hub connected with the wider Colman Dock Transportation Hub at this location. As such, the focus of improvements is providing transit facilities and basic street improvements to be managed by King County Metro and SDOT.

Main and Washington Streets: These project improvements stretch deep into the Pioneer Square neighborhood and are limited in scope and consistent with its historic character. Therefore, care of these elements is best overseen by local stakeholders, such as the Alliance for Pioneer Square, and in line with treatment for the rest of the neighborhood.

Note: The above maintenance scope assumptions have been evaluated and defined by the SDOT and the Office of the Waterfront.

SECTION 3.0

MAINTENANCE TASKS AND STANDARDS OF CARE



3.1 Standards of Care Summary

The standards of care for maintenance of any public space directly affect the annual maintenance budget and also influence perceptions of safety and use. For example, a maintenance plan in which all tasks are carried out at or above recommended best maintenance practices may create a pristine landscape but may ultimately prove to be unsustainable due to cost. Alternatively, a maintenance plan in which tasks and repairs are carried out at minimal levels may reduce annual budgets, but will likely result in high capital costs required for replacement or repairs that could have been prevented with regular care. Low standards of care can also create an unsafe environment for users.

Intensity of use is another factor that influences the maintenance budget. In general, the greater number of visitors a public space receives, the greater the maintenance load. Similarly, areas with intensive use and higher concentrations of visitors, such as play areas and lawns, typically require greater maintenance. Directly related to this is the fact that the level of maintenance impacts park use. Simply stated, a well-maintained park attracts visitors, whereas a poorly maintained site discourages positive park visitorship and often invites misuse and vandalism. Given this relationship between maintenance and use and the aforementioned standards of care, it is important to develop a maintenance plan that balances fiscal considerations with maintenance needs in order to provide a sustainable, high-quality visitor experience.

General standards of care are based on the Operational Guidelines for Grounds Management, 2001, published by APPA, National Recreation and Park Association, and Professional Grounds Management Society, and adapted to the specific needs of the Waterfront project.

Further consideration was given to the standards of care for the Waterfront Seattle Program based on the vision of the design team and Guiding Principles defined by the Office of the Waterfront. The design team led by James Corner Field Operations (JCFO) has outlined a vision for “high quality levels of maintenance” throughout the project. Furthermore, the Office of the Waterfront has defined the Guiding Principles for Operations and Maintenance to “proactively manage new waterfront parks and public spaces to create Seattle’s cleanest and safest public space, with high quality operations, maintenance, programming and security”.

ETM worked with the SDOT Office of the Waterfront and Seattle Parks and Recreation to select levels of care that meet the maintenance needs of the Waterfront project features, while also creating a responsible maintenance budget. The standards of care for the landscape types are summarized in the following section.

3.2 Standards of Care

The standard of care summaries in this section define the general tasks and frequencies for all project area components and provide a benchmark for general care, functionality and appearance.

The table below shows a sample task hour standard for the Asphalt and Concrete Paving (P1) landscape type which defines the various required maintenance tasks, their frequencies, and the total number of hours required to perform each task for a typical unit of paving (in this case 10,000 SF).

TASK	QTY	UNIT	UNIT (min)	ONCE (min)	ONCE (hours)	ANNUAL FREQ.	TOTAL HOURS	COMMENTS
Paved Areas - HOURS/Unit								
P1 - Asphalt & Concrete Paving							36	Annual hours/10,000 SF
Clean paved surface	2	msf	5	10	0	52	9	20% of area ; with backpack blower
Power washing & permeable Asphalt Cleaning	2	msf	70	140	2	2	5	20% of area; clean stained/dirty areas with power washer & clean permeable asphalt areas with regenerative air sweeper or vacuum sweeper
Paving repair	1	csf	240	240	4	2	8	1% of area - repair pavement marking, cracks, spalling, settling, etc.
Graffiti removal		allow					5	Includes both gum and graffiti removal
Remove litter	0.5	msf	3	2	0	260	7	5% of area; 5x per week
Snow and ice management	10	msf	20	200	3	1	3	100% of an area - Includes snow removal, sand/salt spreading, etc. with vehicle and hand equipment

The estimated total annual hours required to maintain one unit (10,000 SF) of Asphalt and Concrete Paving is estimated to be 36 hours as shown in the above table. Task hour tables have been created for each landscape type and are summarized in the following section. Detailed task hour tables for each landscape type are provided in Appendix B along with a guide that outlines the methodology used to determine the task hour standards.

3.2.1 Paved Areas

Maintenance of all paved areas will include frequent litter removal (5x/week) and regular weekly cleaning with backpack blowers or brooms to provide a safe, clean, well-managed landscape . Any graffiti or vandalism is to be removed within 48 hours. All paved areas shall be cleaned with a power washer, firm bristle brush, or regenerative air sweeper (in the case of permeable asphalt on the Promenade). Paving inspections should be conducted during regularly scheduled cleanings/litter removals and any issues such as cracking, spalling, uneven settling, loose pavers/boards, or weed growth should be noted and addressed with repairs as needed. Additionally, snow and ice removal/management will be required during the winter season as needed in order to maintain safe pedestrian access.

It is estimated that the time required annually, on average, to maintain:

- 10,000 SF of Asphalt & Concrete Paving (P1) will be 36 hours
- 1,000 SF of Mortar Set Inlay Paving (P2) will be 11.5 hours
- 1,000 SF of Dry-Laid Paving (P3) will be 14 hours
- 1,000 SF of Boardwalk (P4) will be 6 hours

3.2.2 Planting

All plantings along the Waterfront must be maintained at a high standard of care. Tasks such as fertilizing, pruning/trimming and irrigating should be done on a regular schedule that adjusts for changes in weather, seasonality, and growing season. Groundcovers, trees/shrubs and perennial plantings should be kept free of disease, pests and dead or dying branches. All dead or dying plants should be removed and replaced promptly. All groundcover beds, bioretention cells, and perennial beds must be mulched and kept free of weeds and litter.

Bioretention cell plantings must be frequently inspected to ensure proper drainage, soil quality, and sediment levels. Debris and silt must be cleared from the presettling tank monthly. Mulch must be removed/replaced annually to maintain proper drainage and sediment capture. Plantings must be well-maintained and demonstrate vigorous plant growth in order to function optimally.

Vine plantings shall be trimmed or cut back as needed at least twice annually to maintain a manageable size. This is particularly important in the case of the chocolate vine, a vigorously growing plant.

The habitat beach area is planted with a blend of trees, shrubs, and groundcovers which will require less frequent care than perennial or groundcover beds. Monthly plant care should be performed including trimming, weeding and plant replacement. The beach is the only planting type that will not be irrigated and therefore may require some hand watering during extended periods without rain. Several objects used as soil stabilization and seating are located within the beach area and should be inspected and cleaned as needed. Wind blown litter and floating debris along the water’s edge should be removed weekly. Beach sand and rip-rap edge will need to be inspected and raked regularly and replenished as needed.

Lawn areas will require frequent, dedicated care in order to maintain a healthy stand of turf during the active growing and use season. A regular mowing schedule should be maintained with seasonal applications of fertilizer and pre-emergent weed preventer. In the case of heavy use, some lawn areas may need to be temporarily closed for overseeding, top dressing or major renovation.

It is estimated that the time required annually, on average, to maintain:

- 20 Trees (PL1) will be 12 hours
- 20 Shrubs (PL2) will be 11 hours
- 1,000 SF of Perennial Planting Areas (PL 3) will be 20 hours
- 1,000 SF Groundcover Planting Areas (PL4) will be 12 hours
- 100 LF of Vine Planting along Screen (PL5) will be 10 hours
- 25,000 SF of Habitat Beach (PL6) will be 72.5 hours
- One bioretention cell (PL7) will be 11 hours
- 1,000 SF of Lawn (PL8) will be 19 hours

3.2.3 Furnishing & Site Amenities

Numerous furnishings and site amenities have been specified for the Waterfront which will need to be rigorously maintained to keep up with use and abuse common to such a popular destination. All amenities should be kept clean, safe and functional. Regular cleaning and inspection should be conducted and any damage or graffiti should be reported and scheduled for repair or removal immediately.

As a precaution against theft, all moveable furnishing must be collected and secured each evening at a predetermined time and set up each morning before visitors arrive.

Trash and recycling receptacles must be emptied on a regular schedule depending on usage which can vary depending upon location, season, weather and event schedules. A peak, shoulder, and off-season schedule has been specified for this project which accounts for periods of high or low visitation.

Significant quantities of painted steel planter walls will be used throughout the project. These surfaces will require repainting and repair over time as damage occurs from vandalism, graffiti, accidents and general use. Repairs and repainting will need to be addressed quickly to prevent further enlarging of damaged or peeling areas. A four part Tnemec coating system is currently specified for all metal surfaces and may require several layer applications based upon the extent and depth of damage.

It is estimated that the time required annually, on average, to maintain:

- Ten Furnishing Items (F1) will be 15 hours
- Ten Moveable Furnishing Items (F2) will be 46 hours
- One Trash/Recycling Station (F3) will be 27 hours
- 50 LF of Railing, Fencing & Screens (F4) will be 6 hours
- 100 LF of Planter Walls (F5) will be 8 hours
- 10 Signage Elements (F6) will be 36 hours
- One Art Piece (F7) will be 13 hours

3.2.4 Play Areas

Play areas will receive a great deal of abuse from active children and must be frequently inspected and maintained at a high level of care to provide a safe, clean play environment. All play equipment must kept clean, functional and in good repair at all times. Safety surfacing must be kept free of litter and cleaned of any spills or accidents that may occur throughout the day. Additionally, safety surfacing may wear out prematurely in areas of high use and will need to be repaired or replaced as needed. Sand play areas will require frequent surface leveling, litter removal and cleaning due to frequent use. An annual replacement of all sand within play areas is recommended during the off-season.

It is estimated that the time required annually, on average, to maintain:

- 100 SF of Sand Play Area (PA1) will be 33 hours
- 100 SF of Rubber Surface Play Area (PA2) will be 31 hours

3.2.5 Infrastructure

Maintaining infrastructure is potentially the most important task within the Waterfront. Components such as lighting, drainage and irrigation must be well maintained to keep visitors and the landscape safe and healthy. All systems should be monitored on a regular schedule to ensure proper function, and any issues or failures must be identified and addressed quickly.

Area and trench drains can easily clog with wind blown litter or fallen leaves, and all drainage infrastructure along pedestrian paved areas and planting beds must be monitored and kept free of any surface or sub-grade blockages at all times. Any repairs must be made immediately.

The water feature at Waterfront Park will consist of multiple fountain jets which can be set to produce a mist or spray, as well as a “water sheet” that will flow to a collection point at the west end of the plaza. Water feature maintenance require frequent cleaning, adjustment, and repair. All surfaces should be cleaned and scrubbed regularly to prevent any biological growth build-up. Daily inspections must be conducted during the operating season to check water quality and adjust chemical levels and filtration components. Strainers and grates must be cleaned weekly and filters must be backwashed. Any issues that prevent proper function must be evaluated immediately and repaired or temporarily closed until a necessary part is delivered. Winterization and spring start up will be required and should be conducted in line with the seasonal changes.

Irrigation is vital to maintaining the extensive plantings throughout the Waterfront. Any failures may result in the loss of plant material. Regular inspections should be performed to ensure adequate coverage and function of all above ground sprinklers/rotors and any underground bubble or drip irrigation through visual checks. Pop up rotors fail regularly and should be quickly replaced to avoid the need for hand watering which can very time consuming.

Catch basins and Storm Filter catch basins should be regularly monitored to ensure debris and silt build-up is not excessive and have not clogged any outfall drains. In the case of traditional catch basins, inspection should occur on a bimonthly schedule or after a series of heavy rain events. Storm Filter catch basins will require more care than a traditional catch basin as the filters can clog if siltation accumulates on the tank bottom or the outer filter surfaces. Storm Filter basins should be inspected monthly and cleared once every three months or after heavy rain events. Filter cartridges should be checked for proper function and may need to be changed yearly depending on frequency of storm events and maintenance standards of road surface cleaning.

Lighting elements will need to be kept clean and functional with repairs and “bulbs” replaced promptly as needed.

It is estimated that the time required annually, on average, to maintain:

- 1,000 SF of Irrigated Landscape (I1) will be 10 hours
- The Water Feature (I2) will be 431 hours
- 10,000 SF of Drainage Area (I 3) will be 10 hours
- One Storm Filter Catch Basin (I4) will be 4 hours
- One Catch Basin (I5) will be 1.5 hours
- 10 Pole Light Luminaires (I6) will be 5 hours
- 10 Pedestrian Lighting Fixtures (I7) will be 3 hours

3.2.6 Structures/Building Spaces

Structure and building maintenance will be a major component of Waterfront maintenance as these components provide important visitor amenities and services. All structures and buildings must be kept in good working order and appearance to effectively serve Waterfront users.

All freestanding structures including the Promenade kiosks and pedestrian overpass at Lower Union should be regularly cleaned and inspected for any damage or structural issues. In the case of the kiosks, all glass panels should be thoroughly cleaned bi-monthly.

All elevators must be kept in good working order, clean, and free of graffiti/vandalism. A weekly schedule of interior and glass cleaning should be maintained and monthly service of the mechanical elevator components must be performed. Regular inspections by a certified elevator inspector should be done per code or manufacturer’s recommendations. Any mechanical failures that may occur should be addressed immediately.

Restrooms must be regularly cleaned and well stocked with toiletries at all times. Visitation and restroom usage are tied to seasons and a recommended restroom cleaning schedule has been developed for the Waterfront which assumes twice daily cleanings during the peak season and once daily cleanings during shoulder and off seasons. It should be noted that these recommendations are subject to change if and when actual findings indicate a change in restroom facility maintenance scheduling needs. The primary restroom facility at the Overlook Walk will be staffed full-time with an attendant throughout the year (12 hours/day in summer and 8 hours/day in winter) and all single stall restroom facilities along Alaskan Way and the Promenade will be regularly checked and cleaned throughout the day.

Maintenance of Buildings B & C at the Overlook Walk is included in the scope of this maintenance report. Maintenance will include all exterior cleaning/maintenance such as roof repair, exterior walls, and gutters. Additionally, all utility components such as electrical, plumbing, and HVAC are included within the maintenance scope for the two buildings. All maintenance and repair work should be completed as needed.

It is estimated that the time required annually, on average, to maintain:

- One Kiosk (S1) will be 16 hours
- One Concrete Structure (S2) will be 9 hours
- 2,500 SF of Maintenance Area (S3) will be 32 hours
- One Single Toilet (S4) will be 205 hours
- Overlook Walk Restrooms (Attended) 3,778 hours
- One Elevator (S5) will be 169 hours
- 5,000 SF of Interior Building Space (S6) will be 49 hours

3.3 Waterfront Project Master Task Hour Summary

An estimated total of 26,563 hours are needed for annual maintenance of the completed Waterfront project areas.

Figure 3.2 illustrates the total hours required to maintain each of the ten (10) project areas included in the scope of this Operations & Maintenance Report.

Waterfront Seattle	Unit	Total	Promenade	Alaskan Way	Elliott Way	Lower Union St.	Overlook Walk	Waterfront Park	Railroad Way	Seneca St.	WSBL	Pier 62/63
Paved Areas	Hours	3,668	1,248	565	295	58	118	118	875	14	8	368
Planting	Hours	5,116	1,842	1,127	1,427	25	413	127	121	34	0	0
Furnishing & Site Amenities	Hours	7,150	2,315	853	1,365	97	1,442	290	0	74	59	655
Play Areas	Hours	837	789	0	0	0	48	0	0	0	0	0
Infrastructure	Hours	3,391	1,090	501	632	35	328	558	146	6	3	94
Structures/Building Spaces	Hours	6,401	269	1,228	0	194	4,465	0	0	0	245	0
TOTAL HOURS		26,563	7,552	4,273	3,719	410	6,813	1,093	1,142	128	316	1,118

Figure 3.2 Summary of the total hours required to maintain the Waterfront project area.

SECTION 4.0

MAINTENANCE EQUIPMENT AND MATERIALS



4.1 Maintenance Equipment

Although agency responsibilities for delivery of maintenance services have not been defined at this time, the importance of the correct equipment for performing maintenance tasks cannot be overstated. Depending on the selected operating model, some or all of the Waterfront project may be maintained with in-house staff which would require equipment and materials. Utility vehicles, accessibility equipment, hand tools, bulk materials, and replacement parts will be needed to facilitate effective maintenance. Identifying useful new equipment, ensuring that the optimal equipment mix is maintained, and developing an equipment replacement schedule are crucial elements of successful maintenance.

Small electric or gas-powered utility vehicles should be considered for operational effectiveness throughout the Waterfront. Small vehicles are more appropriate for the Waterfront rather than full-size vehicles for reasons of maneuverability, economy, and ease of maintenance; and they are more user-friendly.



Small utility carts with dump bed or small trailer.

Work bicycles could also be considered as maintenance vehicles. Bicycles with baskets, and even tricycles with dump beds and storage boxes can be used to transport tools and bulk materials. Staff enjoy riding them and visitors enjoy seeing an inventive, sustainable approach to maintenance. Full-size vehicles, such as trucks, should be used only to the extent that they fill needs that cannot be met by smaller, more economical and user-friendly vehicles.



Work bicycles and tricycles.

SECTION 5.0

MAINTENANCE & OPERATIONS FACILITIES



5.1 Facilities Overview

Facilities will be necessary to support Waterfront maintenance and operations (O+M) including daily cleaning and maintenance, repairs, horticultural work, programming support, as well as security.

Due to the linearity of the Waterfront, different kinds and sizes of facilities should be considered for facility locations to efficiently support daily O+M activities. This can be accomplished through careful siting of facilities along the Waterfront to reduce travel distances to pick up/drop off tools/supplies, trash/recycling, and materials. Ideally, a main facility should be centrally located with a number of secondary and tertiary facilities at other key locations that support special uses/programs and reduce time spent transporting materials and supplies back and forth from the main maintenance facility.

Both indoor and outdoor facilities will be required to accommodate staff, equipment, vehicles, materials, and daily stored items like moveable seating. Some areas used primarily for storage of bulk materials and vehicles can be simple fenced yards. Infrequently used equipment and materials can even be stored at an off-site location if on-site space limitations cannot support all facilities.

Whether maintenance and operations is performed by in-house staff or contracted services, some facility accommodations will be necessary to support daily delivery of services. Ultimately, facility needs will be determined by how much work is done in-house (staff, equipment, tools, etc.) and how much is done with contracted services, who typically supply their equipment as needed.



Staff Bathrooms



Temporary Storage/Work Space



Staff Break Room



Equipment Storage



Staff Lockers



Fueling Station

5.2 Potential Facility Locations

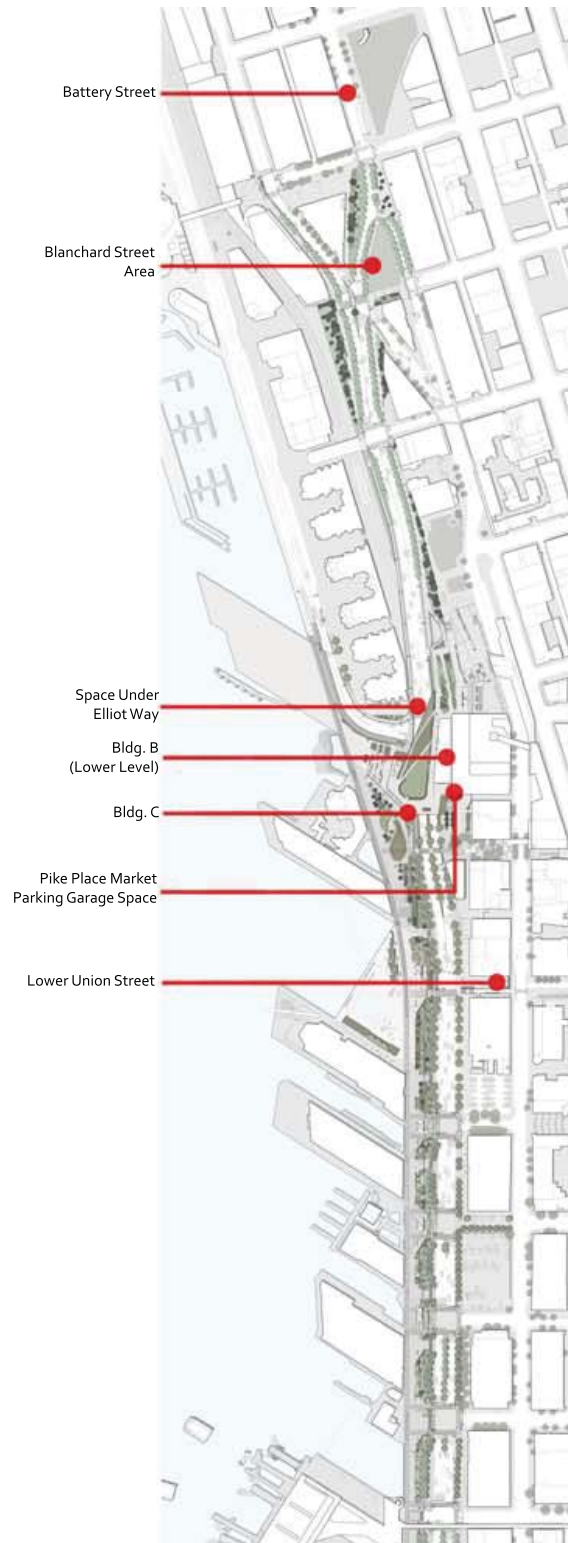
5.2.1 Potential On-Site Facility Locations

A number of locations have been identified along the Waterfront, both on and off-site that could potentially accommodate O+M needs. Potential on-site locations include:

- Building B (Lower Level)
- Building C – Space below south stair of aquarium (Potential Main Facility)
- Space under Elliott Way south of Waterfront Landing
- Pike Place Market Parking Garage Space
- Blanchard Street Area (temporary containers until developed)
- Battery Street
- Lower Union Street (temporary containers)

Buildings B and/or C located at the Overlook Walk have the potential to support the primary indoor facility with an allocation of approximately 2,500 SF for operations and Maintenance. Many of the additional potential facility locations could support small storage or mobilization spaces.

The design, layout and availability of all buildings/locations are currently in development and further design and discussion with the design team and adjacent property owners is required to further define the potential of these spaces.



SECTION 6.o

SAFETY AND SECURITY



6.1 Overview of Waterfront Safety and Security

The new Waterfront Seattle project will span from Railroad Way along Alaskan Way/Elliott Way north to Battery Street. The project includes over eight acres of new and improved public open space, improved connections between center city neighborhoods and Elliott Bay, and nearly 1-1/2 miles of new street surfaces along Alaskan Way and Elliott Way. The majority of the project area, including much of the pedestrian promenade is located within the public right of way.

The Waterfront has been designed with safety and security as a guiding principle; however, design alone cannot ensure a safe environment. A multi-faceted safety and security strategy that consists of sufficient staffing, maintenance, programming, technology and coordination is critical in order to ensure the Waterfront will be a safe place for users, locals and tourists alike.

The security strategy envisioned for the Waterfront should be a multi-tiered approach that draws upon all available resources to ensure the Waterfront is a safe place. Security is a site-wide responsibility that requires cooperation from not only the police, uniformed Waterfront staff and additional safety personnel, but visitors as well. The presence of people is what will ultimately make the Waterfront safe. Activated spaces in which people are present year-round effectively promote the perception of safety in public spaces, and this in turn promotes more use. To ensure that the space is activated initially, the Waterfront must be well-maintained and programmed, and supported with a comprehensive security strategy that includes:

- Enforcement personnel - police, rangers, security staff
- Uniformed park staff - Waterfront O+M staff and ambassadors
- Safety and security infrastructure
- Robust programming of events and activities
- Clear enforceable rules and regulations

Many public spaces have struggled with crime and anti-social behavior simply because they take a reactive rather than a proactive approach. Behavioral and social issues can be difficult to manage proactively. Not only are there varying philosophical approaches to certain social issues, but existing enforcement rules and regulations can conflict with one another making clear enforcement difficult.

An effective governance structure has not been defined at the time of this report submission, including roles and responsibilities of the potential public and non-profit managing entities as well as the property designations and associated laws. Given that these issues are currently undecided, findings and recommendations on safety and security will need to be further refined as decisions are made.

With this in mind, this report outlines the various safety and security tools and offers initial recommendations to ensure that crime, vandalism and other antisocial behaviors are managed proactively, with the goal of a safe, democratic and inclusive environment that can be enjoyed by all.

6.4.4 Initial Recommendations - Safety and Security Strategy

Waterfront Seattle - Safety and Security Strategy	
Management	
Security Council	An in-house council should be formed with members consisting of the Waterfront managing entity, SPD, Friends of the Waterfront, adjacent local businesses such as Pike Place Market, and any other organizations to be invited on a case by case basis. Council meetings should be held on a regular basis (quarterly) to evaluate ongoing issues and implement/adjust initiatives to address changing dynamics. Initial efforts could reduce based on level of need.
Security Coordinator	A part-time Security Coordinator "point person" set in place at the Waterfront to implement and coordinate security initiatives across all applicable organizations. The Coordinator would be a key part of the Security Council and act as link between management and staff, delegating new initiatives and evaluating outcomes. The coordinator would facilitate meetings, create agendas, disseminate information, and provide information and updates to key security staff.
Staffing	
Security Supervision	2 supervisory officers employed on a full time basis to oversee and support security officers and other uniformed staff. Supervisory officers would perform security staff scheduling, equipment and material purchases/repairs/rentals, coordination with partner security resources (Friends Ambassadors, MID teams, etc.), provide special event support, and perform foot patrols when needed.
Year Round Security	Year-round security team; 365 days/year: two staff team for three daily shifts (3-8 hours shifts). Security staff should patrol the property on a regular schedule either by foot, bike, or seqway.
Seasonal Security	Peak Season supplemental security; May-October: two daytime staff team (2-8 hour shifts) to provide support to year-round security team. Security staff should patrol the property on a regular schedule either by foot, bike, or seqway.
Supplemental Event Security (Off-Duty SPD)	Supplemental off-duty SPD staffing to support year-round and seasonal staff during events as needed. 3,000 Hours annually. All supplemental security should be clearly indicated as SPD officers (uniformed).
Ambassadors	A team of approximately 15-20 Ambassadors (Paid or volunteer) to provide visitor education and assistance: May-October - two daytime staff team (2-6 hour shifts/day/7 days per week).
Operations & Maintenance Staff	Dedicated maintenance staff tasked with cleaning, maintaining, and supporting Waterfront operations as additional "eyes and ears".
MID Team Members	MID Clean, Outreach, and Safety Teams working in areas that overlap and abut the Waterfront should coordinate with Waterfront Security and O&M staff to ensure adequate coverage and avoid overlap.
SPR Rangers	Rangers working within the Waterfront area to coordinate with Waterfront Security and MID staff to provide additional "eyes and ears".
Seattle Police Department (SPD)	Seattle Police Department officers to include the Waterfront as part of their regular patrols and provide enforcement of Waterfront rules and regulations. SPR should have direct lines of communication with security staff and have a clear understanding of Waterfront layout and rules & regulations.
Note: all staff should be uniformed, knowledgeable of the Waterfront rules and regulations, equipped with personal communication devices, and trained in emergency protocols and First-Aid.	
Security Infrastructure	
CCTV Cameras	For consideration: Focused use of low-profile CCTV cameras in high use areas of the Waterfront such as kiosks. Cameras should be monitored when possible, not just used to address issues after they occur.
Emergency Call Boxes	For consideration: use of emergency call boxes at regular intervals along the Waterfront Promenade.
Guard Tour System	For consideration: implementation of a guard tour system primarily for use in the evening hours. A strategy of placing a guard tour stop at 1/4 mile intervals should be sufficient.
Perimeter Alarms	For consideration: Perimeter alarms at non-commuter areas to monitor activities during evening hours.

APPENDIX C

PROJECT AREA TASK HOUR SUMMARIES



PROMENADE

Landscape Type	Qty.	Unit	Hrs/Unit	Total Hours	Performed by		
					W-1	W-2	W-3
Paved Areas							
P1 - Asphalt & Concrete Paving	17.5	X SF	36	632	434	58	140
P2 - Mortar Set Inlay Paving	49.2	MSF	12	568	494	25	49
P3 - Dry-Laid Paving	0.9	MSF	14	12	11	1	0
P4 - Boardwalk	5.9	MSF	6.1	36	18	18	0
Total Paved Area Hours				1,248	957	102	189
Planting							
PL1 - Trees	17.2	20 Trees	12	204	100	103	0
PL2 - Shrubs	29.1	20 Shrubs	11	320	291	29	0
PL3 - Perennial Planting Areas	50.4	MSF	20.0	1,009	959	50	0
PL4 - Groundcover Planting Areas	15.1	MSF	12	179	164	15	0
PL5 - Vine Planting along Screen	0.0	CLF	10	0	0	0	0
PL6 - Habitat Beach	1	EA	73	73	72	1	0
PL7 - Bioretention Cells	2	EA	11.2	22	14	8	0
PL8 - Lawn Areas	1.9	MSF	19	36	32	4	0
Total Horticulture Hours				1,842	1,631	211	0
Furnishing & Site Amenities							
F1 - Furnishing	21.4	10 Items	15	327	285	43	0
F2 - Moveable Furnishing	9.0	10 Items	46	412	406	6	0
F3 - Trash & Recycling	15	EA	27	400	400	0	0
F4 - Railing, Fencing & Screens	19.9	50 LF	6	121	106	0	15
F5 - Planter Walls	88.7	CLF	8	695	473	133	89
F6 - Signage and Wayfinding	8.9	10 Items	36	321	312	9	0
F7 - Artwork & Sculpture	3.0	EA	13	39	0	30	9
Total Furn. & Site Amen. Hours				2,315	1,982	221	113
Play Areas							
PA1 - Sand Play Area	7.2	CSF	33	234	205	29	0
PA2 - Rubber Surface Play Area	17.9	CSF	31	555	364	191	0
Total Play Area Hours				789	569	220	0
Infrastructure							
I1 - Irrigation	67.4	MSF	10	697	292	202	202
I2 - Water Feature	0	EA	431	0	0	0	0
I3 - Site Drainage	29.8	MSF	10	298	179	119	0
I4 - Storm Filter Catchbasins	0.0	EA	4	0	0	0	0
I5 - Catchbasins	0.0	EA	1.5	0	0	0	0
I6 - Pole Lighting	5.4	10 Items	5	27	0	22	5
I7 - Pedestrian Lighting	22.6	10 Items	3	68	23	45	0
Total Infrastructure Hours				1,090	494	388	208
Structures/Building Spaces							
S1 - Glass/Metal Structures	4	EA	16	64	0	48	16
S2 - Concrete Structures	0	EA	9	0	0	0	0
S3 - Maintenance Facilities	0	EA	32	0	0	0	0
S4 - Restrooms	1	EA	205	205	199	0	6
S5 - Restrooms (Attended)	0	EA	3,778	0	0	0	0
S6 - Elevators	0	EA	169	0	0	0	0
S7 - Building Maintenance	0.0	EA	49	0	0	0	0
Total Structure Hours				269	199	48	22
Grand Total Maintenance Hours				7,552	5,832	1,189	531

WATERFRONT PARK

Landscape Type	Qty.	Unit	Hrs/Unit	Total Hours	Performed by		
					W-1	W-2	W-3
Paved Areas							
P1 - Asphalt & Concrete Paving	3.3	Ŷ SF	36	118	81	11	26
P2 - Mortar Set Inlay Paving	0.0	MSF	12	0	0	0	0
P3 - Dry-Laid Paving	0.0	MSF	14	0	0	0	0
P4 - Boardwalk	0.0	MSF	6.1	0	0	0	0
Total Paved Area Hours				118	81	11	26
Planting							
PL1 - Trees	0.5	20 Trees	12	5	3	3	0
PL2 - Shrubs	0.0	20 Shrubs	11	0	0	0	0
PL3 - Perennial Planting Areas	6.1	MSF	20.0	122	116	6	0
PL4 - Groundcover Planting Areas	0.0	MSF	12	0	0	0	0
PL5 - Vine Planting along Screen	0.0	CLF	10	0	0	0	0
PL6 - Habitat Beach	0	EA	73	0	0	0	0
PL7 - Bioretention Cells	0	EA	11.2	0	0	0	0
PL8 - Lawn Areas	0.0	MSF	19	0	0	0	0
Total Horticulture Hours				127	119	9	0
Furnishing & Site Amenities							
F1 - Furnishing	12.6	10 Items	15	193	168	25	0
F2 - Moveable Furnishing	0.0	10 Items	46	0	0	0	0
F3 - Trash & Recycling	0	EA	27	0	0	0	0
F4 - Railing, Fencing & Screens	9.2	50 LF	6	56	49	0	7
F5 - Planter Walls	5.2	CLF	8	41	28	8	5
F6 - Signage and Wayfinding	0.0	10 Items	36	0	0	0	0
F7 - Artwork & Sculpture	0.0	EA	13	0	0	0	0
Total Furn. & Site Amen. Hours				290	245	33	12
Play Areas							
PA1 - Sand Play Area	0.0	CSF	33	0	0	0	0
PA2 - Rubber Surface Play Area	0.0	CSF	31	0	0	0	0
Total Play Area Hours				0	0	0	0
Infrastructure							
I1 - Irrigation	6.1	MSF	10	63	26	18	18
I2 - Water Feature	1	EA	431	431	155	168	109
I3 - Site Drainage	3.9	MSF	10	39	23	15	0
I4 - Storm Filter Catchbasins	0.0	EA	4	0	0	0	0
I5 - Catchbasins	0.0	EA	1.5	0	0	0	0
I6 - Pole Lighting	0.0	10 Items	5	0	0	0	0
I7 - Pedestrian Lighting	8.2	10 Items	3	25	8	16	0
Total Infrastructure Hours				558	212	218	127
Structures/Building Spaces							
S1 - Glass/Metal Structures	0	EA	16	0	0	0	0
S2 - Concrete Structures	0	EA	9	0	0	0	0
S3 - Maintenance Facilities	0	EA	32	0	0	0	0
S4 - Restrooms	0	EA	205	0	0	0	0
S5 - Restrooms (Attended)	0	EA	3,778	0	0	0	0
S6 - Elevators	0	EA	169	0	0	0	0
S7 - Building Maintenance	0.0	EA	49	0	0	0	0
Total Structure Hours				0	0	0	0
Grand Total Maintenance Hours				1,093	657	271	165

Pier 62/63

Landscape Type	Qty.	Unit	Hrs/Unit	Total Hours	Performed by		
					W-1	W-2	W-3
Paved Areas							
P1 - Asphalt & Concrete Paving	3.2	ˆ SF	36	116	80	11	26
P2 - Mortar Set Inlay Paving	4.5	MSF	12	52	45	2	5
P3 - Dry-Laid Paving	0.0	MSF	14	0	0	0	0
P4 - Boardwalk	32.9	MSF	6.1	200	102	99	0
Total Paved Area Hours				368	227	112	30
Planting							
PL1 - Trees	0.0	20 Trees	12	0	0	0	0
PL2 - Shrubs	0.0	20 Shrubs	11	0	0	0	0
PL3 - Perennial Planting Areas	0.0	MSF	20.0	0	0	0	0
PL4 - Groundcover Planting Areas	0.0	MSF	12	0	0	0	0
PL5 - Vine Planting along Screen	0.0	CLF	10	0	0	0	0
PL6 - Habitat Beach	0	EA	73	0	0	0	0
PL7 - Bioretention Cells	0	EA	11.2	0	0	0	0
PL8 - Lawn Areas	0.0	MSF	19	0	0	0	0
Total Horticulture Hours				0	0	0	0
Furnishing & Site Amenities							
F1 - Furnishing	1.6	10 Items	15	25	21	3	0
F2 - Moveable Furnishing	5.0	10 Items	46	229	225	3	0
F3 - Trash & Recycling	6	EA	27	160	160	0	0
F4 - Railing, Fencing & Screens	32.8	50 LF	6	200	175	0	25
F5 - Planter Walls	0.0	CLF	8	0	0	0	0
F6 - Signage and Wayfinding	0.8	10 Items	36	29	28	1	0
F7 - Artwork & Sculpture	1.0	EA	13	13	0	10	3
Total Furn. & Site Amen. Hours				655	610	17	28
Play Areas							
PA1 - Sand Play Area	0.0	CSF	33	0	0	0	0
PA2 - Rubber Surface Play Area	0.0	CSF	31	0	0	0	0
Total Play Area Hours				0	0	0	0
Infrastructure							
I1 - Irrigation	0.0	MSF	10	0	0	0	0
I2 - Water Feature	0	EA	431	0	0	0	0
I3 - Site Drainage	6.9	MSF	10	69	42	28	0
I4 - Storm Filter Catchbasins	0.0	EA	4	0	0	0	0
I5 - Catchbasins	0.0	EA	1.5	0	0	0	0
I6 - Pole Lighting	5.0	10 Items	5	25	0	20	5
I7 - Pedestrian Lighting	0.0	10 Items	3	0	0	0	0
Total Infrastructure Hours				94	42	48	5
Structures/Building Spaces							
S1 - Glass/Metal Structures	0	EA	16	0	0	0	0
S2 - Concrete Structures	0	EA	9	0	0	0	0
S3 - Maintenance Facilities	0	EA	32	0	0	0	0
S4 - Restrooms	0	EA	205	0	0	0	0
S5 - Restrooms (Attended)	0	EA	3,778	0	0	0	0
S6 - Elevators	0	EA	169	0	0	0	0
S7 - Building Maintenance	0	EA	49	0	0	0	0
Total Structure Hours				0	0	0	0
Grand Total Maintenance Hours							
				1,118	878	177	63

7.1 Maintenance & Personnel Budget Assumptions

The budget shown in Figure 7.1 is an annual order of magnitude maintenance estimate for the completed Waterfront program area as defined in Section 1 of this report. The budget includes all costs associated with personnel, equipment and materials. This maintenance report and budget is based on the standards and responsibilities outlined in Section 3.0 of this report.

In developing an estimated budget for the Waterfront, ETM has made a number of assumptions that are outlined below. Current assumptions include:

- Hourly rates used for all staffing positions are based upon 2014 Seattle Employee Salary Schedule data (positions and hourly rates).
- The division of labor between the three pay grades (W-1, W-2, W-3) are defined by skill level required to perform each task. Detailed tables are provided in Appendix B which indicate how tasks are assigned to each worker designation.
- Two (2) full-time working maintenance supervisors are included in the estimate in addition to the estimated total task hours. These staff are primarily responsible for oversight and will supplement the primary maintenance workforce. One supervisor is approximately allocated to oversee five (5) in-house staff.
- Employee indirect costs are estimated at 55% for all full time staff and 20% for all part-time staff. These indirect costs are a best estimate at the time of report submission and any rate changes will directly effect on annual staffing costs.
- At least two security officers will be on duty at all times. A minimum security team of two officers will be on-duty during all daytime hours with additional security staffing during the busy summer season and special events. (see Safety & Security section for detailed assumptions).
- Material and supply expenses are included as an in-house expense which includes all necessary materials associated with typical annual maintenance and repair.
- Equipment replacement costs assume the majority of vehicles and equipment will be provided in-house.
- Equipment rental costs assume that not all necessary equipment will be purchased for daily staff use due to the infrequent need for a particular piece of equipment (e.g. scissor lift).
- Equipment fuel and repair costs assume a certain percentage of in-house vehicles/equipment will require ongoing maintenance regular fueling.
- Plant replacement costs assume a certain percentage of annual loss due to weather, use and plant life cycles.
- Insurance costs are included as an estimate and can be adjusted or removed based on actual needs/agreements.
- A standard 5% contingency has been applied to the annual budget to account for variables associated with ongoing design changes, undefined O+M facility locations and developing operating model.
- Cost estimates are in 2015 dollars unless otherwise noted.

Please note that this report does not specify a preferred maintenance strategy, however, the above assumptions are used to form a maintenance framework in order to develop estimated budget costs.

7.2 Budget Analysis

7.2.1 Annual Operations & Maintenance Expenses

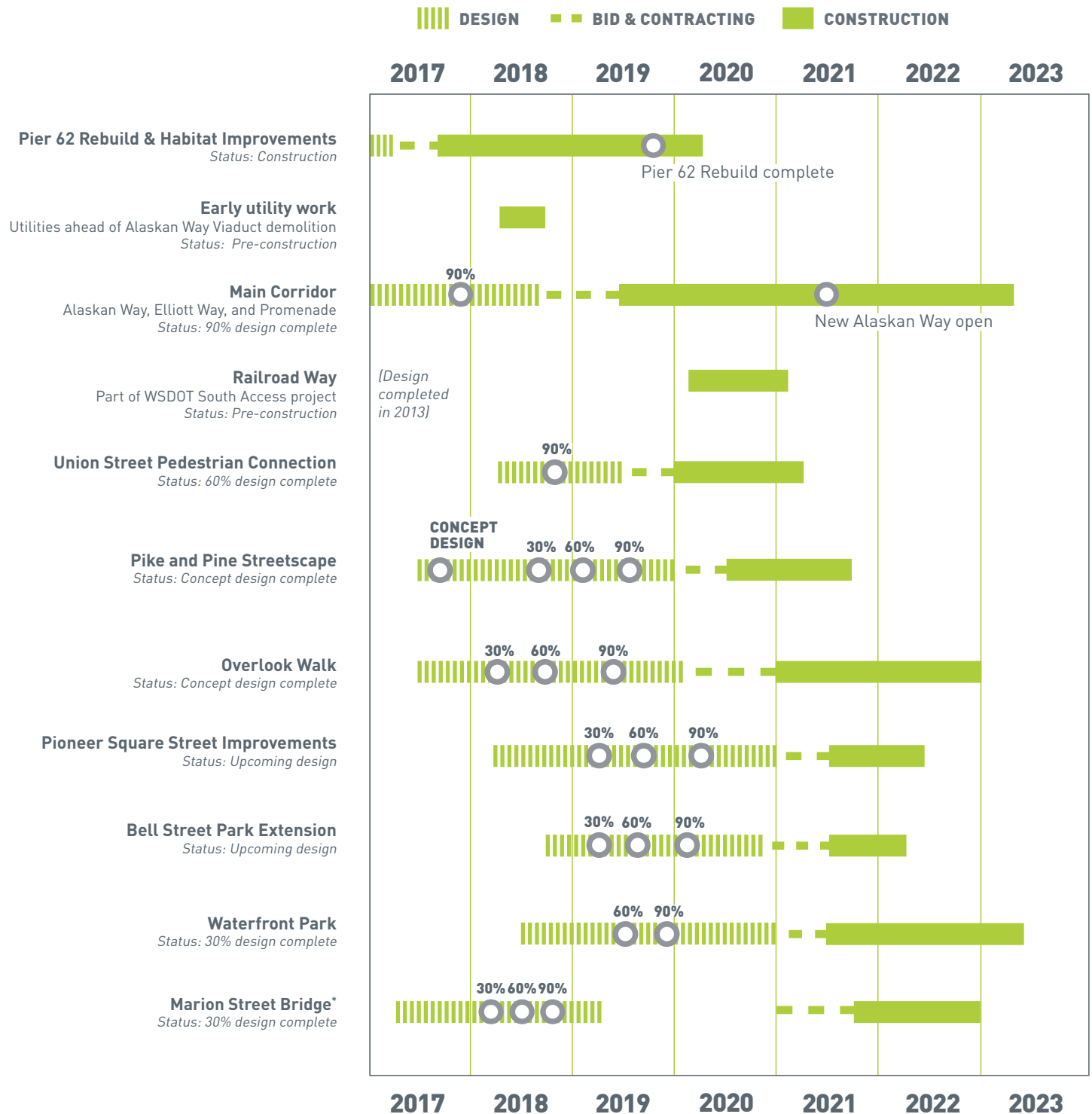
The below table provides estimated annual expenses associated with daily maintenance and operations which includes maintenance, operations and security staffing, material and equipment costs, as well as facility and insurance costs.

Seattle Waterfront - Estimated Annual Maintenance & Operations Budget					Comments
Annual Maintenance Personnel Costs		Hrs	\$/hr	Total Cost	
Working Supervisor		3,720	\$ 37.66	\$140,095	In addition to base task hours. Two FTE equivalent
Maintenance Personnel (Trades Rate; W-3)		2,381	\$ 35.91	\$85,493	Trades Labor (Lighting and infrastructure maintenance and repair, art cons.)
Maintenance Personnel (Skilled Labor Rate; W-2)		3,562	\$ 27.34	\$97,398	Skilled labor (furnishing repair, equipment operation, landscape work)
Maintenance Personnel (Semi-Skilled Rate; W-1)		20,618	\$ 19.96	\$411,535	Semi-skilled labor (Landscape work, cleaning and some maintenance)
Indirect Costs				\$403,987	Typical public sector indirect cost of 55%. Includes benefits, health insurance, pensions/retirement (if applicable), and taxes.
Subtotal Maintenance Personnel Costs				\$1,138,508	
Annual Operations & Maintenance Expenses					
Materials & supplies				\$125,000	Small tools, equipment (hoses, paint, etc.), bench slats, lighting, trash bags, sand, mulch, etc. (Allowance)
Building Maintenance/Repair Materials				\$75,000	Plumbing, HVAC, Roof, Exterior, Etc. (Allowance)
Equipment/Vehicle Replacement				\$65,000	Utility vehicles, power washers, trimmers, backpack blowers, small equipment etc. (Allowance)
Equipment rental				\$40,000	Rental of trucks, hi-boy, scissor lift, etc. (Allowance)
Equipment/Vehicle Fuel and Repair				\$45,000	Parts, repair and fuel (Allowance)
Plant Replacement				\$120,000	Perennial, tree and shrub replacement. Includes some contracted tree maintenance. (Allowance)
Utilities				\$195,000	Water/Electric for Irrigated landscapes, restrooms, water feature, buildings, and site lighting. (Allowance)
Insurance				\$170,000	Liability insurance for entire project area
Facility Lease				\$500,000	Annual fees associated with Lease of Buildings/building space
Subtotal O+M Expenses				\$1,335,000	
Annual Security Expenses		Qty.	Salary	Indirect Cost %	Total Cost
Security Coordinator	686	\$ 32.97	55%	\$35,057	Part-time coordinator
Security Supervision	4,160	\$ 31.10	55%	\$200,533	Field security supervision - 2 full-time working supervisory officers
Year Round Security	17,520	\$ 24.59	55%	\$667,766	two person teams for three daily shifts (3-8 hours shifts)
Seasonal Security	5,840	\$ 21.49	20%	\$150,602	May-October - two daytime staff team (2-8 hour shifts)
Supplemental Security (Off-Duty SPD)	3,000	\$ 68.00	N/A	\$204,000	As needed - event and peak time supplemental security
Ambassadors	4,392	\$ 17.65	20%	\$93,023	May-October - two daytime staff team (2-6 hour shifts)
Equipment and Uniforms				\$10,000	Uniforms, radios, flashlights, etc.
Tech support (CCTV, alarms, Etc.)				\$10,000	
Security Vehicle Maint./Rep.				\$15,000	
Subtotal Security Expenses				\$1,385,980	
Annual Maintenance & Operations Costs				\$3,859,489	
Annual Operations & Maintenance Contingency - 5%				\$192,974	
Total Annual Maintenance & Operations Costs				\$4,052,463	

Figure 7.1 Waterfront Seattle Estimated Annual Operations and Maintenance Budget.



DESIGN AND CONSTRUCTION SCHEDULE



Note: Construction dates subject to change pending the SR 99 Tunnel and Viaduct demolition completion dates, as well as ongoing evaluation of sequencing and packaging assumptions for all projects

*Whether WSDOT or City will construct the Marion Street Bridge project is still under deliberation.

Waterfront Oversight Committee

The City will establish the Waterfront Oversight Committee prior to the start date of any Operating Plans in order to ensure the parks and open spaces are maintained to a high standard of quality and are open and accessible to all. The committee will meet on a regular basis and will provide to the City an annual report evaluating O&M activities and providing feedback for improvement where necessary or desired. Committee membership will be proposed by the Mayor's Office and approved by City Council and will be comprised of at least the following:

Potential Membership

Committee membership would include key representation from the downtown, including but not limited to the following:

- Commercial property owners and operators
- Business owners, including one with an active retail lease located on the Central Waterfront.
- Condominium owner and residential renter
- Institutional (non-profit and/or governmental) property owner
- Representative of the downtown social service community
- Friends of Waterfront Seattle board member
- Parks Superintendent/Mayor's appointee

Formation

The Waterfront Oversight Committee would be formed in 2019, prior to commencement of the City/Friends Pier 62/63 management agreement.