Federal Highway Administration
Western Federal Lands Highway Division

SCOPING REPORT

City and Borough of Sitka

Alaska

AK SITKA 2017(1)

Sitka Sea Walk Phase II

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EXECUTIVE SUMMARY

Objective

The objective of this scoping report is to identify the available information, funding requirements, design criteria, and permitting requirements necessary to complete design and construction of the Sitka Sea Walk Phase II. This report was written by PND Engineers, Inc. and developed through coordination with the Federal Highway Administration – Western Federal Lands Highway Division (FHWA-WFL), the City and Borough of Sitka (CBS), and Alaska Department of Transportation and Public Facilities (AKDOT&PF). A scoping meeting was held in Sitka, AK on November 20, 2019 with all parties to facilitate information gathering and to perform a site visit with a field walkthrough.

Project Description

The Sitka Sea Walk is a continuation of an effort to enhance visitor and resident accessibility to the Sitka National Historical Park (SNHP) and downtown Sitka while also improving safety. The Sitka Sea Walk will also function as a wayfinding system and guide for visitor traffic and simultaneously provide opportunities for exercise and recreation. The development of the Sitka Sea Walk has been divided into two separate phases. Phase I of the Sea Walk was completed in 2013 and extends from the SNHP boundary to the Harrigan Centennial Visitor Center and Sitka Public Library. Phase II will continue the Sea Walk from the Sitka Public Library to the O'Connell Lightering Facility and on to Totem Square and Lincoln Street while maintaining the "look and feel" of Phase I and improving ADA accessibility of the existing facilities.

For the purposes of this report, the Phase II alignment has been broken down into three distinct sections as follows:

- **Section 1** – Sitka Public Library to O'Connell Bridge Approach
- **Section 2** – O'Connell Bridge Approach to O'Connell Lightering Facility
- **Section 3** – O'Connell Lightering Facility to Totem Square and Lincoln Street

Although **Section 1** and **Section 3** each have unique considerations, they are similar in that they both follow and modify existing infrastructure to meet the design requirements of the Sitka Sea Walk. On the other hand, **Section 2** will construct a new alignment section that wraps around the south side (seaward side) of the O'Connell Bridge Approach to the O'Connell Lightering Facility. This scoping report identifies three possible alternatives for constructing this new alignment and include:

- **Alternative No. 1 –** Fill Embankment
- **Alternative No. 2** – Elevated Boardwalk Structure
- **Alternative No**. **3** – Soldier Pile Retaining Wall

Engineering disciplines required to complete design of the Project include:

- Civil Engineering
- Electrical Engineering
- Structural Engineering

Delivery and Funding

Delivery of the Project is expected in 2021 and will be performed by either FHWA-WFL or AKDOT&PF. The Project currently appears to be underfunded and will require that additional funding is obtained to complete construction. The total estimated project cost (including construction contingency and engineering) will vary depending on the alternative chosen for **Section 2** and ranges between $3,757,145.26 and $4,743,817.81. The total funding currently available to the Project is $2,067,202.54 with a requirement that earmark funding ($354,143.54) is spent by July 1, 2020.

Construction of this Project is expected to be completed within one construction season. The construction season will coincide with peak tourist season for CBS and will require coordination and traffic control that minimizes detrimental impact to tourist traffic.

Survey

An as-built survey of the project area was conducted following completion of Phase I construction and will be available for design. This survey was not available during the writing of this report. Additional ground and bathymetric survey may be required to both verify that construction can be maintained within the ROW limits and identify the underwater toe of the existing O'Connell Bridge embankment.

Environmental and Permitting

This Project is expected to fall under multiple Categorical Exclusions within §717.117(c) for National Environmental Policy Act (NEPA) documentation. Additionally, the Project does not directly involve land owned by local tribes or native corporations but will require coordination and consultation to determine tribal significance of affected properties and for development of art installations. The Project is not expected to affect buildings or sites older than 50 years during construction. A cultural resource survey and a State Historic Preservation Office (SHPO) concurrence will be required for completion of NEPA.

No migratory bird or eagle nests were observed within the Project limits; however, Humpback whales and Steller sea lions are known to be present near the Project area. The National Oceanic and Atmospheric Administration (NOAA) has proposed a rule to designate the waters encompassing the Project area as critical habitat for population segments of Humpback whales. At the writing of this report the outcome regarding this decision is still open for comment. The final listing of critical habitat for Humpback whales may require additional permitting/consultation effort. Depending on the alternative chosen for **Section 2**, impacts to waters of the U.S. may result in permitting under Section 10/404 and pile driving may require an Incidental Harassment Authorization (IHA). The Project may qualify for one or more Nationwide Permits if the design of **Section 2** allows. In-water work will have to address essential fish habitat.

Utilities

A full set of utilities (including water, electrical, storm sewer, sanitary sewer and communications) exists within the Project corridor; however, minimal impact is anticipated and will predominately depend on the final alignment of **Section 1** and how this section is widened to achieve the full design width.

Right-of-Way

The Project alignment mostly lies within an existing AKDOT&PF Right-of-Way (ROW) and will require an encroachment permit. Widening of the existing sidewalk is required for **Section 1** to meet the desired design criteria of the Sea Walk. It is anticipated that this widening will occur by extending the sidewalk north into the existing shoulder of Harbor Drive. However, if the full width of **Section 1** is achieved by widening the existing sidewalk to the south then additional ROW may be required in this area. **Section 2**

may require additional ROW for construction of the fill embankment associated with **Alternative No. 1**. This ROW would be acquired from CBS tidelands. No ROW acquisition is expected for **Section 3**.

Geotechnical

A geotechnical investigation is expected for **Section 2** of the Phase II alignment to identify the quality of fill material used in the existing embankment as well as the depth and quality of bedrock below. This information is necessary for pile design of Alternatives No. 2 and No. 3 in this section. Geotechnical drilling in this area may require coordination with the tide cycle and/or traffic control for roadway access. **Section 1** and **Section 3** are not expected to require subsurface drilling due to the nature of the work, available supplemental geotechnical information, and condition of existing facilities within these sections. Any geotechnical investigation will require separate Endangered Species Act (ESA) consultation, wetlands/waters permitting, and cultural resource clearances investigation if performed before permitting is completed for the entire project.

I. PROJECT DESCRIPTION

A. PROJECT SUMMARY

Description	Comment
General project description and nature of work	**Sitka National Historical Park (SNHP) is located on the outer shore of Baranof Island in southeast Alaska. The goal of SNHP is to preserve the historically and culturally important sites and artifacts of the local region. Focus of the park's initiatives include the Native people of Southeast Alaska, the Russian-American period of Alaskan history, and the 1804 Battle of Sitka between local Tlingit and foreign Russian forces.** **The focus of Sitka's pathway developments is to enhance accessibility to the SNHP and downtown Sitka while improving safety. The long-term plan is to link the Sea Walk to the Sitka Multimodal Pathway System (SMPS) and Cross Trail Multimodal Pathway (TMP) via the SNHP trail system. The Sitka Sea Walk is one portion of this long-term plan and aims to create a pedestrian friendly thoroughfare that connects SNHP to Totem Square and downtown shopping.** **The Sea Walk will serve to enhance transportation for visitors and residents as it links downtown shopping areas with multiple visitor destinations along its alignment. Additionally, the Sea Walk will function as a wayfinding system and will guide visitor traffic within Sitka while simultaneously providing opportunities for exercise and recreation. Moreover, the safety of the travelling public will be improved with the development of the Sea Walk through accessibility enhancements and vehicle/pedestrian separations.** **SNHP and the City and Borough of Sitka (CBS) have partnered to plan, design and construct the Sitka Sea Walk. The development of the Sea Walk has been divided into two separate phases. Sitka Sea Walk Phase I extends from the SNHP boundary to the Harrigan Centennial Visitor Center and Sitka Public Library. Phase I was completed in October 2013. Phase II will continue from the termination of Phase I at the Sitka Public Library and extend approximately 0.33 miles along the Sea Walk alignment to Totem Square.** **A large portion of the Phase II alignment follows Harbor Drive. An existing sidewalk follows a similar alignment but currently dead ends at the O'Connell Bridge without a crosswalk to reach the Castle Hill State Historic Site and Totem Square. This currently results in frequent uncontrolled and unsafe crossings by pedestrians. Additionally, the existing sidewalk is only five feet wide and currently too narrow for wheelchair traffic to safely pass. The Sitka Sea Walk Phase II aims to remedy these issues and improve safety by constructing an alignment that follows the seaward side of the O'Connell Bridge approach embankment until it crosses under the bridge to create a separation between pedestrians and vehicular traffic using the bridge. Furthermore, the new Sea Walk will be widened to eight feet in order to accommodate passage of two wheelchairs at a time. This will help create a multiuse path that will benefit members of the community and visitors with a broad range of walking abilities.** **For the purposes of this report, the Phase II alignment has been divided into three distinct sections. Each section will include slightly different work items to accomplish the goal stated above.** Section 1 **encompasses the area of the Sea**

Walk beginning at the Sitka Public Library and continuing to the O'Connell Bridge approach. This section currently has an existing 5-foot-wide sidewalk that follows the south side of Harbor Drive. Improvements in this section will consist of an 8-foot-wide concrete pathway on grade that will replace and widen the existing sidewalk. The existing sidewalk is tightly constrained by Harbor Drive to the north side and buildings and utilities to the south (seaward) side. Widening the sidewalk will require modifications to these adjacent areas. To construct the Sea Walk in this area, a portion of the Harbor Drive eastbound shoulder could be removed to create a 'no parking' zone in this area. This would allow for an 8-foot-wide Sea Walk, separation (grass or stone), concrete curb and gutter, and a paved shoulder on the roadway. This option would remove existing parking on the south shoulder of Harbor Drive with potential for relocating these parking spaces to the currently designated 'no parking' zone on the north side of Harbor Drive in the same area. The City of Sitka prefers this option as it may increase safety and visibility for east bound traffic travelling through the area from the O'Connell Bridge. The remainder of this report considers only this option when discussing Section 1. Other options include widening the sidewalk corridor to the seaward side of the existing sidewalk instead; however, this was deemed impractical as it would require significant utility relocation and conflicts with existing structures. Maintaining an 8-foot-wide Sea Walk was identified as the highest priority for the City of Sitka.

Section 2 **includes the portion of the Sea Walk that proceeds around the seaward side of the O'Connell Bridge approach to the O'Connell Lightering Facility. This section of the Project does not have an existing sidewalk and will require new construction. Analysis has found three design alternatives that may be considered for this portion of the alignment. These alternatives include:**

- **Alternative No. 1 – Build out the existing embankment to a width that will support a continuation of the sidewalk on grade built in Section 1.**
- **Alternative No. 2 – Install a soldier pile retaining wall to retain a fill area that supports a continuation of the sidewalk on grade built in Section 1.**
- **Alternative No. 3 – Install an elevated boardwalk similar to those constructed in Phase I and supported by a pile foundation.**

Section 3 **contains the portion of the Sea Walk between the O'Connell Lightering Facility and its terminus at Totem Square and Lincoln Street. This portion of the Sea Walk follows an existing sidewalk that will be updated to incorporate the Sea Walk architectural features. The existing sidewalk is already the full 8-foot width throughout this section of Sea Walk and does not required widening. The alignment of the Sea Walk through this section will lead pedestrians from Section 2, under the O'Connell bridge to an existing crosswalk at Harbor Way, where pedestrians will be guided along Harbor Way to its junction with Lincoln Street.**

Various options were discussed for the alignment of the Sea Walk upon reaching the Harbor Way/Lincoln Street intersection. The most probable solution would improve an existing crosswalk at this intersection that allows pedestrians to cross from the west side of Harbor Way to the south side of Lincoln Street. This option is preferred by local business to maintain pedestrian traffic on the side of Lincoln Street that fronts local shops. Other options include developing a crosswalk from

	the west side of Harbor Way to the north side of Lincoln Street and guiding pedestrians to Totem Square; although this option was preferred by the City, it is lower priority in the event of cost limitations and may be met with resistance from local business owners as it would route pedestrian traffic further away from the shops fronting the south side of Lincoln Street. Section 3 **also contains three crosswalks that may be enhanced as part of Phase II. These enhancements should conform to the guidelines identified in FHWA Every Day Counts (EDC) Safe Transportation for Every Pedestrian (STEP) Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations and may include raised crosswalks if determined necessary during design.**
Major issues and concerns	**No major issues that would preclude construction of the project are anticipated. There are a few items identified that may have schedule or cost impacts, which include:** • **Coordination of pathway widening required in Section 1 to expand the Sea Walk into the Harbor Drive shoulder and DOT Right-of-way.** • **ROW acquisition is not anticipated for this Project. However, it is not clear if the ROW in Section 2 is wide enough to accommodate the addition of fill required by Alternative 1. This may result in land ownership issues requiring significant time to resolve.** • **There may be some constructability risk associated with the presence of protected species and the associated sound suppression and permitting required during construction of Alternatives 2 or 3 in Section 2. Pile driving associated with these alternatives produces sound levels that may require suppression if protected species are present in the project area.**
Relevant project history	**2019, November 20 – Scoping Meeting held in Sitka** **2019, April – Revised Federal Lands Access Program (FLAP) Project Memorandum of Agreement generated – remains unsigned at the time of this report** **2018, June – Match Agreement signed on June 4, 2018.** **2018, June – FLAP Project Memorandum of Agreement signed by City of Sitka for Sea Walk Phase II.** **2016 – Alaska Department of Transportation & Public Facilities (AKDOT&PF) selected Sea Walk Phase II for construction funding through the Alaska Transportation Alternatives Program (ATAP).** **2014, June – AKDOT&PF Program Decision Committee (PDC) approved Preliminary Engineering for this Project.**

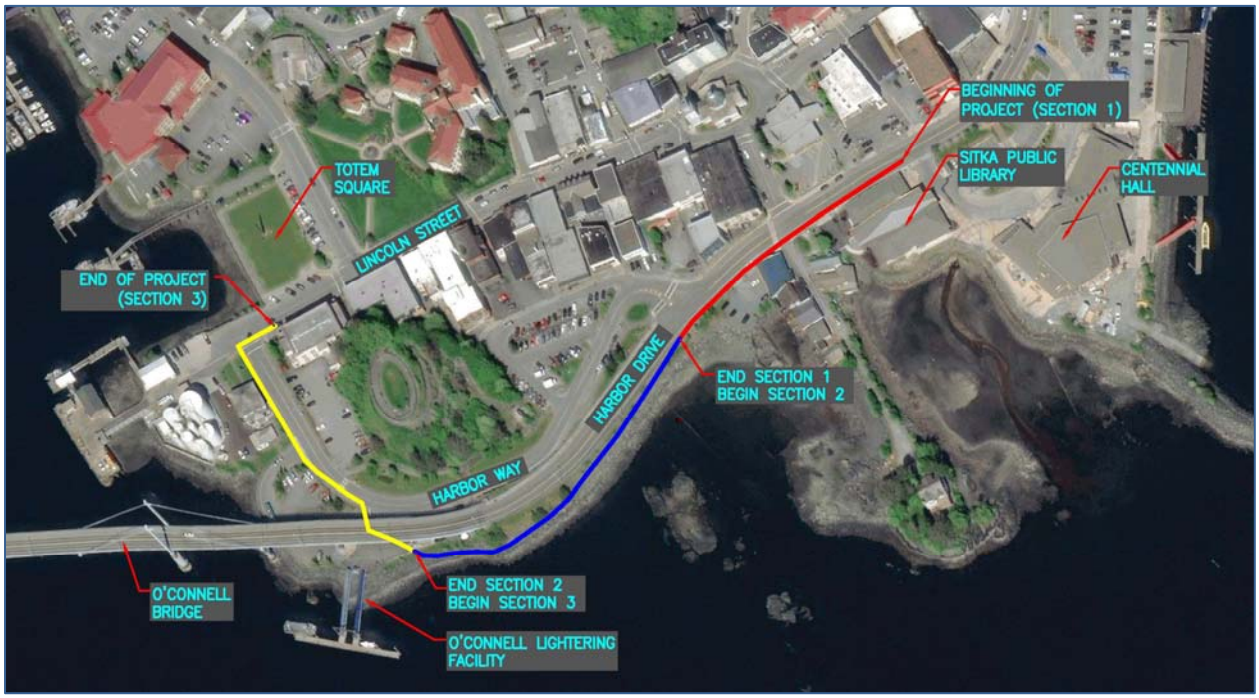


Figure 1: General Project Area and Approximate Alignment

B. ROUTE IDENTIFICATION & EXISTING CONDITIONS

1. SITKA SEA WALK PHASE II – SECTION 1

Sitka Public Library to O'Connell Bridge Approach

Description	Response	Comment
Trail Name:	Sitka Sea Walk Phase II – Section 1	
GPS Coordinates Start	**57° 2'59.16"N, 135°20'1.65"W**	
GPS Coordinates End	**57° 2'56.11"N, 135°20'8.65"W**	
Length	**0.1 mile**	
Functional Classification	**Pedestrian**	
Posted Speed	**N/A**	
Existing Number of Lanes	**1 lane**	
Existing Width	**5 feet**	**The existing sidewalk alignment features a width of 5 feet.**
Existing Clear Width	**Varies**	**The north side of the existing sidewalk is bound by the concrete curb and gutter of Harbor Drive. The south side of the existing sidewalk is generally not paved and has a clear distance of varying width between the sidewalk and adjacent utilities or structures including building corners that abut the sidewalk.**
Major Roadways	**Harbor Drive**	
Current ADT	**Harbor Drive: 4,093**	**This value is based on 2012 traffic data and includes traffic in both directions. Source: http://dot.alaska.gov/stwdplng/transdata/traffic_AADT_Maps_Community.shtml**

Photo 1	**Existing Sidewalk at the beginning of project (BOP) near the Sitka Public Library**	
Photo 2	**Existing Sidewalk in Section 1**	
Photo 3	**Existing Sidewalk in Section 1**	

2. SITKA SEA WALK PHASE II – SECTION 2
O'Connell Bridge Approach to O'Connell Lightering Facility

Description	Response	Comment
Trail Name:	Sitka Sea Walk Phase II – Section 2	
GPS Coordinates Start	57° 2'56.11"N, 135°20'8.65"W	
GPS Coordinates End	57° 2'52.34"N, 135°20'17.57"W	
Length	0.12 miles	
Functional Classification	N/A	No existing sidewalk in this section.
Existing Width	N/A	No existing sidewalk in this section.
Existing Clear Width	Varies	This section of the Sea Walk follows the south embankment of the O'Connell Bridge approach. This embankment increases in height and width towards the O'Connell Bridge. The southern edge of the embankment meets the ocean.
Major Roadways	Harbor Drive	
Current ADT	Harbor Drive: 4,093	This value is based on 2012 traffic data and includes traffic in both directions. Source: http://dot.alaska.gov/stwdplng/transdata/traffic_AADT_Maps_Community.shtml
Photo 1	Existing Embankment in Section 2	

3. SITKA SEA WALK PHASE II – SECTION 3
O'Connell Lightering Facility to Totem Square and Lincoln Street

Description	Response	Comment
Trail Name:	Sitka Sea Walk Phase II – Section 3	
GPS Coordinates Start	57° 2'52.34"N, 135°20'17.57"W	
GPS Coordinates End	57° 2'56.05"N, 135°20'21.50"W	
Length	0.11 miles	
Functional Classification	Pedestrian	
Posted Speed	N/A	

Description	Response	Comment
Existing Number of Lanes	**1 lane**	
Existing Width	**8 feet**	**The existing sidewalk is 8 feet wide**
Existing Clear Width	**Varies**	**The east side of the existing sidewalk is bound by the concrete curb and gutter of Harbor Way. The west side of the existing sidewalk varies along its alignment. The first portion of Section 3 (between the first and second crosswalk) runs atop a retaining wall between a municipal parking lot and Harbor Way. After the second crosswalk, the west side of the existing sidewalk is generally not paved and has a clear distance of varying width between the sidewalk and adjacent utilities or structures.**
Major Roadways	**Harbor Way**	
Current ADT	**Harbor Way: 1,161**	**This value is based on 2012 traffic data and includes traffic in both directions. Source: http://dot.alaska.gov/stwdplng/transdata/traffic_AADT_Maps_Community.shtml**
Photo 1	**Portion of Section 3 between Harbor Way and a municipal parking lot**	
Photo 2	**Portion of Section 3 between the second crosswalk and Project terminus**	

II. PROJECT SUMMARY, SCHEDULE, FUNDING, & CONTACTS

A. SUMMARY & SCHEDULE

Description	Response	Description	Response
Type	**4R**	Partner Agency	**City and Borough of Sitka**
Program Fiscal Year	**2022**	Maintaining Agency	**City and Borough of Sitka**
PS&E Delivery Year	**2021**	FLMA Unit Name	**Sitka National Historical Park (SNHP)**
State	**Alaska**	County	**City and Borough of Sitka**

B. FUNDING

Description	Response	Comment
Main Funding Source	**Transportation Alternatives Program (TAP)**	**TAP Funds – 90.97%** **CBS Local Match Requirement – 9.03%**
Program Amount	TAP Funding $1,360,000 Earmark Funding $354,143.54 FLAP Funding $198,369 Match Funding $154,690 **Total: $2,067,202.54**	**TAP Funding and FLAP Funding both require a 9.03% match.** **Earmark funding does not have a local match requirement.** **Earmark funding must be spent by July 1, 2020.** **Funding estimates shown are current at the writing of this report. Actual funding may vary depending on approved FLAP Project Memorandum of Agreement.**
Preliminary Construction Estimate (CN)	Section 1 $408,907.02 Section 2 – Alt 1 $1,928,409.04 Section 2 – Alt 2 $2,608,872.87 Section 2 – Alt 3 $2,427,744.00	**A preliminary construction cost estimate has been prepared for the project components identified in this scoping report. These are broken out by project section, and are displayed in the appendix.** **The estimate is based on planimetric and end area quantity calculation for major project components. Section 1 estimates assume that the full width of the Sea Walk is obtained by widening the existing corridor into the shoulder of Harbor Drive to avoid major utility relocation. The unit costs are based primarily on bid tabulations for similar jobs within southcentral and**

	Section 3 $253,818.60 **Total CN for Each Alternative:** **Alt. No. 1 - $2,591,134.66** **Alt. No. 2 - $3,271,598.49** **Alt. No. 3 - $3,090,469.62**	**southeast Alaska bid by AKDOT&PF within the last year. Unit costs were adjusted to account for difference in location, complexity, and size of projects.** **Mobilization cost is based on 10% of construction costs. A 20% design contingency was applied to estimated cost to account for potential unknowns and changes to the design. An additional 10% contingency was added to the project cost (loaded with design contingency) to account for the accuracy of quantity take-off methods and variances in pricing.** **For cost estimating purposes Sections 1, 2, and 3 were estimated together as a single project for each of the Section 2 alternatives, but were broken out as separate estimates to assist in evaluating section specific funding.** **It is anticipated that the construction time for each alternative will vary; however, all alternatives are expected to be completed within a single construction season.** **All Costs given are based on 2020 dollars and does not directly consider inflation nor escalation.**
Total Project Costs	**Alternative No. 1** PE: $388,670.20 CE: $518,226.93 CM: $259,113.47 ***Total: $3,757,145.26*** **Alternative No. 2** PE: $490,739.77 CE: $654,319.70 CM: $327,159.85 ***Total: $4,743,817.81*** **Alternative No. 3** PE: $463,570.44 CE: $618,093.92 CM: $309,046.96 ***Total: $4,481,180.95***	**Additional project costs include Preliminary Engineering (PE), Construction Engineering (CE), and Construction Modification (CM) Contingency. These costs are based on a percentage of the preliminary construction cost estimate (CN) provided above. Those percentages are:** **PE = 15% CN** **CE = 20% CN** **CM = 10% CN** **Total project costs include CN, PE, CE, & CM.**
Other	**N/A**	**The Sitka Public Library may provide funding of their own to support the landscape/hardscape/art/architectural enhancement in the covered gravel area between the Sea Walk and the Sitka Public Library in Section 1.**

Prioritization of Funds	**The preliminary construction estimate appears to exceed the anticipated project funding. CBS has provided the following list of priorities to assist in determining which features can be excluded to keep project costs within funding limits. The following is listed in order of decreasing importance.** **1. Maintain full 8-foot width** **2. Maintain "look and feel" of Phase I Sea Walk** **3. Maintain existing memorial bench at O'Connell Bridge approach** **4. Maintain ADA accessibility** **5. Safety lighting as Sea Walk wraps around O'Connell Bridge in Section 2** **6. Opportunity for scenic lookouts and interpretive signage** **7. Project to terminate at Totem Square** **8. Landscaping**

C. PRINCIPAL CONTACTS

Contact and Title	**Brandon Stokes, Project Manager**
Agency	**FHWA-WFL Highway Division**
Phone Number	**360-619-7813**
Email Address	brandon.stokes@dot.gov

Contact and Title	**Cliff Richter, Municipal Engineer**
Agency	**City and Borough of Sitka**
Phone Number	**907-747-1807**
Email Address	cliff.richter@cityofsitka.org

Contact and Title	**Brent Coe, Project Management Branch Chief**
Agency	**FHWA-WFL Highway Division**
Phone Number	**360-619-7744**
Email Address	brent.coe@dot.gov

Contact and Title	**Christopher Goins, Design Group Chief**
Agency	**AKDOT&PF**
Phone Number	**907-465-4443**
Email Address	christopher.goins@alaska.gov

Contact and Title	**Paul Kendall, Project Manager**
Agency	**PND Engineers, Inc.**
Phone Number	**907-561-1011**
Email Address	pkendall@pngdengineers.com

III. AVAILABLE DATA, CRASH DATA, & WORK LIMITATIONS

A. AS-BUILTS AND REPORTS

Data	Description
Other (Explain)	
As-Builts	**2006 AKDOT&PF Sit-Harbor Drive Lighting, Pedestrian & Bicycle Improvements as-built plan set.**
As-Builts	**2002 AKDOT&PF Sitka Harbor Bridge Rehabilitation as-built plan set**
As-Builts	**2001 AKDOT&PF Harbor Way Reconstruction – Harbor Drive to Lincoln Street as-built plan set with typical sections, drainage, utility, retaining wall, etc.**
As-Builts	**1984 AKDOT&PF Sitka Airport Parking Reconstruction and Paving – Airport Access, Japonski Bridge, Lake Street and Sawmill Creek Boulevard Pavement Overlay as-built plan set.**
As-Builts	**1970 AKDOT&PF Sitka to Japonski Island Grading, Drainage, Paving, Bridge, Illumination & Landscaping as-built plan set.**

B. CRASH HISTORY

Data	Response	Comment
Crash History Requested?	**Yes**	**No crash history available.**
Crash History Obtained and Analyzed?	**No**	**No crash history available.**
Anecdotal Crash History?	**No**	**No crash history available.**
Will alternate routes (detours/diversions) be provided for during construction?	**Yes**	**Detour routes for business access during construction and traffic control requirements will be evaluated and developed during design development. Road closures are not anticipated during construction.**
Traffic restrictions during construction?	**Yes**	**Sequencing of construction may be affected by schedule at O'Connell Lightering Facility.**

C. WORK LIMITATIONS

Description	Response	Comment
Season and/or Time Restrictions	**Yes**	**Work will be limited by seasonal construction window and migratory bird movements/presence. U.S. Fish and Wildlife Service recommends that no tree removal occurs between April 15th and July 15th.** **Vibratory pile driving can have behavioral effects on marine mammals that extend significant distances. There are at least three known haulouts at the mouth of Sitka Sound (within 25 km of the project site) that could be affected by underwater noise sources. Timing restrictions may be required to mitigate impacts to these protected haulouts.**

		As construction window coincides with peak tourist season, sequencing of construction may be affected by schedule at O'Connell Lightering Facility.
Designated Staging Area(s)?	**No**	**Contractor would likely be able to stage equipment and materials at O'Connell Lightering Facility. Additionally, staging area behind Centennial Hall and at Totem Square may be available.**
Designated Material Source?	**No**	**Material source may be available for the Project at a City quarry as well as the Indian River Uplands Rock Quarry operated by Baranof Island Housing Authority (BIHA). The City quarry is limited as a material source.**
Hauling or Load Restrictions	**Yes**	**Contractor hauling and load operations shall adhere to the requirements of the State of Alaska Department of Transportation Commercial Vehicle Size, Weight, and Permit Regulations. No additional hauling or load restrictions will be required by CBS.**
Potential Water Sources?	**Yes**	**CBS hydrants are available for water sources.**

IV. FUNCTIONAL CONSIDERATIONS

A. PATHWAY DESIGN & SAFETY

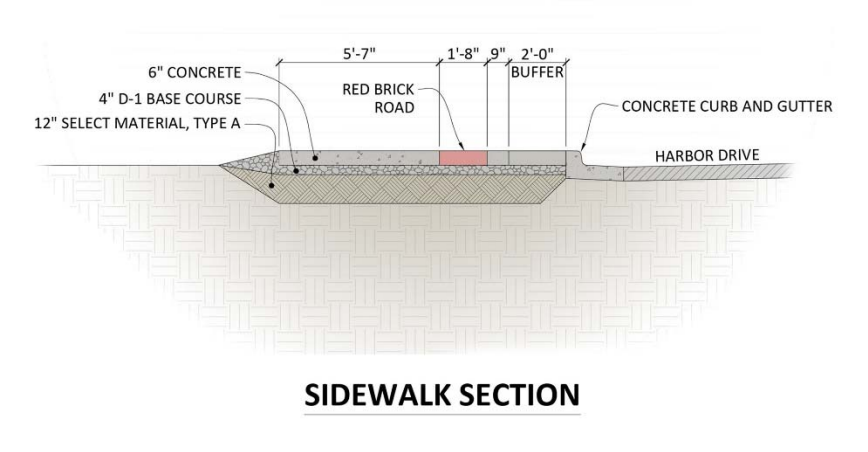
1. SITKA SEA WALK PHASE II – SECTION 1
Sitka Public Library to O'Connell Bridge Approach

Description	Response	Comment
Pathway Name:	Sitka Sea Walk Phase II – Section 1	
PROPOSED DESIGN STANDARDS		
Design Use	**Pedestrian**	
Functional Classification	**Other**	**Shared-Use Sidewalk**
Design Speed	**3.5 ft/s**	**This is the pedestrian walking speed that should be used when calculating pedestrian clearance time per Section R306.2 of the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way.**
Travel Way Width	**8 feet**	**Continuous clear width required by 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R302.3 is 4 feet. However, the Sea Walk design is intended to allow opposing wheel chair traffic to safely pass. Therefore, maintaining a minimum 8-foot-wide travel way is the highest priority feature of the Sea Walk design.**
Travel Way Type	**Concrete**	**CBS indicated that the in-laid brick to create the "red brick road" caused potential for tripping hazard and differential settlement (see photo below). They would like to consider alternative surfacing materials while maintaining the "look and feel" of Phase I.** 

Description	Response	Comment
Shoulder Width	**0 feet**	**The south side of the pathway will vary by location and may abut nearby unpaved areas, paved driveways, nearby utilities and structures. A 2-foot landscape or concrete separation buffer may be considered for the north side of the pathway, if extended into the existing shoulder of Harbor Drive.**
Shoulder Type	**Paved/Unpaved Combo**	**The shoulder on the south side of the existing sidewalk varies and consists of grass, landscape stone, and gravel driveway. This may remain or be replaced in kind. The north side of the pathway is currently paved and may be replaced with a 2-foot landscape or concrete separation buffer; if extended into the existing shoulder of Harbor Drive.**
Min. Horizontal Radius	**N/A**	**Minimum radius guidelines are not provided in the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way or the FHWA Designing Sidewalks and Trails for Access Part II: Best Practices Design Guide. AASHTO Guide for the Development of Bicycle Facilities, Table 5-2 recommends a minimum horizontal radius of 27 feet.**
Maximum Grade	**5%**	**2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R302.5.**
Cross Slope	**2%**	**2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R302.6.**
Horizontal Clearance to Structures	**0 feet**	**The existing sidewalk in this section abuts the Sitka Realty building. This is expected to remain unchanged.**
Min. Clear Zone	**0 feet**	**Relocation of utilities or structures adjacent to the south side of the existing sidewalk is not expected. These features occur at varying distances from the existing sidewalk. According to the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R402, objects adjacent to the Sea Walk should generally not protrude more than 4 inches horizontally into the pedestrian pathway.**
		PROPOSED DESIGN FEATURES
Realignment or grade change required?	**Yes**	**A minor grade change is anticipated at the beginning of the Section 1 alignment in the vicinity of the Public Library. The current sidewalk grade is below the top of the adjacent curb. It is expected that the Section 1 design raises the sidewalk grade to follow the top of curb similar to the other portions of the Sea Walk.** **In addition, the alignment of the Sea Walk as it approaches the O'Connell Bridge may divert away from the existing alignment and Harbor Drive. This alignment would bring the Sea Walk to the south of the existing sidewalk in an effort to deter uncontrolled pedestrian crossings at the intersection of Harbor Way and Harbor Drive. This realignment would occur on the west side of the Sitka Realty building's parking lot and would be dependent on existing ROW in the area. This alignment can be considered but is not a design requirement.**

Description	Response	Comment
Will profile be raised due to proposed pavement structural section?	**No**	**Vertical realignment may be implemented for other reasons (see above).**
Additional work required at intersections or driveways?	**Yes**	**Driveways may require curb ramps designed in accordance with the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way.** **Crosswalk improvements should follow the Every Day Counts initiative guidelines provided in the FHWA STEP Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.**
Exist/Proposed Parking/ Pullouts/Vistas?	**Yes**	**Roadside parking exists along Harbor Drive, but may have to be removed to support Project sidewalk widening while avoiding utility relocation. An existing overlook memorial exists near the end of Section 1 at the O'Connell Bridge. Opportunities for additional overlook/lookout options should be pursued during design.**
Exist/Proposed Pedestrian and/or Bicycle Facilities?	**Yes**	**This project will improve and supplement existing pedestrian facilities**
Exist/Proposed Roadside Features (gates, shelters, etc.)	**Yes**	**There are currently many light poles, electrical utilities, buildings, etc. along the south side of the existing alignment. No additional features are proposed in Section 1.**
Exist/Proposed Fencing?	**No**	
ADA Accommodations?	**Yes**	**See proposed design standards.**
Seeding and Vegetation	**Yes**	**Disturbed and exposed areas of soil shall be stabilized with topsoil and seed by the Contractor. Additionally, CBS requested to add landscape improvements in the covered gravel space between the Sea Walk and the Public Library building if Project budget allows.**
Special Features (Railroad Crossings, etc.)	**No**	
Architectural or decorative aspects to be incorporated (stone masonry, stone curb, rock facing, etc.)	**Yes**	**Elements of traditional Tlingit art will be incorporated into the Project to match Sea Walk Phase I architectural or decorative aspects, particularly the "red brick road" path style and ovoids at confluence locations.** **Additionally, CBS requested hardscape/art/architectural improvements and potentially a sitting area in the covered gravel space between the Sea Walk and the Public Library if Project budget allows. CBS has indicated that the Library may add their own funds to support this enhancement.**
		SAFETY CONSIDERATIONS
Clear Zone and Roadside Hazards	**Yes**	**This section of the alignment parallels an existing high-traffic roadway. In addition, many utilities and structures exist adjacent to the alignment.**

Description	Response	Comment
Existing/Proposed Barrier?	**No**	**If the Sea Walk alignment is widened into the Harbor Drive shoulder, a guardrail modification will be required at the eastbound downstream end of the O'Connell Bridge to guide traffic in the area.**
Proposed signing and supports?	**Yes**	**Opportunities for incorporating interpretive signage should be pursued as budget/space allows.**
Proposed Pavement Markings	**Yes**	**Fog line striping will be required if the Sea Walk alignment extends into the Harbor Drive shoulder to allow for the desired 8-foot pathway width.**
Proposed Lighting	**No**	**Existing street lighting will be adequate.**
Exist/Proposed permanent traffic control (special signs, markings, rumble strips, etc.)	**Yes**	**If the Sea Walk alignment is widened into the Harbor Drive shoulder, a guardrail modification will be required at the eastbound downstream end of the O'Connell Bridge to guide traffic in the area. Additionally, efforts should be made during design to increase safety of, or eliminate uncontrolled pedestrian crossings at the O'Connell Bridge and Harbor Way. Improvements should follow the STEP Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.**
Additional work required to address Sight Distance Issues?	**No**	
Construction Problems from Previous Projects?	**No**	
Will alternate routes (detours/diversions) be provided for during construction?	**Yes/No**	**Detour routes for business access during construction and traffic control requirements will be evaluated and developed during design development.**
Temporary traffic control/traffic restrictions during construction	**Yes**	**Standard traffic maintenance and control measures are anticipated in this section.**
Can the road be closed for construction?	**No**	**The adjacent roads cannot be closed. However, there is the potential to close the existing sidewalk facilities in the areas of improvements.**
Potential Major Impacts to Cost or Schedule	**Yes**	**Widening the existing sidewalk into the shoulder of Harbor Drive to accommodate the 8-foot design width of the Sea Walk will require coordination with AKDOT&PF and may impact the schedule. If this alignment cannot be agreed upon and the Sea Walk cannot be widened into the Harbor Drive shoulder, significant cost impacts will occur in order to maintain the full 8-foot design width. This is due to utility relocation that will be required if the Sea Walk is widened to the south.**
Constructability Concerns	**No**	**Work is typical of work previously completed in this area.**

Description	Response	Comment
Typical Section		

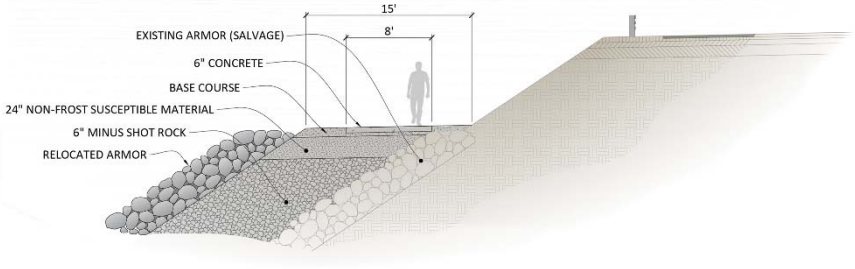
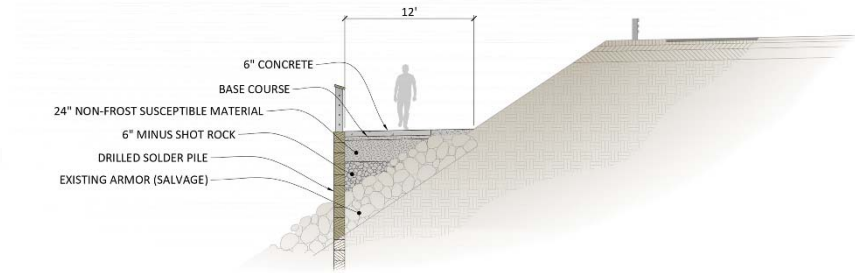
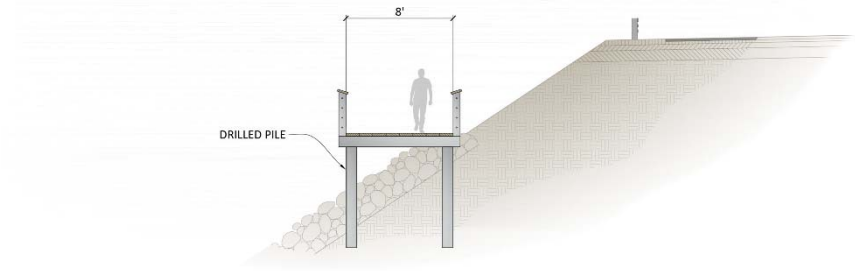
2. SITKA SEA WALK PHASE II – SECTION 2
O'Connell Bridge Approach to O'Connell Lightering Facility

Description	Response	Comment
Pathway Name:	Sitka Sea Walk Phase II – Section 2	
PROPOSED DESIGN STANDARDS		
Design Use	**Pedestrian**	
Functional Classification	**Other**	**Separated Pathway**
Design Speed	**3.5 ft/s**	**This is the pedestrian walking speed that should be used when calculating pedestrian clearance time per Section R306.2 of the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way.**
Design Load	**H5 Design Vehicle**	**The H5 Design Vehicle is required for maintenance with a vehicle live load per AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges Table 3.2-1. This design manual allows for alternative design criteria as specified by the Project Owner. CBS indicated that they will be using equipment to maintain the Sea Walk; however, the specific maintenance vehicle loading was not available at the time of this report.** **Section 2 design should also consider constructability. Loading applied by construction equipment may exceed the design loads described by AASHTO and may therefore be a more critical loading. Section 2 design will need to account for the construction load accordingly.**

Description	Response	Comment
Travel Way Width	**8 feet**	**Continuous clear width required by 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R302.3 is 4 feet. However, the Sea Walk design is intended to allow opposing wheel chair traffic to safely pass. Therefore, maintaining a minimum 8-foot-wide travel way is the highest priority feature of the Sea Walk design.**
Travel Way Type	**Unknown**	**Surfacing will depend on chosen design and may be concrete, timber or other. CBS indicated that the surfacing utilized in Phase I was either slippery (timber) or was a potential tripping hazard (in-laid brick). They would like to consider alternative surfacing materials while maintaining the "look and feel" of Phase I.**
Shoulder Width	**Varies**	**Shoulder width will be dependent upon the chosen alternative:** • **Alternative No. 1 – a minimum 2-foot shoulder is anticipated on each side of the Sea Walk to maintain separation from the embankment slope.** • **Alternative No. 2 – may or may not have a shoulder as determined during design.** • **Alternative No. 3 – no shoulder due to safety railing inherent to elevated structure design.**
Shoulder Type	**Unpaved**	
Min. Horizontal Radius	**N/A**	**Minimum radius guidelines are not provided in the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way or the FHWA Designing Sidewalks and Trails for Access Part II: Best Practices Design Guide. AASHTO Guide for the Development of Bicycle Facilities, Table 5-2 recommends a minimum horizontal radius of 27 feet.**
Maximum Grade	**5%**	**2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R302.5. A reduced grade may be considered to improve traction associated with wet/icy surfacing.**
Cross Slope	**2%**	**2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R302.6**
Horizontal Clearance to Structure	**0 feet**	**No other structures in this section of the Sea Walk alignment.**
Min. Clear Zone	**0 feet**	
PROPOSED DESIGN FEATURES		
Realignment or grade change required?	**Yes**	**Section 2 of the Sea Walk will construct a new facility and alignment around the south side of the eastern O'Connell Bridge approach and connects the end of Section 1 to the O'Connell Lightering Facility below the O'Connell Bridge. This section will be above existing grade.**

Description	Response	Comment
Will profile be raised due to proposed pavement structural section?	**No**	**Vertical realignment may be implemented for other reasons (see above).**
Additional work required at intersections or driveways?	**No**	
Exist/Proposed Parking/ Pullouts/Vistas?	**Yes**	**Opportunities for overlook/lookouts should be pursued during design.**
Exist/Proposed Pedestrian and/or Bicycle Facilities?	**Yes**	**The project will construct a new pedestrian facility.**
Exist/Proposed Roadside Features (gates, shelters, etc.)	**No**	
Exist/Proposed Fencing?	**No**	
ADA Accommodations?	**Yes**	**See proposed design standards.**
Seeding and Vegetation	**Yes**	**Disturbed and exposed areas of soil shall be stabilized with topsoil and seed by the Contractor.**
Special Features (Railroad Crossings, etc.)	**Yes**	**Section 2 may require a structural retaining wall or boardwalk.**
Architectural or decorative aspects to be incorporated (stone masonry, stone curb, rock facing, etc.)	**Yes**	**Elements of traditional Tlingit art will be incorporated into the Project to match Sea Walk Phase I architectural or decorative aspects, particularly the "red brick road" path style and ovoids at confluence locations.**
SAFETY CONSIDERATIONS		
Clear Zone and Roadside Hazards	**Yes**	**This section will require steep slopes, retaining walls, or a boardwalk. These elements will create a falling hazard that must be mitigated.**
Existing/Proposed Barrier?	**Yes**	**Alternatives using retaining walls and boardwalks will require a full height railing.**
Proposed signing and supports?	**Yes**	**Opportunities for incorporating interpretive signage should be pursued as budget/space allows.**
Proposed Pavement Markings	**No**	
Proposed Lighting	**Yes**	**Safety lighting is recommended for this portion of the Sea Walk. Lighting should be similar to that used as part of Phase I including recessed lighting in railing supports or overhead lighting.**
Exist/Proposed permanent traffic control (special signs, markings, rumble strips, etc.)	**No**	
Additional work required to address Sight Distance Issues?	**No**	

Description	Response	Comment
Construction Problems from Previous Projects?	**No**	
Will alternate routes (detours/diversions) be provided for during construction?	**Yes/No**	**Traffic control may be necessary depending on access requirements to the Section 2 area during construction. Detour routes for business access during construction and traffic control requirements will be evaluated and developed during design development.**
Temporary traffic control/traffic restrictions during construction	**Yes**	**Standard traffic maintenance and control measures anticipated in this section.**
Can the road be closed for construction?	**No**	
Potential Major Impacts to Cost or Schedule	**Yes**	**At the time of this writing it is unknown if Alternative No. 1 for Section 2 will extend outside the AKDOT&PF ROW for Harbor Drive. If this occurs, CBS tidelands will be affected and may have an impact on Project schedule.** **There are no major cost concerns.**
Constructability Concerns	**No**	**If Alternative No. 2 or No. 3 are constructed for Section 2, there may be constructability impacts associated with presence of protected species during construction. A monitoring program and/or Incidental Harassment Authorization (IHA) may be required if installation has the potential to affect protected species.**

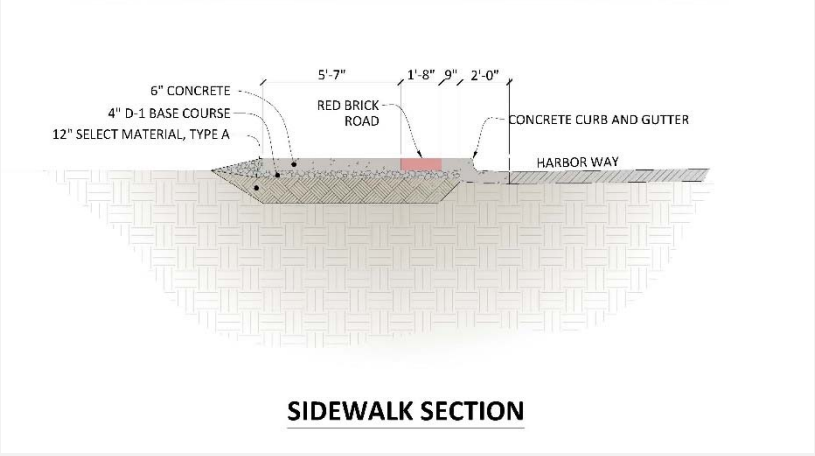
Description	Response	Comment
Typical Section	 **ALTERNATIVE 1** **FILL**  **ALTERNATIVE 2** **SOLDIER WALL**  **ALTERNATIVE 3** **BOARD WALK**	

3. SITKA SEA WALK PHASE II – SECTION 3
O'Connell Lightering Facility to Totem Square and Lincoln Street

Description	Response	Comment
Pathway Name:	Sitka Sea Walk Phase II – Section 3	
PROPOSED DESIGN STANDARDS		
Design Use	Pedestrian	
Functional Classification	**Other**	**Shared-Use Sidewalk**
Design Speed	**3.5 ft/s**	**This is the pedestrian walking speed that should be used when calculating pedestrian clearance time per Section R306.2 of the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way.**
Travel Way Width	**8 feet**	**Continuous clear width required by 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R302.3 is 4 feet. However, the Sea Walk design is intended to allow opposing wheel chair traffic to safely pass. Therefore, maintaining a minimum 8-foot-wide travel way is the highest priority feature of the Sea Walk design.**
Travel Way Type	**Concrete**	**CBS indicated that the in-laid brick to create the "red brick road" caused potential for tripping hazard and differential settlement. They would like to consider alternative surfacing materials while maintaining the "look and feel" of Phase I.**
Shoulder Width	**Varies**	**The south side of the pathway will vary by location and may abut nearby unpaved areas, paved driveways, nearby utilities and structures.**
Shoulder Type	**Paved/Unpaved Combo**	
Min. Horizontal Radius	**N/A**	**Minimum radius guidelines are not provided in the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way or the FHWA Designing Sidewalks and Trails for Access Part II: Best Practices Design Guide. AASHTO Guide for the Development of Bicycle Facilities, Table 5-2 recommends a minimum horizontal radius of 27 feet.**
Maximum Grade	**5%**	**2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R302.5**
Cross Slope	**2%**	**2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R302.6**
Horizontal Clearance to Structure	**0 feet minimum**	**The clearance of the existing sidewalk in this section varies from non-existent (abuts a railing) to several feet. This is expected to remain unchanged.**

Description	Response	Comment
Min. Clear Zone	**N/A**	**Relocation of utilities or structures adjacent to the south side of the existing sidewalk is not expected. These features occur at varying distances from the existing sidewalk. According to the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, Part R402, objects adjacent to the Sea Walk should generally not protrude more than 4 inches horizontally into the pedestrian pathway.**
PROPOSED DESIGN FEATURES		
Realignment or grade change required?	**No**	
Will profile be raised due to proposed pavement structural section?	**No**	
Additional work required at intersections or driveways?	**Yes**	**Driveways may require curb ramps designed in accordance with the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way.** **Several crosswalks exist in this Section. Crosswalk improvements should follow the Every Day Counts initiative guidelines provided in the FHWA STEP Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.**
Exist/Proposed Parking/ Pullouts/Vistas?	**No**	**Opportunities for additional overlook/lookouts may exist at the O'Connell Lightering Facility and should be pursued during design if budget allows.**
Exist/Proposed Pedestrian and/or Bicycle Facilities?	**Yes**	
Exist/Proposed Roadside Features (gates, shelters, etc.)	**Yes**	**Light poles, electrical utilities, buildings, etc. currently exist along the alignment. No additional features are proposed in Section 1.**
Exist/Proposed Fencing?	**Yes**	**A railing currently exists along the west side of the sidewalk just north of the O'Connell Lightering Facility. This railing sits atop a retaining wall that supports the existing sidewalk and Harbor Way. This railing can remain or be replaced in kind.**
ADA Accommodations?	**Yes**	**See proposed design standards.**
Seeding and Vegetation	**Yes**	**Disturbed and exposed areas of soil shall be stabilized with topsoil and seed by the Contractor.**
Special Features (Railroad Crossings, etc.)	**No**	

Description	Response	Comment
Architectural or decorative aspects to be incorporated (stone masonry, stone curb, rock facing, etc.)	**Yes**	**Elements of traditional Tlingit art will be incorporated into the Project to match Sea Walk Phase I architectural or decorative aspects, particularly the "red brick road" path style and ovoids at confluence locations. An ovoid should be installed at the O'Connell Lightering Facility.** **Additionally, CBS noted an art/architectural opportunity with the existing concrete retaining wall located on the east side of Harbor Way in the vicinity of Beak restaurant as budget allows.**
	SAFETY CONSIDERATIONS	
Clear Zone and Roadside Hazards	**Yes**	**This section of the alignment parallels an existing roadway and also has several crosswalk locations.**
Existing/Proposed Barrier?	**Yes**	**An existing metal railing protects a portion of the current sidewalk that is built atop a retaining wall. This railing can remain or be replaced in kind.**
Proposed signing and supports?	**Yes**	**Opportunities for incorporating interpretive signage should be pursued as budget/space allows. A wayfinding kiosk similar to that which exists near Centennial Hall (see photo below) should be installed at the ovoid proposed near the O'Connell Lightering Facility.** 
Proposed Pavement Markings	**Yes**	**Pavement marking improvements may occur at the existing crosswalks.**
Proposed Lighting	**No**	**Existing lighting is sufficient.**
Exist/Proposed permanent traffic control (special signs, markings, rumble strips, etc.)	**Yes**	**Efforts should be made during design to increase safety of pedestrian crossings as described in the FHWA STEP Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.**

Description	Response	Comment
Additional work required to address Sight Distance Issues?	**No**	
Construction Problems from Previous Projects?	**No**	
Will alternate routes (detours/diversions) be provided for during construction?	**Yes/No**	**Detour routes for business access during construction and traffic control requirements will be evaluated and developed during design development.**
Temporary traffic control/traffic restrictions during construction	**Yes**	**Standard traffic maintenance and control measures anticipated in this section.**
Can the road be closed for construction?	**No**	
Potential Major Impacts to Cost or Schedule	**Yes**	**No major cost or schedule impacts are anticipated within this Section of the Sea Walk.**
Constructability Concerns	**No**	**Work is typical of work previously completed in this area.**
Typical Section	 **SIDEWALK SECTION**	

B. SURVEY

Description	Response	Comment
Existing survey, mapping, and/or control?	**Yes**	**An as-built survey, performed in 2014 after completion of Phase I, is available. A survey of the existing ground along the proposed alignment is required to verify that construction can be maintained within the ROW limits. Survey will also be used for design; including modeling, quantity determination, and developing Construction Drawings.** **CBS indicated that LiDAR data may be available, but was not provided at the time of this report. A traditional ground survey would provide the highest level of confidence, which would avoid potential errors associated with LiDAR (such as top of vegetation or water surface falsely identified as the existing ground surface).**
Special features requiring survey	**Yes/No**	**The southern edge of the bridge approach is partially submerged and will require a bathymetric survey to locate the toe of the embankment. Survey activities in this area will generally require coordination with the tides. All other survey tasks are expected to be routine.**
Seasonal restrictions?	**Yes**	**Survey should be conducted during summer months, to prevent additional efforts associated with snow coverage.**
Describe terrain (slopes, vegetation, etc.)	**Terrain is generally level within Section 1 and Section 3 of the Project alignment. Section 2 of the Sea Walk is composed of an existing steep embankment that makes up the eastern O'Connell Bridge approach. This embankment was constructed at an approximate 1.5:1 slope and is partially submerged. Vegetation in the Project area varies from grasses, shrubs, and evergreen trees. There are few trees in the project area and most of the vegetated areas are composed of grasses. Areas that are not vegetated are either paved, landscape stone (in the vicinity of the Sitka Public Library), or large shot rock (in the area of the O'Connell Bridge embankment).**	
Existing Terrain Photos	 **Typical features in Section 1.**	

Description	Response	Comment
	 **Typical vegetation and features of Section 2.**  **Typical vegetation and features in Section 3.**	
Is field survey required?	**Yes**	
Recommended survey	**Ground Survey**	

Description	Response	Comment
Potential Major Impacts to Cost or Schedule	**No**	

C. ENVIRONMENT

Description	Response	Comment
		SUMMARY
Type of NEPA document anticipated	**CE**	**The project is anticipated to fall under multiple Categorical Exclusions (CE) within §717.117(c) for NEPA documentation.**
CEQA required (CA Projects)?	**No**	
NPS – Environmental Screening Form (ESF) required?	**No**	
Potential use of programmatic agreements?	**No**	**Programmatic Agreements are unlikely to apply to this Project.**
Public involvement required?	**Yes**	**CBS indicated that the City generally experiences a high-level of public interest during project development. Public involvement is expected for Phase II at each of the design deliverables. The successful completion of Phase I indicates that Phase II will also be popular with the Public. The Project is consistent with the 2011 Sitka Outdoor Recreation Action Plan, the 2007 Sitka Comprehensive Plan, the 2002 Sitka Non-Motorized Plan, the 2006 Sitka Visitor's Plan V1 and V2, and the 2010 Sitka Passenger Fee Fund Downtown Master Plan. Ongoing public involvement will be helpful for educating and minimizing impacts to the public.**
		AIR QUALITY
Non-attainment or maintenance area?	**No**	**This project area is not located within a non-attainment or maintenance area according to the EPA.** https://www3.epa.gov/airquality/greenbook/anayo_ak.html
Exempt from conformity requirements?	**No**	
If conformity applies, is the project included in the STIP or regional TIP?	**No**	
Adding or removing lanes, signalization, and/or alignment changes?	**Yes**	**Section 2 of this Project is adding an alignment that extends the existing sidewalk on the south side of Harbor Drive from its terminus at the O'Connell Bridge to the lightering facility below the bridge. This alignment will wrap around the south side of the bridge approach to the lightering facility. Additionally, the existing sidewalk along Harbor Drive in Section 1 will be widened from the existing 5-foot width to the proposed 8-foot width. This widening may require removing the existing eastbound shoulder of Harbor Drive.**
State or local air quality studies required?	**No**	

Description	Response	Comment
BIOLOGICAL RESOURCES		
Local knowledge of federal T&E or candidate species in the area?	**Yes**	**Humpback whales and Steller sea lions are known to be present near the project area.** **The project is also within the range of fin whales, North Pacific right whales, and sperm whales. Although they are typically found further offshore, consultation may be required regarding any potential marine impacts.**
Potential for suitable habitat of any listed species in/near the project area?	**Yes**	**Humpback whales and Steller sea lions are known to be present near the project area. Additionally, in-water work may have to address essential fish habitat (EFH).**
Designated critical habitat in the project area?	**Unknown**	**NOAA has proposed a rule to designate the waters encompassing the project area as critical habitat for population segments of Humpback whales. This proposed rule is still open for comment at the time of writing this report; therefore, the outcome regarding the decision of this document is unknown. Consultation regarding proposed critical habitat may still be required until the rule is finalized.**
Local knowledge of state protected species in the area?	**Yes**	**Humpback Whales are known to be present near the project area. It should be noted that few trees exist in the Project corridor and no nests were observed during the scoping meeting field review. Additionally, the Alaska State Wildlife Action Plan lists a number of species found in the project area that may be in need of conservation but don't formally require protection.**
Adjacent to BLM or USFS land?	**No**	
BLM or USFS sensitive species the FLMA is concerned about?	**No**	**There are 15 plant species, one lichen species, and 4 bird species that appear on the 2009 USFS Alaska Region Sensitive Species List that are found within the Tongass National Forest.** **There are no BLM sensitive species found within the project area.**
Migratory bird nest observed in the project area?	**No**	**No migratory bird or eagle nests are present in the Project location to the knowledge of CBS and no nests were observed during the scoping meeting field review. It should also be noted that few trees exist in the Project location. According to the USFWS Land Clearing Timing Guidance for Alaska, the recommended time period for avoiding vegetation clearing is between April 15th and July 15th.**
Wildlife or aquatic organism passage issues?	**No**	**Due to the location adjacent to urban development, limited wildlife passage is anticipated. However, the Project is also within and adjacent to beach and nearshore aquatic habitat and has the potential to impact access to adjacent aquatic habitat.**
Located within 100 miles of the coast?	**Yes**	**Project alignment will follow the coastline around the south side of the O'Connell Bridge to the O'Connell Lightering Facility. Level of impact resulting from this alignment is dependent on engineering solution utilized for construction of the Sea Walk.**

Description	Response	Comment
Known noxious weed occurrences or concerns regarding noxious weeds?	**Yes**	**Mapping from the Alaska Exotic Plants Information Clearinghouse (AKEPIC) indicates that 17 non-native or invasive plants have been reported within the Project corridor or harbor area. The Sitka National Historical Park conducts annual surveys and coordinates community events to support noxious weed removal, including creeping buttercup (*Ranunculus repens*) and marine tunicate removal in Crescent Harbor.**
Biological resource surveys required?	**No**	
Is a BA/BE required?	**Unknown**	**A BE may be required to determine whether the project has the potential to affect any ESA-listed species. If the lead agency determines that there is a potential to affect any listed species, a BA may be required. For this project, effects to listed species may be triggered by the placement of materials in aquatic habitat or by pile driving activities.**
		CULTURAL RESOURCES
New ground disturbance outside the existing roadway prism?	**Yes**	**The fill alternative (Alternative No. 1) for Section 2 will widen the existing approach embankment by 15' within the tidelands.** **Alternatives No. 2 and No. 3 may require a cultural resource clearance for new ground disturbance if a clearance was not obtained during construction of the existing O'Connell Bridge Approach embankment.** **All other areas have been previously developed.**
Previously surveyed for cultural resources?	**No**	**The area has not been surveyed.**
Evaluated for eligibility for the National Register of Historic Places (NRHP)?	**No**	**The proposed alignment adjoins several buildings and sites of historic interest. Nearby sites listed in the NRHP include the American Flag Raising Site on Castle Hill; Cable House and Station; and Sitka US Post Office and Court House.**
Properties (buildings, bridges, trails, etc.) thought to be older than 50 years?	**No**	**Several buildings and sites older than 50 years exist near the proposed alignment but will not be affected by the construction of this Project. The O'Connell Bridge will be older than 50 years in 2021.**
Apparent / unique / suspect structures of possible historical interest?	**No**	**No structures exist in proposed alignment corridor. Several building and sites listed in the NRHP exist near the project corridor.**
Tribes who will have an interest in the project?	**No**	**This project does not directly involve land owned by local tribes or other native corporations. Tribal consultation may be required to determine tribal significance of affected properties and will likely occur for art installations. Quarterly meetings occur between CBS and Sitka Tribe of Alaska.**
Traditional Cultural Properties (TCPs) in the area?	**No**	

Description	Response	Comment
Cultural resource surveys required?	**Yes**	**A cultural resource survey and SHPO concurrence are required for completion of NEPA.**
	ENERGY	
Affect energy use as a result of changes to traffic patterns or volumes, or involve speed zone changes?	**No**	
	GEOLOGY	
Do discussions with Geotechnical staff indicate any concerns?	**No**	
Is drilling / exploration anticipated?	**Yes**	**Drilling and test pits will be conducted as part of the geotechnical investigation protocol.**
	HAZARDOUS MATERIAL	
Hazardous sites in the project area?	**Yes**	**The project area is within 500' of two remediated sites with institutional controls, including the requirement to consult with ADEC prior to excavation or removal of soils or groundwater.**
Known or possible hazardous waste on the project ()?	**Unknown**	**An assessment of the potential for historic sources of hazardous waste has not been conducted. There are no known existing wastes or sources of hazardous waste on the project.**
Structure with potential to contain hazardous material be altered or demolished?	**No**	**No structures exist within the project footprint.**
	LAND USE / PLANNING	
Require land use actions from FLMA or local jurisdictions?	**No**	**Sea Walk Phase II construction will occur within an AKDOT&PF ROW and will require an encroachment permit.**
Concerns regarding consistency with federal, state, or local land use policies or plans?	**No**	**The improvements included in this project were developed and included in the 2007 Sitka Comprehensive Plan, the 2002 Sitka Non-Motorized Plan, the 2006 Sitka Visitor's Plan V1 and V2, and the 2010 Sitka Passenger Fee Fund Downtown Master Plan.**
Coastal Zone Management Act apply?	**No**	**The State of Alaska does not participate in the Coastal Zone Management Program.**
Result in the conversion of prime farmland, unique farmland, or land of statewide or local importance as defined by Farmland Protection Policy Act?	**No**	**There is no farmland within the Project footprint.**

Description	Response	Comment
Any other specially designated or protected lands that may be affected?	**Yes**	**Tidelands within the project area are owned by the City and Borough of Sitka and may be affected by construction activities.** **Castle Hill, noted as a "U.S. Reserve for Agricultural Investigations and Weather Service" within Tract A of U.S. Survey 1474, is now a State park designated as Baranof Castle State Historic Site and National Historic Landmark. The park is not within the project footprint, but may be affected by construction activities and by increased visitor access as a result of the Project.**
		NOISE
Will there be any shift in horizontal or vertical alignment?	**Yes**	**See Section IV, Part A, of this Scoping Report for proposed alignment and improvements information.**
Does project increase the number of through travel lanes?	**No**	
Pathway located on a new alignment?	**Yes**	**Section 2 of the pathway will be a newly constructed alignment. See Section IV, Part A of this Scoping Report for proposed alignment and improvements information.**
Removal of topographical features which currently shield receptors?	**No**	
Are there buildings/ activity areas within 200 feet of proposed right of way line:	**Yes**	**A variety of structures are located within the vicinity of the proposed pathway including the Sitka Public Library, O'Connell Bridge, O'Connell Lightering Facility, and various shops and commercial spaces.**
		SECTION 4(f)
Parks, wildlife refuges, historic properties, recreational areas, campgrounds, trails, etc. that may be impacted?	**Yes/No**	**Submission will be required if Project uses public land, public recreational area, or historic properties such as Totem Square (including use of area for staging). However, as currently envisioned, the project will not require use of those lands.**
		SECTION 6(f)
Land & Water Conservation Funds used to acquire parks, or to make improvements, etc.?	**No**	**The project is within existing public right-of-way for roadways and CBS was not aware of any LWCF-funded improvements in the corridor.**
		SOCIOECONOMICS
Building displacements or relocations?	**No**	

Description	Response	Comment
Right of way be required for the project?	**Yes/No**	**The project will be constructed within existing public right-of-way. Portions of the project will require an encroachment permit with AKDOT&PF to use ROW owned by the State. Alternative No. 1 for Section 2 may require additional ROW on CBS tidelands.**
Divide or disrupt an established community, or affect neighborhood character or stability?	**Yes/No**	**The project does not divide any existing communities or disrupt any planned uses. There is a potential to increase foot traffic on Harbor Drive and visitors to the downtown commercial/industrial area. The CBS has identified the project may indirectly improve the commercial/industrial area along Harbor Drive with the increased exposure to businesses in the area, particularly those related to recreational and tourism activities.**
Affect minority, elderly, handicapped, low income, transit-dependent, or other specific interest group?	**Yes**	**The project includes ADA improvements and will improve access for the handicapped and elderly.**
VISUAL		
Designated state or federal scenic route?	**No**	
Major cuts/fills associated with this project?	**Yes/No**	**Alternative No. 1 and No. 2 in Section 2 will require a construction of an embankment along the existing bridge approach embankments. This embankment is avoided with Alternative No. 3.**
Bridges or large retaining walls anticipated?	**Yes**	**Alternative No. 2 in Section 2 will require a retaining wall structure to retain the fill material that supports the Sea Walk. Alternative No. 3 in Section 2 will require construction of an elevated boardwalk structure.**
Affect waterways designated as National Wild and Scenic Rivers?	**No**	
WATERWAYS / WATER QUALITY		
Within FEMA 100-year floodplain?	**Yes/No**	**Section 2 construction will likely occur within the FEMA flood plain.** **The other portions of the Project are located outside of the FEMA floodplain.**
Within FEMA regulated floodway?	**No**	
Water quality impaired stream (303(d) listed) impacted?	**No**	
Outstanding Resource Waters affected?	**No**	
Active well impacted?	**No**	

Description	Response	Comment
Navigable waterway(s) within the project area?	**Yes**	**Portions of the project adjoin Sitka Sound and Sitka Harbor. It is likely that the proposed alternatives for Section 2 will impact these waterbodies by construction of a fill embankment or pile installation.**
Irrigation ditches impacted?	**No**	
State or National Wild and Scenic River?	**No**	
WETLANDS AND WATERS OF THE U.S.		
Intermittent streams, ephemeral drainages, or perennial rivers/streams?	**No**	
Wetlands mapped on the Nationals Wetlands Inventory (NWI)?	**No**	**The NWI mapper indicates the Sea Walk route may be within Estuarine and Marine Deepwater habitat. Similar shoreline in the area is mapped as Estuarine and Marine Wetland habitat.**
Blue line features from the National Hydrographic Dataset (NHD)?	**No**	**No such features exist along the proposed route. Neighboring features outside the project area include Swan Lake and Indian River.**
Riparian or wetland vegetation evident from visual inspection?	**No**	**Visual observation during the field walkthrough did not find vegetation that indicated the presence of wetlands; however databases of species identified in the area suggest the potential for wetland vegetation, including *Phalaris arundinacea* (reed canarygrass), *Plantago maritima*, and *Sagina maxima.***
Delineation of waters of the U.S. including wetlands and other special aquatic sites need to be completed for the project area?	**Yes/No**	**It is unknown if a formal delineation has been performed for the Project corridor; however, Sections 1 and 3 are mostly developed and will not be classified as wetlands. Section 2 of the project abuts Sitka Sound and may require fill or piles to be placed below High Tide Line (HTL). HTL appears readily identifiable from the presence/lack of vegetation along the embankment and may not warrant a formal delineation. Visual observation during the field walkthrough did not find vegetation that indicated the presence of wetlands; however databases of species identified in the area suggest the potential for wetland vegetation, including *Phalaris arundinacea* (reed canarygrass), *Plantago maritima*, and *Sagina maxima.***
WILDERNESS		
Occur in or near designated wilderness?	**No**	**South Baranof Wilderness is located approximately 20 miles south of the project area, and is a designated wilderness as part of Tongass National Forest.**

Description	Response	Comment
Potential Major Impacts to Cost or Schedule	**Yes/No**	**Depending on the alternative chosen for Section 2, impacts to waters of the US may result in permitting under Section 10/404 and pile driving may require an IHA. The pending listing of critical habitat for the Humpback whales may result in additional permitting/consultation effort depending on the final listing.**
Constructability Concerns	**No**	**No significant concerns. The work proposed is typical of previous improvements constructed in Phase I. However, construction of Section 2 will require careful planning and execution due to limited access, particularly if Alternatives No. 2 or No. 3 is constructed.**

D. PERMITS

Description	Response	Comment
	Section 404 / 401 Permit	
Discharge of dredge or fill into a water of the U.S.	**Yes**	**Section 2 of the project construction may entail either fill placement or pile-driving in Waters of the U.S. (WOTUS). The former would require CWA Section 404/401 permitting and the latter RHA Section 10 permitting.**
Discharge of fill into a perennial river/stream, intermittent stream, or ephemeral drainage?	**No**	
Discharge of fill into a pond or lake?	**No**	
Discharge of fill into a special aquatic site including:?	**Yes**	**Section 2 of the Sea Walk alignment may require work in wetlands or vegetated shallows.**
Water diversion needed?	**No**	
Channelization, channel realignment, or channel armoring required?	**No**	
Qualify for a Nationwide Permit (NWP)?	**Unknown**	**This project may fall under one or more of several NWPs, depending on the alternative selected for Section 2, including but not limited to: 14) Linear Transportation Projects, and 13) Bank Stability. However, 13) Bank Stabilization is fairly limited in allowable dimensions. If design requirements prohibit the use of an NWP, an individual permit will be required.**
Comply with NWP general conditions?	**Yes/No**	**It currently appears an NWP would be possible, but additional design of Section 2 is required to verify this.**
Comply with NWP regional conditions?	**Yes/No**	**It currently appears an NWP would be possible, but additional design of Section 2 is required to verify this.**

Description	Response	Comment
Cause the loss of less than ½ acre of non-tidal waters of the U.S. or 1/3 acre of tidal waters of the U.S.?	**Yes/No**	**Estimated impact of fill embankment constructed with Alternative No. 1 is expected to be greater than 1/3 acre of WOTUS.** **Potential exists for lower quantity impact if Alternatives No. 2 or No. 3 are constructed.**
Does the project require compensatory mitigation?	**Yes**	
Would the project cause the loss of less than 1/10 acre of wetlands?	**Unknown**	**Unknown whether there may be coastal wetlands within the Project area.**
Does the project require a LOP or IP for authorization?	**Yes/No**	**Individual permitting may be required if the Section 2 alternative does not fit the requirements of an NWP.**
Any Corps-approved mitigation bank or in-lieu fee programs that service the project area?	**Unknown**	**There are currently no wetland mitigation banks or in-lieu fee programs with credits available within the Project's watershed. It is unknown whether an alternative bank would be approved by USACE or whether permittee-responsible mitigation would be required, in the event that impacts necessitate compensatory mitigation.**
		NPDES Permit
Amount of acreage disturbed?	**Approx. 1 acre**	**Section 1 anticipated disturbance is approximately 0.15 acres.** **Section 2:** - **Alternative No. 1 is anticipated to disturb approximately 0.75 acres.** - **Alternative No. 2 is anticipated to disturb approximately 0.3 acres.** - **Alternative No. 3 is anticipated to have 0.13 acres** **Section 3 anticipated disturbance is approximately 0.1 acre**
Subject to any state, county or local sediment/erosion management plan (MS4)?	**Yes**	**The project area falls under the State's jurisdiction. The EPA has delegated authority to Alaska Department of Environmental Conservation (ADEC) to manage discharges through the Alaska Pollutant Discharge Elimination System (APDES) program. The Project area is not subject to a local MS4 plan.**
Subject to a state or basin sediment/erosion management plan?	**Yes**	**See response above.**
Cooperator willing to assume responsibility for the NPDES Permit upon completion of construction?	**No**	**A Notice of Termination will be filed after project completion and transfer of the permit will not be necessary.**
Post-construction BMP requirements?	**Yes/No**	**Certain types of permanent BMPs (e.g. seeding) may require post-construction monitoring.**

Description	Response	Comment
Other Permits / Authorizations		
FLMA special use permit	**No**	
Staging area permit?	**No**	**Staging area to be selected/permitted by Contractor. Contractor would likely be able to stage equipment and materials at O'Connell Lightering Facility. Additionally, staging area behind Centennial Hall and at Totem Square may be available. Staging areas may be subject to APDES requirements and would contribute to minimum footprint thresholds.**
Disposal/waste area permit?	**No**	**CBS has disposal sites available for the Contractor and previously developed private disposal sites available.**
Material source permit?	**No**	**Material source may be available for the Project at the CBS quarry or the Indian River Uplands Rock Quarry operated by the Baranof Island Housing Authority (BIHA). The City quarry is limited as a material source. Any new material sources may require additional environmental evaluation.**
Asphalt or concrete batch plant permit?	**No**	**Established asphalt and concrete plants would provide asphalt and concrete required for the Project.**
Utility line or buried pipe permit?	**No**	
Dewatering permit?	**No**	
Water rights or appropriation approval?	**No**	
Local, County or State air quality permit	**No**	
County road access or encroachment permit?	**No**	
State highway access or encroachment permit?	**Yes**	**A large portion of the Project alignment falls within the AKDOT&PF right of way along Harbor Drive. AKDOT&PF expressed concern regarding existing encroachments and new encroachments associated with this Project. AKDOT&PF would like to regularize all encroachments to clarify associated permittees in the area. No encroachment fees will be charged for government to government use; however, encroachment fees are applicable if permittee is paid for use (i.e. tour operator).**
Stream alteration permit?	**No**	
Other	**Yes**	**CBS may require a Grading and Fill permit.** **Modifications to the existing storm drain system in Section 1 may require a plan review from Alaska Department of Environmental Conservation.** **Potential impacts to fish habitat or anadromous fish may require review by ADF&G. This would be conducted as part of the USACE permitting process, if needed.**

Description	Response	Comment
Potential Major Impacts to Cost or Schedule	**Yes**	**At the time of this writing it is unknown if Alternative No. 1 for Section 2 will extend outside the AKDOT&PF ROW for Harbor Drive. If this occurs, land ownership and ROW acquisition may have an impact on Project schedule.** **USACE Section 10/404 permitting may impact the design development schedule but is unlikely to create significant delays unless an IHA is required for pile driving.** **There are no major cost concerns.**
Constructability Concerns	**Yes/No**	**Work is typical of work previously completed in this area and has been successfully permitted in the past. Alternatives No. 2 & 3 for Section 2 would require pile installation in or near Sitka Sound. Noise impacts due to pile driving could require more onerous permit conditions that may impact constructability of those options leading to higher construction cost or longer project duration.**

E. UTILITIES

Description	Response	Comment
Known utilities within project area?	**Yes**	**A full set of utilities including but not limited to water, electrical, and sewer, exist within the Project corridor.**
Anticipated utility impacts?	**Yes**	**Utility impact will be dependent on how Section 1 is widened to achieve the full design width. If the Section 1 alignment is widened by extending the sidewalk to the south then significant utility relocation will be required. This can be avoided by widening Section 1 by extending to the north and into the Harbor Drive shoulder. It is anticipated that storm drain pipe extensions or stormwater catch basin relocation will be required in both cases.**
Existing utility agreements or easements?	**Unknown**	**All utilities (except telecom) to be coordinated with CBS Public Works Department. Telecom coordination will be with ACS and GCI. Ownership and functionality of satellite dish below O'Connell Bridge is unknown. Street lighting ownership is also unknown and is to be determined by CBS.**
Special considerations or utility impact or relocation?	**Unknown**	**Utility impact will be dependent on final alignment. It is anticipated that storm drain pipe extensions or stormwater catch basin relocation will be required regardless of alignment.** **There is an existing waterline that is currently leaking below the O'Connell Bridge and may require repair. The repair/removal of this waterline must be coordinated with Bureau of Indian Affairs (BIA) – task is outside current Project scope.**
Irrigation ditches?	**No**	

Description	Response	Comment
Potential Major Impacts to Cost or Schedule	**Yes**	**Significant cost impacts will occur if an agreement cannot be made to widen Section 1 of the Sea Walk into the Harbor Drive shoulder and widening of this section will have to occur to the south side of the existing sidewalk.**
Constructability Concerns	**No**	

F. RIGHT OF WAY

Description	Response	Comment
Existing ROW?	**Yes**	
Additional ROW Required?	**Unknown**	**Additional ROW may be required depending on the final alignment of Section 1.** **It is also possible that additional ROW may be required to construct Alternative No. 1 in Section 2 depending on final design elevation and side slope of the proposed embankment and existing ROW extents.**
FLMA Transfer?	**No**	
Private Parcel Acquisition?	**No**	**Any ROW required would be acquired from CBS tidelands.**
ROW Fence Requirements?	**No**	
Maintaining Agency involved with Permit to Enter process for field work?	**Yes**	**A majority of the Project alignment is within AKDOT&PF and CBS ROW and lands.**
Potential Major Impacts to Cost or Schedule	**Yes/No**	**Cost and schedule impacts due to ROW are unlikely. However, there is some risk of schedule impacts if ROW acquisition is required to construct Alternative No. 1 in Section 2.**
Constructability Concerns	**No**	

G. GEOTECHNICAL

Description	Response	Comment
Regional and Local Geological Setting?	**Yes**	**The proposed Sitka Sea Walk alignment is located within the Sitka A-5 SE mapped unit. The project area geologic setting is classified primarily as stratified rocks being of unconsolidated deposits, undivided (quaternary) nature. Poorly sorted to well sorted, massive, lenticular, and laminated clay, silt, sand, gravel, and boulders locally covered bedrock, sometimes to depths of many meters. Sediments include tidal mudflat, alluvial, colluvial, and glacial deposits, undivided. Glacial outwash deposits, peat, and unsorted till locally include thin layers of volcanic ash and lapilli tuff.** **This surrounding area (Sitka general) primarily consists of the Baranof Accretionary Complex – sedimentary and volcanic rocks that were derived from oceanic crust that was subducting beneath an arc, mixed with debris from the arc, and accreted beneath the arc.**

Description	Response	Comment
Existing and potential geological hazards	**Yes**	**The project area is located near active seismic faults which may cause large earthquake and tsunami events.**
Nearby faults and seismicity design parameters	**Yes**	**Analysis was performed using the USGS Earthquake Hazards Program Unified Hazard Tool – Dynamic: Alaska 2007 (v2.1.1). The site is classified as Site Class B/C with a Maximum Moment Magnitude of 7.7g and peak ground acceleration of 0.319g using a return period of 2,475 years (2% probability in 50 years).** **The Sitka area is located east of the nearby Fairweather-Queen Charlotte Fault system which has ruptured in several large strike-slip earthquakes over the last century. The Fairweather Fault System runs nearly the entire length of southeast Alaska and British Columbia. Other nearby mapped faults include the Neva Strait Fault and Border Ranges Fault to the west and the Silver Bay Fault, Peril Strait Fault, and Chatham Strait Fault to the east of Sitka.**
Existing geotechnical structures?	**No**	
Geotechnical Repair Areas	**No**	
Surface or groundwater problem areas?	**No**	
Subsurface investigation requirements and access	**Yes**	**Subsurface investigation equipment access to a majority of the proposed Sitka Sea Walk alignment can be completed from the existing roadways or parking lots. Minimal excavation and pavement work is anticipated along Sections 1 and 3. The existing sidewalk is generally observed to be in good condition with the only apparent evidence of subsurface failure occurring in the vicinity of Beak Restaurant along the Section 3 alignment. Minor cracking was observed in the sidewalk in this area.** **Supplemental geotechnical investigation information may be available along Harbor Bay Drive from either the City of Sitka or the AKDOT&PF. Due to the nature of the work, the existing conditions of facilities, and the availability of supplemental geotechnical information, subsurface drilling in Sections 1 and 3 may not be needed.** **Based on the overall proposed length of the Section 2 alignment, four (4) borings are anticipated, should the soldier pile retaining wall or pile supported elevated boardwalk design options be selected. Borings in this area shall be spaced at 100 to 200 feet apart to produce a representative subsurface cross section of the area. Test boring locations will be spaced approximately 400 feet apart per the guidance of Exhibit 6.3-C Standards for Boring Layout and Depth of the PDDM.** **The subsurface investigation along Crescent Bay adjacent to the Sitka Harbor Bridge approach (Section 2) of the alignment may be best completed during a peak low tide with track-mounted equipment when the area will remain dry for an adequate**

Description	Response	Comment
		length of time to complete geotechnical drilling activities. However, if drilling is not possible due to tides, drilling will have to conducted from either the revetment slope above or the roadway. Track-mounted geotechnical drilling equipment, possibly anchored to the revetment slope above, will likely be required when working along the Sitka Harbor Bridge rock revetment. **The primary focus of the geotechnical investigation will be to characterize the depth and quality of the bedrock below the existing Sitka Harbor Bridge rock revetment. Strength and other physical properties of the existing rock revetment may also be analyzed. A rubber-tire geotechnical drilling rig can likely complete a majority of the work along the existing roadway.** **Previous geotechnical studies have been completed within the project area for the construction of the Sitka Harbor Bridge and Harbor Drive both owned by AKDOT&PF. This data may be insufficient and too outdated to meet the needs of this Project. However, this data may be used for supplemental information, if needed.**
NPS – Wall Inventory Program recommendations?	**No**	

Description	Response	Comment
Potential Major Impacts to Cost or Schedule	**Yes**	**Major impacts are not anticipated at the time of this Scoping Report. However, costs may be impacted by the difficult nature of drilling equipment access and hard drilling through both rock fill and bedrock. Project costs and schedule duration may also be impacted based on the outcomes of the geotechnical investigation. These impacts may affect the structural section, earthwork requirements, or sea walk structure attributes such as pile size and embedment depth. Special materials could be required following the findings of these investigations, leading to cost increases.** **Impacts to the schedule may also occur if the geotechnical investigation is delayed due to permitting. A geotechnical investigation will require separate ESA consultation, wetlands/waters permitting, and cultural resource clearances if the investigation is to occur before permitting is complete for the Project.**
Constructability Concerns	**No**	**No constructability concerns are identified at the time of writing this report.**

Summary of geotechnical features/design	**Geotechnical and design features found on the Project include:** 1. **Embankment fill up to 20 feet in height along the existing O'Connell Bridge approach at a 1.5:1 slope requiring slope stability evaluation.** 2. **Soldier Pile Retaining wall requiring retaining wall design and slope stability evaluation.** 3. **Pile supported elevated boardwalk requiring pile design.** **The primary goal of subsurface investigation in this area is to characterize the depth and quality of bedrock underlying the rock fill revetment for pile installation should the soldier pile retaining wall or pile supported elevated boardwalk design options be selected.** **Geotechnical borings are not required in Sections 1 and 3 of the proposed Sitka Sea Walk alignment.**

H. PAVEMENTS AND MATERIALS

Description	Response	Comment
Construction or maintenance history known?	**Yes**	**CBS to provide specifications of equipment used for maintenance and snow removal of the existing Sea Walk.** **Construction history in the Project corridor includes the following AKDOT&PF projects:** • **Project F-099-3(7)/AA-0993(1) – Sitka to Japonski Island Grading, Drainage, Paving, Bridge, Illumination, & Landscaping (1970)** • **AKSAS No. 67572 – Harbor Way Reconstruction – Harbor Drive to Lincoln Street (2000)** • **Project NH-99-3(7)~68350 – Harbor Drive Lighting, Pedestrian and Bicycle Improvements (2003)**
Concrete distress?	**Yes**	**Settlement cracking noted in sidewalk near Beak Restaurant on Harbor Way. This was the only cracking observed in the existing concrete/sidewalks found in the Project corridor.**
Are preservation treatments appropriate for segments or the entire project?	**Yes/No**	**Preservation treatments may be appropriate depending on final surfacing materials used for the Project.**
Is pavement/concrete rehabilitation appropriate for segments or the entire project?	**No**	**Not applicable to this project.**
Is concrete reconstruction appropriate for segments or the entire project?	**Yes**	**The existing sidewalk concrete will be replaced with new concrete during construction of this Project.**
Will segments or areas of the project have unbound surfacing material (i.e. gravel)?	**No**	

Description	Response	Comment
Areas of special concern for material selection, and/or follow-up field investigation?	**Yes**	**It is desired to use local or culturally significant materials to the extent possible. Examples include yellow cedar construction for elevated boardwalks such as those built in Phase I. A similar elevated boardwalk structure will be constructed as part of Alternative No. 3 in Section 2. CBS is pleased with the aesthetics of the yellow cedar material; however, the surface tends to be slippery while wet. Methods for mitigating the slippery nature of this material (such as alternative finishing techniques) should be investigated during Project design. It is a higher priority of CBS that the final surfacing provides safe traction than providing pleasing aesthetics.** **In addition, Phase I construction of the "red brick road" consisted of inlaying brick pavers between two separate areas of concrete. This division of features has resulted in minor differential settlement in areas of Phase I construction. CBS would like Phase II to maintain the "look and feel" of Phase I and incorporate the artistic features and intent of the "red brick road" while also investigating alternative methods of incorporating these features to mitigate differential settlement. Alternatives may include stamped concrete rather than brick inlays.**
Concrete depths known or estimated?	**Yes**	**Depth of concrete sidewalk is anticipated to match that used during Phase I construction (6 inches).**
WFL standard specifications and SCRs expected to be used for all material?	**No**	**Pavement, base course and subgrade materials may require special consideration for cold-weather. Additionally, a majority of the Project elements are non-standard. These include the potential elevated boardwalk/soldier pile retaining wall, architectural elements and lighting, railings, and the inclusion of non-standard features for ADA compliant surfacing within Section 2 construction.**
Description	**Response**	**Comment**
Potential Major Impacts to Cost or Schedule	**No**	**Major impacts are not anticipated at the time of this Scoping Report. However, costs may be impacted by the findings of the pavements and geotechnical investigation. These impacts may affect the structural section or earthwork requirements. Special materials could be required following the findings of these investigations, leading to cost increases. Impacts to the schedule may occur if the geotechnical and pavement investigation is delayed due to permitting.**
Constructability Concerns	**No**	**No concerns at the time of this Scoping Report.**

Summary of Preliminary Pavement & Materials Recommendations (including unbound surfacing and pavement preservation treatments)	**For the purpose of estimating, the following structural sections are assumed:** **Section 1 – 6" Concrete sidewalk, 4" crushed aggregate base course, 12" of non-frost susceptible subbase.** **Section 2:** - **Alternative No. 1 – 6" Concrete sidewalk, 4" crushed aggregate base course, 24" of non-frost susceptible subbase, 6"-minus shot rock fill embankment constructed at a slope of 1.5:1.** - **Alternative No. 2 – 6" Concrete sidewalk, 4" crushed aggregate base course, 24" of non-frost susceptible subbase, 6"-minus shot rock fill retained by soldier pile wall.** - **Alternative No. 3 – Yellow cedar elevated boardwalk supported by drilled steel piles** **Section 3 – 6" Concrete sidewalk, 4" crushed aggregate base course, 12" of non-frost susceptible subbase.**
Photos: Typical pavement condition as well as areas of concern.	 **Settlement cracking in the existing sidewalk outside the Beak Restaurant in Section 3.**

Example of an ovoid constructed in Phase I. Opportunities to incorporate similar features into Phase II should be pursued.

Example of a yellow cedar elevated boardwalk constructed in Phase I.

Example of the "red brick road" constructed in Phase I.

I. HYDROLOGY/HYDRAULICS

Description	Response	Comment
Specific state or local design standards/requirements	**Unknown**	**Standard design requires structures to installed above the flood elevation.**
Condition or performance problems with minor drainage structures?	**No**	**No washout/drainage issues have been known to occur along project corridor.**
Existing major culvert structures (over 48" rise) being retained?	**No**	
Exist/Proposed LWCs?	**No**	
Existing bridge/open bottom structure on project?	**No**	
Proposed major structure? (Culvert >48" or bridge)	**No**	
Proposed open bottom structures?	**No**	
Proposed geotechnical walls located within or adjacent to channels?	**No**	
Fish passage concerns?	**No**	
Channel migration concerns?	**No**	

Description	Response	Comment
Within designated FEMA floodplain?	**Yes/No**	**Section 2 construction will likely occur within the FEMA flood plain.** **The other portions of the Project are located outside of the FEMA flood plain.**
Channel degradation or aggradation concerns?	**No**	
Scour, erosion, deposition of sediment or debris, abrasion or corrosion of structure material at culvert inlets or outlets	**No**	
Describe channel bed and bank material	**N/A**	
Within 100 miles of West coastline?	**Yes**	
Potential Major Impacts to Cost or Schedule	**Yes**	**Phase II design may have to account for stormwater catch basin relocation and stormwater pipe extension depending on final alignment.** **A metocean analysis will be required in the vicinity of Section 2 to determine minimum design elevation of the Sea Walk in this area.**
Constructability Concerns	**No**	**No constructability concerns are anticipated.** **Washout/drainage issues are not known to occur along the project corridor.**

V. TECHNOLOGY AND INNOVATION INITIATIVES

Complete the following table and discuss Every Day Counts technology and innovation initiatives (www.fhwa.dot.gov/everydaycounts/) that can be suitably deployed on this project. Provide justification for those EDC initiatives that do not apply or were not considered

BRIDGES (http://www.fhwa.dot.gov/accelerating/innovation.cfm)		
Description	**Applicable to Project?**	**Justification**
Geosynthetic Reinforced Soil – Integrated Bridge System (EDC-1/2)	**No**	**No bridges.**
Prefabricated Bridge Elements and Systems (EDC-1/2)	**No**	**No bridges.**
Slide-in Bridge Construction (EDC-2)	**No**	**No bridges.**
Composite bridge decking for moveable bridges (Highways for Life)	**No**	**No bridges.**
Fully precast bridge bents for use in seismic regions (Highways for Life)	**No**	**No bridges.**
Full depth ultra-high performance concrete waffle bridge panels (Highways for Life)	**No**	**No bridges.**

CONSTRUCTION (http://www.fhwa.dot.gov/accelerating/innovation.cfm)		
Description	**Applicable to Project?**	**Justification**
Three-Dimensional Modeling (EDC-2)	**Yes/No**	**Could be applied, but project can be well defined from typical 2-D methods.**
Alternative Technical Concepts (EDC-2)	**Yes/No**	**Could be applied, but there isn't clear benefit for this project.**
Construction Manager/General Contractor (EDC-1/2)	**Yes/No**	**Could be applied, but project is well suited to traditional Design-Bid-Build with few constructability concerns.**
Design Build (EDC-1/2)	**Yes/No**	**Could be applied, but project is small for design-build. Also, it is not clear that the complexity, schedule, or quality requirements of this work indicate the consideration of DB.**

PAVEMENT (http://www.fhwa.dot.gov/accelerating/innovation.cfm)		
Description	**Applicable to Project?**	**Justification**
Aggregate Image Measurement System 2 (Highways for Life)	**No**	**Project size does not warrant consideration.**

PAVEMENT (http://www.fhwa.dot.gov/accelerating/innovation.cfm)		
Description	**Applicable to Project?**	**Justification**
Asphalt Binder Cracking Device (Highways for Life)	**No**	**Project size does not warrant consideration.**
Intelligent Asphalt Compaction Analyzer (Highways for Life)	**No**	**Specialty equipment would be cost prohibitive.**
Intelligent Compaction and Construction (EDC-2)	**No**	**Specialty equipment would be cost prohibitive.**
Precast Concrete Pavement Systems (Highways for Life)	**No**	**The limited potential pavement on the project is asphalt which is consistent with pavements throughout the area.**
Warm Mix Asphalt (EDC-1)	**Yes**	**Warm mix could be used to improve working time of asphalt and/or to reduce emissions.**

PLANNING / ENVIRONMENT (http://www.fhwa.dot.gov/accelerating/innovation.cfm)		
Description	**Applicable to Project?**	**Justification**
Expanding the Use of Programmatic Agreements (EDC-1)	**No**	**No applicable agreements.**
Implementing Quality Environmental Documentation (EDC-2)	**Yes**	**Can be integrated into NEPA documentation for the project.**
Programmatic Agreements (EDC-2)	**No**	**No applicable agreements.**

SAFETY (http://www.fhwa.dot.gov/accelerating/innovation.cfm)		
Description	**Applicable to Project?**	**Justification**
All Weather Pavement Marking System (Highways for Life)	**No**	
Automated Pavement Marker (Highways for Life)	**No**	
High Friction Surfaces (EDC-2)	**No**	
Intersection and Interchange Geometrics (EDC-2)	**Yes/No**	**Intersection and Interchange Geometric improvements may be investigated for the end of project intersection at Harbor Way and Lincoln Street.** **In addition, crosswalks should be evaluated for potential improvements in accordance with EDC STEP Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.**
Road Safety Audits (FHWA Safety)	**No**	**N/A**
Safety Edge (EDC-1)	**No**	**N/A**

SAFETY PRODUCT PERFORMANCE EVALUATIONS (http://www.fhwa.dot.gov/accelerating/innovation.cfm)		
Description	**Applicable to Project?**	**Justification**
Sequential Dynamic Curve Warning System (Highways for Life)	**No**	**N/A**

VI. COST ESTIMATE

Prelim Construction Estimate			
AK COS SITKA(1)	PND #:	191154	
Sitka Sea Walk Phase II	Estimate By:	NKH	
	Checked By:	MJG	
Construction Costs			
Alternatives Summary	Printed:	1/23/2020	11:01:06 AM

Alternative No.1 - Rock and Borrow Fill Raised Pathway at Section 2

Item Number	*Item Description*	*Amount*
1	Section 1	408,907.02
2	Section 2	1,928,409.04
3	Section 3	253,818.60
	PROJECT TOTAL CONSTRUCTION BUDGET	**2,591,134.66**

Alternative No.2 - Soldier Pile Sea Wall Raised Pathway at Section 2

Item Number	*Item Description*	*Amount*
1	Section 1	408,907.02
2	Section 2	2,608,872.87
3	Section 3	253,818.60
	PROJECT TOTAL CONSTRUCTION BUDGET	**3,271,598.49**

Alternative No.3 - Elevated Boardwalk @ Section 2

Item Number	*Item Description*	*Amount*
1	Section 1	408,907.02
2	Section 2	2,427,744.00
3	Section 3	253,818.60
	PROJECT TOTAL CONSTRUCTION BUDGET	**3,090,469.62**

Prelim Construction Estimate

AK COS SITKA(1)

Sitka Sea Walk Phase II

Section 1 Estimate

BOP to O'Connell Bridge Approach

PND #: 191154
Estimate By: NKH
Checked By: MJG
Printed: 1/23/2020 11:01:06 AM

Basic Bid

Item Number	*Description*	*Unit*	*Quantity*	*Unit Price*	*Amount*
1	Removal of Pavement	SY	455	10.00	4,550.00
2	Removal of Curb and Gutter	LF	485	10.00	4,850.00
3	Removal of Sidewalk	SY	290	20.00	5,800.00
4	Unclassified Excavation	CY	220	15.00	3,300.00
5	Selected Material, Type A	TON	420	25.00	10,500.00
6	Aggregate Base Course, Grading D-1	TON	160	35.00	5,600.00
7	Hot Mix Asphalt	TON	10	500.00	5,000.00
8	Relocate Existing Catch Basin Structure	EA	1	5,000.00	5,000.00
9	Replace Inlet Frame and Grate	EA	1	2,000.00	2,000.00
10	Adjust Utility Box	EA	2	1,000.00	2,000.00
11	Adjust Water Valve Box	EA	1	1,000.00	1,000.00
12	Modify Guardrail and End Terminal	LUMP SUM	ALL REQUIRED	30,000.00	30,000.00
13	Landscape Buffer, 2' Wide	LF	405	20.00	8,100.00
14	Concrete Buffer, 2' Wide	LF	80	33.33	2,666.40
15	Sidewalk, 6" Thick, 8' Wide	LF	510	150.00	76,500.00
16	Curb and Gutter	LF	485	60.00	29,100.00
17	Curb Ramp	EA	3	50.00	150.00
18	Wayfinding Kiosks	EA	2	4,000.00	8,000.00
19	Interpretive Signs	EA	1	5,000.00	5,000.00
20	Mobilization	LUMP SUM	ALL REQUIRED	10.0%	28,161.64
21	Erosion & Sediment Control	LUMP SUM	ALL REQUIRED	15,000.00	15,000.00
22	Construction Surveying	LUMP SUM	ALL REQUIRED	15,000.00	15,000.00
23	Traffic Maintenance	LUMP SUM	ALL REQUIRED	10,000.00	10,000.00
24	Traffic Control	LUMP SUM	ALL REQUIRED	7,500.00	7,500.00
25	Painted Traffic Markings	LUMP SUM	ALL REQUIRED	10,000.00	10,000.00
26	Field Office	LUMP SUM	ALL REQUIRED	5,000.00	5,000.00
27	Other CE Items	LUMP SUM	ALL REQUIRED	10,000.00	10,000.00
PROJECT Summary	Pay Items:	27 Items		Subtotal:	309,778.04
	DESIGN CONTINGENCY	20%			61,955.61
	ESTIMATING CONTINGENCY	10%			37,173.37
	PROJECT TOTAL CONSTRUCTION BUDGET				**408,907.02**

Prelim Construction Estimate

AK COS SITKA(1)

Sitka Sea Walk Phase II

Section 2 - Alt 1 Estimate

Rock and Borrow Fill Raised Pathway

Bridge to O'Connell Lightering Facility

PND #: 191154
Estimate By: NKH
Checked By: MJG
Printed: 1/23/2020 11:01:06 AM

Basic Bid

Item Number	*Description*	*Unit*	*Quantity*	*Unit Price*	*Amount*
1	Shot Rock Fill, 6" Minus	TON	21500	30.00	645,000.00
2	Selected Material, Type A	TON	1270	25.00	31,750.00
3	Salvage Existing Armor Rock (Excavate & Place)	CY	4,480	40.00	179,200.00
4	Aggregate Base Course, Grading D-1	TON	260	35.00	9,100.00
5	Geotextile	SY	4,867	3.00	14,601.00
6	Sidewalk, 6" Thick, 8' Wide	LF	730	177.78	129,779.40
7	2' Gravel Pathway Shoulder, D-1 Surfacing, Each Side	TON	105	35.00	3,675.00
8	Interpretive Signs	EA	2	5,000.00	10,000.00
9	Lighting & Electrical	LUMP SUM	ALL REQUIRED	150,000.00	150,000.00
10	Mobilization	LUMP SUM	ALL REQUIRED	10.0%	132,810.54
11	Marine Mammal Observation	LUMP SUM	ALL REQUIRED	40,000.00	40,000.00
12	Erosion & Sediment Control	LUMP SUM	ALL REQUIRED	20,000.00	20,000.00
13	Construction Surveying	LUMP SUM	ALL REQUIRED	30,000.00	30,000.00
14	Traffic Maintenance	LUMP SUM	ALL REQUIRED	20,000.00	20,000.00
15	Traffic Control	LUMP SUM	ALL REQUIRED	15,000.00	15,000.00
16	Field Office	LUMP SUM	ALL REQUIRED	10,000.00	10,000.00
17	Other CE Items	LUMP SUM	ALL REQUIRED	20,000.00	20,000.00
PROJECT Summary	Pay Items:	17 Items		Subtotal:	1,460,915.94
	DESIGN CONTINGENCY	20%			292,183.19
	ESTIMATING CONTINGENCY	10%			175,309.91
	PROJECT TOTAL CONSTRUCTION BUDGET				**1,928,409.04**

Prelim Construction Estimate

AK COS SITKA(1)

Sitka Sea Walk Phase II

Section 2 - Alt 2 Estimate

Soldier Pile Sea Wall Raised Pathway

Bridge to O'Connell Lightering Facility

PND #: 191154
Estimate By: NKH
Checked By: MJG
Printed: 1/23/2020 11:01:06 AM

Basic Bid

Item Number	*Description*	*Unit*	*Quantity*	*Unit Price*	*Amount*
1	Shot Rock Fill, 6" Minus	TON	3200	30.00	96,000.00
2	Selected Material, Type A	TON	1270	25.00	31,750.00
4	Aggregate Base Course, Grading D-1	TON	210	35.00	7,350.00
5	Geotextile	SY	730	3.00	2,190.00
6	Sidewalk, 6" Thick, 8' Wide	LF	730	177.78	129,779.40
7	2' Gravel Pathway Shoulder, D-1 Surfacing, Each Side	TON	105	35.00	3,675.00
8	Cantilever Soldier Pile Wall; Timber Lagging	SF	8760	125.00	1,095,000.00
9	Handrailing	LF	730	200.00	146,000.00
8	Interpretive Signs	EA	2	5,000.00	10,000.00
8	Lighting & Electrical	LUMP SUM	ALL REQUIRED	150,000.00	150,000.00
9	Mobilization	LUMP SUM	ALL REQUIRED	10.0%	179,674.44
10	Marine Mammal Observation	LUMP SUM	ALL REQUIRED	15,000.00	15,000.00
11	Erosion & Sediment Control	LUMP SUM	ALL REQUIRED	20,000.00	20,000.00
12	Construction Surveying	LUMP SUM	ALL REQUIRED	30,000.00	30,000.00
13	Traffic Maintenance	LUMP SUM	ALL REQUIRED	20,000.00	20,000.00
14	Traffic Control	LUMP SUM	ALL REQUIRED	10,000.00	10,000.00
15	Field Office	LUMP SUM	ALL REQUIRED	10,000.00	10,000.00
16	Other CE Items	LUMP SUM	ALL REQUIRED	20,000.00	20,000.00
PROJECT Summary	Pay Items:	18 Items		Subtotal:	1,976,418.84
	DESIGN CONTINGENCY	20%			395,283.77
	ESTIMATING CONTINGENCY	10%			237,170.26
	PROJECT TOTAL CONSTRUCTION BUDGET				**2,608,872.87**

Prelim Construction Estimate

AK COS SITKA(1)

Sitka Sea Walk Phase II

Section 2 - Alt 3 Estimate

Elevated Boardwalk

Bridge to O'Connell Lightering Facility

PND #: 191154
Estimate By: NKH
Checked By: MJG
Printed: 1/23/2020 11:01:06 AM

Basic Bid

Item Number	*Description*	*Unit*	*Quantity*	*Unit Price*	*Amount*
1	Elevated Boardwalk	SF	7300	150.00	1,095,000.00
2	Handrailing	LF	1460	200.00	292,000.00
3	Interpretive Signs	EA	2	5,000.00	10,000.00
4	Lighting & Electrical	LUMP SUM	ALL REQUIRED	150,000.00	150,000.00
5	Mobilization	LUMP SUM	ALL REQUIRED	10.0%	167,200.00
6	Marine Mammal Observation	LUMP SUM	ALL REQUIRED	15,000.00	15,000.00
7	Erosion & Sediment Control	LUMP SUM	ALL REQUIRED	20,000.00	20,000.00
8	Construction Surveying	LUMP SUM	ALL REQUIRED	30,000.00	30,000.00
9	Traffic Maintenance	LUMP SUM	ALL REQUIRED	20,000.00	20,000.00
10	Traffic Control	LUMP SUM	ALL REQUIRED	10,000.00	10,000.00
11	Field Office	LUMP SUM	ALL REQUIRED	10,000.00	10,000.00
12	Other CE Items	LUMP SUM	ALL REQUIRED	20,000.00	20,000.00
PROJECT Summary	Pay Items:	12 Items		Subtotal:	1,839,200.00
	DESIGN CONTINGENCY	20%			367,840.00
	ESTIMATING CONTINGENCY	10%			220,704.00
	PROJECT TOTAL CONSTRUCTION BUDGET				**2,427,744.00**

Prelim Construction Estimate

AK COS SITKA(1)

Sitka Sea Walk Phase II

Section 3 Estimate

O'Connell Lightering Facility to EOP

PND #: 191154
Estimate By: NKH
Checked By: MJG
Printed: 1/23/2020 11:01:06 AM

Basic Bid

Item Number	*Description*	*Unit*	*Quantity*	*Unit Price*	*Amount*
1	Removal of Curb and Gutter	LF	290	20.00	5,800.00
2	Removal of Sidewalk	SY	270	20.00	5,400.00
3	Unclassified Excavation	CY	90	15.00	1,350.00
4	Selected Material, Type A	TON	200	25.00	5,000.00
5	Aggregate Base Course, Grading D-1	TON	70	35.00	2,450.00
6	Sidewalk, 6" Thick, 8' Wide	LF	290	177.78	51,556.20
7	Curb and Gutter	LF	290	60.00	17,400.00
8	Curb Ramp	EA	7	50.00	350.00
9	Wayfinding Kiosks	EA	2	4,000.00	8,000.00
10	Interpretive Signs	EA	1	5,000.00	5,000.00
11	Mobilization	LUMP SUM	ALL REQUIRED	10.0%	17,480.62
12	Erosion & Sediment Control	LUMP SUM	ALL REQUIRED	10,000.00	15,000.00
13	Construction Surveying	LUMP SUM	ALL REQUIRED	15,000.00	15,000.00
14	Traffic Maintenance	LUMP SUM	ALL REQUIRED	15,000.00	15,000.00
15	Traffic Control	LUMP SUM	ALL REQUIRED	7,500.00	7,500.00
16	Painted Traffic Markings	LUMP SUM	ALL REQUIRED	5,000.00	5,000.00
17	Field Office	LUMP SUM	ALL REQUIRED	5,000.00	5,000.00
18	Other CE Items	LUMP SUM	ALL REQUIRED	10,000.00	10,000.00
PROJECT Summary	Pay Items:	18 Items		Subtotal:	192,286.82
	DESIGN CONTINGENCY	20%			38,457.36
	ESTIMATING CONTINGENCY	10%			23,074.42
	PROJECT TOTAL CONSTRUCTION BUDGET				**253,818.60**