CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
COMMUNITY DEVELOPMENT

PLANNING COMMISSION STAFF REPORT
CONDITIONAL USE PERMIT USE2023 0010
HEARING DATE: AUGUST 8, 2023

(907) 586-0715
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www.juneau.org/community-development
155 S. Seward Street • Juneau, AK 99801

DATE: August 2, 2023

TO: Michael LeVine, Chair, Planning Commission

BY: Irene Gallion, Senior Planner

THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a Conditional Use Permit for mixed use development: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park.

STAFF RECOMMENDATION: Approval

KEY CONSIDERATIONS FOR REVIEW:

- Seawalk on the south side of the development will meet the 16 foot requirement established in ordinance and in plans. The seawalk width on this lot line is limited by Coast Guard properties.
- Seawalk on the west side of the development will be 20 feet wide, as desired by CBJ Parks and Recreation.
- The proposal moves reception of over 100,000 passengers out of the congested downtown dock area.
- No development on USCG property is explicitly or tacitly approved by this permit.
- Conditions applicable to uplands development were approved under the Notice of Decision for USE2023 0003 (**Attachment C**).

ALTERNATIVE ACTIONS:

1. **Amend:** require additional conditions or delete or modify the recommended conditions.
2. **Deny:** deny the permit and adopt new findings for items 1-6 below that support the denial.
3. **Continue:** to a future meeting date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

ASSEMBLY ACTION REQUIRED:

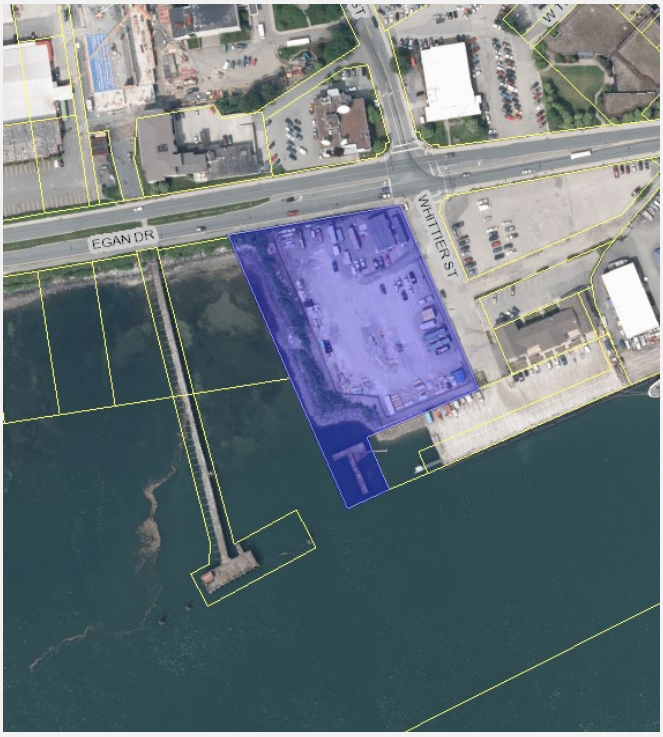
Assembly action is not required for this permit.

STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
  - CBJ 49.15.330
  - CBJ 49.40.210
  - CBJ 49.35.240
  - CBJ 49.70.960
  - CBJ 49.80

GENERAL INFORMATION	
Property Owner	Huna Totem Corporation
Applicant	Russell Dick
Property Address	0 Egan Drive
Legal Description	Juneau Subport Lot C1
Parcel Number	1C060K010031
Zoning	MU2
Land Use Designation	Traditional Town Center
Lot Size	125,406 square feet, 2.8789 acres
Water/Sewer	CBJ
Access	Whittier Street
Existing Land Use	Vacant
Associated Applications	USE2023 0003: Dock approval

SITE FEATURES AND ZONING



SURROUNDING ZONING AND LAND USES	
North (MU2)	Egan Drive/mixed use
South (WC)	Gastineau Channel
East (MU2/WC)	Coast Guard
West (WC)	Tidelands

SITE FEATURES	
Anadromous	No
Flood Zone	VE El 23 feet
Hazard	None mapped
Hillside	No
Wetlands	No
Parking District	Town Center
Historic District	No
Overlay Districts	Cruise Ship Berthing and Lightering District Map

BACKGROUND INFORMATION

Project Description – The Applicant is requesting a Conditional Use Permit (CUP) for uplands development that includes vehicle parking, tourism logistics, retail, restaurants and a park (**Attachment A)**. The Applicant will be partnering with Sealaska Heritage and Goldbelt on a culture and science center on the site (**Attachment B**).

The 500-foot wide, 70-foot long dock associated with this uplands development was approved at the July 11, 2023 Planning Commission meeting (Notice of Decision for USE2023 0003, **Attachment C**).

At that time the Commission did not approve the uplands development due to concerns about:

- Phasing, and not having a concrete idea of the final phase use.
- Public notice, as no opposition was present.

The differences between this proposal and the last one (USE2023 0003) are:

- The dock not included, since it has already been approved.
- There is no phasing. The proposal is for one project.
- The site will include a cultural and science center. Under the previous application, 40,000 square feet was proposed for one of three uses: Housing, retail, or a cultural center. In this proposal, the applicant has determined that the structure will be developed as a culture and science center.

Concept drawings are provided to aid the Planning Commission in determining compliance with Title 49.

The Planning Commission is reviewing this application for CBJ Title 49 land use compliance. If this application is approved the Applicant will coordinate permitting with other agencies as needed. Permitting agencies may include departments of CBJ, and the Alaska Department of Transportation and Public Facilities.

Process –

The process for bringing this project through CBJ review was established when Norwegian Cruise Lines owned the property. The public process history can be found at the Short Term Planning web site, under USE2023 0003:

https://juneau.org/community-development/short-term-projects

The process was outlined for the public in the January 10, 2022, public meeting on the Long Range Waterfront Plan amendment.

> ***Update to the Long Range Waterfront Plan, COMPLETED.*** The intent of Appendix B of the plan is to provide a concise set of provisions for the Commission to review.
>
> ***Apply for and receive a Conditional Use Permit, COMPLETED FOR THE DOCK.*** The Planning Commission's role is to verify regulatory and plan compliance. The Commission has approved the dock. This application is for the uplands.
>
> ***Tidelands Lease.*** The lease provides the vehicle for the Assembly to attach qualitative policy standards to the project, based on their assessment of community interest and well-being. The tidelands lease will be applied for through the CBJ Division of Lands and Resources and heard by the Assembly under Title 53.

Modifications to the Long Range Waterfront Plan followed recommendations of the Visitor Industry Task Force (VITF). The VITF was established by the Mayor in 2019 with the task of:

- Addressing tourism industry management,
- Revisiting the 2004 Long Range Waterfront Plan,
- Conceiving of an appropriate "cap" on the number of visitors, and
- Evaluating the need for additional public involvement.

The table below outlines if VITF recommendations are envisioned to be enacted through the CUP or the Tideland Lease process. "Process" refers to the Commission process of evaluation under Title 49.

Recommendation	**CUP?**	**Lease?**
One (1) large ship per day using the facility	Condition, USE23-03	
Maximum of five (5) larger ships in port per day (what is larger?)		X
No hot berthing at the new facility	Condition, USE23-03	
No larger ship allowed to anchor as the 6th ship in town		X
High quality uplands development for community and visitors	Process	
Year-round development orientation	Process/Condition?	
CBJ manages dock to some extent		X
Dock is electrified	Condition, USE23-03	

When considering the tidelands lease, the Assembly may provide conditions that require looking at the tourism system as a whole. These include limits on the number of large ships in Juneau, where they are parked, and how docks will work together.

The analysis of engineered elements of the development would occur during the building permit review process.

Background –

Like the rest of the flats, the subport was built on mine fill. During World War II the subport was used to stage military resources, and afterward served for storage and vehicle parking.

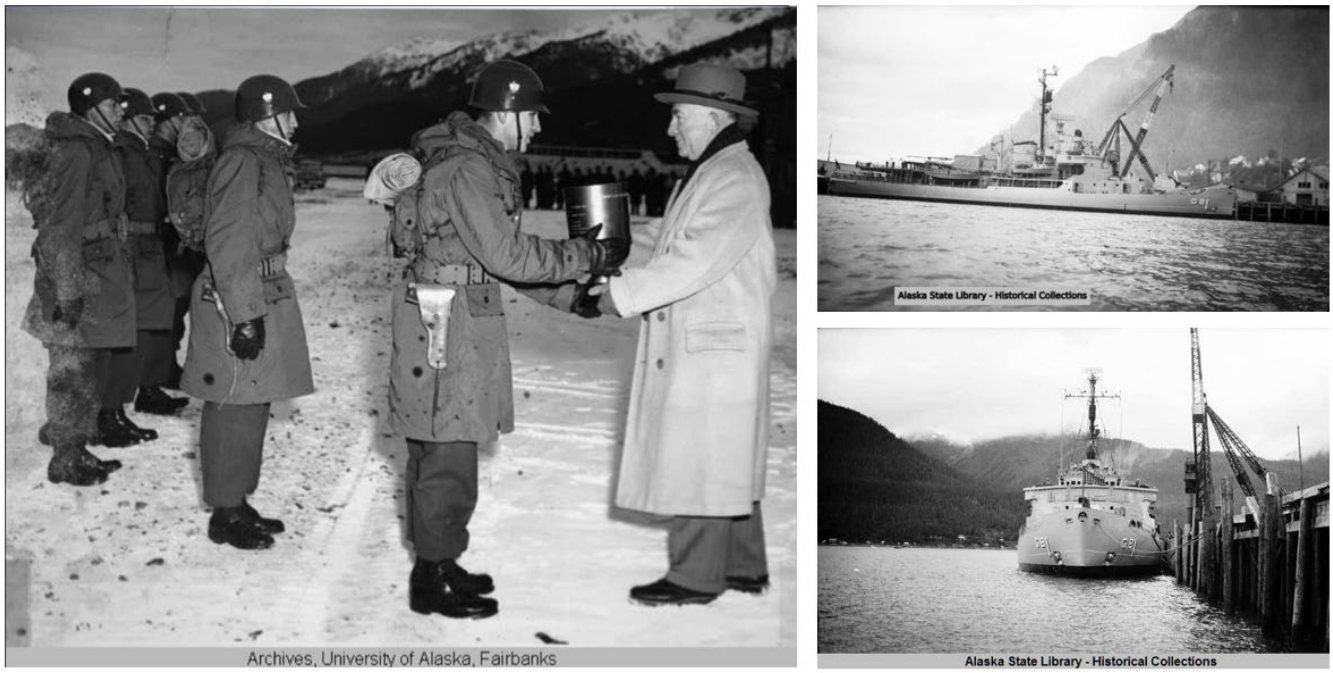


Figure 1: *Right: First Sergeant Kermit Gutierrez receives the Eisenhower Trophy from Governor Ernest Gruening on behalf of Company D. of the 208th Infantry Battalion (Sep) during Governor's Day review at Juneau subport. The Sitka unit was the first Alaska National Guard company to receive the trophy, presented for outstanding achievement in recruiting, training, and soldierly conduct (1939-1959). Left: BURTON ISLAND. Navy Ice Breaker, Juneau Subport dock 7/19/ 1956.*

The original subport was subdivided in 2009. Lot C1 (yellow highlight in **Figure 2**, below) is the area proposed for uplands development under this application. The Heat Street right-of-way was recorded to provide seawalk access around the Coast Guard if needed. Uses in the area include:

- Purple: Alaska Mental Health Trust (AMHT), currently vehicle parking for the U.S. Coast Guard.
- Blue: U.S. Coast Guard, including the dock area at the end of Whittier Street.
- Green: National Oceanic and Atmospheric Administration (NOAA).
- Orange: Develop Juneau Now, LLC. Juneau Hydropower plans to provide downtown heating district infrastructure at this location.

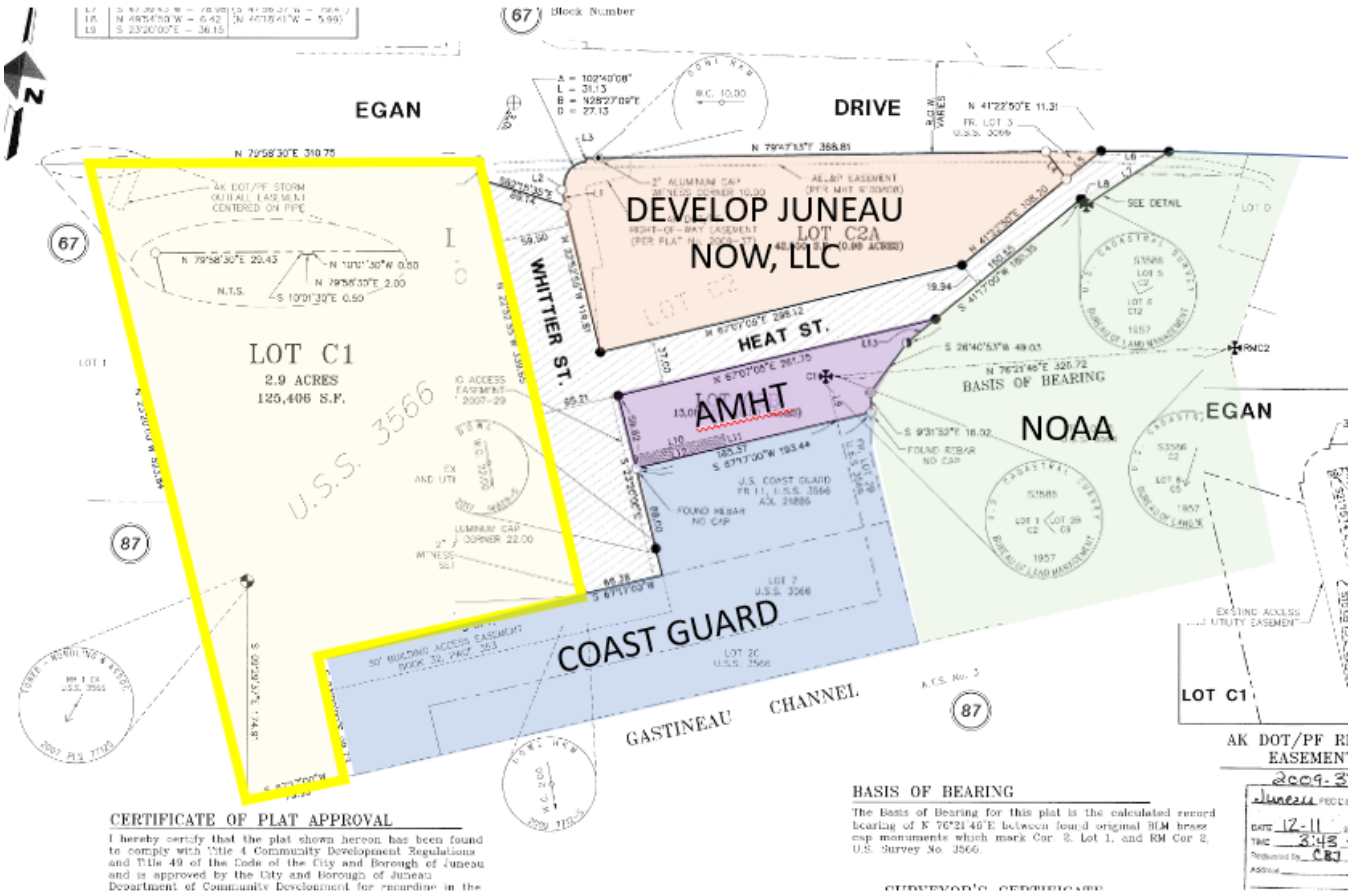


Figure 2: *Plat 2009-37 shows current lot configuration, and established Heat Street, which was intended to provide seawalk access around government properties. Yellow indicates the subport property the Applicant proposes developing. Blue indicates Coast Guard property, purple is the Alaska Mental Health Trust, green is the National Oceanic and Atmospheric Administration. Orange is Develop Juneau Now, LLC, associated with Juneau Hydro's efforts for a heating district downtown.*

In 2019 the AMHT, owner of the property at the time, acted on a study by the Urban Land Institute indicating that sale of the subport would have fewer risks than long-term leasing, and would better serve the AMHT mission. In September of 2019 Norwegian Cruise Lines purchased the subport for $20 million, $7 million higher than the next highest bidder.

The City and Borough of Juneau (CBJ) took the first step to facilitate cruise ship docking at the subport with an update to the Long Range Waterfront Plan, crafting the new Appendix B for reference during conditional use permitting.

In 2022 Norwegian Cruise Lines transferred the property to Huna Totem. The details of the transaction remain private.

The table below summarizes relevant case history for the lot and proposed development.

Item	Summary
BLD2007-00561	Abate and demolish subport building.
SUB2009 00016, Plat 2007-29	Subdivision of Lots 1, 2A, 2B, 4 and 5 of US Survey No 3566, creating Lot C.
SUB2009-00017, Plat 2009-37	Subdivision of Lot C into C1 and C2.
INQ2009-00017	Query about putting an office building on the site.
USE2009-00026	Office building (not constructed). 18 month extension under USE2010 0030.
VAR2009-00017	Parking variance for proposed office building (not constructed). 18 month extension under VAR2010 0033.
VAR2009-00016	Heigh variance for proposed office building (not constructed). 18 month extension under VAR2010 0034.
MAP2009-00001	Rezone from Waterfront Commercial to Mixed Use 2.
USE2012 0022	Off-site staging for the State Library Archive Museum (SLAM) project.
BLD2012 0691	Temporary structures supporting construction of SLAM.
BLD2017 0289	Temporary structure for food service.
Plat 2017-22	Creation of lot C2A and C2B, and the Heat Street right-of-way.
MIP2018 0005	Right-of-way acquisition for Egan Drive reconstruction project.
BLD2019 0242	Temporary power for a job trailer.
LZC2020 0001	Zoning verification summary for a title company.

ZONING REQUIREMENTS: Uplands – Mixed Use 2

Standard		Requirement	Uplands	Code
Lot	Size, square feet	4,000	125,406	CBJ 49.25.400
	Width, linear feet	50	350	CBJ 49.25.400
Setbacks, linear feet	Front (East)	5	5	CBJ 49.25.400
	Rear (West)	5	5	CBJ 49.25.400
	Side (South, abutting tidelands)	0	0	CBJ 49.25.400
	Side (South, not abutting tidelands)	5	5	CBJ 49.25.400
	Street Side (North)	5	5	CBJ 49.25.400
Lot Coverage Maximum, percentage		80	39	CBJ 49.25.400
Vegetative Cover Minimum, percentage		5	22	CBJ 49.50.300
Height	Permissible, linear feet	45	45	CBJ 49.25.400
	Accessory, linear feet	35		CBJ 49.25.400
Maximum Dwelling Units (80 units/Acre)		230	**Unknown**	CBJ 49.25.500
Use		Vacant	Tourism	CBJ 49.25.300

Yard setbacks are not required from tidewater lot lines [CBJ 49.25.430(4)(G)]. Staff has interpreted the lines highlighted in **Figure 3** (below) by the thick white line to be tidewater lot lines for the purposes of buildings setbacks. Buildings are defined in CBJ 49.80. Note that a seawalk or dock does not constitute a building.

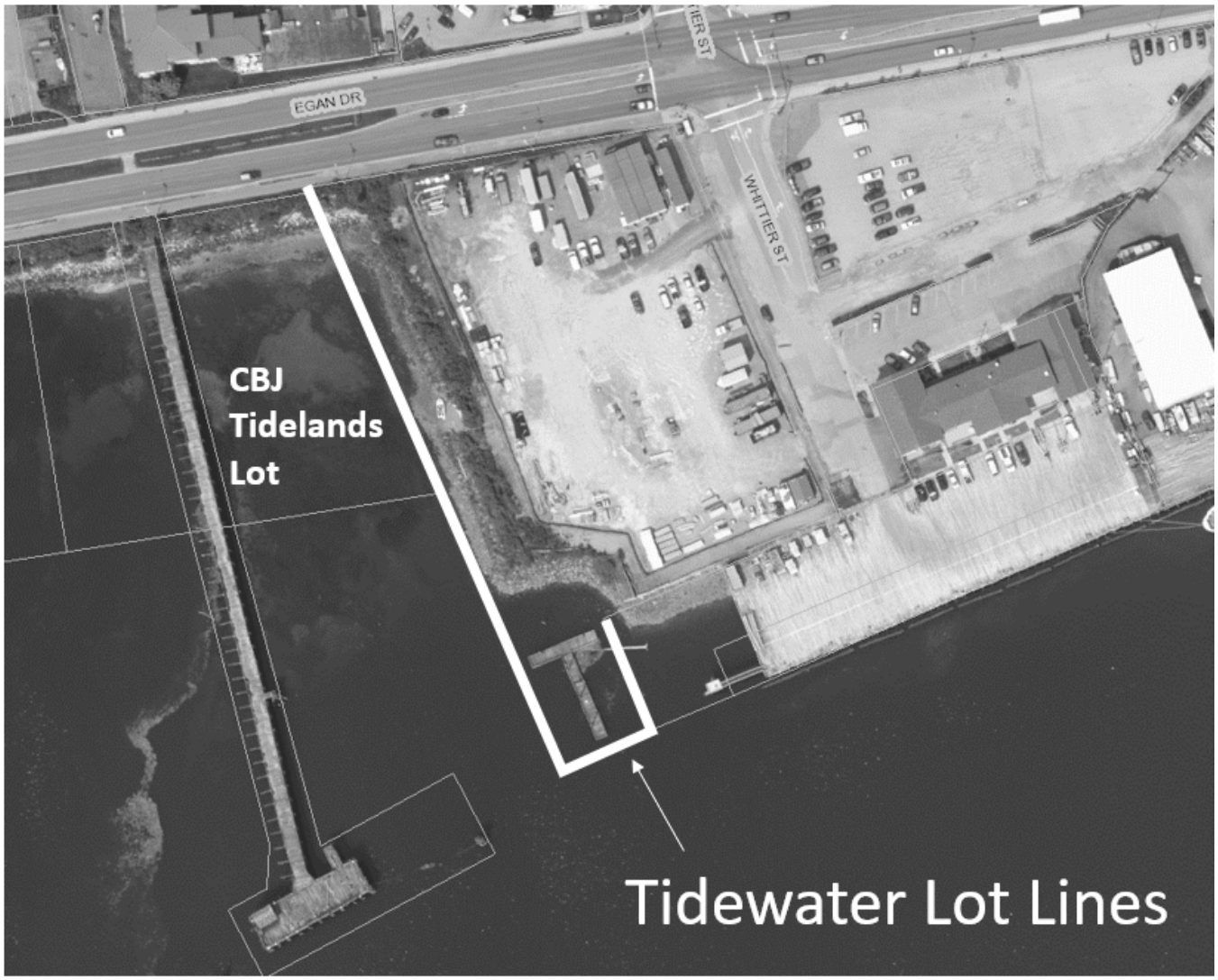


Figure 3: *Tidewater lot lines have a zero setback in code. The image above shows the lot lines that have zero setback for the Applicant's development. Note the CBJ tidelands lot to the west of the project. CBJ does not currently have established plans for the lot.*

SITE PLAN

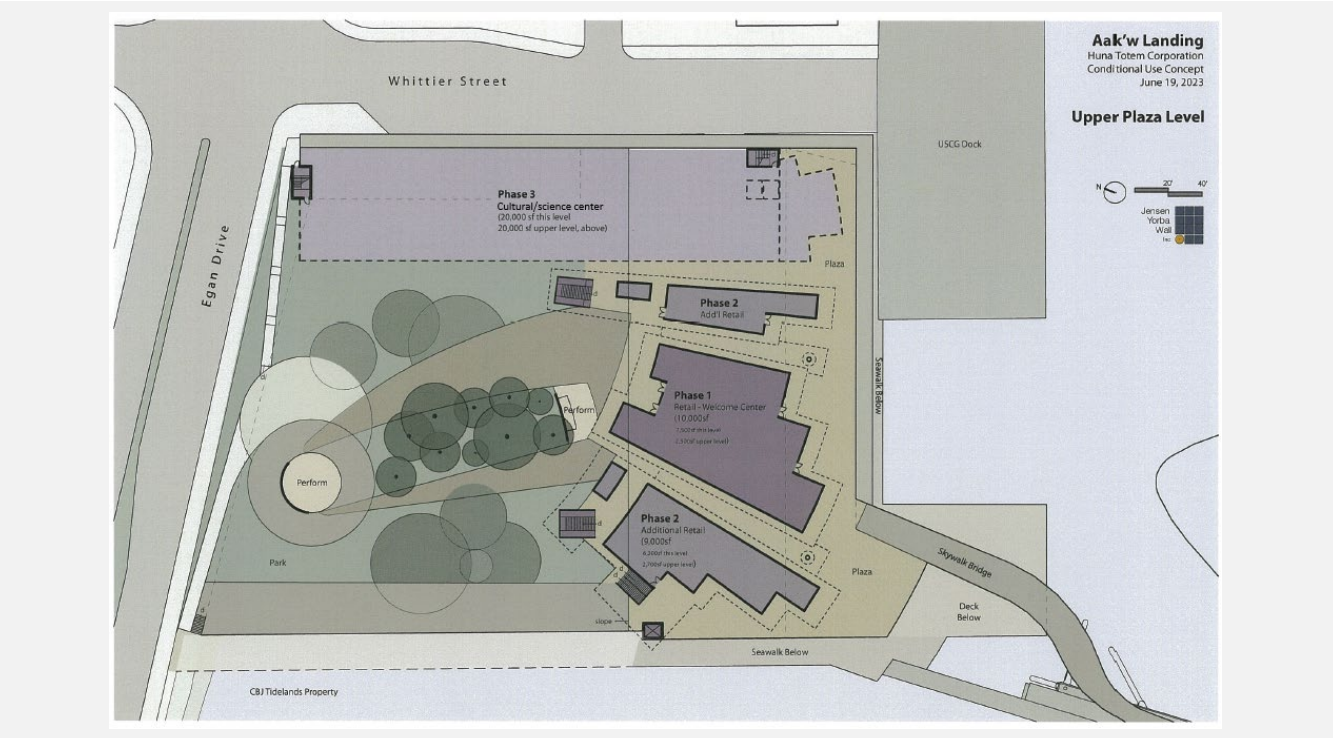


Figure 4: *Overall site plan for the Upper Plaza area showing Phase 1, 2 and 3 development. Parking and additional retail are provided at lower levels.*

ANALYSIS

The project consists of:

- Parking structure with 34,000 square feet of retail space, and dock.
- 9,000 additional square feet of retail space
- 40,000 square feet for a culture and science center.
- A dock, approved under USE2023 0003 (**Attachment C**).

Condition: None.

Project Site – The proposed uplands are on private property held by Huna Totem Corporation. Access is via CBJ-owned Whittier Street, which also provides access to the Coast Guard base. The project is bordered on the north by state-owned Egan Drive.

Condition: None.

Project Design – Project design can be split into three levels.

- Underground bus staging and parking, and other vehicle parking.
- Ground level vehicle parking, seawalk-level retail and cultural center.
- Upper plaza level retail and cultural center.

Disembarking cruise ship passengers will ascend a gangway into the upper plaza level retail. The ascending gangway:

- Will be ADA compliant.
- Provides an elevated view of the plaza and waterfront, aiding in orientation.
- Routes passengers through the retail and restaurant area.

Escalators through the middle of the development take passengers to:

- The seawalk level area, with access to retail, restaurants, the park, and the seawalk.
- The underground bus staging. Busses park nose-in to the island where visitors are deposited. Passengers can load onto tour busses without walking behind maneuvering busses (**Attachment D, page 7-8, Attachment E, page 11**).

Amenities include:

- Indigenous art integrated into the structure. For instance, columns can be wrapped with a totem pole motif, or hardscape can be planned to illustrate cultural stories.
- Restaurants and retail serving tourists and locals.
- Approximately one acre of publicly-available park.
- Off-season vehicle parking.

Condition: None.

Traffic – According to CBJ 49.40.300(a)(1) a traffic impact analysis (TIA) is required (**Attachment F**). Initial comments received from the Tourism Manager have been analyzed (**Attachment G**).

The traffic impact analysis indicates that modifications to street striping and signal timing would address delays created by the additional project traffic.

The Alaska Department of Transportation and Public Facilities (ADOT&PF) reviewed the TIA (**Attachment H page 54**). ADOT&PF will make agreements with the Applicant to mitigate impacts as they are identified.

The Coast Guard is concerned about unimpeded access to the pier (**Attachment H, page 48**). CBJ requires rights-of-way remain clear for movement of pedestrians and vehicles. If the right-of-way will be blocked or used for other purposes, a ROW Permit will be required.

Condition: None.

Vehicle Parking & Circulation – The project is in the Town Center Parking Area. When determining required off-street parking spaces, the calculated number is rounded down [CBJ 49.40.210]. At completion, 94 off-street parking spaces will be required, plus one loading place.

Total required off-street parking spaces are met, with 117 provided. Code does not differentiate between bus parking spaces and vehicle parking spaces.

The back-out spaces shown on Whittier Street in the site plans <u>are not included</u> in the parking calculations for the project. The spaces are conceptual. CBJ does not allow commercial uses to have parking that backs into the right-of-way.

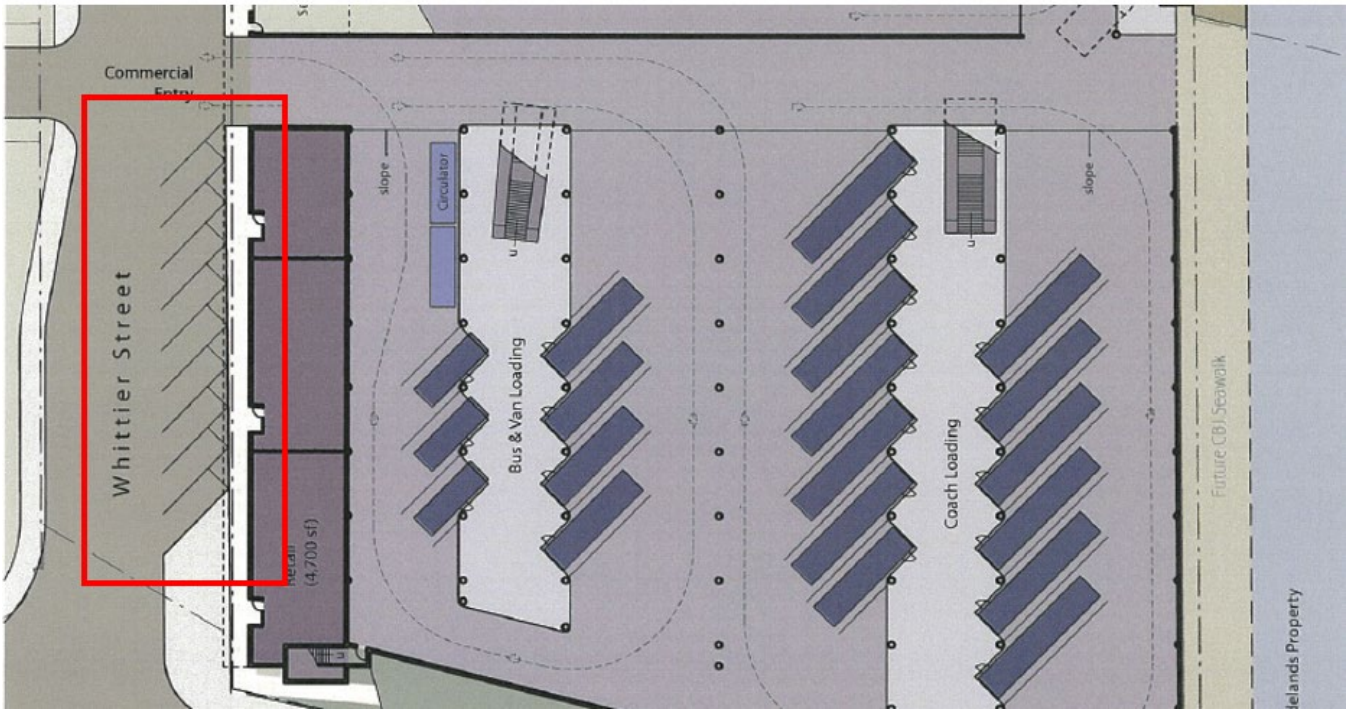


Figure 5: *The back-out parking shown on the site plans is conceptual only. CBJ will not permit back-out parking into the right-of-way for commercial uses.*

ADA spaces are required:

Use	Square Feet	Metric	Parking Required	ADA Required
Retail	Up to 50,000	1/750 sf	66	
Moorage		1/moorage stall	2	
Cultural Center	40,000	1/1,500 sf	26	
COMPLETED PROJECT			**94**	**4**

One (1) loading space is required [CBJ 49.20.210(c)].

Note that retail and restaurants have the same vehicle parking requirement [CBJ 49.40.210(a)].

Condition: None.

Non-motorized Transportation – The seawalk elements shown over CBJ-held tidelands, outlined in red below, are conceptual. The applicant was asked to conceptually show how the project could connect to a seawalk or bridge to Gold Creek, features that are included in the Long Range Waterfront Plan. CBJ does not have plans for their

tidelands lot (shown in **Figure 3,** above) at this time.

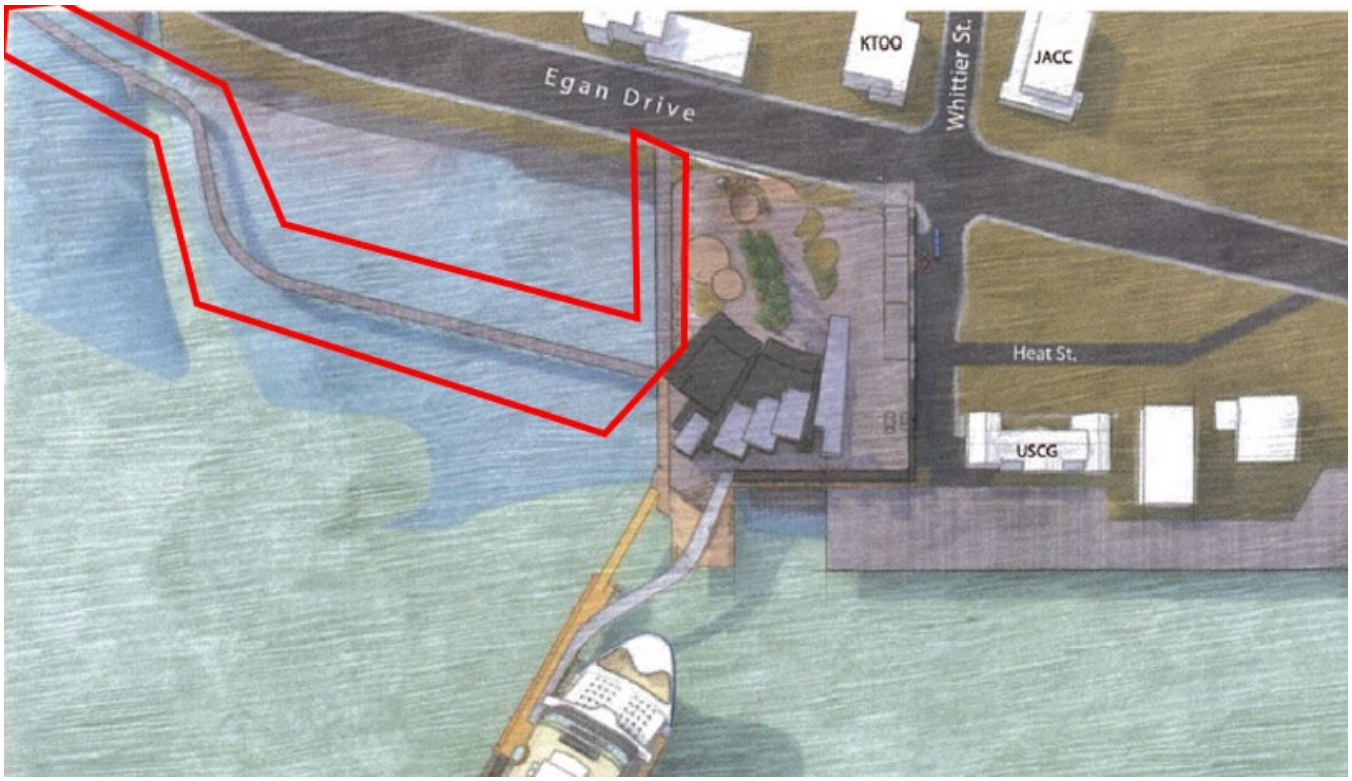


Figure 6: *Seawalk elements outlined in red are shown for concept only and are not part of this approval or project.*

A detailed description of passenger flow can be found in **Attachment A, page 13**.

Two levels of pedestrian accommodation are proposed along the waterfront. The gangway will deposit pedestrians on the "park" level (1 in **Figure 7**, below). Pedestrians can then take a stairway or elevator down to the seawalk level (8 in **Figure 7**, below). Note that seawalk elements shown in slate grey are shown for concept only.

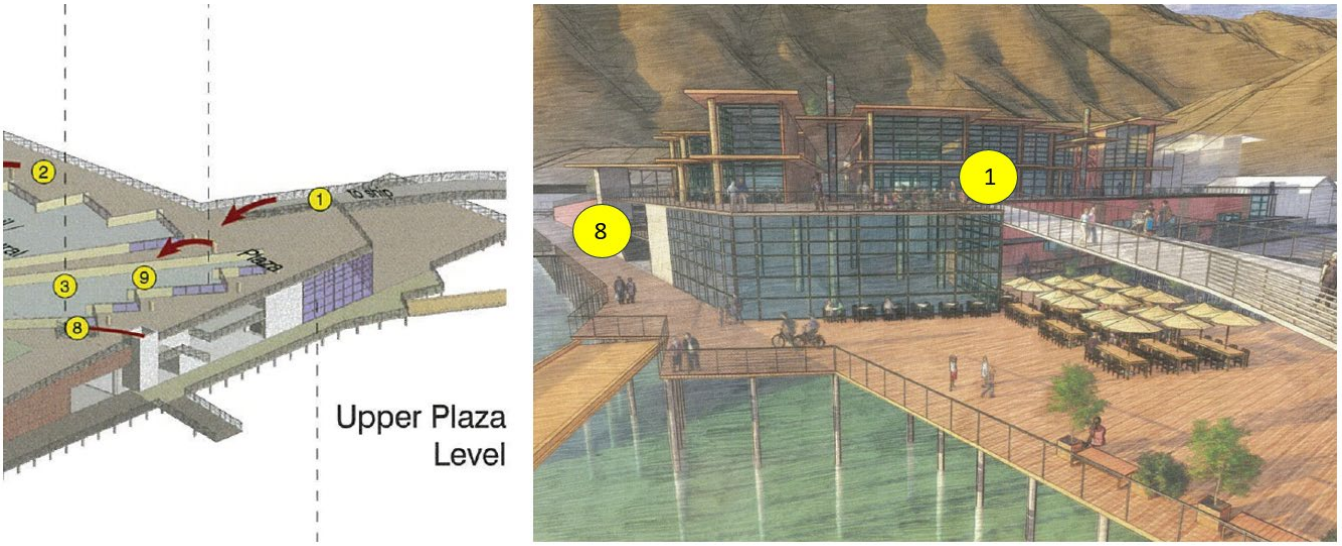


Figure 7: *Two levels of pedestrian accommodation. The gangway leads to the park level (1) of the proposed development. Passengers can then descend a stairwell or elevator (8) to get to the seawalk level, which will include restaurants and shops.*

CBJ Ordinance 2005-29 (am) requires 16-foot wide provision for a pedestrian path along the waterfront. This project proposes seawalk along the east and south lot lines.

CBJ Parks and Recreation would maintain the seawalk. The Applicant would be required to provide a recorded easement for any section of the seawalk on Applicant property. CBJ will empty trash, repair the structure, and any other type of maintenance or management required for public use. A similar agreement is in place with Franklin Dock Enterprises, LLC.

The Applicant proposes that the seawalk at the south of the proposed facility is 16 feet wide, due to Coast Guard dock and property constraints. Note that the park level of the facility (1 in **Figure 7**, above) is wider than 20 feet and provides a view of the waterfront.

The Applicant can construct a 20-foot wide seawalk on the west side of the property.

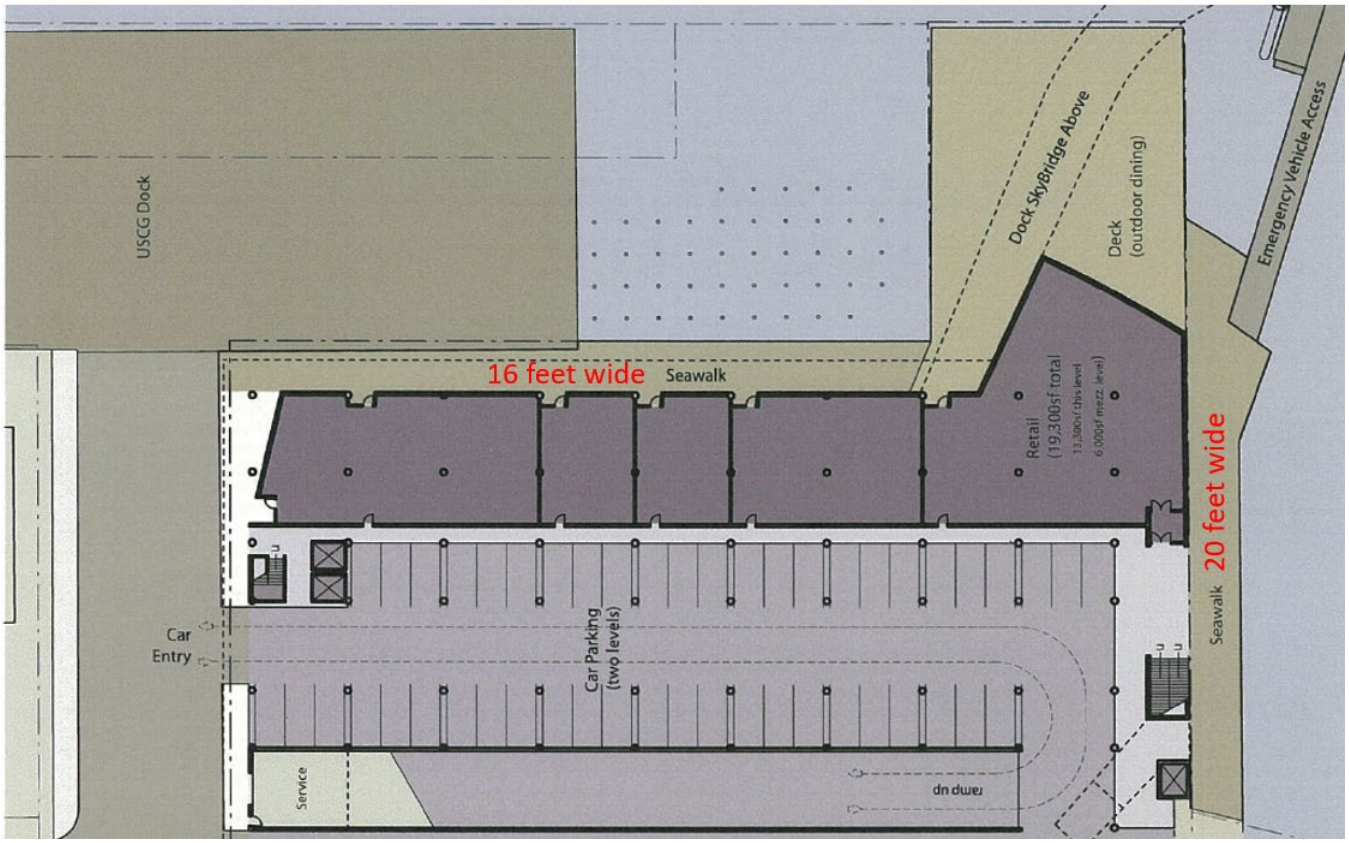


Figure 8: *The seawalk along the south lot line (top) is constrained by Coast Guard development but will meet the 16 foot width required by ordinance and plans. The west lot line seawalk can meet the 20 foot width requested by CBJ's Parks and Recreation Department.*

Under the proposed project (without the CBJ connector seawalk) pedestrians access Egan Drive through two (2) park portals, one at the west side and one at the east side (**Attachment D, page 4**). An earthen berm will discourage direct access along the rest of the north side. CBJ Parks and Recreation requests a condition that the park be maintained by the Applicant for year-round activities (**Attachment H, page 13**). In the past, other large developments have included amenities, (e.g. playgrounds, parks), but vague direction has led to confusion on maintenance responsibility.

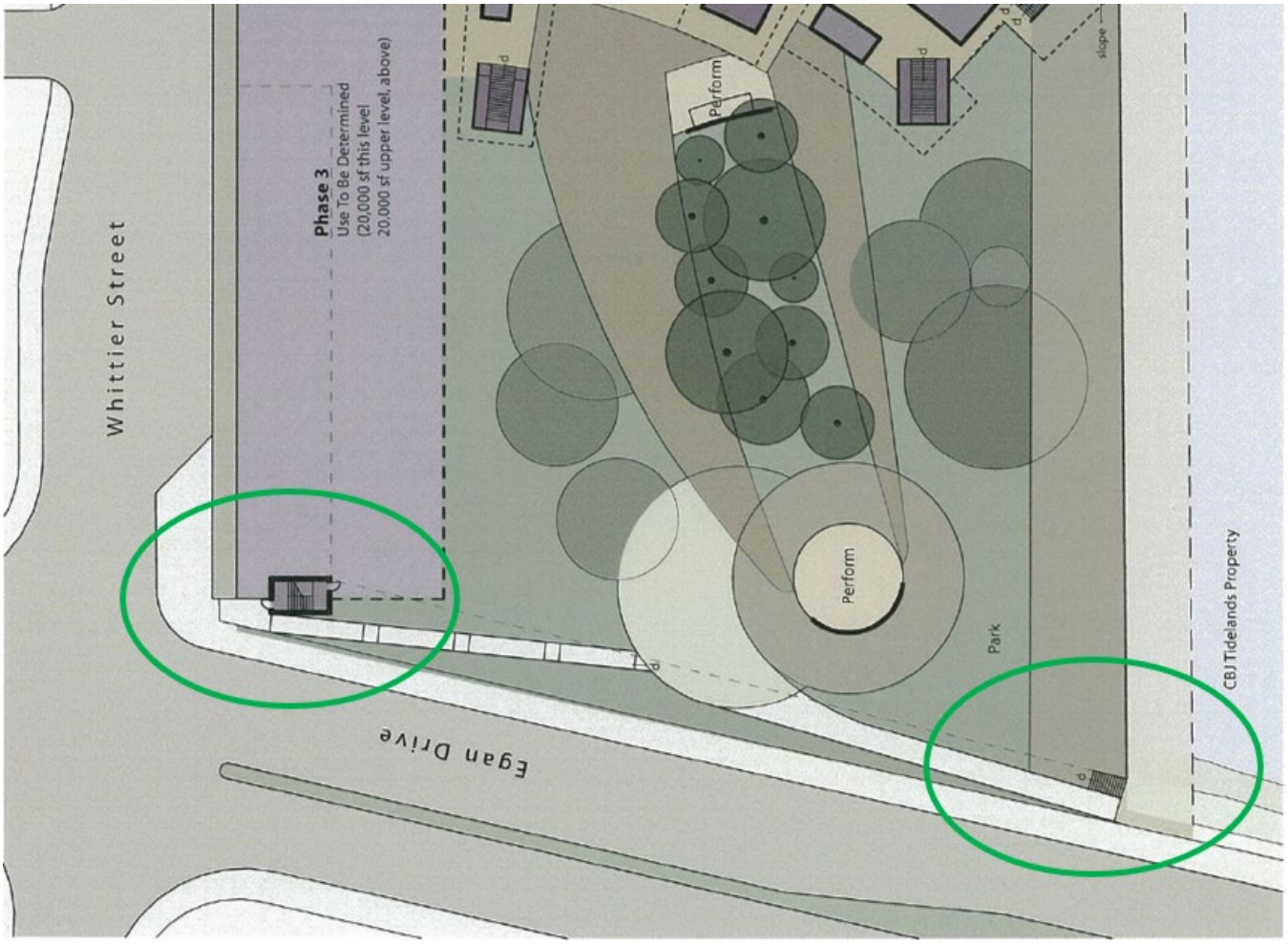


Figure 9: *In the absence of a CBJ seawalk connection, pedestrians can access the Egan Drive sidewalk via the park. The park will be designed to provide sidewalk access at the east and west ends of the park, with an earthen berm dissuading pedestrian access along the length of the lot line.*

Figure 10 shows the applicant's proposed seawalk and CBJ's conceptual seawalk in blue (not to scale). At the west end, the seawalk connects to the Egan Drive sidewalk, which currently accommodates tourists walking the coast. At the east end the Applicant's seawalk development would deposit users on Whittier Street, which currently lacks pedestrian enhancements. The area in yellow shows where CBJ may want to consider seawalk-oriented improvements.

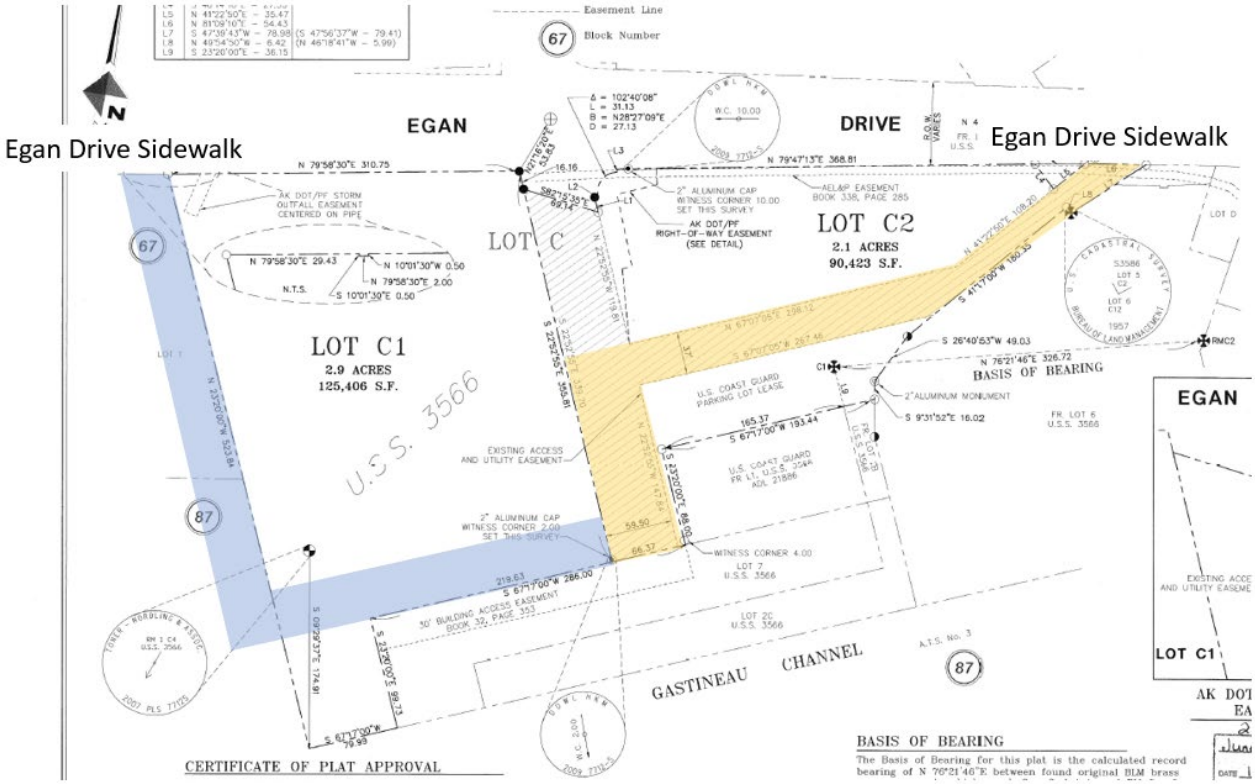


Figure 10: *Plat 2009-37 is highlighted to show the connection of the seawalk to Whittier Street and Heat Street.*

When the parent lot was subdivided in 2017, the staff report recognized the role of the property in providing seawalk continuity:

> The lot is in the special waterfront area identified in Title 49. **49.70.960(c)(6)** requires dedication of a 16 foot wide-pedestrian access easement for the purposes of a seawalk as depicted in the officially adopted *Long Range Waterfront Plan* with the responsibility of the construction left to the landowner. The requirement to dedicate the leg of the easement that is 22 feet wide, and the waiver allowed by 49.35.240(i)(2)(A) will satisfy this requirement. The lot is specifically identified as Area B in *The Long Range Waterfront Plan.* The dedication of ROW is consistent with *The Long Range Waterfront Plan.* The Seawalk will have uninterrupted access from the boardwalk over the water to Egan Drive.

The subdivision created Heat Street, extending east from Whittier Street.

> **Condition (*From the Notice of Decision for USE2023 0003, Condition 2 (Attachment C)***: The minimum width of the Applicant – constructed seawalk on the south side of the lot will be 16 feet wide. The minimum width of the Applicant-constructed seawalk on the west side of the lot will be 20 feet.
>
> **Condition (*From the Notice of Decision for USE2023 0003, Condition 3 (Attachment C)*):** Before Temporary Certificate of Occupancy for element of the project, the Applicant will record an easement for CBJ maintenance and management of the seawalk. The easement will be at least 16 feet wide on the south

side of the lit, and 20 feet wide on the west side of the lot. The easement will be comparable to such easements in place for other dock owners.

Condition (*From the Notice of Decision for USE2023 0003, Condition 4 (Attachment C)*): The applicant will maintain and operate paths, parks, landscaping, and other amenities (other than the seawalk) for year-round use.

Proximity to Transit – Proximate Capital Transit stops include:

MAP	LOCATION	FEET FROM PROJECT, approximate
A	Alaska State Museum, Whittier Street	200
B	State Archives Building, Willoughby Avenue	250
C	Downtown Transit Center, Main Street	400
D	Andrew Hope Building, Willoughby Avenue	870
E	Foodland IGA, Willoughby Avenue	1,300
F	Federal Building, Willoughby Avenue	2,000

Transit stops are on the north side of Egan Drive. The proposed project is on the south side of Egan Drive. A crosswalk at Whittier Street connects the proposal to transit.

The project includes provisions for underground bus and van parking to serve tourists. The design deposits tourists on an island in the middle of the garage, which the busses and vans pull up to. This limits people walking behind the busses.

Figure 11: *Pedestrians will take a descending escalator to the underground tour bus area, which includes provisions for*

recharging a CBJ circulator should one come into existence. Passengers can load onto tour busses without walking behind maneuvering busses.

Condition: None.

Noise – Noise is anticipated to be in character with Mixed Use 2 activities. While ship horns and chimes have been a source of noise complaints, this project does not change or mitigate those concerns.

Condition: None.

Lighting – Structure lighting will be evaluated during the building permit process. Parking areas will need to be suitably lit, lighting fixtures will be required to be "full cut-off," and no off-site glare is allowed.

Condition: None.

Vegetative Cover & Landscaping – Site concepts show approximately 28,000 square feet of vegetation in the proposed park area. The landscaping and park facilities are described in **Attachment A page 14**.

Condition: None.

Habitat – The closest anadromous resource is Gold Creek, approximately 1,000 feet to the west.

Condition: None.

Drainage and Snow Storage – Drainage and snow storage are discussed in **Attachment A page 18**. Off-site snow storage for seawalks is not anticipated, similarly to CBJ seawalks. Vehicle parking is covered. Drainage from vehicle area will include oil-water separation.

Condition: None.

Hazard Zones – The site is not in a mapped landslide or avalanche zone.

The dock and some proposed seawalk is in an AE special flood hazard area with an elevation of 23 feet and will have to be designed and constructed in accordance with CBJ flood regulations.

Condition: None.

Public Health, Safety, and Welfare –

In their 2022 Juneau Tourism Survey, McKinley Research Group reports crowding on sidewalks and vehicle congestion downtown are the second and third highest concerns of Juneau residents (https://juneau.org/manager/tbmp , page 10). The proposed facility at the subport would move approximately 120,000 passengers and support services west of Main Street. Until infrastructure was upgraded or reconstructed, pinch points are the sidewalk at the west end of the project, and the seawalk connection with Whittier Street. Pedestrian accommodations are improved where the seawalk is developed.

The project includes dedicated ambulance access that is separated from the gangway and accessible through the parking garage (**Attachment A page 18, Attachment D**). The stairway and elevator will be configured to accommodate ambulance access. Approximately 80 feet of seawalk may be impacted by transient ambulance

access.

Figure 12: *The green line shows ambulance access to the Emergency Vehicle Access. This route bypasses approximately 420 feet of seawalk along the waterfront, reducing conflict with pedestrians.*

Cruise lines remit a per passenger fee that goes toward tourism-related improvements to offset impacts (https://juneau.org/manager/marine-passenger-fee-program). Cruise ship use of CBJ infrastructure has resulted in funding for lift station improvements (FY2012), Last Chance Basin well field development (FY2015), and improvements to Front and Franklin Streets (FY2017). Such projects benefit CBJ residents in the absence of tourists.

AEL&P estimates that electric rates would be 25% higher without the interruptible sales to Greens Creek Mine and Princess Cruise Lines. https://www.aelp.com/Energy-Conservation/Planning-For-Our-Energy-Future

According to the Juneau Economic Development Council's Economic Indicators for 2022, tourism employs seven (7) percent of employees, and provides three (3) percent (over $32 million), in salary earnings (https://www.jedc.org/research-library-reports-studies-by-jedc/).

The 2022 Visitor Industry Survey done by McKinley Research Group (see link above) indicates that 55 percent of Juneau residents say that tourism has an overall positive impact on their household (page 9).

Property Value or Neighborhood Harmony –

The uplands will:

- Accommodate 120,000 passengers that would otherwise disembark in Juneau's congested cruise ship dock area.
- Provide underground parking for tour providers.
- Channel visitors through retail to excursion providers. Overhead signage will direct visitors to the correct location.
- Include a park, an attractive alternative to surface parking.
- Provide underground parking to the public in the off season.
- Convey Juneau's unique cultural heritage.

AGENCY REVIEW

CDD conducted an agency review comment period between July 26, 2023, and July 28, 2023. The U.S Coast Guard and CBJ's Tourism Director stated the comments they provided for USE2023 0003 still stand.

Agency review comments from USE2023 0003 can be found in **Attachment H**. To recap:

Agency	Summary
CBJ Manager's Office, Manager	Notes and background on process.
USCG, Sector Juneau	Concerns with back-out parking on to Whittier Street.
CBJ Manager's Office, Tourism	1ST set of comments before dock added to CUP. 2nd set is questions on how the development fits into Juneau cruise ship operations.
CBJ Parks and Recreation	Seawalk width, park maintenance, and information on maintenance easements.
United States Coast Guard	Parking, access, and protection of dock infrastructure.
ADOT&PF	Mitigations will be worked out with the Applicant before ADOT&PF permitting.
CBJ Docks and Harbors	Navigability study, tidelands permits, electrification, and elucidation on finger floats.

CBJ Parks and Recreation asked for 20-foot seawalk widths with a CBJ maintenance easement, and explicit Applicant maintenance responsibility for the park. These concerns are addressed with the conditions on Condition 2 of the Notice of Decision for USE2023 0003. Parks and Recreation provided examples of seawalk easement maintenance language in place with other privately-owned docks (**Attachment H, page 13**).

The USCG expressed concerns that proposed development might extend into their property, due to confusion over an expired 35-foot easement. The Applicant intends to build the seawalk between their proposed building and the USCG property. The Applicant understands the 35-foot easement has expired (**Attachment H, page 47**).

The USCG expressed concern about compromising their bulkhead that runs along Applicant property. The Applicant states they are aware of the bulkhead. The Applicant will work with the USCG if there are any

encroachments. The Applicant does not anticipate major excavation work near the bulkhead, and design will protect existing USCG buildings (**Attachment H, page 47**).

PUBLIC COMMENTS

Meetings conducted by NCL include:

- 11.18.2020 - 1st NCL Community Meeting/Presentation (online)
- 12.2.2020 - 2nd NCL Community Meeting/Presentation (online)
- 2.18.2021 - 3rd NCL Community Meeting/Presentation (online)

Meetings conducted by Huna Totem include:

- 2.9.2022 – Southeast Conference – Mid-Session Summit, Juneau
- 10/29/2023: Juneau Chamber Luncheon
- 11.7.2022 - CBJ Committee of the Whole Presentation
- 11/10/22: Juneau Chamber Luncheon
- 12.2.2022 - Gallery Walk Public Presentation
- 1/11/23: Juneau Rotary - Alaska Room at Juneau Airport
- 1.30.2023 - Hanger Ballroom Presentation
- 2/1/2023: Southeast Conference – Mid-Session Summit - Juneau
- 3.19 - 3.25.2023 - Gold Metal Basketball Pop-Up Informational Booth

Under USE2023 0003, the Commission had expressed concerns about the public notice for the project. Public notice for USE2023 0003 was consistent with other projects as required under CBJ 49.15.230 (**Attachment J**):

1. The application was included on the agenda posted online at https://juneau-ak.municodemeetings.com/
2. Notice was published in the Juneau Empire on Wednesday, June 28th, 2023, and July 5, 2023 (**Attachment J, pages 1-3**).
3. The developer posted a public notice sign on the property on June 25, 2023. The sign was required to be posted by June 26, 2023. CBJ CDD provides the signs that the Applicants post (**Attachment J, pages 4-10**).
4. An abutters notice was sent to property owners within 500 feet of the project (**Attachment J, page 11**).
5. There were no multi-family residential properties within 500 feet of the project, so no door-knockers were required.
6. The Director determined additional public notice was not required, as:
    a. Larger-scale review of the dock as an improvement had occurred during the update of the Long Range Waterfront Plan.
    b. A notice was posted at the CBJ web site: Regular Planning Commission meets July 11, 2023. Here's how to weigh in. – City and Borough of Juneau
    c. A web site was provided at https://juneau.org/community-development/short-term-projects , and referenced on the abutters notice.
7. The Director determined additional meetings were not needed because of the multiple meetings already held on the project (listed above).

For this application (USE2023 0010) CDD conducted a public comment period between July 24, 2023, and August 4, 2023. Public notice was mailed to property owners within 500 feet of the proposed development (**Attachment J**). A public notice sign was also posted on-site two weeks prior to the scheduled hearing (**Attachment K**). Public comments submitted at time of writing this staff report can be found in **Attachment L**.

Name	Summary
Bill Kramer	Concerns about cruise impacts (from USE2023 0003).
Kris Hart	Inadequate documents.
Margo Waring	Not community oriented.

CONFORMITY WITH ADOPTED PLANS

2013 Comprehensive Plan

Chapter	Page No.	Item	Summary
5	50	5.5-IA5F: Public and private investment in new dock facilities for cruise ships.	This project provides private investment in new facilities.
5	50	5.5-IA12: CBJ should look at measures that would convey the community's unique style and cultural roots to cruise ship passengers.	The proposal includes maintenance of sight lines from Egan to the waterfront, and includes indigenous art and forms in the architecture, decoration, and landscaping.

2022 Long Range Waterfront Plan, Amendment (Attachment M): Elements applicable to uplands development.

Page No.	Item	Summary
1	Minimize congestion of pedestrians and tourism-related vehicles east of Seward Street.	If currently lightered passengers are accommodated at the new dock, accommodations for approximately 120 thousand passengers will be moved west of Seward Street.
3	Seawalk the length of the waterfront.	Current proposal includes seawalk on west and south sides of the development (waterfront). Seawalk ends at Whittier Street.
3	Use structures to accentuate view corridors or anchor visual interests.	Passenger gangway provides elevated view of waterfront. Gaps between structures creates visual continuity with park. Whittier Street terminates at the dock.
5	High quality uplands development for visitors and community.	Uplands include extensive retail and restaurant space, indigenous art incorporation, and underground staging of tourist transportation.

Page No.	Item	Summary
5	Year-round development orientation.	Vehicle parking available off season. Retail and restaurants available off-season.
6	Uplands: manage vehicular traffic, including signalization.	Vehicle parking and bus transportation under-ground, with park on top.
6	Uplands: Stage tourist transportation efficiently.	Pedestrian traffic is routed through the structure and onto the seawalk. Tourists access busses at an underground island, minimizing need to walk behind maneuvering busses.
6	Uplands: Extend seawalk to the proposed dock.	Seawalk is proposed along the west and south sides of the project.
6	Uplands: Extend shuttle bus service.	The project provides accommodation for parking and maneuvering busses and large vans.

2004 Long Range Waterfront Plan, Original (Area B, Attachment N). The amendment recognized that uplands provisions of the original LRWP are valid and appropriate to the tidelands dock use, and used to manage the impacts of a large cruise ship dock and its impacts.

Chapter	Page No.	Item	Summary
3.3	47/48	Create a lively, mixed-use neighborhood. Mix commercial on ground floor with residential upstairs.	This can be evaluated and determined during the CUP process.
	47	Streets and plazas encourage travel through site and along waterfront.	Seawalks are proposed on the west and south sides of the development, adjacent to the Channel. Covered gathering areas between retail structures provide visual continuity with the waterfront.
	48/50	"Area B" properties provide significant parking, and development of the area may require accommodations elsewhere.	Vehicle parking will be maintained underground and will be available for use during the off season.
	48	Building setbacks a maximum of ten (10) feet from street edge.	Setbacks on the west, south and east sides are approximately five (5) feet. Setbacks on the north side (from Egan Drive) are more due to the park.
	48/50	Parking should be behind or wrapped by buildings. Discourage parking on the waterfront.	Vehicle parking and tourist transportation are provided underground. This provides a sheltered area for tourists to wait.
	48	Buildings should be a maximum of 35 feet, unless view corridors, open space or enhancing building design are provided.	MU2 zoning height limit is 45 feet. Retail and visitor structures include corridors between structures providing continuity with the waterfront. Over an acre of open space is provided. The structures focus toward the waterfront and provide indigenous art.

Chapter	Page No.	Item	Summary
	48	View corridors should be preserved.	Covered corridors between structures provide continuity with the waterfront.
	48	Set aside a minimum of 16 feet for a seawalk.	A seawalk is proposed along the west and south sides, meeting the minimum 16 feet.
	48	Create a mix of medium buildings that create an appealing visual rhythm.	Renderings show a varied roof line, covered corridors between structures, and accommodations for totem poles.
	48	Historic maritime architecture with deep recessed building openings and strong detailing.	Modern architecture highlights indigenous cultures. Covered decks and walkways create recessed structure openings.
	48/50	Views along internal streets should be preserved, accentuating view corridors and anchoring visual interests.	Internal streets are not proposed. Covered corridors between structures create visual continuity with the waterfront. The gangway to the second story provides elevated orientation to Juneau's waterfront.

2015 Juneau Economic Development Plan – no specific insights or requirements.

FINDINGS

Conditional Use Permit Criteria – Per CBJ 49.15.330(e) & (f), Review of Director's & Commission's Determinations, the Director makes the following findings on the proposed development:

1. Is the application for the requested Conditional Use Permit complete?

Analysis: No further analysis needed.

Finding: Yes. The application contains the information necessary to conduct full review of the proposed operations. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15.

2. Is the proposed use appropriate according to the Table of Permissible Uses?

Analysis: The application is for up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. A floating steel dock up to 70 feet wide and 500 feet long was approved under USE2023 0003.

The uplands uses listed at CBJ 49.25.300:

- 1.300: Multi-family dwellings.
- 2.200: Storage and display of goods with greater or equal to 5,000 square feet and/or 20 percent of gross floor area of outside merchandising of goods.
- 5.300: Libraries, museums and art galleries.
- 8.100 Restaurants without drive-through.
- 10.510 Moorage, commercial.

- 21.300: Visitor, cultural facilities related to features of the site.

Uplands require a conditional use permit because the project constitutes major development:

- More than 12 residences OR
- More than 10,000 square feet of commercial uses.

Finding: Yes. The requested permit is appropriate according to the Table of Permissible Uses.

3. Will the proposed development comply with the other requirements of this chapter?

Analysis: No further analysis required.

Finding: Yes. With the recommended conditions, the proposed development will comply with Title 49, including vehicle parking, lighting, vegetative cover, structures design and seawalk access.

4. Will the proposed development materially endanger the public health, safety, or welfare?

Analysis: No further analysis needed.

Finding: No. With appropriate conditions, the requested use, in the MU2 zoning district, will not materially endanger the public health or safety.

5. Will the proposed development substantially decrease the value of or be out of harmony with property in the neighboring area?

Analysis: No further analysis needed.

Finding: No. With appropriate conditions, the requested use, in the MU2 zoning district, will not substantially decrease the value or be out of harmony with the property in the neighboring area.

6. Will the proposed development be in conformity with officially adopted plans?

Analysis: No further analysis required.

Finding: Yes. The proposed use, with the recommended conditions, will conform with the 2013 Comprehensive Plan, 2022 Long Range Waterfront Plan Amendment, and the 2004 Long Range Waterfront Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit. The permit would allow the development of Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. No conditions are recommended for this permit.

A floating steel dock up to 70 feet wide and 500 feet long was approved under USE2023 0003. Conditions specific to the uplands development that were approved under USE2023 0003 and are not open to reconsideration:

2. The minimum width of the Applicant–constructed seawalk on the south side of the lot will be 16 feet wide. The minimum width of the Applicant-constructed seawalk on the west side of the lot will be 20 feet.
3. Before Temporary Certificate of Occupancy for any phase or element of the project, the Applicant will record an easement for CBJ maintenance and management of the seawalk. The easement will be at least 16 feet wide on the south side of the lit, and 20 feet wide on the west side of the lot. The easement will be comparable to such easements in place for other dock owners.
4. The Applicant will maintain and operate paths, parks, landscaping, and other amenities (other than the seawalk) for year-round use.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application
Attachment B	Partnership acknowledgements
Attachment C	Notice of Decision, USE2023 0003 (dock approval)
Attachment D	Plans
Attachment E	Renderings
Attachment F	Traffic Impact Analysis
Attachment G	Response to initial TIA comments
Attachment H	Agency Review Comments
Attachment I	Public notice for USE2023 0003
Attachment J	Abutters Notice for USE2023 0010
Attachment K	Public Notice Sign
Attachment L	Public Comments
Attachment M	Long Range Waterfront Plan Amendment
Attachment N	Long Range Waterfront Plan, Chapter 3.3 (Area B)

Huna Totem Corporation

WOOSH-JEE-EEN • PULLING TOGETHER

July 24, 2023

Ms. Irene Gallion
Senior Planner
Community Development Division
City and Borough of Juneau
4th Floor – Marine View Center
230 South Franklin Street
Juneau, Alaska 99801

Dear Ms. Gallion:

The challenge with this submittal is to efficiently reflect the Planning Commission's decision from the July 11th meeting with the materials necessary to bring the full project application to fruition. We have worked diligently to accomplish that purpose herein.

Attached please find the following materials for Huna Totem Corporation's Conditional Use Permit Application for the uplands at the Aak'w Landing project:

1. The Development Permit Application as required.
2. An email attachment from the additional landowner for the relevant tidelands of the State of Alaska is incorporated by reference as previously submitted.
3. A new Conditional Use Permit Application with an updated project summary description.
4. A single sheet project summary description.
5. A copy of the Planning Commission's Notice of Decision dated July 20, 2023.
6. An updated Architectural Narrative dated 7.22.2023.
7. The Zoning and Parking Study dated 6.19.2023 which updated the Site and Building specifics numbers to reflect our modified submittal plans as of that date and is still applicable,
8. The completed Traffic Impact Analysis dated 5.12.2023 which is still applicable and is incorporated by reference due to its length.

We would appreciate your review of these materials and their inclusion in the packet for the August 8th meeting of CBJ's Planning Commission. Please contact me with any questions.

Cordially,

Fred Parady
Chief Operating Officer

9301 Glacier Hwy Suite 200 Juneau, AK 99801 Phone (907) 789-8500 Fax (907) 789-1896

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
COMMUNITY DEVELOPMENT

DEVELOPMENT PERMIT APPLICATION

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications. This form and all documents associated with it are public record once submitted.

To be completed by Applicant

PROPERTY LOCATION

Physical Address: O Egan Drive

Legal Description(s) (Subdivision, Survey, Block, Tract, Lot): Juneau Subport Lot C1 Tidelands

Parcel Number(s): n/a

☐ This property is located in the downtown historic district
☐ This property is located in a mapped hazard area, if so, which: No

LANDOWNER/ LESSEE

Property Owner: Huna Totem Corporation | Contact Person: Fred Parady

Mailing Address: 9301 Glacier Highway, Suite 200, Juneau 99801 | Phone Number(s): 907.789.8504, 907.723.3903

E-mail Address: fparady@hunatotem.com

LANDOWNER/ LESSEE CONSENT

Required for Planning Permits, not needed on Building/ Engineering Permits.

Consent is required of all landowners/ lessees. If submitted with the application, alternative written approval may be sufficient. Written approval must include the property location, landowner/ lessee's printed name, signature, and the applicant's name.

I am (we are) the owner(s)or lessee(s) of the property subject to this application and I (we) consent as follows:

A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission.
B. I (we) grant permission for the City and Borough of Juneau officials/employees to inspect my property as needed for purposes of this application.

_____ **Landowner/Lessee (Printed Name)** _____ **Title (e.g.: Landowner, Lessee)**

X _____ **Landowner/Lessee (Signature)** _____ **Date**

Russell Dick, Pres. & CEO **Landowner/Lessee (Printed Name)** Landowner **Title (e.g.: Landowner, Lessee)**

X _____ **Landowner/Lessee (Signature)** 7/22/2023 **Date**

NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours. We will make every effort to contact you in advance, but may need to access the property in your absence and in accordance with the consent above. Also, members of the Planning Commission may visit the property before a scheduled public hearing date.

APPLICANT If same as LANDOWNER, write "SAME"

Applicant (Printed Name): Huna Totem Application | Contact Person: Fred Parady

Mailing Address: Same | Phone Number(s): 907.789.8504, 907.723.3903

E-mail Address: Same

X _____ **Applicant's Signature** _____ **Date of Application**

----------DEPARTMENT USE ONLY BELOW THIS LINE----------

	Intake Initials
Case Number	Date Received

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Attachment A- Application

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
COMMUNITY DEVELOPMENT

DEVELOPMENT PERMIT APPLICATION

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications. This form and all documents associated with it are public record once submitted.

To be completed by Applicant

PROPERTY LOCATION

Physical Address: O Egan Drive

Legal Description(s) (Subdivision, Survey, Block, Tract, Lot): Juneau Subport Lot C1 Tidelands

Parcel Number(s): n/a

☐ This property is located in the downtown historic district
☐ This property is located in a mapped hazard area, if so, which: No

LANDOWNER/ LESSEE

Property Owner	Contact Person	Phone Number(s)
Huna Totem Corporation	Fred Parady	907.789.8504 907.723.3903
Mailing Address: 9301 Glacier Highway, Suite 200, Juneau 99801		
E-mail Address: fparady		

LANDOWNER/ LESSEE CONSENT

Required for Planning Permits, not needed on Building/ Engineering Permits.

Consent is required of all landowners/ lessees. If submitted with the application, alternative written approval may be sufficient. Written approval must include the property location, landowner/ lessee's printed name, signature, and the applicant's name.

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B. I (we) grant permission for the City and Borough of Juneau officials/employees to inspect my property as needed for purposes of this application.

Dan Bleidorn — **Landowner/Lessee (Printed Name)**
CBJ Lands Manager — **Title (e.g.: Landowner, Lessee)**

X _____ **Landowner/Lessee (Signature)** _____ **Date**

_____ **Landowner/Lessee (Printed Name)** _____ **Title (e.g.: Landowner, Lessee)**

X _____ **Landowner/Lessee (Signature)** _____ **Date**

NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours. We will make every effort to contact you in advance, but may need to access the property in your absence and in accordance with the consent above. Also, members of the Planning Commission may visit the property before a scheduled public hearing date.

APPLICANT — If same as LANDOWNER, write "SAME"

Applicant (Printed Name)	Contact Person	Phone Number(s)
Huna Totem Application	Fred Parady	907.789.8504 907.723.3903
Mailing Address: Same		
E-mail Address: Same		

X _____ **Applicant's Signature** — 5.26.2023 **Date of Application**

----------DEPARTMENT USE ONLY BELOW THIS LINE----------

Intake Initials	
Case Number	Date Received

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Attachment A- Application

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

DEVELOPMENT PERMIT APPLICATION

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications. This form and all documents associated with it are public record once submitted.

To be completed by Applicant

PROPERTY LOCATION

Physical Address: 0 Egan Drive

Legal Description(s) (Subdivision, Survey, Block, Tract, Lot): Juneau Subport Lot C1

Parcel Number(s): Parcel: 1C060-K01-0031 (C-1)

☐ This property is located in the downtown historic district
☐ This property is located in a mapped hazard area, if so, which: No

LANDOWNER/ LESSEE

Property Owner: Huna Totem Corporation | Contact Person: Fred Parady

Mailing Address: 9301 Glacier Highway, Suite 200, Juneau, AK 99801 | Phone Number(s): 907.789.8504 (office) 907.723.3903 (cell)

E-mail Address: fparady@hunatotem.com

LANDOWNER/ LESSEE CONSENT

Required for Planning Permits, not needed on Building/ Engineering Permits.

Consent is required of all landowners/ lessees. If submitted with the application, alternative written approval may be sufficient. Written approval must include the property location, landowner/ lessee's printed name, signature, and the applicant's name.

I am (we are) the owner(s)or lessee(s) of the property subject to this application and I (we) consent as follows:
A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission.
B. I (we) grant permission for the City and Borough of Juneau officials/employees to inspect my property as needed for purposes of this application.

Russell Dick — Landowner
Landowner/Lessee (Printed Name) — Title (e.g.: Landowner, Lessee)

X _____ 1/24/23
Landowner/Lessee (Signature) — Date

_____
Landowner/Lessee (Printed Name) — Title (e.g.: Landowner, Lessee)

X _____
Landowner/Lessee (Signature) — Date

NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours. We will make every effort to contact you in advance, but may need to access the property in your absence and in accordance with the consent above. Also, members of the Planning Commission may visit the property before a scheduled public hearing date.

APPLICANT — If same as LANDOWNER, write "SAME"

Applicant (Printed Name): Same | Contact Person: Same

Mailing Address: Same | Phone Number(s): Same

E-mail Address: Same

X _____ 01.24.2023
Applicant's Signature — Date of Application

---DEPARTMENT USE ONLY BELOW THIS LINE---

Intake Initials	
	1/25/23
Case Number	Date Received
USE23-003	1-25-23

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Attachment A- Application

Fred Parady

From: Hillgartner, Megan G (DNR) <megan.hillgartner@alaska.gov>
Sent: Friday, April 21, 2023 3:14 PM
To: Fred Parady
Subject: RE: Aak'w Landing Tidelands
Attachments: Aak'w Landing Concept Plans 2022.11.22.pdf; 2023 04 17 HTC CBJ Tidelands DEVELOPMENT PERMIT APPLICATION.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Fred,

Just gave you a call back but appears I've missed you, so figured I'd follow up via email.

As we discussed on the phone last week, it seems premature for DNR to sign the CBJ Development Permit Application (attached) as we have not seen or reviewed any application requesting use of state land for this proposal. The preliminary drawings you sent on April 17th were helpful in determining the location of the proposed tideland lease we discussed over the phone, however, I cannot sign any document granting "complete understanding and permission" for an activity until we've received, reviewed, adjudicated, and approved a complete tideland lease application from the entity requesting the use of state tidelands (whether that be CBJ or Huna Totem Corporation – as it is still unclear who is requesting this use).

The CBJ Development Permit Application does, however, note that alternative written approval may be accepted. I would like to offer this email as a proof that we have received the tentative drawings ("Aak'w Landing Concept Plans 2022.11.22") and have confirmed that this proposal, as indicated on PDF page 6, involves use of state-owned, DMLW-managed submerged lands. Placement of permanent infrastructure and long-term, commercial use of state-managed lands requires written authorization from DNR -DMLW. We look forward to receiving and reviewing your tideland lease application for this requested activity.

I hope this email will sufficiently address your needs to move forward with the City in obtaining your preliminary approvals for this project. Please feel free to give me a call if you have any questions.

Thank you,

Megan G. Hillgartner
Southeast Regional Manager
Department of Natural Resources
Division of Mining, Land and Water
P: (907) 465-3406

From: Fred Parady <FParady@hunatotem.com>
Sent: Monday, April 17, 2023 11:27 AM
To: Hillgartner, Megan G (DNR) <megan.hillgartner@alaska.gov>
Subject: Aak'w Landing Tidelands

These are not ready for submittal are very descriptive. Please note the last slide of the 2022.11.22 pdf where the dotted line shows the boundary between CBJ and state tidelands.

Fred

Fred Parady
Chief Operating Officer
Huna Totem Corporation
907.789.8504 (w)
907.723.3903 (c)

HUNA TOTEM CORPORATION

ICY STRAIT
—POINT—

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
COMMUNITY DEVELOPMENT

ALLOWABLE/CONDITIONAL USE PERMIT APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

To be completed by Applicant

PROJECT SUMMARY

The project proposed development of mixed use, including retail, community park, cultural/science center, and associated parking on an approximately 3-acre waterfront site.

The Aak w Landing uplands project will be a concrete Bus Staging and vehicle Garage topped by a landscaped Park sloping up from Egan Drive. Total square footages are approximate at this initial design stage, but as shown on the Zoning and Parking Study, the target square footages are well below what would be allowed on the site by zoning or parking.

TYPE OF ALLOWABLE OR CONDITIONAL USE PERMIT REQUESTED

◯ Accessory Apartment – Accessory Apartment Application (AAP)

◯ Use Listed in 49.25.300 – Table of Permissible Uses (USE)

Table of Permissible Uses Category: See attachment

IS THIS A MODIFICATION or EXTENSION OF AN EXISTING APPROVAL? ◯ YES – Case # _____ ◉ NO

UTILITIES PROPOSED **WATER:** ☑ Public ☐ On Site **SEWER:** ☑ Public ☐ On Site

SITE AND BUILDING SPECIFICS

Total Area of Lot 125,377 square feet Total Area of Existing Structure(s) 0 square feet

Total Area of Proposed Structure(s) 150,000 (incl. park roof) square feet

EXTERNAL LIGHTING

Existing to remain ◉ No ◯ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

Proposed ◯ No ◉ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

ALL REQUIRED DOCUMENTS ATTACHED

☑ **Narrative including:**

- ☑ Current use of land or building(s)
- ☑ Description of project, project site, circulation, traffic etc.
- ☑ Proposed use of land or building(s)
- ☑ How the proposed use complies with the Comprehensive Plan

☑ **Plans including:**

- ☑ Site plan
- ☑ Floor plan(s)
- ☑ Elevation view of existing and proposed buildings
- ☑ Proposed vegetative cover
- ☑ Existing and proposed parking areas and proposed traffic circulation
- ☑ Existing physical features of the site (e.g.: drainage, habitat, and hazard areas)

If this is a modification or extension include:

- ☐ Notice of Decision and case number
- ☐ Justification for the modification or extension
- ☐ Application submitted at least 30 days before expiration date

----------DEPARTMENT USE ONLY BELOW THIS LINE----------

ALLOWABLE/CONDITIONAL USE FEES	Fees	Check No.	Receipt	Date
Application Fees	$_____			
Admin. of Guarantee	$_____			
Adjustment	$_____			
Pub. Not. Sign Fee	$_____			
Pub. Not. Sign Deposit	$_____			
Total Fee	$_____			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number	Date Received

Allowable/Conditional Use Permit Application Instructions

Allowable Use permits are outlined in CBJ 49.15.320, Conditional Use permits are outline in CBJ 49.15.330

Pre-Application Conference: A pre-application conference is required prior to submitting an application. There is no fee for a pre-application conference. The applicant will meet with City & Borough of Juneau and Agency staff to discuss the proposed development, the permit procedure, and to determine the application fees. To schedule a pre-application conference, please contact the Permit Center at 586-0770 or via e-mail at permits@juneau.org.

Application: An application for an Allowable/Conditional Use Permit will not be accepted by the Community Development Department until it is determined to be complete. The items needed for a complete application are:

1. **Forms:** Completed Allowable/Conditional Use Permit Application and Development Permit Application forms.
2. **Fees:** Fees generally range from $350 to $1,600. Any development, work, or use done without a permit issued will be subject to double fees. All fees are subject to change.
3. **Project Narrative:** A detailed narrative describing the project.
4. **Plans:** All plans are to be drawn to scale and clearly show the items listed below:
    A. Site plan, floor plan and elevation views of existing and proposed structures
    B. Existing and proposed parking areas, including dimensions of the spaces, aisle width and driveway entrances
    C. Proposed traffic circulation within the site including access/egress points and traffic control devices
    D. Existing and proposed lighting (including cut sheets for each type of lighting)
    E. Existing and proposed vegetation with location, area, height and type of plantings
    F. Existing physical features of the site (i.e. drainage, eagle trees, hazard areas, salmon streams, wetlands, etc.)

Document Format: All materials submitted as part of an application shall be submitted in either of the following formats:

1. Electronic copies in the following formats: .doc, .txt, .xls, .bmp, .pdf, .jpg, .gif, .xlm, .rtf (other formats may be preapproved by the Community Development Department).
2. Paper copies 11" X 17" or smaller (larger paper size may be preapproved by the Community Development Department).

Application Review & Hearing Procedure: Once the application is determined to be complete, the Community Development Department will initiate the review and scheduling of the application. This process includes:

Review: As part of the review process the Community Development Department will evaluate the application for consistency with all applicable City & Borough of Juneau codes and adopted plans. Depending on unique characteristics of the permit request the application may be required to be reviewed by other municipal boards and committees. During this review period, the Community Development Department also sends all applications out for a 15-day agency review period. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

Hearing: All Allowable/Conditional Use Permit Applications must be reviewed by the Planning Commission for vote. Once an application has been deemed complete and has been reviewed by all applicable parties the Community Development Department will schedule the requested permit for the next appropriate meeting.

Public Notice Responsibilities: Allowable/Conditional Use requests must be given proper public notice as outlined in CBJ 49.15.230:

The Community Development Department will give notice of the pending Planning Commission meeting and its agenda in the local newspaper a minimum of 10-days prior to the meeting. Furthermore, CDD will mail notices to all property owners within 500-feet of the project site.

The Applicant will post a sign on the site at least 14 days prior to the meeting. The sign shall be visible from a public right-of-way or where determined appropriate by CDD. Signs may be produced by the Community Development Department for a preparation fee of $50, and a $100 deposit that will be refunded in full if the sign is returned within seven days of the scheduled hearing date. If the sign is returned between eight and 14 days of the scheduled hearing $50 may be refunded. The Applicant may make and erect their own sign. Please contact the Community Development Department for more information.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

Attachment A- Application

Huna Totem Corporation

Aak'w Landing Project

O Egan Drive, Juneau, AK 99802

Project Summary

The project proposed development of mixed use, including retail, community park, docking, and associated parking includes a total of 24,800 square feet of retail, and approximately 60,000 square feet of City park area. Tourist season parking includes 124 stalls for buses and cars. In the off-season the parking area will be able to accommodate 117 cars.

External lighting to be developed.

The Aak'w Landing uplands project will be a concrete Bus Staging and vehicle Garage topped by a landscaped Park sloping up from Egan Drive. The project will include 34,000 sf of Retail spaces initially, adding 9,000 sf of additional Retail and 40,000 sf of facilities for a cultural/science center. Total square footages are approximate at this initial design stage, but as shown on the Zoning and Parking Study, the target square footages are well below what would be allowed on the site by zoning or parking.

Planning Commission
(907) 586-0715
PC_Comments@juneau.org
www.juneau.org/community-development/planning-commission
155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION
NOTICE OF DECISION

Date: July 20, 2023
Case No.: USE2023 0003

Huna Totem Corporation
9301 Glacier Hwy, Ste. 200
Juneau, AK 99801

Proposal:	Conditional Use Permit for mixed use development: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Includes floating steel dock up to 70 feet wide and 500 feet long.
Property Address:	0 Egan Drive
Legal Description:	Juneau Subport Lot C1
Parcel Code No.:	1C060K010031
Hearing Date:	July 11, 2023

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated June 29, 2023 as they pertain to the floating dock. The Commission approved a Conditional Use Permit for a floating steel dock up to 70 feet wide and 500 feet long. The project is to be conducted as described in the project description and project drawings submitted with the application, and with the following conditions:

1. A Temporary Certificate of Occupancy will not be issued for the dock until the tidelands lease is recorded.
2. The minimum width of the Applicant – constructed seawalk on the south side of the lot will be 16 feet wide. The minimum width of the Applicant-constructed seawalk on the west side of the lot will be 20 feet.
3. Before Temporary Certificate of Occupancy for any phase or element of the project, the Applicant will record an easement for CBJ maintenance and management of the seawalk. The easement will be at least 16 feet wide on the south side of the lit, and 20 feet wide on the west side of the

lot. The easement will be comparable to such easements in place for other dock owners.

4. The Applicant will maintain and operate paths, parks, landscaping, and other amenities (other than the seawalk) for year-round use.
5. The dock owner will, at their own expense, provide shore power within 24 months after an appropriately-sized power line is within 25 feet of the property line. When shore power is provided, large ships using the dock will be required to use shore power instead of ship power.
6. Prior to issuance of a building permit, the Applicant must provide a navigability study that includes explicit consideration of access impacts to:
   - Alaska Steam Dock.
   - Cruise Ship Terminal.
   - USCG/NOAA docks.
   - Large traffic, such as material or fuel barges, transiting Gastineau Channel under the bridge.
   - The AJT Mining Properties, Inc. dock.
   - Aircraft using the area for landing and taxiing to the float plane docks.
7. The dock is limited to one (1) large cruise ship (750 feet or more in length OR 950 or more passengers) each 24 hour period beginning at midnight.
8. The dock will not accommodate hot berthing.
9. The dock will not accommodate lightering from a cruise ship at anchor if that ship is over 750 feet in length or accommodates more than 950 passengers at full capacity.

The Commission (Commission) did not adopt the analysis and findings that relate to the uplands portion of the application. The Commission found that the uplands portion of the application did not contain sufficiently specific information, particularly about the portion designated Phase 3, to support a conclusion that the project as a whole would comport with Title 49, including the MU2 land use designation.

Attachments: June 29, 2023 memorandum from Irene Gallion, Community Development, to the CBJ Planning Commission regarding USE2023 0003.

This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030(c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

Effective Date: The permit is effective upon approval by the Commission, July 11, 2023.

Expiration Date: The permit will expire 18 months after the effective date, or January 11, 2025, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.

Michael LeVine, Chair
Planning Commission

July 19, 2023
Date

Ilsa Lund
Filed With City Clerk

July 20, 2032
Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.

Jensen
Yorba
Wall
Inc.

522 West 10th Street, Juneau, Alaska 99801 907.586.1070 jensenyorbawall.com

Designing Community Since 1935

Date: July 22, 2023
Re: Aak'w Landing (JYW No. 21022)
Architectural Narrative for CBJ Conditional Use Application

The project proposed development of mixed use, including retail, community park, cultural/science center, and associated parking includes a total of 24,800 square feet of retail, and approximately 60,000 square feet of City park area.

The Aak'w Landing uplands project will be a concrete Bus Staging and vehicle Garage topped by a landscaped Park sloping up from Egan Drive. The project will include 34,000 sf of Retail spaces initially, adding 9,000 sf of additional Retail and 40,000 sf of facilities for a cultural/science center. Total square footages are approximate at this initial design stage, but as shown on the Zoning and Parking Study, the target square footages are well below what would be allowed on the site by zoning or parking.

Exceptional Cruise Ship Visitor Pedestrian Traffic Flow. The Aak'w Landing concept provides the surges of pedestrian traffic flow off the cruise ships with a unique and greatly enhanced experience—an experience we believe will set our facility apart from any other cruise ship port. The dock, architecture and landscape will all be designed to guide visitors efficiently through the site while providing an abundance of opportunities for views, shopping, and cultural activities.

- The passenger Gangway from the ship will gently ascend so visitors will enter the site at the Upper Plaza elevation, 20' above grade and the Seawalk below. By bringing the visitors onto the site at this elevation, we will be able to curate and direct their initial experience on the Plaza. The length of the Gangway will allow this elevation gain to occur gradually, without becoming a full ADA ramp requiring landings and constricting guardrails.
- The Gangway will curve around the bow of the ship with view areas providing unique perspectives and photo opportunities during embarking and disembarking.
- The Gangway will arc over the dining and activities on the Seawalk below, enticing visitors to further explore the entire Aak'w Landing area.
- The Gangway and Welcome Center building will direct the flow of passengers around the southeast corner of the Plaza. The flow will be efficient and clear, but will not directly lead to an exit, providing a large amount of retail frontage and opportunities.
- Large Canopies around the Welcome Center and Retail buildings will provide pooling locations for the visitors where orientation and sorting will occur. Once on the north side of the Welcome Center, passengers will be directed towards one of two large stair/escalators to the Bus Staging below, or down further into the Park to cultural events and walking tours, or down the large West Stair to independent exploration of the Seawalk.

- Passengers descending West Stair will be routed to the wide curving Seawalk across the south-facing side of the building. This walk will provide 300' of south-facing waterfront Restaurant and Retail frontage.

Efficient, Ample, Safe, and Hidden Vehicular Traffic. We recognize that maximizing vehicular access and parking will be key to successfully moving visitors to and through Aak'w Landing. Our concept proposes a parking and bus staging plan focusing on efficiency and safety.

- Bus and vehicle parking is maximized while still remaining hidden. By raising the Plaza to 20' above grade, two levels of passenger vehicles totaling about 93 stalls are available in the Garage. Two separate pedestrian islands surrounded by angled loading stalls will allow for up to 24 coaches and busses in the Bus Staging area. Preliminary design includes: (13) 45' coaches, (7) 35' busses, (3) 25' busses, and a large Circulator trolley/bus.
- Bus Staging access lanes and the lower level of the parking Garage are level with Whittier Ave. This will provide easy and friendly vehicular access to the building and eliminate steep ramp transitions. The level access lanes will also allow vehicle passage through the building to the CBJ Tideland Lots to the west if this is desired in the future.
- The entire Bus Staging area descends downward from the level access lane towards the rear of the building. This will allow the Park above to slope down towards Egan Drive while still providing easy-to-navigate and accessible walking and driving paths in the Bus Staging area.
- Visitor pedestrian traffic flows never cross the vehicle traffic lanes. Visitors descend stairs/escalators directly to protected islands in Bus Staging, or out to the Seawalk away from the vehicle area altogether.
- Bus and passenger vehicle traffic are entirely separated. Individual entrances to Bus Staging and the vehicle parking Garage are located off Whittier Ave.
- The vehicle areas are entirely hidden from view from most pedestrians. Grade-level Retail spaces front the building along Whittier Ave. and the Seawalk, while the sloping Park and flat Plaza roof the entire vehicle areas below.

A Vibrant, Engaging, Landmark Park and Plaza. The preliminary design includes 1.14 acres (49,513sf) of landscaped park and public performance area, as well as .68 acres (29,694sf) of public plaza at the upper (Park) elevation, and .48 acres (22,559sf) of public area at the lower (Seawalk) elevation.

- The Park gently climbs from the north edge along Egan Drive with a series of flat hardscaped outdoor spaces throughout for year-round activities. Wide walkways with vehicle-control bollards will allow food trucks and equipment access to activate the park with pop-up activities and events.
- After the Park rises to the Upper Plaza elevation, it levels out to become a wide Plaza where the Welcome Center will be located. Visitors at this level can get unimpeded views out over Gastineau Channel to the south and west as well as access to and from the Gangway to the ship.

Art Integration Throughout the Project. Because of our team's cultural focus, we view art as an opportunity to tell the story of Aak'w Landing both subtly and overtly throughout the project.

- From the moment they step off the ship, visitors will be shown they are in a special and unique place. Art will be integrated with the dock structure itself with large dock supports and pilings

wrapped in graphics and art to recall traditional house posts and totems. Other smaller items such as railings and guards will incorporate art and sculpture.

- Shop and Cultural buildings on the Plaza will be designed in conjunction with local artists to incorporate Alaskan Native forms and materials. Art will be integrated into the architecture and structure as well as displayed on the buildings.
- Local Indigenous Native art will inform the macro layout of the landscaped Park as well as the specific planting and landscaping. An initial idea being worked out by the artists and designers on our team is to have the plan of the walkways, landscaping and hardscaping form an image of Raven Stealing the Sun.

Cruise Ship Dock (already approved in USE23-0030)

- 500' x 70' steel floating dock of similar construction to that utilized at Icy Strait Point Berth II and Ward Cove Cruise Facility with an 8-foot-high constant freeboard.
- Able to accommodate a single 240,000 Gross Tons, 360-meter-long design vessel during cruise season weather conditions.
- The dock will be fitted with foam filled floating fenders suitably designed for the cruise fleet.
- The floating berth shall be accessed with a 140-foot-long gangway rated for port of call standard equipment.
- Mooring locations to be equipped with electric capstans for line handling and will be accessible by catwalks.
- The dock includes basic facility lighting, electrical service, and wash down water from the abutment seaward.
- The proposed design includes the cable trays and structure for integrating future shore power connections once the municipal feed is available.

Jensen Yorba Wall Inc.
522 West 10th Street, Juneau, Alaska 99801 907.586.1070 jensenyorbawall.com

Designing Community Since 1935

Date: June 19, 2023
Re: Aak'w Landing (JYW No. 21021)
Zoning and Planning Study

Total Project Area
475,377 sf.

Discussion: Area of Uplands and Dock are combined for the Conditional Use Permit and to show the total size of the project. The two portions of the project are considered individually below.

Uplands Portion of Project
Parcel: 1C060-K01-0031 (C-1)
Area: 125,377 sf (2.88 Acres)

Property Zoning: MU2
Maximum Lot Coverage: 80% (100,302 sf)
Minimum Vegetative Cover: 5% (6,269 sf)
Maximum Height (Permissible Uses): 45'
Minimum Setbacks: 5' (0' where property line is adjacent to tidelands)
Allowable Uses:

- Phase 1:
  - Visitor, Cultural Facilities Related to the Site: 3
  - Storage and Display of Goods with greater than 5,000 sf: 1,3
  - Restaurants & Bars without Drive-Through Service: 3
  - Seasonal Open Air Food Service: 1,3
  - Open Space: 1
  - Automobile Parking Garage: 1,3
- Future Phases:
  - Offices Greater than 2,500 sf: 1,3
  - Libraries, Museums, Art Galleries: 1,3
  - Theaters from 201 – 1,000: 1

(1. Department approval requires the department of community development approval only.
1, 3. Department approval required if minor dev., conditional use permit required if major development.
3. Conditional use permit requires planning commission approval.)

Discussion: The project will comply with all zoning requirements, including the height restriction. The footprint of the building is larger than the Maximum Lot Coverage area by approximately 2,800 sf, but since almost 50,000 sf of the building is to be covered in a landscaped and publicly-accessible Park, it is believed this will comply with requirements.

Attachment A- Application

Dock Portion of Project
Parcel: 1C100-K83-0032 (CBJ Tidelands) and unlabeled adjacent Alaska State Tidelands
Project Area: 350,000 sf (125,000 sf on CBJ Tidelands, 225,000 sf on State Tidelands).

> *Discussion: Project Area is only a portion of the much larger CBJ- and State-owned parcels. Project Area includes area physically occupied by the Dock structures, the "shadow" of the 360-meter long cruise ship floating above, and approximately 20% additional space around the dock and ship to ensure compliance.*

Property Zoning: MU2 (taken from adjacent C-1 Lot Zoning)
Maximum Lot Coverage: 80% (280,000 sf)
Minimum Vegetative Cover: 5% (17,500 sf)
Maximum Height (Permissible Uses): 45'
Minimum Setbacks: 5' (0' where property line is adjacent to tidelands)

> *Discussion: Dimensional standards and requirements listed are for MU2 zoning. Not clear how all standards—particularly vegetative cover—apply to tideland lots which are entirely over water. However, the project will comply with a strict reading of all requirements:*
> - *The constructed Dock takes up an area much smaller than the allowable Maximum Lot Coverage (143,960 sf vs the allowable 280,000 sf)*
> - *The Park on the Uplands is large enough to fulfill Minimum Vegetative Cover requirements (50,000 sf vs. the required 23,769 sf for the Uplands and Dock together)*
> - *The Dock height will be lower than the 45' Maximum Height as determined from the datum on the Uplands.*

Allowable Uses:
- Private Moorage: 1,3 (49.25.300, 10.520)

(1, 3. Department approval required if minor dev., conditional use permit required if major development.)

Proposed Development: Floating Dock with access ramps to the adjacent C-1 parcel. No occupiable buildings are proposed in this portion of the development.

Parking: As noted above, all parking is being provided on the Uplands portion of the project.

> *Discussion: Parking requirements for the project have been determined by the Uplands development areas without modifiers—i.e., the parking calculations assume that all visitors to the Uplands facilities—even the Welcome Center—arrive via personal vehicle and not on the cruise ship. As noted above, the project provides 172 parking stalls for a total build-out requirement of 70-110 stalls.*
>
> *Parking requirements for the vehicles serving the cruise ship and dock itself are not defined by code. The project includes more parking areas for buses, vans, and coaches than are currently provided at the other cruise ship docks. (For example, the AJ Dock facility provides 21 dedicated coach and bus stalls, the proposed Aak'w Landing project proposes 24 dedicated coaches and bus stalls).*

- A large stair and elevator are located at the open SW corner of the Upper Plaza to take pedestrians down towards the dining Deck and Seawalk-level retail below. This corner of the site is open to the Tidelands and is one of the only portions of the site which will always have open waterfront views.
- The large (75- 95' deep) dining Deck is located on the "flagpole" portion of the site and will also always be open to the waterfront to the south.
- Adjacent to the dining Deck, a 16' wide Seawalk will take pedestrians along retail spaces as they walk east towards Whittier. The corner retail space at the SE corner of the site will have stairs and elevators which can take visitors back up to the Upper Plaza Level.
- Pedestrians on Whittier can proceed either to the wide sidewalks and signalized intersection / pedestrian crossing at Whittier/Egan, or they can proceed down Heat Street towards downtown. CBJ improvements to Heat Street to create an attractive extension of the Seawalk from downtown would enhance the visitor's walking experience but are not seen as a critical or immediate need.
- A portion of 16'+ Seawalk is planned at the SW corner of the project along the adjacent Tidelands property. The Seawalk is shown as a possible future project along the west side of the project on CBJ Lot 1A, but this project will depend on CBJ plans for this property. A Seawalk here would link the Seawalk near the SW dining Deck back to Egan, but is not required since pedestrians can route up to the Upper Plaza and along the west side of the Park down to Egan.

Emergency Access

- Emergency vehicles can access the site from Egan and Whittier and will have complete access to the parking levels.
- A controlled vehicle access lane through the parking level, onto the SW Seawalk and to an at-grade vehicle bridge to the cruise ship dock will allow for emergency vehicle access to the entire dock. This route is not anticipated to be used for non-emergency vehicles.
- It is hoped to develop the Park access ramps and walkways such that food trucks and service vehicles could be brought to the Upper Plaza level without needing a driveway off Egan. Such access ramps would allow for emergency vehicle access to the Upper Plaza, although such access is not required by code.

Snow Storage and Drainage: All vehicle traffic on the site is inside the covered parking garage, with covered canopies over the access drive lanes from Whittier. Canopies over the south-facing Seawalk protect walking traffic and the majority of the retail spaces are accessible directly from the interior parking garage. Snow removal at the non-canopy covered Seawalks and at the Park / Upper Plaza is anticipated to be intermittent with no off-site snow storage required. Snow will not be pushed off the site into the water.

Drainage off the site will be internally collected and routed to the channel. Catch basins in vehicle traffic areas will have oil-water separators as required.

FEMA and Floodplain Requirements: All retail and permanently-occupied spaces at the lower Seawalk Level have floors above the flood plain level. The rear portion of the parking garage slopes below the floodplain and this portion of the garage will be engineered to withstand flooding and tidally-caused uplift pressures.

Lighting: Exterior lighting—both on the buildings and in the exterior spaces--will comply with code requirements.

SEALASKA HERITAGE

July 27, 2023

Mr. Russell A. Dick
President & CEO
Huna Totem Corporation
9301 Glacier Highway, Suite 200
Juneau, Alaska 99801

Dear Mr. Dick:

We are writing today to confirm our support for Huna Totem Corporation's Áak'w Landing project generally, and specifically the Indigenous Knowledge, Science and Cultural Center that has been incorporated into the design. This builds on the exciting national movement to integrate Indigenous knowledge and science and expands the goal of making Juneau the Northwest Coast Arts Capital.

To begin with the obvious, the project brings $150M of private investment into downtown Juneau, reimagining a 3-acre gravel lot into a wonderful new destination for the sustainable tourism industry. This vital fifth dock shifts the narrative regarding congestion downtown into a modern, well-designed approach that will greatly enhance our community.

Specifically, the overall project design boosts the Seawalk that has been an essential element of downtown planning for decades, puts a defining addition to the cultural foundation of downtown Juneau, makes substantial improvements in traffic flow, works within the five-ship limit that has been established, and promotes local and Native economic development.

As we have discussed these past months, the cultural/science center advances our long-held views of the importance of both culture and science to education as well as to our visitor's experience of Southeast Alaska. It aligns perfectly within our work in the area with the Sealaska Heritage Institute and the broader redevelopment of the Willoughby District.

Let me close by noting that the project is visionary for our residents, our students, our guests, our economy, and our community. After decades of the property essentially standing vacant, we strongly support the conditional use permit and development HTC and its partners are bringing forward. We are proud to be part of that team!

Respectfully,

Rosita Kaaháni Worl, Ph.D.
President

August 1, 2023

Mr. Russell A. Dick
President & CEO
Huna Totem Corporation
9301 Glacier Highway, Suite 200
Juneau, Alaska 99801

Dear Russell:

Goldbelt values its relationship with the City and Borough of Juneau (CBJ) as we work together on the Eaglecrest Gondola project. Similarly, we support and value Huna Totem Corporation's (HTC) Aak'w Landing project. Goldbelt is keenly aware of the range of issues facing Juneau with the infrastructure and facilities necessary to support sustainable tourism. We applaud the efforts of the Assembly and City Manager to address these issues thoughtfully.

The Aak'w Landing project as proposed supports key recommendations of the Visitor Industry Task Force:

- It builds upon the cultural foundation of downtown Juneau (a Goldbelt priority).
- The project significantly adds to the Seawalk and makes meaningful safety improvements to Franklin Street traffic flow.
- It works within the five-ship limit that CBJ negotiated.
- The project will strengthen the local economy over the long term.

Huna Totem has developed a core leadership team for tourism development, as evidenced by the international award-winning destination at Icy Strait Point, the project under construction at Whittier, and the developments at Klawock and here at Aak'w Landing. The Aak'w Landing project is the culmination of years of effort and outreach to develop a cornerstone asset for all of Juneau. It is time to bring that vision to fruition.

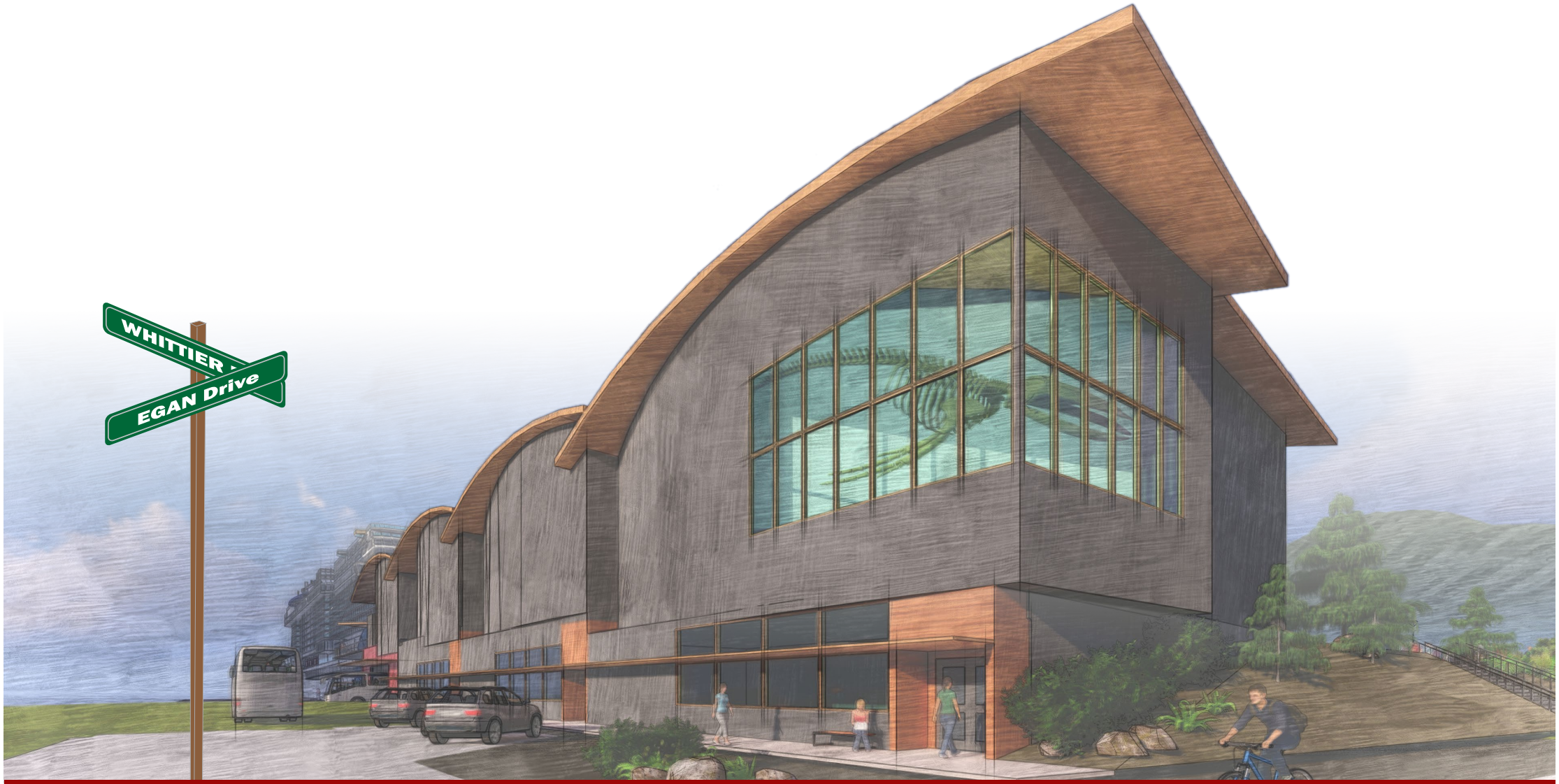
Please note our strong commitment to this process, and intention to partner with HTC to make this project become a going concern. We are excited to work together with CBJ and HTC to maximize the impact this project makes on the community, and the future of tourism in Southeast Alaska. Goldbelt fully supports approval of this project.

Sincerely,

McHugh Pierre
President and CEO

3025 Clinton Drive • Juneau, Alaska 99801 • (800) 770-5866 • (907) 790-4990 • Fax (907) 790-4999
www.goldbelt.com

Áak’w Landing Culture & Science Center



Attachment B- Partnership acknowledgements

Planning Commission
(907) 586-0715
PC_Comments@juneau.org
www.juneau.org/community-development/planning-commission
155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION
NOTICE OF DECISION

Date: July 20, 2023
Case No.: USE2023 0003

Huna Totem Corporation
9301 Glacier Hwy, Ste. 200
Juneau, AK 99801

Proposal:	Conditional Use Permit for mixed use development: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Includes floating steel dock up to 70 feet wide and 500 feet long.
Property Address:	0 Egan Drive
Legal Description:	Juneau Subport Lot C1
Parcel Code No.:	1C060K010031
Hearing Date:	July 11, 2023

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lot. The easement will be comparable to such easements in place for other dock owners.

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   - The AJT Mining Properties, Inc. dock.
   - Aircraft using the area for landing and taxiing to the float plane docks.
7. The dock is limited to one (1) large cruise ship (750 feet or more in length OR 950 or more passengers) each 24 hour period beginning at midnight.
8. The dock will not accommodate hot berthing.
9. The dock will not accommodate lightering from a cruise ship at anchor if that ship is over 750 feet in length or accommodates more than 950 passengers at full capacity.

The Commission (Commission) did not adopt the analysis and findings that relate to the uplands portion of the application. The Commission found that the uplands portion of the application did not contain sufficiently specific information, particularly about the portion designated Phase 3, to support a conclusion that the project as a whole would comport with Title 49, including the MU2 land use designation.

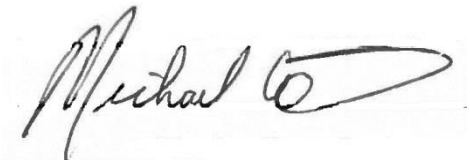
Attachments: June 29, 2023 memorandum from Irene Gallion, Community Development, to the CBJ Planning Commission regarding USE2023 0003.

This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030(c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

Effective Date: The permit is effective upon approval by the Commission, July 11, 2023.

Expiration Date: The permit will expire 18 months after the effective date, or January 11, 2025, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.



July 19, 2023

Michael LeVine, Chair
Planning Commission

Date

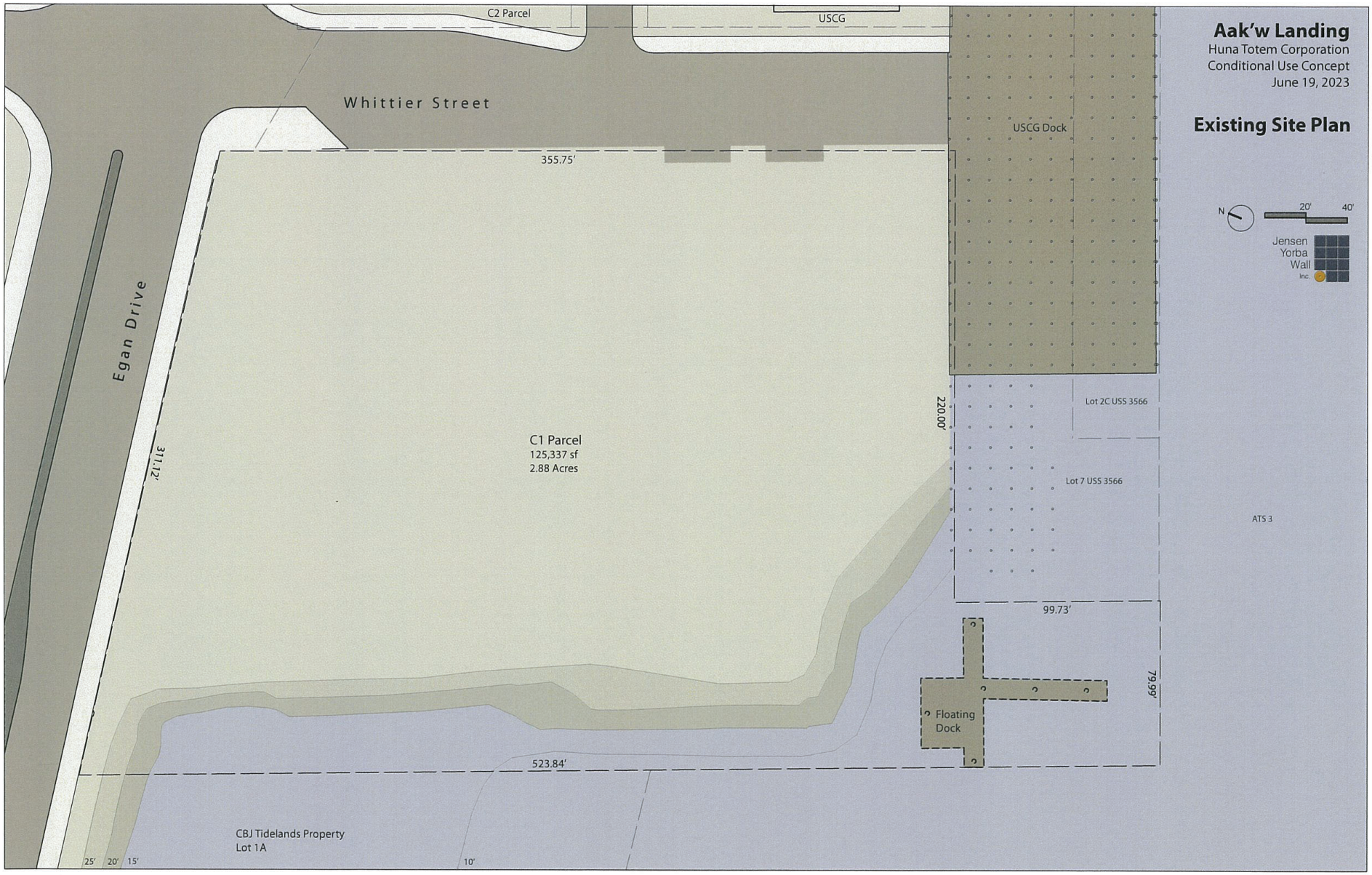
July 20, 2032

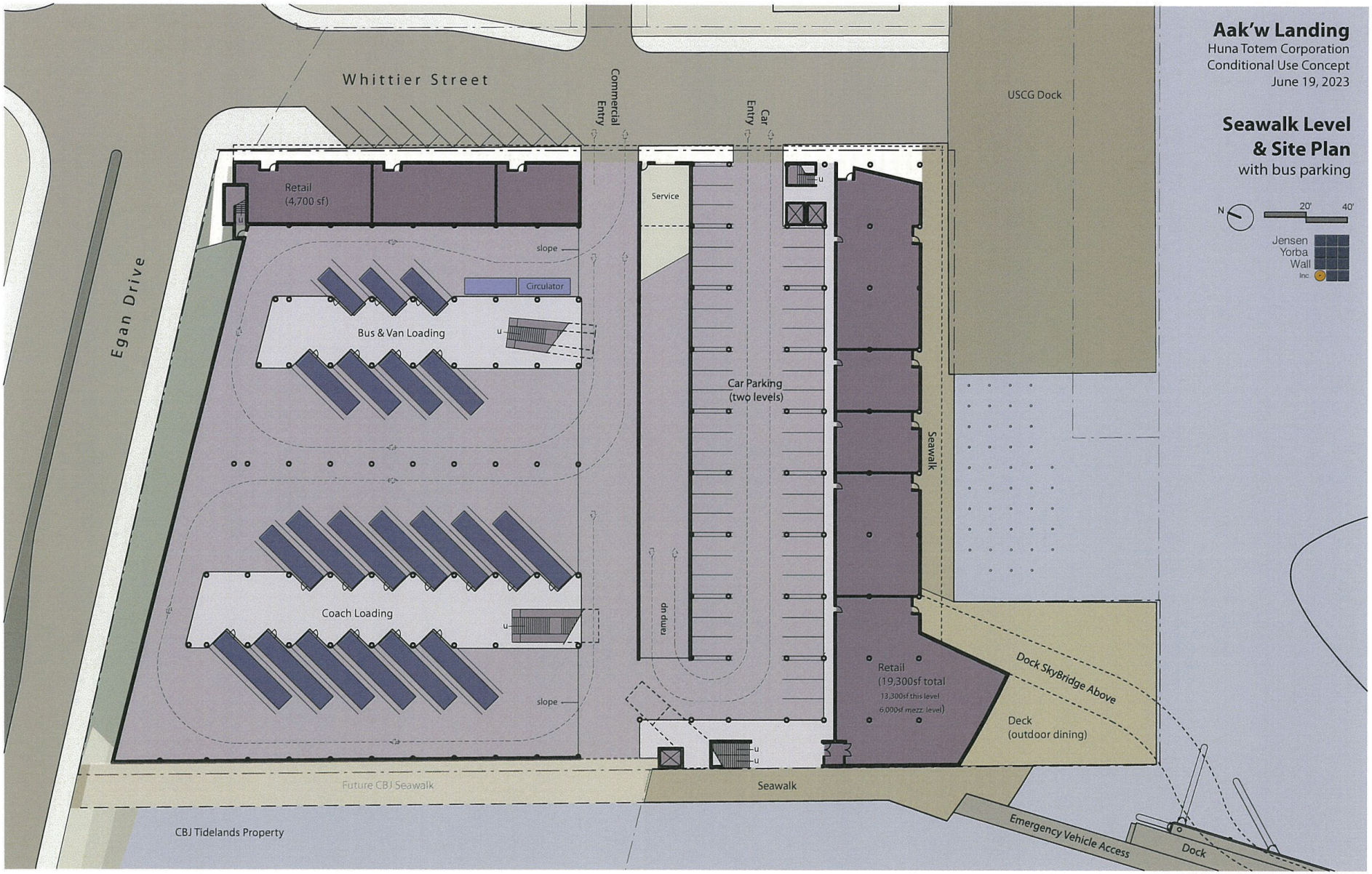
Filed With City Clerk

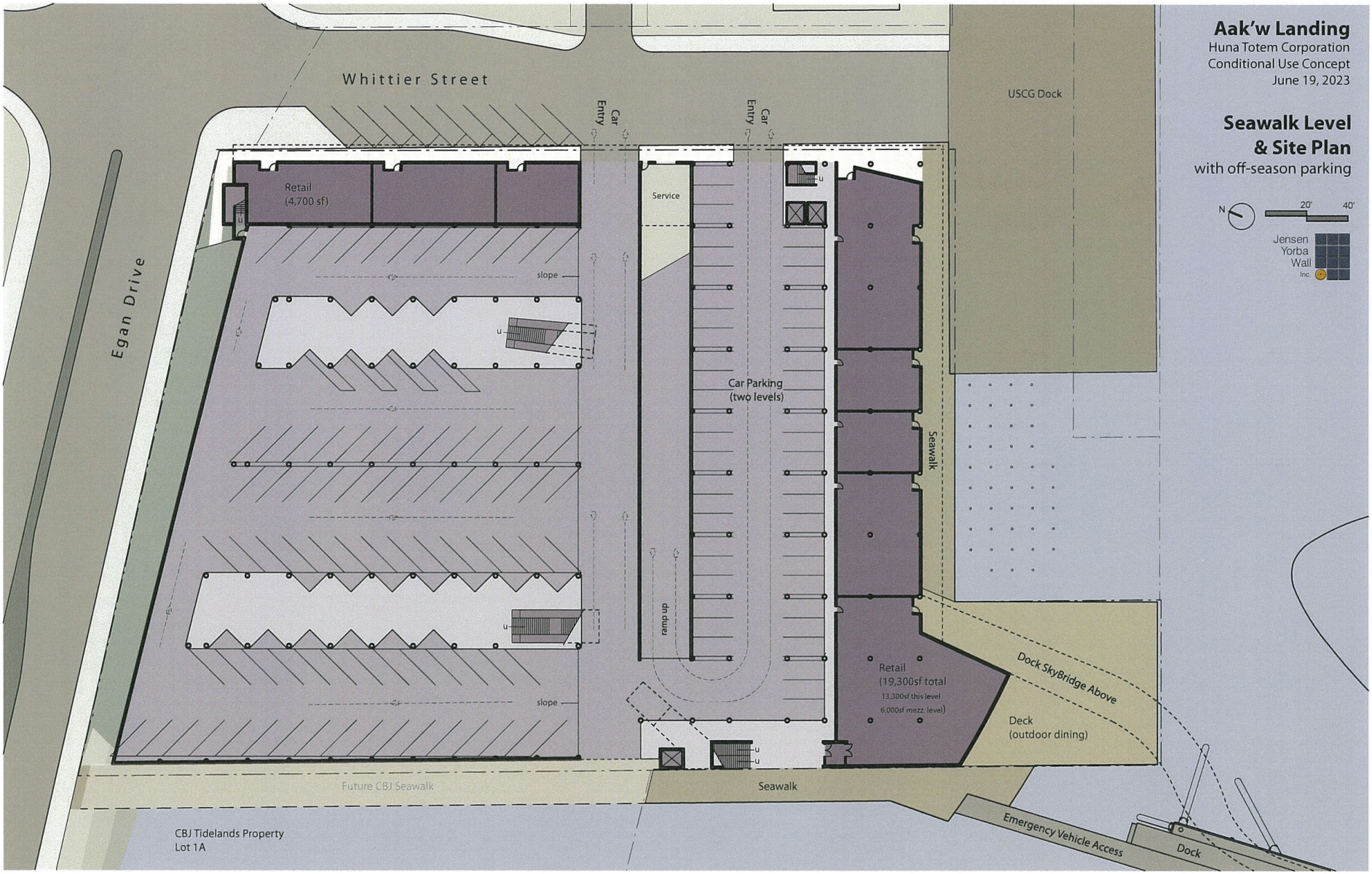
Date

cc: Plan Review

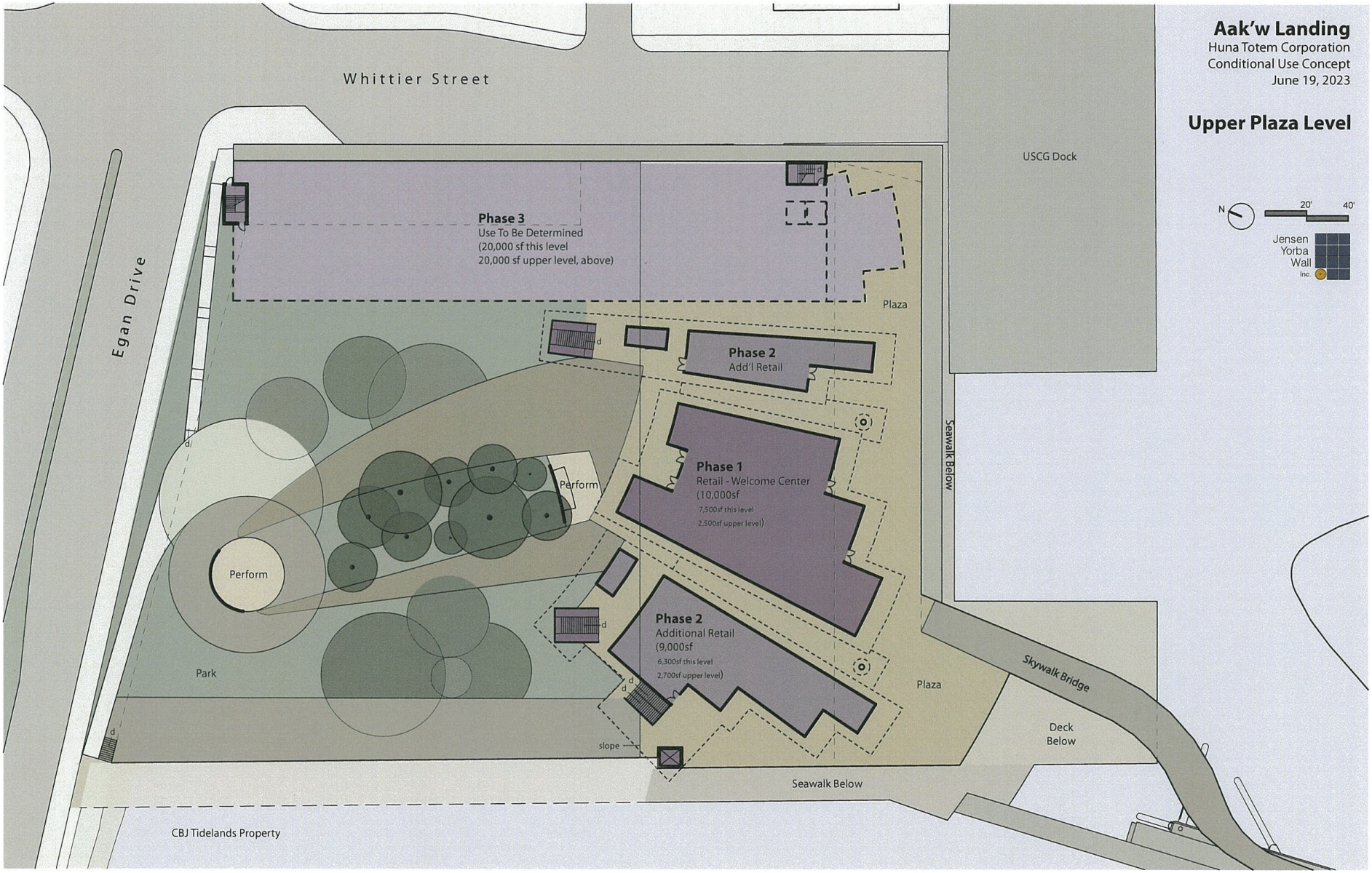
NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.


Aak'w Landing
Huna Totem Corporation
Conditional Use Concept
June 19, 2023
Existing Site Plan
C2 Parcel
USCG
Whittier Street
USCG Dock
355.75'
Egan Drive
311.12'
C1 Parcel
125,337 sf
2.88 Acres
220.00'
Lot 2C USS 3566
Lot 7 USS 3566
ATS 3
99.73'
79.99'
Floating Dock
523.84'
CBJ Tidelands Property
Lot 1A
25'
20'
15'
10'
N
20'
40'
Jensen Yorba Wall Inc.


Aak'w Landing
Huna Totem Corporation
Conditional Use Concept
June 19, 2023
Seawalk Level
& Site Plan
with bus parking
N
20'
40'
Jensen
Yorba
Wall
Inc.
Whittier Street
Commercial Entry
Car Entry
USCG Dock
Egan Drive
Retail
(4,700 sf)
slope
Circulator
Bus & Van Loading
Service
Car Parking
(two levels)
Seawalk
Coach Loading
ramp up
Retail
(19,300sf total
13,300sf this level
6,000sf mezz. level)
Dock SkyBridge Above
Deck
(outdoor dining)
slope
Future CBJ Seawalk
Seawalk
CBJ Tidelands Property
Emergency Vehicle Access
Dock



Attachment D- Plans

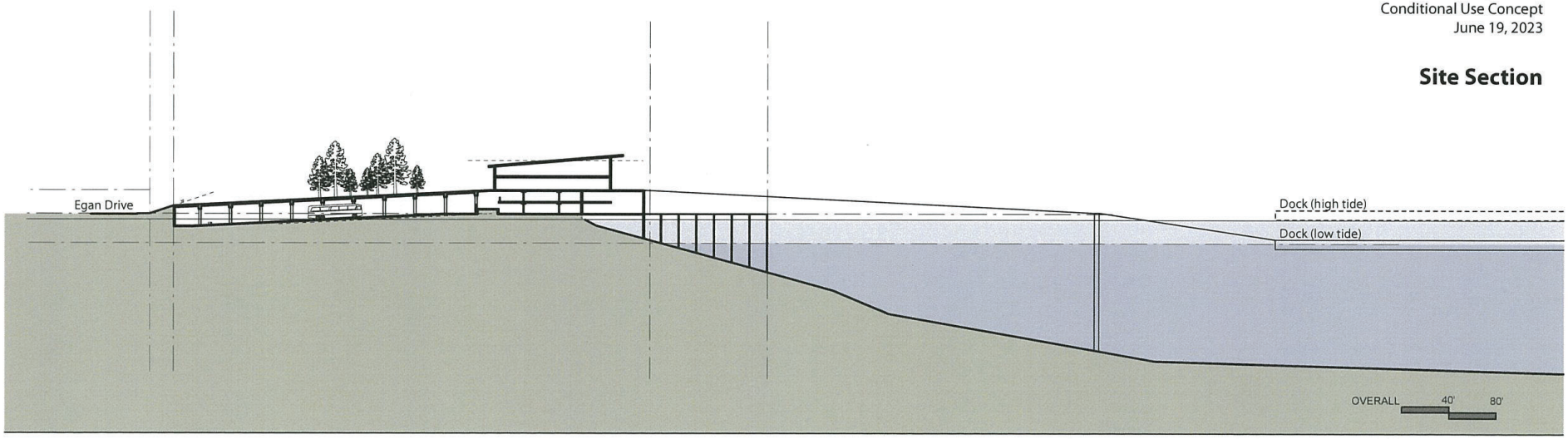


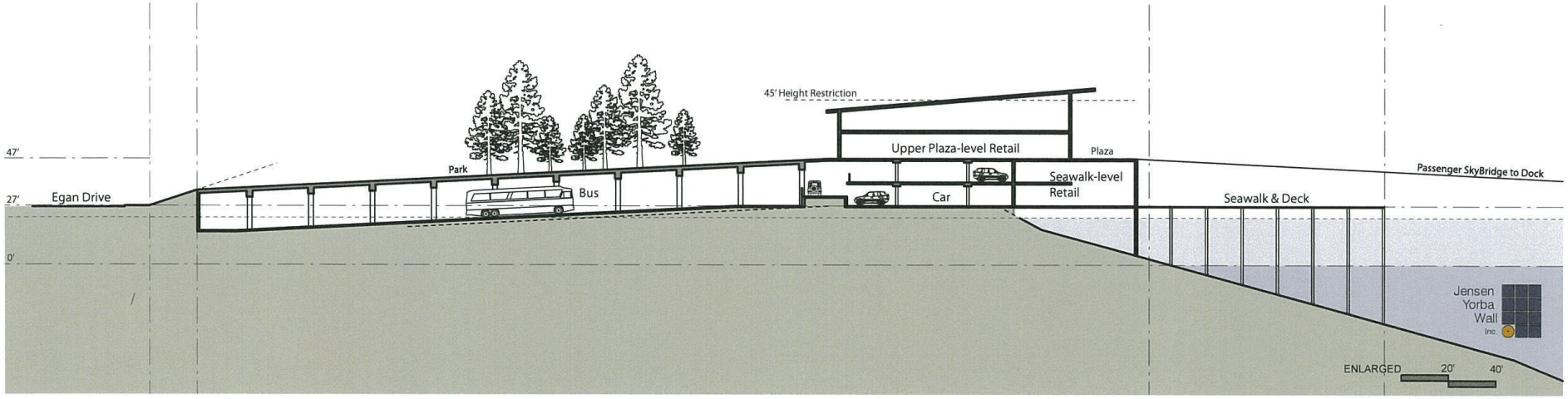
Attachment A3 - Application Packet - Site plans and elevations

Attachment D- Plans

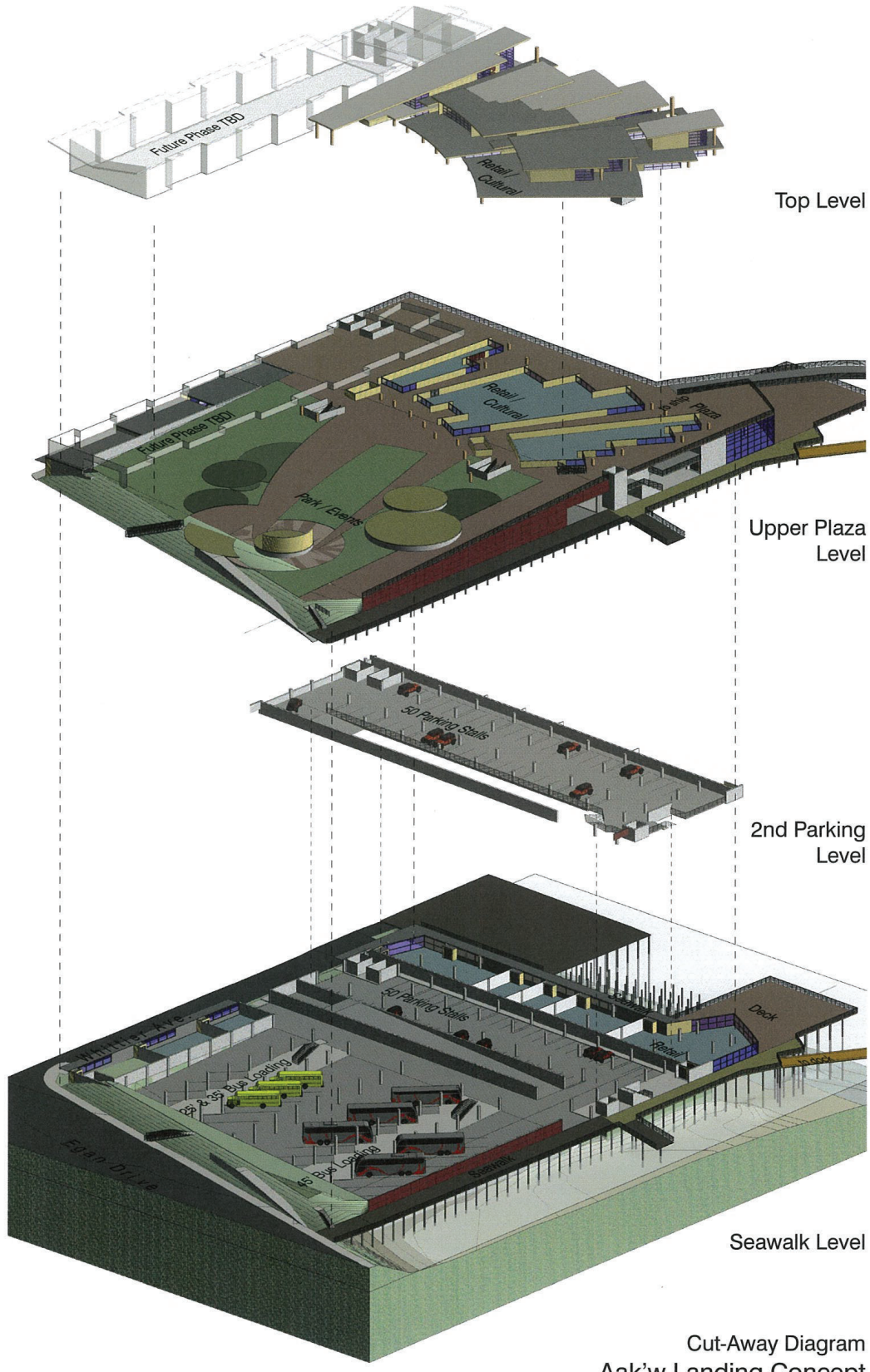
Aak'w Landing
Huna Totem Corporation
Conditional Use Concept
June 19, 2023

Site Section

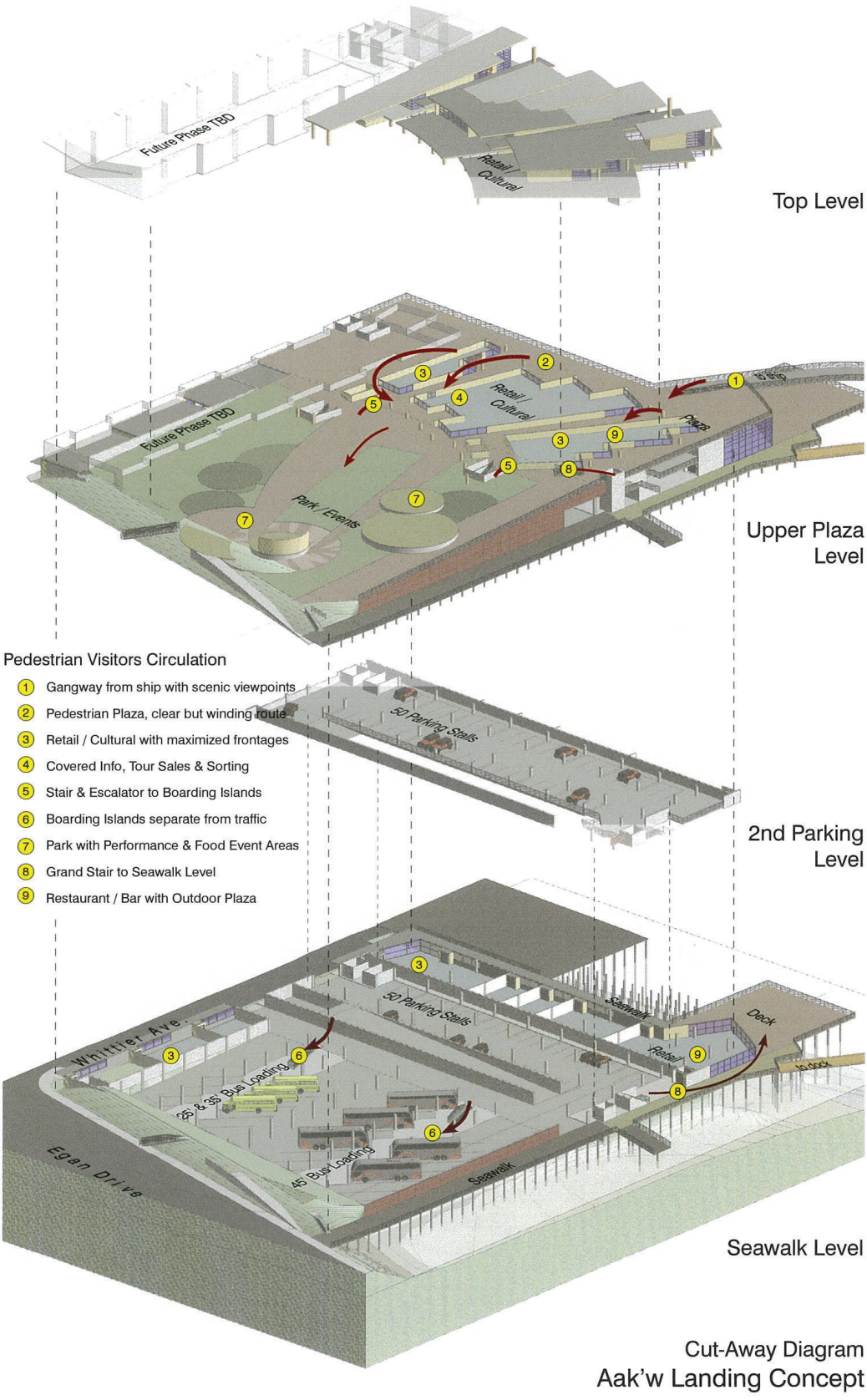


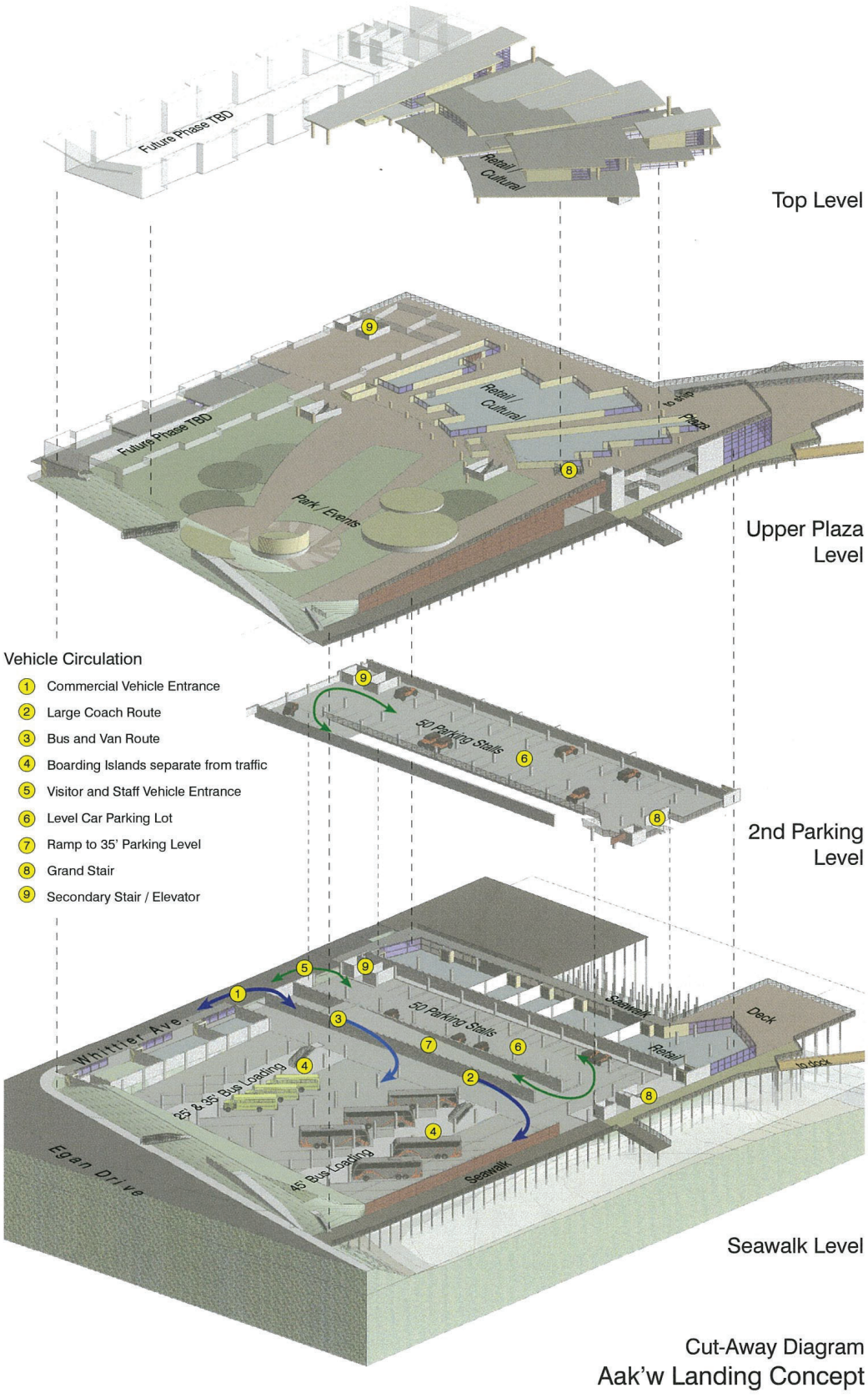


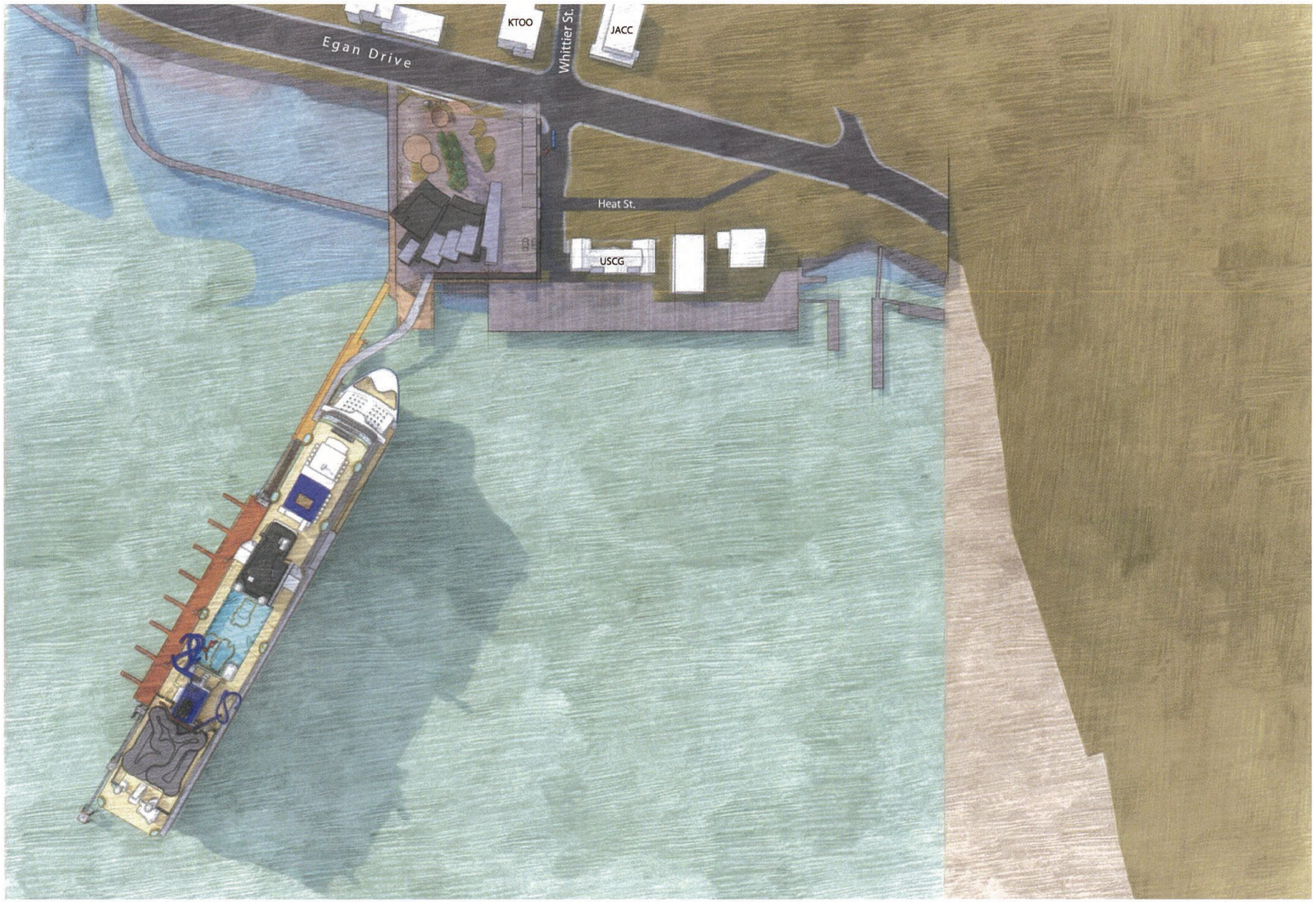
Attachment D- Plans



Cut-Away Diagram
Aak'w Landing Concept


Future Phase TBD
Retail / Cultural
Top Level
Future Phase TBD
Retail / Cultural
Plaza
Park / Events
Upper Plaza Level
Pedestrian Visitors Circulation
1 Gangway from ship with scenic viewpoints
2 Pedestrian Plaza, clear but winding route
3 Retail / Cultural with maximized frontages
4 Covered Info, Tour Sales & Sorting
5 Stair & Escalator to Boarding Islands
6 Boarding Islands separate from traffic
7 Park with Performance & Food Event Areas
8 Grand Stair to Seawalk Level
9 Restaurant / Bar with Outdoor Plaza
50 Parking Stalls
2nd Parking Level
Whittier Ave.
50 Parking Stalls
Seawalk
Deck
Retail
25' & 35' Bus Loading
45' Bus Loading
Egan Drive
Seawalk
Seawalk Level
Cut-Away Diagram
Aak'w Landing Concept

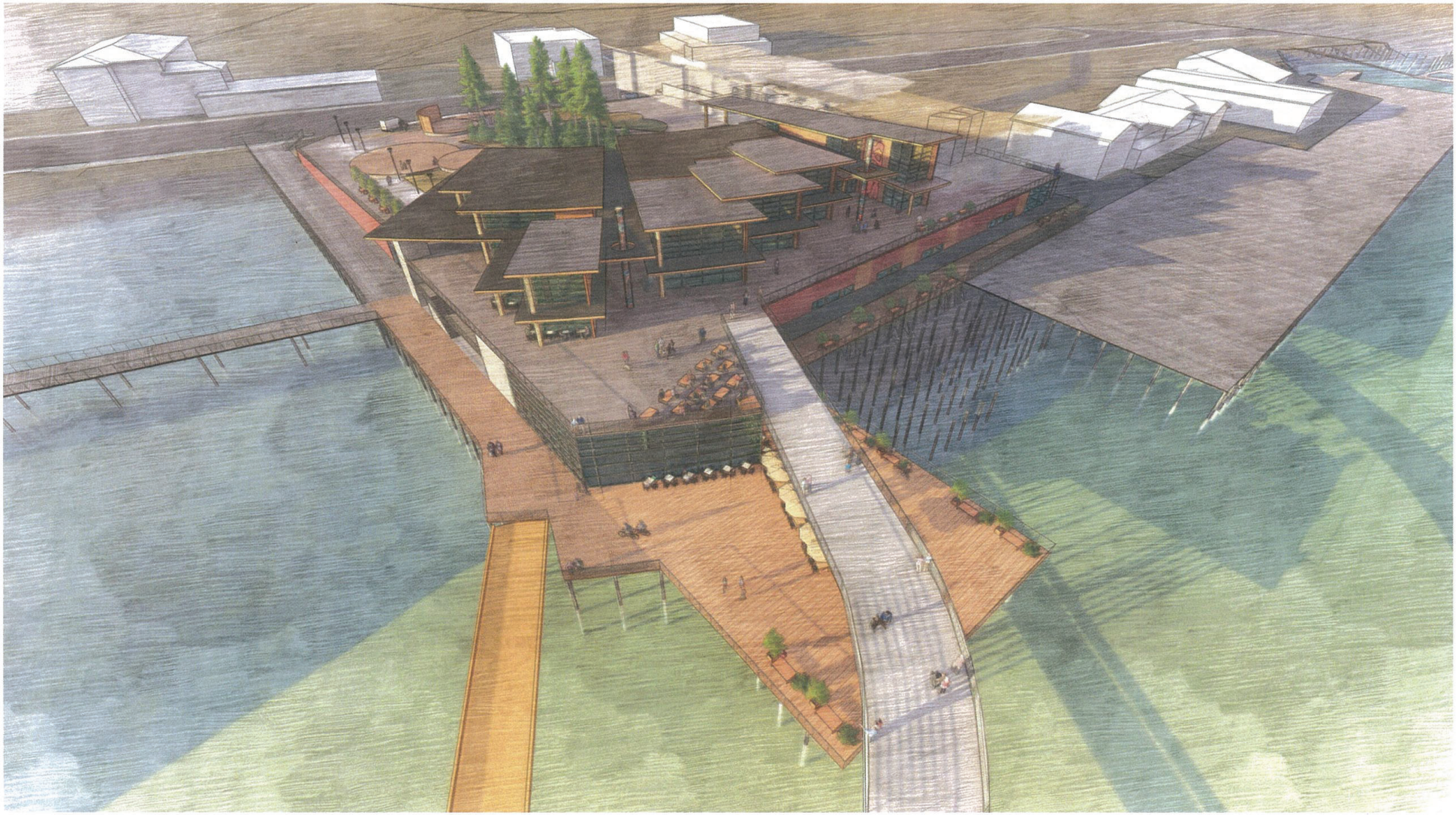

Future Phase TBD
Retail / Cultural
Top Level
Future Phase TBD
Retail / Cultural
Park / Events
Upper Plaza Level
Vehicle Circulation
1 Commercial Vehicle Entrance
2 Large Coach Route
3 Bus and Van Route
4 Boarding Islands separate from traffic
5 Visitor and Staff Vehicle Entrance
6 Level Car Parking Lot
7 Ramp to 35' Parking Level
8 Grand Stair
9 Secondary Stair / Elevator
50 Parking Stalls
2nd Parking Level
Whittier Ave
Egan Drive
25 & 35' Bus Loading
45' Bus Loading
50 Parking Stalls
Seawalk
Retail
Dock
Seawalk Level
Cut-Away Diagram
Aak'w Landing Concept



Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Overhead View



Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Aerial View from Southwest

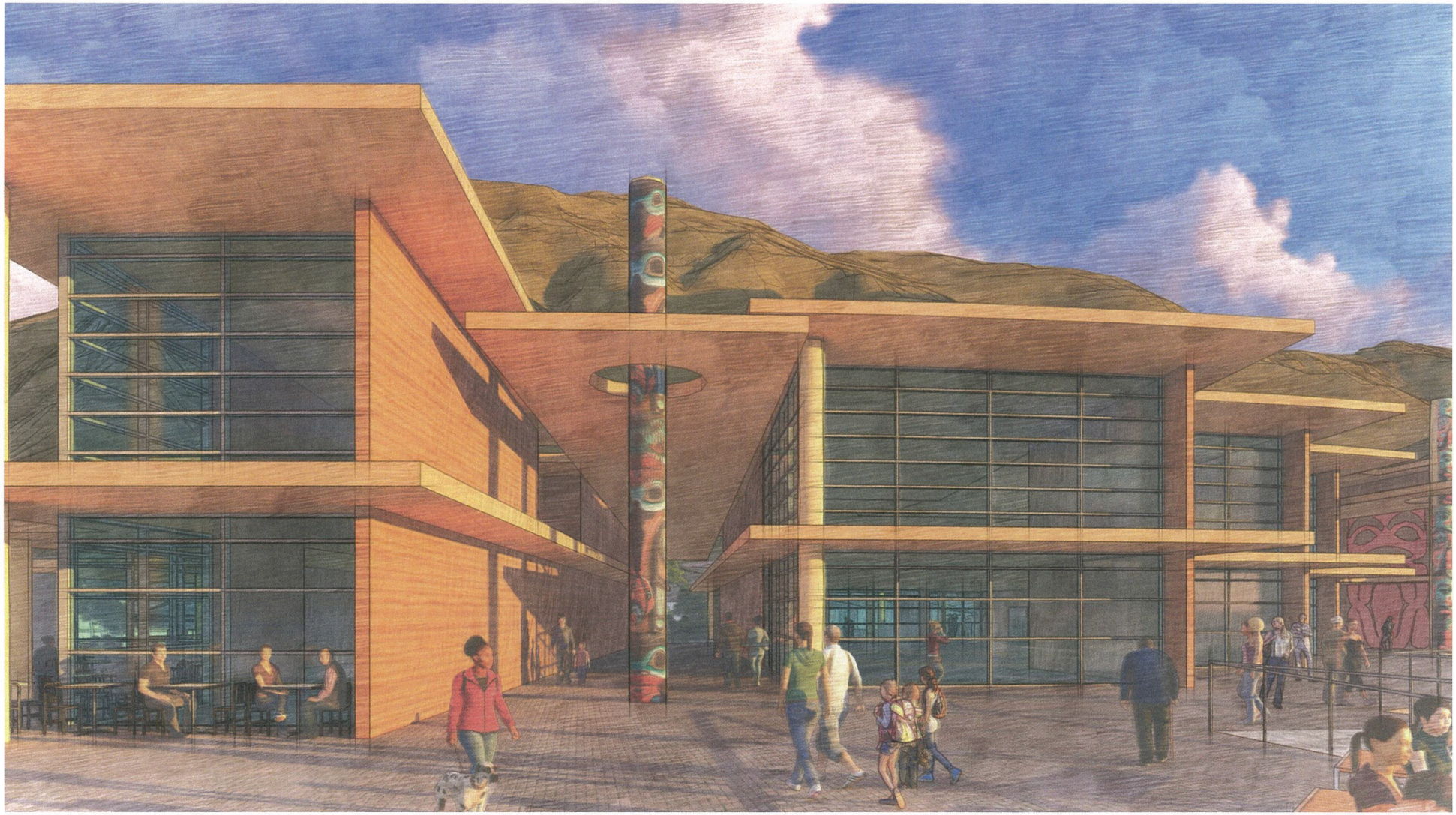
Aak'w Landing
Huna Totem Corporation
Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

View from Southwest
Pedestrain Skybridge to right
Service Gangway below to left

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Skybridge



Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Upper Plaza from South
Welcome Center to right
Phase 2 Retail to left

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Upper Plaza from Southeast
Welcome Center to left
Phase 2 Retail ahead
Future Phase Development beyond

Aak'w Landing
Huna Totem Corporation
Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

South Seawalk from Whittier St.
Seawalk-Level Retail
Future Phase Development above

Aak'w Landing
Huna Totem Corporation

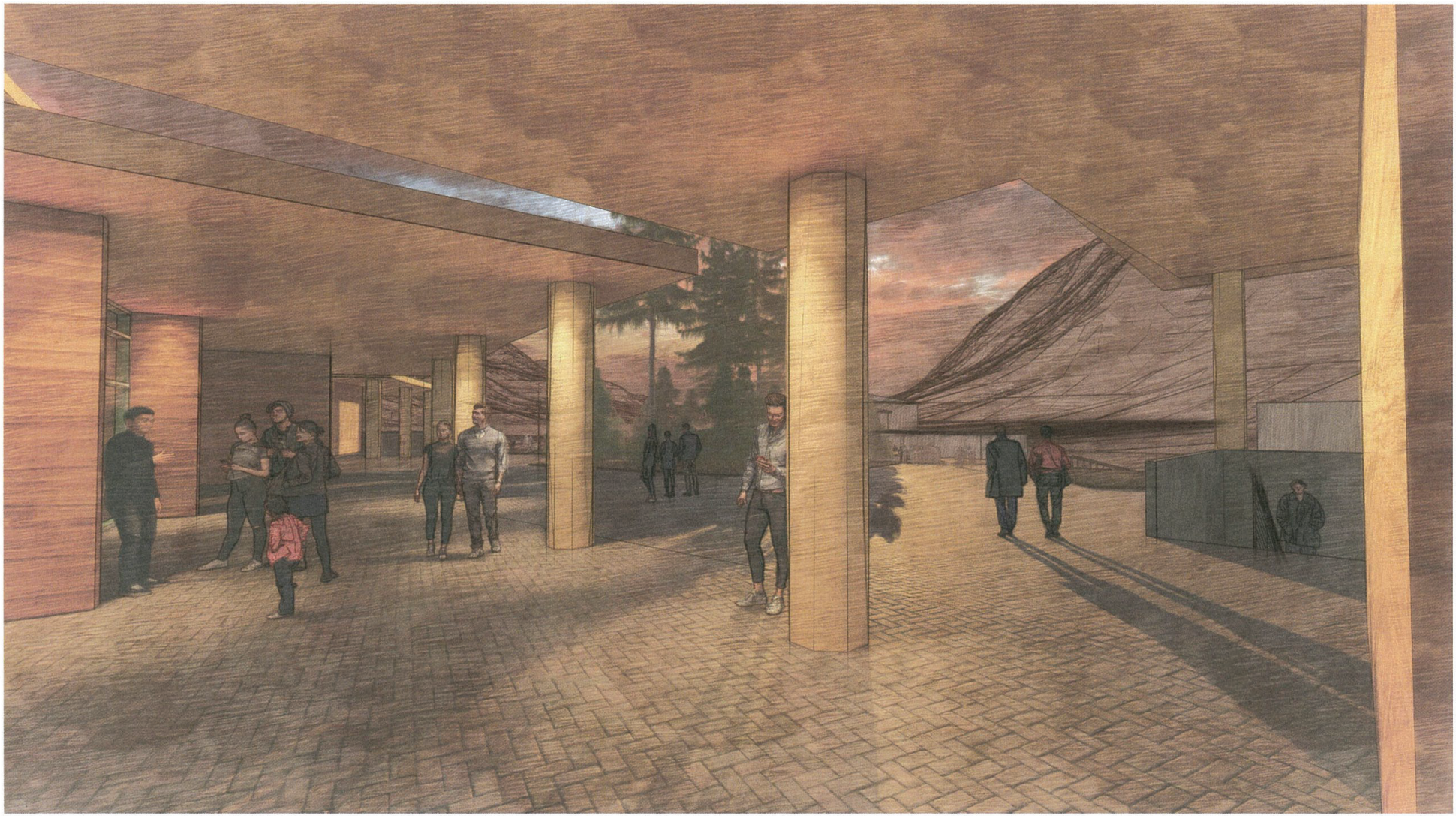
Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

South Seawalk

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Seawalk Deck
Seawalk-Level Retail / Dining
Skybridge above



Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Top of Park
Welcome Center to left
Stairs / Escalators to Tour Arrival/Departure ahead

Aak'w Landing
Huna Totem Corporation

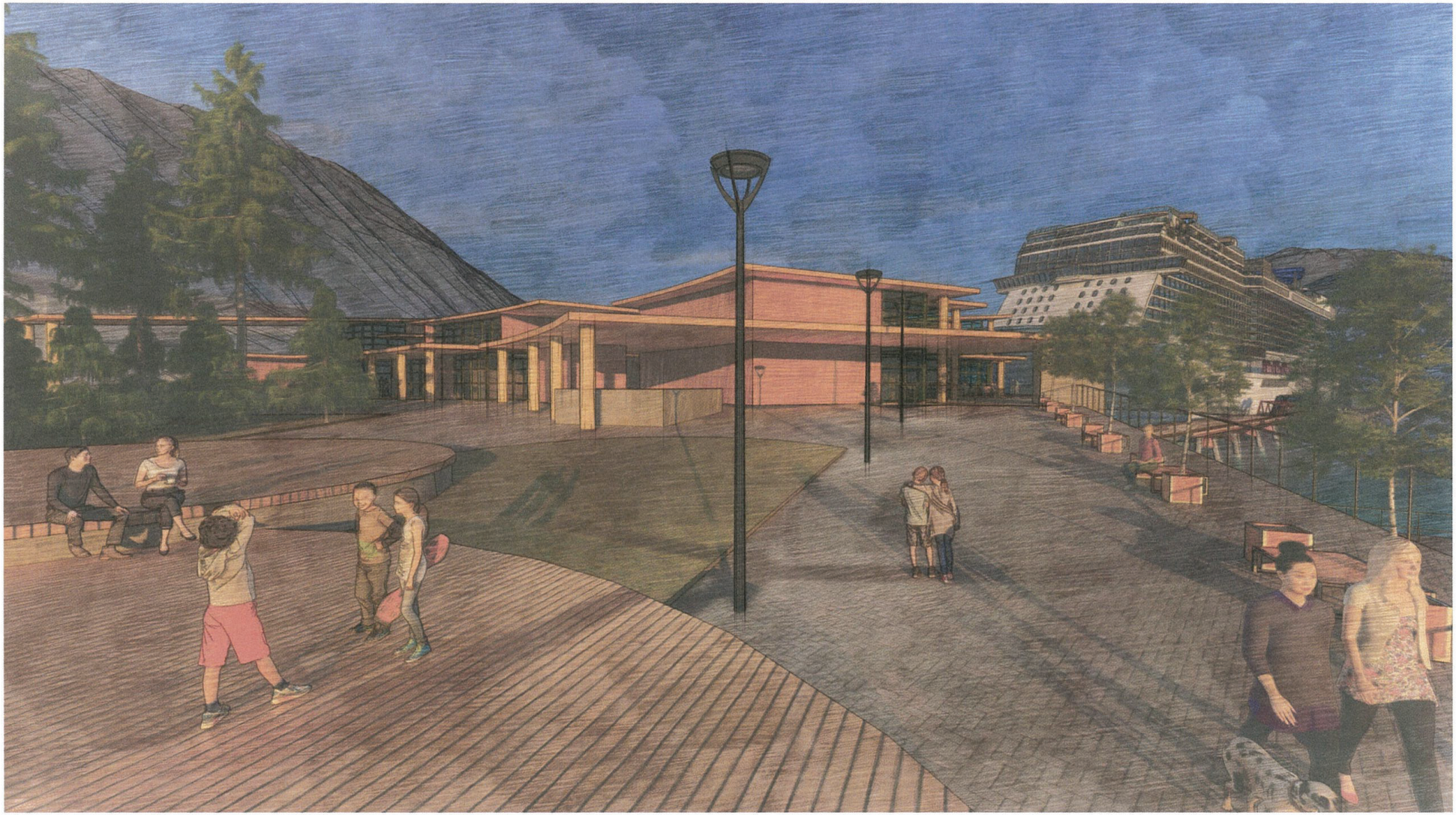
Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Tour Arrival / Departure Area

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Lower Park



Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Park
Welcome Center beyond to left

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Upper Plaza fromWest
Phase 2 Retail / Dining to left

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept June 19, 2023

Corner of Egan and Whittier
Future Phase Development Option - Cultural / Museum

MEMORANDUM

TO: Corey Wall (Jensen Yorba Wall, Inc.)

FROM: LaQuita Chmielowski, P.E. (DOWL)
Cynthia Roe (DOWL)

DATE: May 12, 2023

SUBJECT: Traffic Impact Analysis for Aak'w Landing Development

BACKGROUND

This memorandum evaluates potential traffic impacts associated with the proposed Aak'w Landing multi-use development. The proposed development is located at the southwest corner of Egan Drive and Whittier Street on Lots C1, Juneau Subport, in Downtown Juneau, Alaska. The first two phases of the development will consist of underground bus and passenger vehicle parking garage with approximately 52,000 square feet of retail space and 11,000 square feet of high-turnover restaurant space. Land use for the third phase of development has not been finalized at this time, though for analysis purposes 20,000 square feet of retail space is assumed. Access to the development will be provided via a new driveway at the base level of the parking garage on Whittier Street. Opening year for the development is expected to be 2025. The proposed development site plan is included in the Appendix.

This study examines existing intersection operations in the study area, along with future operation in 2035 with and without the Aak'w Landing multi-use development.

EXISTING CONDITIONS

Existing conditions were analyzed in the study area including existing roadway characteristics, traffic volumes, intersection operations, and crash history.

Roadway Characteristics & Study Intersections

The proposed development is located on Lot C1; the majority of development traffic is expected to travel via Egan Drive. Figure 1 shows the study area and intersections of interest. Table 1 shows the existing traffic control at each study intersection, while Table 2 provides the functional classification, posted speed limit, and cross section for the roadways in the study area. The Egan Drive / 10th Street, Egan Drive / Whittier Street, and Egan Drive / Main Street intersections are signalized with protected permitted left-turn phasing, along with pedestrian-only phases for the east and west legs.

Table 1: Traffic Control at Study Intersections

Intersection	Traffic Control
Egan Drive & W 10th Street	Traffic Signal
Egan Drive & Glacier Avenue	None - Free Movement from Side Street onto Egan Drive
Egan Drive & Whittier Street	Traffic Signal
Egan Drive & Willoughby Avenue	None - Free Movement from Side Street onto Egan Drive
Willoughby Avenue & Whittier Street	Stop Controlled on Whittier Street and Warrior Street
Egan Drive & Main Street	Traffic Signal

Figure 1: Study Area Intersections Map

Table 2: Study Area Roadway Characteristics

Roadway	Functional Classification	Posted Speed (mph)	Number of Lanes	Pedestrian Facilities	Bike Facilities
Egan Drive	Principal Arterial	40 mph	4	Yes	No
W 10th Street	Major Collector	20 mph	2	Yes	Yes
Whittier Street	Major Collector	None Posted	2	Partial[1]	No
Willoughby Street	Major Collector	None Posted	2	Yes	No
Main Street	Major Collector	20 mph	2	Yes	No
Glacier Avenue	Minor Collector	20 mph	2	Yes	No

[1]Non-continuous sidewalks on the west side of Whittier Street

Existing Traffic Volumes

Existing traffic volumes were collected on Tuesday, March 21, 2023. Data was collected at the six existing study intersections using 16-hour turning movement counts (6:00 AM to 10:00 PM). In addition, a 24-hour CountCAM station on Egan Drive collected traffic speed data. The AM peak hour of traffic was identified as 7:30 – 8:30 AM, while the PM peak hour was identified as 4:00 – 5:00 PM.

A seasonal adjustment factor (SAF) of 1.12 was applied to the traffic count data to represent typical traffic conditions. The SAF was calculated using data from the nearby Alaska Department of Transportation & Public Facilities (DOT&PF) permanent count station located on Egan Drive, northwest of Glacier Highway Access Road.[1] Figure 2 shows the seasonally adjusted existing AM and PM peak hour turning movement volumes at the study intersections.

[1] Data from https://alaskatrafficdata.drakewell.com

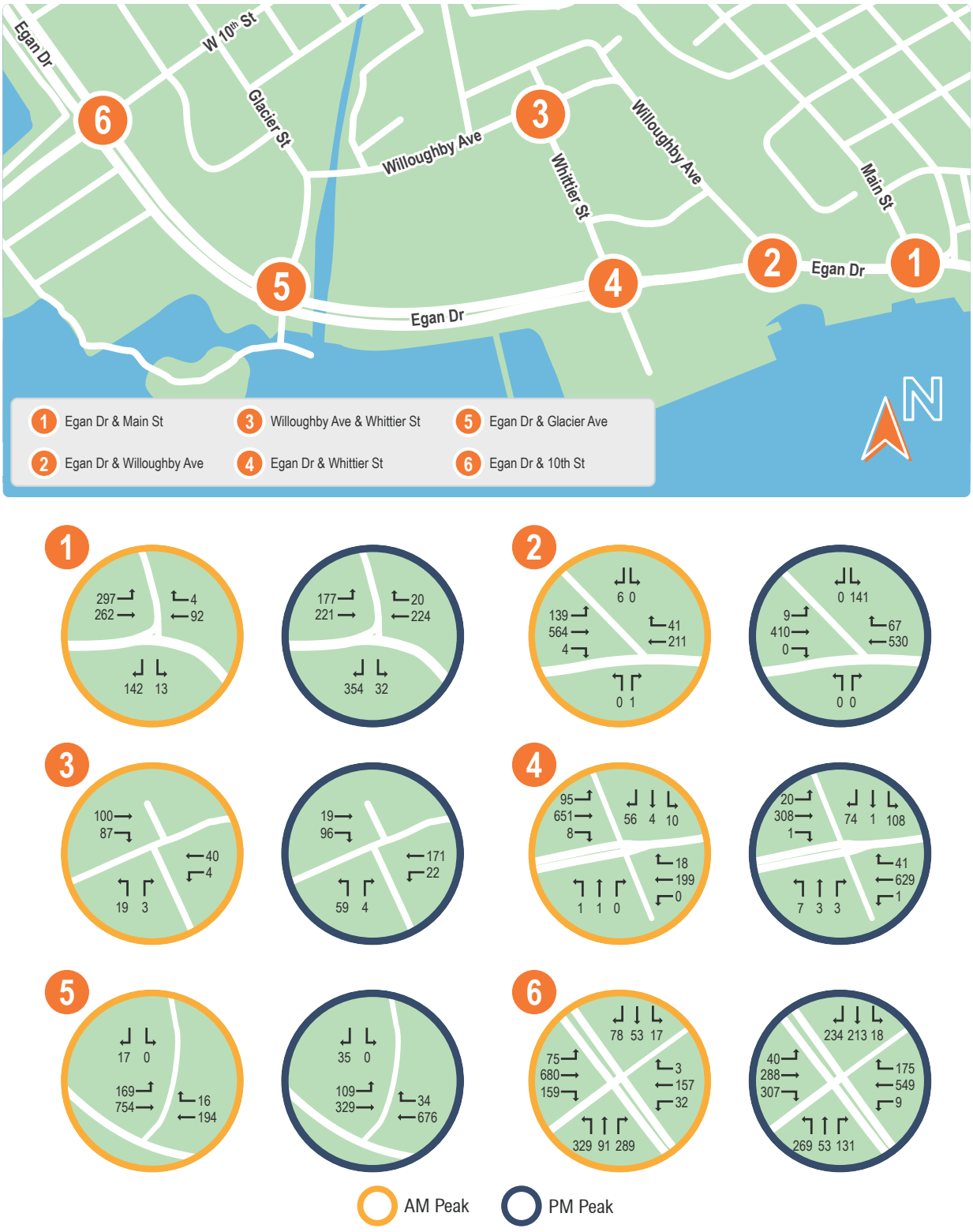


Figure 2: Existing AM and PM Peak Hour Traffic Volumes

Mobility Standards

Traffic operations were modeled in Synchro/SimTraffic version 11. Synchro reports are provided in the Appendix. This study uses the Highway Capacity Manual 6th edition (HCM)[2] methodology to calculate intersection level of service (LOS). The Alaska Administrative Code (AAC)[3] establishes a minimum LOS for the development's construction and design years. These code and policy documents state the following minimum acceptable LOS for the construction and design years:

- LOS C is acceptable if the existing conditions are LOS C or better
- LOS D is acceptable if the existing conditions are LOS D
- If the existing conditions are poorer than LOS D, a lower LOS is acceptable if the operation does not deteriorate more than ten percent (10%) in terms of delay time or any other appropriate measure of effectiveness compared with the background condition (i.e., without the development).

Existing Intersection Traffic Operations

Table 4 shows the existing delay and LOS at study intersections (reported using the 6th Edition HCM delay methodology). Overall intersection delay is reported at the signalized intersections, while delay is only reported for the critical movements (or highest delay approach) at stop-controlled intersections.

The only intersection operating at LOS C or worse is the Egan Drive / Whittier Street intersection which operates at LOS E with existing signal timing and turn movement configuration during the PM peak hour.

Table 3: Existing Conditions Traffic Operations

Intersection	AM Peak Hour			PM Peak Hour		
	LOS	Delay	Critical Movement	LOS	Delay	Critical Movement
Egan Drive & W 10th Street	C	25	—	B	17	—
Egan Drive & Glacier Avenue	A/A	9	SBR	A/B	12	SBR
Egan Drive & Whittier Street	A	7	—	**E**	**56**	**—**
Egan Drive & Willoughby Avenue	A/B	14	NBR	A/A	0	EBL
Willoughby Avenue & Whittier Street	A/B	10	NBL	A/B	12	NBL
Egan Drive & Main Street	A	5	—	A	6	—

[2] HCM 6th Edition: Highway Capacity Manual, Transportation Research Board, 2016.

[3] Section 17 Alaska Administrative Code 10.070, https://www.akleg.gov/basis/aac.asp#17.10.070

Crash History

Tables 5 and 6 show crash history for the study intersections for the seven most recent years of available crash data (January 1, 2015, to December 31, 2021). The Egan Drive and Whittier Street intersection had six crashes occur over this period. Table 5 shows the crash rate at each study intersection, along with the statewide crash rate (based on intersection traffic control and number of approaches). The statewide averages are based on data from 2008 to 2012 and represent the most recent data available.[4] All of the intersections have crash rates that are below the statewide average for intersection types. Table 6 shows the breakdown of crashes by crash type at the intersections.

Table 4: Total Crashes and Crash Rate by Intersection (2015 – 2021)

Intersection	Crash Rate [a]		Crash Severity			Total Crashes
	Intersection	Statewide Average	Fatal	Injury	PDO	
Egan Drive & W 10th Street	0.63	1.57	0	7	21	28
Egan Drive & Glacier Avenue	0.06	—	0	1	1	2
Egan Drive & Whittier Street	0.15	1.57	0	2	4	6
Egan Drive & Willoughby Street	0	—	0	0	0	0
Willoughby Avenue & Whittier Street	0	0.52	0	0	0	0

[a] Crash rate for intersections = Crashes per million entering vehicles (MEV).

Table 5: Crash Type by Intersection (2015 – 2021)

Intersection	Angle	Single Vehicle Run-off	Rear End	Sideswipe	Bicycle	Motorcycle
Egan Drive & W 10th Street	12	1	12	2	0	1
Egan Drive & Glacier Avenue	0	0	1	0	1	0
Egan Drive & Whittier Street	2	0	4	0	0	0
Egan Drive & Willoughby Avenue	0	0	0	0	0	0
Willoughby Avenue & Whittier Street	0	0	0	0	0	0

FUTURE CONDITIONS

2035 No-Build Traffic Operations

Figure 3 shows the expected AM and PM peak hour turning movement counts in 2035, without the proposed Aak'w Landing development. Future traffic volumes were generated using an annual growth rate of 2.0% per year. This growth rate was assumed based on prior experience then concurred by DOT&PF staff.[5] Table 7 shows the expected delay and LOS at study

[4] Alaska Highway Safety Improvement Program Handbook, Alaska DOT&PF, January 2017.

[5] Email from DOT&PF staff on March 28, 2023.

intersections in 2035, without the Aak'w Landing development. The Egan Drive / Whittier Street intersection continues to degrade and operates at LOS F with existing signal timing and turn movement configuration during the PM peak hour. All other intersections operate within an acceptable level for mobility standards.

Table 6: 2035 No-Build Traffic Operations

Intersection	AM Peak Hour			PM Peak Hour		
	LOS	Delay	Critical Movement	LOS	Delay	Critical Movement
Egan Drive & W 10th Street	C	26	—	C	22	—
Egan Drive & Glacier Avenue	A/B	10	SBR	A/B	14	SBR
Egan Drive & Whittier Street	B	17	—	**F**	**84**	**—**
Egan Drive & Willoughby Avenue	A/C	18	NBR	A/A	0	EBL
Willoughby Avenue & Whittier Street	A/B	11	NBL	A/C	15	NBL
Egan Drive & Main Street	A	5	—	A	7	—

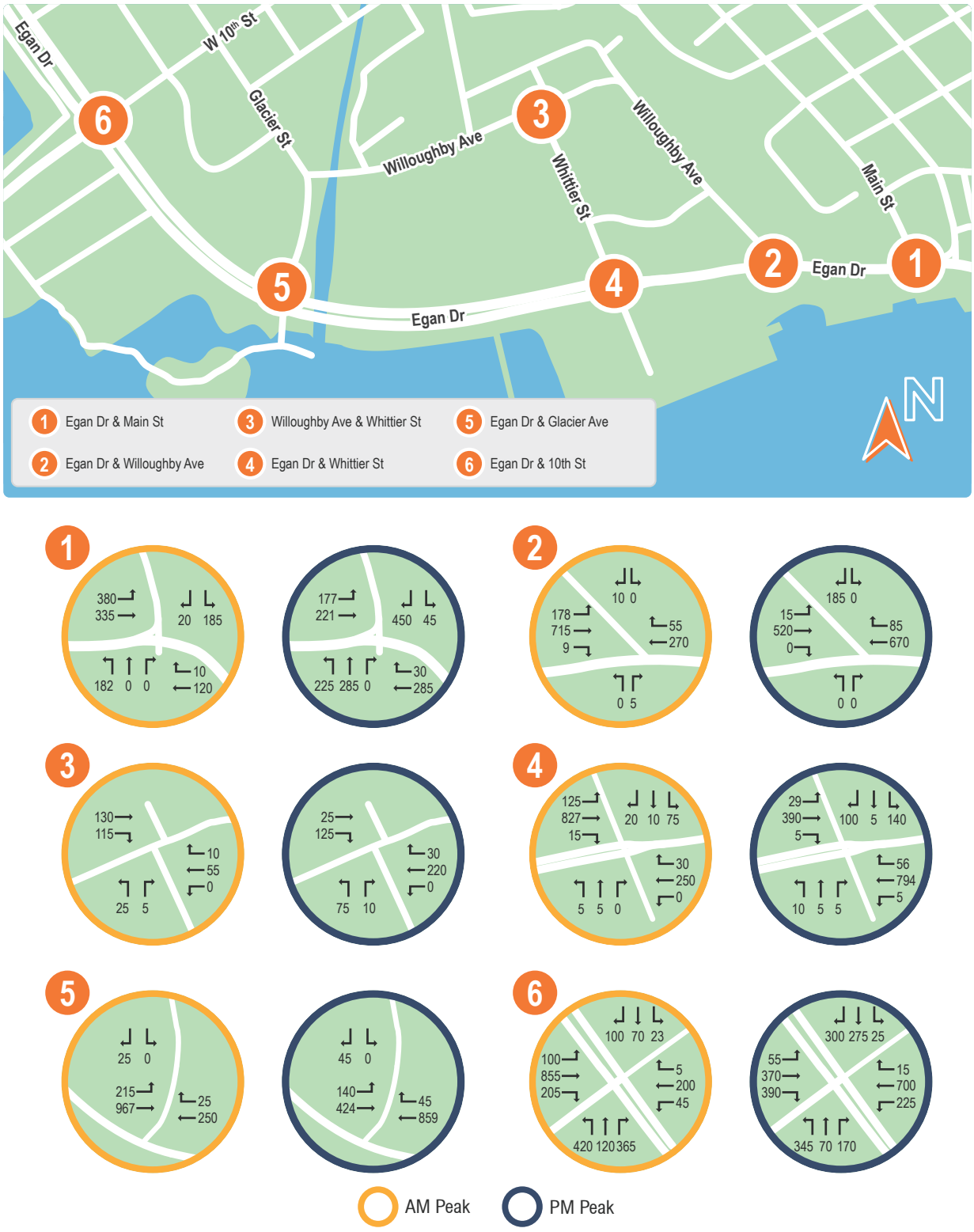


Figure 3: Future 2035 No-Build Traffic Volumes

Trip Generation

Trip generation rates for the proposed development are based on the data published in the *Institute of Transportation Engineers (ITE) Trip Generation Manual (Trip Generation Manual), 11th Edition* [6] and data provided by Jensen Yorba Wall (Client) related to expected cruise ship behavior. [7] Table 8 shows the size and type of unit expected at the development by land use code and development phase.[8] This information was used to calculate the expected number of vehicle trips during a typical weekday and the entering and exiting vehicle trips during the AM peak and PM peak hours as shown in Table 9.

Table 7: Development Land Use Types and Units

Development Phase	Description	ITE Code	Quantity	Units
1	Cruise Ship	-	1	Berth
1	Shopping Plaza (40-150k)	821	32	KSF
1	High-Turnover (Sit-Down Restaurant)	932	11	KSF
2	Shopping Plaza (40-150k)	821	20	KSF
3	Shopping Plaza (40-150k)	821	20	KSF

Table 9: Development Vehicle Trips

Development Phase	Description	Qty.	Daily		AM Peak Hour				PM Peak Hour			
			Rate	Total	Rate	Enter	Exit	Total	Rate	Enter	Exit	Total
1	Cruise Ship	1	-	188	-	45	45	90	-	45	45	90
1	Shopping Plaza (40-150k)	32	94.49	3024	3.53	57	56	113	9.03	139	150	289
1	High-Turnover (Sit-Down Restaurant)	11	107.2	1179	9.57	53	52	105	9.05	61	39	100
2	Shopping Plaza (40-150k)	20	94.49	1890	3.53	36	35	71	9.03	87	94	181
3	Shopping Plaza (40-150k)	20	94.49	1890	3.53	36	35	71	9.03	87	94	181

Due to the high number of passengers associated with cruise ships in addition to the planned volume of scheduled vehicle trips, all development trips were converted to their person trip equivalent before conducting an internal trip capture analysis using the *ITE Trip Generation Handbook*. [9] For land uses similar to the development site the *Trip Generation Handbook* provides vehicle occupancy rates ranging from 1.13 to 1.69. Given the multiple land uses associated with the development site and cruise ship passengers' dependency on ride-share options to leave the site a conservative vehicle occupancy rate of 1.2 was used to estimate the

[6] *ITE Trip Generation Manual*, 11th Edition, Institute of Transportation Engineers, September 2021.

[7] Due to a lack of data related to recreational port land use in the *ITE Trip Generation Manual* data provided by the Client was used. Email from Jensen Yorba Wall, April 25, 2023.

[8] Estimated from concept drawing provided by Jensen Yorba Wall, Concept Drawings Email January 6,2023

[9] *ITE Trip Generation Handbook*, 3rd Edition, Institute of Transportation Engineers, September 2017.

number of people per vehicle trip. With guidance from the National Cooperative Highway Research Program (NCHRP) Report 684[10] and Client provided data[11] for known development trips being added to the system (e.g., busses for tours) the total number of person trips, internal person trips, and external person trips were estimated. Table 9 shows the total person trips less the number of internal trips and walking trips associated with cruise ship passengers resulting in the total external trips generated by the development.

Table 8: Peak Hour Development Trips

Vehicle Trip Inventory	AM Peak Hour			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
All Person Trips – All Phases	413	408	821	846	851	1,697
Less Internal Trip Capture	-50	-50	-100	-202	-202	-404
Person Trips Subtotal - All Phases	363	358	721	644	649	1,293
Less Cruise Ship Passengers	-189	-180	-369	-284	-350	-634
Off-Site Person Trips (W/O Cruise Ship Passengers)	174	178	352	360	299	659
Off-Site Vehicle Trips (W/O Cruise Ship)	145	149	294	300	250	550
Off-Site Cruise Ship Trips	45	45	90	45	45	90
Total External Vehicle Trips	**190**	**194**	**384**	**345**	**295**	**640**

The development is expected to add 384 AM peak hour and 640 PM peak hour trips to the transportation network.

Trip Distribution

Trip distribution involves estimating where traffic is coming from and going to when accessing the development. The trip distribution was established based on PM peak hour volumes on Egan Drive and adjusted based on Client provided data and concurrence with DOT&PF staff. [12] Development traffic was distributed using the following assumptions for trip origins and destinations:

- 60% to/from Egan Drive from the West
- 30% to/from Egan Drive from the East
- 10% to/from Egan Drive from the North

Figure 4 shows the expected development-related traffic expected at study intersections during the AM and PM peak hours.

[10] *NCHRP Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*, Transportation Research Board, 2011.

[11] Email from Jensen Yorba Wall, April 25, 2023. A follow up call with Jensen Yorba Wall confirmed 15% of daily person trips occur in the AM and PM peak hours.

[12] Email from DOT&PF staff on May 5, 2023.

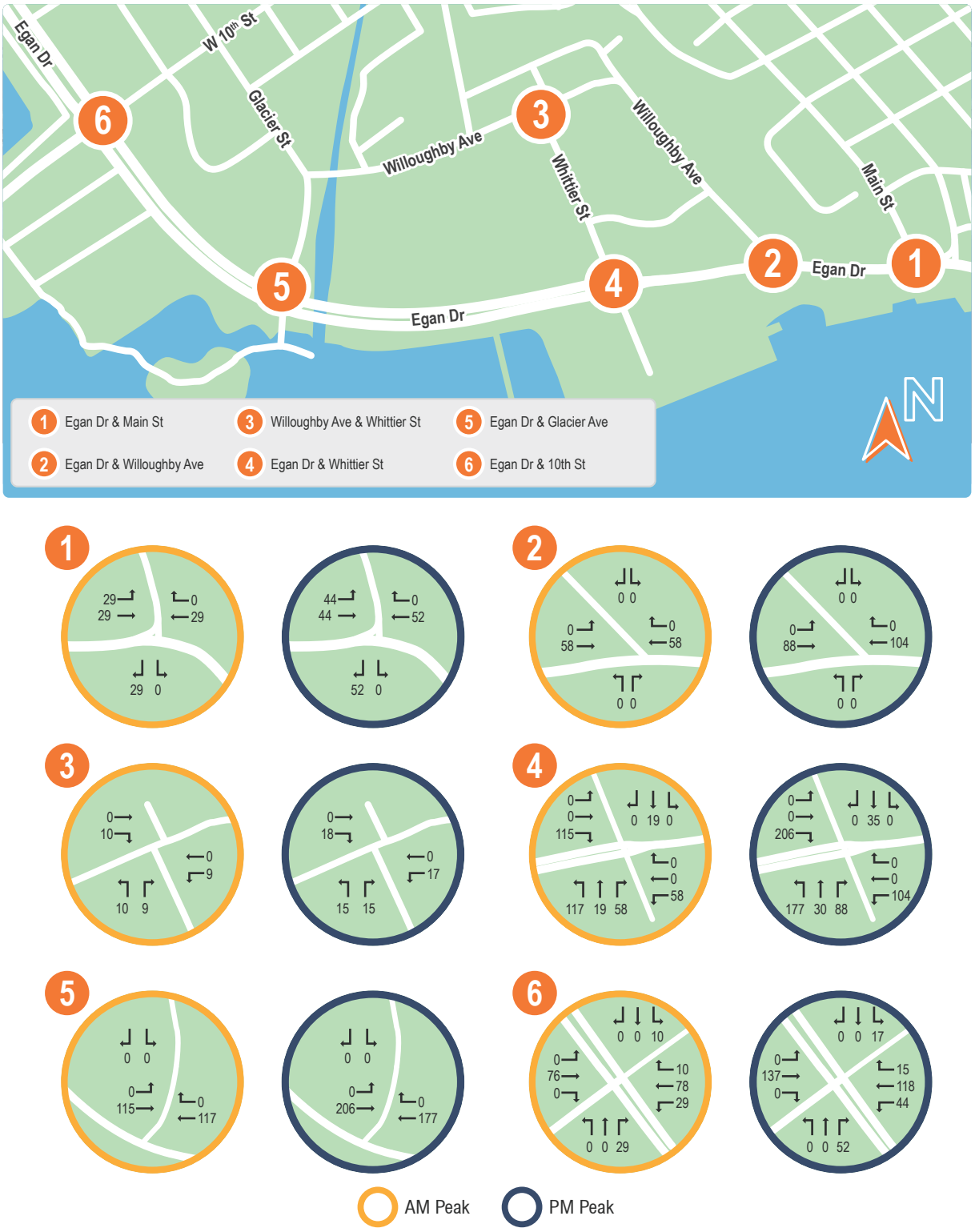


Figure 4: Added Development Traffic Volumes

2035 Traffic Operations with Development

2035 Future Baseline

Figure 5 shows the total traffic expected at study intersections in 2035, with the development. Table 10 shows the expected traffic operations at each study intersection under existing signal timing and turn movement configuration conditions. These conditions result in LOS F at the Egan Drive / Whittier Street intersection during the PM peak hour and LOS D at the Egan Drive / 10th Street intersection during the AM peak hour. All other intersections operate within an acceptable level for mobility standards.

Table 10: 2035 Traffic Operations with Development

Intersection	AM Peak Hour			PM Peak Hour		
	LOS	Delay	Critical Movement	LOS	Delay	Critical Movement
Egan Drive & W 10th Street	**D**	**40**	**—**	C	25	—
Egan Drive & Glacier Avenue	A/B	10	SBR	A/C	16	SBR
Egan Drive & Whittier Street	**F**	**95**	**—**	**F**	**239**	**—**
Egan Drive & Willoughby Avenue	A/C	18	NB	A/A	0	EBL
Willoughby Avenue & Whittier Street	A/B	11	NB	A/C	15	NBL
Egan Drive & Main Street	A	5	—	A	7	—

As required by AAC, mitigation is required due to unacceptable levels of operation (LOS D or worse) at the Egan Drive / Whittier Street and Egan Drive / W 10th Street intersections under baseline operation conditions. Although the Egan Drive / Whittier Street intersection experienced LOS F before adding development traffic, the left-turn traffic volumes for the north and southbound legs of the intersection significantly increase delay at the intersection during the AM and PM peak hours. Similarly, left-turn traffic volume from Egan Drive onto W 10th Street increases delay at the intersection during the AM peak hour.

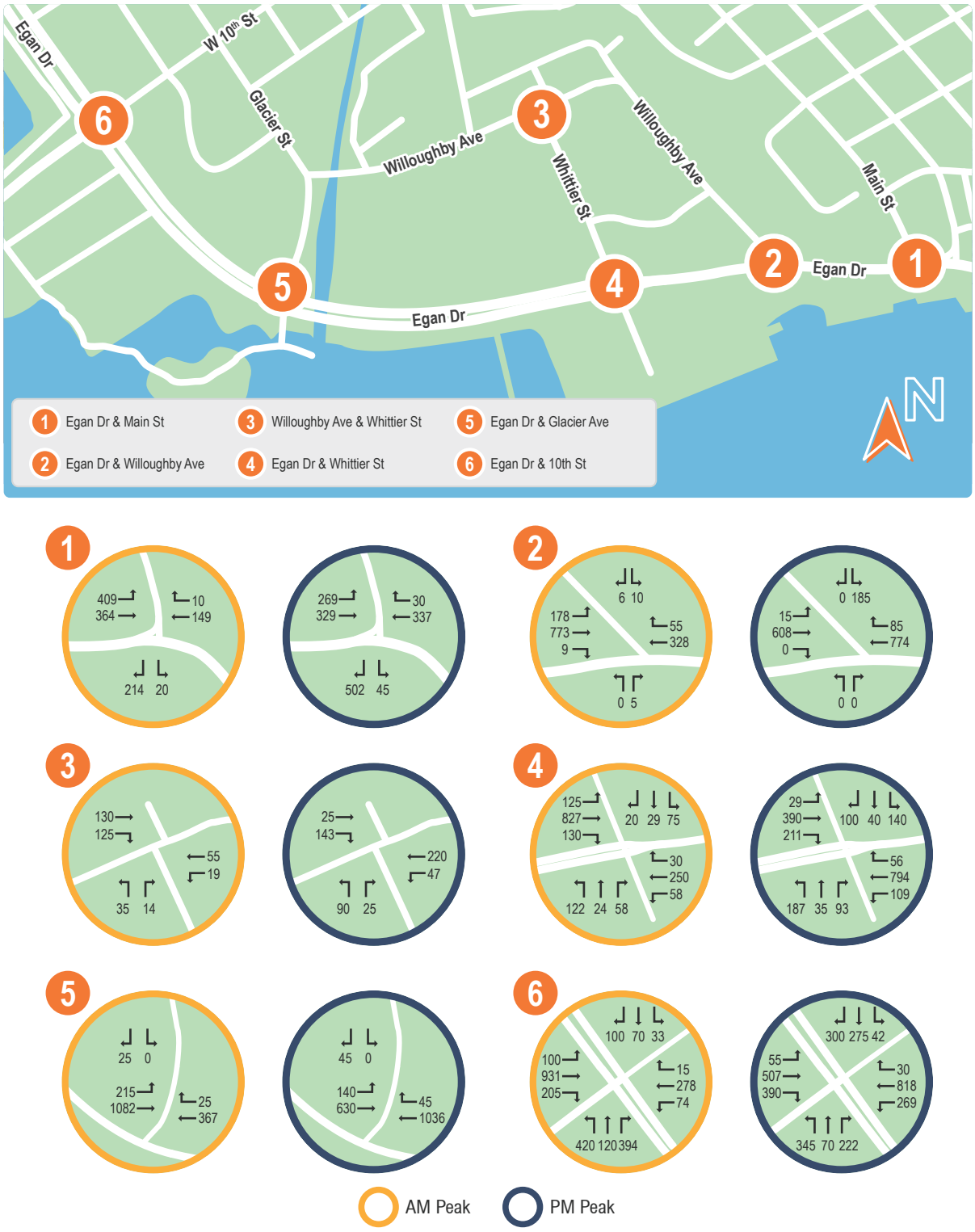


Figure 5: Future 2035 Build Volumes

2035 Future Alternative

Based upon the needs shown in the 2035 Future Baseline scenario, the following improvements to Egan Drive intersections were included in the 2035 Future Alternative:

- Re-striping of the north and south legs of the Egan Drive / Whittier Street intersection to include a single left-turn lane and a single shared through-right-turn lane
- Update and optimize maximum green times at the Egan Drive / 10th Street and Egan Drive / Whittier Street intersections to allow 120 second maximum cycle length.

With these changes, as shown in Table 11, all intersections now operating within an acceptable LOS.

Table 11: 2035 Traffic Operations with Development (With Mitigation)

Intersection	AM Peak Hour			PM Peak Hour		
	LOS	Delay	Critical Movement	LOS	Delay	Critical Movement
Egan Drive & W 10th Street	C	26	—	C	30	—
Egan Drive & Glacier Avenue	A/B	10	SBR	A/C	16	SBR
Egan Drive & Whittier Street	B	17	—	C	30	—
Egan Drive & Willoughby Avenue	A/C	18	NBR	A/B	11	EBL
Willoughby Avenue & Whittier Street	A/B	11	NBL	A/C	15	NBL
Egan Drive & Main Street	A	5	—	A	7	—

CONCLUSIONS

The proposed Aak'w Landing development is a three-phase multi-use development opening in Downtown Juneau during the year 2025. The first two phases of the development will consist of underground bus and passenger vehicle parking garage with approximately 52,000 square feet of retail space and 11,000 square feet of high-turnover restaurant space. Land use for the third phase of development has not been finalized at this time, though is assumed 20,000 square feet of retail space will be constructed. Access to the development will be provided via a new driveway at the base level of the parking garage on Whittier Street. The proposed development as currently planned will add approximately 83,000 square feet of multi-use space off Egan Drive, generating 384 trips in the AM and 640 trips in the PM peak hours. During the evaluation of the development, operational concerns led to the following mitigation requirements:

- **Egan Drive / W 10th Street Intersection**
  - Update and optimize maximum green times at the Egan Drive / 10th Street and Egan Drive / Whittier Street intersections to allow 120 second maximum cycle length.
- **Egan Drive / Whittier Street Intersection**
  - Re-striping of the north and south legs of the Egan Drive / Whittier Street intersection to include a single left-turn lane and a single shared through-right-turn lane
  - Update and optimize maximum green times at the Egan Drive / 10th Street and Egan Drive / Whittier Street intersections to allow 120 second maximum cycle length.

Appendix

Site Information

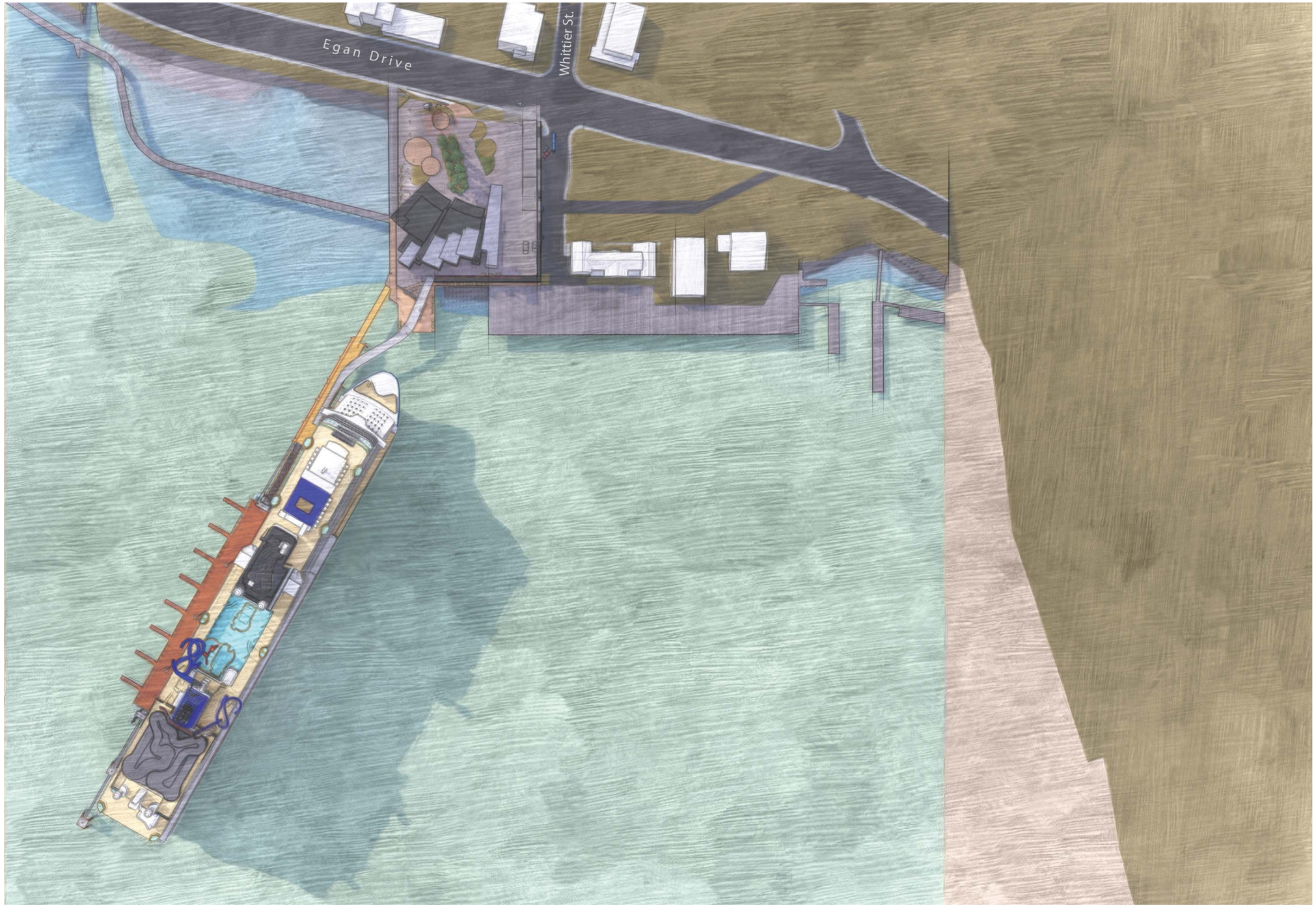
HCM Analysis – Existing

HCM Analysis –No-Build

HCM Analysis – Build

Site Information

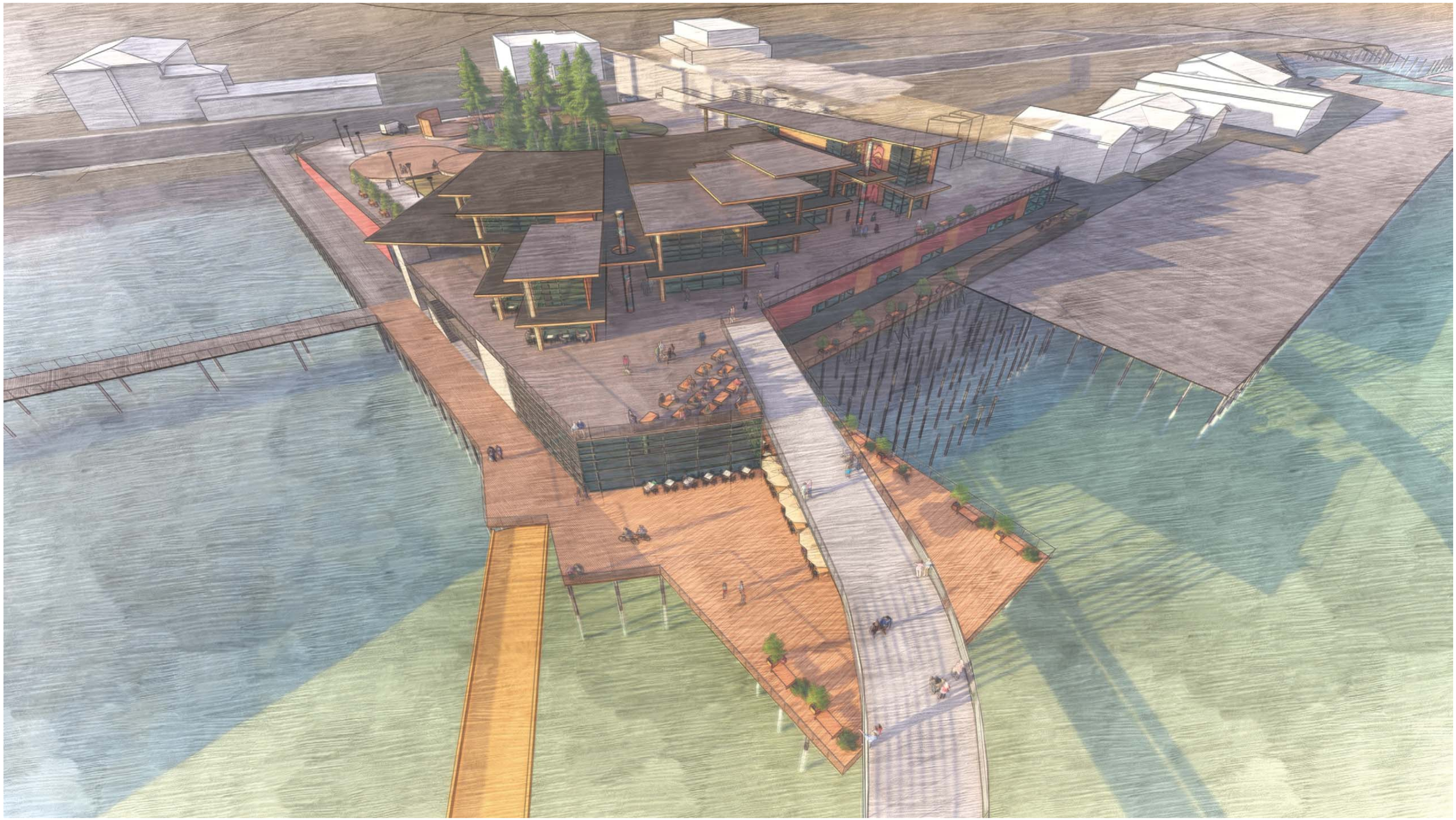
Attachment A5 - Application Packet - Traffic Impact Analysis – Final Draft



Aak'w Landing
Huna Totem Corporation

Overhead View

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023



Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Aerial View from Southwest

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

View from Southwest
Pedestrain Skybridge to right
Service Gangway below to left

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Skybridge

Aak'w Landing
Huna Totem Corporation

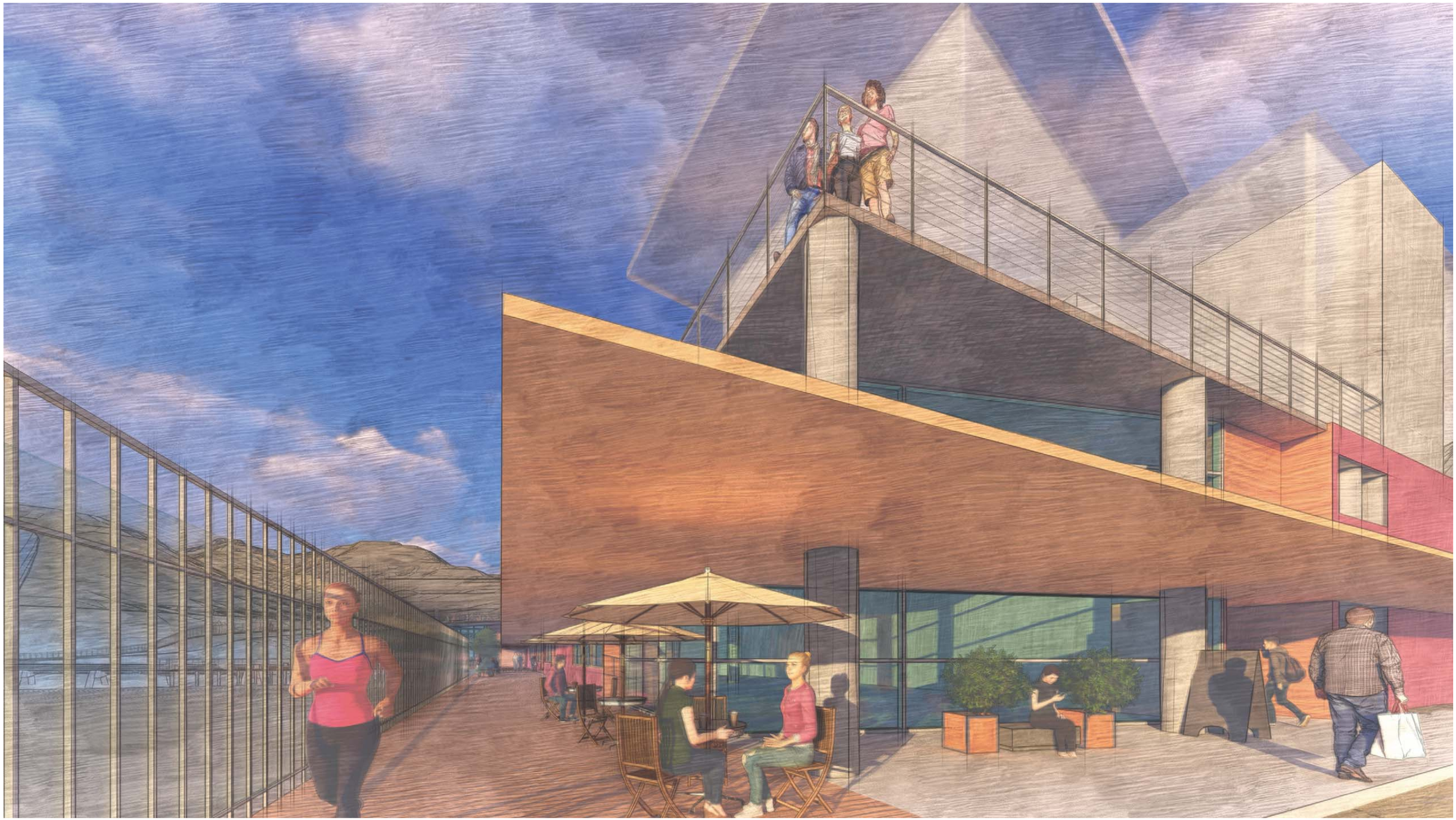
Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Upper Plaza from South
Welcome Center to right
Phase 2 Retail to left

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

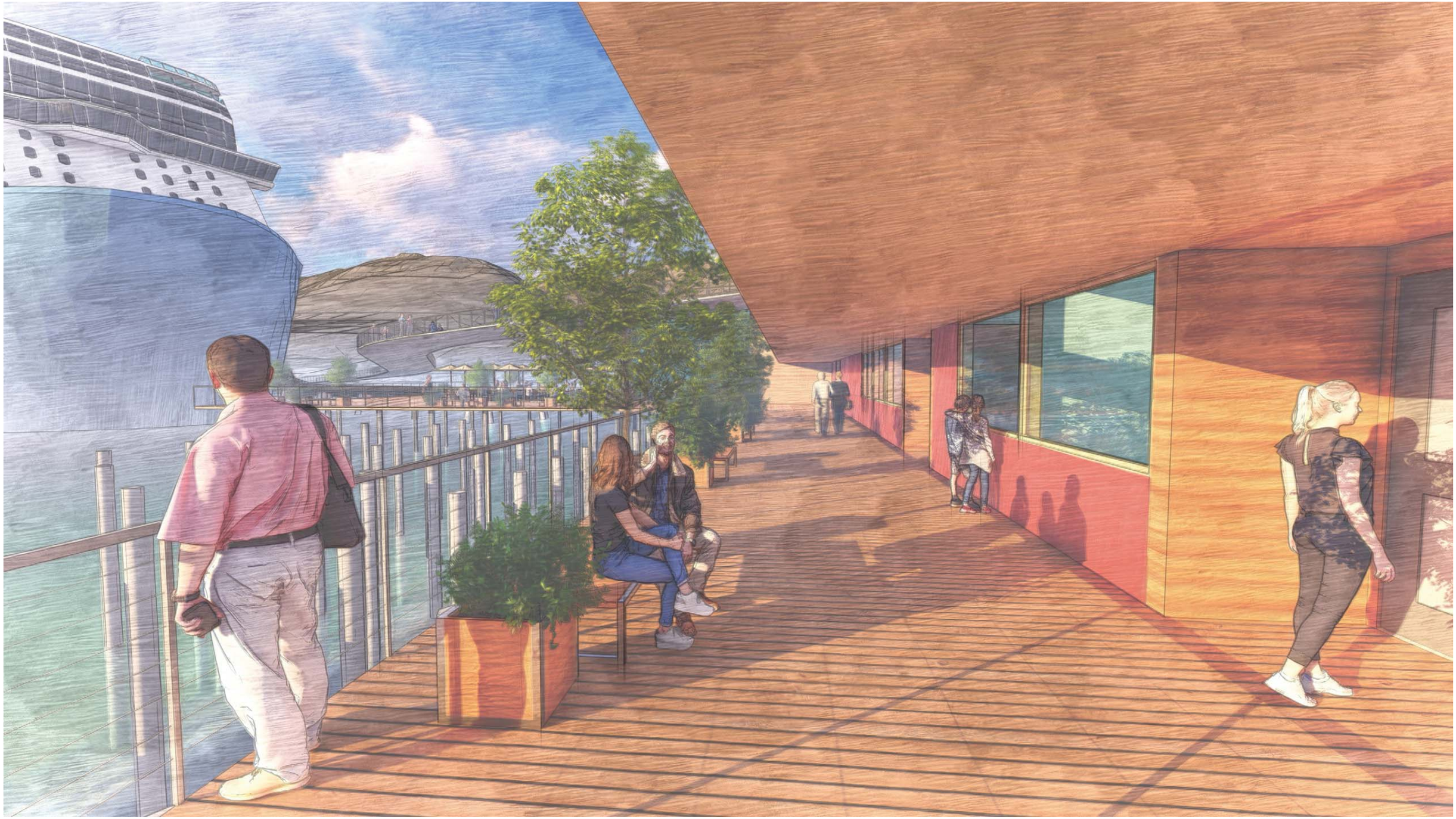
Upper Plaza from Southeast
Welcome Center to left
Phase 2 Retail ahead
Future Phase Development beyond



Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

South Seawalk from Whittier St.
Seawalk-Level Retail
Future Phase Development above



Aak'w Landing
Huna Totem Corporation

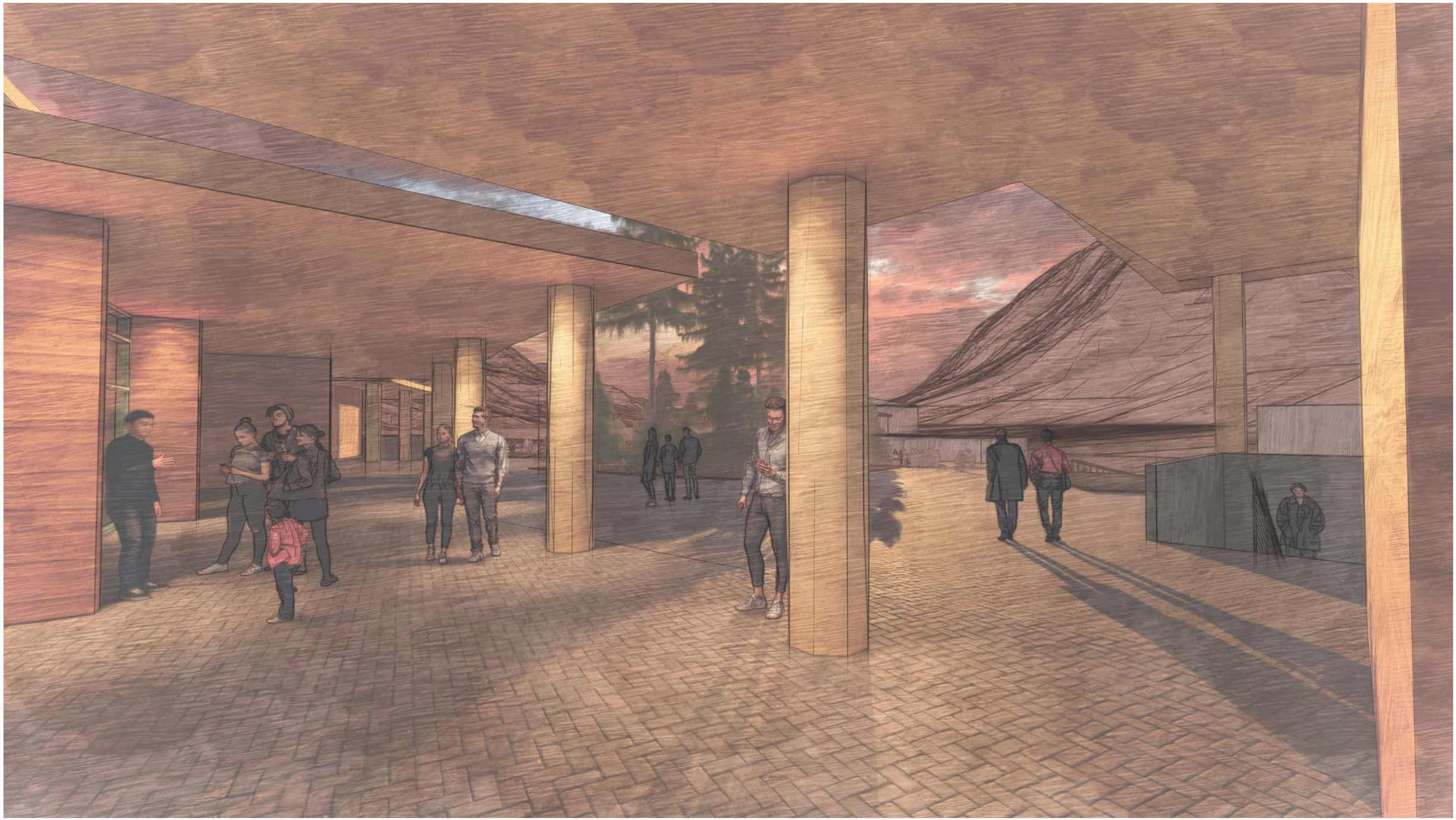
Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

South Seawalk

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Seawalk Deck
Seawalk-Level Retail / Dining
Skybridge above



Aak'w Landing
Huna Totem Corporation

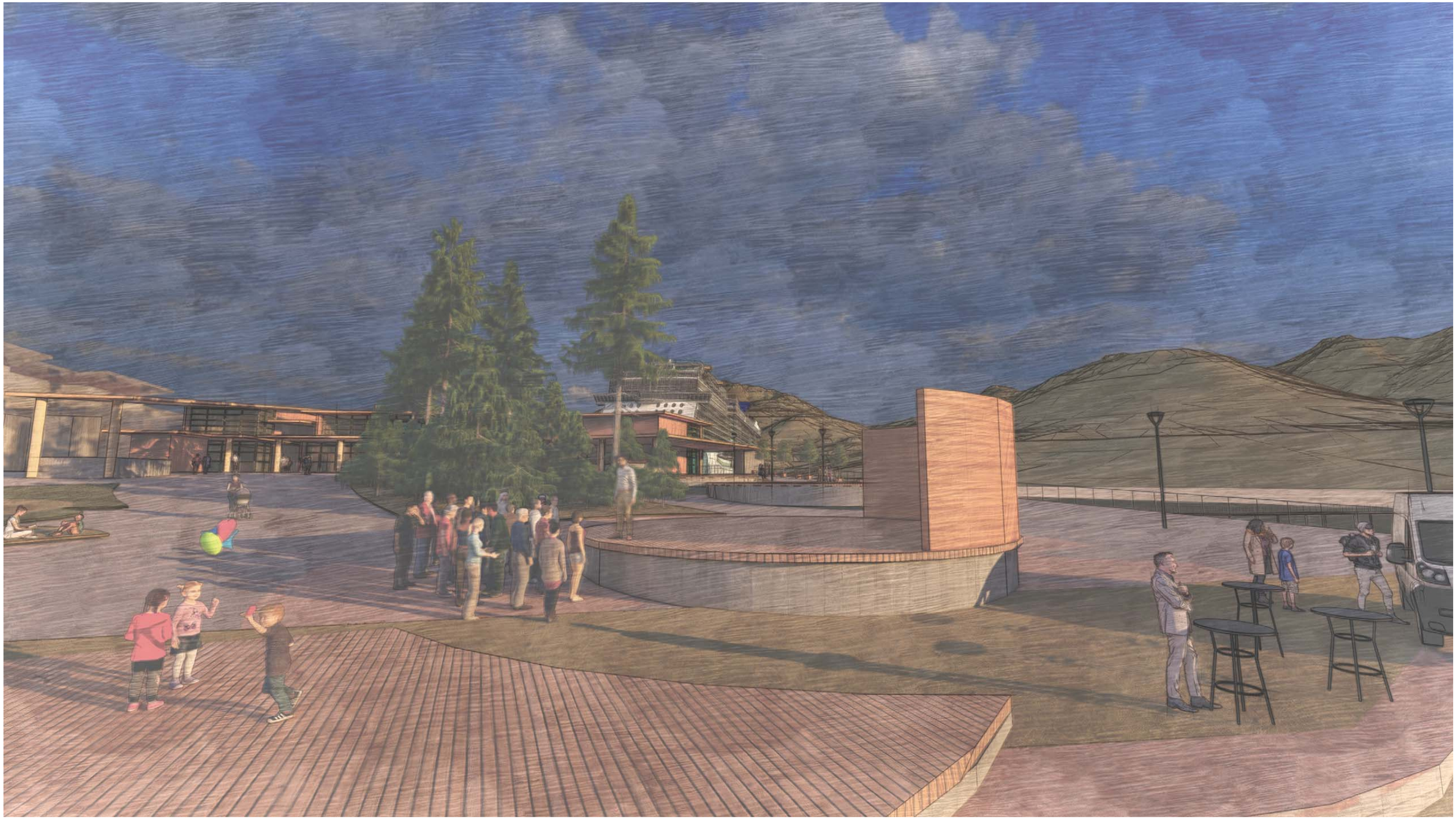
Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Top of Park
Welcome Center to left
Stairs / Escalators to Tour Arrival/Departure ahead

Aak'w Landing
Huna Totem Corporation

Tour Arrival / Departure Area

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023



Aak'w Landing
Huna Totem Corporation

Lower Park

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Aak'w Landing
Huna Totem Corporation

Park
Welcome Center beyond to left

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Aak'w Landing
Huna Totem Corporation

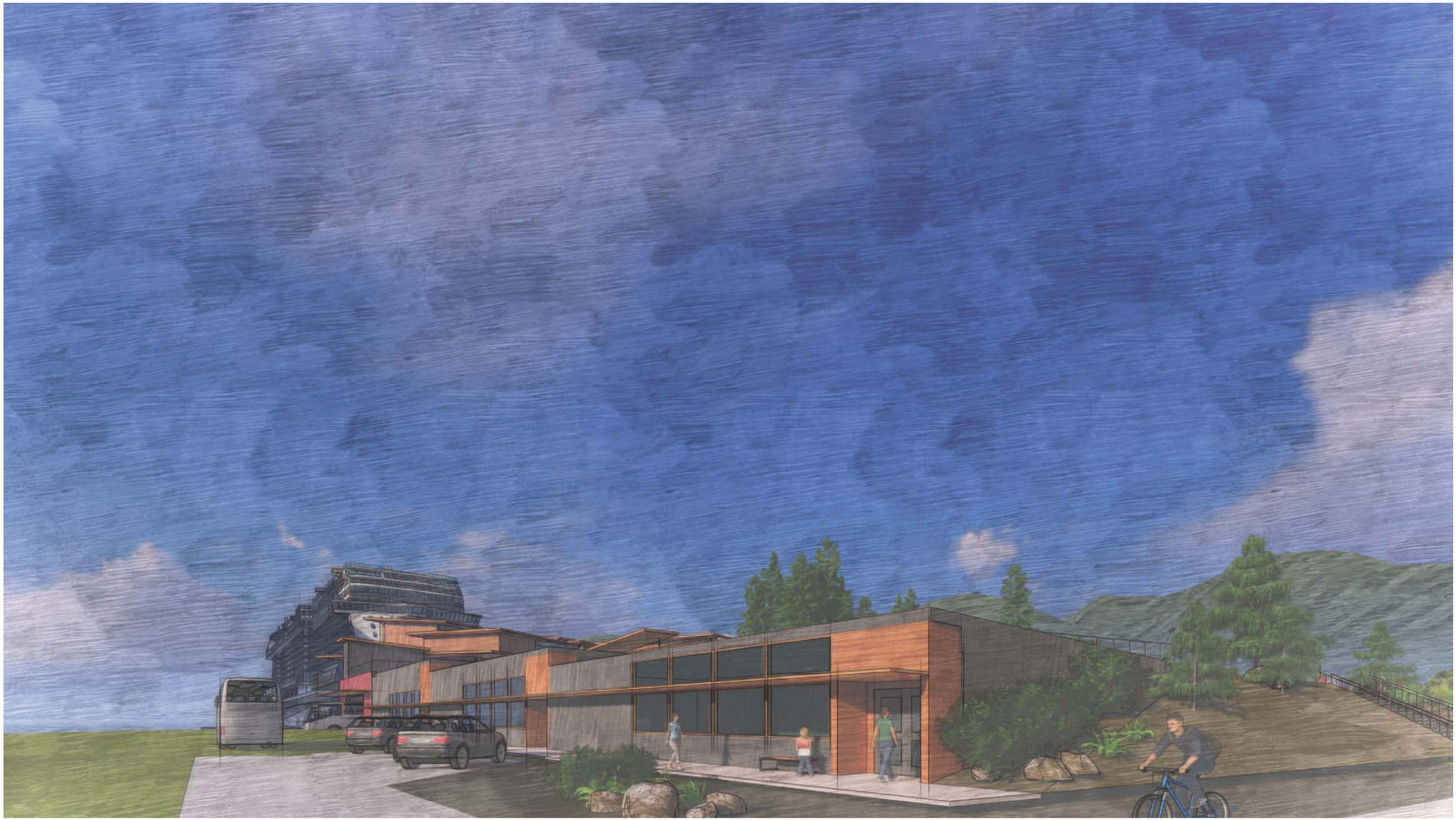
Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Upper Plaza fromWest
Phase 2 Retail / Dining to left

Aak'w Landing
Huna Totem Corporation

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Upper Plaza fromWest
Phase 2 Retail / Dining to left



Aak'w Landing
Huna Totem Corporation

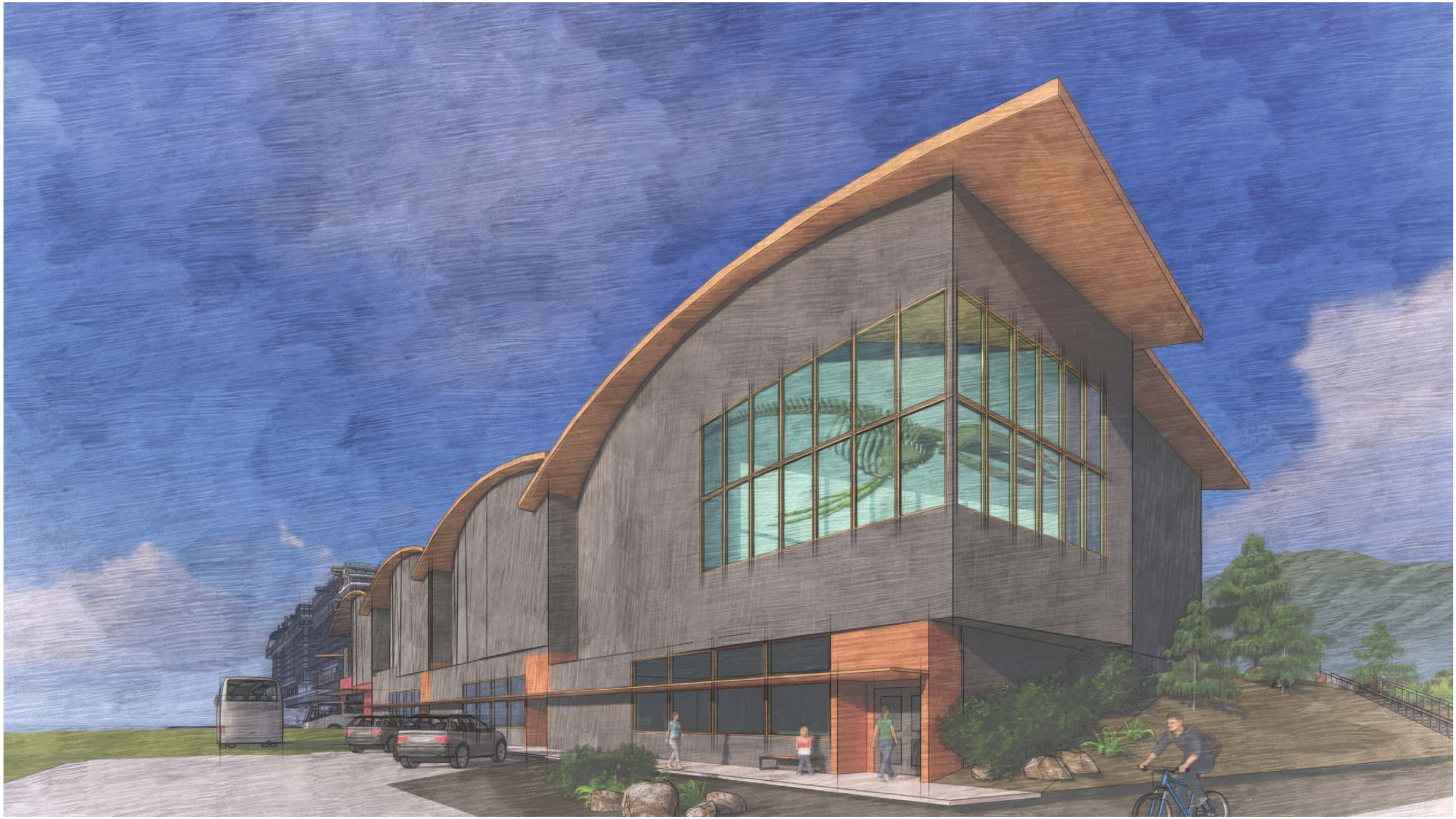
Corner of Egan and Whittier
Whittier-Level Retail

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Aak'w Landing
Huna Totem Corporation

Corner of Egan and Whittier
Future Phase Development Option - Housing

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023



Aak'w Landing
Huna Totem Corporation

Corner of Egan and Whittier
Future Phase Development Option - Cultural / Museum

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Aak'w Landing
Huna Totem Corporation

Corner of Egan and Whittier
Future Phase Development Option - Assembly / Conference

Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

Aak'w Landing

Huna Totem Corporation
Conditional Use Concept
November 22, 2022

Existing Site Plan

N

20' 40'

Jensen Yorba Wall Inc.

C2 Parcel

USCG

Whittier Street

355.75'

USCG Dock

Egan Drive

311.12'

C1 Parcel
125,337 sf
2.88 Acres

220.00'

Lot 2C USS 3566

Lot 7 USS 3566

ATS 3

99.73'

79.99'

Floating Dock

523.84'

CBJ Tidelands Property
Lot 1A

25' 20' 15'

10'

Aak'w Landing

Huna Totem Corporation
Conditional Use Concept
November 22, 2022

Seawalk Level & Site Plan

with bus parking

N
20'
40'

Jensen Yorba Wall Inc.

Whittier Street

Commercial Entry

Car Entry

USCG Dock

Egan Drive

Retail (4,700 sf)

u

slope

Circulator

Bus & Van Loading

u

Service

u

Car Parking (two levels)

Seawalk

Coach Loading

u

ramp up

slope

Retail (13,300sf)

Dock SkyBridge Above

Deck (outdoor dining)

u

u

Seawalk

CBJ Tidelands Property

Dock

Aak'w Landing

Huna Totem Corporation
Conditional Use Concept
November 22, 2022

Seawalk Level & Site Plan

with off-season parking

N
20' 40'

Jensen Yorba Wall Inc.

Whittier Street

Egan Drive

Car Entry

Car Entry

USCG Dock

Retail
(4,700 sf)

u

Service

u

slope

u

Car Parking
(two levels)

Seawalk

u

ramp up

Retail
(13,300sf)

Dock SkyBridge Above

Deck
(outdoor dining)

slope

u

u

Seawalk

CBJ Tidelands Property

Dock

Aak'w Landing

Huna Totem Corporation
Conditional Use Concept
November 22, 2022

Upper Plaza Level

N

20' 40'

Jensen Yorba Wall Inc.

Whittier Street

Egan Drive

USCG Dock

Phase 3
Use To Be Determined
(20,000 sf @ this level
20,000 sf @ level above)

Plaza

Phase 2
Add'l Retail

Phase 1
Retail - Welcome Center
(7,500sf @ this level)

Seawalk Below

Perform

Perform

Phase 2
Additional Retail
(14,000sf total @ this level
10,000 sf @ level above)

Park

Plaza

Skywalk Bridge

Deck
Below

slope

Seawalk Below

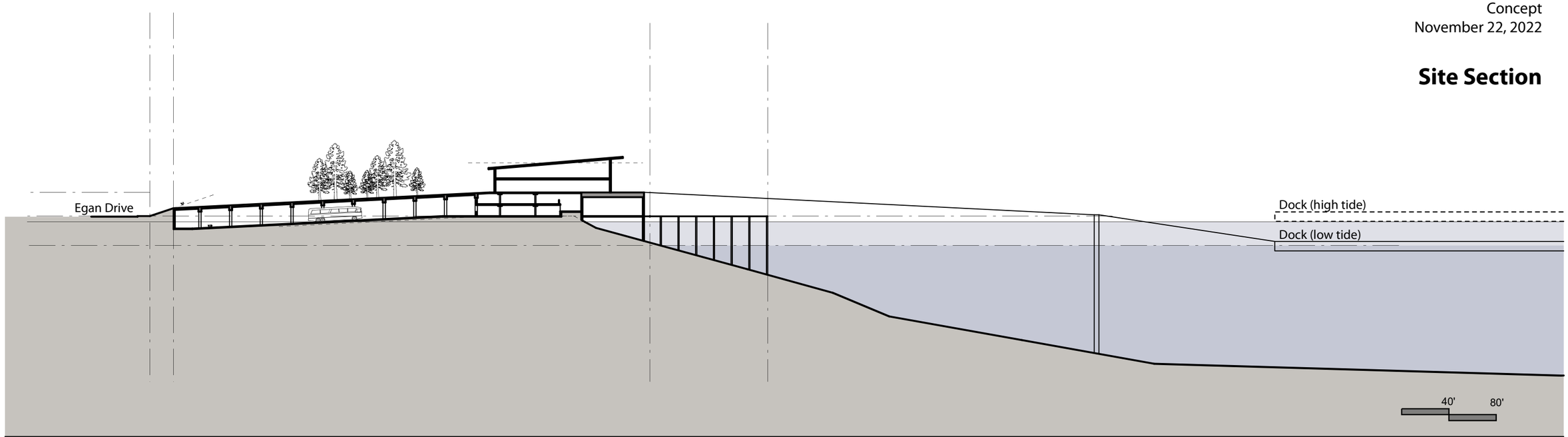
CBJ Tidelands Property

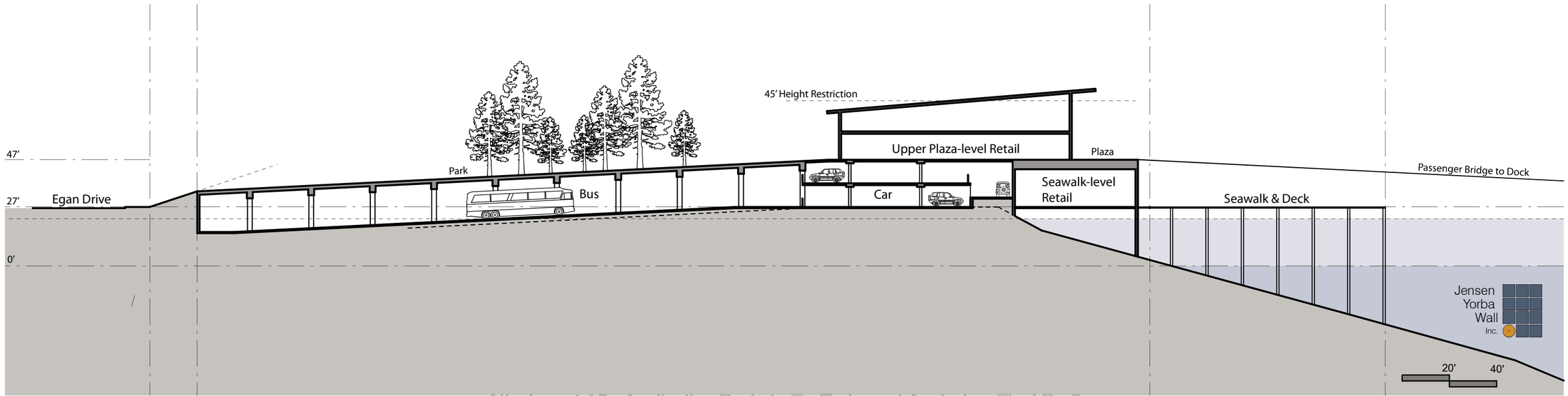
d

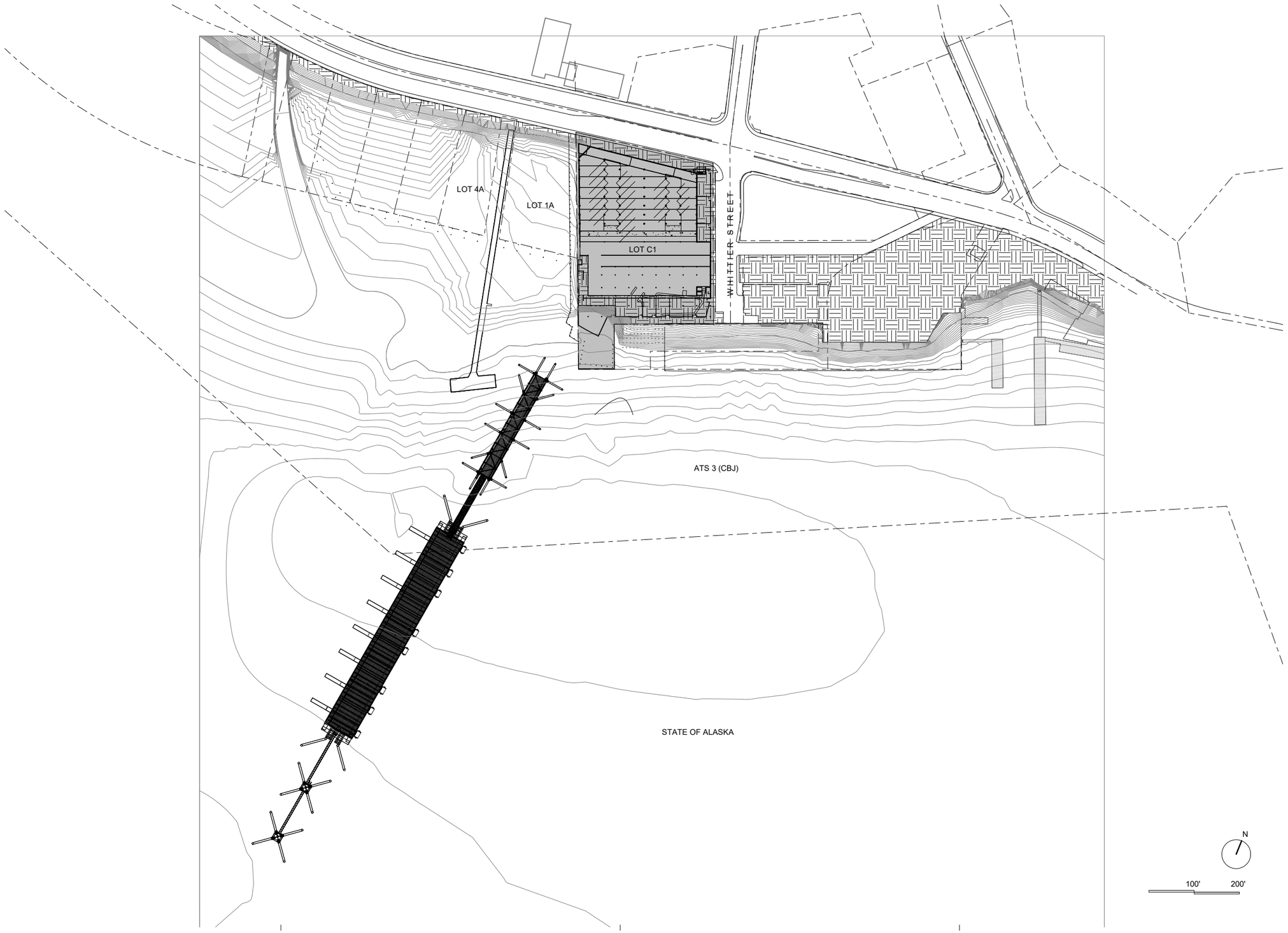
Aak'w Landing

Huna Totem Corporation Conditional Use
Concept
November 22, 2022

Site Section







Jensen Yorba Wall Inc.
522 West 10th Steet
Juneau, Alaska 99801
907.586.1070
AECC137
jensenyorbawall.com

Huna Totem Corporation

Aak'w Landing

Conceptual Design

REVISIONS

SHEET TITLE

Property Location

DATE: 1.3.2023
FILE: 21022

A000

1/3/2023 12:28:18 PM G:_Projects\21022\CAD\7 Revised Concept\21022 Aak'w Landing - R22.rvt

Jensen Yorba Wall Inc.
522 West 10th Street, Juneau, Alaska 99801 907.586.1070 jensenyorbawall.com

Aak'w Landing Estimates for Traffic Impact Analysis
4.19.2023

TRAFFIC
Busses (Coaches):

- 30 arrivals and departures daily.
- Staggered, with 10-15 coaches leaving per hour in the morning and then 10-15 arriving per hour in the afternoon.
- A maximum of 3 busses leaving at the same time.
- An average of 60 people per coach, for a total of 1800 people per day.
- All of this traffic would turn left onto Egan to go to/from the glacier and Auke Bay.

Private Operators

- 30 arrivals and departures daily
- A mix of smaller school busses and vans. 20 school busses and 10 vans.
- Staggered, with 5-10 busses and 4-6 vans per hour departing in the morning and then returning in the afternoon.
- A maximum of 2 busses and two vans leaving at the same time.
- An average of 30 people per school bus and 15 per van for a total of 750 people per day.
- 75% of this traffic would go left on Egan and 25% would go right towards downtown/Thane.

Taxis

- 30 arrivals and departures daily.
- Spread throughout the day, so 10 departures per hour in the morning, 10 arrivals per hour in the afternoon.
- An average of 5 people per taxi for a total of 150 people per day.
- Half of this traffic would go left on Egan and half would go right towards downtown/Thane.

Downtown Circulator

- 4 arrivals/departures per hour throughout the day.
- An average of 15 people per trip, so 60 per hour or around 300 per day.
- All of this traffic would turn right on Egan towards downtown.

Pedestrian Traffic

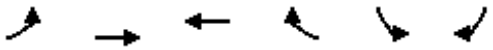
- The above vehicle totals accommodate 2,700 people per day. The remaining passengers, along with significant number (50%) of those that do a coach or bus tour will also walk off the site.
- 3,000 pedestrians walk off and back to the site each day.
- Staggered throughout the day, so an average of 600 pedestrians trips to or from the site per hour.
- 70% of the pedestrians walk right down Egan or the Seawalk towards downtown, 20% walk straight down Whittier to the State Museum, and 10% walk left along Egan towards Whale Park.

SITE USE

The site will primarily be used by cruise ship passengers when ships are docked, not by locals visiting the site in personal vehicles. The Welcome Center will be entirely used by cruise ship passengers with no private vehicles except those used by staff. Other shops and restaurants will be a mix—50% locals and 50% cruise ship passengers.

- 10,000 sf Welcome Center
- 11,000 sf Restaurants and Coffee Shops
- 22,000 sf Retail
- 20,000 sf future Retail
- 20,000 sf Museum / Cultural Center space

HCM Analysis – Existing



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	297	262	92	4	13	142
Future Volume (veh/h)	297	262	92	4	13	142
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1618	1900	1900
Adj Flow Rate, veh/h	362	320	112	5	16	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	4	13	19	0	0
Cap, veh/h	940	1230	544	24	38	
Arrive On Green	0.18	0.67	0.34	0.34	0.02	0.00
Sat Flow, veh/h	1810	1841	1622	72	1810	1610
Grp Volume(v), veh/h	362	320	0	117	16	0
Grp Sat Flow(s),veh/h/ln	1810	1841	0	1694	1810	1610
Q Serve(g_s), s	3.6	2.1	0.0	1.5	0.3	0.0
Cycle Q Clear(g_c), s	3.6	2.1	0.0	1.5	0.3	0.0
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	940	1230	0	569	38	
V/C Ratio(X)	0.38	0.26	0.00	0.21	0.42	
Avail Cap(c_a), veh/h	1247	1570	0	1995	1090	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.4	2.0	0.0	7.1	14.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.3	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.5	2.0	0.0	7.2	17.3	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		682	117		16	
Approach Delay, s/veh		3.3	7.2		17.3	
Approach LOS		A	A		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.9	14.8		5.1		24.8
Change Period (Y+Rc), s	4.5	* 4.8		4.5		* 4.8
Max Green Setting (Gmax), s	10.5	* 35		18.0		* 26
Max Q Clear Time (g_c+I1), s	5.6	3.5		2.3		4.1
Green Ext Time (p_c), s	0.1	0.1		0.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.2
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	564	4	0	211	41	0	0	1	0	0	6
Future Vol, veh/h	139	564	4	0	211	41	0	0	1	0	0	6
Conflicting Peds, #/hr	10	0	19	19	0	10	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	92	80	80	92	92	92
Heavy Vehicles, %	0	0	10	0	19	0	2	12	0	2	2	2
Mvmt Flow	174	705	5	0	264	51	0	0	1	0	0	7

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	325	0	0	729	0	0	1365	1400	730
Stage 1	-	-	-	-	-	-	1075	1075	-
Stage 2	-	-	-	-	-	-	290	325	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.42	6.62	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.62	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.108	3.3
Pot Cap-1 Maneuver	1246	-	-	884	-	-	162	134	426
Stage 1	-	-	-	-	-	-	328	284	-
Stage 2	-	-	-	-	-	-	759	632	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1246	-	-	868	-	-	137	0	417
Mov Cap-2 Maneuver	-	-	-	-	-	-	137	0	-
Stage 1	-	-	-	-	-	-	277	0	-
Stage 2	-	-	-	-	-	-	759	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.6	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	417	1246	-	-	868	-	-
HCM Lane V/C Ratio	0.003	0.139	-	-	-	-	-
HCM Control Delay (s)	13.7	8.4	-	-	0	-	-
HCM Lane LOS	B	A	-	-	A	-	-
HCM 95th %tile Q(veh)	0	0.5	-	-	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	100	87	4	40	19	3
Future Vol, veh/h	100	87	4	40	19	3
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	0	0	11	0	0
Mvmt Flow	137	119	5	55	26	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	258	0	264	199
Stage 1	-	-	-	-	199	-
Stage 2	-	-	-	-	65	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1318	-	729	847
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	963	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1315	-	725	845
Mov Cap-2 Maneuver	-	-	-	-	725	-
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	959	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	739	-	-	1315	-
HCM Lane V/C Ratio	0.041	-	-	0.004	-
HCM Control Delay (s)	10.1	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	651	8	0	199	18	1	1	0	56	4	10
Future Volume (veh/h)	95	651	8	0	199	18	1	1	0	56	4	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.98		1.00	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1707	1900	1900	1900	1900	1900	1900	1796
Adj Flow Rate, veh/h	119	814	10	0	249	22	1	1	0	70	5	12
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	2	0	0	13	0	0	0	0	0	0	7
Cap, veh/h	870	2755	34	551	1969	173	108	89	163	221	13	151
Arrive On Green	0.05	0.77	0.77	0.00	0.65	0.65	0.10	0.10	0.00	0.10	0.10	0.10
Sat Flow, veh/h	1810	3595	44	1810	3017	264	491	884	1610	1444	132	1491
Grp Volume(v), veh/h	119	402	422	0	133	138	2	0	0	75	0	12
Grp Sat Flow(s),veh/h/ln	1810	1777	1862	1810	1622	1659	1376	0	1610	1576	0	1491
Q Serve(g_s), s	1.9	6.3	6.3	0.0	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.7
Cycle Q Clear(g_c), s	1.9	6.3	6.3	0.0	2.9	2.9	3.6	0.0	0.0	3.6	0.0	0.7
Prop In Lane	1.00		0.02	1.00		0.16	0.50		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	870	1362	1427	551	1059	1083	198	0	163	235	0	151
V/C Ratio(X)	0.14	0.30	0.30	0.00	0.13	0.13	0.01	0.00	0.00	0.32	0.00	0.08
Avail Cap(c_a), veh/h	960	1362	1427	732	1059	1083	560	0	525	559	0	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.4	3.2	3.2	0.0	6.0	6.1	37.2	0.0	0.0	38.8	0.0	37.5
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.4	1.5	0.0	0.9	0.9	0.0	0.0	0.0	1.6	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.4	3.3	3.3	0.0	6.3	6.3	37.2	0.0	0.0	39.1	0.0	37.6
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	D
Approach Vol, veh/h		943			271			2			87	
Approach Delay, s/veh		3.5			6.3			37.2			38.9	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	65.7		15.8	0.0	76.2		15.8				
Change Period (Y+Rc), s	* 5.7	* 5.7		6.5	* 5.7	* 5.7		6.5				
Max Green Setting (Gmax), s	* 9.3	* 34		30.0	* 9.3	* 34		30.0				
Max Q Clear Time (g_c+I1), s	3.9	4.9		5.6	0.0	8.3		5.6				
Green Ext Time (p_c), s	0.0	0.6		0.1	0.0	1.9		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

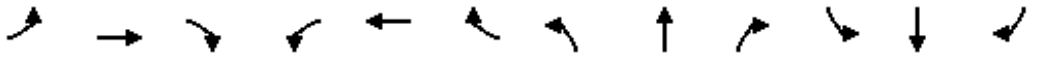
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	169	754	194	16	0	17
Future Vol, veh/h	169	754	194	16	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	92	92
Heavy Vehicles, %	4	2	15	33	2	2
Mvmt Flow	217	967	249	21	0	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	270	0	-	0	-	135
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.18	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.24	-	-	-	-	3.32
Pot Cap-1 Maneuver	1276	-	-	-	0	889
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1276	-	-	-	-	889
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1276	-	-	-	889
HCM Lane V/C Ratio	0.17	-	-	-	0.021
HCM Control Delay (s)	8.4	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.6	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	680	159	17	53	78	32	157	3	75	680	159
Future Volume (veh/h)	75	680	159	17	53	78	32	157	3	75	680	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	739	0	18	70	103	35	171	3	82	739	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.76	0.76	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0	2	2	2	2	2	2
Cap, veh/h	196	835		93	319	719	202	812	14	431	885	
Arrive On Green	0.45	0.45	0.00	0.45	0.45	0.45	0.03	0.23	0.23	0.05	0.25	0.00
Sat Flow, veh/h	1212	1870	1585	56	715	1610	1781	3573	63	1781	3554	1585
Grp Volume(v), veh/h	82	739	0	88	0	103	35	85	89	82	739	0
Grp Sat Flow(s),veh/h/ln	1212	1870	1585	770	0	1610	1781	1777	1859	1781	1777	1585
Q Serve(g_s), s	4.3	23.1	0.0	1.0	0.0	2.4	0.9	2.5	2.5	2.2	12.6	0.0
Cycle Q Clear(g_c), s	28.4	23.1	0.0	24.1	0.0	2.4	0.9	2.5	2.5	2.2	12.6	0.0
Prop In Lane	1.00		1.00	0.20		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	196	835		412	0	719	202	404	422	431	885	
V/C Ratio(X)	0.42	0.89		0.21	0.00	0.14	0.17	0.21	0.21	0.19	0.84	
Avail Cap(c_a), veh/h	196	835		412	0	719	761	818	856	589	1002	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.7	16.2	0.0	12.3	0.0	10.5	18.3	20.0	20.0	17.5	22.7	0.0
Incr Delay (d2), s/veh	0.5	10.8	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	5.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	11.3	0.0	0.7	0.0	0.8	0.3	0.9	1.0	0.8	5.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	27.0	0.0	12.4	0.0	10.5	18.4	20.1	20.1	17.6	27.7	0.0
LnGrp LOS	C	C		B	A	B	B	C	C	B	C	
Approach Vol, veh/h		821			191			209			821	
Approach Delay, s/veh		27.3			11.4			19.8			26.7	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	20.5		35.0	6.9	21.9		35.0				
Change Period (Y+Rc), s	5.1	* 6		6.5	5.1	6.0		* 6.5				
Max Green Setting (Gmax), s	8.9	* 29		28.5	21.9	18.0		* 22				
Max Q Clear Time (g_c+I1), s	4.2	4.5		30.4	2.9	14.6		26.1				
Green Ext Time (p_c), s	0.0	0.7		0.0	0.0	1.3		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		24.8
HCM 6th LOS		C

Notes

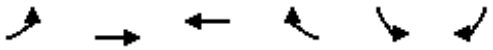
User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

PM Peak Analysis



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	177	221	224	20	32	354
Future Volume (veh/h)	177	221	224	20	32	354
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1618	1900	1900
Adj Flow Rate, veh/h	216	270	273	24	39	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	4	13	19	0	0
Cap, veh/h	700	1155	544	48	84	
Arrive On Green	0.12	0.63	0.35	0.35	0.05	0.00
Sat Flow, veh/h	1810	1841	1547	136	1810	1610
Grp Volume(v), veh/h	216	270	0	297	39	0
Grp Sat Flow(s),veh/h/ln	1810	1841	0	1683	1810	1610
Q Serve(g_s), s	2.1	1.8	0.0	4.0	0.6	0.0
Cycle Q Clear(g_c), s	2.1	1.8	0.0	4.0	0.6	0.0
Prop In Lane	1.00			0.08	1.00	1.00
Lane Grp Cap(c), veh/h	700	1155	0	592	84	
V/C Ratio(X)	0.31	0.23	0.00	0.50	0.46	
Avail Cap(c_a), veh/h	1152	1645	0	2076	1141	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.9	2.3	0.0	7.3	13.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.7	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.0	2.4	0.0	7.5	14.7	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		486	297		39	
Approach Delay, s/veh		3.5	7.5		14.7	
Approach LOS		A	A		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.9	14.8		5.8		22.7
Change Period (Y+Rc), s	4.5	* 4.8		4.5		* 4.8
Max Green Setting (Gmax), s	10.5	* 35		18.0		* 26
Max Q Clear Time (g_c+I1), s	4.1	6.0		2.6		3.8
Green Ext Time (p_c), s	0.1	0.1		0.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	410	0	0	530	67	0	0	0	0	0	141
Future Vol, veh/h	9	410	0	0	530	67	0	0	0	0	0	141
Conflicting Peds, #/hr	10	0	19	19	0	10	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	92	80	80	92	92	92
Heavy Vehicles, %	0	0	10	0	19	0	2	12	0	2	2	2
Mvmt Flow	11	513	0	0	663	84	0	0	0	0	0	153

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	757	0	0	532	0	0	1259	1311	535
Stage 1	-	-	-	-	-	-	554	554	-
Stage 2	-	-	-	-	-	-	705	757	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.42	6.62	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.62	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.108	3.3
Pot Cap-1 Maneuver	863	-	-	1046	-	-	188	152	549
Stage 1	-	-	-	-	-	-	575	498	-
Stage 2	-	-	-	-	-	-	490	401	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	863	-	-	1027	-	-	182	0	538
Mov Cap-2 Maneuver	-	-	-	-	-	-	182	0	-
Stage 1	-	-	-	-	-	-	557	0	-
Stage 2	-	-	-	-	-	-	490	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	-	863	-	-	1027	-	-
HCM Lane V/C Ratio	-	0.013	-	-	-	-	-
HCM Control Delay (s)	0	9.2	-	-	0	-	-
HCM Lane LOS	A	A	-	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-

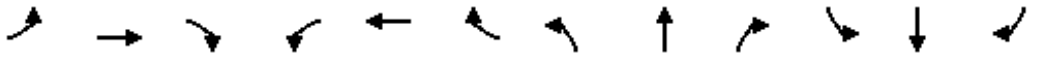
Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	19	96	22	171	59	4
Future Vol, veh/h	19	96	22	171	59	4
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	0	0	11	0	0
Mvmt Flow	26	132	30	234	81	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	160	0	388	94
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	294	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1432	-	619	968
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	761	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1429	-	603	966
Mov Cap-2 Maneuver	-	-	-	-	603	-
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	743	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	618	-	-	1429	-
HCM Lane V/C Ratio	0.14	-	-	0.021	-
HCM Control Delay (s)	11.8	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	308	1	1	629	41	7	3	3	108	1	74
Future Volume (veh/h)	20	308	1	1	629	41	7	3	3	108	1	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1707	1900	1900	1900	1900	1900	1900	1796
Adj Flow Rate, veh/h	25	385	1	1	786	51	9	4	4	135	1	92
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	2	0	0	13	0	0	0	0	0	0	7
Cap, veh/h	303	1738	5	502	1403	91	66	18	522	78	0	493
Arrive On Green	0.03	0.48	0.48	0.00	0.45	0.45	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	3636	9	1810	3092	201	0	56	1600	0	1	1512
Grp Volume(v), veh/h	25	188	198	1	412	425	13	0	4	136	0	92
Grp Sat Flow(s),veh/h/ln	1810	1777	1869	1810	1622	1670	56	0	1600	1	0	1512
Q Serve(g_s), s	0.7	5.7	5.7	0.0	17.1	17.1	0.0	0.0	0.2	0.0	0.0	4.0
Cycle Q Clear(g_c), s	0.7	5.7	5.7	0.0	17.1	17.1	30.0	0.0	0.2	30.0	0.0	4.0
Prop In Lane	1.00		0.01	1.00		0.12	0.69		1.00	0.99		1.00
Lane Grp Cap(c), veh/h	303	849	893	502	736	758	85	0	522	78	0	493
V/C Ratio(X)	0.08	0.22	0.22	0.00	0.56	0.56	0.15	0.00	0.01	1.74	0.00	0.19
Avail Cap(c_a), veh/h	440	849	893	682	736	758	85	0	522	78	0	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	14.0	14.0	12.7	18.4	18.4	25.6	0.0	20.9	45.9	0.0	22.2
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	3.1	3.0	0.3	0.0	0.0	379.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.1	2.2	0.0	6.5	6.7	0.2	0.0	0.1	10.0	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	14.1	14.1	12.7	21.5	21.4	26.0	0.0	20.9	425.1	0.0	22.3
LnGrp LOS	B	B	B	B	C	C	C	A	C	F	A	C
Approach Vol, veh/h		411			838			17			228	
Approach Delay, s/veh		14.1			21.4			24.8			262.6	
Approach LOS		B			C			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	47.4		36.5	5.8	49.7		36.5				
Change Period (Y+Rc), s	* 5.7	* 5.7		6.5	* 5.7	* 5.7		6.5				
Max Green Setting (Gmax), s	* 9.3	* 34		30.0	* 9.3	* 34		30.0				
Max Q Clear Time (g_c+I1), s	2.7	19.1		32.0	2.0	7.7		32.0				
Green Ext Time (p_c), s	0.0	1.9		0.0	0.0	0.8		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	56.3	
HCM 6th LOS	E	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

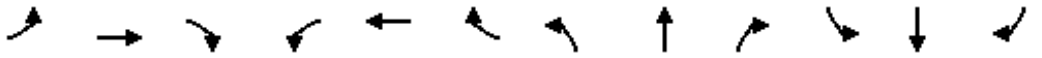
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	109	329	676	34	0	35
Future Vol, veh/h	109	329	676	34	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	92	92
Heavy Vehicles, %	4	2	15	33	2	2
Mvmt Flow	140	422	867	44	0	38

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	911	0	-	0	-	456
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.18	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.24	-	-	-	-	3.32
Pot Cap-1 Maneuver	731	-	-	-	0	551
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	731	-	-	-	-	551
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	2.8	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	731	-	-	-	551
HCM Lane V/C Ratio	0.191	-	-	-	0.069
HCM Control Delay (s)	11.1	-	-	-	12
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	53	131	18	213	234	175	549	9	40	288	307
Future Volume (veh/h)	269	53	131	18	213	234	175	549	9	40	288	307
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	333	0	0	20	280	308	190	597	10	43	313	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.76	0.76	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0	2	2	2	2	2	2
Cap, veh/h	677	0		91	667	586	458	960	16	298	671	
Arrive On Green	0.36	0.00	0.00	0.36	0.36	0.36	0.11	0.27	0.27	0.04	0.19	0.00
Sat Flow, veh/h	1656	0	1585	51	1833	1610	1781	3577	60	1781	3554	1585
Grp Volume(v), veh/h	333	0	0	300	0	308	190	296	311	43	313	0
Grp Sat Flow(s),veh/h/ln	828	0	1585	1884	0	1610	1781	1777	1860	1781	1777	1585
Q Serve(g_s), s	10.1	0.0	0.0	0.0	0.0	8.0	4.4	7.8	7.8	0.9	4.2	0.0
Cycle Q Clear(g_c), s	16.4	0.0	0.0	6.3	0.0	8.0	4.4	7.8	7.8	0.9	4.2	0.0
Prop In Lane	1.00		1.00	0.07		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	677	0		758	0	586	458	477	499	298	671	
V/C Ratio(X)	0.49	0.00		0.40	0.00	0.53	0.41	0.62	0.62	0.14	0.47	
Avail Cap(c_a), veh/h	965	0		854	0	669	990	986	1032	534	1208	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.9	0.0	0.0	12.7	0.0	13.2	14.6	17.0	17.0	13.8	19.1	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.3	0.2	0.5	0.5	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	2.4	0.0	2.6	1.5	2.7	2.8	0.3	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	0.0	0.0	12.8	0.0	13.5	14.8	17.5	17.5	13.8	19.3	0.0
LnGrp LOS	B	A		B	A	B	B	B	B	B	B	
Approach Vol, veh/h		333			608			797			356	
Approach Delay, s/veh		19.1			13.2			16.9			18.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	20.2		25.8	11.2	16.0		25.8				
Change Period (Y+Rc), s	5.1	* 6		6.5	5.1	6.0		* 6.5				
Max Green Setting (Gmax), s	8.9	* 29		28.5	21.9	18.0		* 22				
Max Q Clear Time (g_c+I1), s	2.9	9.8		18.4	6.4	6.2		10.0				
Green Ext Time (p_c), s	0.0	2.6		0.9	0.1	1.1		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

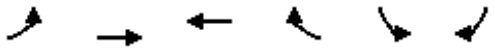
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM Analysis – No-Build

Attachment A5 - Application Packet - Traffic Impact Analysis – Final Draft



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	380	335	120	10	20	185
Future Volume (veh/h)	380	335	120	10	20	185
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1618	1900	1900
Adj Flow Rate, veh/h	463	409	146	12	24	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	4	13	19	0	0
Cap, veh/h	932	1248	490	40	54	
Arrive On Green	0.22	0.68	0.31	0.31	0.03	0.00
Sat Flow, veh/h	1810	1841	1556	128	1810	1610
Grp Volume(v), veh/h	463	409	0	158	24	0
Grp Sat Flow(s),veh/h/ln	1810	1841	0	1684	1810	1610
Q Serve(g_s), s	5.1	2.9	0.0	2.3	0.4	0.0
Cycle Q Clear(g_c), s	5.1	2.9	0.0	2.3	0.4	0.0
Prop In Lane	1.00			0.08	1.00	1.00
Lane Grp Cap(c), veh/h	932	1248	0	530	54	
V/C Ratio(X)	0.50	0.33	0.00	0.30	0.44	
Avail Cap(c_a), veh/h	1126	1473	0	1860	1022	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.7	2.1	0.0	8.3	15.2	0.0
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.1	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.5	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.9	2.2	0.0	8.4	17.3	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		872	158		24	
Approach Delay, s/veh		3.6	8.4		17.3	
Approach LOS		A	A		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	11.6	14.8		5.5		26.4
Change Period (Y+Rc), s	4.5	* 4.8		4.5		* 4.8
Max Green Setting (Gmax), s	10.5	* 35		18.0		* 26
Max Q Clear Time (g_c+I1), s	7.1	4.3		2.4		4.9
Green Ext Time (p_c), s	0.1	0.1		0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	4.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	178	715	9	0	270	55	0	0	5	0	0	10
Future Vol, veh/h	178	715	9	0	270	55	0	0	5	0	0	10
Conflicting Peds, #/hr	10	0	19	19	0	10	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	92	80	80	92	92	92
Heavy Vehicles, %	0	0	10	0	19	0	2	12	0	2	2	2
Mvmt Flow	223	894	11	0	338	69	0	0	6	0	0	11

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	417	0	0	924	0	0	1738	1782	922
Stage 1	-	-	-	-	-	-	1365	1365	-
Stage 2	-	-	-	-	-	-	373	417	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.42	6.62	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.62	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.108	3.3
Pot Cap-1 Maneuver	1153	-	-	748	-	-	96	77	330
Stage 1	-	-	-	-	-	-	237	205	-
Stage 2	-	-	-	-	-	-	696	574	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1153	-	-	734	-	-	76	0	323
Mov Cap-2 Maneuver	-	-	-	-	-	-	76	0	-
Stage 1	-	-	-	-	-	-	188	0	-
Stage 2	-	-	-	-	-	-	696	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	16.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	323	1153	-	-	734	-	-
HCM Lane V/C Ratio	0.019	0.193	-	-	-	-	-
HCM Control Delay (s)	16.4	8.9	-	-	0	-	-
HCM Lane LOS	C	A	-	-	A	-	-
HCM 95th %tile Q(veh)	0.1	0.7	-	-	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	130	115	10	55	25	5
Future Vol, veh/h	130	115	10	55	25	5
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	0	0	11	0	0
Mvmt Flow	178	158	14	75	34	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	338	0	362	259
Stage 1	-	-	-	-	259	-
Stage 2	-	-	-	-	103	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1232	-	641	785
Stage 1	-	-	-	-	789	-
Stage 2	-	-	-	-	926	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1230	-	632	784
Mov Cap-2 Maneuver	-	-	-	-	632	-
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	915	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	653	-	-	1230	-
HCM Lane V/C Ratio	0.063	-	-	0.011	-
HCM Control Delay (s)	10.9	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	825	15	0	250	30	5	5	0	75	10	20
Future Volume (veh/h)	125	825	15	0	250	30	5	5	0	75	10	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1707	1900	1900	1900	1900	1900	1900	1796
Adj Flow Rate, veh/h	156	1031	19	0	312	38	6	6	0	94	12	25
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	2	0	0	13	0	0	0	0	0	0	7
Cap, veh/h	776	2627	48	423	1808	218	107	89	212	235	26	197
Arrive On Green	0.05	0.74	0.74	0.00	0.62	0.62	0.13	0.13	0.00	0.13	0.13	0.13
Sat Flow, veh/h	1810	3569	66	1810	2913	352	366	676	1610	1230	197	1498
Grp Volume(v), veh/h	156	513	537	0	173	177	12	0	0	106	0	25
Grp Sat Flow(s),veh/h/ln	1810	1777	1858	1810	1622	1643	1043	0	1610	1427	0	1498
Q Serve(g_s), s	2.8	9.9	9.9	0.0	4.2	4.2	0.0	0.0	0.0	0.0	0.0	1.4
Cycle Q Clear(g_c), s	2.8	9.9	9.9	0.0	4.2	4.2	6.6	0.0	0.0	6.5	0.0	1.4
Prop In Lane	1.00		0.04	1.00		0.21	0.50		1.00	0.89		1.00
Lane Grp Cap(c), veh/h	776	1308	1368	423	1007	1020	196	0	212	261	0	197
V/C Ratio(X)	0.20	0.39	0.39	0.00	0.17	0.17	0.06	0.00	0.00	0.41	0.00	0.13
Avail Cap(c_a), veh/h	862	1308	1368	604	1007	1020	507	0	525	545	0	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.5	4.5	4.5	0.0	7.4	7.4	35.0	0.0	0.0	37.5	0.0	35.3
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.4	0.4	0.0	0.0	0.0	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.5	2.6	0.0	1.3	1.4	0.2	0.0	0.0	2.3	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.5	4.7	4.6	0.0	7.8	7.8	35.1	0.0	0.0	37.9	0.0	35.4
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	D
Approach Vol, veh/h		1206			350			12			131	
Approach Delay, s/veh		4.8			7.8			35.1			37.4	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	62.8		18.6	0.0	73.4		18.6				
Change Period (Y+Rc), s	* 5.7	* 5.7		6.5	* 5.7	* 5.7		6.5				
Max Green Setting (Gmax), s	* 9.3	* 34		30.0	* 9.3	* 34		30.0				
Max Q Clear Time (g_c+I1), s	4.8	6.2		8.5	0.0	11.9		8.6				
Green Ext Time (p_c), s	0.0	0.8		0.2	0.0	2.6		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

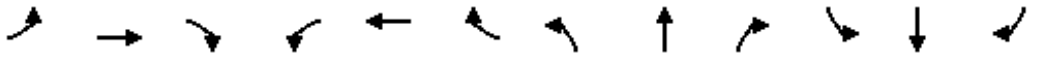
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	215	965	250	25	0	25
Future Vol, veh/h	215	965	250	25	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	92	92
Heavy Vehicles, %	4	2	15	33	2	2
Mvmt Flow	276	1237	321	32	0	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	353	0	-	0	-	177
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.18	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.24	-	-	-	-	3.32
Pot Cap-1 Maneuver	1188	-	-	-	0	835
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1188	-	-	-	-	835
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1188	-	-	-	835
HCM Lane V/C Ratio	0.232	-	-	-	0.033
HCM Control Delay (s)	8.9	-	-	-	9.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.9	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	120	370	25	70	100	45	200	5	100	865	205
Future Volume (veh/h)	420	120	370	25	70	100	45	200	5	100	865	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	294	359	0	27	92	132	49	217	5	109	940	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.76	0.76	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0	2	2	2	2	2	2
Cap, veh/h	432	783		170	540	674	183	875	20	455	979	
Arrive On Green	0.42	0.42	0.00	0.42	0.42	0.42	0.04	0.25	0.25	0.07	0.28	0.00
Sat Flow, veh/h	1157	1870	1585	243	1288	1610	1781	3551	82	1781	3554	1585
Grp Volume(v), veh/h	294	359	0	119	0	132	49	108	114	109	940	0
Grp Sat Flow(s),veh/h/ln	1157	1870	1585	1532	0	1610	1781	1777	1856	1781	1777	1585
Q Serve(g_s), s	16.1	9.0	0.0	0.2	0.0	3.4	1.3	3.2	3.2	2.9	17.0	0.0
Cycle Q Clear(g_c), s	25.2	9.0	0.0	9.2	0.0	3.4	1.3	3.2	3.2	2.9	17.0	0.0
Prop In Lane	1.00		1.00	0.23		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	432	783		709	0	674	183	438	457	455	979	
V/C Ratio(X)	0.68	0.46		0.17	0.00	0.20	0.27	0.25	0.25	0.24	0.96	
Avail Cap(c_a), veh/h	453	816		709	0	674	716	800	835	582	979	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.8	13.6	0.0	11.8	0.0	12.0	18.3	19.7	19.8	16.6	23.3	0.0
Incr Delay (d2), s/veh	3.1	0.2	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.1	19.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	3.5	0.0	1.0	0.0	1.1	0.5	1.2	1.3	1.1	8.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	13.8	0.0	11.9	0.0	12.1	18.6	19.9	19.9	16.7	42.8	0.0
LnGrp LOS	C	B		B	A	B	B	B	B	B	D	
Approach Vol, veh/h		653			251			271			1049	
Approach Delay, s/veh		19.2			12.0			19.6			40.1	
Approach LOS		B			B			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	22.1		33.9	7.5	24.0		33.9				
Change Period (Y+Rc), s	5.1	* 6		6.5	5.1	6.0		* 6.5				
Max Green Setting (Gmax), s	8.9	* 29		28.5	21.9	18.0		* 22				
Max Q Clear Time (g_c+I1), s	4.9	5.2		27.2	3.3	19.0		11.2				
Green Ext Time (p_c), s	0.0	0.9		0.1	0.0	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		28.3
HCM 6th LOS		C

Notes

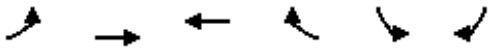
User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

PM Peak Analysis



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	225	285	285	30	45	450
Future Volume (veh/h)	225	285	285	30	45	450
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1618	1900	1900
Adj Flow Rate, veh/h	274	348	348	37	55	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	4	13	19	0	0
Cap, veh/h	641	1158	506	54	111	
Arrive On Green	0.15	0.63	0.33	0.33	0.06	0.00
Sat Flow, veh/h	1810	1841	1517	161	1810	1610
Grp Volume(v), veh/h	274	348	0	385	55	0
Grp Sat Flow(s),veh/h/ln	1810	1841	0	1678	1810	1610
Q Serve(g_s), s	2.8	2.6	0.0	6.0	0.9	0.0
Cycle Q Clear(g_c), s	2.8	2.6	0.0	6.0	0.9	0.0
Prop In Lane	1.00			0.10	1.00	1.00
Lane Grp Cap(c), veh/h	641	1158	0	560	111	
V/C Ratio(X)	0.43	0.30	0.00	0.69	0.50	
Avail Cap(c_a), veh/h	1009	1562	0	1965	1084	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.6	2.5	0.0	8.7	13.7	0.0
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.6	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	1.2	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.8	2.6	0.0	9.2	14.9	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		622	385		55	
Approach Delay, s/veh		4.0	9.2		14.9	
Approach LOS		A	A		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.9	14.8		6.3		23.7
Change Period (Y+Rc), s	4.5	* 4.8		4.5		* 4.8
Max Green Setting (Gmax), s	10.5	* 35		18.0		* 26
Max Q Clear Time (g_c+I1), s	4.8	8.0		2.9		4.6
Green Ext Time (p_c), s	0.1	0.2		0.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	520	0	0	670	85	0	0	0	0	0	185
Future Vol, veh/h	15	520	0	0	670	85	0	0	0	0	0	185
Conflicting Peds, #/hr	10	0	19	19	0	10	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	92	80	80	92	92	92
Heavy Vehicles, %	0	0	10	0	19	0	2	12	0	2	2	2
Mvmt Flow	19	650	0	0	838	106	0	0	0	0	0	201

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	954	0	0	669	0	0	1598	1661	672
Stage 1	-	-	-	-	-	-	707	707	-
Stage 2	-	-	-	-	-	-	891	954	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.42	6.62	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.62	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.108	3.3
Pot Cap-1 Maneuver	729	-	-	931	-	-	117	92	459
Stage 1	-	-	-	-	-	-	489	423	-
Stage 2	-	-	-	-	-	-	401	324	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	729	-	-	914	-	-	112	0	449
Mov Cap-2 Maneuver	-	-	-	-	-	-	112	0	-
Stage 1	-	-	-	-	-	-	467	0	-
Stage 2	-	-	-	-	-	-	401	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	-	729	-	-	914	-	-
HCM Lane V/C Ratio	-	0.026	-	-	-	-	-
HCM Control Delay (s)	0	10.1	-	-	0	-	-
HCM Lane LOS	A	B	-	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	125	30	220	75	10
Future Vol, veh/h	25	125	30	220	75	10
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	0	0	11	0	0
Mvmt Flow	34	171	41	301	103	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	207	0	505	122
Stage 1	-	-	-	-	122	-
Stage 2	-	-	-	-	383	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1376	-	530	935
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1373	-	510	933
Mov Cap-2 Maneuver	-	-	-	-	510	-
Stage 1	-	-	-	-	906	-
Stage 2	-	-	-	-	669	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	539	-	-	1373	-
HCM Lane V/C Ratio	0.216	-	-	0.03	-
HCM Control Delay (s)	13.5	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	390	5	5	794	56	10	5	5	140	5	100
Future Volume (veh/h)	29	390	5	5	794	56	10	5	5	140	5	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1707	1900	1900	1900	1900	1900	1900	1796
Adj Flow Rate, veh/h	36	488	6	6	992	70	12	6	6	175	6	125
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	2	0	0	13	0	0	0	0	0	0	7
Cap, veh/h	236	1695	21	448	1372	97	65	21	522	77	1	493
Arrive On Green	0.03	0.47	0.47	0.01	0.45	0.45	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	3595	44	1810	3073	217	0	63	1600	0	4	1512
Grp Volume(v), veh/h	36	241	253	6	524	538	18	0	6	181	0	125
Grp Sat Flow(s),veh/h/ln	1810	1777	1862	1810	1622	1667	63	0	1600	4	0	1512
Q Serve(g_s), s	1.0	7.6	7.6	0.2	24.3	24.3	0.0	0.0	0.2	0.0	0.0	5.6
Cycle Q Clear(g_c), s	1.0	7.6	7.6	0.2	24.3	24.3	30.0	0.0	0.2	30.0	0.0	5.6
Prop In Lane	1.00		0.02	1.00		0.13	0.67		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	236	838	878	448	724	745	86	0	522	78	0	493
V/C Ratio(X)	0.15	0.29	0.29	0.01	0.72	0.72	0.21	0.00	0.01	2.31	0.00	0.25
Avail Cap(c_a), veh/h	360	838	878	617	724	745	86	0	522	78	0	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.2	14.9	14.9	12.8	20.8	20.8	25.7	0.0	21.0	45.5	0.0	22.8
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.0	6.2	6.0	0.4	0.0	0.0	627.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.9	3.0	0.1	9.6	9.8	0.3	0.0	0.1	15.4	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	15.0	15.0	12.8	27.0	26.8	26.1	0.0	21.0	672.7	0.0	22.9
LnGrp LOS	B	B	B	B	C	C	C	A	C	F	A	C
Approach Vol, veh/h		530			1068			24			306	
Approach Delay, s/veh		15.1			26.8			24.8			407.2	
Approach LOS		B			C			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	46.8		36.5	6.4	49.1		36.5				
Change Period (Y+Rc), s	* 5.7	* 5.7		6.5	* 5.7	* 5.7		6.5				
Max Green Setting (Gmax), s	* 9.3	* 34		30.0	* 9.3	* 34		30.0				
Max Q Clear Time (g_c+I1), s	3.0	26.3		32.0	2.2	9.6		32.0				
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	1.1		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	83.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

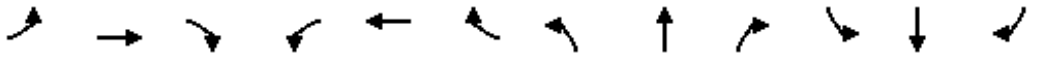
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	140	424	859	45	0	45
Future Vol, veh/h	140	424	859	45	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	92	92
Heavy Vehicles, %	4	2	15	33	2	2
Mvmt Flow	179	544	1101	58	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1159	0	-	0	-	580
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.18	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.24	-	-	-	-	3.32
Pot Cap-1 Maneuver	587	-	-	-	0	458
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	587	-	-	-	-	458
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	587	-	-	-	458
HCM Lane V/C Ratio	0.306	-	-	-	0.107
HCM Control Delay (s)	13.8	-	-	-	13.8
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	1.3	-	-	-	0.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	345	70	170	25	275	300	225	700	15	55	370	390
Future Volume (veh/h)	345	70	170	25	275	300	225	700	15	55	370	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	429	0	0	27	362	395	245	761	16	60	402	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.76	0.76	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0	2	2	2	2	2	2
Cap, veh/h	605	0		84	771	683	423	974	20	232	620	
Arrive On Green	0.42	0.00	0.00	0.42	0.42	0.42	0.14	0.27	0.27	0.04	0.17	0.00
Sat Flow, veh/h	1415	0	1585	63	1817	1610	1781	3559	75	1781	3554	1585
Grp Volume(v), veh/h	429	0	0	389	0	395	245	380	397	60	402	0
Grp Sat Flow(s),veh/h/ln	708	0	1585	1880	0	1610	1781	1777	1857	1781	1777	1585
Q Serve(g_s), s	18.5	0.0	0.0	0.0	0.0	12.6	7.4	13.3	13.3	1.6	7.1	0.0
Cycle Q Clear(g_c), s	28.5	0.0	0.0	10.0	0.0	12.6	7.4	13.3	13.3	1.6	7.1	0.0
Prop In Lane	1.00		1.00	0.07		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	605	0		855	0	683	423	486	508	232	620	
V/C Ratio(X)	0.71	0.00		0.46	0.00	0.58	0.58	0.78	0.78	0.26	0.65	
Avail Cap(c_a), veh/h	605	0		855	0	683	756	777	813	396	952	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.2	0.0	0.0	14.0	0.0	14.8	18.8	22.5	22.5	17.8	25.8	0.0
Incr Delay (d2), s/veh	3.3	0.0	0.0	0.1	0.0	0.8	0.5	1.0	1.0	0.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.0	4.0	0.0	4.4	2.7	5.1	5.3	0.6	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	0.0	0.0	14.1	0.0	15.6	19.3	23.6	23.5	18.0	26.2	0.0
LnGrp LOS	C	A		B	A	B	B	C	C	B	C	
Approach Vol, veh/h		429			784			1022			462	
Approach Delay, s/veh		28.5			14.9			22.5			25.2	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	24.4		35.0	14.5	17.7		35.0				
Change Period (Y+Rc), s	5.1	* 6		6.5	5.1	6.0		* 6.5				
Max Green Setting (Gmax), s	8.9	* 29		28.5	21.9	18.0		* 22				
Max Q Clear Time (g_c+I1), s	3.6	15.3		30.5	9.4	9.1		14.6				
Green Ext Time (p_c), s	0.0	3.1		0.0	0.1	1.3		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		21.7
HCM 6th LOS		C

Notes

User approved pedestrian interval to be less than phase max green.

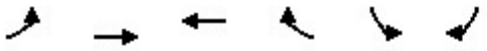
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM Analysis – Build

Attachment A5 - Application Packet - Traffic Impact Analysis – Final Draft



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	409	364	149	10	20	214
Future Volume (veh/h)	409	364	149	10	20	214
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1618	1900	1900
Adj Flow Rate, veh/h	499	444	182	12	24	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	4	13	19	0	0
Cap, veh/h	913	1258	490	32	54	
Arrive On Green	0.24	0.68	0.31	0.31	0.03	0.00
Sat Flow, veh/h	1810	1841	1584	104	1810	1610
Grp Volume(v), veh/h	499	444	0	194	24	0
Grp Sat Flow(s),veh/h/ln	1810	1841	0	1688	1810	1610
Q Serve(g_s), s	5.6	3.3	0.0	2.9	0.4	0.0
Cycle Q Clear(g_c), s	5.6	3.3	0.0	2.9	0.4	0.0
Prop In Lane	1.00			0.06	1.00	1.00
Lane Grp Cap(c), veh/h	913	1258	0	522	54	
V/C Ratio(X)	0.55	0.35	0.00	0.37	0.44	
Avail Cap(c_a), veh/h	1071	1445	0	1830	1003	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.9	2.1	0.0	8.8	15.5	0.0
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.2	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.7	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.1	2.2	0.0	8.9	17.6	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		943	194		24	
Approach Delay, s/veh		3.7	8.9		17.6	
Approach LOS		A	A		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.2	14.8		5.5		27.0
Change Period (Y+Rc), s	4.5	* 4.8		4.5		* 4.8
Max Green Setting (Gmax), s	10.5	* 35		18.0		* 26
Max Q Clear Time (g_c+I1), s	7.6	4.9		2.4		5.3
Green Ext Time (p_c), s	0.1	0.1		0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	4.9
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	178	773	9	0	328	55	0	0	5	0	0	10
Future Vol, veh/h	178	773	9	0	328	55	0	0	5	0	0	10
Conflicting Peds, #/hr	10	0	19	19	0	10	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	92	80	80	92	92	92
Heavy Vehicles, %	0	0	10	0	19	0	2	12	0	2	2	2
Mvmt Flow	223	966	11	0	410	69	0	0	6	0	0	11

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	489	0	0	996	0	0	1882	1926	994
Stage 1	-	-	-	-	-	-	1437	1437	-
Stage 2	-	-	-	-	-	-	445	489	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.42	6.62	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.62	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.108	3.3
Pot Cap-1 Maneuver	1085	-	-	703	-	-	78	63	300
Stage 1	-	-	-	-	-	-	219	189	-
Stage 2	-	-	-	-	-	-	646	533	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1085	-	-	690	-	-	61	0	294
Mov Cap-2 Maneuver	-	-	-	-	-	-	61	0	-
Stage 1	-	-	-	-	-	-	171	0	-
Stage 2	-	-	-	-	-	-	646	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	17.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	294	1085	-	-	690	-	-
HCM Lane V/C Ratio	0.021	0.205	-	-	-	-	-
HCM Control Delay (s)	17.5	9.2	-	-	0	-	-
HCM Lane LOS	C	A	-	-	A	-	-
HCM 95th %tile Q(veh)	0.1	0.8	-	-	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	130	125	19	55	35	14
Future Vol, veh/h	130	125	19	55	35	14
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	0	0	11	0	0
Mvmt Flow	178	171	26	75	48	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	351	0	393	266
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	127	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1219	-	615	778
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	904	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1217	-	600	777
Mov Cap-2 Maneuver	-	-	-	-	600	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	884	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	642	-	-	1217	-
HCM Lane V/C Ratio	0.105	-	-	0.021	-
HCM Control Delay (s)	11.3	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	827	130	58	250	30	122	24	58	75	29	20
Future Volume (veh/h)	125	827	130	58	250	30	122	24	58	75	29	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1707	1900	1900	1900	1900	1900	1900	1796
Adj Flow Rate, veh/h	156	1034	162	72	312	38	152	30	72	94	36	25
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	2	0	0	13	0	0	0	0	0	0	7
Cap, veh/h	558	1334	209	231	1193	144	72	8	522	67	16	493
Arrive On Green	0.07	0.43	0.43	0.05	0.41	0.41	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	3077	481	1810	2913	352	0	25	1600	0	49	1512
Grp Volume(v), veh/h	156	596	600	72	173	177	182	0	72	130	0	25
Grp Sat Flow(s),veh/h/ln	1810	1777	1782	1810	1622	1643	25	0	1600	49	0	1512
Q Serve(g_s), s	4.5	26.3	26.4	2.0	6.5	6.6	0.0	0.0	2.9	0.0	0.0	1.0
Cycle Q Clear(g_c), s	4.5	26.3	26.4	2.0	6.5	6.6	30.0	0.0	2.9	30.0	0.0	1.0
Prop In Lane	1.00		0.27	1.00		0.21	0.84		1.00	0.72		1.00
Lane Grp Cap(c), veh/h	558	770	773	231	664	673	80	0	522	83	0	493
V/C Ratio(X)	0.28	0.77	0.78	0.31	0.26	0.26	2.28	0.00	0.14	1.56	0.00	0.05
Avail Cap(c_a), veh/h	615	770	773	331	664	673	80	0	522	83	0	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	22.2	22.2	17.5	17.9	18.0	43.0	0.0	21.9	40.4	0.0	21.2
Incr Delay (d2), s/veh	0.1	4.7	4.8	0.3	0.9	1.0	611.9	0.0	0.0	302.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	11.0	11.1	0.8	2.4	2.5	15.4	0.0	1.1	8.9	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	27.0	27.0	17.7	18.9	18.9	654.9	0.0	21.9	343.3	0.0	21.3
LnGrp LOS	B	C	C	B	B	B	F	A	C	F	A	C
Approach Vol, veh/h		1352			422			254			155	
Approach Delay, s/veh		25.5			18.7			475.4			291.4	
Approach LOS		C			B			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	43.4		36.5	9.9	45.6		36.5				
Change Period (Y+Rc), s	* 5.7	* 5.7		6.5	* 5.7	* 5.7		6.5				
Max Green Setting (Gmax), s	* 9.3	* 34		30.0	* 9.3	* 34		30.0				
Max Q Clear Time (g_c+I1), s	6.5	8.6		32.0	4.0	28.4		32.0				
Green Ext Time (p_c), s	0.0	0.8		0.0	0.0	1.9		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	95.4	
HCM 6th LOS	F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	215	1082	367	25	0	25
Future Vol, veh/h	215	1082	367	25	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	92	92
Heavy Vehicles, %	4	2	15	33	2	2
Mvmt Flow	276	1387	471	32	0	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	503	0	-	0	-	252
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.18	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.24	-	-	-	-	3.32
Pot Cap-1 Maneuver	1044	-	-	-	0	748
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1044	-	-	-	-	748
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1044	-	-	-	748
HCM Lane V/C Ratio	0.264	-	-	-	0.036
HCM Control Delay (s)	9.7	-	-	-	10
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	1.1	-	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	120	394	33	70	100	74	278	15	100	931	205
Future Volume (veh/h)	420	120	394	33	70	100	74	278	15	100	931	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	294	359	0	36	92	132	80	302	16	109	1012	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.76	0.76	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0	2	2	2	2	2	2
Cap, veh/h	428	786		191	456	677	194	866	46	414	955	
Arrive On Green	0.42	0.42	0.00	0.42	0.42	0.42	0.05	0.25	0.25	0.06	0.27	0.00
Sat Flow, veh/h	1157	1870	1585	291	1086	1610	1781	3433	181	1781	3554	1585
Grp Volume(v), veh/h	294	359	0	128	0	132	80	156	162	109	1012	0
Grp Sat Flow(s),veh/h/ln	1157	1870	1585	1378	0	1610	1781	1777	1838	1781	1777	1585
Q Serve(g_s), s	16.5	9.2	0.0	0.4	0.0	3.5	2.2	4.8	4.9	3.0	18.0	0.0
Cycle Q Clear(g_c), s	26.1	9.2	0.0	9.6	0.0	3.5	2.2	4.8	4.9	3.0	18.0	0.0
Prop In Lane	1.00		1.00	0.28		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	428	786		648	0	677	194	448	464	414	955	
V/C Ratio(X)	0.69	0.46		0.20	0.00	0.20	0.41	0.35	0.35	0.26	1.06	
Avail Cap(c_a), veh/h	434	796		648	0	677	690	780	807	535	955	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.5	13.9	0.0	12.2	0.0	12.3	18.8	20.5	20.5	16.8	24.5	0.0
Incr Delay (d2), s/veh	3.6	0.2	0.0	0.1	0.0	0.1	0.5	0.2	0.2	0.1	46.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	3.6	0.0	1.1	0.0	1.2	0.8	1.8	1.9	1.1	12.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.1	14.1	0.0	12.3	0.0	12.3	19.3	20.7	20.7	17.0	70.8	0.0
LnGrp LOS	C	B		B	A	B	B	C	C	B	F	
Approach Vol, veh/h		653			260			398			1121	
Approach Delay, s/veh		20.0			12.3			20.4			65.5	
Approach LOS		B			B			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	22.9		34.6	8.3	24.0		34.6				
Change Period (Y+Rc), s	5.1	* 6		6.5	5.1	6.0		* 6.5				
Max Green Setting (Gmax), s	8.9	* 29		28.5	21.9	18.0		* 22				
Max Q Clear Time (g_c+I1), s	5.0	6.9		28.1	4.2	20.0		11.6				
Green Ext Time (p_c), s	0.0	1.3		0.1	0.0	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay	40.2	
HCM 6th LOS	D	

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

PM Peak Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	269	329	337	30	45	502
Future Volume (veh/h)	269	329	337	30	45	502
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1618	1900	1900
Adj Flow Rate, veh/h	328	401	411	37	55	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	4	13	19	0	0
Cap, veh/h	614	1176	500	45	110	
Arrive On Green	0.17	0.64	0.32	0.32	0.06	0.00
Sat Flow, veh/h	1810	1841	1543	139	1810	1610
Grp Volume(v), veh/h	328	401	0	448	55	0
Grp Sat Flow(s),veh/h/ln	1810	1841	0	1682	1810	1610
Q Serve(g_s), s	3.5	3.1	0.0	7.6	0.9	0.0
Cycle Q Clear(g_c), s	3.5	3.1	0.0	7.6	0.9	0.0
Prop In Lane	1.00			0.08	1.00	1.00
Lane Grp Cap(c), veh/h	614	1176	0	545	110	
V/C Ratio(X)	0.53	0.34	0.00	0.82	0.50	
Avail Cap(c_a), veh/h	922	1516	0	1912	1052	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.2	2.6	0.0	9.6	14.1	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.0	1.2	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	1.7	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.5	2.6	0.0	10.8	15.4	0.0
LnGrp LOS	A	A	A	B	B	
Approach Vol, veh/h		729	448		55	
Approach Delay, s/veh		4.4	10.8		15.4	
Approach LOS		A	B		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.7	14.8		6.4		24.6
Change Period (Y+Rc), s	4.5	* 4.8		4.5		* 4.8
Max Green Setting (Gmax), s	10.5	* 35		18.0		* 26
Max Q Clear Time (g_c+I1), s	5.5	9.6		2.9		5.1
Green Ext Time (p_c), s	0.1	0.2		0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	608	0	0	774	85	0	0	0	0	0	185
Future Vol, veh/h	15	608	0	0	774	85	0	0	0	0	0	185
Conflicting Peds, #/hr	10	0	19	19	0	10	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	92	80	80	92	92	92
Heavy Vehicles, %	0	0	10	0	19	0	2	12	0	2	2	2
Mvmt Flow	19	760	0	0	968	106	0	0	0	0	0	201

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1084	0	0	779	0	0	1838	1901	782
Stage 1	-	-	-	-	-	-	817	817	-
Stage 2	-	-	-	-	-	-	1021	1084	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.42	6.62	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.62	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.108	3.3
Pot Cap-1 Maneuver	651	-	-	847	-	-	83	65	397
Stage 1	-	-	-	-	-	-	434	376	-
Stage 2	-	-	-	-	-	-	348	281	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	651	-	-	832	-	-	79	0	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	79	0	-
Stage 1	-	-	-	-	-	-	414	0	-
Stage 2	-	-	-	-	-	-	348	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	-	651	-	-	832	-	-
HCM Lane V/C Ratio	-	0.029	-	-	-	-	-
HCM Control Delay (s)	0	10.7	-	-	0	-	-
HCM Lane LOS	A	B	-	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	143	47	220	90	25
Future Vol, veh/h	25	143	47	220	90	25
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	0	0	11	0	0
Mvmt Flow	34	196	64	301	123	34

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	232	0	563	134
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	429	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1348	-	491	920
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	661	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1345	-	462	918
Mov Cap-2 Maneuver	-	-	-	-	462	-
Stage 1	-	-	-	-	895	-
Stage 2	-	-	-	-	623	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	15
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	518	-	-	1345	-
HCM Lane V/C Ratio	0.304	-	-	0.048	-
HCM Control Delay (s)	15	-	-	7.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.3	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	390	211	109	794	56	187	35	93	140	40	100
Future Volume (veh/h)	29	390	211	109	794	56	187	35	93	140	40	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1707	1900	1900	1900	1900	1900	1900	1796
Adj Flow Rate, veh/h	36	488	264	136	992	70	234	44	116	175	50	125
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	2	0	0	13	0	0	0	0	0	0	7
Cap, veh/h	236	929	500	373	1372	97	72	0	522	70	6	493
Arrive On Green	0.03	0.42	0.42	0.06	0.45	0.45	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	2227	1199	1810	3073	217	0	0	1600	0	17	1512
Grp Volume(v), veh/h	36	389	363	136	524	538	278	0	116	225	0	125
Grp Sat Flow(s),veh/h/ln	1810	1777	1649	1810	1622	1667	0	0	1600	17	0	1512
Q Serve(g_s), s	1.0	15.0	15.1	3.9	24.3	24.3	0.0	0.0	4.8	0.0	0.0	5.6
Cycle Q Clear(g_c), s	1.0	15.0	15.1	3.9	24.3	24.3	30.0	0.0	4.8	30.0	0.0	5.6
Prop In Lane	1.00		0.73	1.00		0.13	0.84		1.00	0.78		1.00
Lane Grp Cap(c), veh/h	236	741	688	373	724	745	72	0	522	75	0	493
V/C Ratio(X)	0.15	0.52	0.53	0.36	0.72	0.72	3.86	0.00	0.22	2.99	0.00	0.25
Avail Cap(c_a), veh/h	360	741	688	444	724	745	72	0	522	75	0	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.2	20.0	20.0	15.0	20.8	20.8	46.0	0.0	22.5	43.8	0.0	22.8
Incr Delay (d2), s/veh	0.1	0.5	0.6	0.2	6.2	6.0	1318.7	0.0	0.1	932.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	5.9	5.5	1.5	9.6	9.8	28.0	0.0	1.8	21.2	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	20.5	20.6	15.2	27.0	26.8	1364.7	0.0	22.6	976.1	0.0	22.9
LnGrp LOS	B	C	C	B	C	C	F	A	C	F	A	C
Approach Vol, veh/h		788			1198			394			350	
Approach Delay, s/veh		20.4			25.6			969.6			635.6	
Approach LOS		C			C			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	46.8		36.5	11.4	44.1		36.5				
Change Period (Y+Rc), s	* 5.7	* 5.7		6.5	* 5.7	* 5.7		6.5				
Max Green Setting (Gmax), s	* 9.3	* 34		30.0	* 9.3	* 34		30.0				
Max Q Clear Time (g_c+I1), s	3.0	26.3		32.0	5.9	17.1		32.0				
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	1.8		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		238.5
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	140	630	1036	45	0	45
Future Vol, veh/h	140	630	1036	45	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	92	92
Heavy Vehicles, %	4	2	15	33	2	2
Mvmt Flow	179	808	1328	58	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1386	0	-	0	-	693
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.18	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.24	-	-	-	-	3.32
Pot Cap-1 Maneuver	480	-	-	-	0	386
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	480	-	-	-	-	386
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	3.1	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	480	-	-	-	386
HCM Lane V/C Ratio	0.374	-	-	-	0.127
HCM Control Delay (s)	16.9	-	-	-	15.7
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	1.7	-	-	-	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	345	70	222	42	275	300	269	818	30	55	507	390
Future Volume (veh/h)	345	70	222	42	275	300	269	818	30	55	507	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	429	0	0	46	362	395	292	889	33	60	551	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.76	0.76	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0	2	2	2	2	2	2
Cap, veh/h	537	0		109	693	645	421	1092	41	218	694	
Arrive On Green	0.40	0.00	0.00	0.40	0.40	0.40	0.16	0.31	0.31	0.04	0.20	0.00
Sat Flow, veh/h	1415	0	1585	131	1728	1610	1781	3494	130	1781	3554	1585
Grp Volume(v), veh/h	429	0	0	408	0	395	292	452	470	60	551	0
Grp Sat Flow(s),veh/h/ln	708	0	1585	1858	0	1610	1781	1777	1847	1781	1777	1585
Q Serve(g_s), s	16.8	0.0	0.0	1.2	0.0	13.8	9.0	16.7	16.7	1.6	10.5	0.0
Cycle Q Clear(g_c), s	28.5	0.0	0.0	11.7	0.0	13.8	9.0	16.7	16.7	1.6	10.5	0.0
Prop In Lane	1.00		1.00	0.11		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	537	0		801	0	645	421	555	577	218	694	
V/C Ratio(X)	0.80	0.00		0.51	0.00	0.61	0.69	0.81	0.81	0.28	0.79	
Avail Cap(c_a), veh/h	537	0		801	0	645	691	735	764	372	900	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.0	0.0	0.0	16.3	0.0	16.9	19.0	22.5	22.5	17.6	27.3	0.0
Incr Delay (d2), s/veh	7.8	0.0	0.0	0.2	0.0	1.3	0.8	4.0	3.8	0.3	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	4.8	0.0	5.0	3.4	6.8	7.0	0.6	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.8	0.0	0.0	16.5	0.0	18.2	19.8	26.5	26.3	17.9	30.0	0.0
LnGrp LOS	D	A		B	A	B	B	C	C	B	C	
Approach Vol, veh/h		429			803			1214			611	
Approach Delay, s/veh		36.8			17.3			24.8			28.9	
Approach LOS		D			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	28.2		35.0	16.2	19.9		35.0				
Change Period (Y+Rc), s	5.1	* 6		6.5	5.1	6.0		* 6.5				
Max Green Setting (Gmax), s	8.9	* 29		28.5	21.9	18.0		* 22				
Max Q Clear Time (g_c+I1), s	3.6	18.7		30.5	11.0	12.5		15.8				
Green Ext Time (p_c), s	0.0	3.4		0.0	0.1	1.4		0.6				

Intersection Summary		
HCM 6th Ctrl Delay	25.3	
HCM 6th LOS	C	

Notes

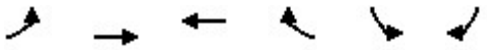
User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM Analysis – Build with Mitigation



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	409	364	149	10	20	214
Future Volume (veh/h)	409	364	149	10	20	214
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1618	1900	1900
Adj Flow Rate, veh/h	499	444	182	12	24	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	4	13	19	0	0
Cap, veh/h	913	1258	490	32	54	
Arrive On Green	0.24	0.68	0.31	0.31	0.03	0.00
Sat Flow, veh/h	1810	1841	1584	104	1810	1610
Grp Volume(v), veh/h	499	444	0	194	24	0
Grp Sat Flow(s),veh/h/ln	1810	1841	0	1688	1810	1610
Q Serve(g_s), s	5.6	3.3	0.0	2.9	0.4	0.0
Cycle Q Clear(g_c), s	5.6	3.3	0.0	2.9	0.4	0.0
Prop In Lane	1.00			0.06	1.00	1.00
Lane Grp Cap(c), veh/h	913	1258	0	522	54	
V/C Ratio(X)	0.55	0.35	0.00	0.37	0.44	
Avail Cap(c_a), veh/h	1071	1445	0	1830	1003	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.9	2.1	0.0	8.8	15.5	0.0
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.2	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.7	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.1	2.2	0.0	8.9	17.6	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		943	194		24	
Approach Delay, s/veh		3.7	8.9		17.6	
Approach LOS		A	A		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.2	14.8		5.5		27.0
Change Period (Y+Rc), s	4.5	* 4.8		4.5		* 4.8
Max Green Setting (Gmax), s	10.5	* 35		18.0		* 26
Max Q Clear Time (g_c+I1), s	7.6	4.9		2.4		5.3
Green Ext Time (p_c), s	0.1	0.1		0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	4.9
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	178	773	9	0	328	55	0	0	5	0	0	10
Future Vol, veh/h	178	773	9	0	328	55	0	0	5	0	0	10
Conflicting Peds, #/hr	10	0	19	19	0	10	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	92	80	80	92	92	92
Heavy Vehicles, %	0	0	10	0	19	0	2	12	0	2	2	2
Mvmt Flow	223	966	11	0	410	69	0	0	6	0	0	11

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	489	0	0	996	0	0	1882	1926	994
Stage 1	-	-	-	-	-	-	1437	1437	-
Stage 2	-	-	-	-	-	-	445	489	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.42	6.62	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.62	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.108	3.3
Pot Cap-1 Maneuver	1085	-	-	703	-	-	78	63	300
Stage 1	-	-	-	-	-	-	219	189	-
Stage 2	-	-	-	-	-	-	646	533	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1085	-	-	690	-	-	61	0	294
Mov Cap-2 Maneuver	-	-	-	-	-	-	61	0	-
Stage 1	-	-	-	-	-	-	171	0	-
Stage 2	-	-	-	-	-	-	646	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	17.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	294	1085	-	-	690	-	-
HCM Lane V/C Ratio	0.021	0.205	-	-	-	-	-
HCM Control Delay (s)	17.5	9.2	-	-	0	-	-
HCM Lane LOS	C	A	-	-	A	-	-
HCM 95th %tile Q(veh)	0.1	0.8	-	-	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	130	125	19	55	35	14
Future Vol, veh/h	130	125	19	55	35	14
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	0	0	11	0	0
Mvmt Flow	178	171	26	75	48	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	351	0	393	266
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	127	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1219	-	615	778
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	904	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1217	-	600	777
Mov Cap-2 Maneuver	-	-	-	-	600	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	884	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	642	-	-	1217	-
HCM Lane V/C Ratio	0.105	-	-	0.021	-
HCM Control Delay (s)	11.3	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	827	130	58	250	30	122	24	58	75	29	20
Future Volume (veh/h)	125	827	130	58	250	30	122	24	58	75	29	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1707	1900	1900	1900	1900	1900	1900	1796
Adj Flow Rate, veh/h	156	1034	162	72	312	38	152	30	72	94	36	25
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	2	0	0	13	0	0	0	0	0	0	7
Cap, veh/h	711	1757	275	329	1630	197	294	93	223	256	196	136
Arrive On Green	0.06	0.57	0.57	0.05	0.56	0.56	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1810	3078	481	1810	2913	352	1350	492	1180	1302	1039	722
Grp Volume(v), veh/h	156	596	600	72	173	177	152	0	102	94	0	61
Grp Sat Flow(s),veh/h/ln	1810	1777	1782	1810	1622	1643	1350	0	1672	1302	0	1761
Q Serve(g_s), s	3.3	19.9	20.0	1.5	4.8	4.9	9.8	0.0	4.8	6.2	0.0	2.7
Cycle Q Clear(g_c), s	3.3	19.9	20.0	1.5	4.8	4.9	12.5	0.0	4.8	11.0	0.0	2.7
Prop In Lane	1.00		0.27	1.00		0.21	1.00		0.71	1.00		0.41
Lane Grp Cap(c), veh/h	711	1014	1017	329	907	919	294	0	316	256	0	333
V/C Ratio(X)	0.22	0.59	0.59	0.22	0.19	0.19	0.52	0.00	0.32	0.37	0.00	0.18
Avail Cap(c_a), veh/h	791	1014	1017	429	907	919	479	0	545	434	0	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	12.8	12.8	9.6	10.0	10.0	36.6	0.0	32.2	37.0	0.0	31.3
Incr Delay (d2), s/veh	0.1	0.8	0.8	0.1	0.5	0.5	0.5	0.0	0.2	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	7.0	7.1	0.5	1.6	1.7	3.3	0.0	2.0	2.0	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.6	13.5	13.6	9.7	10.5	10.5	37.1	0.0	32.4	37.3	0.0	31.4
LnGrp LOS	A	B	B	A	B	B	D	A	C	D	A	C
Approach Vol, veh/h		1352			422			254			155	
Approach Delay, s/veh		12.9			10.3			35.2			35.0	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	57.2		23.9	9.9	58.2		23.9				
Change Period (Y+Rc), s	* 5.7	* 5.7		6.5	* 5.7	* 5.7		6.5				
Max Green Setting (Gmax), s	* 9.3	* 34		30.0	* 9.3	* 34		30.0				
Max Q Clear Time (g_c+I1), s	5.3	6.9		13.0	3.5	22.0		14.5				
Green Ext Time (p_c), s	0.0	0.8		0.2	0.0	2.8		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	215	1082	367	25	0	25
Future Vol, veh/h	215	1082	367	25	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	92	92
Heavy Vehicles, %	4	2	15	33	2	2
Mvmt Flow	276	1387	471	32	0	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	503	0	-	0	-	252
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.18	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.24	-	-	-	-	3.32
Pot Cap-1 Maneuver	1044	-	-	-	0	748
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1044	-	-	-	-	748
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1044	-	-	-	748
HCM Lane V/C Ratio	0.264	-	-	-	0.036
HCM Control Delay (s)	9.7	-	-	-	10
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	1.1	-	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	120	394	33	70	100	74	278	15	100	931	205
Future Volume (veh/h)	420	120	394	33	70	100	74	278	15	100	931	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	294	359	0	36	92	132	80	302	16	109	1012	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.76	0.76	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0	2	2	2	2	2	2
Cap, veh/h	300	598		148	335	515	245	1076	57	498	1157	
Arrive On Green	0.32	0.32	0.00	0.32	0.32	0.32	0.05	0.31	0.31	0.06	0.33	0.00
Sat Flow, veh/h	1157	1870	1585	215	1048	1610	1781	3433	181	1781	3554	1585
Grp Volume(v), veh/h	294	359	0	128	0	132	80	156	162	109	1012	0
Grp Sat Flow(s),veh/h/ln	1157	1870	1585	1263	0	1610	1781	1777	1838	1781	1777	1585
Q Serve(g_s), s	8.8	9.3	0.0	0.4	0.0	3.5	1.7	3.8	3.8	2.4	15.5	0.0
Cycle Q Clear(g_c), s	18.5	9.3	0.0	9.7	0.0	3.5	1.7	3.8	3.8	2.4	15.5	0.0
Prop In Lane	1.00		1.00	0.28		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	300	598		484	0	515	245	557	576	498	1157	
V/C Ratio(X)	0.98	0.60		0.26	0.00	0.26	0.33	0.28	0.28	0.22	0.87	
Avail Cap(c_a), veh/h	300	598		497	0	529	280	578	598	556	1223	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.3	16.5	0.0	14.5	0.0	14.6	14.2	14.9	15.0	12.1	18.4	0.0
Incr Delay (d2), s/veh	46.5	1.2	0.0	0.1	0.0	0.1	0.3	0.1	0.1	0.1	6.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	3.9	0.0	1.1	0.0	1.2	0.6	1.3	1.4	0.8	6.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.8	17.7	0.0	14.6	0.0	14.7	14.5	15.0	15.0	12.2	25.0	0.0
LnGrp LOS	E	B		B	A	B	B	B	B	B	C	
Approach Vol, veh/h		653			260			398			1121	
Approach Delay, s/veh		42.5			14.6			14.9			23.8	
Approach LOS		D			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	24.1		25.0	8.0	24.8		25.0				
Change Period (Y+Rc), s	5.1	* 6		6.5	5.1	6.0		* 6.5				
Max Green Setting (Gmax), s	5.5	* 19		18.5	4.0	19.9		* 19				
Max Q Clear Time (g_c+I1), s	4.4	5.8		20.5	3.7	17.5		11.7				
Green Ext Time (p_c), s	0.0	1.1		0.0	0.0	1.3		0.2				

Intersection Summary		
HCM 6th Ctrl Delay	26.4	
HCM 6th LOS	C	

Notes

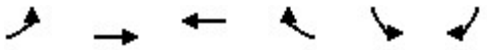
User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

PM Peak Analysis



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	269	329	337	30	45	502
Future Volume (veh/h)	269	329	337	30	45	502
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1618	1900	1900
Adj Flow Rate, veh/h	328	401	411	37	55	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	4	13	19	0	0
Cap, veh/h	614	1176	500	45	110	
Arrive On Green	0.17	0.64	0.32	0.32	0.06	0.00
Sat Flow, veh/h	1810	1841	1543	139	1810	1610
Grp Volume(v), veh/h	328	401	0	448	55	0
Grp Sat Flow(s),veh/h/ln	1810	1841	0	1682	1810	1610
Q Serve(g_s), s	3.5	3.1	0.0	7.6	0.9	0.0
Cycle Q Clear(g_c), s	3.5	3.1	0.0	7.6	0.9	0.0
Prop In Lane	1.00			0.08	1.00	1.00
Lane Grp Cap(c), veh/h	614	1176	0	545	110	
V/C Ratio(X)	0.53	0.34	0.00	0.82	0.50	
Avail Cap(c_a), veh/h	864	2052	0	1098	965	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.2	2.6	0.0	9.6	14.1	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.0	1.2	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	1.7	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.5	2.6	0.0	10.8	15.4	0.0
LnGrp LOS	A	A	A	B	B	
Approach Vol, veh/h		729	448		55	
Approach Delay, s/veh		4.4	10.8		15.4	
Approach LOS		A	B		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.7	14.8		6.4		24.6
Change Period (Y+Rc), s	4.5	* 4.8		4.5		* 4.8
Max Green Setting (Gmax), s	9.5	* 20		16.5		* 35
Max Q Clear Time (g_c+I1), s	5.5	9.6		2.9		5.1
Green Ext Time (p_c), s	0.1	0.2		0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	608	0	0	774	85	0	0	0	0	0	185
Future Vol, veh/h	15	608	0	0	774	85	0	0	0	0	0	185
Conflicting Peds, #/hr	10	0	19	19	0	10	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	92	80	80	92	92	92
Heavy Vehicles, %	0	0	10	0	19	0	2	12	0	2	2	2
Mvmt Flow	19	760	0	0	968	106	0	0	0	0	0	201

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1084	0	0	779	0	0	1838	1901	782
Stage 1	-	-	-	-	-	-	817	817	-
Stage 2	-	-	-	-	-	-	1021	1084	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.42	6.62	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.62	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.108	3.3
Pot Cap-1 Maneuver	651	-	-	847	-	-	83	65	397
Stage 1	-	-	-	-	-	-	434	376	-
Stage 2	-	-	-	-	-	-	348	281	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	651	-	-	832	-	-	79	0	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	79	0	-
Stage 1	-	-	-	-	-	-	414	0	-
Stage 2	-	-	-	-	-	-	348	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	-	651	-	-	832	-	-
HCM Lane V/C Ratio	-	0.029	-	-	-	-	-
HCM Control Delay (s)	0	10.7	-	-	0	-	-
HCM Lane LOS	A	B	-	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	143	47	220	90	25
Future Vol, veh/h	25	143	47	220	90	25
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	0	0	11	0	0
Mvmt Flow	34	196	64	301	123	34

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	232	0	563	134
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	429	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1348	-	491	920
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	661	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1345	-	462	918
Mov Cap-2 Maneuver	-	-	-	-	462	-
Stage 1	-	-	-	-	895	-
Stage 2	-	-	-	-	623	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	15
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	518	-	-	1345	-
HCM Lane V/C Ratio	0.304	-	-	0.048	-
HCM Control Delay (s)	15	-	-	7.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.3	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	390	211	109	794	56	187	35	93	140	40	100
Future Volume (veh/h)	29	390	211	109	794	56	187	35	93	140	40	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	0.99		0.92	0.96		0.94	0.96		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1707	1900	1900	1900	1900	1900	1900	1796
Adj Flow Rate, veh/h	36	488	264	136	992	70	234	44	116	175	50	125
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	2	0	0	13	0	0	0	0	0	0	7
Cap, veh/h	167	696	374	293	1100	78	469	124	328	420	107	268
Arrive On Green	0.03	0.32	0.32	0.07	0.36	0.36	0.12	0.28	0.28	0.05	0.24	0.24
Sat Flow, veh/h	1810	2148	1153	1810	3052	215	1810	440	1159	1810	453	1133
Grp Volume(v), veh/h	36	403	349	136	527	535	234	0	160	175	0	175
Grp Sat Flow(s),veh/h/ln	1810	1777	1524	1810	1622	1646	1810	0	1598	1810	0	1586
Q Serve(g_s), s	1.1	18.0	18.2	4.5	27.9	27.9	8.6	0.0	7.2	0.0	0.0	8.6
Cycle Q Clear(g_c), s	1.1	18.0	18.2	4.5	27.9	27.9	8.6	0.0	7.2	0.0	0.0	8.6
Prop In Lane	1.00		0.76	1.00		0.13	1.00		0.73	1.00		0.71
Lane Grp Cap(c), veh/h	167	576	494	293	585	593	469	0	452	420	0	375
V/C Ratio(X)	0.22	0.70	0.71	0.46	0.90	0.90	0.50	0.00	0.35	0.42	0.00	0.47
Avail Cap(c_a), veh/h	214	791	678	474	901	914	736	0	598	483	0	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.6	26.8	26.8	20.3	27.4	27.4	21.9	0.0	25.9	29.3	0.0	29.7
Incr Delay (d2), s/veh	0.2	1.3	1.6	0.4	7.3	7.3	0.8	0.0	0.2	0.7	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.3	6.4	1.8	11.2	11.3	3.7	0.0	2.8	3.4	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	28.0	28.4	20.7	34.8	34.7	22.7	0.0	26.1	29.9	0.0	30.0
LnGrp LOS	C	C	C	C	C	C	C	A	C	C	A	C
Approach Vol, veh/h		788			1198			394			350	
Approach Delay, s/veh		27.9			33.2			24.1			30.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	38.3	15.7	27.9	12.0	35.1	11.4	32.1
Change Period (Y+Rc), s	* 5.7	* 5.7	4.5	6.5	* 5.7	* 5.7	6.5	* 6.5
Max Green Setting (Gmax), s	* 5.3	* 50	24.5	17.5	* 15	* 40	8.1	* 34
Max Q Clear Time (g_c+I1), s	3.1	29.9	10.6	10.6	6.5	20.2	2.0	9.2
Green Ext Time (p_c), s	0.0	2.7	0.6	0.2	0.0	1.9	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	140	630	1036	45	0	45
Future Vol, veh/h	140	630	1036	45	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	92	92
Heavy Vehicles, %	4	2	15	33	2	2
Mvmt Flow	179	808	1328	58	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1386	0	-	0	-	693
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.18	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.24	-	-	-	-	3.32
Pot Cap-1 Maneuver	480	-	-	-	0	386
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	480	-	-	-	-	386
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	3.1	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	480	-	-	-	386
HCM Lane V/C Ratio	0.374	-	-	-	0.127
HCM Control Delay (s)	16.9	-	-	-	15.7
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	1.7	-	-	-	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	345	70	222	42	275	300	269	818	30	55	507	390
Future Volume (veh/h)	345	70	222	42	275	300	269	818	30	55	507	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	429	0	0	46	362	395	292	889	33	60	551	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.76	0.76	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0	2	2	2	2	2	2
Cap, veh/h	615	0		109	811	762	382	1080	40	181	689	
Arrive On Green	0.47	0.00	0.00	0.47	0.47	0.47	0.15	0.31	0.31	0.03	0.19	0.00
Sat Flow, veh/h	1415	0	1585	142	1713	1610	1781	3494	130	1781	3554	1585
Grp Volume(v), veh/h	429	0	0	408	0	395	292	452	470	60	551	0
Grp Sat Flow(s),veh/h/ln	708	0	1585	1855	0	1610	1781	1777	1847	1781	1777	1585
Q Serve(g_s), s	28.1	0.0	0.0	0.0	0.0	16.5	12.4	22.7	22.7	2.2	14.2	0.0
Cycle Q Clear(g_c), s	42.0	0.0	0.0	13.9	0.0	16.5	12.4	22.7	22.7	2.2	14.2	0.0
Prop In Lane	1.00		1.00	0.11		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	615	0		919	0	762	382	549	571	181	689	
V/C Ratio(X)	0.70	0.00		0.44	0.00	0.52	0.77	0.82	0.82	0.33	0.80	
Avail Cap(c_a), veh/h	732	0		1080	0	903	445	819	852	210	1144	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.1	0.0	0.0	17.0	0.0	17.7	26.3	30.8	30.8	24.4	37.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.1	0.0	0.2	5.4	2.6	2.5	0.4	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	0.0	6.0	0.0	6.0	5.5	9.6	9.9	0.9	6.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	0.0	0.0	17.1	0.0	17.9	31.6	33.4	33.3	24.8	37.8	0.0
LnGrp LOS	C	A		B	A	B	C	C	C	C	D	
Approach Vol, veh/h		429			803			1214			611	
Approach Delay, s/veh		32.7			17.5			32.9			36.6	
Approach LOS		C			B			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	35.8		52.1	19.5	24.7		52.1				
Change Period (Y+Rc), s	5.1	* 6		6.5	5.1	6.0		* 6.5				
Max Green Setting (Gmax), s	4.9	* 44		53.5	17.9	31.0		* 54				
Max Q Clear Time (g_c+I1), s	4.2	24.7		44.0	14.4	16.2		18.5				
Green Ext Time (p_c), s	0.0	4.3		1.6	0.1	2.4		0.8				

Intersection Summary		
HCM 6th Ctrl Delay		29.6
HCM 6th LOS		C

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Note: All comments must have a response and a follow-up code

Aak'w Landing Development
Traffic Impact Analysis

Section	Comment/Decision	Made By	Response (Include a Follow-up Code in Column F)	Response By	Follow-up Code 1 - Will address 2 - Need additional information 3 - Requires contract amendment 4 - Noted, but no change	Addressed
Page 10	I don't understand why or how so many buses would be going to the east or north based on the tour offerings available. There are two tours that would go downtown, both are small bus, small capacity tours.	CBJ CDD (Alexandra Pierce)	The trip distribution percentages presented on page 10 describe all traffic associated with the development. This includes buses (which we estimate to be 23% of vehicular traffic), local traffic, and development employee traffic. Final percentages were discussed with DOT&PF staff and agreed upon prior to TIA completion.	CR	4	
Page 14	Even only 60% of bus traffic headed to the valley, the applicant recommends longer light times at 10th and Egan. This is concerning to me because it could back up Douglas traffic and negatively impact neighborhoods to facilitate bus traffic. On one hand they are saying that there will be 10-15 buses an hour (not that big a deal). On the other hand, this suggests that there will be so much bus traffic that they need to change the signal timing at an intersection.	CBJ CDD (Alexandra Pierce)	1) The signal at 10th/Egan has plenty of intersection capacity based on the analysis within the TIA. Signal timing provided by DOT indicates there is plenty of room to optimize signal timings as additional growth occurs. Even without the development in question this is recommended on a standard 5-yr maintenance cycle. 2) Again, the number of buses is only one component of development traffic, and due to the # of riders it is not the predominant traffic concern of the development.	CR	4	
Page 42	The TIA assumes that CBJ would provide a circulator. We are currently evaluating the utility of a circulator but stating that we would provide (and pay for) a circulator that meets HTC's needs is a bold assumption. We have not supplied data on the timing or trips per hour of a future circulator so I am not sure where HTC is getting its assumptions of a municipally provided and funded circulator that operates on a 15 minute interval. The AJ Dock provides its own shuttle and HTC should pe prepared to do the same regardless of the outcome of a circulator study.	CBJ CDD (Alexandra Pierce)	The provided Trip assumption memo in the Appendix does not make any assumption as to the owner/operator of the "Downtown circulator" mentioned. We believe this is a confusion in terms between the memo (indicating some kind of high occupancy shuttle/circulator from the development to downtown) and the CBJ evaluation of a transit option labeled the "Downtown Circulator" which would serve more than just a single development.	CR	4	
Page 42	Additionally, the buses per hour piece seems unrealistic given how cruise ship arrivals and bus departures work. There are a rush of departures right when a ship arrives and then another rush in the afternoon (if the ship is on a full day port call).	CBJ CDD (Alexandra Pierce)	Our analysis assumes all buses will leave/arrive the development within a 2-hour window in the morning and afternoon with a full day port call lasting 10 hours. Our current peaking includes the highest hourly estimate for each bus/high-occupancy vehicle type.	CR	4	
Page 42	The pedestrian traffic seems low to me too. They are docking 4000 pax ships (2100 crew) there, but it doesn't seem like they are properly accounting for passengers and crew leaving the site. Also, another major cruise line wants to come to Juneau and use a future subport dock for 5000 pax ships. This is why we need passenger volume information and projections. It seems like they are underrepresenting the number of passengers and crew disembarking. Also, while pedestrian movements might be slightly more spread throughout the day than bus movements, the assumption that pedestrian movements would be evenly distributed throughout the day is not consistent with how cruise passengers typically behave with more passengers walking off the site at arrival and back onto the site just before departure.	CBJ CDD (Alexandra Pierce)	We agree the amount of pedestrian traffic is important, but from a TIA perspective the traffic impact is worse if fewer pedestrians are assumed. Our approach directly uses the passengers in the internal trip capture calculation for the development. This means more pedestrians DECREASES the number of vehicles assumed coming/leaving the development since passengers are walking. As for the traffic impacts at the signals due to the increased pedestrian crossings, we inflated the 'calls' and pedestrian volume in the HCM analysis to include a pedestrian recall for EVERY signal cycle length. This therefore assumes the pedestrian button is always being used for the entire hour. In addition, per page 10, footnote 11 of the TIA, an AM and PM peak of 15% pedestrian (walking only) usage was included in the analysis. This is on top of the passengers using tour buses, shuttles, etc. Is CBJ asking for increased pedestrian usage and thus decreased traffic impact? If so, please let us know the acceptable percentage.	CR	2	

Attachment G- Response to initial TIA comments

Note: All comments must have a response and a follow-up code

Section	Comment/Decision	Made By	Response (Include a Follow-up Code in Column F)	Response By	Follow-up Code 1 - Will address 2 - Need additional information 3 - Requires contract amendment 4 - Noted, but no change	Addressed
Page 42	Finally, CBJ and HTC have never discussed alignment or agreement on the Seawalk. A seawalk alignment is shown on their plans (at my request) but there is no mutually agreed plan for seawalk construction. 3000 pedestrians on Egan seems like a lot without a plan and timing for pedestrian upgrades or seawalk construction.	CBJ CDD (Alexandra Pierce)	Concept plans were included for completeness and to show land use with approximate area. The inclusion or exclusion of a Seawalk does not impact the motorized traffic system other than the already accounted for pedestrian crossings at intersections.	CR	4	

Attachment G- Response to initial TIA comments

Irene Gallion

From: Alexandra Pierce
Sent: Thursday, July 27, 2023 2:59 PM
To: Irene Gallion
Subject: RE: USE23-10: Huna Totem uplands development

Thanks Irene,

I have reviewed and I have no additional comments, but request the Commission refer to my comments on the original application.

Alix

From: Irene Gallion <Irene.Gallion@juneau.gov>
Sent: Tuesday, July 25, 2023 4:10 PM
To: Jeffrey Hedges <Jeffrey.Hedges@juneau.gov>; Bridget LaPenter <Bridget.LaPenter@juneau.gov>; Dan Bleidorn <Dan.Bleidorn@juneau.gov>; Dan Jager <Dan.Jager@juneau.gov>; Carl Uchytil <Carl.Uchytil@juneau.gov>; Alexandra Pierce <Alexandra.Pierce@juneau.gov>
Cc: Irene Gallion <Irene.Gallion@juneau.gov>
Subject: USE23-10: Huna Totem uplands development

Hello team,

You may recall having seen this project before: Dock and uplands development of the subport. The Commission approved the dock, but wanted further information on uplands development. So, the applicant has re-applied for uplands development.

The differences between this application and the last one are:

- The dock is not included (it has been approved)
- The project will not be phased.
- 40,000 square feet of a culture and science center have been settled on for use of the facility's east structure. This is one of three options considered under the previous application. Housing and retail had also been considered.

The re-hearing of the uplands section of this project is on August 8. If you have any additional comments on the project, let me know by **Friday, July 28, 2023**. My apologies for the quick turn.

Thank you,

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 x4130

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How are we doing? Provide feedback here: https://juneau.org/community-development/how-are-we-doing

Irene Gallion

From: Torba, Tracey L CDR USCG CEU JUNEAU-ASSET L (USA) <Tracey.L.Torba@uscg.mil>
Sent: Friday, July 28, 2023 2:47 PM
To: Irene Gallion
Subject: RE: USE23-10: Subport Uplands

Good Afternoon Irene,

Thank you for the opportunity to review. The US Coast Guard has no further comments beyond those we already submitted and you addressed. Have a great weekend!

v/r,

CDR Tracey Torba
CEU Juneau CO
(M): 907-723-0316
Chat on MS Teams

From: Irene Gallion <Irene.Gallion@juneau.gov>
Sent: Wednesday, July 26, 2023 8:16 AM
To: Torba, Tracey L CDR USCG CEU JUNEAU-ASSET L (USA) <Tracey.L.Torba@uscg.mil>
Subject: [URL Verdict: Neutral][Non-DoD Source] FW: USE23-10: Subport Uplands
Importance: High

My apologies, here are the attachments.

From: Irene Gallion
Sent: Wednesday, July 26, 2023 8:15 AM
To: Torba, Tracey L CDR USCG CEU JUNEAU-ASSET L (USA) <Tracey.L.Torba@uscg.mil>
Cc: Irene Gallion <Irene.Gallion@juneau.gov>
Subject: USE23-10: Subport Uplands
Importance: High

Hello CDR Torba,

You may recall having seen this project before: Dock and uplands development of the subport. The Commission approved the dock, but wanted further information on uplands development. So, the applicant has re-applied for uplands development.

The differences between this application and the last one are:

- The dock is not included (it has been approved)
- The project will not be phased.
- 40,000 square feet of a culture and science center have been settled on for use of the facility's east structure (basically across Whittier Street from where the Coast Guard currently parks). This is one of three options considered under the previous application. Housing and retail had also been considered.

The re-hearing of the uplands section of this project is on August 8. If you have any additional comments on the project, let me know by **Friday, July 28, 2023**. My apologies for the quick turn.

Thank you,

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 x4130

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How are we doing? Provide feedback here: https://juneau.org/community-development/how-are-we-doing

Irene Gallion

From: Irene Gallion
Sent: Thursday, February 2, 2023 2:56 PM
To: Charlie Ford; General Engineering; Dan Bleidorn; Carl Uchytil
Cc: Jeffrey Hedges; John Bohan; Matthew Creswell; Irene Gallion
Subject: USE23-03: Aak'w Landing Conditional Use Permit
Attachments: USE23-03_Application.pdf; USE23-03_Concept.pdf; USE23-03_Plans.pdf; Agency Comments Form.pdf

Hello CBJ Team,

We have received an application from Huna Totem for the uplands development of the subport lot. As part of the review process, we are circulating the application amongst CBJ departments for input that will be provided to the Planning Commission for review.

Attached is the application, draft plans and concept drawings. You can also find information at the short term planning web site: https://juneau.org/community-development/short-term-projects

We do not have the case scheduled for the Planning Commission yet.

If you could provide feedback by **February 16th, 2023**, that would be very helpful. I've attached an Agency Comment Form for your use. If you need more time let me know and we will work something out.

Thank you,

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 X2

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Irene Gallion

From: Rorie Watt
Sent: Thursday, February 2, 2023 4:06 PM
To: Irene Gallion; Jill Maclean; Scott Ciambor
Cc: Dan Bleidorn
Subject: FW: USE23-03: Aak'w Landing Conditional Use Permit
Attachments: 2021 NCL Lease Bleidorn Memo signed.pdf; 1 2021-01-25 Watt Memo with Attachements.pdf; 2 Juneau-Lease-Appliction 1a.pdf; 2021-07-19_Assembly-LHED_Pkt.pdf

Irene – FYI the below, attached. It's the applicant's choice on what to apply for and the Department's decision on how to process the application. But, FYI this is a change of course from what NCL was doing.

I think our thinking was that by doing the attached, then Dan could sign a CUP application as the land owner for a complete project.

Can you communicate with the applicant, or maybe they are already aware of this? Thanks.

From: Dan Bleidorn <Dan.Bleidorn@juneau.gov>
Sent: Thursday, February 2, 2023 3:46 PM
To: Rorie Watt <Rorie.Watt@juneau.gov>
Cc: Robert Barr <Robert.Barr@juneau.gov>; Carl Uchytil <Carl.Uchytil@juneau.gov>
Subject: RE: USE23-03: Aak'w Landing Conditional Use Permit

Yes, they provided a motion to work on the lease.
If they want to apply for a CUP for the tidelands I don't think there is anything stopping them.

From: Rorie Watt <Rorie.Watt@juneau.gov>
Sent: Thursday, February 2, 2023 3:40 PM
To: Dan Bleidorn <Dan.Bleidorn@juneau.gov>
Cc: Robert Barr <Robert.Barr@juneau.gov>; Carl Uchytil <Carl.Uchytil@juneau.gov>
Subject: FW: USE23-03: Aak'w Landing Conditional Use Permit

Dan –

Didn't we get a motion to work with NCL on a tidelands lease? This is strange to have them apply only for the uplands development, that doesn't make sense to me. Didn't we do that so that you could sign a CUP app? Please advise.

From: Irene Gallion <Irene.Gallion@juneau.gov>
Sent: Thursday, February 2, 2023 2:57 PM
To: Scott Ciambor <Scott.Ciambor@juneau.gov>; Alexandra Pierce <Alexandra.Pierce@juneau.gov>; Rorie Watt <Rorie.Watt@juneau.gov>; Robert Barr <Robert.Barr@juneau.gov>
Subject: FW: USE23-03: Aak'w Landing Conditional Use Permit

FYI

From: Irene Gallion
Sent: Thursday, February 2, 2023 2:56 PM
To: Charlie Ford <Charlie.Ford@juneau.gov>; General Engineering <General_Engineering@juneau.gov>; Dan Bleidorn

<Dan.Bleidorn@juneau.gov>; Carl Uchytil <Carl.Uchytil@juneau.gov>
Cc: Jeffrey Hedges <Jeffrey.Hedges@juneau.gov>; John Bohan <John.Bohan@juneau.gov>; Matthew Creswell <Matthew.Creswell@juneau.gov>; Irene Gallion <Irene.Gallion@juneau.gov>
Subject: USE23-03: Aak'w Landing Conditional Use Permit

Hello CBJ Team,

We have received an application from Huna Totem for the uplands development of the subport lot. As part of the review process, we are circulating the application amongst CBJ departments for input that will be provided to the Planning Commission for review.

Attached is the application, draft plans and concept drawings. You can also find information at the short term planning web site: https://juneau.org/community-development/short-term-projects

We do not have the case scheduled for the Planning Commission yet.

If you could provide feedback by **February 16th, 2023**, that would be very helpful. I've attached an Agency Comment Form for your use. If you need more time let me know and we will work something out.

Thank you,

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 X2

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www.juneau.org/community-development
155 S. Seward Street • Juneau, AK 99801

COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: Tourism (City Manager's Office)

STAFF PERSON/TITLE: Alexandra Pierce/Tourism Manager

DATE: 2/10/23

APPLICANT: Huna Totem Corporation

TYPE OF APPLICATION: USE Permit

PROJECT DESCRIPTION:

Mixed use uplands development: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Dock development will be considered under a separate series of land use actions.

LEGAL DESCRIPTION: Juneau Subport Lot C1

PARCEL NUMBER(S): 1C060K010031

PHYSICAL ADDRESS: No assigned address.

SPECIFIC QUESTIONS FROM PLANNER:

AGENCY COMMENTS:

This application appears to be for the uplands only and states that the dock development would be handled through a separate land use process. I would prefer to see one application for the entire development. It is very difficult to evaluate an uplands development on its own merits when the application makes multiple references to a dock and includes renderings of the dock. The development is oriented around a planned dock and is designed to receive cruise ship passengers. A standalone uplands development would not have the same bus parking and staging requirements and would likely include different elements. The application is incomplete and confusing in its current format. To properly evaluate this application, I would need to see projections showing the number of passengers that the development is anticipated to receive as well as information on proposed uses for the outside (non cruise ship) berth. As the offsite impacts of a fifth dock to the community are potentially significant, the applicant should clarify its multi-year expectation of numbers and sizes of ships using the facility, total numbers of passengers expected and whether those ships and passengers would come from existing or increased visitation. These elements directly affect the passenger and vehicle circulation on the uplands development. I would also need information on adjoining land uses (including tideland uses) and how the proposed development would support the navigability of the port. I also see renderings that show the Avista dock removed and plans that show it in place. I recommend that the applicant clarify negotiated plans (if any) for the future of the adjacent dock.

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COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: Tourism (City Manager's Office)

STAFF PERSON/TITLE: Alexandra Pierce/Tourism Manager

DATE: 6/9/23

APPLICANT: Huna Totem Corporation

TYPE OF APPLICATION: USE Permit

PROJECT DESCRIPTION:

Mixed use uplands development: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park.

LEGAL DESCRIPTION: Juneau Subport Lot C1

PARCEL NUMBER(S): 1C060K010031

PHYSICAL ADDRESS: No assigned address.

SPECIFIC QUESTIONS FROM PLANNER:

AGENCY COMMENTS:

I have reviewed Huna Totem Corporation's USE Permit application and there are a number of items that I believe should be addressed as part of the Conditional Use Permit process.

• Does the applicant have current or future plans for the other side of the cruise ship dock? What is the long term plan for the outside of the pier?

• What does the applicant project for numbers and sizes (passenger capacity) of ships that will use the facility per cruise ship season? Does the applicant have annual passenger volume projections for the next 5-10 years?

• Does the applicant believe that ship visitation will be from industry growth or from ships that prefer this location to docks that they already visit? (Assumes that visitation is greater than the current number of ships that anchor or hot berth).

• Who would pay for the seawalk extension and connection to the east and west? The applicant or CBJ?

• Is the applicant able to provide renderings that show pedestrian flow? The applicant states that "The Gangway and Welcome Center building will direct the flow of passengers around the southeast corner of the Plaza. The flow will be efficient and clear, but will not directly lead to an exit, providing a large amount of retail frontage and opportunities." This statement contradicts itself and suggests that the development is designed to keep passengers on site. How will passengers be directed in case of an emergency?

AGENCY COMMENTS (CONTINUED):

• Unclear on what the applicant suggests for shore power – is it the applicant's intent to install shore power? Or is it the intent that another party pay to install shore power? There are no municipal or AEL&P plans to extend power infrastructure or shore power to this area.
• Has the applicant negotiated removal or purchase of the AVISTA owned historic fuel dock? Some plan views show it in place and others show it removed.
• Plan views and renderings show diagonal parking on Whittier Street. Does the applicant intend to construct offsite improvements? (Note: Some concern about proximity of some of those back out diagonal spaces and distance to Egan Drive/traffic signal).
• TIA indicates 30% of vehicles exiting the site will come towards town. Please clarify, this seems unlikely to be accurate. There are currently only 2 tours that would require buses to travel into town.
• TIA indicates 10% of vehicles exiting the site will go directly across the street (towards the museum). Please clarify, this seems unlikely to be accurate.
• TIA estimates 10-15 buses per hour. This seems contradictory to typical cruise ship operations. For example, the Norwegian Bliss has about 85 vehicle (55-65 bus) departures in the hour after docking, and traffic slows until just before departure. A smaller ship like the Norwegian Jewel has closer to 65 vehicle departures. Please clarify plans for spikes in vehicle activity and how vehicle volume will be managed.
• TIA suggests longer light times at 10th and Egan. The applicant is encouraged to consider community needs and rush hour congestion on the bridge in making this recommendation.
• TIA suggests that 600 pedestrians will walk off the site per hour via Egan Drive. Please clarify whether pedestrian volumes at peak times (arrival/departure) have been analyzed.
• Does the applicant plan to provide a shuttle or rely on a future CBJ circulator? CBJ is currently evaluating the utility of a circulator and has not made any decisions on route, timing, and volume. CBJ has not supplied data on the timing or trips per hour of a future circulator, however the TIA discusses a municipally operated circulator that operates on a 15-minute interval. If a shuttle is planned, please clarify the number of buses and trips anticipated. For reference, the AJ Dock has up to six buses operating on a continuous loop. It is unlikely that a municipal circulator, if implemented, would be able to handle this volume.

Throughout this application, there are assumptions about the CBJ providing amenities that have not been funded or approved. I would like to see more information on how the on and offsite impacts will be managed both with and without seawalks (east and west) and a circulator bus.

Irene Gallion

From: Irene Gallion
Sent: Monday, February 6, 2023 9:20 AM
To: 'dave.d.stiles@uscg.mil'
Cc: Ilsa Lund
Subject: FW: USE2023 0003: Aak'w Landing, multi-use Waterfront development

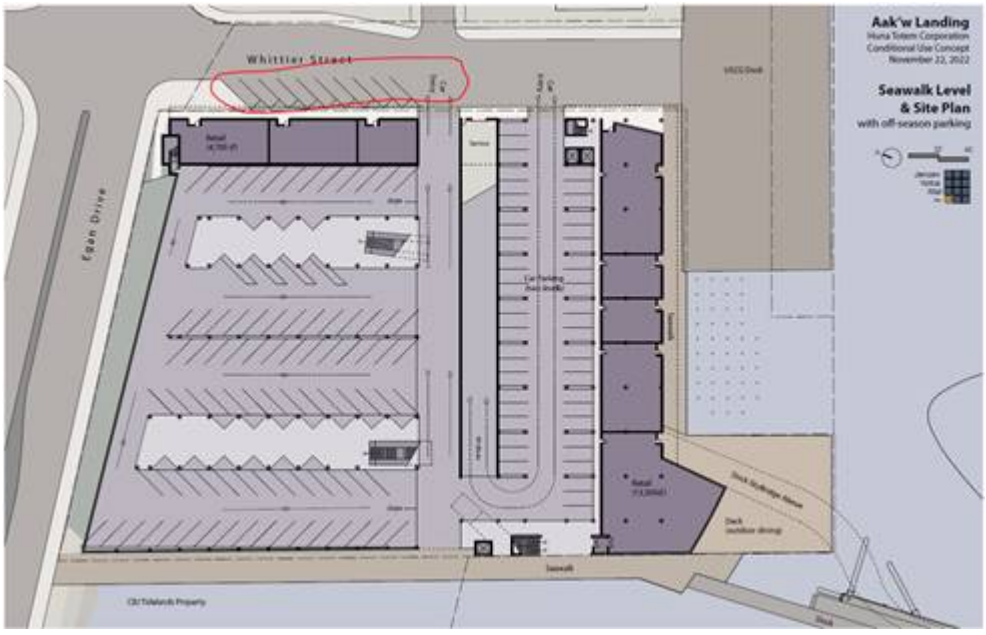
Good Day LCDR Stiles:

I understand you are referencing the parking proposed along Whittier Street in the draft plans for the Aak'w Landing development (see red circle in the graphic below).

CBJ does not allow most commercial entities to have back-out parking onto CBJ streets (the exception is child care homes). Additionally, the parking shown off of Whittier Street is on CBJ property, and cannot be used to meet parking requirements for the project. The applicant has been advised.

When the Traffic Impact Analysis is finished, this project will go to interested agencies for formal review. Are you the person this should go to? Or is there someone else?

Thank you for your interest,



Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 X2

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From: Ilsa Lund
Sent: Friday, February 3, 2023 11:42 AM
To: Irene Gallion
Cc: Lily Hagerup
Subject: FW: USE2023 0003: Aak'w Landing, multi-use Waterfront development

Hi Irene,
The following email was sent to the PC Comments email.

Ilsa Lund | Administrative Assistant
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street, 4th Floor Marine View Building
Office: 907.586.0715 ext. 4120

Note: my email has changed to ilsa.lund@juneau.GOV on 12/5/22*

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From: Stiles, Dave D. LCDR USCG SEC JUNEAU (USA) <Dave.D.Stiles@uscg.mil>
Sent: Friday, February 3, 2023 10:59 AM
To: PC_Comments <PC_Comments@juneau.org>
Subject: USE2023 0003: Aak'w Landing, multi-use Waterfront development

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Good Day,

Request to know the city's setback requirements on a public road. For example Whittier Street has USCG Station Juneau and "Future Retail Store Front Parking with Bus traffic using the same road. A concern I have is, if parking is allowed on the side of Whittier Street will buses be able to move safely in the same area?

V/R,
LCDR Dave Stiles
Sector Juneau
CO MILPERS
Logistics Department Head
907-463-2473 (W)
907-957-0155 (C)

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COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: CBJ Parks & Recreation

STAFF PERSON/TITLE: George Schaaf, Director

DATE: June 6, 2023

APPLICANT: Huna Totem

TYPE OF APPLICATION: Conditional Use Permit

PROJECT DESCRIPTION:

Mixed use development: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Includes floating steel dock up to 70 feet wide and 500 feet long.

LEGAL DESCRIPTION: Juneau Subport Lot C1

PARCEL NUMBER(S): 1C060K010031

PHYSICAL ADDRESS: No assigned address.

SPECIFIC QUESTIONS FROM PLANNER:

AGENCY COMMENTS:

Thank you for inviting comments from the Parks & Recreation Department. Expanding recreation and open space along Juneau's waterfront by completing a continuous 1.8-mile-long Seawalk is the highest priority of the Long-Range Waterfront Plan. The Parks & Recreation Department manages and maintains the section of the Juneau Seawalk extending south from Mayor Bill Overstreet Park. The Department is also involved in the management and maintenance of the Seawalk between Marine Park and the AJ Dock. The Department recommends the following conditions in order to preserve and enhance public access to open space and recreational opportunities along Juneau's waterfront, including the proposed development.

1) As a condition of this permit and consistent with the Long Range Waterfront Plan, the Parks & Recreation Department recommends that the Applicant be required to construct and grant a permanent easement to CBJ for a public Seawalk through the proposed development. The Seawalk shall be a minimum of 20 feet wide without obstructions for pedestrian flow, as this is the minimum width necessary to accommodate pedestrian traffic resulting from increased numbers of visitors. The applicant should be required to include CBJ in the design process for the Seawalk and required to obtain design approval from CBJ prior to construction. Upon completion of the Seawalk and easement, the permit should be clear that the Seawalk will be managed and maintained by CBJ Parks & Recreation.

AGENCY COMMENTS (CONTINUED):

2) The Applicant proposes several "parks, " including a 1.14-acre landscaped park and performance area, a 0.68-acre public plaza, and a 0.48-acre public area. These areas are intended "for year-round activities." While these parks will be constructed, owned, managed, and maintained by Huna Totem, the permit should require that public access to these areas be maintained consistent with other public parks in Juneau.

3) As a condition of the permit, the Applicant should be solely responsible for maintenance and operation of all paths, parks, landscaping, and other public amenities, except that portion of the Seawalk which passes through or adjacent to the development. This point is critical: In the past, CU permits for large developments have required public amenities but remained silent on who is responsible for maintenance. This leads to confusion, poor maintenance, and ultimately incurs significant costs to CBJ years or decades later.

Irene Gallion

From: Michele Elfers
Sent: Friday, June 2, 2023 12:53 PM
To: George Schaaf; Irene Gallion
Cc: Alexandra Pierce
Subject: RE: USE23-03: Seawalk questions
Attachments: recorded easement.pdf; Signed Easement Seawalk 4-2013.pdf

We have this type of situation at Franklin Dock, where the upland portion is owned by Franklin Dock Enterprises, and the tideland portion is on an easement from FDE to CBJ for a public seawalk. Along the seawalk, anywhere there is seawalk on private land we get an easement. CBJ entirely maintains the portions on the easement, we empty trash, repair the structure, and any other type of maintenance or management of public use. FDE/the private entity entirely takes care their portion of the seawalk. CBJ requires the actual "seawalk" to be either owned by CBJ or under an easement. So for example, Huna Totem saying 10' of the seawalk is owned by HT and 10' is under easement to CBJ is no good because then we have no control or guarantee a suitable seawalk is available for the public and maintained appropriately.

I have attached the easement we have for Franklin Dock/Miner's Cove area and the one for Taku Fisheries area. I also cc'd Alix as she is working with Eng on additional easements to the south. She may have more to add or change if thinking has evolved more recently.
Michele

From: George Schaaf <George.Schaaf@juneau.gov>
Sent: Friday, June 2, 2023 12:03 PM
To: Irene Gallion <Irene.Gallion@juneau.gov>
Cc: Michele Elfers <Michele.Elfers@juneau.gov>
Subject: Re: USE23-03: Seawalk questions

I will need to phone a friend who knows more about this than I do. Michele?

I do know that this is similar to the situation at the south end of the existing Seawalk, near the AJ dock. In that area, the sea walk is physically connected to a private structure.

George Schaaf (he/him – *what's this?*)
Director
Parks & Recreation Department

City & Borough of Juneau
155 S. Seward St.
Juneau, Alaska 99801
Ph: (907) 586-5226

Sent from my mobile device; please pardon any typos.

From: Irene Gallion <Irene.Gallion@juneau.gov>
Sent: Friday, June 2, 2023 12:01:22 PM

To: George Schaaf <George.Schaaf@juneau.gov>
Subject: USE23-03: Seawalk questions

Hi George,

How do we deal with maintenance of privately-constructed or held seawalk?

For instance, say Huna Totem builds their seawalk. There is part over CBJ tidelands, and part on their own property. Some of it may structurally connect to their building.

Here comes P&R ready to maintain it.

- Do we treat sections of the seawalk differently? For instance, the parts over CBJ tidelands vs the parts on Huna Totem land?
- Is CBJ liable for damage to the seawalk?
- Would management or ownership be transferred to CBJ?
- What happens when a chunk needs to be replaced?
- If CBJ is maintaining the seawalk, does that include trash?
- Is there a contract that works for all this? Do we have this in place with other private holders of continuity?

Of note, part or all of your response may be used in developing the staff report. Thanks!

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 x4130

Fostering excellence in development for this generation and the next.
How are we doing? Provide feedback here: https://juneau.org/community-development/how-are-we-doing

When recorded return to:

City and Borough of Juneau
155 S. Seward Street
Juneau, Alaska 99801

SEAWALK EASEMENT

FRANKLIN DOCK ENTERPRISES, LLC, an Alaska limited liability corporation registered to do business in Alaska, with its principal office at 350 North Franklin Street., Suite 2, Juneau, Alaska, 99801 ("GRANTOR") for and in consideration of one dollar and other good and valuable consideration in hand paid, hereby grants, conveys and dedicates to the CITY AND BOROUGH OF JUNEAU, an Alaska municipal corporation, with its principal office at 155 South Seward Street, Juneau, Alaska 99801 ("GRANTEE" or "CBJ"), an exclusive, perpetual public easement upon portions of the lands within Lots 1A and 2A of Franklin Dock Enterprises Subdivision II, according to Plat No. 96-71, Juneau Recording District, State of Alaska, which easement is shown on Exhibit 'A', attached hereto, and more particularly described as follows:

> Commencing at the most south corner of Lot 1A, Franklin Dock Enterprises Subdivision II, Juneau Plat 96-71; thence along the southeasterly boundary line of said Lot 1A, N 58° 28' 45" E, 65.38 feet to a point on the seaward edge of the as-constructed timber seawalk, said point being the true point of beginning for this description; thence along said edge of seawalk, N 16° 27' 49" W, 42.25 feet; thence continuing along said edge, N 37° 01' 09" W, 35.00 feet; thence continuing along said edge, S 73° 32' 13" W, 8.54 feet; thence continuing along said edge, N 16° 27' 47" W, 22.78 feet; thence continuing along said edge, N 37° 01' 09" W, 63.17 feet; thence continuing along said edge, S 73° 32' 13" W, 12.82 feet; thence continuing along said edge, N 16° 27' 47" W, 34.18 feet; thence continuing along said edge, N 37° 01' 09" W, 43.00 feet; thence continuing along said edge, S 73° 32' 13" W, 8.54 feet; thence continuing along said edge, N 16° 27' 47" W, 22.78 feet; thence continuing along said edge, N 39° 34' 50" W,

59.89 feet to the seaward edge of the existing wood timber seawalk; thence along said edge of existing seawalk, S 58° 57' 33" E, 49.99 feet; thence continuing along said edge of existing seawalk, coincidental with the landward edge of the as-constructed timber seawalk, S 37° 01' 09" E, 239.80 feet; thence continuing along said landward edge, S 42° 22' 41" E, 22.06 feet; thence continuing along said landward edge, S 28° 00' 05" E, 20.70 feet to a point on the southerly boundary line of said Lot 1A; thence leaving said landward edge along said southerly boundary line, S 58° 28' 45" W, 29.79 feet to the point of beginning and terminus of this description.

Containing in all 5,643 square feet more or less.

FRANKLIN DOCK ENTERPRISES, LLC, an Alaska limited liability corporation registered to do business in Alaska, with its principal office at 240 Main St., Suite 600, Juneau, Alaska, 99801 ("GRANTOR") for and in consideration of one dollar and other good and valuable consideration in hand paid, hereby grants, conveys and dedicates to the CITY AND BOROUGH OF JUNEAU, an Alaska municipal corporation, with its principal office at 155 South Seward Street, Juneau, Alaska 99801 ("GRANTEE" or "CBJ"), an exclusive, perpetual public easement upon portions of the lands within Lots 2A and 3A of Franklin Dock Enterprises Subdivision II, according to Plat No. 96-71, Juneau Recording District, State of Alaska, which easement is shown on "Exhibit A", attached hereto, and more particularly described as follows:

Commencing at the most south corner of Lot 2A, Franklin Dock Enterprises Subdivision II, Juneau Plat No. 96-71, said point also being a corner of Lot 3A, Franklin Dock Enterprises Subdivision II; thence along the southeasterly boundary line of said Lot 2A, N 27° 08' 15" E, 0.83 feet to a point on the landward edge of the as-constructed timber seawalk, said point being the true point of beginning for this description; thence along the landward edge of the as-constructed timber seawalk S 59° 41' 14" E, 36.64 feet; thence along the edge of said timber seawalk S 30° 18' 30" W, 16.00 feet; thence continuing along said edge S 50° 51' 52" W, 8.54 feet to the corner of said as-constructed timber seawalk; thence along the seaward edge of said timber seawalk N 39° 08' 05" W, 22.78 feet; thence continuing along said edge N 60° 05' 10" W, 25.00 feet; thence continuing along said edge N 42° 43' 07" W, 18.33 feet; thence continuing along said edge S 67° 50' 15" W, 8.54 feet; thence continuing along said edge N 22° 09' 45" W, 22.78 feet, thence continuing along said edge N 42° 43' 07" W, 11.35 feet to a point on the northwesterly boundary line of said Lot 3A; thence leaving said edge, along said boundary line, N 87° 44'

45" E, 9.73 feet to a point on the southerly boundary line of said Lot 2A; thence along the westerly boundary line of said Lot 2A, N 30° 14' 15" W, 39.77 feet to a point on the landward edge of the as-constructed timber seawalk; thence along said edge of timber seawalk, S 42° 43' 07" E, 83.55 feet; thence continuing along said edge S 59° 41' 14" E, 10.87 feet to the point of beginning and terminus of this description.

Containing in all 1,901 square feet more or less.

The purpose of this easement is to grant CBJ, its agents and assigns, the right to access, design, install, construct, maintain, and make improvements to a seawalk and utilities along the waterfront on Lot 1A, 2A, and 3A for public uses and purposes. This easement includes, but is not limited to, all development, modification, maintenance, repair and public use and access rights, as well as all maintenance, garbage & sanitation and emergency vehicle access rights necessary, useful, or convenient for the enjoyment of the public easement herein granted. This easement does not include the right to lease space to private vendors.

This exclusive and perpetual easement shall at all times be a continuing covenant running with the land and shall be binding upon and in favor of the successors and assigns of the respective parties hereto.

GRANTEE agrees to maintain the easement and all improvements in good and safe repair and condition and shall indemnify, defend, and hold harmless GRANTOR from and against all claims, actions, liabilities, damages, and expenses arising out of the GRANTEE'S and/or the public's use of the easement, except for that part of any claim, action, liability, damage or expense, attributable to the negligence of GRANTOR, its agents, tenants or assigns.

The GRANTOR hereby agrees not to construct or have constructed any improvements or structures on the easement, or to otherwise impede GRANTEE'S or the public's use of the easement described herein, without the consent of GRANTEE.

Effective upon execution of this Easement and until completion of the contemplated work, CBJ and its agents and contractors will have the right and license to enter upon Lots 1 and 2 for the purpose of construction/reconstruction and staging activities relating to and including, but not limited to construction of all seawalk, utility, and other related improvements. CBJ shall give 10 day notice to Franklin Dock Enterprises prior to beginning construction activities on Lot 1A, 2A and 3A. This notice shall include a work schedule as well as a site plan showing which portion of the lots shall be utilized for construction activities and which portion of Lots 1 and 2 shall be used for staging activities and storage of materials. Storage of materials shall be limited to those materials that shall be used in the short term; long term storage of materials shall not be permitted. Franklin Dock Enterprises shall approve the schedule and plan in writing prior to construction beginning. CBJ shall coordinate construction activities and usage of Lot 1A, 2A and 3A with Franklin Dock Properties to schedule all construction activities outside of the cruise ship season.

CBJ shall indemnify and hold Franklin Dock Enterprises and its officers, directors and employees harmless for, from and against any and all liability, responsibility, obligations, claims, or damages incurred or sustained by any of such parties arising from the activities of CBJ, its contractors, agents and employees, on Lot 1A, 2A and 3A.

CBJ shall pay for and execute the repair to equal or better condition of property damages incurred from driving piles or performing other construction activities on Lot 1A, 2A and 3A. These damages could include concrete or asphalt cracking or damages to other structures caused by settling or vibration as a result of construction activities. CBJ recognizes that some damages may not be visible for up to three years after construction activity ceases.

If the GRANTEE fails to commence construction of the Seawalk prior to September 30, 2015 or if the project is otherwise abandoned or completion made impossible, GRANTEE agrees to release this easement upon request of the GRANTOR.

The parties agree to comply with the terms and conditions of this easement and further agree to communicate and work together to resolve compliance concerns that may arise. GRANTOR has the right to revoke this easement if, after 90 days written notice and opportunity to cure, GRANTEE remains non-compliant with a material term and/or condition of the Easement. Unless otherwise agreed by the parties, in the event of revocation, the easement improvements may be retained by GRANTOR, upon payment to the CBJ for the fair market value of the improvements.

IN WITNESS WHEREOF, the parties have executed this Easement as of the date and year set forth below.

GRANTEE:
CITY AND BOROUGH OF JUNEAU

By: _____

Name: Kimberly A. Kiefer

Its: City and Borough Manager

GRANTOR:
FRANKLIN DOCK ENTERPRISES, LLC

By: _____

Name: Reed Stoops

Its: Managing Member

GRANTOR ACKNOWLEDGMENT

STATE OF ALASKA)
) : ss.
First Judicial District)

This is to certify that on the 18 day of April, 2013, before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared Reed Stoops, III, to me known to be the

identical individual(s) described in and who executed the foregoing instrument as the Managing Member, who on oath stated that s/he was duly authorized to execute said instrument on behalf of said corporation, who acknowledged to me that s/he signed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

WITNESS my hand and official seal on the day and year in this certificate first above written.

Natalia Gilley
Notary Public in and for the State of Alaska
My Commission Expires: June 12, 2016

GRANTEE ACKNOWLEDGMENT

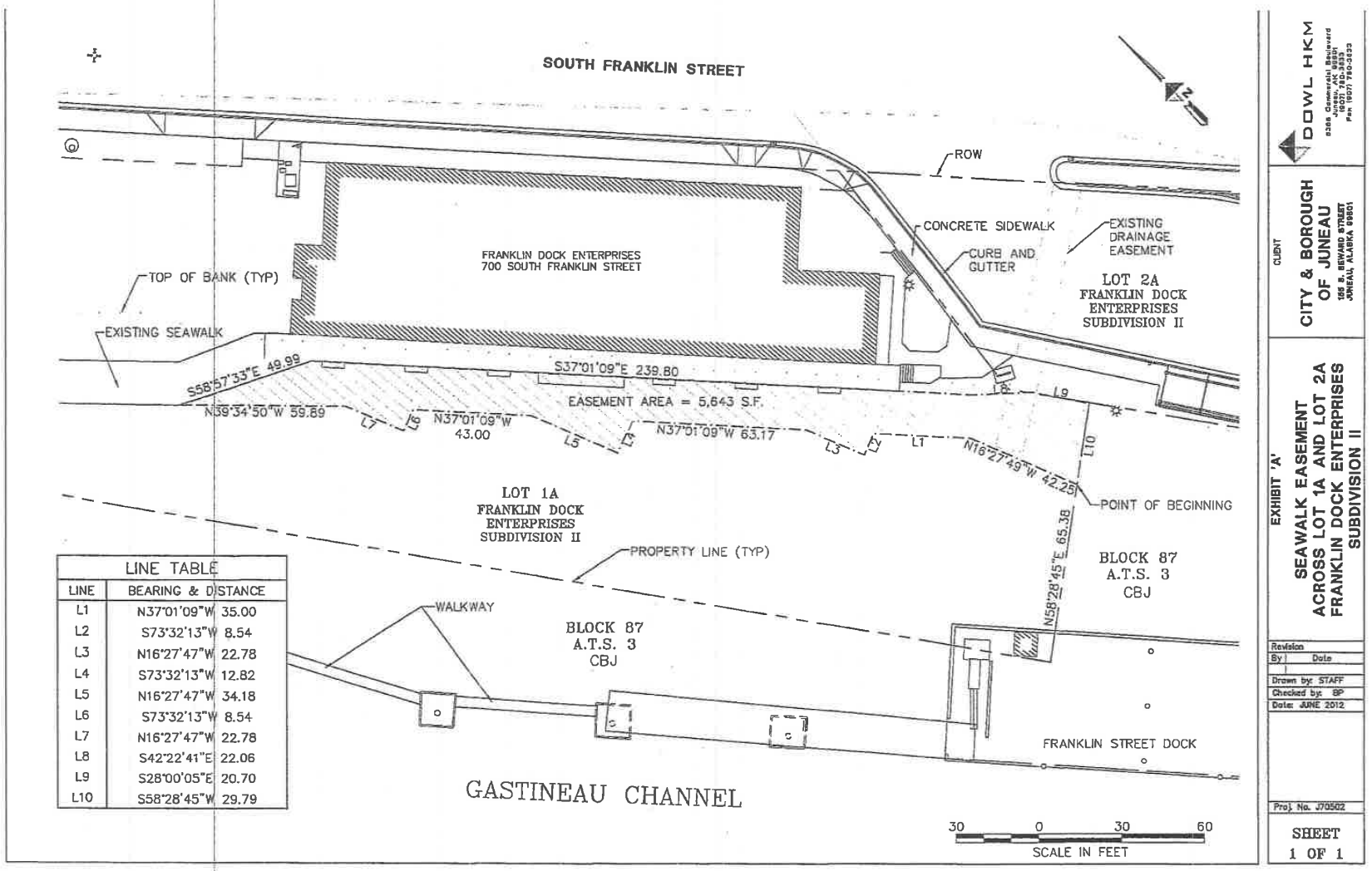
STATE OF ALASKA)
) : ss.
First Judicial District)

This is to certify that on the _____ day of _____, 2013, before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared Kimberly Kiefer to me known to be the Manager of the City and Borough of Juneau, Alaska, a municipal corporation which executed the above and foregoing instrument, who on oath stated that she was duly authorized to execute said instrument on behalf of said corporation, who acknowledged to me that she signed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

WITNESS my hand and official seal on the day and year in this certificate first above written.

Veeraya R Branum
Notary Public in and for the State of Alaska
My Commission Expires: 10-15-2015

STATE OF ALASKA
OFFICIAL SEAL
Veeraya R. Branum
NOTARY PUBLIC
My Commission Expires: 10-15-2015



LINE TABLE	
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L9	S28°00'05"E 20.70
L10	S58°28'45"W 29.79

DOWL HKM
8338 Glacier Highway
Juneau, AK 99801
(907) 780-6151
Fax (907) 780-3233

CLIENT
CITY & BOROUGH OF JUNEAU
155 S. SEWARD STREET
JUNEAU, ALASKA 99801

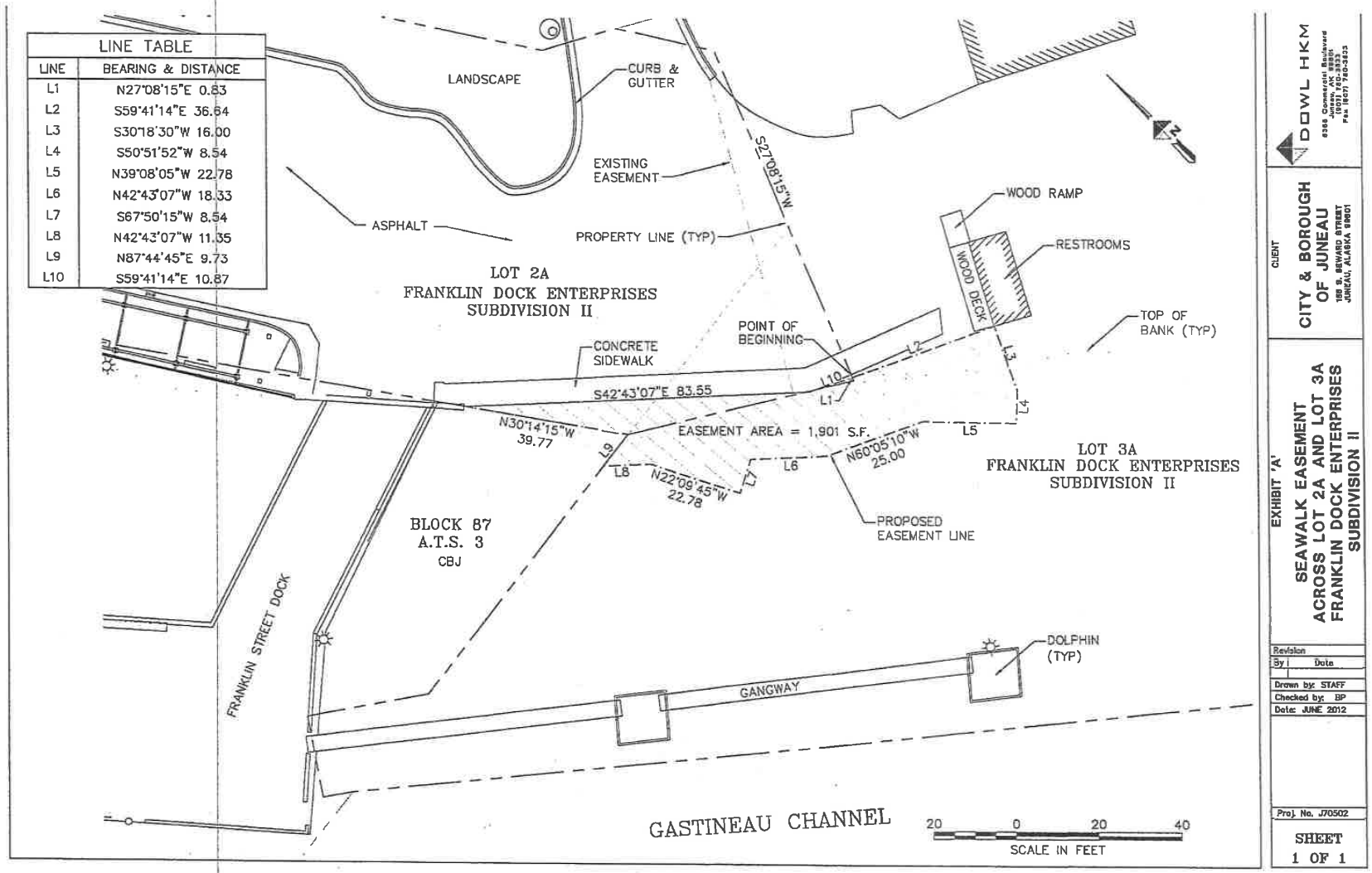
EXHIBIT 'A'
SEAWALK EASEMENT
ACROSS LOT 1A AND LOT 2A
FRANKLIN DOCK ENTERPRISES
SUBDIVISION II

Revision	
By	Date
Drawn by: STAFF	
Checked by: BP	
Date: JUNE 2012	

Proj. No. J70502

SHEET
1 OF 1

Attachment H- Agency Review Comments



Attachment H- Agency Review Comments

ALASKA
2013-003117-0
Recording District 101 Juneau
04/29/2013 12:36 PM Page 1 of 7

When recorded return to:
Engineering Dept.
City and Borough of Juneau
155 S. Seward Street
Juneau, Alaska 99801

SEAWALK EASEMENT

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This exclusive and perpetual easement shall at all times be a continuing covenant running with the land and shall be binding upon and in favor of the successors and assigns of the respective parties hereto.

GRANTEE agrees to maintain the easement and all improvements in good and safe repair and condition and shall indemnify, defend, and hold harmless GRANTOR from and against all claims, actions, liabilities, damages, and expenses arising out of the GRANTEE'S and/or the public's use of the easement, except for that part of any claim, action, liability, damage or expense, attributable to the negligence of GRANTOR, its agents, tenants or assigns.

The GRANTOR hereby agrees not to construct or have constructed any improvements or structures on the easement, or to otherwise impede GRANTEE'S or the public's use of the easement described herein, without the consent of GRANTEE.

Effective upon execution of this Easement and until completion of the contemplated work, CBJ and its agents and contractors will have the right and license to enter upon Lots 1 and 2 for the purpose of construction/reconstruction and staging activities relating to and including, but not limited to construction of all seawalk, utility, and other related improvements. CBJ shall give 10 day notice to Franklin Dock Enterprises prior to beginning construction activities on Lot 1A, 2A and 3A. This notice shall include a work schedule as well as a site plan showing which portion of the lots shall be utilized for construction activities and which portion of Lots 1 and 2 shall be used for staging activities and storage of materials. Storage of materials shall be limited to those materials that shall be used in the short term; long term storage of materials shall not be permitted. Franklin Dock Enterprises shall approve the schedule and plan in writing prior to construction beginning. CBJ shall coordinate construction activities and usage of Lot 1A, 2A and 3A with Franklin Dock Properties to schedule all construction activities outside of the cruise ship season.

CBJ shall indemnify and hold Franklin Dock Enterprises and its officers, directors and employees harmless for, from and against any and all liability, responsibility, obligations, claims, or damages incurred or sustained by any of such parties arising from the activities of CBJ, its contractors, agents and employees, on Lot 1A, 2A and 3A.

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If the GRANTEE fails to commence construction of the Seawalk prior to September 30, 2015 or if the project is otherwise abandoned or completion made impossible, GRANTEE agrees to release this easement upon request of the GRANTOR.

The parties agree to comply with the terms and conditions of this easement and further agree to communicate and work together to resolve compliance concerns that may arise. GRANTOR has the right to revoke this easement if, after 90 days written notice and opportunity to cure, GRANTEE remains non-compliant with a material term and/or condition of the Easement. Unless otherwise agreed by the parties, in the event of revocation, the easement improvements may be retained by GRANTOR, upon payment to the CBJ for the fair market value of the improvements.

IN WITNESS WHEREOF, the parties have executed this Easement as of the date and year set forth below.

GRANTEE:
CITY AND BOROUGH OF JUNEAU

By: _____

Name: Kimberly A. Kiefer

Its: City and Borough Manager

GRANTOR:
FRANKLIN DOCK ENTERPRISES, LLC

By: _____

Name: Reed Stoops

Its: Managing Member

GRANTOR ACKNOWLEDGMENT

STATE OF ALASKA)
) : ss.
First Judicial District)

This is to certify that on the 18 day of April, 2013, before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared Reed Stoops, III, to me known to be the

identical individual(s) described in and who executed the foregoing instrument as the Managing Member, who on oath stated that s/he was duly authorized to execute said instrument on behalf of said corporation, who acknowledged to me that s/he signed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

WITNESS my hand and official seal on the day and year in this certificate first above written.

Natalia Ridley
Notary Public in and for the State of Alaska
My Commission Expires: June 12, 2016

GRANTEE ACKNOWLEDGMENT

STATE OF ALASKA)
) : ss.
First Judicial District)

This is to certify that on the _____ day of _____, 2013, before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared Kimberly Kiefer to me known to be the Manager of the City and Borough of Juneau, Alaska, a municipal corporation which executed the above and foregoing instrument, who on oath stated that she was duly authorized to execute said instrument on behalf of said corporation, who acknowledged to me that she signed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

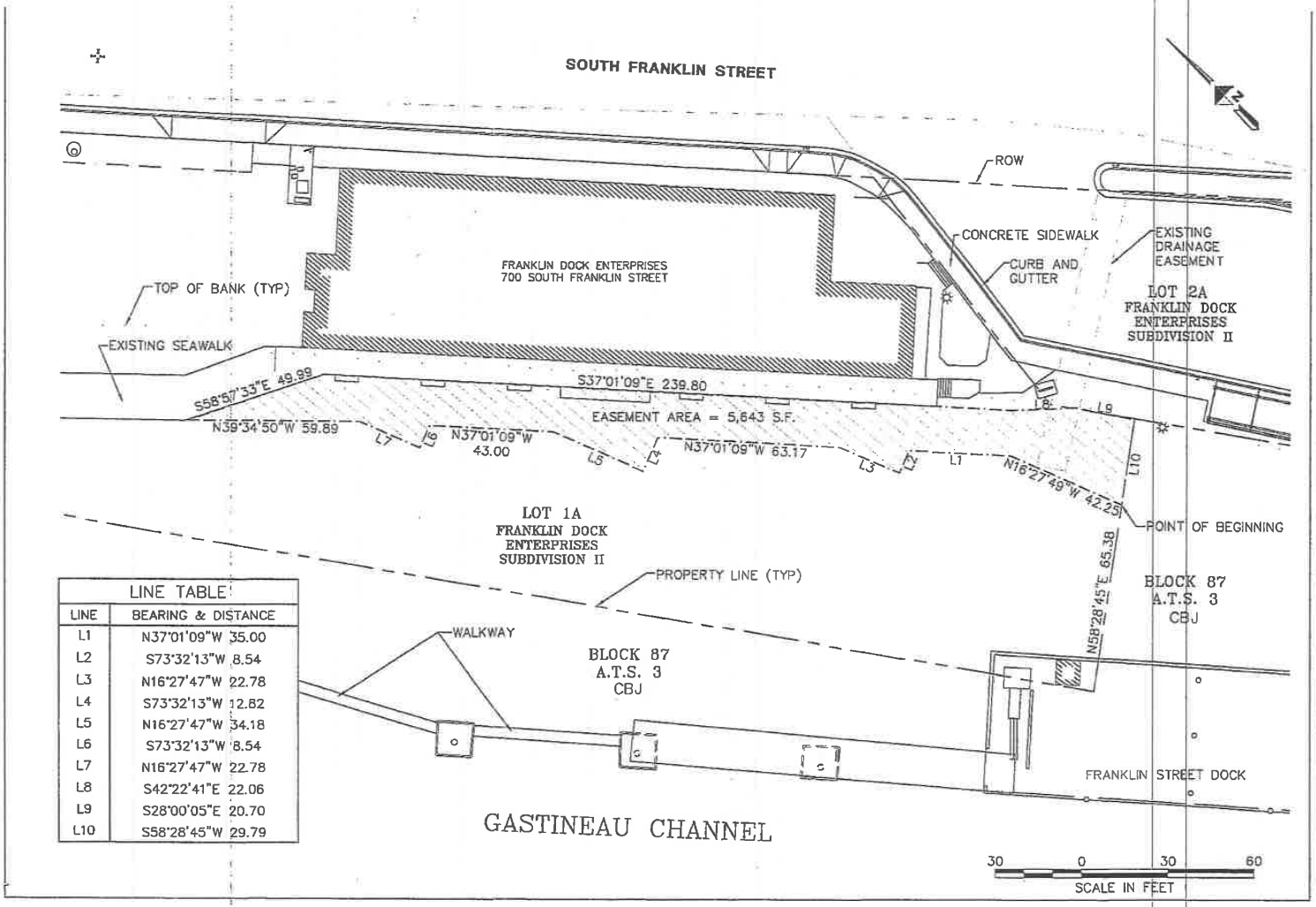
WITNESS my hand and official seal on the day and year in this certificate first above written.

Veeraya R Branum
Notary Public in and for the State of Alaska
My Commission Expires: 10-15-2015

STATE OF ALASKA
OFFICIAL SEAL
Veeraya R. Branum
NOTARY PUBLIC
My Commission Expires: 10-15-2015

When recorded, Return to:

CITY AND BOROUGH OF JUNEAU
ENGINEERING DEPARTMENT
155 SOUTH SEWARD ST.
JUNEAU, AK 99801



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DOWL HKM
6368 Commercial Boulevard
Juneau, AK 99801
(907) 790-4800
Fax (907) 790-4853

CLIENT
CITY & BOROUGH OF JUNEAU
155 S. SEWARD STREET
JUNEAU, ALASKA 99801

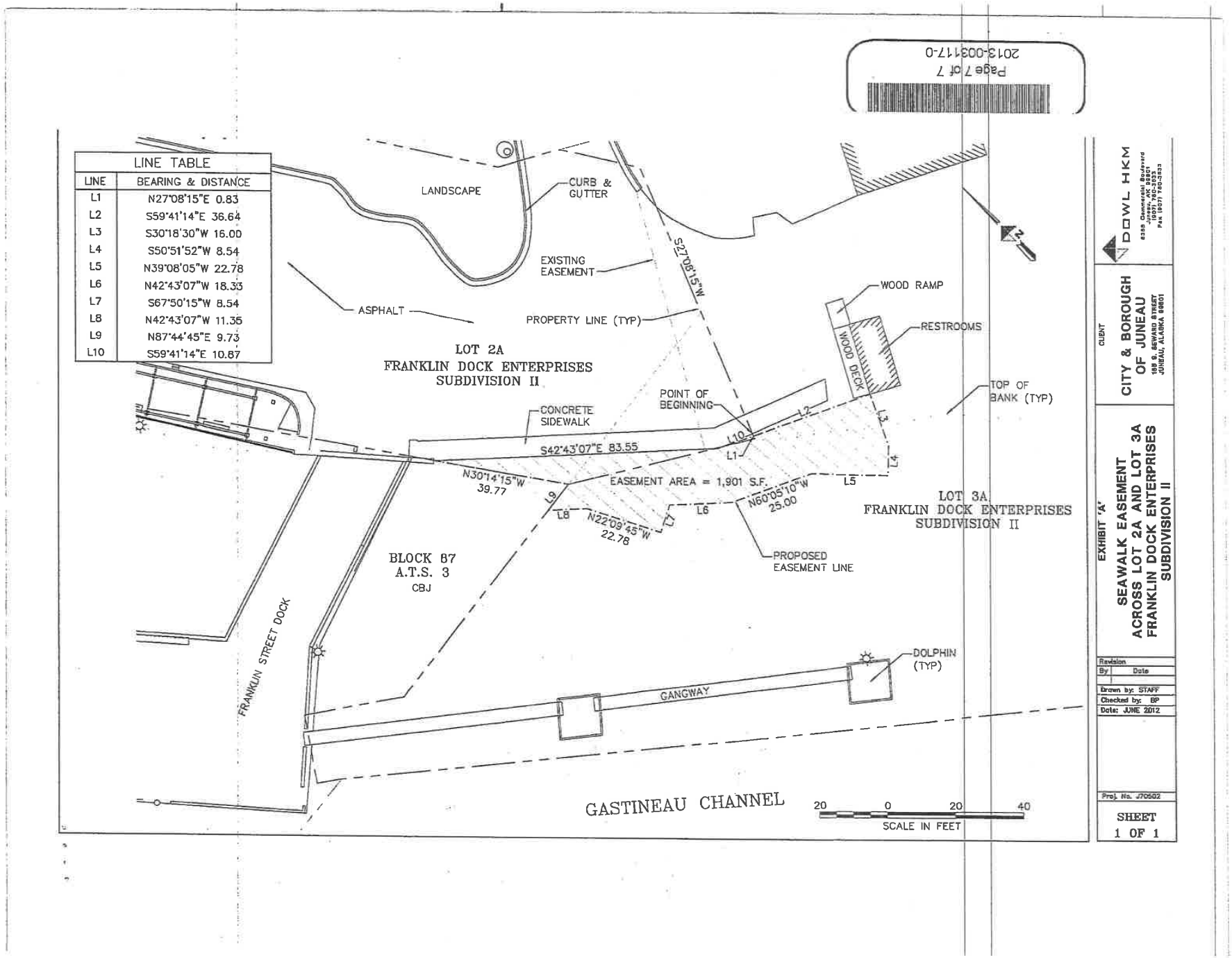
EXHIBIT 'A'
SEAWALK EASEMENT
ACROSS LOT 1A AND LOT 2A
FRANKLIN DOCK ENTERPRISES
SUBDIVISION II

Revision	
By	Date
Drawn by: STAFF	
Checked by: BP	
Date: JUNE 2012	

Proj. No. J70502

SHEET
1 OF 1

Attachment H- Agency Review Comments



Attachment H- Agency Review Comments

ALASKA

2013-003117-0

Recording District 101 Juneau

04/29/2013 12:36 PM Page 1 of 7

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City and Borough of Juneau
155 S. Seward Street
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Commencing at the most south corner of Lot 1A, Franklin Dock Enterprises Subdivision II, Juneau Plat 96-71; thence along the southeasterly boundary line of said Lot 1A, N 58° 28' 45" E, 65.38 feet to a point on the seaward edge of the as-constructed timber seawalk, said point being the true point of beginning for this description; thence along said edge of seawalk, N 16° 27' 49" W, 42.25 feet; thence continuing along said edge, N 37° 01' 09" W, 35.00 feet; thence continuing along said edge, S 73° 32' 13" W, 8.54 feet; thence continuing along said edge, N 16° 27' 47" W, 22.78 feet; thence continuing along said edge, N 37° 01' 09" W, 63.17 feet; thence continuing along said edge, S 73° 32' 13" W, 12.82 feet; thence continuing along said edge, N 16° 27' 47" W, 34.18 feet; thence continuing along said edge, N 37° 01' 09" W, 43.00 feet; thence continuing along said edge, S 73° 32' 13" W, 8.54 feet; thence continuing along said edge, N 16° 27' 47" W, 22.78 feet; thence continuing along said edge, N 39° 34' 50" W,

59.89 feet to the seaward edge of the existing wood timber seawalk; thence along said edge of existing seawalk, S 58° 57' 33" E, 49.99 feet; thence continuing along said edge of existing seawalk, coincidental with the landward edge of the as-constructed timber seawalk, S 37° 01' 09" E, 239.80 feet; thence continuing along said landward edge, S 42° 22' 41" E, 22.06 feet; thence continuing along said landward edge, S 28° 00' 05" E, 20.70 feet to a point on the southerly boundary line of said Lot 1A; thence leaving said landward edge along said southerly boundary line, S 58° 28' 45" W, 29.79 feet to the point of beginning and terminus of this description.

Containing in all 5,643 square feet more or less.

FRANKLIN DOCK ENTERPRISES, LLC, an Alaska limited liability corporation registered to do business in Alaska, with its principal office at 240 Main St., Suite 600, Juneau, Alaska, 99801 ("GRANTOR") for and in consideration of one dollar and other good and valuable consideration in hand paid, hereby grants, conveys and dedicates to the CITY AND BOROUGH OF JUNEAU, an Alaska municipal corporation, with its principal office at 155 South Seward Street, Juneau, Alaska 99801 ("GRANTEE" or "CBJ"), an exclusive, perpetual public easement upon portions of the lands within Lots 2A and 3A of Franklin Dock Enterprises Subdivision II, according to Plat No. 96-71, Juneau Recording District, State of Alaska, which easement is shown on "Exhibit A", attached hereto, and more particularly described as follows:

Commencing at the most south corner of Lot 2A, Franklin Dock Enterprises Subdivision II, Juneau Plat No. 96-71, said point also being a corner of Lot 3A, Franklin Dock Enterprises Subdivision II; thence along the southeasterly boundary line of said Lot 2A, N 27° 08' 15" E, 0.83 feet to a point on the landward edge of the as-constructed timber seawalk, said point being the true point of beginning for this description; thence along the landward edge of the as-constructed timber seawalk S 59° 41' 14" E, 36.64 feet; thence along the edge of said timber seawalk S 30° 18' 30" W, 16.00 feet; thence continuing along said edge S 50° 51' 52" W, 8.54 feet to the corner of said as-constructed timber seawalk; thence along the seaward edge of said timber seawalk N 39° 08' 05" W, 22.78 feet; thence continuing along said edge N 60° 05' 10" W, 25.00 feet; thence continuing along said edge N 42° 43' 07" W, 18.33 feet; thence continuing along said edge S 67° 50' 15" W, 8.54 feet; thence continuing along said edge N 22° 09' 45" W, 22.78 feet, thence continuing along said edge N 42° 43' 07" W, 11.35 feet to a point on the northwesterly boundary line of said Lot 3A; thence leaving said edge, along said boundary line, N 87° 44'

45" E, 9.73 feet to a point on the southerly boundary line of said Lot 2A; thence along the westerly boundary line of said Lot 2A, N 30° 14' 15" W, 39.77 feet to a point on the landward edge of the as-constructed timber seawalk; thence along said edge of timber seawalk, S 42° 43' 07" E, 83.55 feet; thence continuing along said edge S 59° 41' 14" E, 10.87 feet to the point of beginning and terminus of this description.

Containing in all 1,901 square feet more or less.

The purpose of this easement is to grant CBJ, its agents and assigns, the right to access, design, install, construct, maintain, and make improvements to a seawalk and utilities along the waterfront on Lot 1A, 2A, and 3A for public uses and purposes. This easement includes, but is not limited to, all development, modification, maintenance, repair and public use and access rights, as well as all maintenance, garbage & sanitation and emergency vehicle access rights necessary, useful, or convenient for the enjoyment of the public easement herein granted. This easement does not include the right to lease space to private vendors.

This exclusive and perpetual easement shall at all times be a continuing covenant running with the land and shall be binding upon and in favor of the successors and assigns of the respective parties hereto.

GRANTEE agrees to maintain the easement and all improvements in good and safe repair and condition and shall indemnify, defend, and hold harmless GRANTOR from and against all claims, actions, liabilities, damages, and expenses arising out of the GRANTEE'S and/or the public's use of the easement, except for that part of any claim, action, liability, damage or expense, attributable to the negligence of GRANTOR, its agents, tenants or assigns.

The GRANTOR hereby agrees not to construct or have constructed any improvements or structures on the easement, or to otherwise impede GRANTEE'S or the public's use of the easement described herein, without the consent of GRANTEE.

Effective upon execution of this Easement and until completion of the contemplated work, CBJ and its agents and contractors will have the right and license to enter upon Lots 1 and 2 for the purpose of construction/reconstruction and staging activities relating to and including, but not limited to construction of all seawalk, utility, and other related improvements. CBJ shall give 10 day notice to Franklin Dock Enterprises prior to beginning construction activities on Lot 1A, 2A and 3A. This notice shall include a work schedule as well as a site plan showing which portion of the lots shall be utilized for construction activities and which portion of Lots 1 and 2 shall be used for staging activities and storage of materials. Storage of materials shall be limited to those materials that shall be used in the short term; long term storage of materials shall not be permitted. Franklin Dock Enterprises shall approve the schedule and plan in writing prior to construction beginning. CBJ shall coordinate construction activities and usage of Lot 1A, 2A and 3A with Franklin Dock Properties to schedule all construction activities outside of the cruise ship season.

CBJ shall indemnify and hold Franklin Dock Enterprises and its officers, directors and employees harmless for, from and against any and all liability, responsibility, obligations, claims, or damages incurred or sustained by any of such parties arising from the activities of CBJ, its contractors, agents and employees, on Lot 1A, 2A and 3A.

CBJ shall pay for and execute the repair to equal or better condition of property damages incurred from driving piles or performing other construction activities on Lot 1A, 2A and 3A. These damages could include concrete or asphalt cracking or damages to other structures caused by settling or vibration as a result of construction activities. CBJ recognizes that some damages may not be visible for up to three years after construction activity ceases.

If the GRANTEE fails to commence construction of the Seawalk prior to September 30, 2015 or if the project is otherwise abandoned or completion made impossible, GRANTEE agrees to release this easement upon request of the GRANTOR.

The parties agree to comply with the terms and conditions of this easement and further agree to communicate and work together to resolve compliance concerns that may arise. GRANTOR has the right to revoke this easement if, after 90 days written notice and opportunity to cure, GRANTEE remains non-compliant with a material term and/or condition of the Easement. Unless otherwise agreed by the parties, in the event of revocation, the easement improvements may be retained by GRANTOR, upon payment to the CBJ for the fair market value of the improvements.

IN WITNESS WHEREOF, the parties have executed this Easement as of the date and year set forth below.

GRANTEE:
CITY AND BOROUGH OF JUNEAU

By: _____

Name: Kimberly A. Kiefer

Its: City and Borough Manager

GRANTOR:
FRANKLIN DOCK ENTERPRISES, LLC

By: _____

Name: Reed Stoops

Its: Managing Member

GRANTOR ACKNOWLEDGMENT

STATE OF ALASKA)
) : ss.
First Judicial District)

This is to certify that on the 18 day of April, 2013, before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared Reed Stoops, III, to me known to be the

identical individual(s) described in and who executed the foregoing instrument as the Managing Member, who on oath stated that s/he was duly authorized to execute said instrument on behalf of said corporation, who acknowledged to me that s/he signed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

WITNESS my hand and official seal on the day and year in this certificate first above written.

Natalia Ridley
Notary Public in and for the State of Alaska
My Commission Expires: Sept 12, 2016

GRANTEE ACKNOWLEDGMENT

STATE OF ALASKA)
) : ss.
First Judicial District)

This is to certify that on the _____ day of _____, 2013, before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared Kimberly Kiefer to me known to be the Manager of the City and Borough of Juneau, Alaska, a municipal corporation which executed the above and foregoing instrument, who on oath stated that she was duly authorized to execute said instrument on behalf of said corporation, who acknowledged to me that she signed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

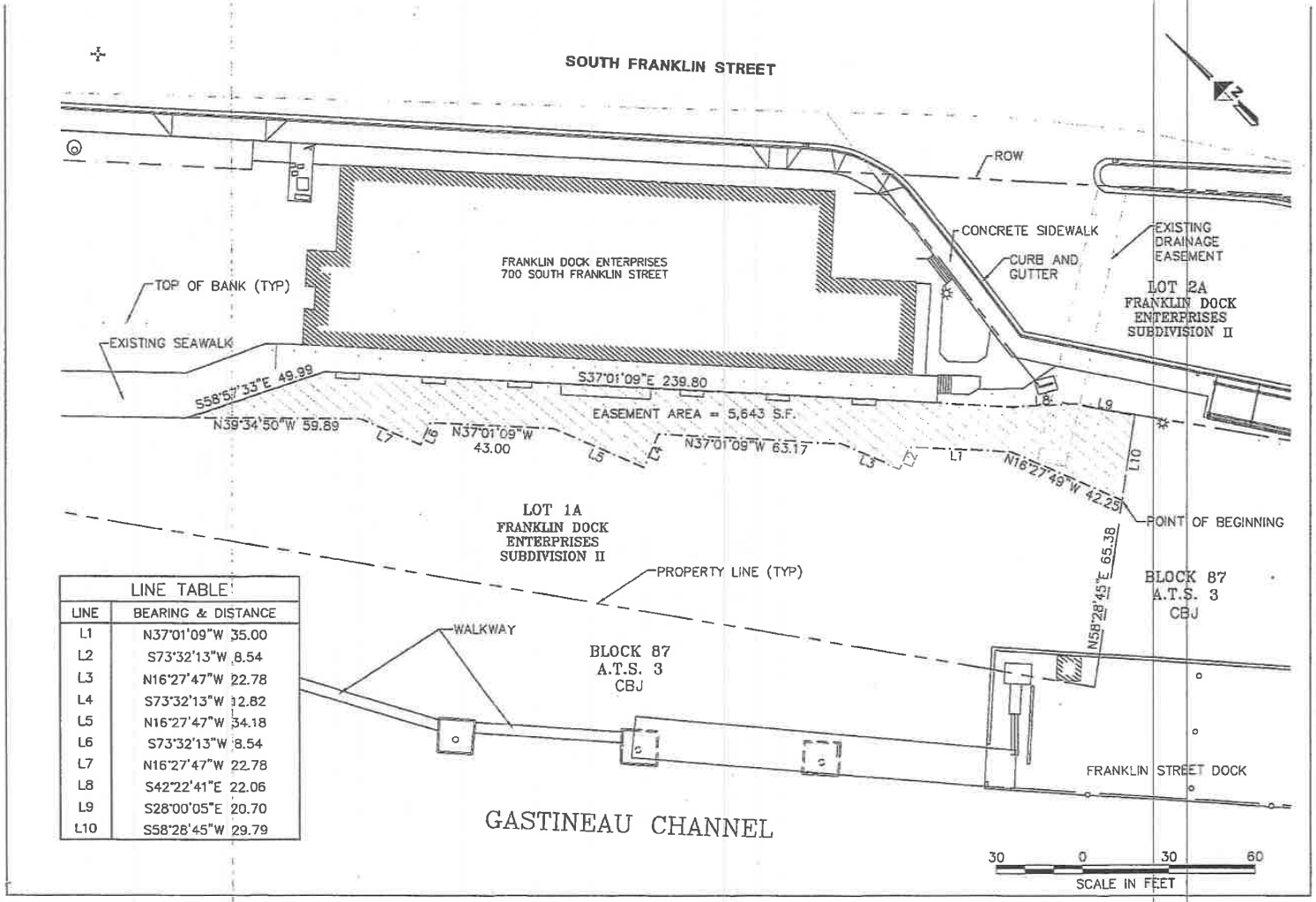
WITNESS my hand and official seal on the day and year in this certificate first above written.

Veeraya R Branum
Notary Public in and for the State of Alaska
My Commission Expires: 10-15-2015

STATE OF ALASKA
OFFICIAL SEAL
Veeraya R. Branum
NOTARY PUBLIC
My Commission Expires: 10-15-2015

When Recorded, Return to:

CITY AND BOROUGH OF JUNEAU
ENGINEERING DEPARTMENT
155 SOUTH SEWARD ST.
JUNEAU, AK 99801



LINE TABLE	
LINE	BEARING & DISTANCE
L1	N37°01'09"W 35.00
L2	S73°32'13"W 8.54
L3	N16°27'47"W 22.78
L4	S73°32'13"W 12.82
L5	N16°27'47"W 34.18
L6	S73°32'13"W 8.54
L7	N16°27'47"W 22.78
L8	S42°22'41"E 22.06
L9	S28°00'05"E 20.70
L10	S58°28'45"W 29.79

DOWL HKM
8888 Commercial Boulevard
Juneau, AK 99801
(907) 790-4800
Fax (907) 790-4853

CLIENT
CITY & BOROUGH OF JUNEAU
155 S. SEWARD STREET
JUNEAU, ALASKA 99801

EXHIBIT 'A'
SEAWALK EASEMENT
ACROSS LOT 1A AND LOT 2A
FRANKLIN DOCK ENTERPRISES
SUBDIVISION II

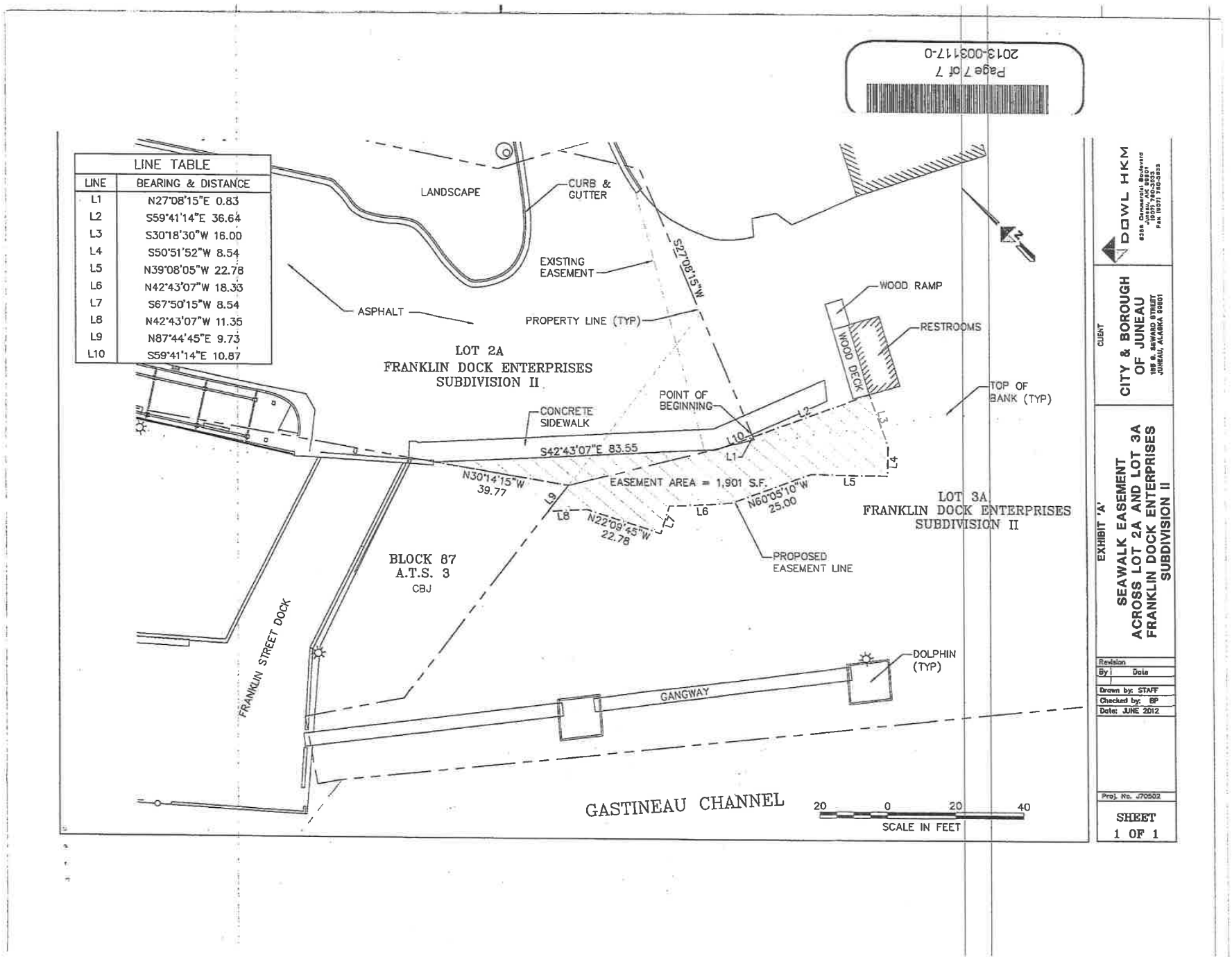
Revision
By | Date

Drawn by: STAFF
Checked by: BP
Date: JUNE 2012

Proj. No. J70502

SHEET
1 OF 1

Attachment H- Agency Review Comments



Attachment H- Agency Review Comments

When recorded return to:

City and Borough of Juneau
155 S. Seward Street
Juneau, Alaska 99801

SEAWALK EASEMENT

FRANKLIN DOCK ENTERPRISES, LLC, an Alaska limited liability corporation registered to do business in Alaska, with its principal office at 350 North Franklin Street., Suite 2, Juneau, Alaska, 99801 ("GRANTOR") for and in consideration of one dollar and other good and valuable consideration in hand paid, hereby grants, conveys and dedicates to the CITY AND BOROUGH OF JUNEAU, an Alaska municipal corporation, with its principal office at 155 South Seward Street, Juneau, Alaska 99801 ("GRANTEE" or "CBJ"), an exclusive, perpetual public easement upon portions of the lands within Lots 1A and 2A of Franklin Dock Enterprises Subdivision II, according to Plat No. 96-71, Juneau Recording District, State of Alaska, which easement is shown on Exhibit 'A', attached hereto, and more particularly described as follows:

> Commencing at the most south corner of Lot 1A, Franklin Dock Enterprises Subdivision II, Juneau Plat 96-71; thence along the southeasterly boundary line of said Lot 1A, N 58° 28' 45" E, 65.38 feet to a point on the seaward edge of the as-constructed timber seawalk, said point being the true point of beginning for this description; thence along said edge of seawalk, N 16° 27' 49" W, 42.25 feet; thence continuing along said edge, N 37° 01' 09" W, 35.00 feet; thence continuing along said edge, S 73° 32' 13" W, 8.54 feet; thence continuing along said edge, N 16° 27' 47" W, 22.78 feet; thence continuing along said edge, N 37° 01' 09" W, 63.17 feet; thence continuing along said edge, S 73° 32' 13" W, 12.82 feet; thence continuing along said edge, N 16° 27' 47" W, 34.18 feet; thence continuing along said edge, N 37° 01' 09" W, 43.00 feet; thence continuing along said edge, S 73° 32' 13" W, 8.54 feet; thence continuing along said edge, N 16° 27' 47" W, 22.78 feet; thence continuing along said edge, N 39° 34' 50" W,

59.89 feet to the seaward edge of the existing wood timber seawalk; thence along said edge of existing seawalk, S 58° 57' 33" E, 49.99 feet; thence continuing along said edge of existing seawalk, coincidental with the landward edge of the as-constructed timber seawalk, S 37° 01' 09" E, 239.80 feet; thence continuing along said landward edge, S 42° 22' 41" E, 22.06 feet; thence continuing along said landward edge, S 28° 00' 05" E, 20.70 feet to a point on the southerly boundary line of said Lot 1A; thence leaving said landward edge along said southerly boundary line, S 58° 28' 45" W, 29.79 feet to the point of beginning and terminus of this description.

Containing in all 5,643 square feet more or less.

FRANKLIN DOCK ENTERPRISES, LLC, an Alaska limited liability corporation registered to do business in Alaska, with its principal office at 240 Main St., Suite 600, Juneau, Alaska, 99801 ("GRANTOR") for and in consideration of one dollar and other good and valuable consideration in hand paid, hereby grants, conveys and dedicates to the CITY AND BOROUGH OF JUNEAU, an Alaska municipal corporation, with its principal office at 155 South Seward Street, Juneau, Alaska 99801 ("GRANTEE" or "CBJ"), an exclusive, perpetual public easement upon portions of the lands within Lots 2A and 3A of Franklin Dock Enterprises Subdivision II, according to Plat No. 96-71, Juneau Recording District, State of Alaska, which easement is shown on "Exhibit A", attached hereto, and more particularly described as follows:

Commencing at the most south corner of Lot 2A, Franklin Dock Enterprises Subdivision II, Juneau Plat No. 96-71, said point also being a corner of Lot 3A, Franklin Dock Enterprises Subdivision II; thence along the southeasterly boundary line of said Lot 2A, N 27° 08' 15" E, 0.83 feet to a point on the landward edge of the as-constructed timber seawalk, said point being the true point of beginning for this description; thence along the landward edge of the as-constructed timber seawalk S 59° 41' 14" E, 36.64 feet; thence along the edge of said timber seawalk S 30° 18' 30" W, 16.00 feet; thence continuing along said edge S 50° 51' 52" W, 8.54 feet to the corner of said as-constructed timber seawalk; thence along the seaward edge of said timber seawalk N 39° 08' 05" W, 22.78 feet; thence continuing along said edge N 60° 05' 10" W, 25.00 feet; thence continuing along said edge N 42° 43' 07" W, 18.33 feet; thence continuing along said edge S 67° 50' 15" W, 8.54 feet; thence continuing along said edge N 22° 09' 45" W, 22.78 feet, thence continuing along said edge N 42° 43' 07" W, 11.35 feet to a point on the northwesterly boundary line of said Lot 3A; thence leaving said edge, along said boundary line, N 87° 44'

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Containing in all 1,901 square feet more or less.

The purpose of this easement is to grant CBJ, its agents and assigns, the right to access, design, install, construct, maintain, and make improvements to a seawalk and utilities along the waterfront on Lot 1A, 2A, and 3A for public uses and purposes. This easement includes, but is not limited to, all development, modification, maintenance, repair and public use and access rights, as well as all maintenance, garbage & sanitation and emergency vehicle access rights necessary, useful, or convenient for the enjoyment of the public easement herein granted. This easement does not include the right to lease space to private vendors.

This exclusive and perpetual easement shall at all times be a continuing covenant running with the land and shall be binding upon and in favor of the successors and assigns of the respective parties hereto.

GRANTEE agrees to maintain the easement and all improvements in good and safe repair and condition and shall indemnify, defend, and hold harmless GRANTOR from and against all claims, actions, liabilities, damages, and expenses arising out of the GRANTEE'S and/or the public's use of the easement, except for that part of any claim, action, liability, damage or expense, attributable to the negligence of GRANTOR, its agents, tenants or assigns.

The GRANTOR hereby agrees not to construct or have constructed any improvements or structures on the easement, or to otherwise impede GRANTEE'S or the public's use of the easement described herein, without the consent of GRANTEE.

Effective upon execution of this Easement and until completion of the contemplated work, CBJ and its agents and contractors will have the right and license to enter upon Lots 1 and 2 for the purpose of construction/reconstruction and staging activities relating to and including, but not limited to construction of all seawalk, utility, and other related improvements. CBJ shall give 10 day notice to Franklin Dock Enterprises prior to beginning construction activities on Lot 1A, 2A and 3A. This notice shall include a work schedule as well as a site plan showing which portion of the lots shall be utilized for construction activities and which portion of Lots 1 and 2 shall be used for staging activities and storage of materials. Storage of materials shall be limited to those materials that shall be used in the short term; long term storage of materials shall not be permitted. Franklin Dock Enterprises shall approve the schedule and plan in writing prior to construction beginning. CBJ shall coordinate construction activities and usage of Lot 1A, 2A and 3A with Franklin Dock Properties to schedule all construction activities outside of the cruise ship season.

CBJ shall indemnify and hold Franklin Dock Enterprises and its officers, directors and employees harmless for, from and against any and all liability, responsibility, obligations, claims, or damages incurred or sustained by any of such parties arising from the activities of CBJ, its contractors, agents and employees, on Lot 1A, 2A and 3A.

CBJ shall pay for and execute the repair to equal or better condition of property damages incurred from driving piles or performing other construction activities on Lot 1A, 2A and 3A. These damages could include concrete or asphalt cracking or damages to other structures caused by settling or vibration as a result of construction activities. CBJ recognizes that some damages may not be visible for up to three years after construction activity ceases.

If the GRANTEE fails to commence construction of the Seawalk prior to September 30, 2015 or if the project is otherwise abandoned or completion made impossible, GRANTEE agrees to release this easement upon request of the GRANTOR.

The parties agree to comply with the terms and conditions of this easement and further agree to communicate and work together to resolve compliance concerns that may arise. GRANTOR has the right to revoke this easement if, after 90 days written notice and opportunity to cure, GRANTEE remains non-compliant with a material term and/or condition of the Easement. Unless otherwise agreed by the parties, in the event of revocation, the easement improvements may be retained by GRANTOR, upon payment to the CBJ for the fair market value of the improvements.

IN WITNESS WHEREOF, the parties have executed this Easement as of the date and year set forth below.

GRANTEE:
CITY AND BOROUGH OF JUNEAU

By: _____

Name: Kimberly A. Kiefer

Its: City and Borough Manager

GRANTOR:
FRANKLIN DOCK ENTERPRISES, LLC

By: _____

Name: Reed Stoops

Its: Managing Member

GRANTOR ACKNOWLEDGMENT

STATE OF ALASKA)
) : ss.
First Judicial District)

This is to certify that on the 18 day of April, 2013, before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared Reed Stoops, II, to me known to be the

identical individual(s) described in and who executed the foregoing instrument as the Managing Member, who on oath stated that s/he was duly authorized to execute said instrument on behalf of said corporation, who acknowledged to me that s/he signed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

WITNESS my hand and official seal on the day and year in this certificate first above written.

Natalia Kilday
Notary Public in and for the State of Alaska
My Commission Expires: June 12, 2016

GRANTEE ACKNOWLEDGMENT

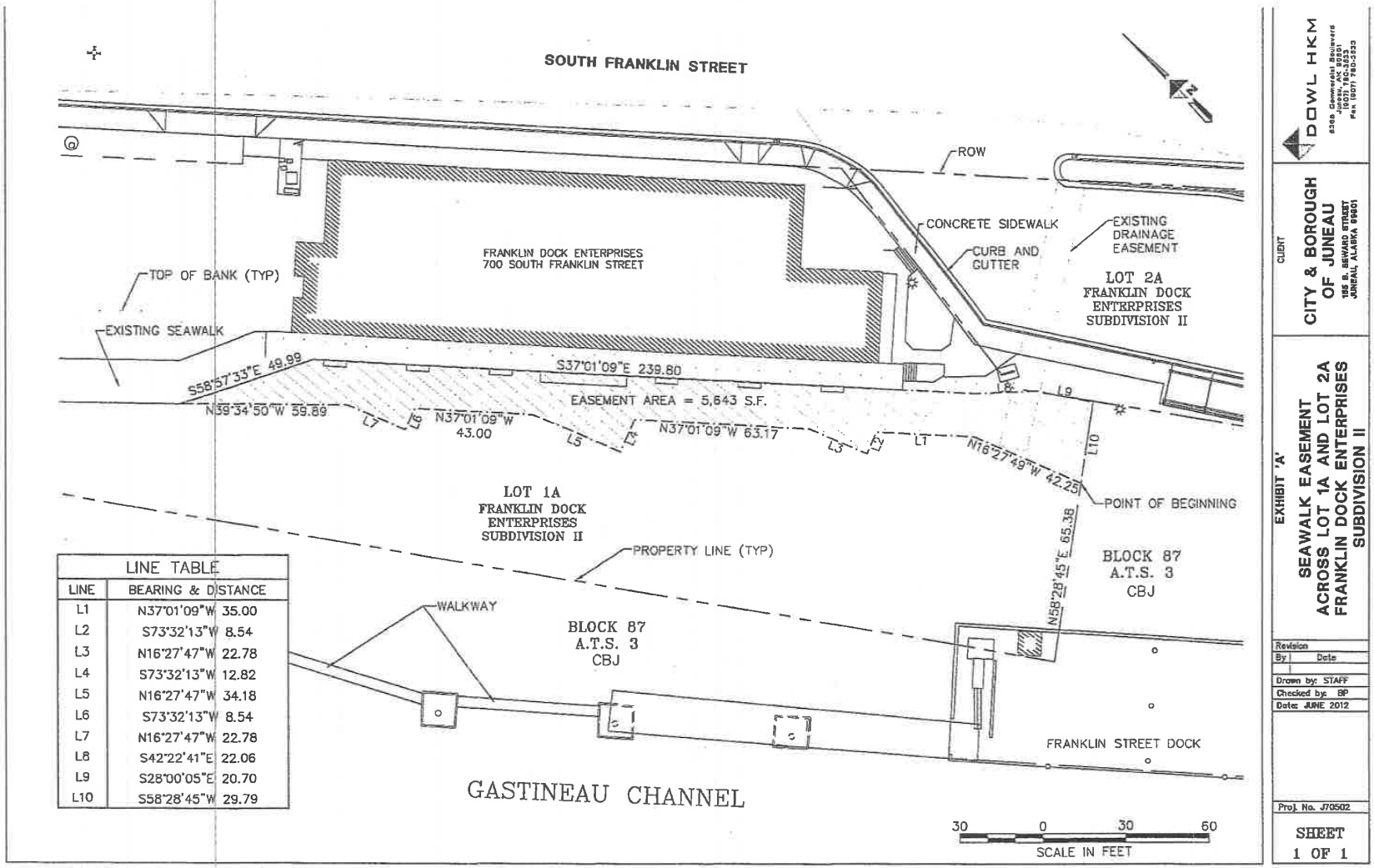
STATE OF ALASKA)
) : ss.
First Judicial District)

This is to certify that on the _____ day of _____, 2013, before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared Kimberly Kiefer to me known to be the Manager of the City and Borough of Juneau, Alaska, a municipal corporation which executed the above and foregoing instrument, who on oath stated that she was duly authorized to execute said instrument on behalf of said corporation, who acknowledged to me that she signed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

WITNESS my hand and official seal on the day and year in this certificate first above written.

Veeraya R Branum
Notary Public in and for the State of Alaska
My Commission Expires: 6-15-2015

STATE OF ALASKA
OFFICIAL SEAL
Veeraya R. Branum
NOTARY PUBLIC
My Commission Expires: 6-15-2015



LINE TABLE	
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L8	S42°22'41"E 22.06
L9	S28°00'05"E 20.70
L10	S58°28'45"W 29.79

DOWL HKM
6360 Commercial Boulevard
Juneau, AK 99801
(907) 790-3200
Fax (907) 790-3220

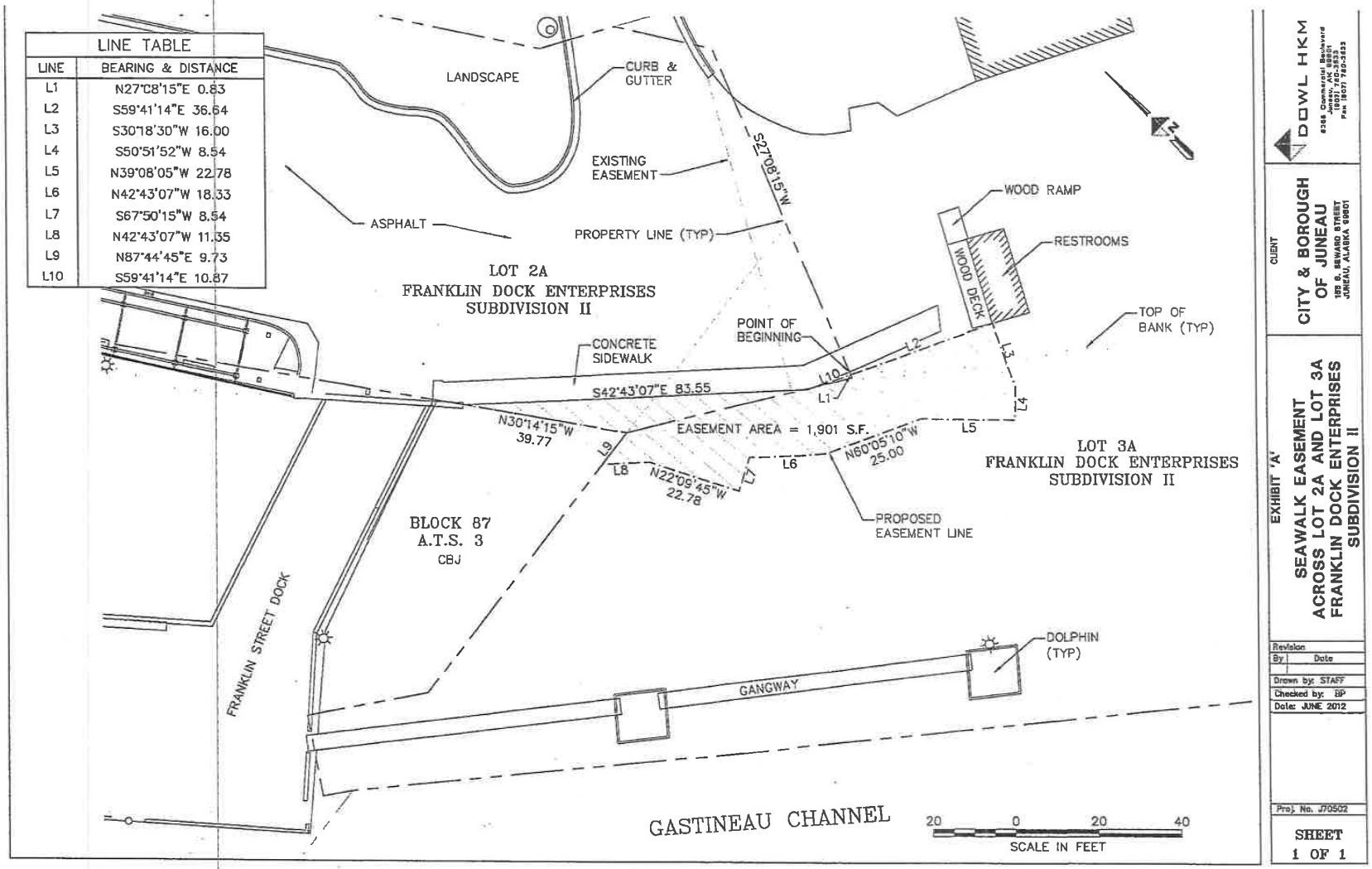
CLIENT
CITY & BOROUGH OF JUNEAU
155 S. SEWARD STREET
JUNEAU, ALASKA 99801

EXHIBIT 'A'
SEAWALK EASEMENT ACROSS LOT 1A AND LOT 2A FRANKLIN DOCK ENTERPRISES SUBDIVISION II

Revision	
By	Date
Drawn by: STAFF	
Checked by: BP	
Date: JUNE 2012	
Proj. No. J70502	

SHEET
1 OF 1

Attachment H- Agency Review Comments



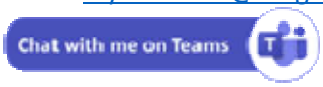
Attachment H- Agency Review Comments

Irene Gallion

From: Menze, Jay T CIV USCG CEU JUNEAU-ASSET L (USA) <Jay.T.Menze@uscg.mil>
Sent: Wednesday, June 21, 2023 7:16 PM
To: Irene Gallion
Subject: RE: [URL Verdict: Neutral][Non-DoD Source] USE23-03: Huna Totem Cruise Facility - per your query

Thanks for taking the time to talk with me.

v/r
Jay Menze, MAT4, USCG, Ret.
D14 & D17
Real Property Accountability Specialist (RPAS)
CEU Juneau
P: 907-463-2409
C: 907-209-3980
Email: Jay.T.Menze@uscg.mil



From: Irene Gallion <Irene.Gallion@juneau.gov>
Sent: Wednesday, June 21, 2023 3:54 PM
To: Menze, Jay T CIV USCG CEU JUNEAU-ASSET L (USA) <Jay.T.Menze@uscg.mil>
Cc: Irene Gallion <Irene.Gallion@juneau.gov>
Subject: [URL Verdict: Neutral][Non-DoD Source] USE23-03: Huna Totem Cruise Facility - per your query

Hi Jay,

Thank you for the call.

You had expressed concerns that the proposed cruise ship dock would impede Coast Guard operations, particularly regarding the Coast Guard mooring dolphin. You also advised that the Coat Guard will be accepting responsibility for NOAA lands to the east and will accommodate any federal ship.

I'm sending you the latest application materials.

Please advise of:

- The location of your mooring dolphin.
- The depth and width of area you'd need to operate effectively at your dock.

Note that the Planning Commission is not technically expert on maritime design, but can establish conditions for CBJ-held tidelands that could mitigate impacts on Coat Guard operations. There are two ways to present your information that would be helpful:

- In layman's terms, so that members of the public, the Commission and Assembly have an idea of the request.
- In technical terms, so constraints can be passed on to the Applicant and their engineers.

The documents I'm attaching are larger than the system allows, so I'll be sending you a ZendTo to pick them up. There will be a two week deadline on picking up the documents. If you miss it, let me know and I'll resend. Note: Please check your junk file!

You can also find initial documents at the project web site: https://juneau.org/community-development/short-term-projects Scroll down to case number USE2023 0003. The documents I'm e mailing you have been revised from those on the web site, but the site has not yet been updated.

Note that Coast Guard comments will need to be received by **noon on July 7th** to be considered by the Commission at their July 11th meeting.

As we discussed, after the Conditional Use Permit application will be the Tidelands Lease process run through CBJ Lands and decided by the Assembly.

Thank you,

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 x4130

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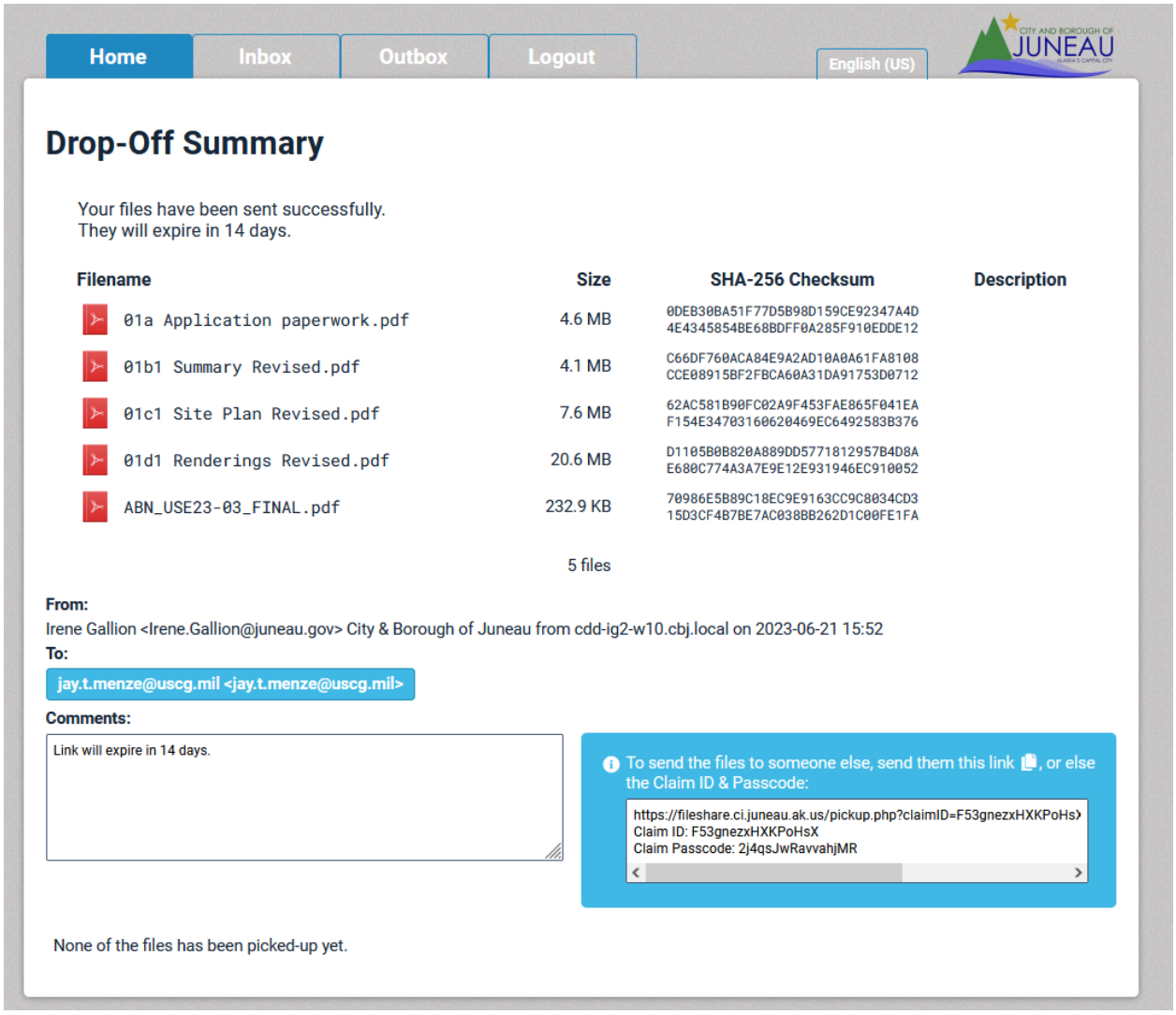
Fostering excellence in development for this generation and the next.

How are we doing? Provide feedback here: https://juneau.org/community-development/how-are-we-doing



Attachment H- Agency Review Comments

Irene Gallion

From: Irene Gallion
Sent: Monday, June 26, 2023 3:40 PM
To: Torba, Tracey L CDR USCG CEU JUNEAU-ASSET L (USA)
Cc: Sprenger, Paul A CIV USCG D17 (USA); randall.p.vigil@USACE.army.gov; matthew.t.brody@usace.army.mil; Stiles, Dave D. LCDR USCG SEC JUNEAU (USA); Meek, Moira H LT USCG CGC LIBERTY (USA); Schumacher, Mitchell P LCDR USCG CEU JUNEAU-ASSET L (USA); Irene Gallion
Subject: RE: USE23-03: Subport Development - agency comments

Hello CBR Torba,

Below are initial responses to your concerns. Please advise if you have any concerns or additions.

Thank you,

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 x4130

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---

From: Torba, Tracey L CDR USCG CEU JUNEAU-ASSET L (USA) <Tracey.L.Torba@uscg.mil>
Sent: Friday, June 23, 2023 10:17 AM
To: Irene Gallion <Irene.Gallion@juneau.gov>
Cc: Sprenger, Paul A CIV USCG D17 (USA) <Paul.Sprenger@uscg.mil>; randall.p.vigil@USACE.army.gov; matthew.t.brody@usace.army.mil; Stiles, Dave D. LCDR USCG SEC JUNEAU (USA) <Dave.D.Stiles@uscg.mil>; Meek, Moira H LT USCG CGC LIBERTY (USA) <Moira.H.Meek@uscg.mil>; Schumacher, Mitchell P LCDR USCG CEU JUNEAU-ASSET L (USA) <Mitchell.P.Schumacher@uscg.mil>
Subject: RE: USE23-03: Subport Development - agency comments

Good Afternoon Ms. Gallion,

I'll be your USCG POC for agency reviews going forward. Below are our comments:

- Concerning increased traffic on Whittier Street: STA Juneau needs to maintain unimpeded access to the pier. STA Juneau regularly transports crews and boats on the road system from downtown to Auke Bay for operations. CBJ requires rights-of-way remain clear for movement of pedestrians and vehicles. If the right-of-way will be blocked or used for other purposes, a ROW Permit will be required.

- Concerning on-street parking along Whittier Street: STA Juneau and the Buoy Deck utilize that public parking for overflow. Should it get repurposed, there will be an impact on Coast Guard use, along with patrons of the Buoy Deck restaurant/bar. Unless waivered or within the No Parking Required Area, property owners are expected to maintain adequate parking for their uses on their property. CBJ does not allow back-out parking onto rights-of-way for commercial uses. The Applicant has not included the Whittier Street spaces in their parking calculations, and showed them conceptually.
- Concerning significant increase to pedestrian traffic along Whittier Street: based on the projections and conceptual design, STA Juneau's security posture will require an upgraded stance, which will incur costs to the USCG. This note is not a request for funding, it is solely provided for awareness of the impact. If CBJ can facilitate reasonable accommodation through permitting or design please open that conversation with me, and I'll get you to the right Department depending on the proposal.
- Page 36 Existing Site Plan shows Huna Totem property line extended onto USCG property. We suspect they show it that way due to a 35' revocable permit that was previously in place with the State of Alaska when our wharf extended to the mooring dolphin and the State had a building located roughly where Tracy's Crab Shack is now. The permit was so they could access their building. Upon demolition of the building and transfer of the property to the Mental Health Trust the permit was dissolved. This information was passed to Fred Parady at Huna Totem on 11/15/2022. Pages 37-39 appear to have their planned seawalk partially on USCG property which is not allowable. I reached out to the applicant on this concern. No element of the development will extend into Coast Guard property. They are aware of the expired 35-foot easement. They are anticipating some supplemental survey that will clean up the drawings during design.
- According to our records, we own the bulkhead that runs along their property and our dock; what measures will be taken to ensure Huna Totem's planned construction does not compromise our bulkhead? If the bulkhead extends onto Applicant property, they will work with you regarding the encroachment. They anticipate that, if there are encroachments, they are very minor. They do not anticipate excavation work near your bulkhead, and will design their work to protect existing USCG structures.

Please don't hesitate to contact me with any questions or concerns. I look forward to working with you on this effort.

Respectfully,

CDR Tracey Torba, PE, PMP
Commanding Officer
U.S. Coast Guard Civil Engineering Unit Juneau
709 West Ninth Street | Juneau, AK| 99801
O: 907-463-2412| M: 907-463-2412
Chat on MS Teams
Call me on MS Teams

From: Irene Gallion <Irene.Gallion@juneau.gov>
Sent: Tuesday, May 30, 2023 10:02 AM
To: Sprenger, Paul A CIV USCG D17 (USA) <Paul.Sprenger@uscg.mil>; randall.p.vigil@USACE.army.gov; matthew.t.brody@usace.army.mil
Cc: Irene Gallion <Irene.Gallion@juneau.gov>; Stiles, Dave D. LCDR USCG SEC JUNEAU (USA) <Dave.D.Stiles@uscg.mil>
Subject: [URL Verdict: Neutral][Non-DoD Source] USE23-03: Subport Development - agency comments

Hello all,

Attached are revised application materials for proposed development of a cruise ship dock and associated uplands infrastructure. You can find additional information at our web site: https://juneau.org/community-development/short-term-projects

The Conditional Use Permit hearing has been scheduled for July 11, 2023.

Please have comments to CBJ by **June 26, 2023** for inclusion in the staff report. Comments received between June 26, 2023 and July 7, 2023 at noon will be forwarded directly to the Planning Commission. Comments received after July 7, 2023 at noon cannot be accepted.

Note that the purpose of the Planning Commission hearing and Conditional Use Permit process is to assure the project meets local codes and complies with local plans. We recognize that this project will still require permits from other local, state and federal agencies.

Thank you,

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 x4130

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Irene Gallion

From: Corey Wall <corey@jensenyorbawall.com>
Sent: Monday, June 26, 2023 12:37 PM
To: Irene Gallion; Fred Parady
Subject: Re: USE23-03: Coast Guard comment

Hi Irene-

I think this graphic problem was caused by some inaccuracies in our site survey information at this corner. We have pretty good survey work from PND that was done for NCL in 2021, but we understand this will need to be supplemented and we have a proposal from PND for that work.

Our response to the USCG is that we intend to extend the Seawalk between our building and the USCG property to the property line, but not over it. We understand that the old 35' easement has been revoked, and we were not intending to use it. If the existing USCG dock facilities extend off their property and encroach onto ours, then we will work with them to resolve the issue, but we think any encroachments are very minor. Our building starts a minimum of 16' back from property line, so there will not be major excavation work near the USCG bulkhead. We will design our work to protect any existing USCG structures.

Thanks,
C

From: Irene Gallion <Irene.Gallion@juneau.gov>
Sent: Monday, June 26, 2023 9:24 AM
To: Fred Parady <FParady@hunatotem.com>; Corey Wall <corey@jensenyorbawall.com>
Subject: USE23-03: Coast Guard comment

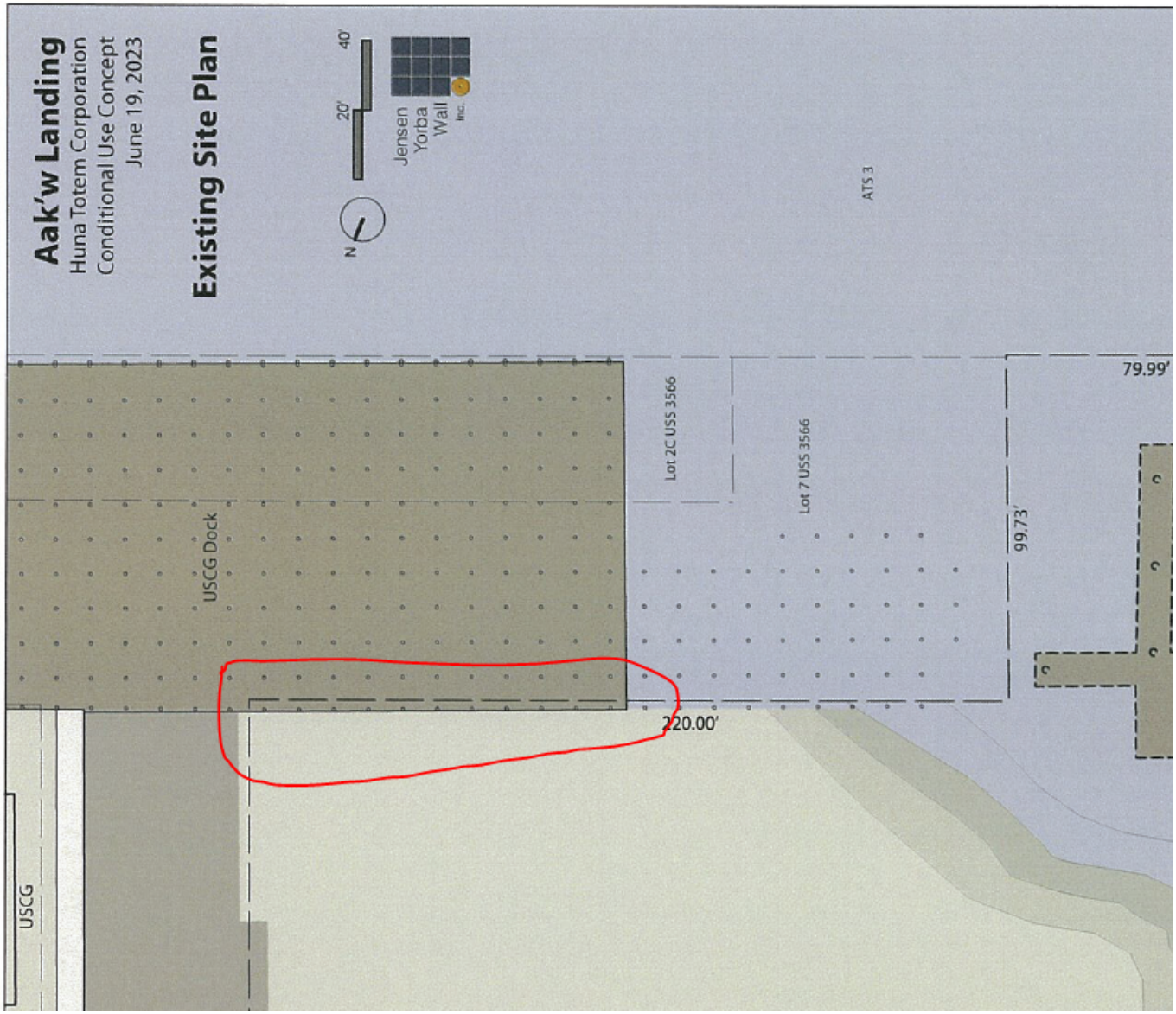
Hi Fred and Corey,

Hoping to get the staff report wrapped up today for Admin, hoping to get a quick response on these issues if able. Thanks!

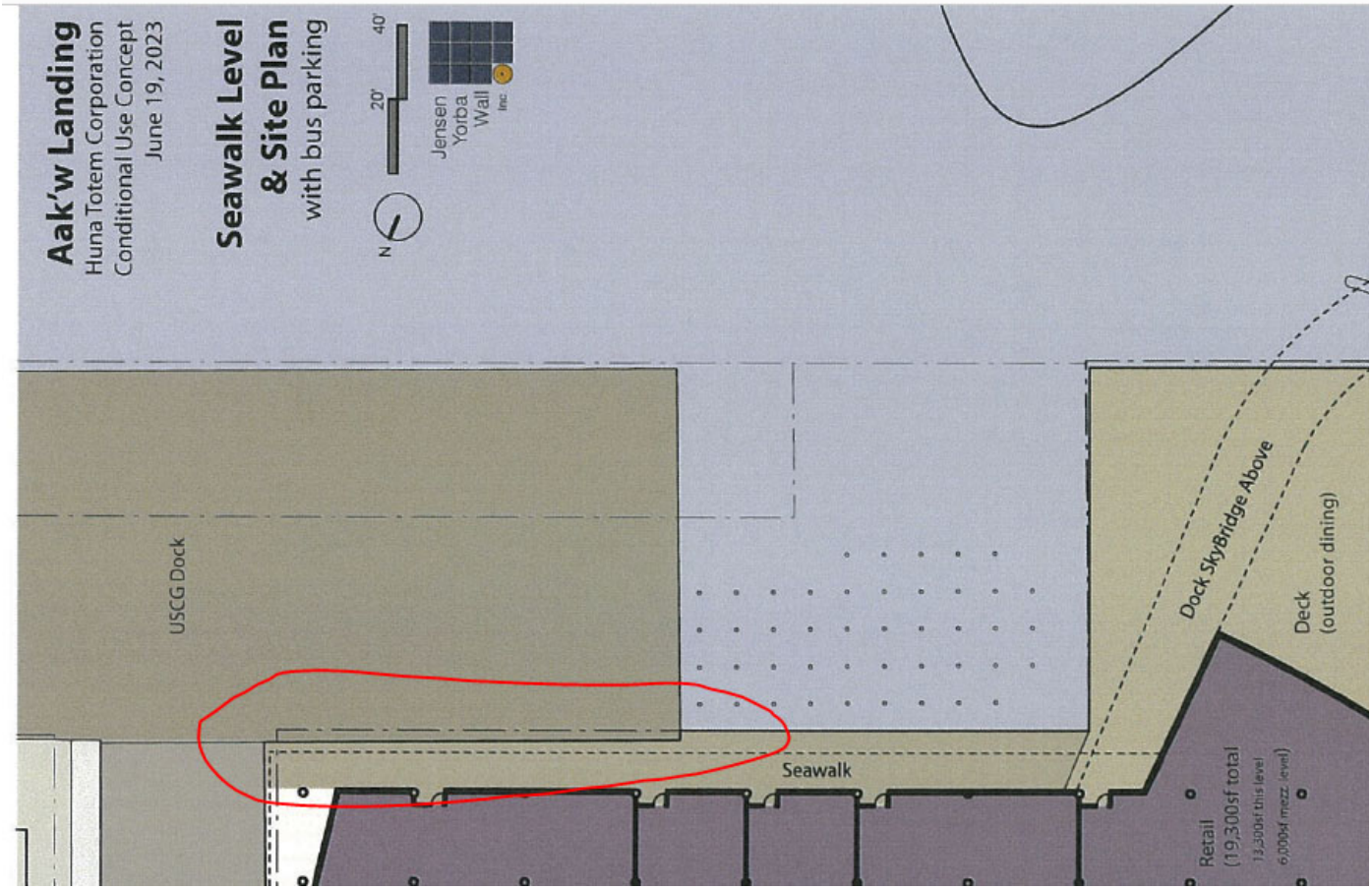
I received this comment from the Coast Guard:

- Page 36 Existing Site Plan shows Huna Totem property line extended onto USCG property. We suspect they show it that way due to a 35' revocable permit that was previously in place with the State of Alaska when our wharf extended to the mooring dolphin and the State had a building located roughly where Tracy's Crab Shack is now. The permit was so they could access their building. Upon demolition of the building and transfer of the property to the Mental Health Trust the permit was dissolved. This information was passed to Fred Parady at Huna Totem on 11/15/2022. Pages 37-39 appear to have their planned seawalk partially on USCG property which is not allowable.

I think they mean the area below:



When I look at subsequent drawings, based on color, it looks like development of the seawalk does not extend onto Coast Guard property. Is that correct? I remember Mickey talking about this at one of our meetings, so I think you are aware and designing appropriately, but wanted to double check.



Also, they say,

- According to our records, we own the bulkhead that runs along their property and our dock; what measures will be taken to ensure Huna Totem's planned construction does not compromise our bulkhead?

Thanks!

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 x4130

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Irene Gallion

From: Drown, Arthur EE (DOT) <arthur.drown@alaska.gov>
Sent: Monday, June 26, 2023 2:01 PM
To: Irene Gallion
Cc: Schuler, Michael K (DOT); Purves, Nathan A (DOT); Thater, Steven P (DOT)
Subject: RE: Traffic Impact Analysis for Huna Totem Aak'w Landing project

Good afternoon Irene,

The outcome of a very productive meeting between the Department, DOWL, Huna Totem and Jensen Yorba Wall this morning culminated in the following adjustments to the previously provided feedback on the review of the subject TIA. Hopefully this is not too late, but please submit this as DOT&PF's comments on the TIA.

The review of the provided TIA for the proposed development garnered the following feedback from the respective sections within the Department.

Planning: No objections from Planning. The assumed no build growth rate seems high at 2%; however, I note it was confirmed by DOT&PF. As well, mitigation is included for the Egan/Whittier intersection, so I am not concerned that the no build growth rate impacts the final outcome.

Environmental: No comment at this time from Environmental concerning the TIA and potential traffic impacts.

Traffic and Safety: Traffic and Safety is working with DOWL to ensure that a revised Traffic Impact Analysis meets the needs of the Department and addresses pertinent mitigation measures necessary to successfully flow traffic in the best interests of the traveling public.

Maintenance and Operations: No comment.

Right of Way: Per 17 AAC 10.060 the developers will be required to submit an application for an approach road permit as the proposed development significantly changes the current land use of the subject property and traffic flow into the established DOT&PF facility, specifically at the Egan/Whittier intersection. As part of the permitting process, the Department will build a memorandum of agreement with the developer to address any and all mitigation measures needed to alleviate traffic flow issues that may arise from the subject properties change of use. At this time, the subject Traffic Impact Analysis is preliminary and will be modified to address potential traffic flow mitigation measures as they are identified. For further Right of Way permitting questions, please contact Right of Way Agent, Arthur Drown Phone: 907-465-4517 or email arthur.drown@alaska.gov to work through the permitting process.

Thank you,

Arthur Drown
Right of Way Agent
Property Management, Right of Way
Department of Transportation & Public Facilities
Southcoast Region
6860 Glacier Hwy, Juneau, AK 99801
(907)465-4517

From: Irene Gallion <Irene.Gallion@juneau.gov>
Sent: Friday, June 16, 2023 1:53 PM
To: Drown, Arthur EE (DOT) <arthur.drown@alaska.gov>
Subject: RE: Traffic Impact Analysis for Huna Totem Aak'w Landing project

Hi Arthur,

Not nagging, just checking – does it look like you'll have comments by June 26th?

Thank you, have a good weekend!

IMG

From: Drown, Arthur EE (DOT) <arthur.drown@alaska.gov>
Sent: Tuesday, May 30, 2023 7:59 AM
To: Irene Gallion <Irene.Gallion@juneau.gov>; Scott Ciambor <Scott.Ciambor@juneau.gov>
Cc: Schuler, Michael K (DOT) <michael.schuler@alaska.gov>
Subject: RE: Traffic Impact Analysis for Huna Totem Aak'w Landing project

Thank you for this information Irene,

I put the TIA out for Department wide review, I will compile any comments provided and return a summary to you prior to the deadline.

Arthur Drown
Right of Way Agent
Property Management, Right of Way
Department of Transportation & Public Facilities
Southcoast Region
6860 Glacier Hwy, Juneau, AK 99801
(907)465-4517

From: Irene Gallion <Irene.Gallion@juneau.gov>
Sent: Friday, May 26, 2023 4:18 PM
To: Drown, Arthur EE (DOT) <arthur.drown@alaska.gov>; Scott Ciambor <Scott.Ciambor@juneau.gov>
Cc: Schuler, Michael K (DOT) <michael.schuler@alaska.gov>
Subject: RE: Traffic Impact Analysis for Huna Totem Aak'w Landing project

Hi Arthur,

The Huna Totem project is scheduled for the July 11 Planning Commission meeting.

For DOT analysis or concerns to be considered in the staff report, it must be received by June 26.

If you miss that deadline, review notes and memos can still be accepted through July 7 at noon, but will not be included in the staff analysis. If this is the case, I'd recommend that DOT develop a memo that clearly states conditions they'd like to see added to the permit.

Thanks! Have a good weekend,

IMG

From: Drown, Arthur EE (DOT) <arthur.drown@alaska.gov>
Sent: Monday, May 22, 2023 3:50 PM
To: Scott Ciambor <Scott.Ciambor@juneau.gov>
Cc: Schuler, Michael K (DOT) <michael.schuler@alaska.gov>; Irene Gallion <Irene.Gallion@juneau.gov>
Subject: RE: Traffic Impact Analysis for Huna Totem Aak'w Landing project

Perfect, thank you Scott.

Arthur Drown

Right of Way Agent
Property Management, Right of Way
Department of Transportation & Public Facilities
Southcoast Region
6860 Glacier Hwy, Juneau, AK 99801
(907)465-4517

From: Scott Ciambor <Scott.Ciambor@juneau.gov>
Sent: Monday, May 22, 2023 3:49 PM
To: Drown, Arthur EE (DOT) <arthur.drown@alaska.gov>
Cc: Schuler, Michael K (DOT) <michael.schuler@alaska.gov>; Irene Gallion <Irene.Gallion@juneau.gov>
Subject: RE: Traffic Impact Analysis for Huna Totem Aak'w Landing project

Hi Arthur –
This study was one of the last items needed for their Conditional Use Permit application. The Planning Commission hearing on this case will likely be in July/August – I'll be sure to have Irene reach out once it is set. Thanks, scott

SCOTT CIAMBOR /SKAHT CHAM-bor/| PLANNING MANAGER
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street, 4th Floor Marine View Building
Office: 907.586.0753 ext. 4127

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From: Drown, Arthur EE (DOT) <arthur.drown@alaska.gov>
Sent: Monday, May 22, 2023 3:36 PM
To: Scott Ciambor <Scott.Ciambor@juneau.gov>
Cc: Schuler, Michael K (DOT) <michael.schuler@alaska.gov>; Irene Gallion <Irene.Gallion@juneau.gov>
Subject: RE: Traffic Impact Analysis for Huna Totem Aak'w Landing project

Good afternoon Scott,

Thank you for passing this along. I will disseminate to the appropriate parties within the department for review. Is there currently public hearing or planning commission agenda regarding the review of the development? If there is it may be good to loop us in after the TIA is reviewed in order to provide comment.

Thank you,

Arthur Drown
Right of Way Agent
Property Management, Right of Way
Department of Transportation & Public Facilities
Southcoast Region
6860 Glacier Hwy, Juneau, AK 99801
(907)465-4517

From: Scott Ciambor <Scott.Ciambor@juneau.gov>
Sent: Monday, May 22, 2023 2:02 PM
To: Drown, Arthur EE (DOT) <arthur.drown@alaska.gov>
Cc: Schuler, Michael K (DOT) <michael.schuler@alaska.gov>; Irene Gallion <Irene.Gallion@juneau.gov>
Subject: Traffic Impact Analysis for Huna Totem Aak'w Landing project

Hi Arthur and Michael -
Since Irene is on vacation, I wanted to forward the Traffic Impact Analysis for Huna Totem Aak'w Landing project that we received on Friday. Thanks, scott

SCOTT CIAMBOR /SKAHT CHAM-bor/| PLANNING MANAGER
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street, 4th Floor Marine View Building
Office: 907.586.0753 ext. 4127

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
COMMUNITY DEVELOPMENT

(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/community-development
155 S. Seward Street • Juneau, AK 99801

COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: Docks & Harbors

STAFF PERSON/TITLE: Carl Uchytil/Port Director

DATE: June 22, 2023

APPLICANT: Huna-Totem Corporation (HTC)

TYPE OF APPLICATION: Conditional Use Permit (CUP)

PROJECT DESCRIPTION:

Mixed use development: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Includes floating steel dock up to 70 feet wide and 500 feet long.

LEGAL DESCRIPTION: Juneau Subport Lot C1

PARCEL NUMBER(S): 1C060K010031

PHYSICAL ADDRESS: No assigned address.

SPECIFIC QUESTIONS FROM PLANNER:

AGENCY COMMENTS:

1. Docks & Harbors requests a navigability study be conducted to ensure the alignment of the proposed HTC dock does not impede access to the AS/CT Docks or to the USCG/NOAA Docks. The study should also evaluate any unreasonable impact to larger vessels (i.e. fuel/material barges) transiting Gastineau Channel under the bridge. The AJT Dock (former Standard Oil Dock) also should be addressed as the proposed HTC appears to block reasonable access to this derelict pier which is legally on patented private tidelands.
2. Docks & Harbors recommends that Wings and FAA be consulted to ensure access, landing and taxiing to the float plane docks are not unduly restricted.
3. Docks & Harbors, on behalf of CBJ requests as a condition of the permit, the ability to petition the State of Alaska (DNR) for state submerged tidelands to be conveyed to CBJ in accordance with AS 38.05.820 (Occupied Tide and Submerged Land) necessary for the HTC dock construction.
4. Docks & Harbors recommends the CUP address dock electrification and expected commitment from HTC to achieve shore power (conceptual planning document, by date certain, anticipated financial investment, etc.).
5. Docks & Harbors requests the applicant provide clarity to the finger floats shown in the renderings. What size of slips are proposed and how will these slips be utilized in the off-season.

AGENCY COMMENTS (CONTINUED):

6. Docks & Harbors requests to know if HTC will be providing navigation safety measures such as real time current monitoring and/or meteorological sensors.
7. Given a that very large cruise ships will be moored perpendicular to shore and in close proximity to the bride, request a hydraulic study be conducted to determine whether disruptions to the tidal flushing under the bridge or if siltation issues will be anticipated. Additionally, evaluate safety concerns to very large cruise ships mooring with current abeam in the proposed dock alignment.
8. An evaluation to view-shed impacts should be considered/addressed for both the dock (with vessel) as well as the proposed upland building.

CITY AND BOROUGH OF JUNEAU

ALASKA'S CAPITAL CITY

COMMUNITY DEVELOPMENT

TUESDAY, July 11, 2023

REGULAR PLANNING COMMISSION MEETING

7:00 P.M. – Virtual & In-Person Meeting

The following agenda items are scheduled:

Applicant: Huna Totem Corporation

Case No.: USE2023 0003

Location: 0 Egan Drive

Activity: Conditional Use Permit for mixed use development: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Project includes a steel dock up to 70 feet wide and 500 feet long. Uplands located at southwest corner of Egan Drive and Whittier Street, zoned Mixed Use 2. Dock extends into tidelands, zone Waterfront Commercial.

This meeting will be held in person and by remote participation. To join the webinar, paste this URL into your browser: https://juneau.zoom.us/j/88134375638 Or telephone: 1-669-900-6833 or 1 253-215-8782 or 1-346-248-7799 or 1-929-436-2866 or 1-301-715-8592 or 1-312-626-6799 and enter Webinar ID: 881 3437 5638. You may also participate in person at City Hall; Assembly Chambers, 155 S. Seward Street, Juneau, AK.

To read materials associated with this agenda item please visit:
https://juneau-ak.municodemeetings.com/

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ALASKA'S CAPITAL ITY

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A0- 112007

FROM

City and Borough of Juneau
Municipal Clerk's Office
155 South Seward Street
Juneau, AK 99801 (Fax: 907-586-4529)

AGENCY CONTACT: Lily Hagerup

DATE OF A.O.: 6/23/2023

PHONE: (907) 586-0715

DATES ADVERTISEMENT REQUIRED:

Wednesday, June 28, 2023

THE MATERIAL BETWEEN THE DOUBLE LINES MUST BE PRINTED IN ITS ENTIRETY ON THE DATES SHOWN.

SPECIAL INSTRUCTIONS:

Place under 'Your Municipality'

TO PUBLISHER

Juneau Empire
(Fax: 907-586-9097 or 907-586-3121)
Attention: Justin Price

Type of Advertisement: ☐ egal ☐ Display ☐ Classified ☐ Other (Specify):

Please place the attached ad request under the "Your Municipality" section to be published on Wednesday, June 28, 2023

Let me know if you have received this as well, as proof of advertisement.

Thank you,
-Lily Hagerup

Page 1 of 2

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INVOICE MUST E IN TRIPLICATE AND MUST REFERENCE THE DVERTISING ORDER NUMBER.

CERTIFIED AFFIDAVIT OF PUBLICATION (PART 2 OF THIS FORM) WITH COPY OF THE ADVERTISEMENT MUST E SUBMITTED WITH THE INVOICE.

pt.	Prog.	iv.	Acct.	bj.	Acty.	Project	*	Amount

VENDOR NO	REQUISITIONED BY	DIVISIONAL APPROVAL	FINANCE APPROVAL IF OVER $500.00	

02-901 (Rev. 1/84)

PUBLISHER

Attachment I- Public Notice for USE2023 0003

PLEASE TYPE

ADVERTISING ORDER

SEE BOTTOM FOR INVOICE ADDRESS

CITY/BOROUGH O JUNEAU
ALASKA'S CAPITAL ITY

ADVERTISING DER .

A0- 112007

FROM

City and Borough of Juneau
Municipal Clerk's Office
155 South Seward Street
Juneau, AK 99801 (Fax: 907-586-4529)

AGENCY CONTACT: Lily Hagerup

DATE OF A.O.: 6/30/2023

PHONE: (907) 586-0715

DATES ADVERTISEMENT REQUIRED:

Wednesday, July 5, 2023

THE MATERIAL BETWEEN THE DOUBLE LINES MUST BE PRINTED IN ITS ENTIRETY ON THE DATES SHOWN.

SPECIAL INSTRUCTIONS:

Place under 'Your Municipality'

TO PUBLISHER

Juneau Empire
(Fax: 907-586-9097 or 907-586-3121)
Attention: Justin Price

Type of Advertisement: ☐ egal ☐ Display ☐ Classified ☐ Other (Specify):

Please place the attached ad request under the "Your Municipality" section to be published on **Wednesday, July 5, 2023.**

Let me know if you have received this as well, as proof of advertisement.

Thank you,
-Lily Hagerup

SEND **INVOICE TO**

PAGE 1 OF PAGES | TOTAL OF ALL PAGES $

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pt.	Prog.	iv.	Acct.	bj.	Acty.	Project	*	Amount

VENDOR NO	REQUISITIONED BY	DIVISIONAL APPROVAL	FINANCE APPROVAL IF OVER $500.00	

02-901 (Rev. 1/84)

PUBLISHER

Attachment I- Public Notice for USE2023 0003

Irene Gallion

From: Fred Parady <FParady@hunatotem.com>
Sent: Sunday, June 25, 2023 12:09 PM
To: Irene Gallion
Cc: Mickey Richardson; Corey Wall
Subject: Re: USE23-03: Sign reminder

Irene:

I put the sign up just now (noon on Sunday 6/25)…


NOTICE
For more information
586-0715
pc_comments@juneau.org
MIXED USE DEVELOPMENT
USE20230003: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Includes floating steel dock up to 70 feet wide and 500 feet long.
HEARING DATE: 7/11/2023


NOTICE
For more information
586-0715
pc_comments@juneau.org
MIXED USE DEVELOPMENT
USE20230003: Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Includes floating steel dock up to 70 feet wide and 500 feet long.
HEARING DATE: 7/11/2023


NOW OPEN
NOW OPEN FOR THE SEASON
NOTICE 586-0715
MIXED USE
DEVELOPMENT
HEARING DATE: 7/11/2023


NOTICE 586-0715
MIXED USE
DEVELOPMENT
HEARING DATE: 7/11/2023

Fred

Sent from my iPhone

On Jun 20, 2023, at 4:19 PM, Irene Gallion <Irene.Gallion@juneau.gov> wrote:

Hi Team,

Just a reminder that the public notice sign needs to be posted by Monday, June 26, 2023.

Fred, if you already did this and sent me a picture, I've misplaced it, can you resend? I know you picked up the sign already. If not, please send me an e mail when the sign is posted. The e mail will be used to date stamp the installation.

Thank you!

Irene Gallion | Senior Planner
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street | 4th Floor Marine View Building
Office: 907.586.0753 x4130
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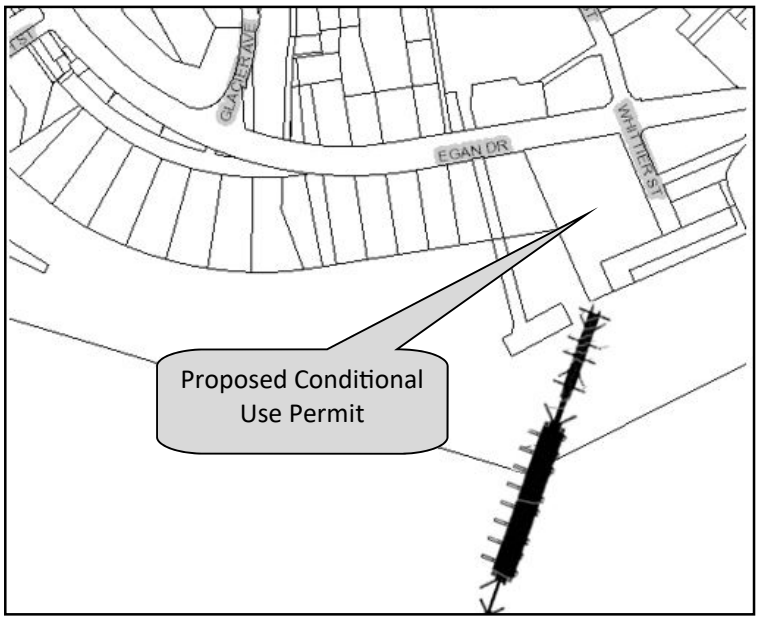
Invitation to Comment

On a proposed Conditional Use Permit at the Southwest corner of Egan Drive and Whittier Street (subport).



CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
COMMUNITY DEVELOPMENT

155 S. Seward Street Juneau, Alaska 99801

TO:

An application has been submitted for consideration and public hearing by the Planning Commission for a **Conditional Use Permit for mixed use development:** Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Project includes a steel dock up to 70 feet wide and 500 feet long. Uplands located at southwest corner of **Egan Drive and Whittier Street**, zoned **Mixed Use 2**. Dock extends into **tidelands,** zoned **Waterfront Commercial**.

PROJECT INFORMATION:
Project Information can be found at:
https://juneau.org/community-development/short-term-projects

PLANNING COMMISSION DOCUMENTS:
Staff Report expected to be posted **July 3rd, 2023** at
https://juneau-ak.municodemeetings.com/
Find hearing results, meeting minutes, and more here, as well.

Now through June 19th

Comments received during this period will be sent to the Planner, **Irene Gallion,** to be included as an attachment in the staff report.

June 20 noon, July 7

Comments received during this period will be sent to Commissioners to read in preparation for the hearing.

HEARING DATE & TIME: 7:00 pm, July 11,

This meeting will be held in person and by remote participation. For remote participation: join the Webinar by visiting https://juneau.zoom.us/j/88134375638 and use the Webinar ID: 881 3437 5638 OR join by telephone, calling: 1-253-215-8782 and enter the Webinar ID (above).

You may also participate in person in City Hall Assembly Chambers, 155 S. Seward Street, Juneau, Alaska.

July 12, 2023

The results of the hearing will be posted online.

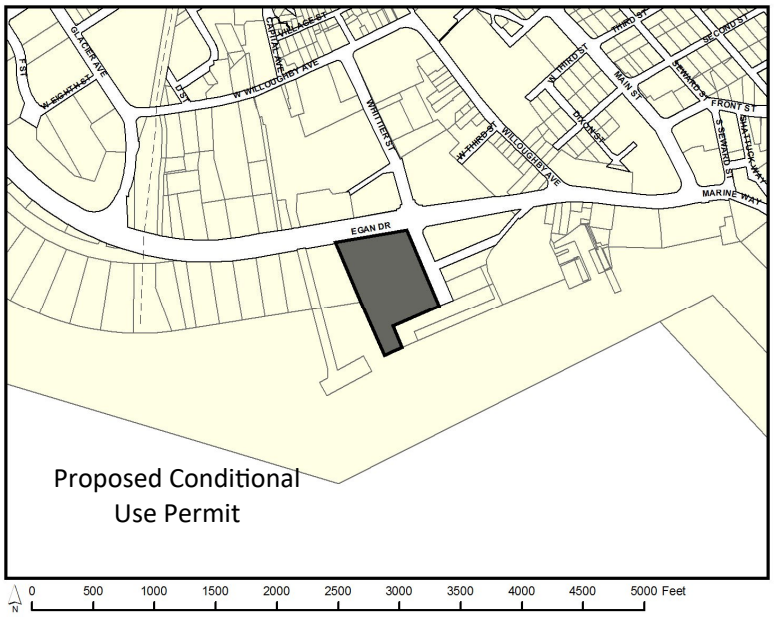
FOR DETAILS OR QUESTIONS,

Phone: **(907)586-0753 ext. 4130**
Email: **pc_comments@juneau.gov**
Mail: **Community Development, 155 S. Seward Street, Juneau AK 99801**
Printed June 2, 2023

Case No.: USE2023 0003
Parcel No.: 1C060K010031
CBJ Parcel Viewer: http://epv.juneau.org

Invitation to Comment

On a proposed Conditional Use Permit at the Southwest corner of Egan Drive and Whittier Street (subport).



CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
COMMUNITY DEVELOPMENT

155 S. Seward Street Juneau, Alaska 99801

TO:

An application has been submitted for consideration and public hearing by the Planning Commission for a **Conditional Use Permit for mixed use development:** Up to 50,000 square feet of retail and related uses, underground bus staging and vehicle parking, and a park. Uplands located at southwest corner of **Egan Drive and Whittier Street**, zoned **Mixed Use 2**.

PROJECT INFORMATION:
Project Information can be found at:
https://juneau.org/community-development/short-term-projects

PLANNING COMMISSION DOCUMENTS:
Staff Report expected to be posted **July 31st, 2023** at
https://juneau-ak.municodemeetings.com/
Find hearing results, meeting minutes, and more here, as well.

now noon, August 4,2023

Comments received during this period will be sent to Commissioners to read in preparation for the hearing.

HEARING DATE & TIME: 7:00 pm, August 8, 2023

This meeting will be held in person and by remote participation. For remote participation: join the Webinar by visiting https://juneau.zoom.us/j/85938116675 and use the Webinar ID: 859 3811 6675 OR join by telephone, calling: 1-253-215-8782 and enter the Webinar ID (above). You may also participate in person in City Hall Assembly Chambers, 155 S. Seward Street, Juneau, Alaska.

Aug. 9, 2023

The results of the hearing will be posted online.

FOR DETAILS OR QUESTIONS,

Phone: **(907)586-0753 ext. 4130**
Email: **pc_comments@juneau.gov**
Mail: **Community Development, 155 S. Seward Street, Juneau AK 99801**
Printed July 24, 2023

Case No.: USE2023 0010
Parcel No.: 1C060K010031
CBJ Parcel Viewer: http://epv.juneau.org

Irene Gallion

From: Mickey Richardson <Mickey@hunatotem.com>
Sent: Monday, July 24, 2023 1:49 PM
To: Jill Maclean; Fred Parady
Cc: Garth Schlemlien; Corey Wall; Scott Ciambor; Ruth Banaszak; Irene Gallion
Subject: RE: Draft Resubmittal

The official Public Notice sign has been reposted:

Attachment K- Public Notice Sign

Irene Gallion

From: Ilsa Lund
Sent: Monday, April 3, 2023 9:00 AM
To: Irene Gallion
Subject: FW: USE2023 0003: Aak'w Landing, multi-use waterfront development

Hi Irene,
I believe you are assigned to this case.
Thanks,

Ilsa Lund | Administrative Assistant
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street, 4th Floor Marine View Building
Office: 907.586.0715 ext. 4120

Note: my email has changed to ilsa.lund@juneau.GOV on 12/5/22

Fostering excellence in development for this generation and the next.

From: Bill Kramer <907billk@gmail.com>
Sent: Sunday, April 2, 2023 12:09 PM
To: PC_Comments <PC_Comments@juneau.gov>
Subject: USE2023 0003: Aak'w Landing, multi-use waterfront development

Dear Juneau Community Development Department,

Comment regarding: USE2023 0003: Aak'w Landing, multi-use waterfront development

I am writing to express my concern about the proposed development of more retail infrastructure for the cruise ship industry in our city. As you are likely aware, Juneau is already suffering from overtourism caused by the cruise ship industry, and it is clear that something needs to be done to address this issue.

As a resident of Juneau, I have witnessed firsthand the negative impacts of overtourism, including overcrowding, environmental degradation, and strain on local resources and infrastructure. The cruise ship industry is contributing to these problems, and we need to take action to limit the number of cruise ship passengers and crew members in our city each day.

Rather than continuing to expand the retail infrastructure for the cruise ship industry, I urge you to prioritize the protection of our environment and the well-being of our community. This could include measures such as implementing a limit on the number of cruise ships allowed to dock in our port each day, or exploring alternative tourism models that prioritize sustainability and community well-being.

I believe that it is important for the City and Borough of Juneau to take a proactive approach to addressing the issue of overtourism and the negative impacts of the cruise ship industry. By working together and taking action now, we can ensure that our city remains a vibrant and sustainable place to live, work, and visit for generations to come.

Thank you for considering my concerns and taking action to address this important issue.

Sincerely,

Bill Kramer

Sent from Mail for Windows

Irene Gallion

From: PC_Comments
Sent: Monday, July 31, 2023 8:47 AM
To: Irene Gallion; Jill Maclean
Subject: FW: Comment on Case No USE20230010 - Huna Totem

FYI

Alsa Lund | Administrative Assistant
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street, 4th Floor Marine View Building
Office: 907.586.0715 ext. 4120

Fostering excellence in development for this generation and the next.

From: Kriss Hart <kriss@wmc2775.com>
Sent: Saturday, July 29, 2023 9:24 AM
To: PC_Comments <PC_Comments@juneau.gov>
Subject: Comment on Case No USE20230010 - Huna Totem

Commissioners,

I have received the Invitation to Comment mailed to me on the 24th of July as the owner of the neighboring subport lot, Develop Juneau Now LLC. My lot was purchased to allow planning for a District Heating Plant and is currently rented to CBJ for State parking.

I have reviewed the provided documents and do not find them adequate to evaluate the impacts on my property and request an adequate delay in hearing to review the revised documents.

The application and supporting documents talk of phased development which to me would mean they would come back for approval of phase 2 and 3 later. The Notice says there is no Phasing, and all phases are being reviewed together. There is not enough information to approve phases 2-3. Please request documents match the request and do not contain undefined future phases for clarity.

The documents mention a 5' setback from property line. Is that the allowable for this zoning?

The traffic study does not completely or accurately address the site traffic and needs to include: Maximum loads allowed for passengers, crew, employees, support services and should include all modes of transportation including: walking, buses, hired vehicles, trucks with impacts on any anticipated route. What changes will occur with Whittier Street and Heat Street access and parking? Where do the Seawalk users access the Seawalk? How do disembarking walking passengers access walking routes to town?

Thank you for hearing my concerns, I can be reached by email or cell phone 206 849-4812 please confirm receipt of this email.

Kriss Hart
East Peak LLC (300 Egan DR)

Irene Gallion

From: PC_Comments
Sent: Monday, July 31, 2023 8:49 AM
To: Irene Gallion; Jill Maclean
Subject: FW: New dock

FYI

Alsa Lund | Administrative Assistant
Community Development Department | City & Borough of Juneau, AK
Location: 230 S. Franklin Street, 4th Floor Marine View Building
Office: 907.586.0715 ext. 4120

Fostering excellence in development for this generation and the next.

From: Margo Waring <margowaring@gmail.com>
Sent: Sunday, July 30, 2023 12:17 PM
To: PC_Comments <PC_Comments@juneau.gov>; Borough Assembly <BoroughAssembly@juneau.gov>
Subject: New dock

To: CBJ Assembly and Planning Commission:

I write to you in opposition to granting Huna Totem permission to build a new dock structure on the waterfront.

First, let me say that I had supported Norwegian's interest and plan for the development of the site. But I have changed my mind for several reasons:

Reneging on promised view shed protection
The new design shortcomings
Post covid industry strategy of more and larger ships
Ineffectiveness of current 5 ship approach to limit numbers of tourists

First let me state that I, and other older residents of Juneau, remember the promise CBJ made that community support for the 16B docks would mean there would never be an obstruction of the "down channel view" that was of importance to Juneauites and lured many into support for that dock alternative. The Huna Totem dock would violate that promise.

Since the end of covid restrictions on travel, Juneau has experienced a burst of tourism travel that has even put pressure on previously adequate resources, such as the city bus system and the Mendenhall Glacier Visitor

Center (MGVC). CBJ adopted a policy of supporting only 5 ships per day, In recognition of the danger of "too much" tourism. But current and planned ships carry many more passengers, so the goal of limitation of population pressure by limiting numbers of ships has failed. Adding a new dock will exacerbate this problem.

NCL had proposed a community centered approach that would have provided community facilities and experiences and supported a local vision by incorporating an Ocean Center that would benefit not just the cruise industry but also local scientific studies. Many supported NCL's vision for the property for that reason. This vision is abandoned in the current proposal which benefits the cruise industry and would promote increased tourism by providing more dock space, allowing more visitors and more ships—just what the community doesn't want. It gives encouragement to the industry to increase and promises to put pressure on increasing the numbers of ships and the numbers of visitors—all without meeting the community goals of the NCL project.

I ask that you reject Huna Totem's proposal and support a future for our community that gives priority to a livable community rather than to a too rapidly growing industry.

Margo Waring
11380 N. Douglas Hwy
Juneau, AK 99801

Presented by: The Manager
Presented: 02/07/2022
Drafted by: R. Palmer III

ORDINANCE OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Serial No. 2022-12(am)

An Ordinance Amending the Comprehensive Plan Related to the Long Range Waterfront Plan.

WHEREAS, the recent Visitor Industry Task Force provided recommendations for a framework to better manage cruise ship tourism; and

WHEREAS, adoption of this ordinance does not direct the Planning Commission to issue a permit for a fifth cruise ship dock, but this ordinance changes the Long Range Waterfront Plan to allow a fifth cruise ship dock in the Subport area; and

WHEREAS, the Assembly's intent of this ordinance is to change the Long Range Waterfront Plan to allow a fifth cruise ship dock in the Subport area if the fifth dock: provides infrastructure to prevent hot-berthing at the existing docks, especially at the AJ dock; provides infrastructure that prevents a large cruise ship from anchoring-out or using dynamic positioning technology to stay in Gastineau Channel for tourism purposes; minimizes congestion of pedestrians and tourism-related vehicles east of Seward Street; and other purposes to balance the needs of the community; and

WHEREAS, the Assembly wants large cruise ships to stay at one of the cruise ship docks for a large portion of the day to minimize congestion, to maximize authentic Alaska shore-side excursions for tourists, and to minimize harm to the community; and

WHEREAS, the Assembly directs the City Manager to continue exploring methods to achieve the intent of this ordinance, which may involve future legislation, contract negotiations, expenditures, property acquisitions, and public meetings.

BE IT ENACTED BY THE ASSEMBLY OF THE CITY AND BOROUGH OF JUNEAU, ALASKA:

Section 1. Classification. This ordinance is of a general and permanent nature and shall become a part of the City and Borough of Juneau Municipal Code.

Section 2. Amendment of Section. CBJC 49.05.200 Comprehensive plan, is amended to read:

49.05.200 Comprehensive plan.

(a) The City and Borough Comprehensive Plan is designed to lessen congestion in the streets; secure safety from fire, panic, and other dangers; promote health and the general welfare; provide

adequate light and air; prevent the overcrowding of land; avoid undue concentration of population; and facilitate adequate and cost-effective provision for transportation, water, sewerage, schools, parks, and other public requirements.

(b) The comprehensive plan adopted by the assembly by ordinance contains the policies that guide and direct public and private land use activities in the City and Borough. The implementation of such policies includes the adoption of ordinances in this title. Where there is a conflict between the comprehensive plan and any ordinance adopted under or pursuant to this title, such ordinance shall take precedence over the comprehensive plan.

(1) Plan adopted. There is adopted as the comprehensive plan of the City and Borough of Juneau, that publication titled The Comprehensive Plan of the City and Borough of Juneau, Alaska, 2013 Update, including the following additions:

…

(C) The Long Range Waterfront Plan for the City and Borough of Juneau, dated January 22, 2004, as amended including by Ordinance 2022-12;

…

Section 3. Amendment of Long Range Waterfront Plan. The Long Range Waterfront Plan, CBJC 49.05.200(b)(1)(C), is amended to read as follows:

(a) **Page 47. Amend the text of Section 3.3 AREA B: SUBPORT as follows:**

…

Upon adoption of Ordinance 2022-12, the CBJ Assembly amended the tidelands portion of Area B (Figure 33, B2) to allow for creation of a dock facility capable of accommodating one large cruise ship as well as docking facilities for government agencies, like the U.S. Coast Guard and NOAA vessels. Criteria for this development is described in Appendix B. All other Area B recommendations and design criteria remain unchanged, including uplands development and park facilities. Located to the north of this facility is the proposed Gold Creek Waterfront Park, a new, two acre recreational area oriented to families and children (see Figure 33, Feature B1). Gold Creek Park provides an important area attraction and asset as well as a visual and functional transition point into Downtown.

…

Page 47. Repeal and replace Figure 33: Area B (Overall) 2025 Concept Plan as follows:

Figure 33: Area B (Overall) 2025 Concept Plan

(b) **Page 41. Amend the text of Section 3.1 LONG RANGE PLAN OVERVIEW as follows:**

…

- **Expanded Recreation and Open Space Area**. The Plan supports substantial expansion of recreation and open space areas through the creation of a 1.8 mile coastal seawalk running the length of Juneau's Downtown waterfront. The seawalk is accentuated by a series of parks, each a special destination for active and passive recreational pursuits. A total of 6.1 net new acres of recreation and open spaces stretching from the Juneau-Douglas Bridge to the South Franklin Street Dock is provided in the Plan. Increased water recreation areas are also offered, including the introduction of new marina facilities, small boat and kayaking zones, and an environmental education/enhancement area.

…

(c) **Page 50. Amend the text of Section 3.3 AREA B: SUBPORT as follows**:

…

- **Transparency and Views**. Views along the internal streets of the Subport should be preserved, with consideration provided to use the public area, and building façade articulation to accentuate view corridors and anchor visual interest in key locations.

Views from the Gold Creek Park across the Gold Creek Protection Zone should also be maintained.

…

(d) **Pages 68-69. Amend Table 8: Long Range Waterfront Master Plan: Near-, Mid-, and Long-Term Development Initiatives Master Sheet as described below and depicted in Exhibit A:**

(1) Strike NT15;

(2) Strike MT6;

(3) Amend MT7; and

(4) Amend MT9.

(e) **After Page 77. Insert Appendix B as described below:**

Appendix B – 2022 AMENDMENT TO AREA B
This amendment applies only to the tidelands portion of AREA B: SUBPORT to allow a large cruise ship dock that accommodates one large cruise ship and provides moorage for government agencies like the Coast Guard and NOAA vessels. The LRWP Concept Plan for the uplands portions of Area B remains unchanged. In 2011, the Subport property was rezoned to Mixed Use 2 per the LRWP's guidance.

The 2022 amendments are described in Ordinance 2022-12(am).

This amendment discusses the criteria developing Area B, especially the criteria for constructing a fifth cruise ship dock at the Subport established by the CBJ Visitor Industry Task Force (VITF) in 2020. It is important to note that many of these criteria apply to the uplands portion of Area B and are excluded from the amendment. The upland provisions in the LRWP are valid and appropriate to this new tidelands use. However, the uplands-related criteria in both the LRWP and VITF final report are related to managing the impacts of a large cruise ship dock and the associated increase in pedestrian and bus traffic and should be considered strong recommendations for uplands development. Criteria excluded from this amendment are identified below.

VITF Recommendation on LRWP Update
The VITF considered whether the CBJ should undertake a complete update to the LRWP. It was determined that the CBJ Assembly should not prioritize a LRWP complete update and should instead maintain focus on better tourism management. It was determined that an amendment to the tidelands portion of Area B was warranted with the below criteria and the CBJ should continue to implement the existing plan, prioritizing Seawalk development.

VITF Criteria for Subport Dock Construction
In 2020, the CBJ VITF established the following criteria for constructing a cruise ship dock at the Subport. This amendment supports the VITF's criteria and any application for development needs to be evaluated consistent with the following:

1. One larger ship per day using one side of the facility;
2. Maximum of five larger ships in port per day;
3. No hot berthing at the new facility;
4. No larger ships allowed to anchor as the sixth ship in town. Larger ships may anchor but the number of larger ships in port would still be limited to five (CBJ to consider legal ramifications of limiting size of ships at anchor);
5. CBJ manages dock to some extent through a public private partnership or management agreement;
6. Dock is electrified;

The following criteria are related to uplands development and remain strong recommendations for uplands-related proposals:

7. High quality uplands development for community and visitors;
8. Year round development orientation.

Long Range Waterfront Plan Amendment Criteria
Section 3.9 of the LRWP establishes a framework for amendment, presented below. The manner in which each component is addressed is described in italics:

It is important that Long Range Waterfront Plan—which is a product of an extensive and thorough public process—maintain a substantial commitment for its implementation from the community. Therefore, amendments to the Long Range Waterfront Plan, including the addition of cruise ship docks, should be approved only after undergoing a process similar to that which was undertaken during the development of the Plan. Specifically, public workshops identifying need for the facility and development of alternatives that mitigate negative impacts identified in the Community opinion survey should be held.

On behalf of CBJ, McKinley Research (formerly McDowell Group) conducted a statistically valid public opinion survey of Juneau residents in October 2021. It found that 56% of Juneau residents were supportive or very supportive of constructing a large cruise ship dock at the Subport and 33% were opposed or very opposed. Ten percent of respondents did not know if they were supportive or opposed. Furthermore, those that said they were opposed or very opposed to a subport dock were asked whether a list of factors would increase their level of support:

1. A cap of five large ships per day in Juneau's harbor: 42% yes, 54% no
2. Public park: 40% yes, 55% no
3. Interpretive ocean center: 38% yes, 53% no
4. Seawalk connection: 34% yes, 53% no
5. Shore power: 33% yes, 59% no
6. Housing: 27% yes, 63% no
7. Underground parking: 26% yes, 68% no
8. Retail and restaurants: 21% yes, 76% no

In addition to the survey, the Visitor Industry Task Force took public testimony on tourism issues and received over 200 comments. A cruise ship dock at the subport was a major topic of discussion.

The CBJ conducted public meetings on this amendment on the following dates: January 11, 2022, January 24, 2022, and February 28, 2022.

With respect to cruise ship traffic, which impacts the entire City and Borough, the Assembly concludes:

1. No cruise ship berthing or lightering facility should occur within the City and Borough outside of the area encompassed by the plan, before adoption of the borough-wide study of cruise ship alternatives or January 2007, whichever occurs first.
   Accomplished by time-frame

2. The capacity within the area encompassed by the plan should not exceed five large ships (greater than 750 feet in length) whether at berth or at anchor.
   Included in VITF criteria above. The 2021 survey also supports a maximum of five ships per day in Juneau's harbor. The United States Coast Guard has not yet made a formal determination that a new dock would preclude a sixth ship at anchor.

3. In addition, any proposals to develop additional berths within the area encompassed by the plan should include a design for the dock and related facilities that address the following issues with regard to the specific site and also in the context of the entire downtown waterfront planning area:
   a. Impacts to navigation and anchorage in Juneau Harbor.
      Criteria for development, evaluated through Conditional Use Permit process
   b. Impacts to view planes.
      Criteria for development, evaluated through Conditional Use Permit process
   c. Environmental impacts, including consideration of shore power to mitigate potential air pollution.
      Criteria for development, evaluated through Conditional Use Permit process. Shore power is included in the VITF criteria above.

   The following criteria are related to uplands development and remain strong recommendations for uplands-related proposals:

   d. Vehicular Traffic, including necessary signalization.
   e. Staging for buses and other tour vehicles in the most efficient manner possible to provide for diverse use of uplands.
   f. Pedestrian access.
   g. Sidewalks.
   h. Extension of Seawalk from downtown to the proposed dock.
   i. Extension of bus shuttle service.

Section 4. Effective Date. This ordinance shall be effective 30 days after its adoption.

Adopted this 14th day of March, 2022.

Maria Gladziszewski, Deputy Mayor

Attest:

Elizabeth J. McEwen, Municipal Clerk

No.	Category	Priority	Project	Description	Responsibility	Funding Source	Duration**	Critical Path	Est. Project Cost*
~~NT15~~	~~Study~~	~~High~~	~~Gold Creek Marina Design and Permitting~~	~~Design Gold Creek Marina and obtain regulatory permits.~~	~~CBJ~~	~~CBJ/Port Revenues~~	~~12 Months~~	~~none~~	~~$ 225,000~~
~~MT6~~	~~Project~~	~~High~~	~~Gold Creek Marina Development~~	~~Creation of a 80-105 vessel marina and 1,000 foot floating exterior dock. Project includes dredging, with fill used for creation of Gold Creek Park and uplands for Subport Phase 2 development.~~	~~CBJ~~	~~CBJ/Port Revenues~~	~~30 Months~~	~~NT15~~	~~TBD~~
MT7	Project	High	Gold Creek Park Development	Creation of a 2 acre park adjacent to the Subport ~~Gold Creek Marina~~ and Egan Drive. Project includes all programmed park facilities as well as the Seawalk linkage from the Subport to Gold Creek.	CBJ	CBJ/Port Revenues	12 Months	NT15	TBD
MT9	Project	High	Subport Interior Access Roads and On-Street Parking Facilities	Extend internal street network and parking facilities into the Subport Phase 2 and ~~Gold Creek Marina~~ development.	Private (Subport Developer) / CBJ	CBJ / Private (Subport Developer)	12 Months	NT18, Parallel to MT8, 10	$ 550,000

Attachment M- Long Range Waterfront Plan Amendment

No.	Category	Priority	Project	Description	Responsibility	Funding Source	Duration**	Critical Path	Est. Project Cost*
~~NT15~~	~~Study~~	~~High~~	~~Gold Creek Marina Design and Permitting~~	~~Design Gold Creek Marina and obtain regulatory permits.~~	~~CBJ~~	~~CBJ/Port Revenues~~	~~12 Months~~	~~none~~	~~$ 225,000~~
~~MT6~~	~~Project~~	~~High~~	~~Gold Creek Marina Development~~	~~Creation of a 80-105 vessel marina and 1,000 foot floating exterior dock. Project includes dredging, with fill used for creation of Gold Creek Park and uplands for Subport Phase 2 development.~~	~~CBJ~~	~~CBJ/Port Revenues~~	~~30 Months~~	~~NT15~~	~~TBD~~
MT7	Project	High	Gold Creek Park Development	Creation of a 2 acre park adjacent to the Subport ~~Gold Creek Marina~~ and Egan Drive. Project includes all programmed park facilities as well as the Seawalk linkage from the Subport to Gold Creek.	CBJ	CBJ/Port Revenues	12 Months	NT15	TBD
MT9	Project	High	Subport Interior Access Roads and On-Street Parking Facilities	Extend internal street network and parking facilities into the Subport Phase 2 and ~~Gold Creek Marina~~ development.	Private (Subport Developer) / CBJ	CBJ / Private (Subport Developer)	12 Months	NT18, Parallel to MT8, 10	$ 550,000

Attachment M- Long Range Waterfront Plan Amendment

3.3 AREA B: SUBPORT

Land Use

Redevelopment of the Subport and properties surrounding this area represent the largest and most ambitious effort in the Plan, but also one that will provide significant dividends to Juneau residents and visitors. The Subport component of the Plan follows many of the elements proposed within the *2003 Subport Revitalization Plan*—an effort that was formulated with community input and through collaboration with primary land owners. The Subport provides a unique opportunity to take a large, underutilized property and create a truly new component of Downtown. Creation of a lively, mixed-use neighborhood is the focus of Subport redevelopment (see Figure 33, Feature B3). Reuse of area buildings along with introduction of new structures creates an urban atmosphere supportive of office, hotel, entertainment, fish and whole foods market(s), and retail uses. Area attractors—the Gold Creek Park, nearby cultural facilities, and seasonal marine activities—combined with residential and office users foster economic activity in this district year-round. Streets and plazas encourage pedestrian and other modes of travel to move both through the site and along the waterfront.

This Subport plan also retains its maritime roots, offering facilities for local and transient vessels and small cruise vessels at the Gold Creek Marina facility (see Figure 33, Feature B2). The Plan calls for the creation of a floating marina facility capable of accommodating forty five, 50 to 60 foot vessels and upwards of 60, 20 to 30 foot vessels. Also provided is a +/- 1,000 foot floating exterior dock designed to support operations by small cruise ships, large transit yachts, visiting military vessels, and other vessels contributing to an active and diverse working waterfront. Located to the north of this facility is the proposed Gold Creek Waterfront Park, a new, two acre recreational area oriented to families and children (see Figure 33, Feature B1). Gold Creek Park provides an important area attraction and asset as well as a visual and functional transition point into Downtown.

View of Similar Waterfront Park Areas

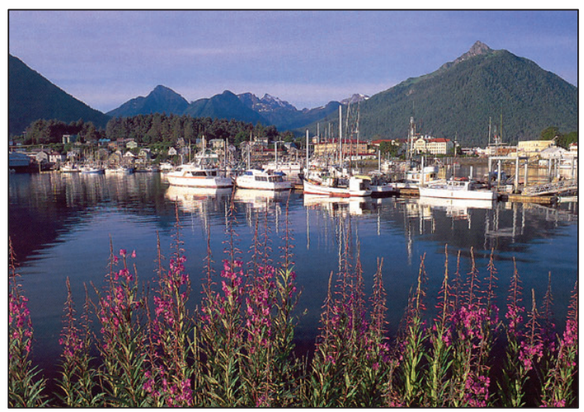
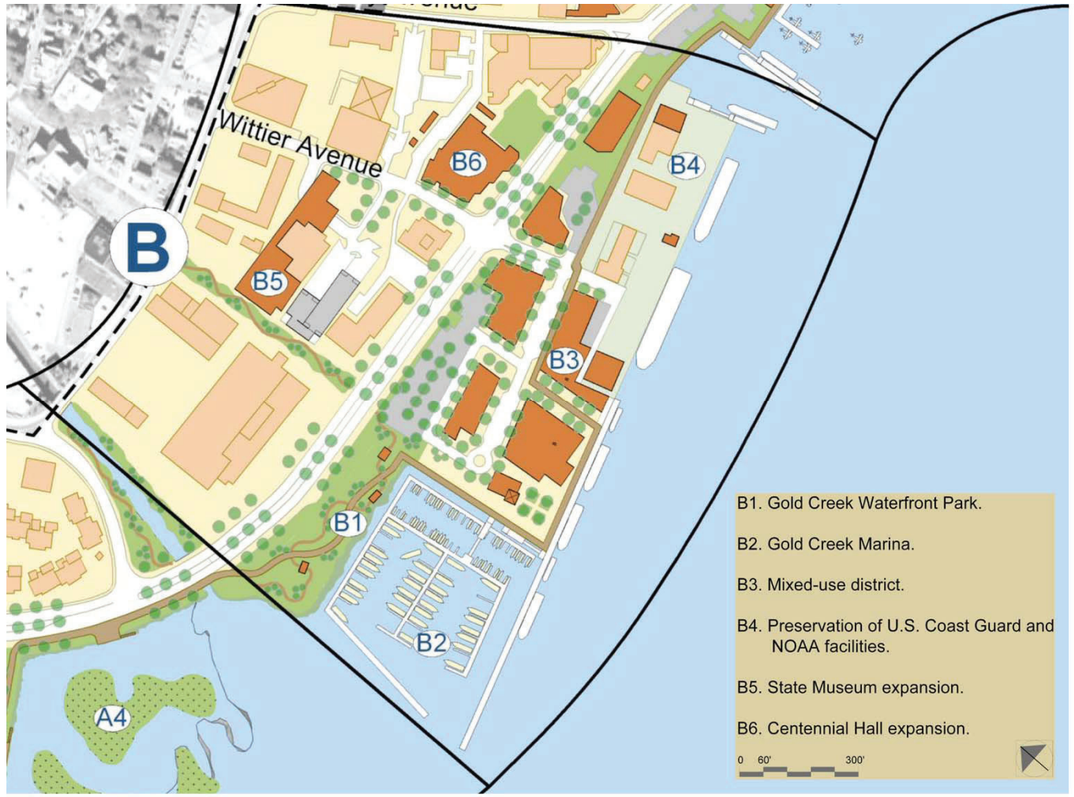


Figure 33: Area B (Overall) 2025 Concept Plan



U.S. Coast Guard and NOAA facilities are retained under the Plan (See Figure 33, Feature B4). Improved edge conditions are encouraged to keep vehicles and pedestrians away from these properties. More appropriate decorative fencing of a height of 10 feet should be installed and other hardscape and landscape treatments to buffer this edge and prevent cars from parking proximate to these should be installed.

Intended to further strengthen this area of Juneau's and SE Alaska's cultural center, a 65,000 SF expansion of the State Museum to house State Library and Archives is depicted in the Concept Plan. Supporting this expansion is an additional 50 parking spaces contained on one level of additional parking (See Figure 33, Feature B5). Expansion of Centennial Hall allows Juneau to capture a greater share of the regional convention and executive conference market. Properly designed, expansion of Centennial Hall could also provide an improved venue for concerts, theatre and other performing arts (See Figure 33, Feature B6).

Properties in Area "B" currently provide a significant amount of parking for downtown Juneau. Parking is a poor use of valuable waterfront property; however, as this area transitions to more appropriate uses, reduced parking supply in the downtown area may result. To avoid parking shortages, the downtown community needs to be prepared to compensate for loss of parking and the increased parking demand created by new development in a comprehensive manner.

Suggested Design Criteria

Suggested design criteria for Area B include the following:

- **Site and Structures – Mixed-Use District.** If possible, incorporate a portion of the Subport's existing warehouse building and reuse timber components.

- **Site and Structures – Gold Creek Park.** Park should be developed with a series of all weather structures designed in keeping with Juneau's character. Encourage the development of several zones within the park to provide for differing types of recreation. A child's play area and environmental and/or historical zone also geared to kids should be considered. Park should link back to the City by at-grade and/or below grade pedestrian linkages created and an improved recreation edge to Gold Creek and back to the State Museum. Elevated pedestrian links should be discouraged over Egan Drive.

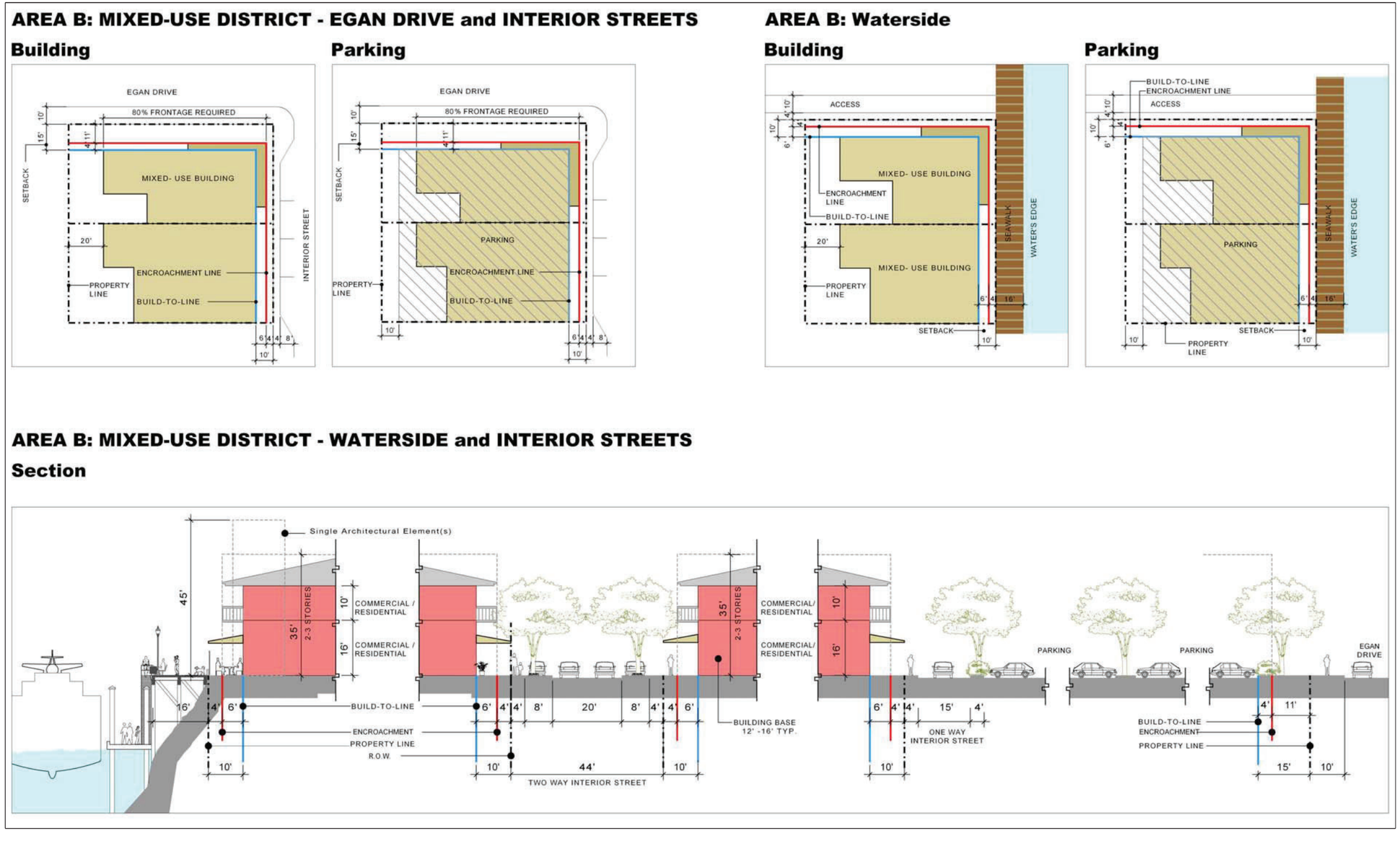
- **Massing and Scale – Mixed-Use District – Interior Streets and Egan Drive.** Maintain buildings heights between 2- to 3-stories (maximum 35 feet) along Egan Drive and interior streets (see Figure 34). A single architectural element(s) can extend to a height of 45 feet. Consideration may be given to permit additional building height in exchange for amenities such as preserving identified view corridors, open space, or building design. Set front and side street building setbacks at a maximum of 10 feet from the street edge; balconies and other architectural elements associated with activity in the public realm may be extended up to 4 feet from the street edge (see Figure 29). Awnings and similar weather protection features may be extended the full 10 feet for the ground level only. Establish building frontages at a minimum 80% of the building façade. Parking should be placed behind and/or wrapped by buildings; parking should be discouraged from placement along the waterfront. A perimeter of 10 feet should be established between mixed-use area and the U.S. Coast Guard and NOAA; for security purposes, this area should be clear of all structures and landscaping and should discourage pedestrian access.

- **Massing and Scale – Mixed-Use District – Waterside.** Building heights between 2- to 3-stories (maximum 35 feet) along the waterfront. Consideration may be given to permit additional building height in exchange for amenities such as preserving identified view corridors, open space, or building design. Maintain building setbacks at 10 feet along waterfront streets. Encroachment of public realm building elements should follow guidelines described for interior streets. Set aside an additional minimum of 16 feet to accommodate the seawalk.

- **Character.** Building types should include a mix of medium sized buildings that create an appealing visual rhythm and feel from the pedestrian scale. Building development with a mix of community oriented commercial activities on the ground floor with residential units occupying upper floors should be encouraged. Buildings should be consistent with the historic maritime architectural character of Juneau and include deep recessed building openings and strong detailing. Consideration should be given for inclusion of a signature building that creates an icon for the project site and/or anchors a portion of the area.

View of Similar Waterside Massing and Scale Treatments (Area B)

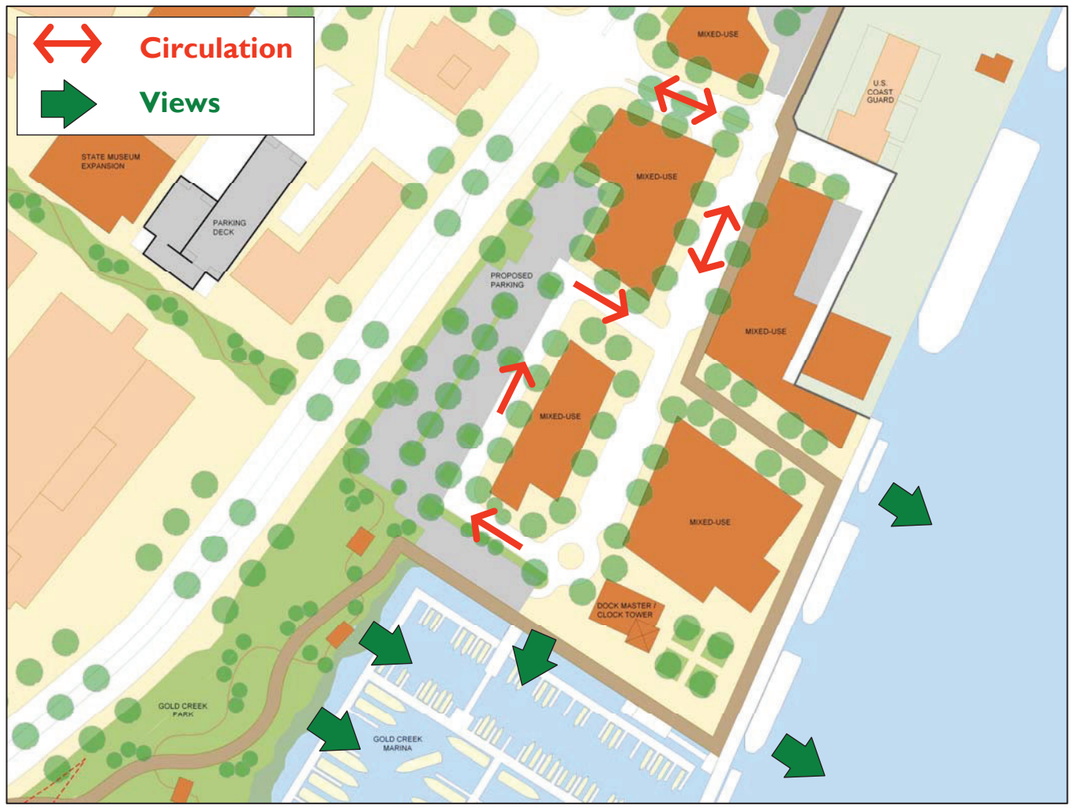
FIGURE 34: SUGGESTED DESIGN GUIDELINES, AREA B



- **Street Orientation.** The primary entrance to the Subport redevelopment should be from a signalized intersection introduced at Egan Drive and Wittier Avenue (See Figure 35). Signage anchoring this intersection should be incorporated. Internal streets should radiate for a new central spine created through the center of the project, accessing adjacent, smaller scale streets and pedestrian plazas, parking areas, and the U.S. Coast Guard and NOAA facilities. Parking should be concealed and/or wrapped by buildings and not be present along the waterfront. On street parking stalls should be present along most roadways internal to the Subport.

- **Transparency and Views.** Views along the internal streets of the Subport should be preserved, with consideration provided to use the public area, and building façade articulation to accentuate view corridors and anchor visual interest in key locations. Views from the Gold Creek Park across the marina and Gold Creek Protection Zone should also be maintained.

Figure 35: Area B: Circulation and Views



3.4 AREA C: DOWNTOWN

Land Use

Strengthening Downtown and the waterfront are not mutually exclusive ends; the improvement of one will improve the other. The vision for Downtown includes a number of exciting projects, from greatly enhancing the heart of Downtown through redevelopment and expansion of Marine Park, to embracing the development of a new State Capitol Building/Complex on Telephone Hill that uses Marine Park and the waterfront area as a figurative front porch for the people of Juneau and Alaska.

To the extent that the Merchant's Wharf site becomes available, the city should look at purchasing either part or all of it, depending on the cities needs. The city is interested in the creation of an Aviation History Center, Maritime Museum or other similar venue that reflects a theme important to the region and waterfront, but at this time is not ready to select a specific site. The edge along the waterfront portion of Merchant's Wharf would be increased to allow for greater pedestrian circulation along the seawalk as well as outdoor dining areas with weather protection. Waterfront areas would be reconfigured to afford a new cruise tender position (City Tender), float plane area (Wing's of Alaska), small ship berthing, water taxi/shuttle stop, and other uses. With the removal of a portion of Merchant's Wharf, an additional quarter acre would be acquired to allow for expansion of Marine Park and the creation of a visual linkage to the waterfront from Main Street (see Figure 36, Feature C2). The present Marine Park structures are redeveloped to allow for a more appropriate and complete relationship between recreational areas found to the west and east. Marine Park elements would include historical artifacts and signage appropriate for the area; a small stage area for cultural activities, displays, and performances; and other elements. The present cruise ship tender position is contemplated for removal/relocation to the western edge of the park to better disperse visitors through the park and along the seawalk.

Creation of a new State Capitol Building/Complex on Telephone Hill has long been an objective discussed within the community and contained within previous planning documents. Over the long term and provided that equitable financial arrangements are made, development of a new State Capitol Building/Complex in this area solidifies Juneau's permanence as the State's center (see Figure 36, Feature C3). It also works to create a focus for activity along the waters edge and a dramatic silhouette of the City appropriate for the Capital of Alaska. The Plan also envisions wrapping the ground floor of the Public Library with commercial and/or cultural uses and to soften the hard edge of the parking structure as well as reduce its presence as a barrier to visitor circulation along the building edge (see Figure 36, Feature C4). Such improvements should be designed as additions to the outside of the existing structure to maintain the structural integrity of the building and to maintain existing parking spaces. Uses could include a visitors center, not for profit commercial enterprise, artist studio(s) showcasing local works or other activity considered not in direct commercial competition with local businesses. Landscaping improvements and other modification are also contemplated for this structure as well as the Marine View building. The Plan also calls for a gateway feature that would entice area visitors into the Historic District of Juneau. Each of these projects is intended to help provide infrastructure that helps lead area visitors into Downtown and to turn the corner along the waterfront toward the Subport.