



**PLANNING COMMISSION STAFF REPORT
CONDITIONAL USE PERMIT USE2023 0003
HEARING DATE: JULY 11, 2023**

(907) 586-0715

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www.juneau.org/community-development

155 S. Seward Street • Juneau, AK 99801

DATE: June 29, 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. Includes floating steel dock up to 70 feet wide and 500 feet long.

STAFF RECOMMENDATION: Approval with conditions

KEY CONSIDERATIONS FOR REVIEW:

- Applicant is limited to one (1) large cruise ship unless they subsequently modify the Conditional Use Permit with Planning Commission approval.
- Two (2) additional moorages for smaller vessels could be provided under the current vehicle parking regime. More than three (3) moorages would require additional vehicle parking.
- 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 thousand passengers out of the congested downtown dock area.
- No development on USCG property is explicitly or tacitly approved by this permit.

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:

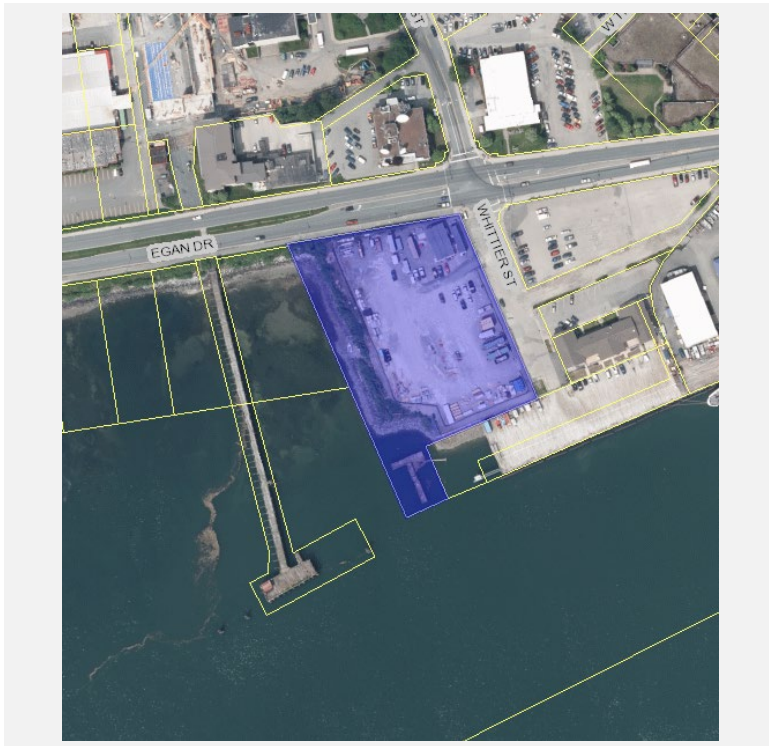
Assembly action is not required for this permit.

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 Support Lot C1
Parcel Number	1C060K010031
Zoning	Uplands: MU2. Dock: Waterfront Commercial
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	None at this time

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 E1 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 a dock up to 500 feet long and 70 feet wide, and uplands development that includes vehicle parking, tourism logistics, retail, restaurants and a park (**Attachment A1-A5**).

The original application was for the uplands. The Applicant added the dock to this application rather than apply for a separate one. Revisions have resulted in some redundancies throughout the submission.

Concept drawings are provided to aid the Planning Commission in determining compliance with Title 49. Approval of the CUP would signal to the Applicant that investment in further design, flood zone permitting, and tidelands leasing was warranted.

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, the United States Coast Guard, and multiple State of Alaska environmental and land use departments.

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:

<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. The Planning Commission’s role is to verify regulatory and plan compliance.

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 process 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	
Maximum of five (5) larger ships in port per day (what is larger?)		X
No hot berthing at the new facility	Condition	
No larger ship allowed to anchor as the 6 th 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	

Lease "conditions" established by the Assembly may be qualitative rather than measurable. For instance, 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 –

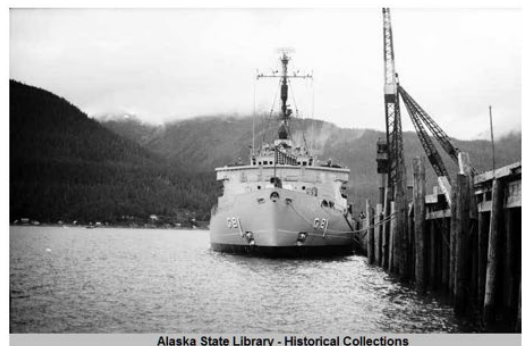
Like the rest of the flats, the subport was built on mine fill. During World War II the subport was used to stage military resources, and afterward served for storage and vehicle parking.



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Alaska State Library - Historical Collections



Alaska State Library - Historical Collections

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 dock 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.

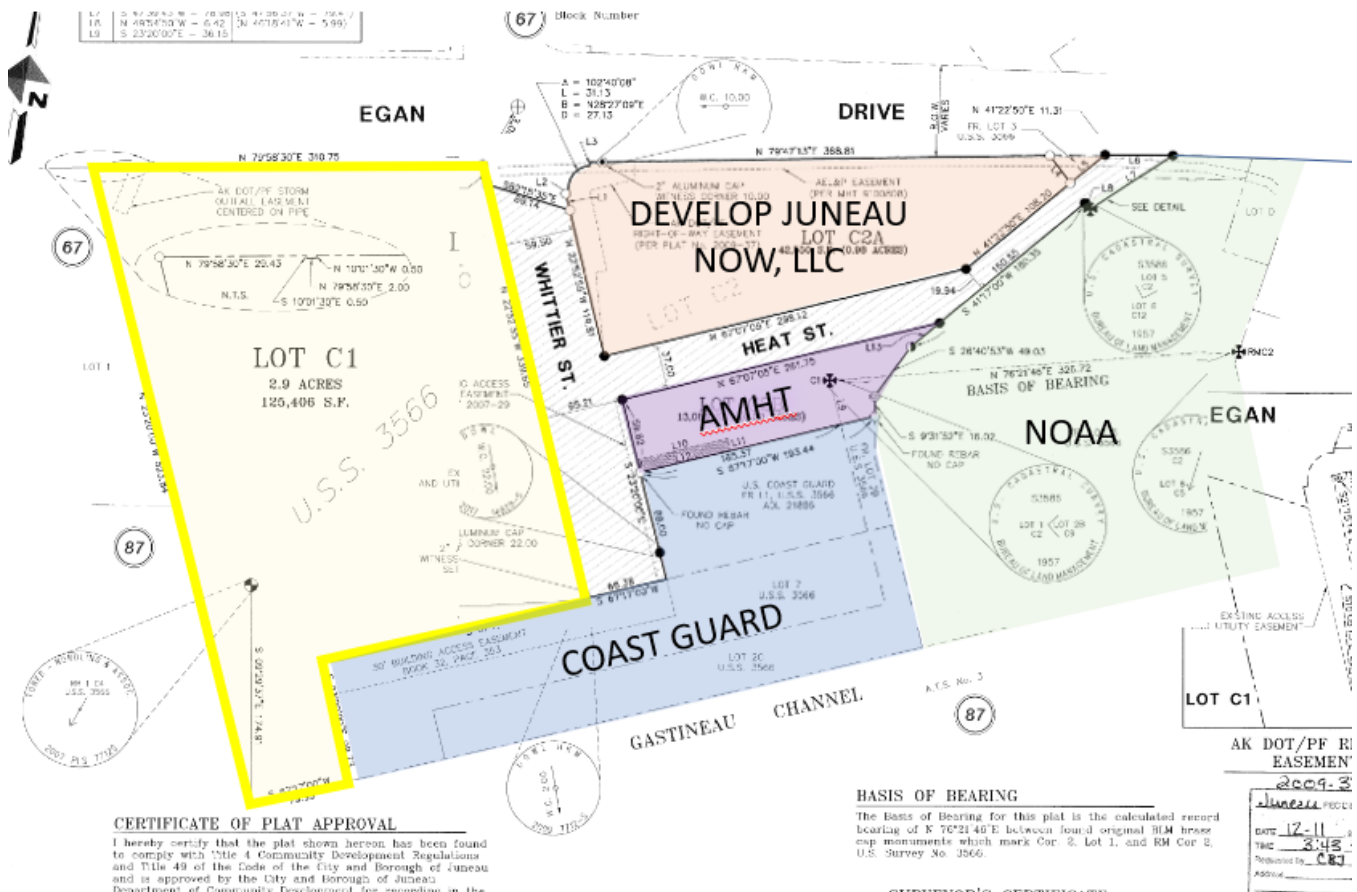


Figure 2: Plat 2009-37 shows current lot configuration, and established Heat Street, which was intended to provide seawalk access around government properties. Yellow indicates the subport property the Applicant proposes developing. Blue indicates Coast Guard property, purple is the Alaska Mental Health 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	Height 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.

The tidelands fall under Waterfront Commercial zoning. Proposed structures associated with the dock (**Attachment A3, page 6**) extend approximately 740 feet into State of Alaska-held tidelands.

SITE PLAN

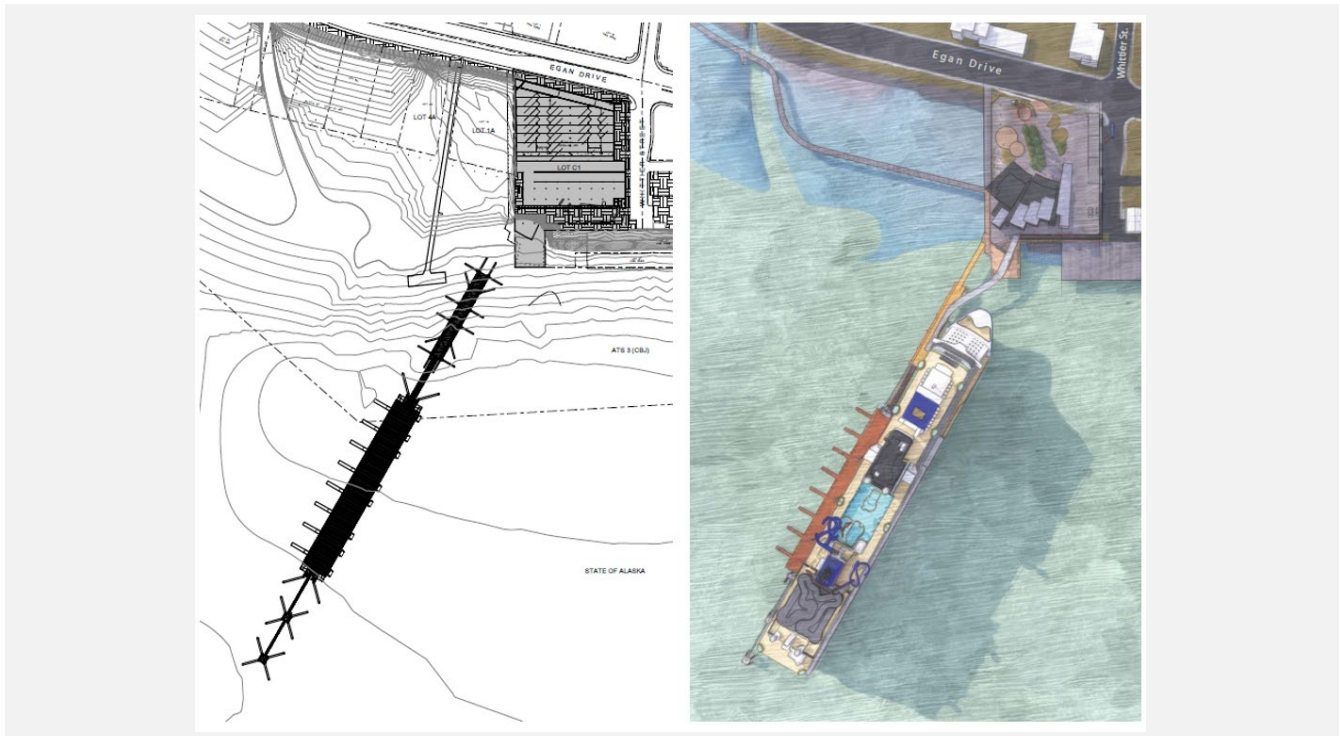


Figure 4: Overall site plan. The figure on the left shows lot lines and tidelands boundaries. The one on the right shows a rendering of the completed project. Note that the sections of seawalk that are dark grey are shown for conceptual purposes only (as requested of the Applicant by other CBJ departments) and are not part of this application or project.

ANALYSIS

Project Phasing – (Attachment A2, page 1. Attachment A3, pages 2-4)

- Phase 1: Parking structure with 34,000 square feet of retail space, and dock.
- Phase 2: 9,000 additional square feet of retail space
- Phase 3: 40,000 square feet, use to be determined. Could be museum, retail, housing, or other.

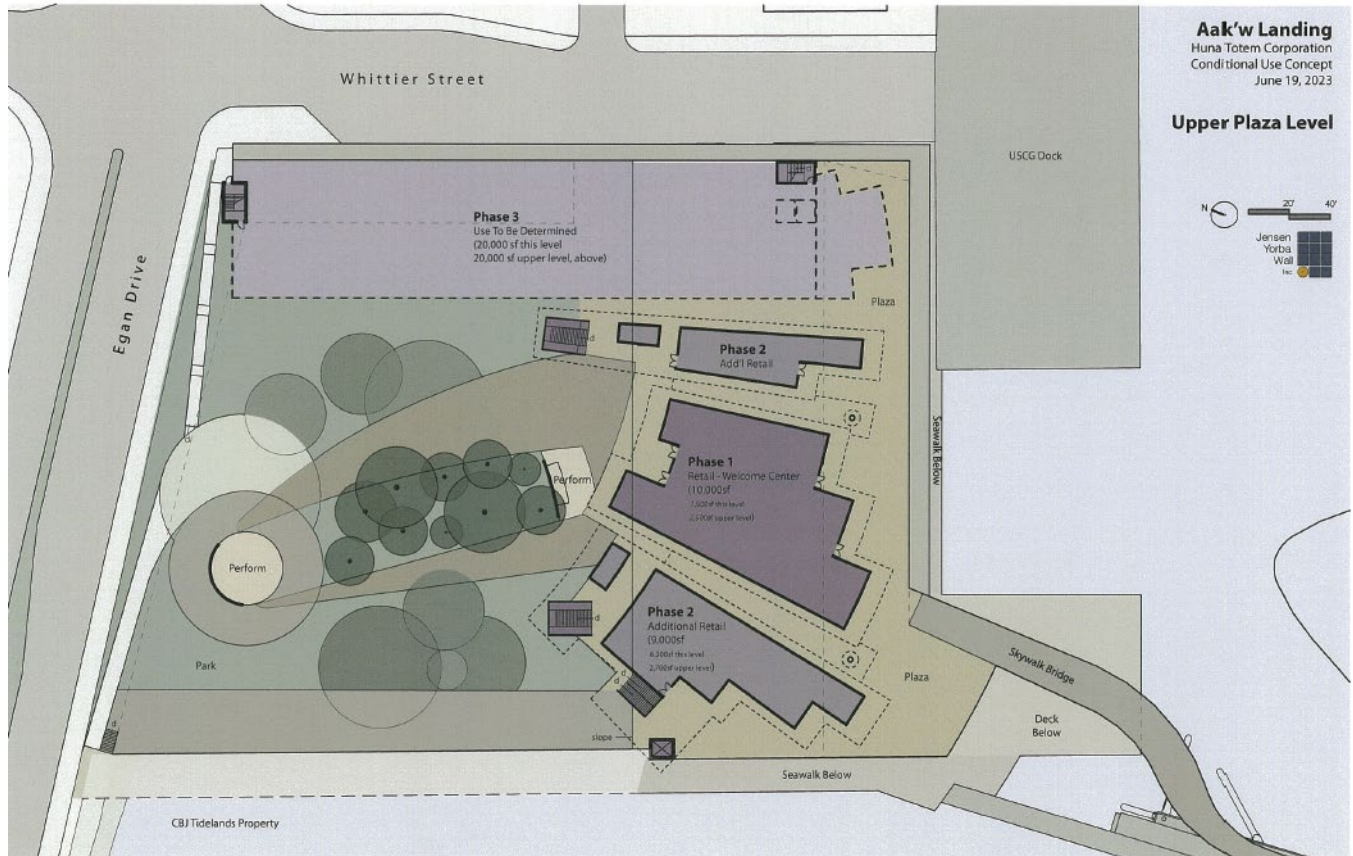


Figure 5: Site plan showing Phase 1, 2 and 3 structures. The park, underground vehicle parking facilities and dock are part of Phase 1.

Condition: None.

Project Site – The development extends across three (3) land ownership entities.

- The proposed uplands are on private property held by Huna Totem Corporation.
- CBJ can lease CBJ-held tidelands to private entities.
 - 800 feet of the dock structure crosses CBJ-held tidelands (**Attachment A3, page 6**).
 - The seawalk walkway on the west lot line is proposed 20 feet wide. The extension into CBJ tidelands property is conceptual. (**Attachment A3, page 2-4**).
- 700 feet of the dock structure extends into DNR-held tidelands (**Attachment A3, page 6**). CBJ can apply to DNR to hold the tidelands for an economic development purpose. Tidelands will not be granted to a private entity.

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: A Temporary Certificate of Occupancy will not be issued for the dock until the tidelands lease is recorded.

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

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

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 A4, page 11**).

Amenities include:

- Indigenous art will be 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 will serve tourists and locals.
- Approximately one acre of publicly-available park.
- Off-season vehicle parking available.

Condition: None.

Traffic – According to CBJ 49.40.300(a)(1) a traffic impact analysis (TIA) is required (**Attachment A5**). Initial comments received from the Tourism Manager have been analyzed (**Attachment A6**).

The traffic impact analysis indicates that modifications to street striping and signal timing would address delays created by the additional project traffic (**Attachment 5, page 14**).

The Alaska Department of Transportation and Public Facilities (ADOT&PF) reviewed the TIA (**Attachment E, pages 51**). 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 E, page 45**). 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]. Depending on eventual uses, 71 to 112 off-street parking spaces will be required at the completion of Phase 3.

Total required parking 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 are not included 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.

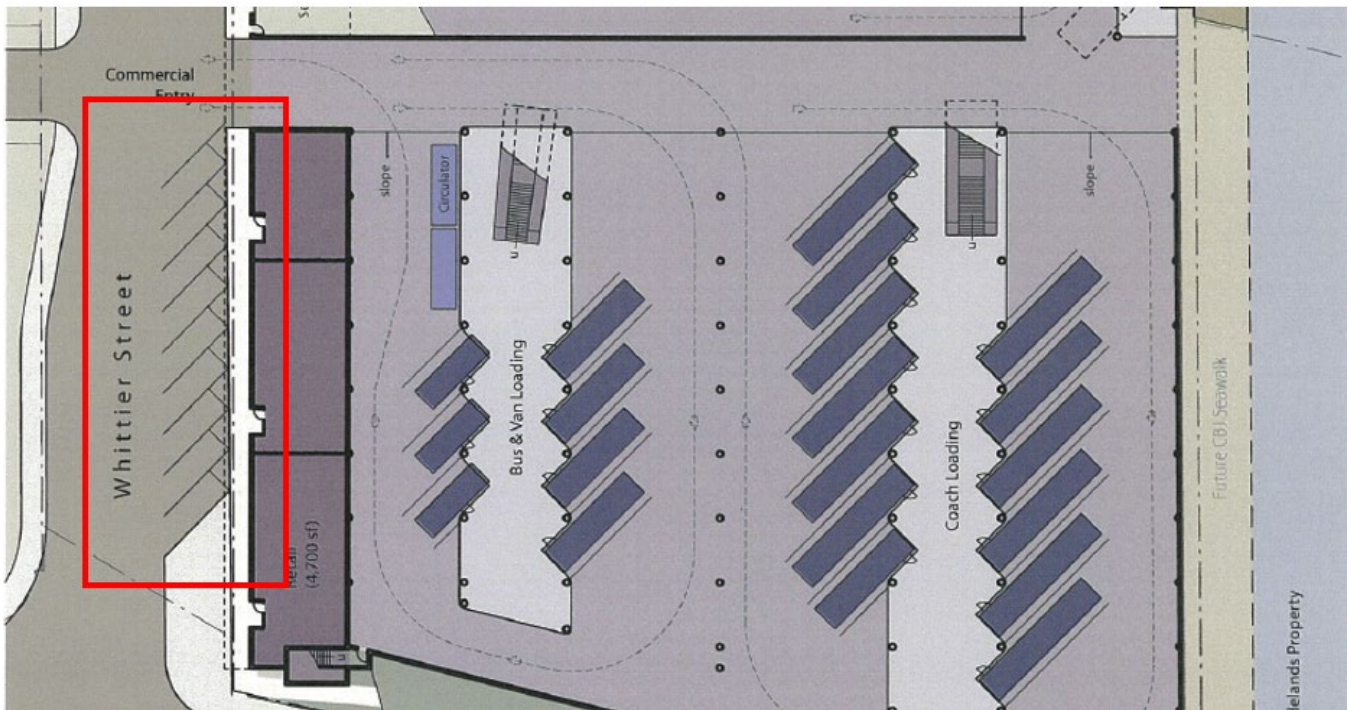


Figure 6: The back-out parking shown on the site plans is conceptual only. CBJ will not permit back-out parking into the right-of-way for commercial uses.

ADA spaces are required:

Use	Square Feet	Metric	Parking Required	ADA Required
PHASE I				
Retail	34,000	1/750 sf	45	
Moorage		1/moorage stall	2	
PHASE I PROJECT TOTAL			47	2
PHASE II				
Retail	9,000	1/750 sf	12	1
PHASE I/II PROJECT TOTAL			59	3
Phase III				
Cultural Center OR	40,000	1/1,500 sf	26	2
Retail OR	40,000	1/750 sf	53	3
Housing (32 1-bedroom)	40,000	0.4 spaces per	12	1
COMPLETED PROJECT				
w/ Cultural Center			83	4
w/ Retail			112	5
w/ Housing (32 1-bedroom)			71	3

One (1) loading space will be required and must be provided in Phase I [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.

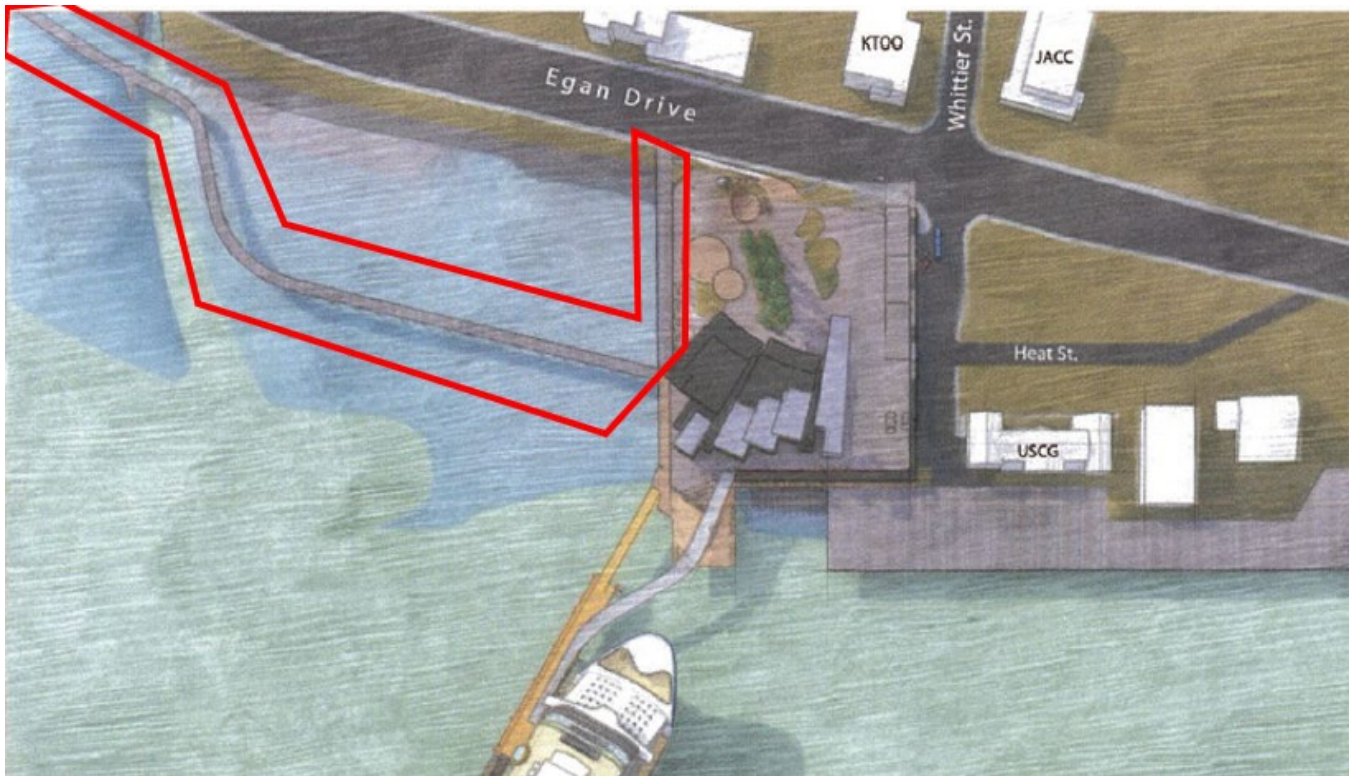


Figure 7: Seawalk elements outlined in red are shown for concept only, and are not part of this approval or project.

A detailed description of passenger flow can be found in **Attachment A2, page 4**.

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

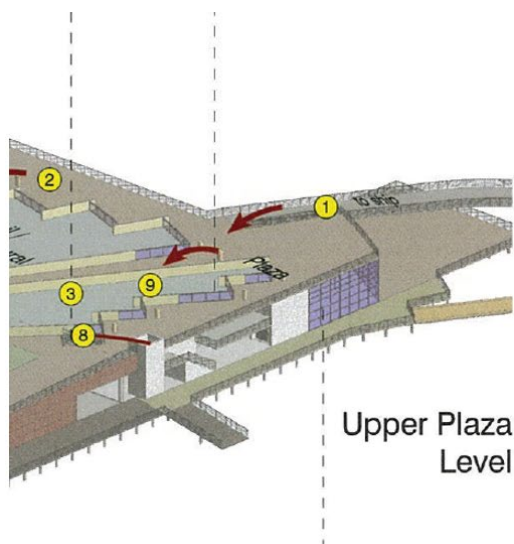


Figure 8: Two levels of pedestrian accommodation. The gangway leads to the upper level (1) of the proposed development. Passengers can then descend a stairwell or elevator (8) to get to the seawalk level, which will include restaurants and shops.

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 upper park level of the facility (1 in **Figure 8**, 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.

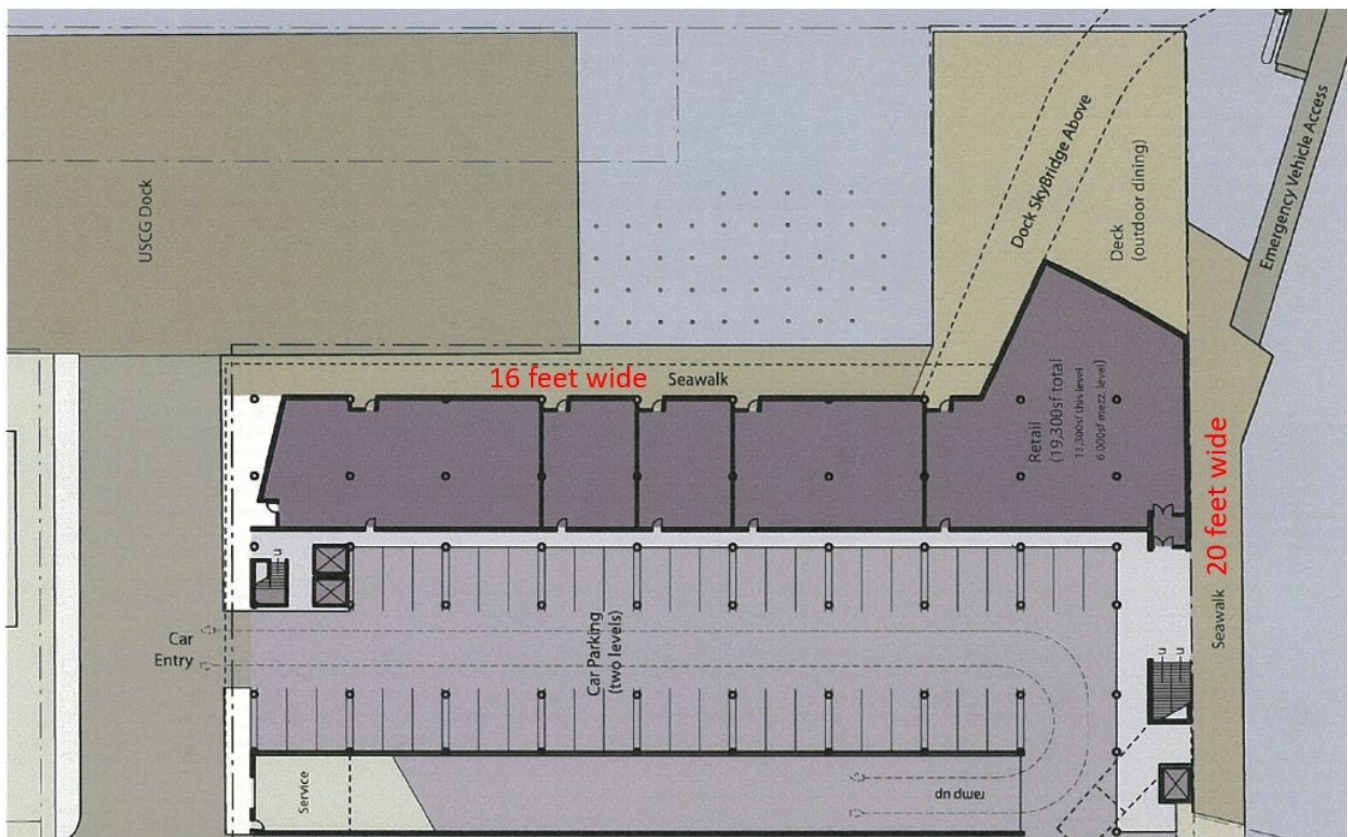


Figure 9: The seawalk along the south lot line (top) is constrained by Coast Guard development but will meet the 16 foot width required by ordinance and plans. The west lot line seawalk can meet the 20 foot width requested by CBJ's Parks and Recreation Department.

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 A3 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 for year-round activities by the Applicant (**Attachment E, page 11**). In the past, other large developments have included amenities, (e.g. playgrounds, parks), but vague direction has led to confusion on maintenance responsibility.

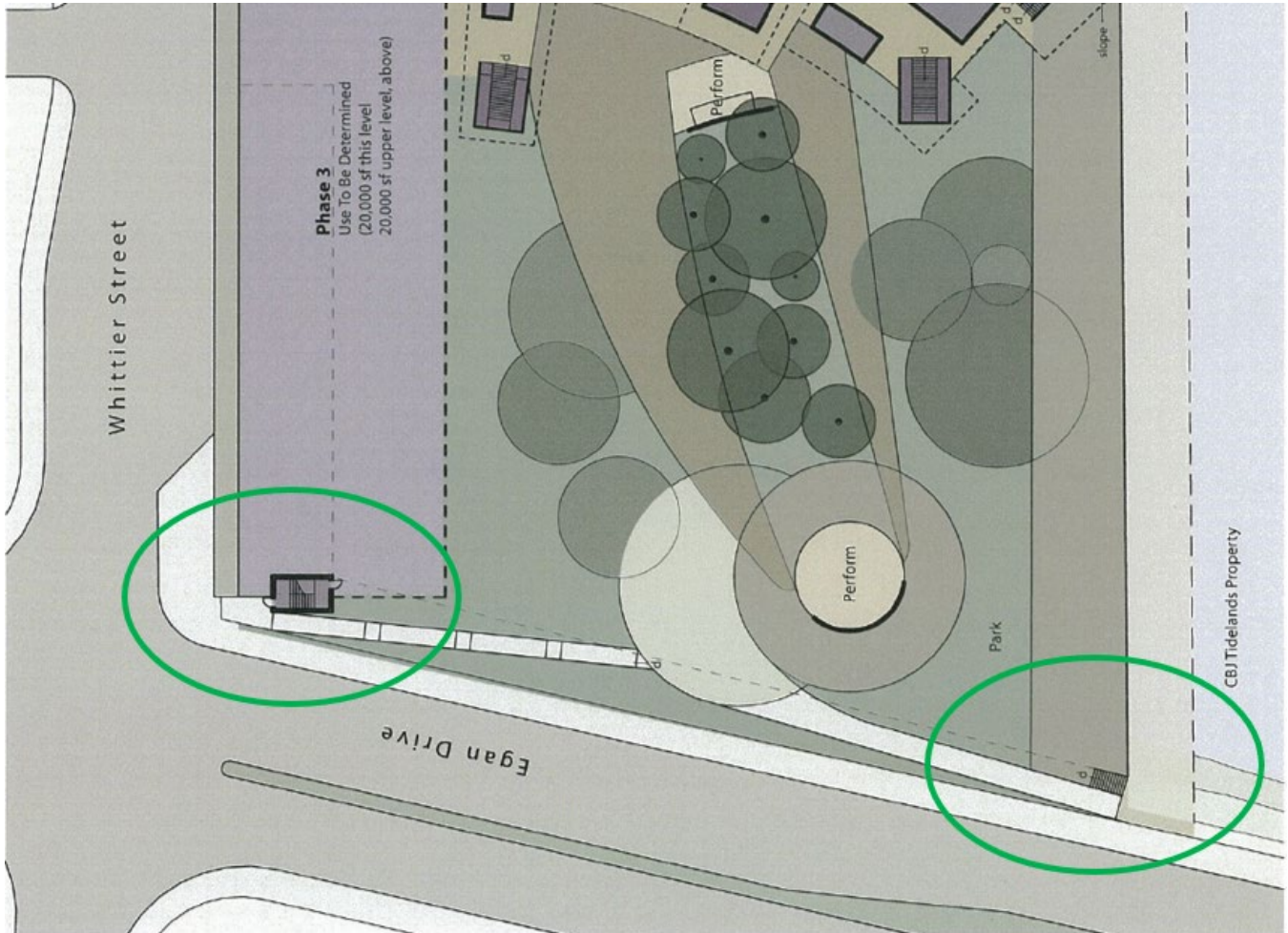


Figure 10: In the absence of a CBJ seawalk connection, pedestrians can access the Egan Drive sidewalk via the park. The park will be designed to provide sidewalk access at the east and west ends of the park, with an earthen berm dissuading pedestrian access along the length of the lot line.

Figure 11 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.

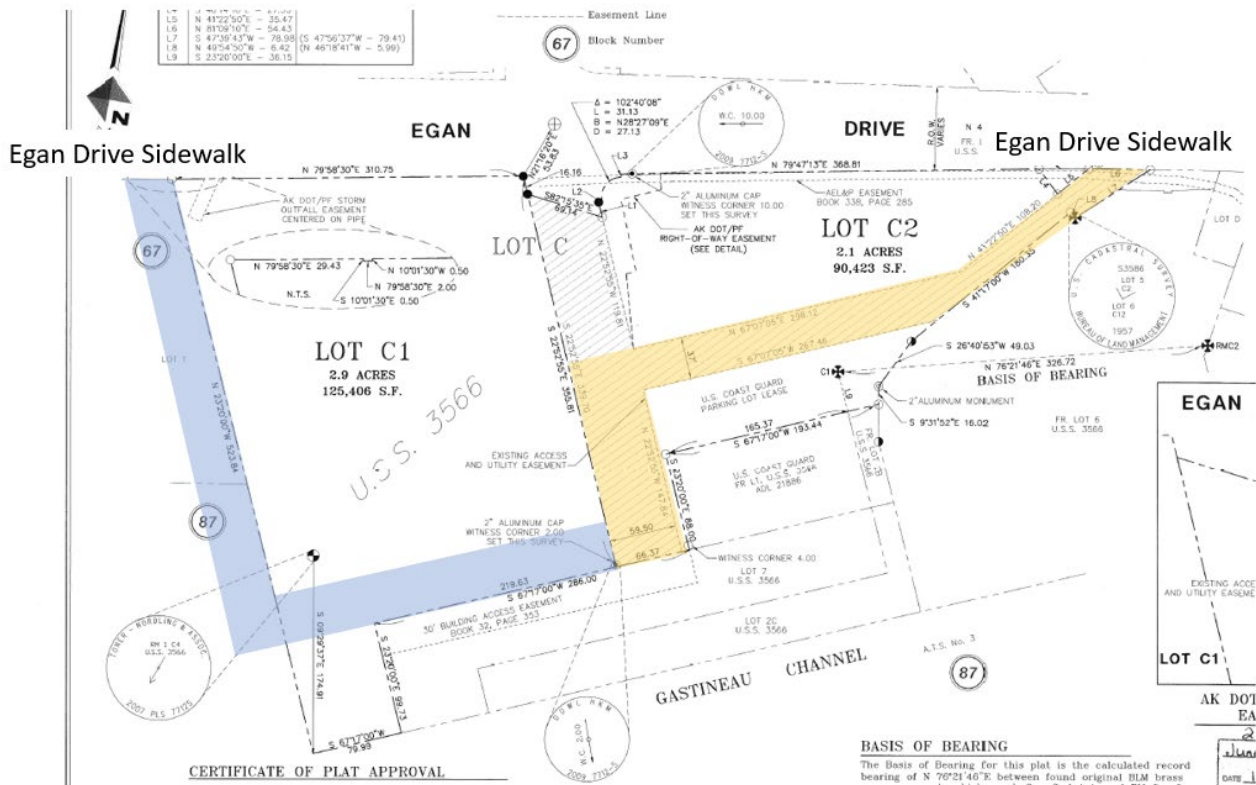


Figure 11: Plat 2009-37 is highlighted to show the connection of the seawalk to Whittier Street and Heat Street.

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: 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: 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 lot, 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: 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 12: 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 and Waterfront Commercial 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 on **page 4 and 7 of Attachment A2** and shown on **page 4 of Attachment A3**.

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 A2 page 5**. 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 –

The proposed dock will be designed to structurally accommodate a ship on one side. The other side could accommodate dayboats, tenders, or small watercraft (**Attachment A2 page 12**). Modifications to this approved design would require amendment of the CUP.

Juneau docks are owned by multiple owners with varying policies and fees. CBJ is undertaking a systemic effort to normalize dockage and harmonize fees, allowing ships to be more flexibly accommodated at various docks.

Health: Shore power would improve health through reduction of combustion byproducts. The dock will be built to accommodate shore power “when a municipal line is available.” There are no current plans to provide a municipal line. Though debated in the community, AEL&P has suggested two (2) ways to provide an appropriate line to the subport: Via a submarine line laid from Douglas, or by burying a new line between the Juneau Douglas Bridge and the subport. With a new line, a powerhouse and transformer would be required on or near the site. Rough order of magnitude costs are expected in the mid- to high-tens of thousands. By comparison, the dock

electrification for Juneau -owned docks, estimated by PND Engineers (<https://juneau.org/engineering-public-works/jcos>, under “Climate”), is \$12.9 million per berth (2019 dollars), without the need for new transmission infrastructure.

Safety: 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 A3, page 2 and 3**). The stairway and elevator will be configured to accommodate ambulance access. Approximately 80 feet of seawalk may be impacted by transient ambulance access.



Figure 13: 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.

Welfare: 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).

CBJ Docks and Harbors requested a navigability study to verify that the proposed dock does not impede access to other docks, or impact larger vessels (such as fuel or material barges) transiting Gastineau Channel under the bridge. The study should include discussions with air operators and the Department of Transportation Federal Aviation Administration to verify access by aircraft landing and taxiing to the float plane docks (**Attachment E, page 56**).

Condition: 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.

Condition: 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.

Property Value or Neighborhood Harmony –

Conditioning for tourism impacts on the Juneau community is challenging due to ship size increases and the ability to enforce limitations.

The dock is proposed to accommodate a ship 360 meters long (1181 feet), and 240,000 gross tons (**Attachment A2, page 8**). Below are the largest ships run by lines currently serving Juneau:

Ship	Line	Gross Tons	Length (feet)	CAPACITY		
				Rooms	Double	Max
Icon of the Seas	Royal Caribbean	250,800	1,198	2,805	5,610	7,600
Utopia of the Seas	Royal Caribbean	228,081	1,188	2,874	5,748	6,988
Wonder of the Seas	Royal Caribbean	236,857	1,187.8	2,867	5,734	6,988
Symphony of the Seas	Royal Caribbean	228,081	1,184.42	2,759	5,518	6,680
Harmony of the Seas	Royal Caribbean	226,963	1,188.1	2,747	5,494	6,687
Oasis of the Seas	Royal Caribbean	226,838	1,180	2,742	5,484	6,771
Allure of the Seas	Royal Caribbean	225,282	1,180	2,742	5,484	6,780
Carnival Celebration	Carnival	183,521	1,130	2,687	5,374	6,631
Mardi Gras	Carnival	181,808	1,130	2,641	5,282	6,631
Spectrum of the Seas	Royal Caribbean	169,379	1,138.8	2,137	4,246	5,622
Norwegian Encore	Norwegian	169,116	1,094	2,040	3,998	UNK
Ovation of the Seas	Royal Caribbean	168,666	1,138.6	2,090	4,180	4,905

Norwegian Encore and Quantum of the Seas are the largest to visit Juneau at this time. Depending on the source (Cruise Critic, Cruise Mapper, Wikipedia) Norwegian Encore and Ovation of the Seas are in the low 20s of worldwide ship size.

Industry trends are towards larger ships that exceed 4,000 passengers under double occupancy. Max capacity considers, for instance, if a room for two (2) is occupied by a family of four (4).

The inertia of the lightering process practically limits ship size to about 3,000 passengers. A dock will allow larger ships to occupy Juneau’s fifth cruise ship position, increasing Juneau’s cruise ship visitor capacity by 25 percent. If all docks were occupied every day of the season, this could be up to half a million additional visitors to Juneau each year considering current ship design (**Attachment B, page 14**).

Juneau planning documents and agreements limit the number of “large” ships to five (5). Definitions in use are:

- 750 feet in length in the amendment to the Long Range Waterfront Plan (**Attachment C, page 6, item 2**)
- 950 passengers in the Memorandum of Agreement between CBJ and the cruise lines (<https://juneau.org/manager/tbmp> , under “Visitor Industry Task Force”).

There is no upper limit on a large ship.

The City Attorney has provided a memo outlining the challenges of limiting the number of passengers rather than ships (**Attachment D**). Among those:

- The U.S. Constitutional right to travel.
- Revenue bonds prohibit CBJ from undertaking actions that put debt service payments in jeopardy.

- CBJ regulation that may favor their own competing properties.

Docks at anchor cannot connect to water and sanitary services.

If CBJ were managing the docks, the cruise ship passenger limitation could be rotated through the docks for equity.

Condition: 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.

Condition: The dock will not accommodate hot berthing.

Condition: 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.

AGENCY REVIEW

CDD conducted an agency review comment period between May 30, 2023 and June 26, 2023. Agency review comments can be found in **Attachment E**.

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	1 ST set of comments before dock added to CUP. 2 nd 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 [page 16-17](#) of this report. Parks and Recreation provided examples of seawalk easement maintenance language in place with other privately-owned docks (**Attachment E, page 10**).

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 E, page 46 and 48**).

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 E, page 46**).

CBJ Docks and Harbors asked for a navigation study (**Attachment E, page 56**), which has been made a condition (page 20 of this report). Other items of interest include:

- Permission to request tidelands from the Alaska Department of Natural Resources. This permission would be granted through the tidelands lease and expansion, under the Lands and Resources Department.
- Requirement for electrification. This is a condition.
- Clarity regarding dock fingers shown in renderings. These fingers could be used for dayboats, tenders or watercraft (**Attachment A2, page 12**).

PUBLIC COMMENTS

CDD conducted a public comment period between June 2, 2023 and June 20, 2023. Public notice was mailed to property owners within 500 feet of the proposed development (**Attachment F**). A public notice sign was also posted on-site two (2) weeks prior to the scheduled hearing (**Attachment G**). Public comments submitted at time of writing this staff report can be found in **Attachment H**.

CDD received one (1) comment.

Name	Summary
Bill Kramer	Concerns about cruise impacts.

Meetings conducted by the Applicant and 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)
- 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

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 but requires CBJ participation on a tidelands lease.
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 C)

Page No.	Item	Summary
1	Provide infrastructure to prevent hot-berthing at existing docks.	A new dock does not prevent hot-berthing but creates an alternative. A proposed condition would prohibit hot-berthing.
1	Provide infrastructure to prevent large ship at anchor/dynamic positioning.	While not a goal of the project, construction of the dock may impede anchoring in Gastineau Channel.
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 110 thousand passengers will be moved west of Seward Street.
2	Dock facility capable of accommodating one (1) large cruise ship plus government ships.	Current proposal is for one (1) large cruise ship. Opposite side of dock will not be constructed to accommodate the loads of large ships, but could handle dayboats, tenders, or small watercraft (Attachment A2 page 12).
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	One (1) larger ship per day using one side of the facility.	Condition proposed.
5	Maximum of five (5) larger ships in port per day.	CBJ management issue.
5	No hot berthing at the new facility.	Condition proposed.

Page No.	Item	Summary
5	No larger ships allowed to anchor as the sixth ship in town.	CBJ management issue.
5	CBJ manages the dock to some extent through private partnership or agreement.	CBJ management issue.
5	Dock is electrified.	Condition proposed.
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.
5	Year-round development orientation.	Vehicle parking available off season. Retail and restaurants available off-season.
6	No berthing or lightering outside of the area encompassed by the plan.	CBJ manages current lightering facilities and would deny access to a sixth ship at anchor, or anchored outside of the managed area. A proposed condition prohibits lightering from the proposed facility.
6	No more than five (5) ships greater than 750 feet in length.	CBJ management issue.
6	New docks should address impacts to navigation and anchorage.	This will be determined during dock design.
6	New docks should address impacts to view planes.	Passenger gangway provides elevated view of waterfront. Gaps between structures creates visual continuity with park. Whittier Street terminates at the dock, creating connection from Egan Drive to the waterfront.
6	New docks should address environmental impacts, including shore power to mitigate air pollution.	The proposed dock includes cable trays and structure for integrating future shore power connections once the municipal feed is available (Attachment A2, page 12). However, a line capable of providing power needed is not currently proximate to the project.
6	Uplands: manage vehicular traffic, including signalization.	Vehicle parking and bus transportation underground, 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 I). 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.
	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.

2018 Juneau Renewable Energy Strategy

Chapter	Page No.	Item	Summary
Apx A,B	A13, B8	Long Term actions: Require all cruise ships and other large commercial ships to have the capacity to plug into Juneau’s electric energy supply when in port.	The proposed dock includes cable trays and structure for integrating future shore power connections once the municipal feed is available (Attachment A2, page 12). However, a line capable of providing power needed is not currently proximate to the project.
Apx A,B	A13, B8	Mandate new commercial docks to provide electric plug-ins for cruise ships and other commercial vessels, and require that ships use electric power whenever available.	The proposed dock includes cable trays and structure for integrating future shore power connections once the municipal feed is available (Attachment A2, page 12). However, a line capable of providing power needed is not currently proximate to the project.

2011 Juneau Climate Action and Implementation Plan

Chapter	Page No.	Item	Summary
Strategy T6-A	43	Long Term actions: Require all cruise ships and other large commercial ships to have the capacity to plug into Juneau’s electric energy supply when in port.	The proposed dock includes cable trays and structure for integrating future shore power connections once the municipal feed is available (Attachment A2, page 12). However, a line capable of providing power needed is not currently proximate to the project.
Strategy T6-A	43	Mandate new commercial docks to provide electric plug-ins for cruise ships and other commercial vessels, and require that ships use electric power whenever available.	The proposed dock includes cable trays and structure for integrating future shore power connections once the municipal feed is available (Attachment A2, page 12). However, a line capable of providing power needed is not currently proximate to the project.

Juneau Solid Waste Action Plan (no date) – no specific requirements.

Juneau 2008 Solid Waste Management Strategy – no specific requirements.

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

The **Juneau Commission on Sustainability Annual Report (2022)** listed dock electrification as the top transportation priority. <https://juneau.org/engineering-public-works/jcos>

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. The project includes a floating steel dock up to 70 feet wide and 500 feet long.

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

Each use requires a conditional use permit because the project constitutes major development:

- More than 12 residences
- 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 MU2 and Waterfront Commercial zoning districts, 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 MU2 and Waterfront Commercial zoning districts, will 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, 2004 Long Range Waterfront Plan, 2018 Juneau Renewable Energy Strategy, and 2011 Juneau Climate Action and Implementation Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE WITH CONDITIONS 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. Includes floating steel dock up to 70 feet wide and 500 feet long.

The approval is subject to 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 lot, 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.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A1	Application Packet – Application Forms
Attachment A2	Application Packet - Summary Documents
Attachment A3	Application Packet - Site plans and elevations
Attachment A4	Application Packet - Renderings
Attachment A5	Application Packet - Traffic Impact Analysis – Final Draft
Attachment B	Assembly Committee of the Whole: 2023 Cruise Season Presentation Materials
Attachment C	Ordinance 2022-12(am): Amendment to the Long Range Waterfront Plan
Attachment D	City Attorney Memo: “Preliminary Legal Issues with Managing Tourism”
Attachment E	Agency Review Comments
Attachment F	Abutters Notices
Attachment G	Public Notice Sign
Attachment H	Public Comments
Attachment I	2004 Long Range Waterfront Plan, Chapter 3.3 (Area B)

Original Application



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 Support Lot C1																	
	Parcel Number(s) Parcel: 1C060-K01-0031 (C-1)																	
	<input type="checkbox"/> This property is located in the downtown historic district <input type="checkbox"/> 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.																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Russell Dick</td> <td style="width: 50%;">Landowner</td> </tr> <tr> <td>Landowner/Lessee (Printed Name)</td> <td>Title (e.g.: Landowner, Lessee)</td> </tr> <tr> <td>X </td> <td>1/24/23</td> </tr> <tr> <td>Landowner/Lessee (Signature)</td> <td>Date</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td>X _____</td> <td>_____</td> </tr> <tr> <td>Landowner/Lessee (Printed Name)</td> <td>Title (e.g.: Landowner, Lessee)</td> </tr> <tr> <td>Landowner/Lessee (Signature)</td> <td>Date</td> </tr> </table>			Russell Dick	Landowner	Landowner/Lessee (Printed Name)	Title (e.g.: Landowner, Lessee)	X	1/24/23	Landowner/Lessee (Signature)	Date			X _____	_____	Landowner/Lessee (Printed Name)	Title (e.g.: Landowner, Lessee)	Landowner/Lessee (Signature)	Date
Russell Dick	Landowner																	
Landowner/Lessee (Printed Name)	Title (e.g.: Landowner, Lessee)																	
X	1/24/23																	
Landowner/Lessee (Signature)	Date																	
X _____	_____																	
Landowner/Lessee (Printed Name)	Title (e.g.: Landowner, Lessee)																	
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																		
Applicant (Printed Name) Same		If same as LANDOWNER, write "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

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

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

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



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 phased development of mixed use, including retail, community park, docking, and associated parking. Phase 1 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 uptown 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 in the first phase with future phases adding 9,000 sf of additional Retail and 40,000 sf of facilities with a use yet to be determined. 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 regarding Aak'w Landing Zoning and Parking

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) Phase 1 150,000, future phase building square feet 1st PHASE 34,000 sf, per narrative

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	\$ <u>4,000⁰⁰</u>	<u>ph 1 class IV</u>		
Admin. of Guarantee	\$ _____			
Adjustment	\$ _____			
Pub. Not. Sign Fee	\$ <u>50⁰⁰</u>			
Pub. Not. Sign Deposit	\$ <u>100⁰⁰</u>			
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 <u>USE23-003</u>	Date Received <u>1-25-23</u>
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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



Huna Totem Corporation

WOOSH-JEE-EEN • PULLING TOGETHER

May 18, 2023

Revised Materials

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:

As we discussed yesterday, enclosed please find the updated materials we are submitting for our Conditional Use Permit Application USE23-003 for our project Aak'w Landing project. The updated materials combine reflect the original submittal for the uplands portion of the project with the requested inclusion of the tidelands portion. Included are the following:

1. The original Development Permit Application
2. An email attachment from the additional landowner for the relevant tidelands of the State of Alaska.
3. The original Conditional Use Permit Application showing the case number.
4. An updated project summary description.
5. Two drawings of the planned dock alignment.
6. An updated Architectural Narrative dated 5.17.23.
7. An updated Zoning and Parking Study also dated 5.17.23, which updates the Site and Building Specifics numbers to reflect
8. The completed Traffic Impact Analysis.

All other attachments in the original remain as submitted. We hope to complete review in a timely manner in order to make the agenda for the Planning Commission shown on the calendar for Tuesday, July 11, 2023.

Thank you for your time in reviewing these materials and your insight into the process. We look forward to moving into the next steps necessary to advance the Aak'w Landing project.

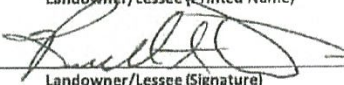
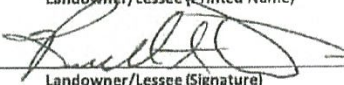
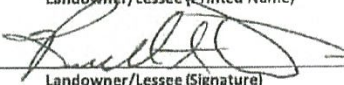

Cordially,

Fred Parady
Chief Operating Officer



DEVELOPMENT PERMIT APPLICATION

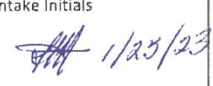
NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications. This form and all documents associated with it are public record once submitted.

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)															
	<input type="checkbox"/> This property is located in the downtown historic district <input type="checkbox"/> 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.																
<table style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">Russell Dick</td> <td style="width: 50%; text-align: center;">Landowner</td> </tr> <tr> <td style="text-align: center;">Landowner/Lessee (Printed Name)</td> <td style="text-align: center;">Title (e.g.: Landowner, Lessee)</td> </tr> <tr> <td style="text-align: center;">X </td> <td style="text-align: center;">1/24/23</td> </tr> <tr> <td style="text-align: center;">Landowner/Lessee (Signature)</td> <td style="text-align: center;">Date</td> </tr> </table> <table style="width: 100%;"> <tr> <td style="width: 50%;">Landowner/Lessee (Printed Name)</td> <td style="width: 50%;">Title (e.g.: Landowner, Lessee)</td> </tr> <tr> <td>X _____</td> <td>_____</td> </tr> <tr> <td style="text-align: center;">Landowner/Lessee (Signature)</td> <td style="text-align: center;">Date</td> </tr> </table>			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
Russell Dick	Landowner															
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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

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

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

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

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

CAUTION: This email originated from outside the State of Alaska mail system. Do not click links or open attachments unless you recognize the sender and know the content is safe.



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.

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	
<input type="checkbox"/> This property is located in the downtown historic district <input type="checkbox"/> 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	
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.	
Dan Bleidorn CBJ Lands Manager _____ Landowner/Lessee (Printed Name) Title (e.g.: Landowner, Lessee)	
X <u><i>Daniel Bleidorn</i></u> <u>05/26/2023</u> 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) Huna Totem Application	Contact Person Fred Parady
Mailing Address Same	Phone Number(s) 907.789.8504 907.723.3903
E-mail Address Same	
X <u><i>[Signature]</i></u> <u>5.26.2023</u> Applicant's Signature Date of Application	

To be completed by Applicant

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

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

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

	Intake Initials
Case Number	Date Received



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 phased development of mixed use, including retail, community park, docking, and associated parking. Phase 1 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 subarea 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 in the first phase with future phases adding 9,000 sf of additional Retail and 40,000 sf of facilities with a use yet to be determined. 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 regarding Aak'w Landing Zoning and Parking

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) Phase 1 150,000, future phase build square feet 1st PHASE 34,000 sf, per narrative All Phases

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	\$ 4,000 ⁰⁰	ph 1 class IV		
Admin. of Guarantee	\$ _____			
Adjustment	\$ _____			
Pub. Not. Sign Fee	\$ 50 ⁰⁰			
Pub. Not. Sign Deposit	\$ 100 ⁰⁰			
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 USE23-003	Date Received 1-25-23
---------------------------------	---------------------------------



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

Huna Totem Dock

Case Number: PAC2022 0047
 Applicant: Huna Totem Corporation, Fred Parady
 Property Owner: Aak W Landing LLC
 Property Address: Egan Dr.
 Parcel Code Number: 1C060K010031
 Site Size: 125,406 SF/2.8789 Acres
 Zoning: MU2 Mixed Use 2 (Willoughby)
 Existing Land Use: Seasonal restaurant/Construction trailer

Conference Date: October 26, 2022
 Report Issued: November 2, 2022
DISCLAIMER: Pre-application conferences are conducted for purposes of providing applicants with a preliminary review of a project and timeline. Pre-application conferences are not based on a complete application, and are not a guarantee of final project approval.

List of Attendees

Note: Copies of the Pre-Application Conference Report will be emailed, instead of mailed, to participants who have provided their email address below.

Name	Title	Email address
Fred Parady	Huna Totem, COO	FParady@hunatotem.com
Russell Dick	Huna Totem, President/CEO	Russell.Dick@hunatotem.com
Mickey Richardson	Huna Totem, Dir of Marketing	Mickey@hunatotem.com
Wayne Jensen	JYW Architects, President	Wayne@jensenyorbawall.com
Corey Wall	JYW Architects, Vice President	Corey@jensenyorbawall.com
Irene Gallion	Planning	Irene.Gallion@juneau.org
Emily Suarez		Emily.Suarez@juneau.org
David Peterson		David.Peterson@juneau.org

Sydney Hawkins	Permit Tech II	Sydney.Hawkins@juneau.org
Jill Maclean	CBJ CDD Director	Jill.Maclean@juneau.org
Alex Pierce	CBJ Tourism Manager	Alexandra.Pierce@juneau.org
Dan Bleidorn	CBJ Lands Manager	Dan.Bleidorn@juneau.org

Conference Summary

Questions/issues/agreements identified at the conference that weren't identified in the attached reports.

The following is a list of issues, comments and proposed actions, and requested technical submittal items that were discussed at the pre-application conference.

Flood plain development: FEMA mapping shows the flood plain area ending at the beach. Elements of the proposal closer to Egan Drive are below the 27 foot special flood hazard area elevation, but are outside of the mapped area. The Director has determined that flood proofing will not be required for development outside of the mapped area.

Lot coverage: See #7 below.

Construction across lot lines: A reminder that CDD cannot permit construction that crosses lot lines (CBJ 49.25.430).

Tidewater Lot Line setbacks: According to CBJ 49.25.430(4)(G): In any zoning district, yard setbacks are not required from tidewater lot lines. Reference #3 below.

Seawalk requirements: See the attached Ordinance 2005-29(am). Property owners within the area of the Long Range Waterfront Plan shall dedicate all easements necessary for construction of a seawalk 16 feet in width.

Project Overview

The project proposed phased development of mixed use, including retail, community park, docking, and associated parking.

Phase 1 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 180 cars.

Materials provided by the applicant include:

- Existing Site Plan
- Seawalk (Grade) Level and Site Plan (with bus parking).
- Seawalk (Grade) Level and Site Plan (with off-season parking).
- Upper Plaza Level Phase 1.
- Upper Plaza Level Future Phases.
- Site Section.
- Zoning and parking study.
- Architectural Narrative for CBJ Pre-Application Conference.

The Applicant is working through early development stages. There are two meetings on November 7, 2022:

- **Assembly Lands, Resources and Economic Development:** The lease of the tidelands will be discussed in light of 53.09.260. Coast Guard land ownership and seawalk requirements will be discussed. Focus is on the specifics of the lease.
- **Assembly Committee of the Whole:** Huna Totem will be presenting development ideas and concepts to the Assembly. Focus will be on the vision for the community.

Coast Guard land ownership negotiations may result in modifications to the

The project will require a conditional use permit (CUP), because of public interest will be require a public meeting before the application goes to the Planning Commission.

Planning Division

1. **Zoning** – MU2, Town Center Parking area
2. **Subdivision** – Not applicable.
3. **Setbacks** –
 - a. Minimum front yard setback: 5 feet
 - b. Minimum street side yard setback: 5 feet
 - c. Minimum rear yard setback: 5 feet
 - d. Minimum side yard setback: 5 feet
 - e. 49.25.430 (4)(G) - Yard setbacks. Tidewater lot line setback is zero (0)
4. **Height** – Maximum height permissible use: 45 feet
5. **Access** – Primary access is from Whittier Street. At this time the Applicant is unsure if access off Egan Drive will be required. Egan Drive is an Arterial. If access off Egan Drive is proposed, a driveway permit will be required from The Alaska Department of Transportation and Public Facilities.

Contact: Michael K. Schuler
Email: michael.schuler@alaska.gov
Phone: 465-4499
6. **Parking & Circulation**– Parking per submitted materials. Note that the parking shown on Whittier is illustrative, and is not considered in parking calculations provided by the Applicant. CBJ does not permit back-out parking for commercial operations (CBJ 49.40.235(b)(6)

The Applicant does not anticipate pursuing a waiver for parking at this time. If pursued, a waiver application should be made at the same time as the Conditional Use Permit application.
7. **Lot Coverage** – Maximum lot coverage is 80%. CDD’s interpretation is that the park area on top of the garage is not lot coverage.

The definition of “lot coverage” means the percentage of horizontal lot area that is occupied by all buildings on the lot, each measured at the outside of those exterior walls of the floor having the greatest horizontal dimensions. The garage creates horizontal lot area by providing park space on the roof.

Phase 1 proposal current lot coverage is 8%.

8. **Vegetative Coverage** – Per CBJ 49.50.300 - Minimum vegetative cover is 5%. (Met)
9. **Lighting** – Proposed lighting will need to be downward cast full cut off. Lighting conditions established by the commission. Verified during building permit process.
10. **Noise** – Anticipated noise from this project is not expected to be excessive for the zoning district.
11. **Flood** –



Elements of the proposed structure and improvements are in the VE flood zone with elevations of 23 to 26 feet. VE Zone is a Special Flood Hazard Area (SFHA) inundated by 1% annual chance flood; coastal floods with velocity hazards. New development that follows within the definitions stipulated in 49.80 shall obtain a floodplain development permit (FDP). Proposed structures will need to be design to meet the requirements of CBJ 49.70 Article IV, and 49.70.400(j) for additional provisions in zones VE and V.

12. **Hazard/Mass Wasting/Avalanche/Hillside Endorsement** – The project is not within a mapped hazard area. The project does not appear to need a Hillside Endorsement. A Hillside Endorsement will be required if slopes in excess of 18% are created, or cut into.

-
13. **Wetlands** – Wetlands are not anticipated on this lot. Fill of wetlands will require a United States Army Corp of Engineers fill permit.

Contact them at: 907-753-2689

14. **Habitat** – Check with the U.S. Fish and Wildlife on the presence of eagle nests in the area. The presence of eagle nests may impact construction scheduling. No anadromous waterbodies are on the subject parcel, or within 50 feet.

15. **Plat or Covenant Restrictions** –There were not applicable Plat notes in Plat number 2009-37.

16. **Traffic** – A traffic impact analysis (TIA) will be required per CBJ 49.40.300 (a)(1)

Parking level: 5,300 SF and 9,500 SF: Total SF: 14,500 SF (Retail)

Phase 1: 10,000 SF Plaza level (Retail)

Total: 24,800 SF retail

According to the Institute of Transportation Engineers Trip Generation Manual 9th edition a variety store generates 64.03 average annual daily traffic (AADT). Generating 1,587.94 AADT.

Per plans parks are approximately 60,000 SF, or approximately 1.4 Acres (Scaled of off Plaza Level Phase 1 drawings) According to the Institute of Transportation Engineers Trip Generation Manual 9th edition a City park generates 1.89 average annual daily traffic (AADT).

The applicant will review the parking analysis done by the previous applicant, and modify if necessary.

17. **Nonconforming situations** – There are not nonconforming situations evident

Building Division

18. **Building** – Building plans will be reviewed during the permitting process, no comments at this time.

19. **Outstanding Permits** –

- a. BLD20190242 – “Temp power for job trailer.”

General Engineering/Public Works

20. **Engineering** –

- a. Note that a single water meter would be required. Does not anticipate many challenges since the project will have engineers involved.

- b. Per discussion above, review building elevations with FEMA elevation requirements for this area.

21. **Drainage** – None at this time.

22. **Utilities** – (water, power, sewer, etc.) None at this time.

Fire Marshal

23. **Fire Items/Access** – No comments at this time.

Other Applicable Agency Review

Created: 2022-10-12 14:40:45 [EST]

(Supp. No. 145)

-
24. The Traffic Impact Analysis will be submitted to the Alaska Department of Transportation and Public Facilities for their evaluation and review. If they have concerns, the Commission may condition the project to address them.
 25. The application will be circulated to the Alaska Department of Transportation and Public Facilities, the United States Army Corps of Engineers, the Alaska Department of Natural Resources, the United States Fish and Wildlife Service, the Alaska Department of Fish and Game, the Federal Aviation Administration, and the United States Coast Guard.

List of required applications

Based upon the information submitted for pre-application review, the following list of applications must be submitted in order for the project to receive a thorough and speedy review.

1. Development Permit Application
2. Allowable/Conditional Use Permit Application

Additional Submittal Requirements

Submittal of additional information, given the specifics of the development proposal and site, are listed below. These items will be required in order for the application to be determined Counter Complete.

1. A copy of this pre-application conference report.
2. Traffic Impact Analysis. The Final draft will be required to go to the Planning Commission.

Exceptions to Submittal Requirements

Submittal requirements staff has determined **not** to be applicable or **not** required, given the specifics of the development proposal, are listed below. These items will **not** be required in order for the application to be reviewed.

1. None

Fee Estimates

The preliminary plan review fees listed below can be found in the CBJ code section 49.85.

Based upon the project plan submitted for pre-application review, staff has attempted to provide an accurate estimate for the permits and permit fees which will be triggered by your proposal.

1. \$1,000 Class IV Permit
2. Public Notice Sign \$150. \$100 refundable if the sign is brought back by the Monday after the Commission meeting.

For informational handouts with submittal requirements for development applications, please visit our website at www.juneau.org/community-development.

Submit your Completed Application

You may submit your application(s) online via email to permits@juneau.org

OR in person with payment made to:

City & Borough of Juneau, Permit Center
230 South Franklin Street
Fourth Floor Marine View Center
Juneau, AK 99801

Phone: (907) 586-0715
Web: www.juneau.org/community-development

Attachments:

49.70 Article IV
49.15.330
Ordinance 2005-29(am)
Development Permit Application
Allowable/Conditional Use Permit Application

49.15.330 Conditional use permit.

- (a) *Purpose.* A conditional use is a use that may or may not be appropriate in a particular zoning district according to the character, intensity, or size of that or surrounding uses. The conditional use permit procedure is intended to afford the commission the flexibility necessary to make determinations appropriate to individual sites. The commission may attach to the permit those conditions listed in subsection (g) of this section as well as any further conditions necessary to mitigate external adverse impacts. If the commission determines that these impacts cannot be satisfactorily overcome, the permit shall be denied.
- (b) *Preapplication conference.* Prior to submission of an application, the developer shall meet with the director for the purpose of discussing the site, the proposed development activity, and the conditional use permit procedure. The director shall discuss with the developer, regulation which may limit the proposed development as well as standards or bonus regulations which may create opportunities for the developer. It is the intent of this section to provide for an exchange of general and preliminary information only and no statement by either the developer or the director shall be regarded as binding or authoritative for purposes of this code. A copy of this subsection shall be provided to the developer at the conference.
- (c) *Submission.* The developer shall submit to the director one copy of the completed permit application together with all supporting materials and the permit fee.
- (d) *Director's review procedure.*
 - (1) The director shall endeavor to determine whether the application accurately reflects the developer intentions, shall advise the applicant whether or not the application is acceptable and, if it is not, what corrective action may be taken.
 - (2) After accepting the application, the director shall schedule it for a hearing before the commission and shall give notice to the developer and the public in accordance with section 49.15.230.
 - (3) The director shall forward the application to the planning commission together with a report setting forth the director's recommendation for approval or denial, with or without conditions together with the reasons therefor. The director shall make those determinations specified in subsections (1)(A)—(1)(C) of subsection (e) of this section.
 - (4) Copies of the application or the relevant portions thereof shall be transmitted to interested agencies as specified on a list maintained by the director for that purpose. Referral agencies shall be invited to respond within 15 days unless an extension is requested and granted in writing for good cause by the director.
 - (5) Even if the proposed development complies with all the requirements of this title and all recommended conditions of approval, the director may nonetheless recommend denial of the application if it is found that the development:
 - (A) Will materially endanger the public health or safety;
 - (B) Will substantially decrease the value of or be out of harmony with property in the neighboring area; or
 - (C) Will not be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans.
- (e) *Review of director's determinations.*

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- (1) At the hearing on the conditional use permit, the planning commission shall review the director's report to consider:
 - (A) Whether the proposed use is appropriate according to the table of permissible uses;
 - (B) Whether the application is complete; and
 - (C) Whether the development as proposed will comply with the other requirements of this title.
 - (2) The commission shall adopt the director's determination on each item set forth in paragraph (1) of this subsection (e) unless it finds, by a preponderance of the evidence, that the director's determination was in error, and states its reasoning for each finding with particularity.
- (f) *Commission determinations; standards.* Even if the commission adopts the director's determinations pursuant to subsection (e) of this section, it may nonetheless deny or condition the permit if it concludes, based upon its own independent review of the information submitted at the hearing, that the development will more probably than not:
- (1) Materially endanger the public health or safety;
 - (2) Substantially decrease the value of or be out of harmony with property in the neighboring area; or
 - (3) Lack general conformity with the comprehensive plan, thoroughfare plan, or other officially adopted plans.
- (g) *Specific conditions.* The commission may alter the director's proposed permit conditions, impose its own, or both. Conditions may include one or more of the following:
- (1) *Development schedule.* A reasonable time limit may be imposed on construction activity associated with the development, or any portion thereof, to minimize construction-related disruption to traffic and neighborhood, to ensure that development is not used or occupied prior to substantial completion of required public or quasi-public improvements, or to implement other requirements.
 - (2) *Use.* Use of the development may be restricted to that indicated in the application.
 - (3) *Owners' association.* The formation of an association or other agreement among developers, homeowners or merchants, or the creation of a special district may be required for the purpose of holding or maintaining common property.
 - (4) *Dedications.* Conveyance of title, easements, licenses, or other property interests to government entities, private or public utilities, owners' associations, or other common entities may be required.
 - (5) *Performance bonds.* The commission may require the posting of a bond or other surety or collateral approved as to form by the city attorney to guarantee the satisfactory completion of all improvements required by the commission. The instrument posted may provide for partial releases.
 - (6) *Commitment letter.* The commission may require a letter from a public utility or public agency legally committing it to serve the development if such service is required by the commission.
 - (7) *Covenants.* The commission may require the execution and recording of covenants, servitudes, or other instruments satisfactory in form to the city attorney as necessary to ensure permit compliance by future owners or occupants.
 - (8) *Revocation of permits.* The permit may be automatically revoked upon the occurrence of specified events. In such case, it shall be the sole responsibility of the owner to apply for a new permit. In other cases, any order revoking a permit shall state with particularity the grounds therefor and the requirements for reissuance. Compliance with such requirements shall be the sole criterion for reissuance.

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- (9) *Landslide and avalanche areas.* Development in landslide and avalanche areas, designated on the landslide and avalanche area maps dated September 9, 1987, consisting of sheets 1–8, as the same may be amended from time to time by assembly ordinance, shall minimize the risk to life and property.
 - (10) *Habitat.* Development in the following areas may be required to minimize environmental impact:
 - (A) Developments in wetlands and intertidal areas.
 - (11) *Sound.* Conditions may be imposed to discourage production of more than 65 dBa at the property line during the day or 55 dBa at night.
 - (12) *Traffic mitigation.* Conditions may be imposed on development to mitigate existing or potential traffic problems on arterial or collector streets.
 - (13) *Water access.* Conditions may be imposed to require dedication of public access easements to streams, lake shores and tidewater.
 - (14) *Screening.* The commission may require construction of fencing or plantings to screen the development or portions thereof from public view.
 - (15) *Lot size or development size.* Conditions may be imposed to limit lot size, the acreage to be developed or the total size of the development.
 - (16) *Drainage.* Conditions may be imposed to improve on and off-site drainage over and above the minimum requirements of this title.
 - (17) *Lighting.* Conditions may be imposed to control the type and extent of illumination.
 - (18) *Other conditions.* Such other conditions as may be reasonably necessary pursuant to the standards listed in subsection (f) of this section.

(Serial No. 87-49, § 2, 1987; Serial No. 2006-15, § 2, 6-5-2006; Serial No. 2015-03(c)(am), § 9, 8-31-2015 ; Serial No. 2017-29, § 3, 1-8-2018, eff. 2-8-2018)

49.70.400 Floodplain.

- (a) *Purpose.* The purpose of this article is to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas. Other purposes are to:
 - (1) Reserved;
 - (2) Prevent the erection of structures in areas unfit for human usage by reason of danger from flooding, unsanitary conditions, or other hazards;
 - (3) Minimize danger to public health by protecting the water supply and promoting safe and sanitary drainage;
 - (4) Reduce the financial burdens imposed on the community, its governmental units, and its individuals by frequent and periodic floods and overflow of lands;
 - (5) Reserved;
 - (6) Ensure that potential buyers are notified that property is in a special flood hazard area; and
 - (7) Ensure that those who occupy the special flood hazard area assume financial responsibility for their development.
- (b) *Interpretation.*
 - (1) In the interpretation and application of this article, all provisions are considered minimum requirements and are liberally construed in favor of the governing body.

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- (2) This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. Where the provisions of this article and another ordinance conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
 - (3) This article shall apply to all areas of special flood hazard areas (SFHAs) within the jurisdiction of the City and Borough of Juneau.
 - (4) The special flood hazard areas identified by the Federal Insurance Administrator (FIA) in a scientific and engineering report entitled the "Flood Insurance Study" (FIS) and the flood insurance rate maps (FIRMs) dated September 18, 2020 for the City and Borough of Juneau, Alaska are adopted. The FIS and FIRMs shall be on file with the community development department and available to the public at 155 South Seward Street, Juneau, Alaska.
- (c) *Implementation.* The director is responsible for administering and implementing the provisions of this chapter and is responsible for maintaining for public use and inspection appropriate records and information relevant to implementation of this chapter. Such records and information must include:
- (1) Actual elevations, in relation to mean lower low water, of the lowest floor, including basement, of all new or substantially improved structures located in the special flood hazard area (SFHA), and whether or not such structures have basements;
 - (2) Actual elevations, in relation to mean lower low water, of all new and substantially improved floodproofed structures and the required floodproofing certifications;
 - (3) Flood insurance studies (FISs);
 - (4) Flood insurance rate maps (FIRMs);
 - (5) Any reports or studies on flood hazards in the community, such as written reports by the U.S. Army Corps of Engineers, U.S. Geological Survey, or private firms provided to the director; and
 - (6) A file of all floodplain permit applications, permits, exceptions, and supporting documentation.
- (d) *Enforcement.* Enforcement of this chapter is per CBJ 49.10.600—49.10.660.
- (e) *Floodplain development permit required.* A floodplain development permit is required for any development or industrial uses located within a special flood hazard area, including placement of manufactured homes. The director must:
- (1) Review all floodplain development permit applications for development in the special flood hazard area for compliance with the provisions of this chapter, and to determine if other permits may be necessary from local, state, or federal governmental agencies.
 - (2) Interpret the location of the special flood hazard area boundaries and regulatory floodway. If there appears to be a conflict between a mapped boundary and actual field conditions, the director must determine and interpret the documents. When base flood elevation data has not been provided, the director shall obtain, review, and reasonably utilize base flood elevation and floodway data available from any federal, state, municipal, or any other source to implement the provisions of this chapter.
 - (3) If the director determines that a proposed development is within a special flood hazard area, a permit fee must be collected and the following information must be provided before processing a floodplain development permit:
 - (A) Elevation of the lowest floor, including a basement, of all structures;
 - (B) Elevation to which any structure has been floodproofed;
 - (C) Certification by an engineer or architect that the floodproofing methods for any nonresidential structure meet generally accepted floodproofing standards;

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- (D) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development;
 - (E) Description of the plan for maintenance of the altered or relocated portion of the watercourse so that the flood-carrying capacity is not diminished; and
 - (F) When base flood elevation data have not been provided, the director shall obtain, review and reasonably apply any base flood elevation and floodway data available from federal, state or other sources.
- (f) *Methods of reducing losses.* In order to accomplish its purpose, this article includes methods and provisions to:
- (1) Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards, or that result in damaging increases in erosion or flood heights or velocities;
 - (2) Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
 - (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
 - (4) Control filling, grading, dredging, and other development that may increase flood damage; and
 - (5) Prevent or regulate the construction of flood barriers that will unnaturally divert floodwaters or that may increase flood hazards in other areas.
- (g) *General standards for flood hazard protection.* In special flood hazard areas the following standards apply:
- (1) *Anchoring.*
 - (A) Design, modify, and anchor new construction and substantial improvements to prevent flotation, collapse, or lateral movement of the structure(s).
 - (B) A manufactured home must be anchored to prevent flotation, collapse, or lateral movement and be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.
 - (C) An alternative method of anchoring may be used if the system is designed to withstand a wind force of 90 miles per hour or greater. Certification must be provided to the director that this standard is met.
 - (2) *Construction materials and methods.*
 - (A) Construct new construction and substantial improvements with materials and utility equipment resistant to flood damage.
 - (B) Use methods and practices that minimize flood damage for new construction and substantial improvements.
 - (C) Design or locate electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities so as to prevent water from entering or accumulating within the components during conditions of flooding.
 - (D) Require adequate drainage paths around structures on slopes to guide floodwaters away from existing and proposed structures for new construction and substantial improvements within zones AH and AO.
 - (3) *Utilities.*

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- (A) Design new and replacement water supply systems to minimize or eliminate infiltration of floodwaters into the system.
 - (B) Design new and replacement sanitary sewage systems to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
 - (C) Locate on-site waste disposal systems to avoid impairment to them or contamination from them during flooding.
- (4) *[Subdivision and development proposal criteria.]* Subdivision and development proposals must meet the following criteria:
- (A) Be designed to minimize flood damage;
 - (B) Locate and construct utilities and facilities, such as sewer, gas, electrical, and water systems to minimize flood damage;
 - (C) Provide adequate drainage to reduce exposure to flood damage; and
 - (D) Include base flood elevation data if the development consists of at least 50 lots or five acres, whichever is the lesser. If base flood elevation data is not available, the proposal must provide the data and backup information for how the base flood elevation data was generated for the proposal.
- (5) *[Floodplain development permit requirements.]* Review of floodplain development permits must include:
- (A) Review of the flood insurance rate map and flood insurance study for flood zone determinations for new or substantially improved structures;
 - (B) For new or substantially improved structures:
 - (i) Submittal of the proposed and finished lowest floor elevations in zones A, AE, AO, and AH.
 - (ii) Submittal of the proposed and finished bottom elevation of the lowest horizontal structural member of the lowest floor and its distance from the mean lower low water mark in zones V and VE; and
 - (iii) Submittal of specific requirements for zones V and VE as set forth in subsection 49.70.400(i).
 - (C) In zones A and V, where elevation data are not available through the flood insurance study or from another authoritative source, applications for floodplain development permit shall be reviewed to ensure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and may be based on historical data, high water marks, photographs of past flooding, and other similar or relevant data. Failure to elevate construction at least two feet above grade in these zones may result in higher insurance rates.
 - (D) Provision of an elevation certificate to demonstrate that the lowest floor of a structure is at or above base flood elevation. The certification must be provided on a form approved by the National Flood Insurance Program and prepared by a registered land surveyor or professional engineer who is licensed in the State of Alaska and authorized to certify such information. This requirement may be waived by the director if an approved record elevation demonstrates that the lowest floor is substantially above the base flood elevation due to natural ground level.
- (6) *Other permits.* The applicant must certify that all other necessary permits have been obtained from any federal or state governmental agencies.
- (7) *[Maintaining watercourse.]* Maintain altered or relocated portions of a special flood hazard area mapped watercourse so that the flood-carrying capacity is not diminished. The department must notify the state coordinating agency, if any, and the Federal Emergency Management Agency prior to

issuance of a floodplain development permit that seeks to alter or relocate any watercourse within a special flood hazard area.

- (h) *Specific standards for flood hazards protection.* In special flood hazard areas where base flood elevation data is provided, the following provisions are required:
- (1) *New structures or substantial improvements.* Fully enclosed areas below the lowest floor of new construction or substantial improvements, that are useable solely for parking of vehicles, building access, or storage in an area other than a basement, must automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect licensed in the State of Alaska or must meet or exceed the following minimum criteria:
 - (A) Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (B) Height of the bottom of all openings must be no higher than one foot above grade; and
 - (C) Openings may be equipped with screens, louvers, or other coverings or devices provided that the automatic entry and exit of floodwaters is allowed.
 - (2) *Residential construction.* New construction and substantial improvement of any residential structure:
 - (A) Construct the lowest floor, including basement, elevated to or above the base flood elevation within zones A, AE, or AH; or
 - (B) Construct the lowest floor elevated to the base flood depth number specified on the flood insurance rate map, or higher, or if no depth number is specified, at least two feet above the highest adjacent natural grade within zone AO.
 - (3) *Manufactured homes.* New or substantially improved manufactured homes must:
 - (A) Be placed at or above, the base flood elevation, within zones A, AH, or AE, and shall be elevated to, or above, the base flood elevation, and comply with subsection (g); or
 - (B) Elevate the lowest floor to the depth number specified on the flood insurance rate map, or higher, or if no depth number is specified, at least two feet above the highest adjacent natural grade within zone AO; and meet the provisions of subsection (g)(1).
 - (4) *Recreational vehicles.* Recreational vehicles placed within any special flood hazard area must be:
 - (A) Situated on the site for fewer than 180 consecutive days;
 - (B) Fully licensed, operational, and approved for road use; or
 - (C) Meet the requirements of subsection (h)(3).
 - (5) *Nonresidential construction.* New construction or substantial improvement of any nonresidential structure must:
 - (A) Elevate the lowest floor, including basement, to or above the base flood elevation within zones A, AE, and AH;
 - (B) Elevate the lowest floor to the depth number specified on the flood insurance rate map, or higher, or if no depth number is specified, at least two feet above the highest adjacent natural grade within zone AO; or
 - (C) Floodproof the area below the base flood elevation within zones A, AE, AH, and AO, so that:
 - (i) The structure and utility and sanitary facilities are watertight with walls substantially impermeable to the passage of water;

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- (ii) Structural components shall have the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
 - (D) A floodproof structure must be designed by an engineer or architect licensed in the State of Alaska, certifying that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on the engineer's or architect's development or review of the structural design, specifications, and plans. Certification must be provided to the director;
 - (E) Applicants proposing to floodproof nonresidential buildings must be notified at the time of floodplain development permit application that flood insurance premiums are based on rates that are one foot below the floodproofed level.
- (6) *Industrial uses.* Industrial uses within the special flood hazard area are subject to the following provisions:
- (A) Sand and gravel operations, recreation activities, open space, and parking lots may be allowed in 100-year floodplains if the use does not increase the flood hazard.
 - (B) Industrial equipment and raw materials stored in 100-year floodplains must be adequately bermed or otherwise protected.
 - (C) Disposal of hazardous materials in 100-year floodplains is prohibited. No new development that involves storage of hazardous materials will be permitted in the 100-year floodplain unless there is no feasible and prudent alternative and adequate safety measures are provided to prevent accidental discharge.
 - (D) Establishment of sanitary landfills in floodplains is prohibited.
- (7) *Increasing water surface elevation in special flood hazard area mapped watercourses where floodways are not mapped.* Notwithstanding any other provisions of this article, development in zones A, AE, and AH may increase the water surface elevation of the base flood:
- (A) Up to one foot with the submittal of an analysis completed by an engineer licensed in the State of Alaska demonstrating the cumulative effects of the proposed, existing and anticipated, development to the base flood; or
 - (B) By more than one foot only after a conditional letter of map revision and final letter of map revision is approved by the Federal Emergency Management Agency flood insurance administrator.
- (i) *Additional provisions in floodways.*
- (1) Residential and nonresidential structures are prohibited in floodways, no exceptions apply. Culverts and bridges are not subject to this prohibition.
 - (2) Encroachments, including fill, new construction, and other development, except subdivisions, within a floodway are prohibited unless an engineer licensed in the State of Alaska submits a hydrologic and hydraulic analyses to the director indicating that the encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge. The hydrologic and hydraulic analyses must be performed in accordance with standard engineering practice acceptable by the Federal Emergency Management Agency.
 - (3) Development along a floodway cannot increase the water surface elevation unless a conditional letter of map revision and final letter of map revision that revises the floodway are approved by the Federal Emergency Management Agency.
- (j) *Additional provisions in zones VE and V.*

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- (1) New construction and substantial improvements in zones V and VE must be elevated on pilings and columns so that:
 - (A) The bottom of the lowest horizontal structural member of the lowest floor, excluding the pilings or columns, is elevated to or above the base flood elevation; and
 - (B) The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values must each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval). Wind loading values used are those required by applicable state statute and local code. A registered professional engineer or architect licensed in the State of Alaska must develop or review the structural design, specifications, and plans for the construction and must certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsections (j)(1)(A) and (B) of this section.
 - (C) The use of fill for structural support of buildings is prohibited.
 - (2) In zones VE and V, new habitable construction must be located landward of the reach of mean high tide.
 - (3) In zones VE and V, new construction and substantial improvements must have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls, open wood latticework, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.
 - (4) Breakaway walls must have a design safe loading resistance of not less than ten pounds per square foot and no more than 20 pounds per square foot. Use of breakaway walls that exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect licensed in the State of Alaska certifies that the designs proposed meet the following conditions:
 - (A) Breakaway wall collapse must result from a water load less than that which would occur during the base flood; and
 - (B) The elevated portion of the building and supporting foundation system must not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination must each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval). Wind loading values used shall be those required by applicable state statute and local code.
 - (C) Enclosed space within breakaway walls are limited to parking of vehicles, building access, or storage. Such space must not be used for human habitation.
 - (k) *Warning and disclaimer of liability.* The degree of flood protection required by this article is intended for minimum regulatory purposes only and is based on general scientific and engineering principles. Floods larger than expected, can and will occur. Flood heights may be increased by human or natural causes. This article does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the City and Borough, any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision made thereunder.

(Serial No. 87-49, § 2, 1987; Serial No. 90-46, §§ 2—9, 1990; Serial No. 2013-19(b), § 2, 7-15-2013 ; Serial No. 2020-42, § 2, 8-24-2020, eff. 9-23-2020 ; Serial No. 2021-06, § 2, 4-26-2021, eff. 5-26-2021)

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49.70.410 Exceptions.

- (a) The planning commission shall hear all applications for an exception from the provisions of this article, and are limited to the powers granted in this article and those necessarily implied to ensure due process and to implement the policies of this article.
- (b) In passing upon such application, the planning commission must consider all technical evaluations, relevant factors, standards specified in other sections of this article, and:
 - (1) The danger that materials may be swept onto other lands and cause injury to other persons or property;
 - (2) The danger to life and property due to flooding or erosion damage;
 - (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (4) The importance of the services provided by the proposed facility to the community;
 - (5) The necessity to the facility of a waterfront location, where applicable;
 - (6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (7) The compatibility of the proposed use with existing and anticipated development;
 - (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - (9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (10) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - (11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (c) Exceptions may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing subsections (b)(1)—(b)(11) of this section have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the exception increases.
- (d) Upon consideration of the factors of subsection (b) of this section and the purposes of this article, the commission may deny or grant the application and may attach such conditions to the grant of an exception as it deems necessary to further the purposes of this article.
- (e) Exceptions may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this section.
- (f) Exceptions must not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (g) Exceptions must only be issued upon a determination that the exception is the minimum necessary, considering the flood hazard, to afford relief.
- (h) Exceptions must only be issued upon:
 - (1) A showing of good and sufficient cause;
 - (2) A determination that failure to grant the exception would result in exceptional hardship to the applicant; and
 - (3) A determination that the granting of an exception will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances or conflict with existing local laws or ordinances.
- (i) Reserved.
- (j) Warning and disclaimer of liability. The degree of flood protection required by this article is intended for minimum regulatory purposes only and is based on general scientific and engineering principles. Floods larger than expected,

can and will occur. Flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the City and Borough, any officer or employee thereof, or the Federal Insurance Administration for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

(Serial No. 87-49, § 2, 1987; Serial No. 90-46, § 10, 1990; Serial No. 2021-06, § 3, 4-26-2021, eff. 5-24-2021)

Presented by: The Manager
Introduced: 09/12/2005
Drafted by: J.W. Hartle

ORDINANCE OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Serial No. 2005-29(am)

**An Ordinance Relating to the Seawalk in the Area
Encompassed by the Long Range Waterfront Plan.**

WHEREAS, the Assembly has adopted the Long Range Waterfront Plan; and

WHEREAS, that plan includes a seawalk extending along the entire downtown waterfront to provide a useable transportation corridor; and

WHEREAS, the CBJ Land Use Code currently requires property owners developing or redeveloping their property to construct the seawalk and dedicate an easement for it; and

WHEREAS, having the City and Borough construct the seawalk will facilitate development of a coherent, useable corridor; and

WHEREAS, the LID process can be used to provide for construction of the seawalk along properties not under development.

NOW, THEREFORE, 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 code.

Section 2. Amendment of Subsection. CBJ 49.70.960 Special waterfront areas, is amended at subsection (c)(6) to read:

...

(6) Seawalk. A pedestrian access easement and walkway intended to provide a continuous pedestrian path along the entire downtown waterfront area, shall be included with all future development or redevelopment along the downtown waterfront shoreline. This walkway, to be known as the seawalk, shall be a continuous path along the entire downtown waterfront as depicted in the Long Range Waterfront Plan. In lieu of constructing the required seawalk, property owners developing or redeveloping property along the waterfront shoreline within the area encompassed by the Long Range Waterfront Plan shall pay a fee to the City and Borough equal to twenty percent of the final project cost for a seawalk constructed to public assembly standards for the section abutting their property. Unless the alignment of the seawalk requires otherwise, owners of property along

the waterfront shoreline within the area encompassed by the Long Range Waterfront Plan developing or redeveloping their property shall dedicate all easements necessary for construction of a seawalk sixteen feet in width.

(A) *Reserved.*

(B) *Reserved.*

(C) The seawalk shall not be required for existing buildings located along the water's edge until additions or alterations, or both, in excess of 50 percent of the gross square footage of the existing structure are proposed or undertaken within a 36-month period as determined by the City and Borough building division. General maintenance or repair work is exempt from this requirement.

(D) *Reserved.*

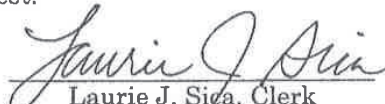
...

Section 3. Effective Date. This ordinance shall be effective 30 days after its adoption.

Adopted this 10th day of October, 2005.


Bruce Botelho, Mayor

Attest:


Laurie J. Sica, Clerk



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.

Proposed Phase 1 Development: Parking Structure with Park above. Retail both at Seawalk and Upper Plaza (Park) level. 103,100 sf footprint

- 150,000 sf total developed area, including:
 - One-story bus parking and loading garage
 - Two-story car parking garage
 - 34,000 sf Retail, including:
 - 4,700 sf Whittier Street-facing (Seawalk Level)
 - 19,300 sf Seawalk-facing (Seawalk Level & Mezzanine)
 - 10,000 sf Welcome Center (Upper Plaza Level)
- 1+ acre of Park and Plaza over bus and vehicle garage

Proposed Future Phase Development: Additional Retail and Use TBD facilities at Upper Plaza (Park) level

- 9,000 sf additional Retail (43,000 sf total, including Phase 1)
- 40,000 sf Future Phase, Use TBD

Parking

Parking Provided. Phase 1 development will have 93 passenger vehicle parking stalls in the garage and 24 coach, bus, and van parking stalls, for a total of 117 bus and car stalls. Alternate “Off-Hours” striping in the bus garage will allow for passenger car parking after-hours or off-season for a total of 79 car stalls (plus the Circulator) in this area of the garage for a building total of 172 car stalls.

Discussion: CBJ Codes calculations are based on car-sized parking stalls. Given the large capacity of the buses, using the “Off-Hours” striping stall total to determine parking capacity seems reasonable. However, the proposed development is allowable even if parking capacity is determined with bus stalls counted as a single stall.

<u>Phase 1 Parking Required:</u>	34,000 sf Retail (1 stall per 750 sf):	46 stalls required
<u>Future Total Parking Required:</u>	43,000 sf Retail (including Phase 1):	57 stalls required
	40,000 sf of Use TBD	
	If Cultural (1 stall per 1,500):	27 stalls required
	If Retail (1 stall per 750 sf):	53 stalls required
	If Housing (32 one-bedroom):	<u>13 stalls required</u>
		70-110 stalls required total

CBJ Parking Requirement:

- Commercial/Retail 1 per 750 sf
- Restaurants 1 per 750 sf
- Museum 1 per 1,500
- Recreational Space 1 per 10 seats
- Housing, 400 sf Eff. .3 spaces per
- Housing, 1-bedroom .4 spaces per
- Housing 2-bedroom .6 spaces per

Discussion: Given the amount of parking available, future phase development options are almost certainly going to be restricted by height or other considerations, not parking.

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).

Other Planning Considerations

Circulation: The project has been designed to prioritize safe and efficient movement of pedestrians and vehicles. The goal is to create a high-quality experience both for visitors arriving to Juneau for the first time via the adjacent cruise ship dock and for local residents who want to enjoy the publicly-accessible Park and view areas or waterfront retail / restaurant facilities on the site.

Cruise Ship Arrival

- Pedestrian traffic to and from the cruise ship arrives onto the site via the Dock SkyBridge, which connects at the Upper Plaza (Park) level. This will provide a location for large groups of newly-arrived visitors to get sorted and organized in an area away from the more linear Seawalk-level retail areas below. This level will be entirely pedestrian, with all vehicles located a level or two below.
- The curving Skybridge will provide orienting views to and through the upper-level buildings before visitors arrive at the Upper Plaza. Major pedestrian routes are marked with large canopies supported by totem pole columns and other artwork.
- Directly in front of a visitor arriving at the Upper Plaza is a 10,000 sf Welcome Center—a unique facility for any dock in Juneau. Visitors can walk around or through the Welcome Center to be sorted into tours or provided maps and suggestions for independent activities.
- The slowly rising SkyBridge arcs over the dining Deck and gives visitors a view of the Seawalk-level retail and other enticing attractions below. The large dining Deck and SkyBridge act as visual markers to orient visitors when they return to the site.

Tour Departure

- To the rear of the Welcome Center, two separate sets of escalators and stairs take visitors to the loading islands on the parking level below. Electronic and static signage helps separate and efficiently guide the visitors to their tour departure areas.
- In the parking garage, visitors are loaded and unloaded from raised loading islands. Pedestrians do not ever cross bus or car traffic lanes on foot in the garage.
- Buses and commercial traffic have a separate entrance and traffic patterns from passenger vehicles. During on-hours, commercial traffic and passenger vehicles are entirely separate.

Park and Upper Plaza

- Over half of the upper level of the project is devoted to Park and open Plaza spaces. The Park gently slopes towards Egan Drive and the sidewalk to provide easy pedestrian access to this very prominent feature.
- The Park will be heavily landscaped with a variety of activity and leisure spaces such as: performance stages for music and dance, open areas for play and gathering, landscaped natural areas to display native art, covered seating areas with hook-ups for food trucks and carts, etc.

Pedestrian Traffic and Seawalks

- Based on current predictions, the majority of visitors will leave the site on leave the site via commercial vehicles as described above. However, pedestrians to and from the Upper Plaza will have number of clear and attractive walking options.
- Pedestrians descending through the Park towards Egan will be routed either to the NE corner (Whitter/Egan signalized intersection) or to the NW corner and onto the Egan sidewalk walking towards Gold Creek. The landscaped berm at the rear of the Park will not allow pedestrian traffic at random locations down to the Egan sidewalk.

- 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.

Date: May 17, 2023

Re: Aak'w Landing (JYW No. 21021)

Architectural Narrative for CBJ Conditional Use Application

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 in the first phase with future phases adding 9,000 sf of additional Retail and 40,000 sf of facilities with a use yet to be determined. 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.

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Cruise Ship Dock.

- 500' x 70' steel floating dock of similar construction to that utilized at Icy Strait Point Berth II and Ward Cove Cruse 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.

Project Summary

Aak'W Landing Conditional Use Permit Application

The project proposes a phased development of mixed use, including retail, food and beverage, community park, docking, and associated parking. Phase 1 includes a total of 24,800 square feet of retail and food and beverage operations, 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 is to be developed.

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The pier portion of the project will utilize a proven steel float solution that will be built with a deck up to 70-feet wide and 500 feetlong, allowing for the best facility layout and passenger handling solution.

Drawings for the above project are attached.

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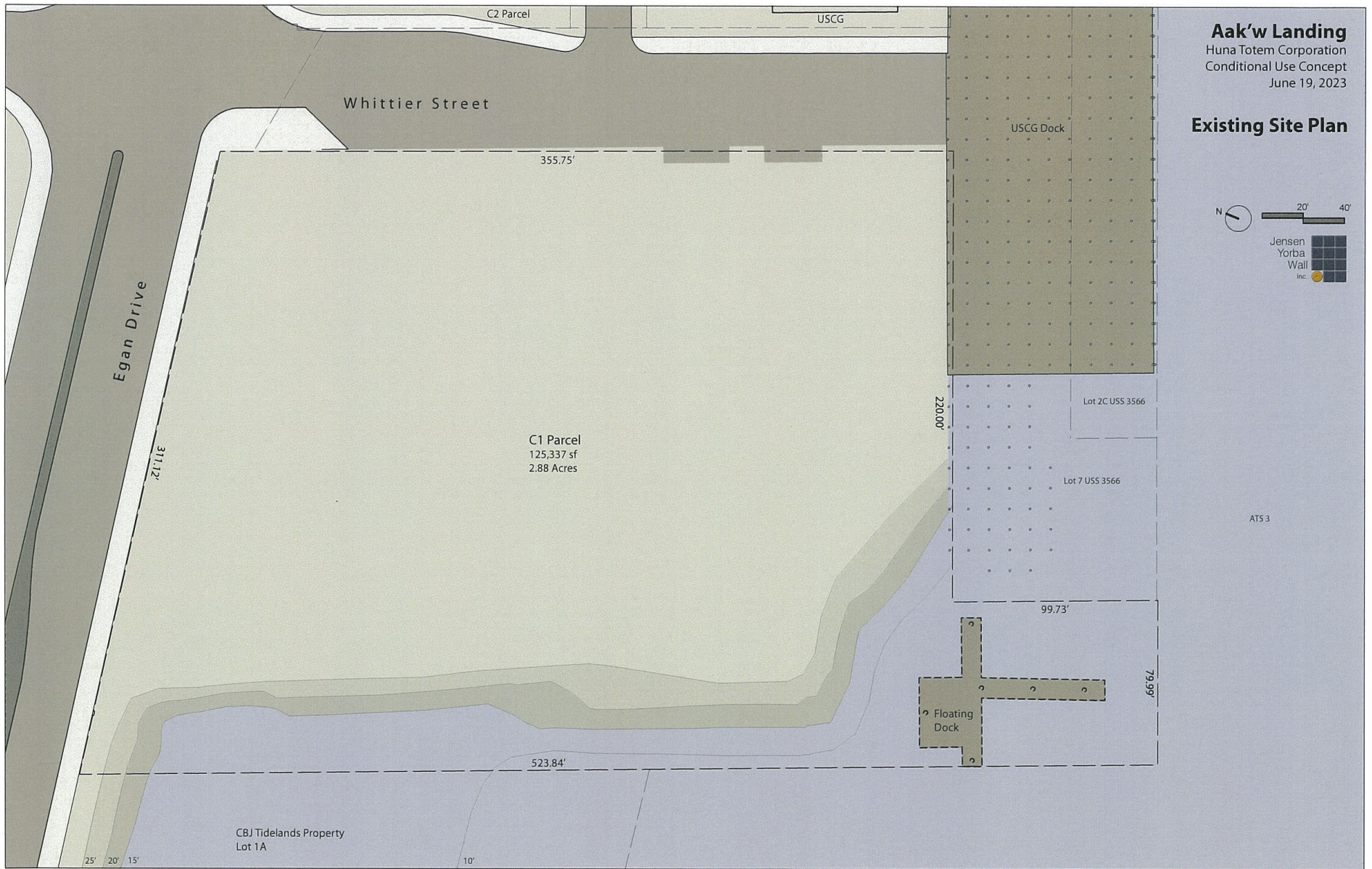
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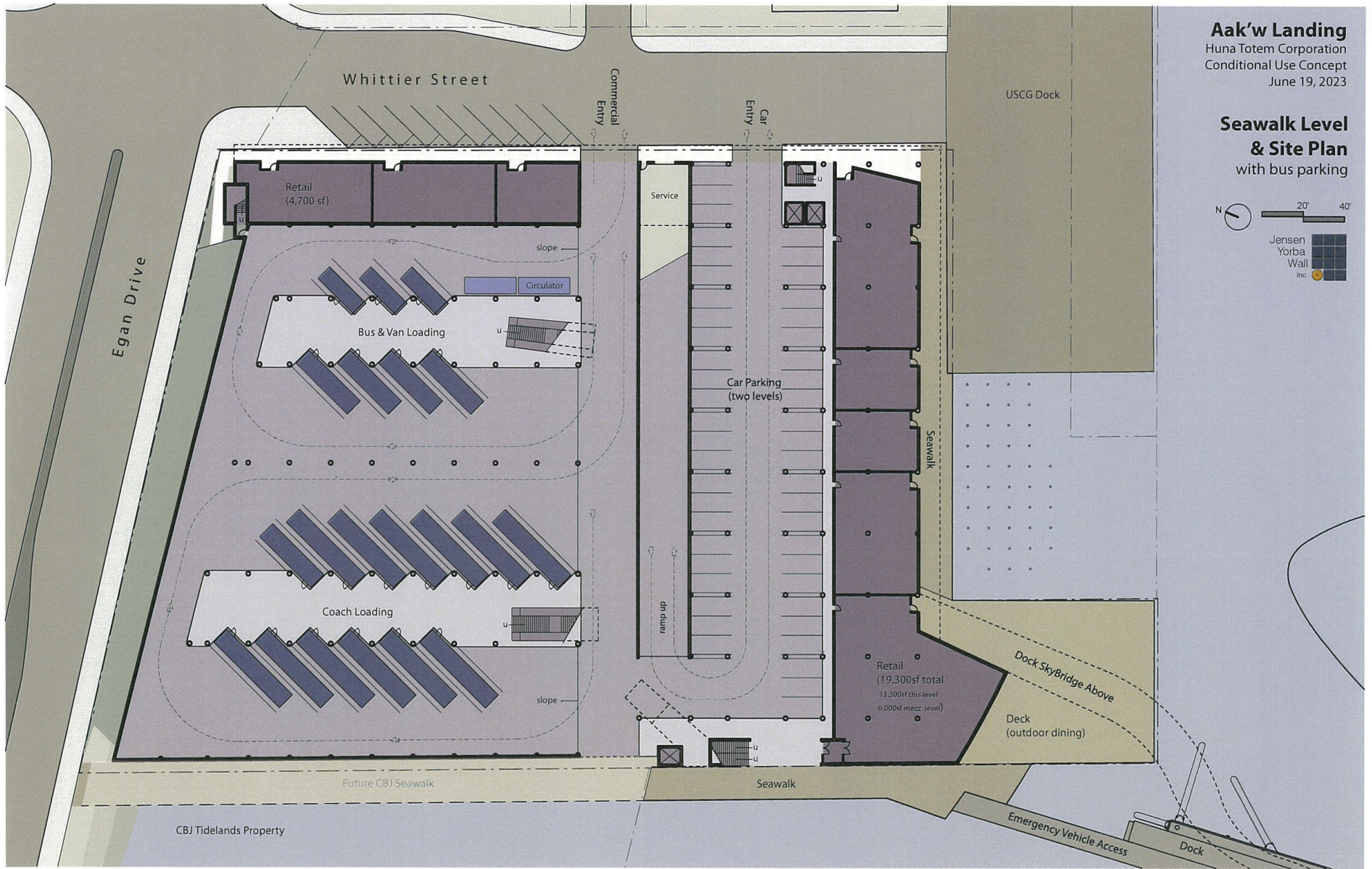
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- Able to accommodate a single 240,000 Gross Tons, 360-meter-long design vessel during cruise season weather conditions.
- The dock will be fitted with foam filled floating fenders suitably designed for the cruise fleet.
- The opposite side of the dock from the cruise ship berth will not be constructed to take the structural loads of large ships, but could be configured for tour day boat, tenders and other small watercraft such as canoes or kayaks.
- 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.

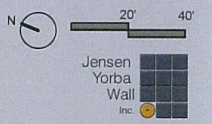


Attachment A3 - Application Packet - Site plans and elevations

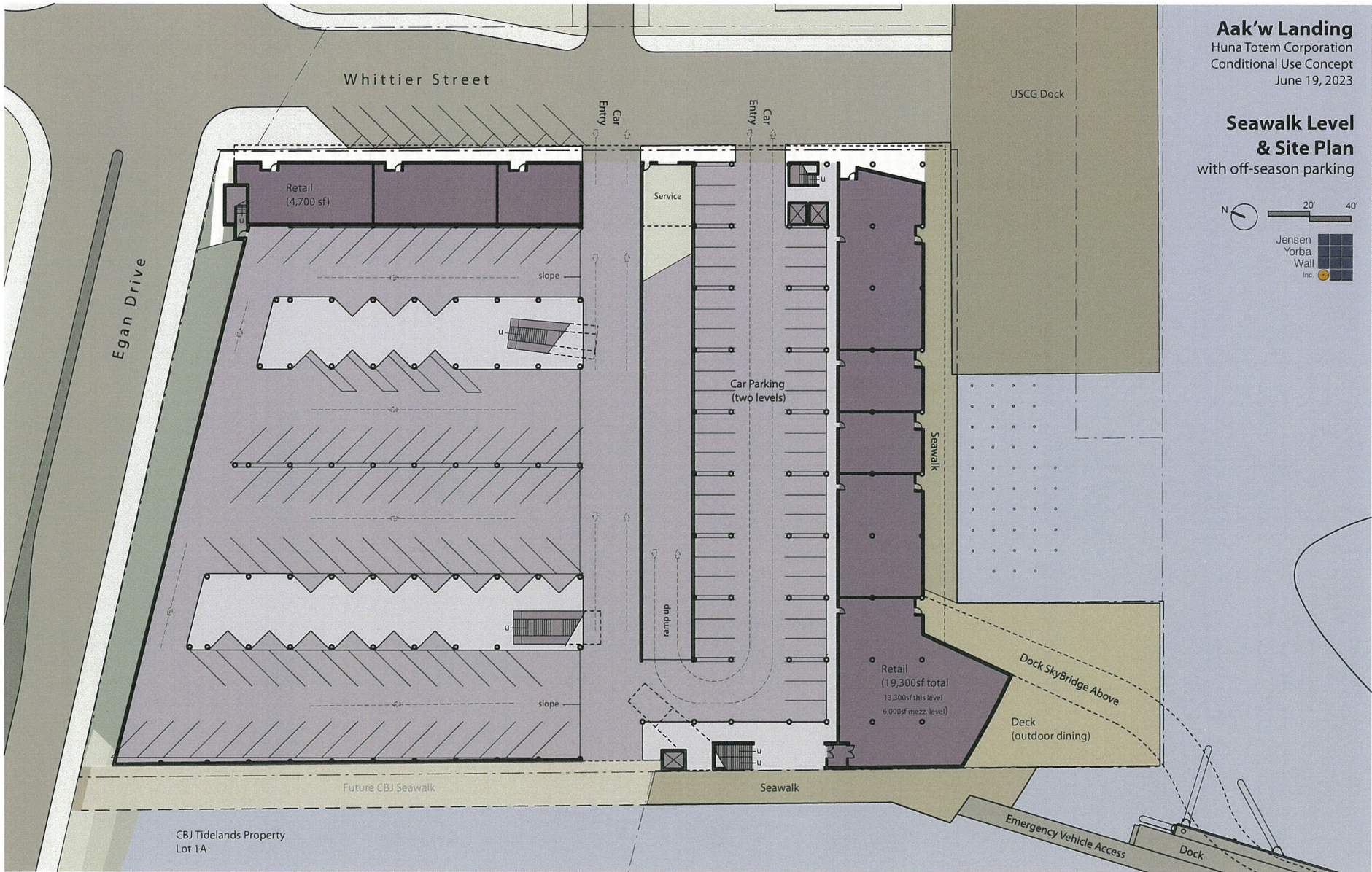


Aak'w Landing
 Huna Totem Corporation
 Conditional Use Concept
 June 19, 2023

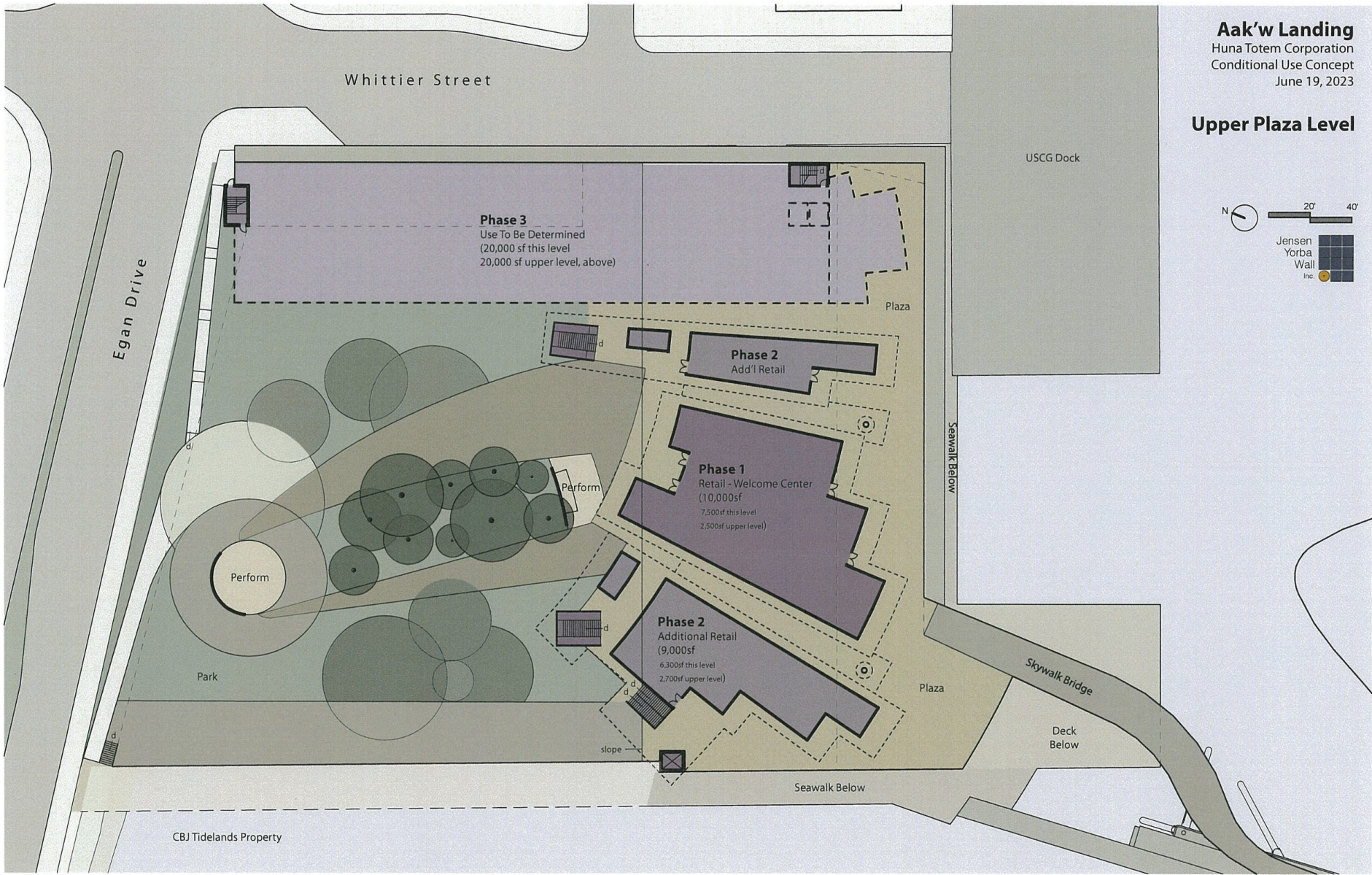
**Seawalk Level
 & Site Plan
 with bus parking**



Attachment A3 - Application Packet - Site plans and elevations

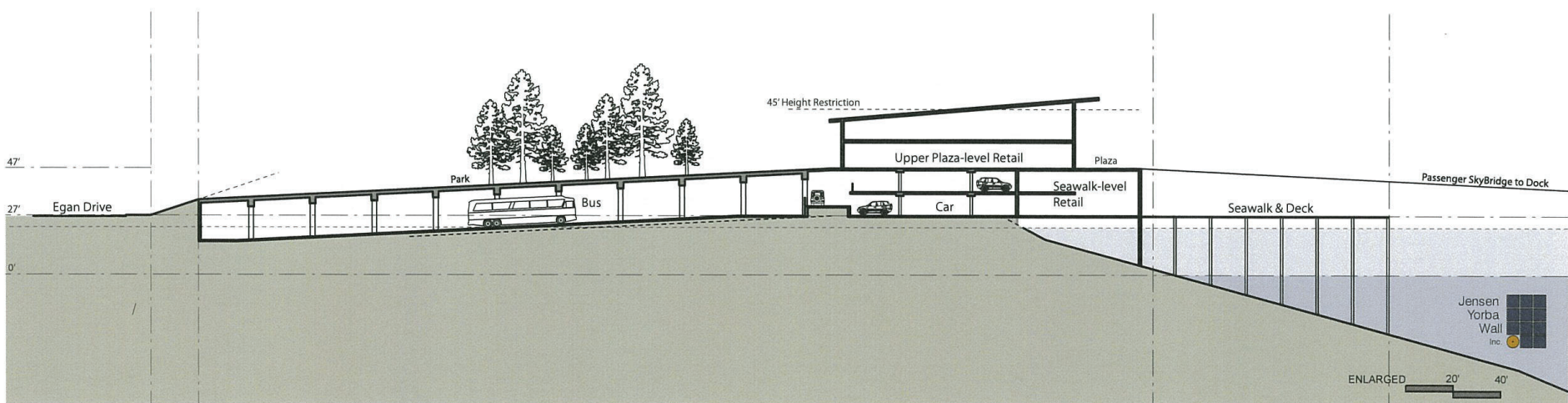
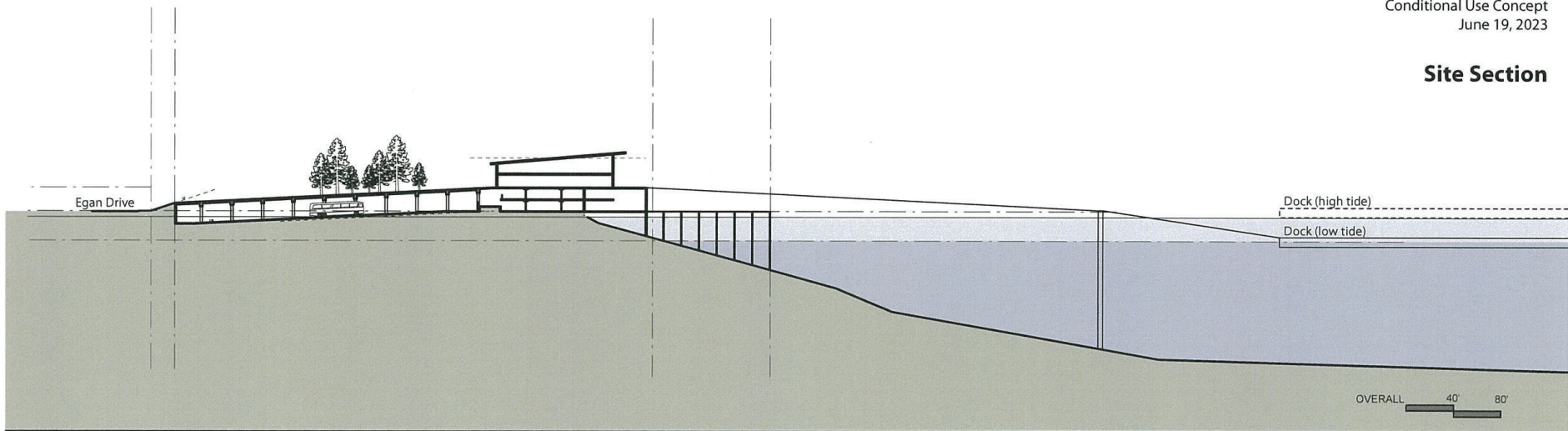


Attachment A3 - Application Packet - Site plans and elevations

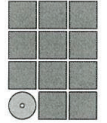
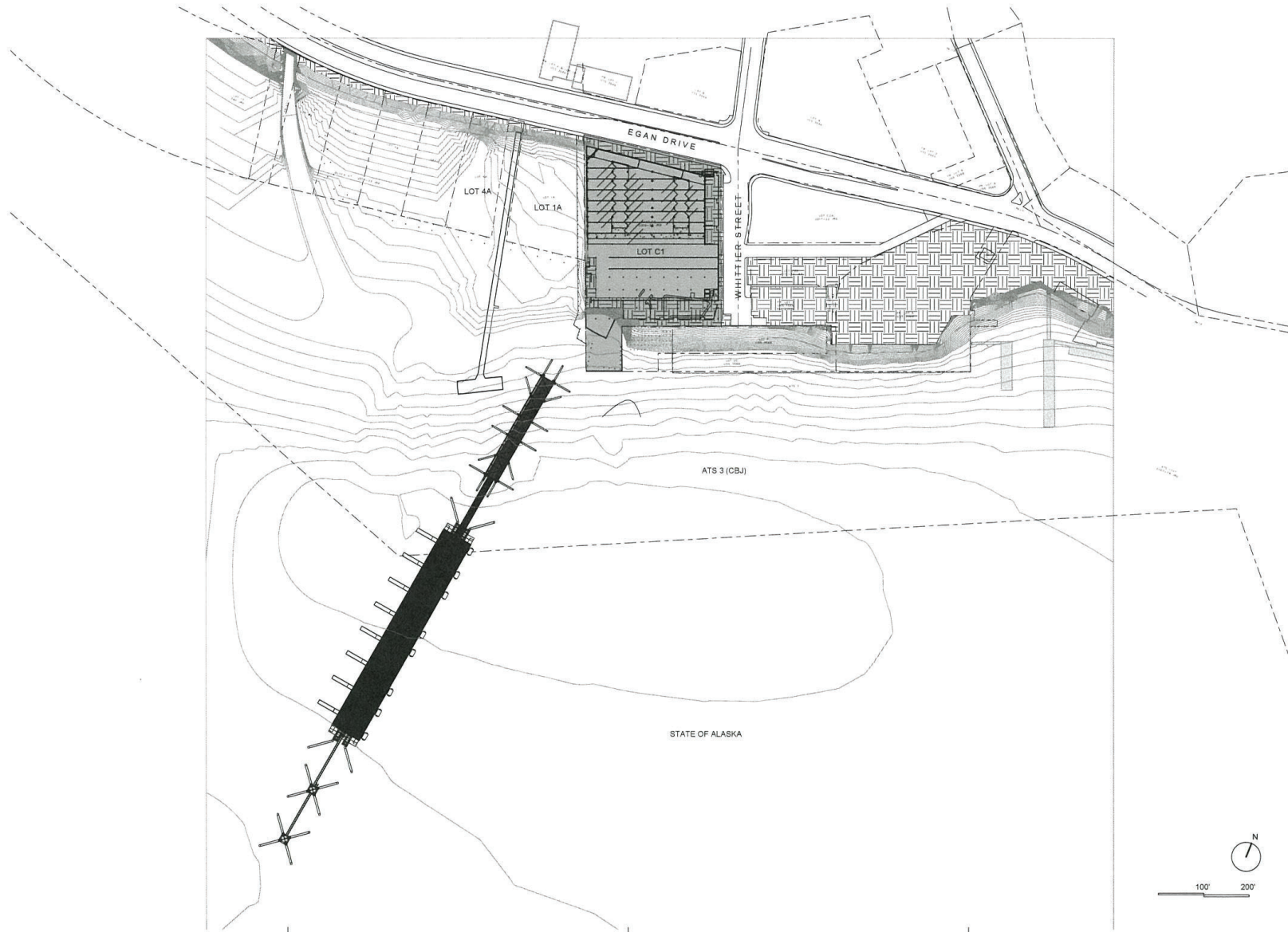


Attachment A3 - Application Packet - Site plans and elevations

Site Section



1/10/2023 12:28:18 PM G:\Projects\3102\CAD\7 Revised Concept\21022 Aak'w Landing - R22.rvt



**Jensen
Yorba
Wall Inc.**

522 West 10th Street
Juneau, Alaska 99801
907.586.1070
AKC0127
jensenyorbawall.com

Huma Totem Corporation
Aak'w Landing

Conceptual Design

REVISIONS



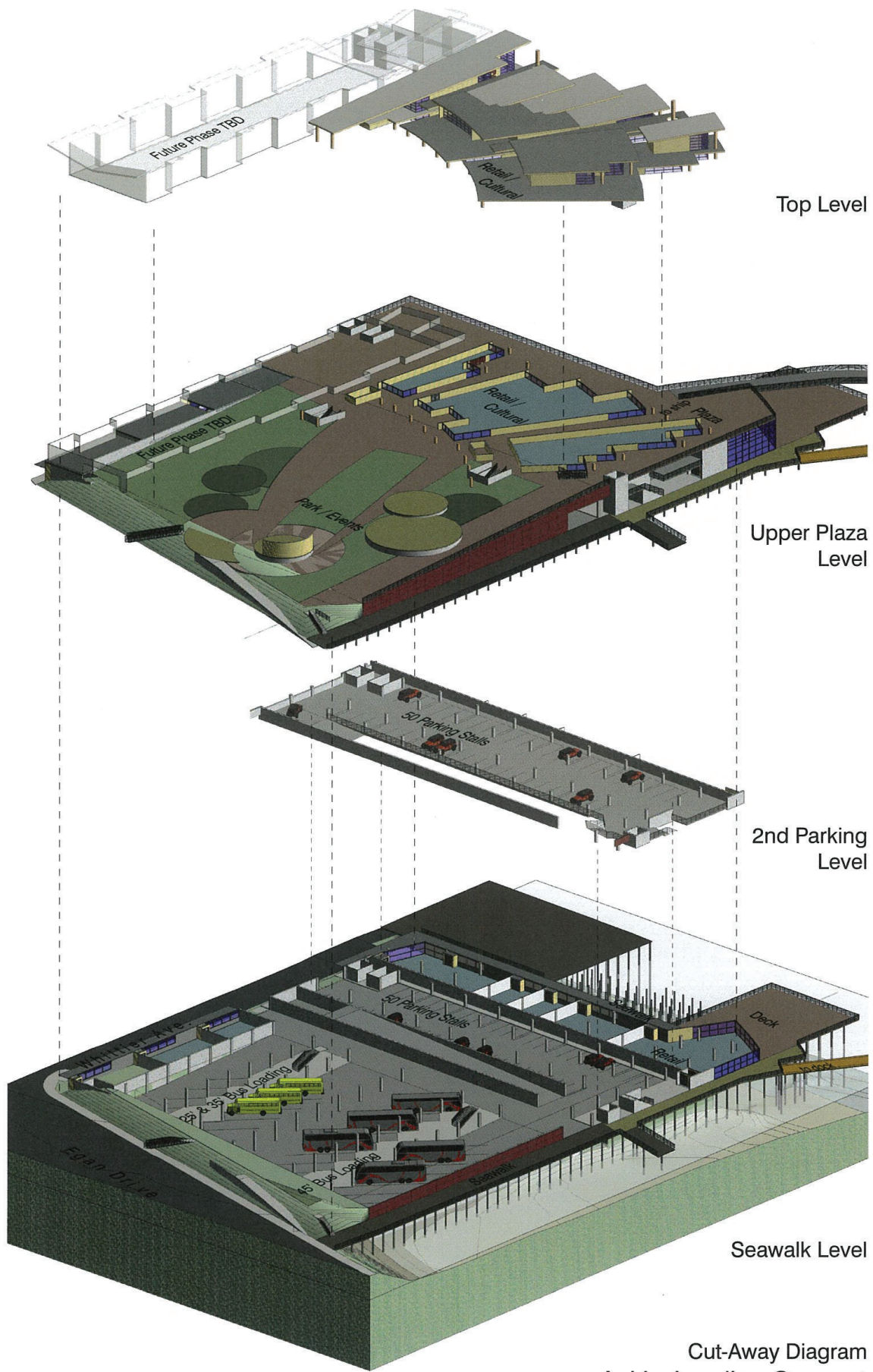
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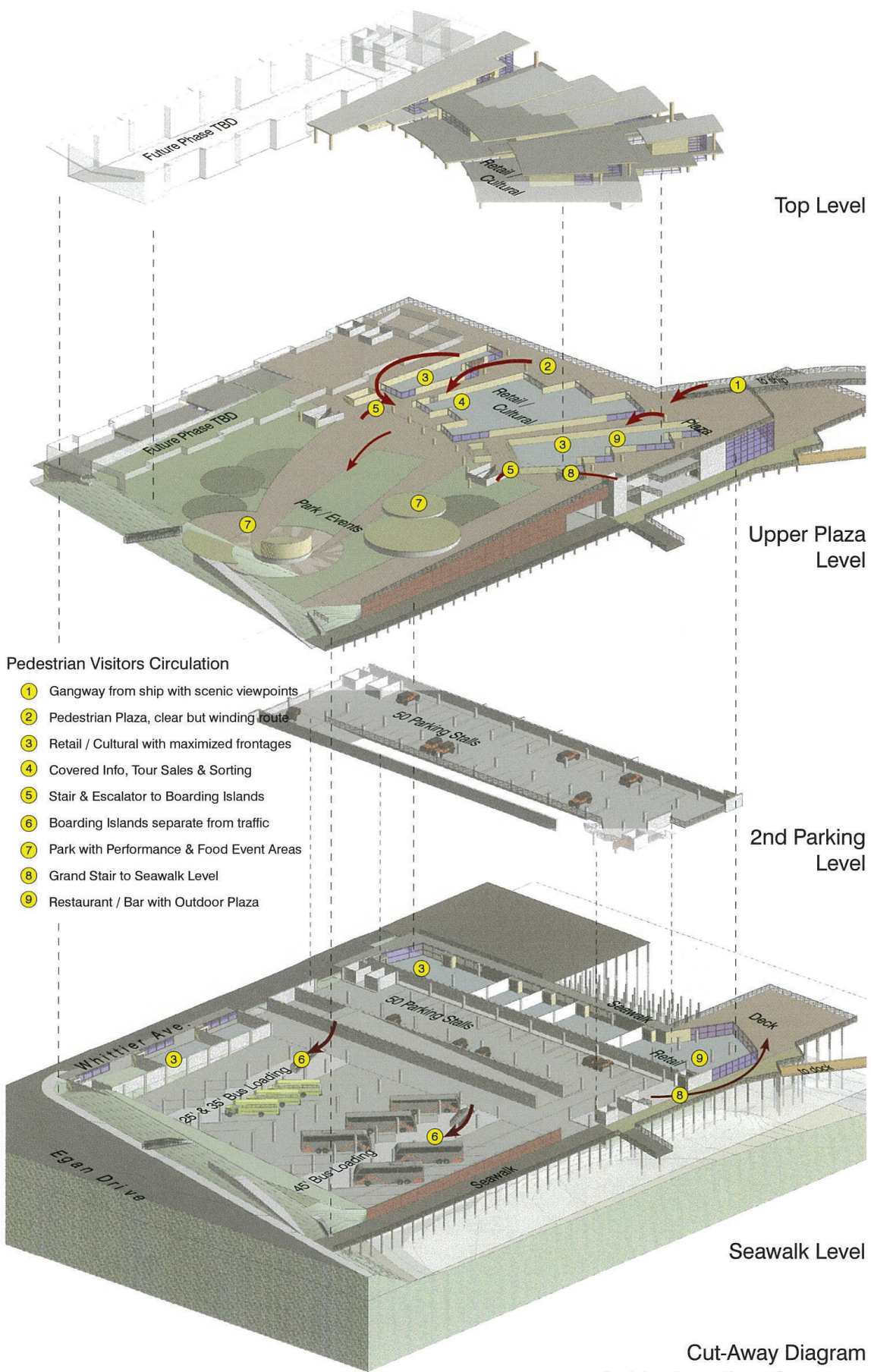
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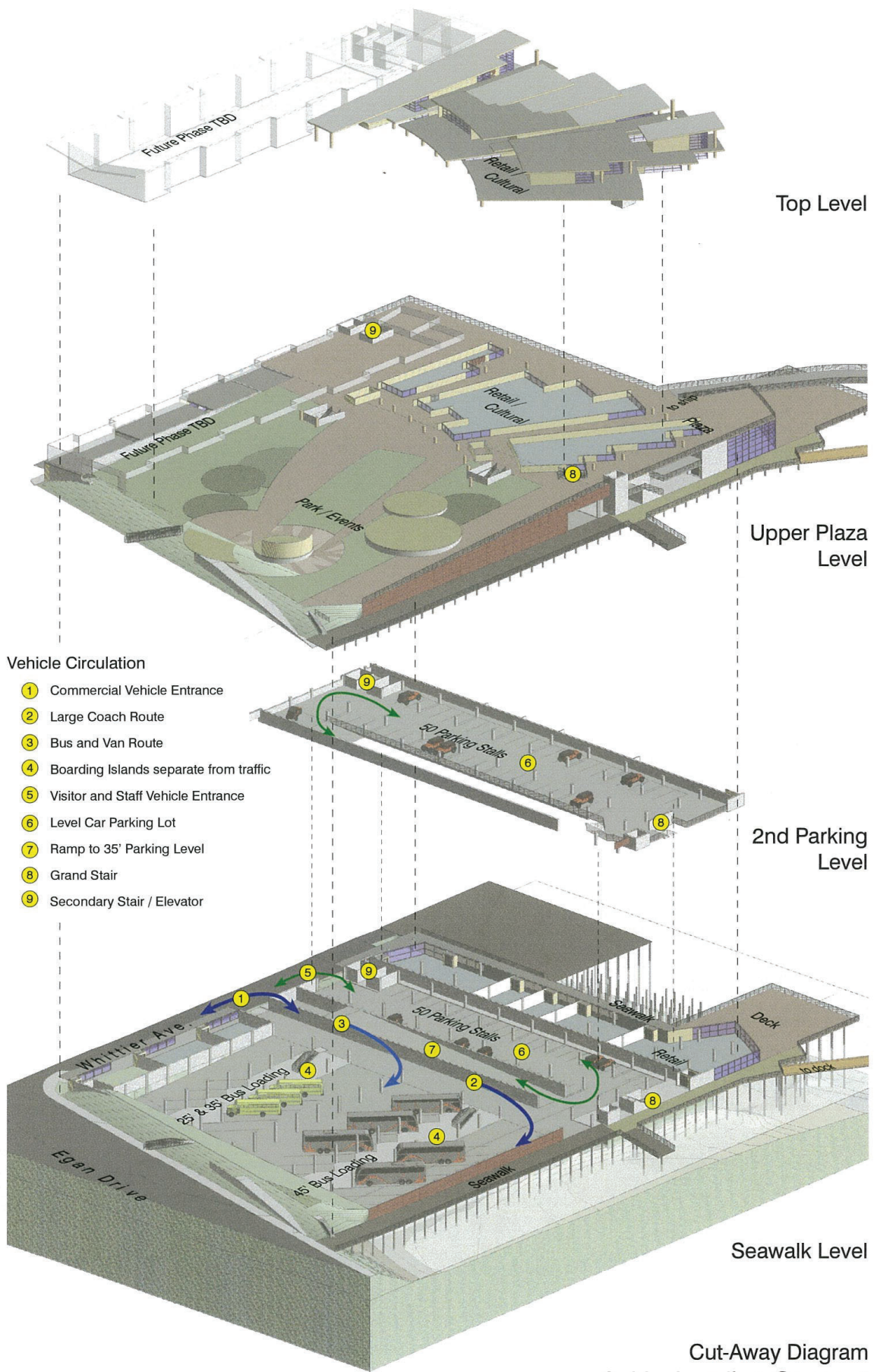
Attachment A3 - Application Packet - Site plans and elevations



Cut-Away Diagram
Aak'w Landing Concept



Cut-Away Diagram
Aak'w Landing Concept



Top Level

Upper Plaza Level

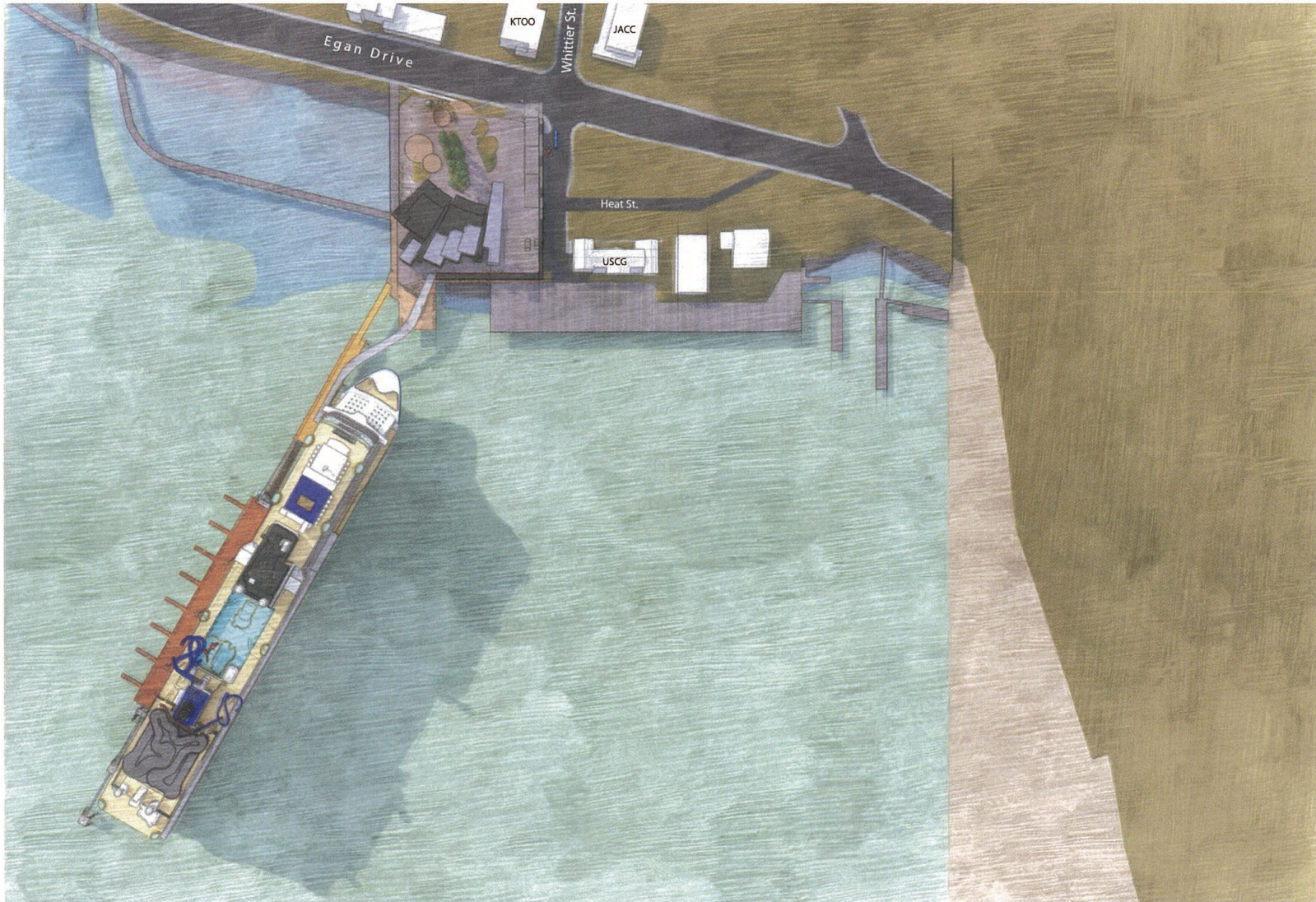
2nd Parking Level

Seawalk 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

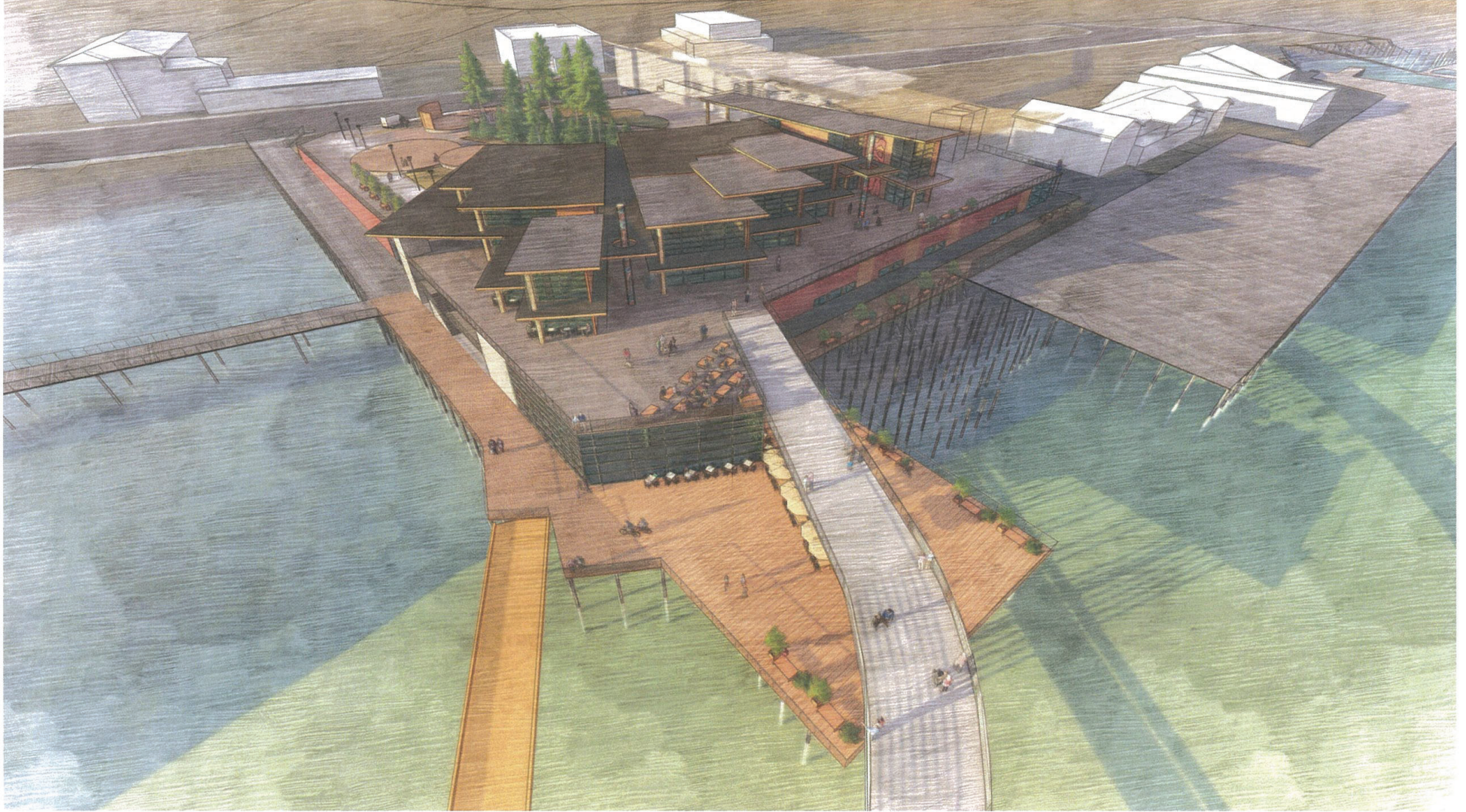
Cut-Away Diagram
Aak'w Landing Concept



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 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

Pedestrian Skybridge to right
Service Gangway below to left

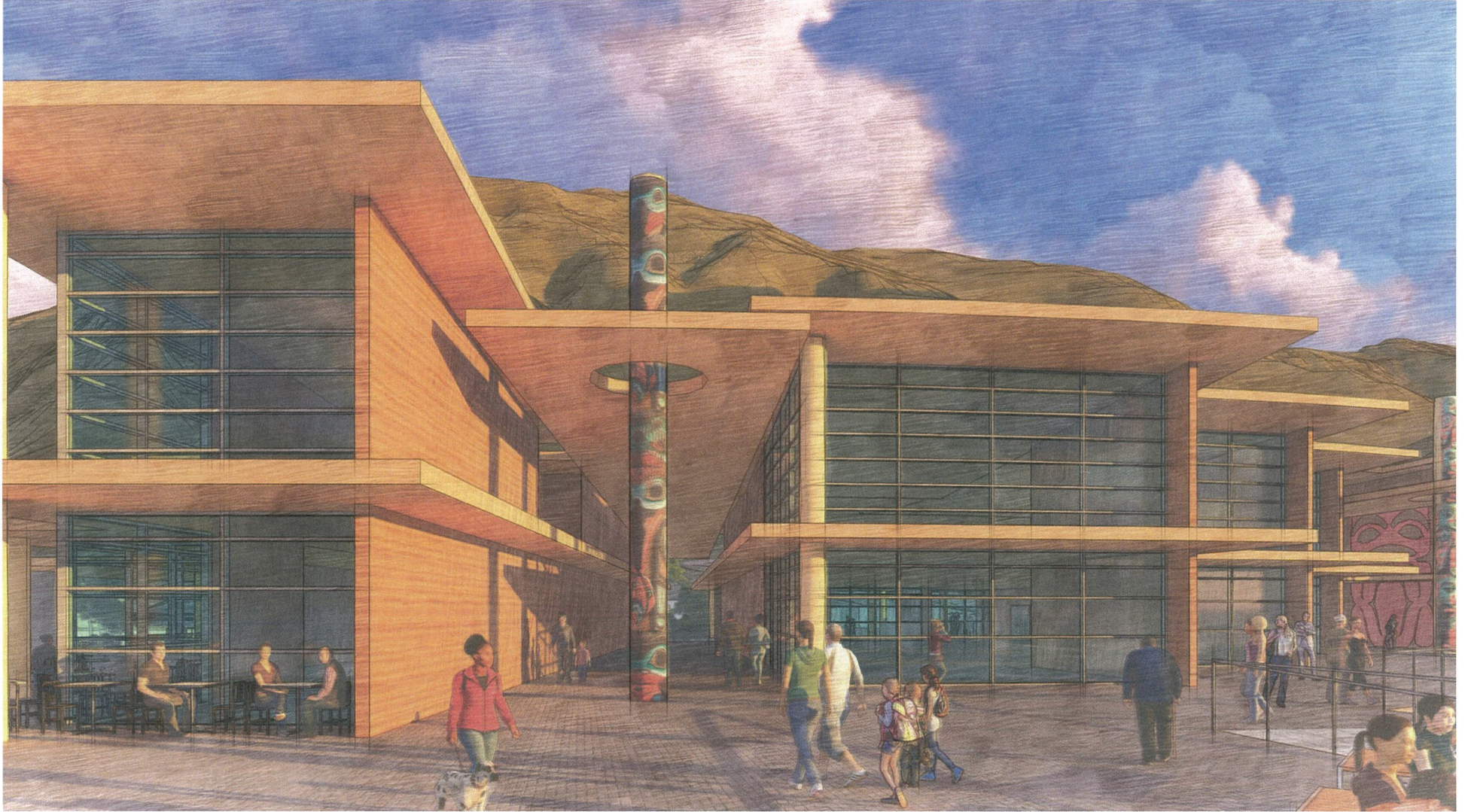


Aak'w Landing

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



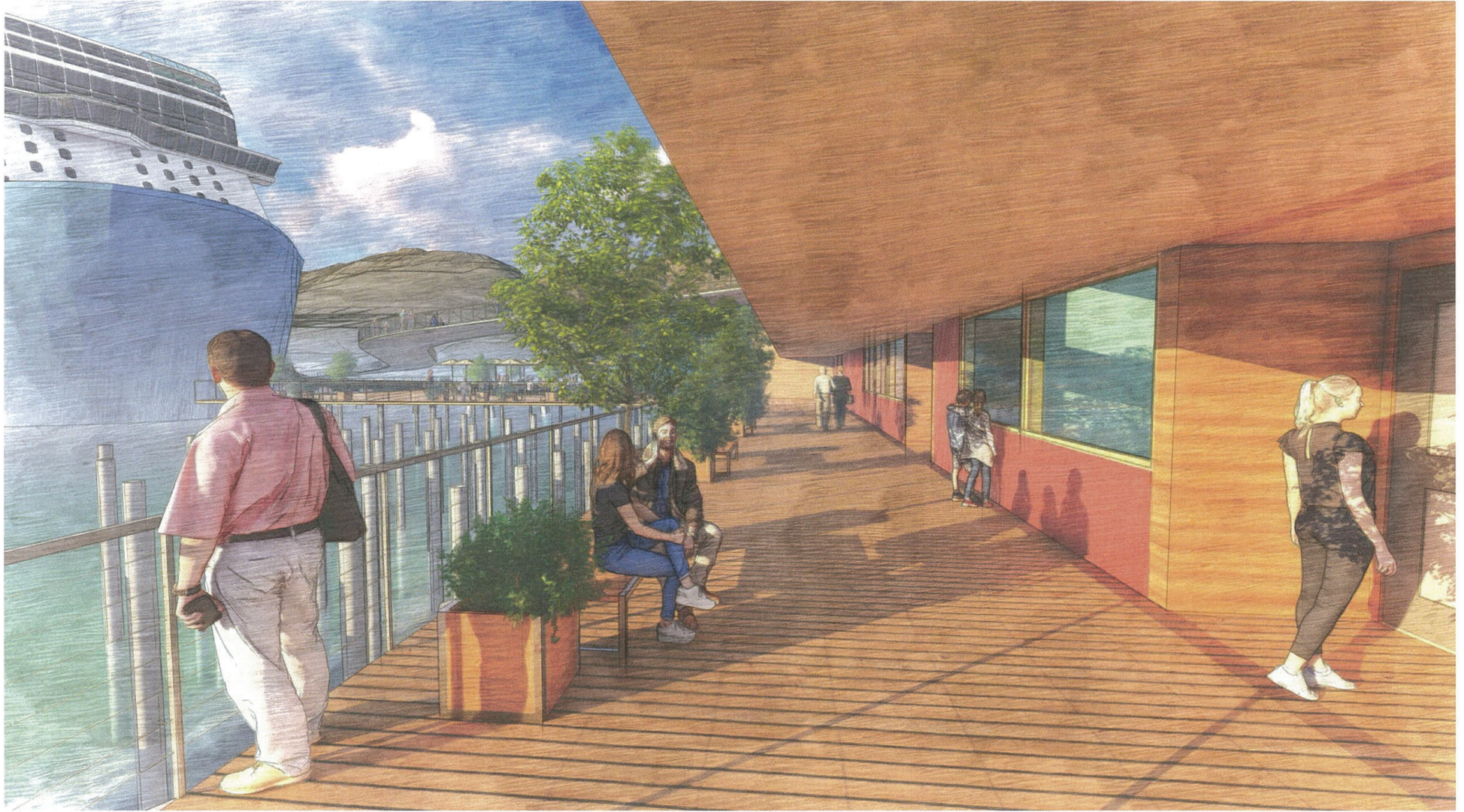
Aak'w Landing

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

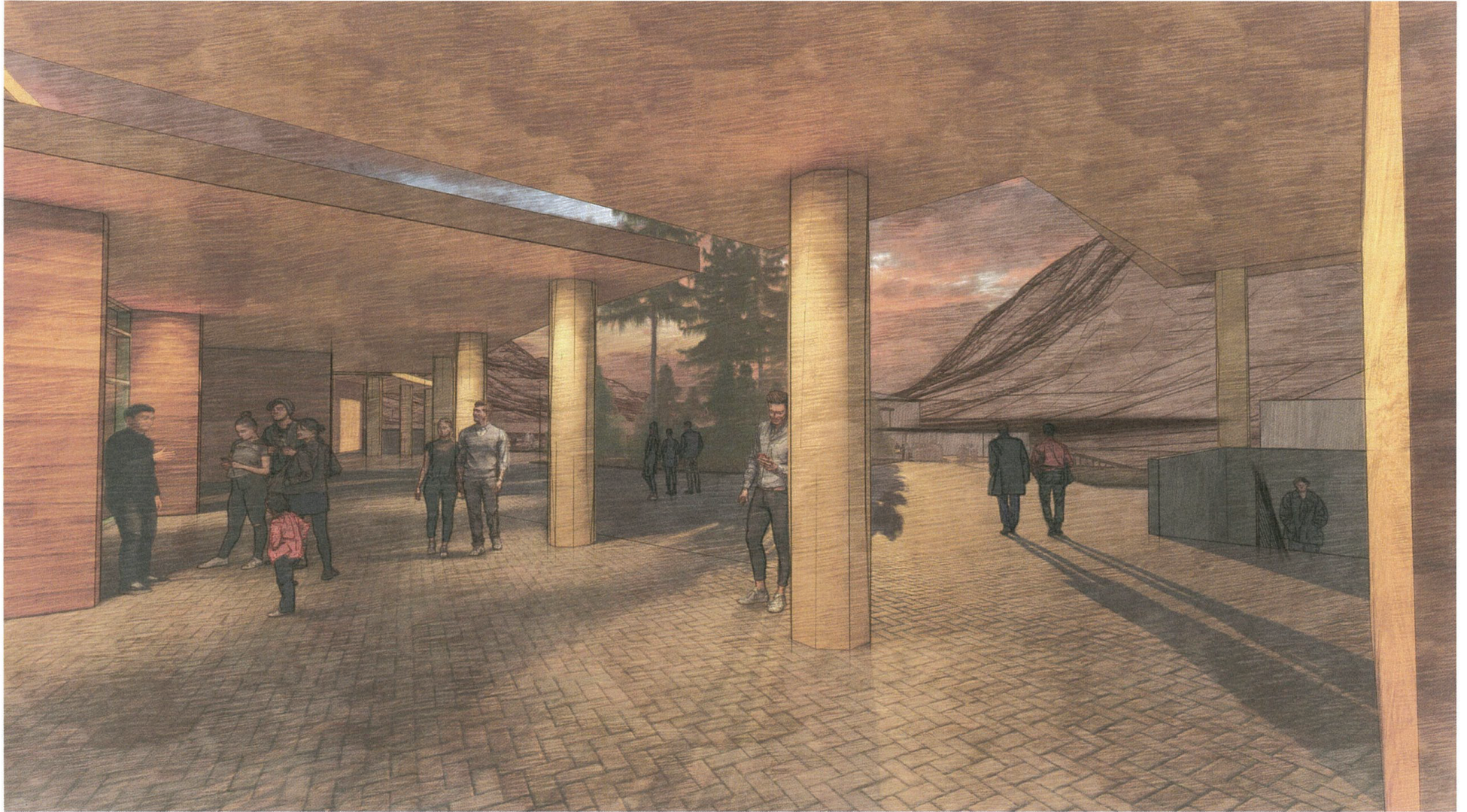
South Seawalk



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

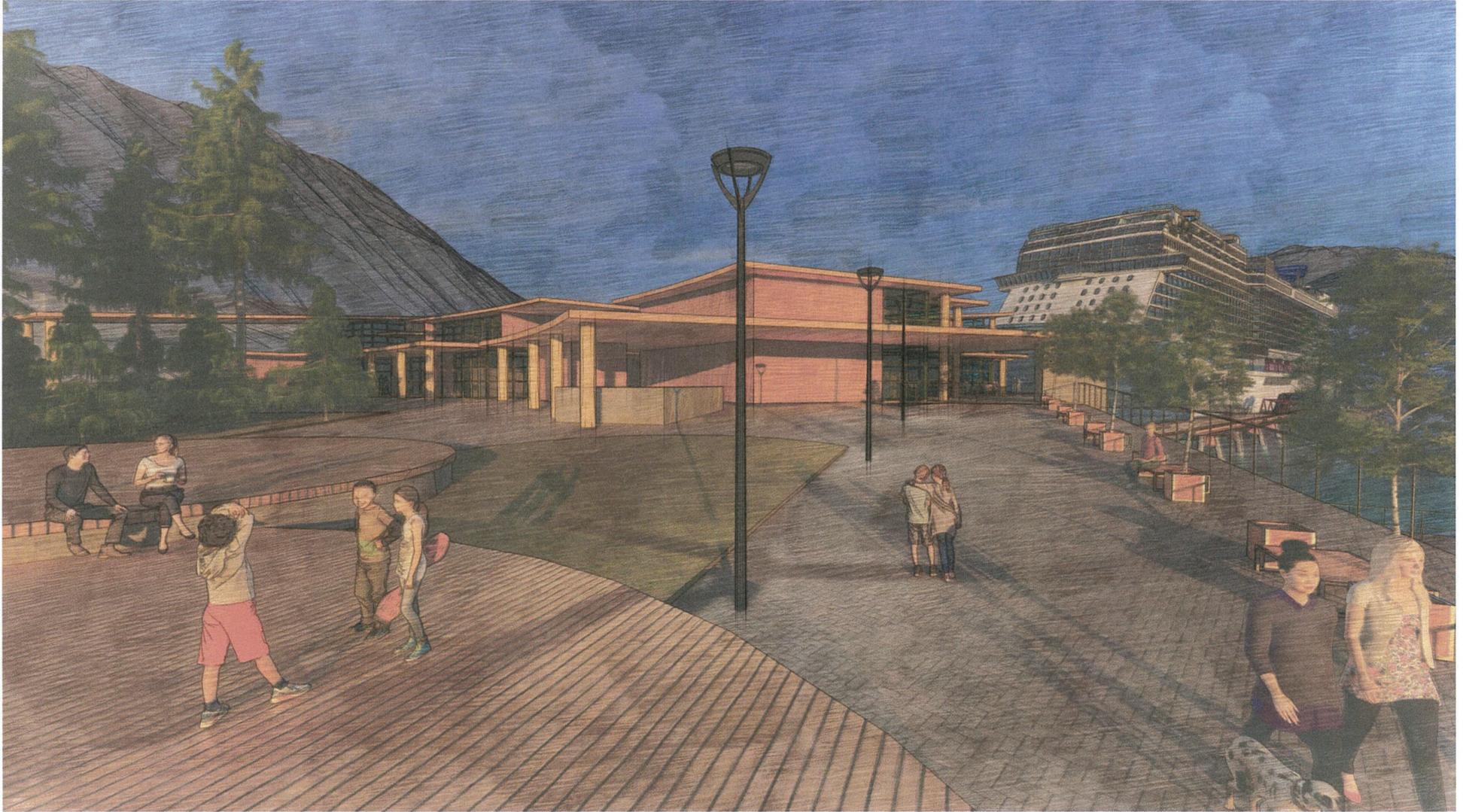
Tour Arrival / Departure Area



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 from West
Phase 2 Retail / Dining to left



Aak'w Landing

Huna Totem Corporation

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Corner of Egan and Whittier

Whittier-Level Retail



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 - Housing



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



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 - Assembly / Conference



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 10 th 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 10 th 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

¹Non-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>

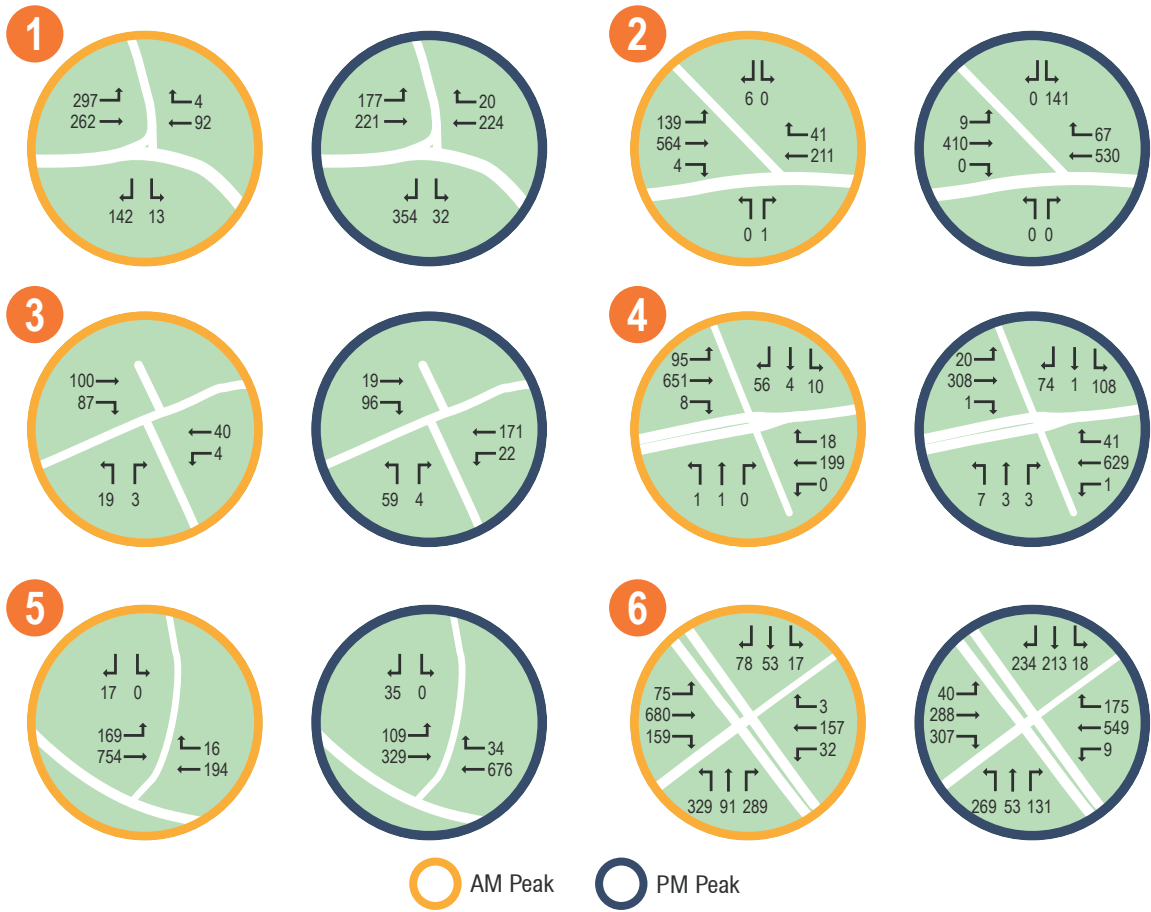


Figure 2: Existing AM and PM Peak Hour Traffic Volumes

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 10 th 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 10 th 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 10 th 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 10 th 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	—

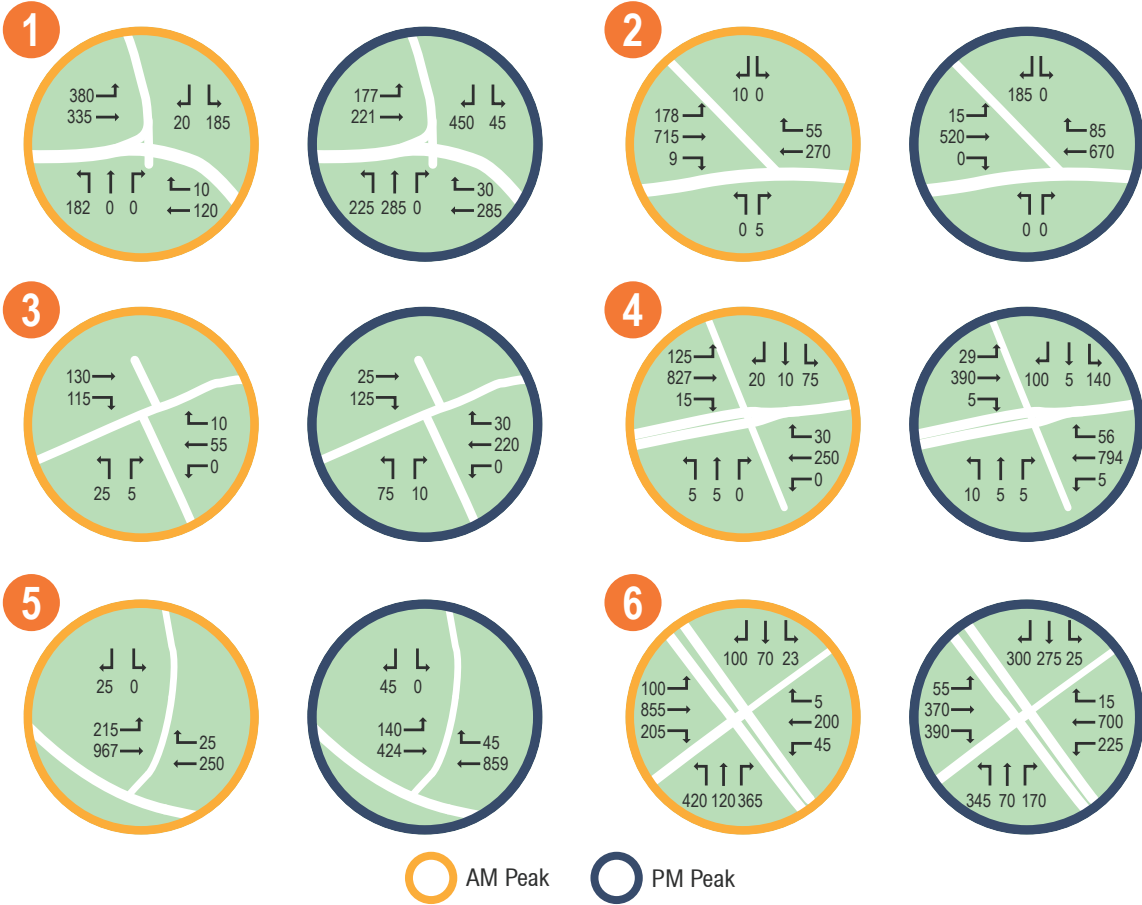


Figure 3: Future 2035 No-Build Traffic Volumes

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 684¹⁰ and Client provided data¹¹ 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.

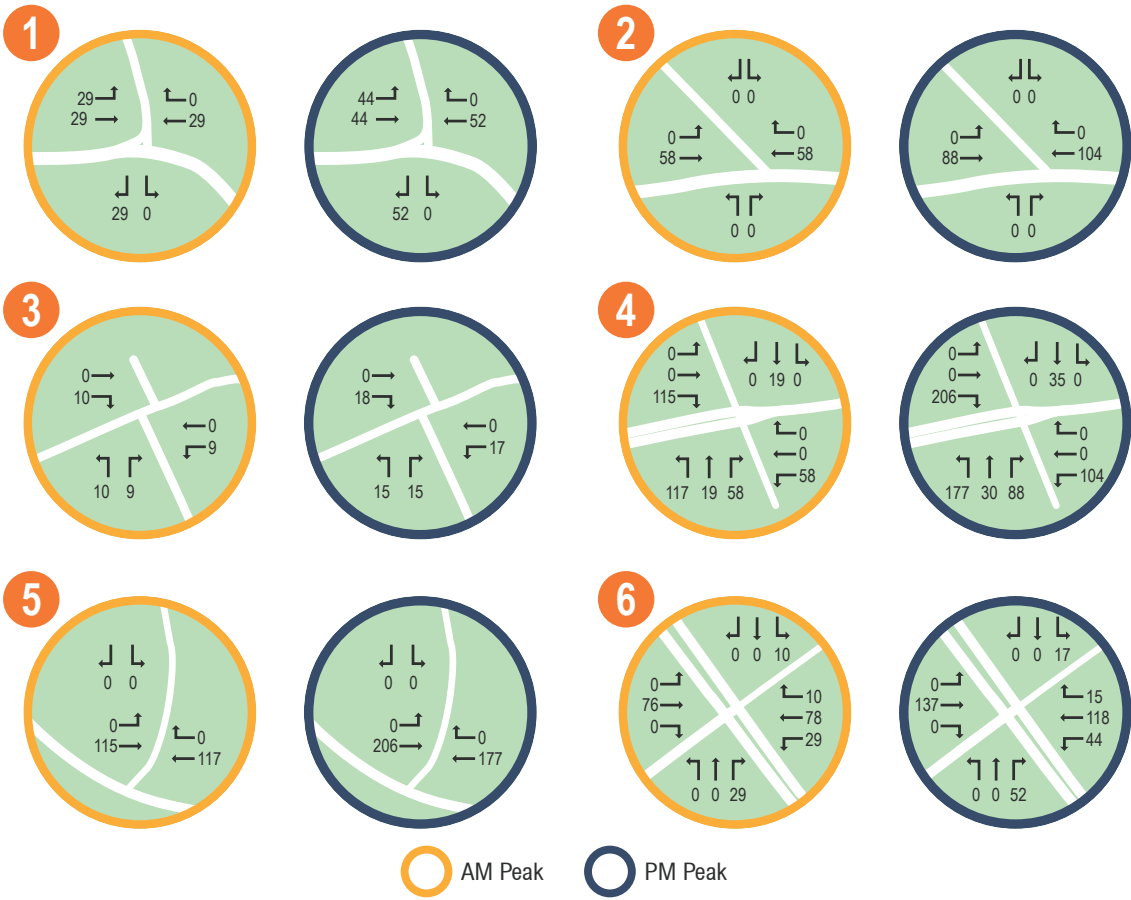


Figure 4: Added Development Traffic Volumes

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 10 th 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.

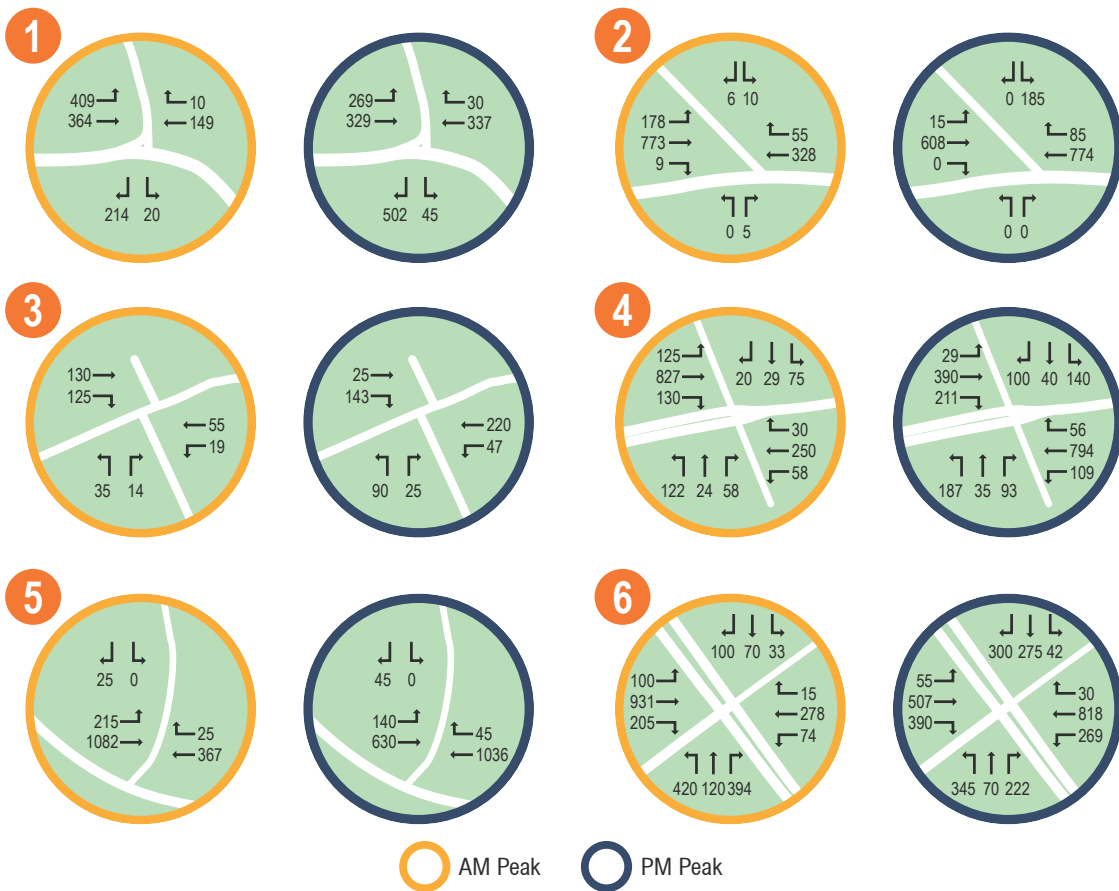


Figure 5: Future 2035 Build Volumes

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 10 th 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

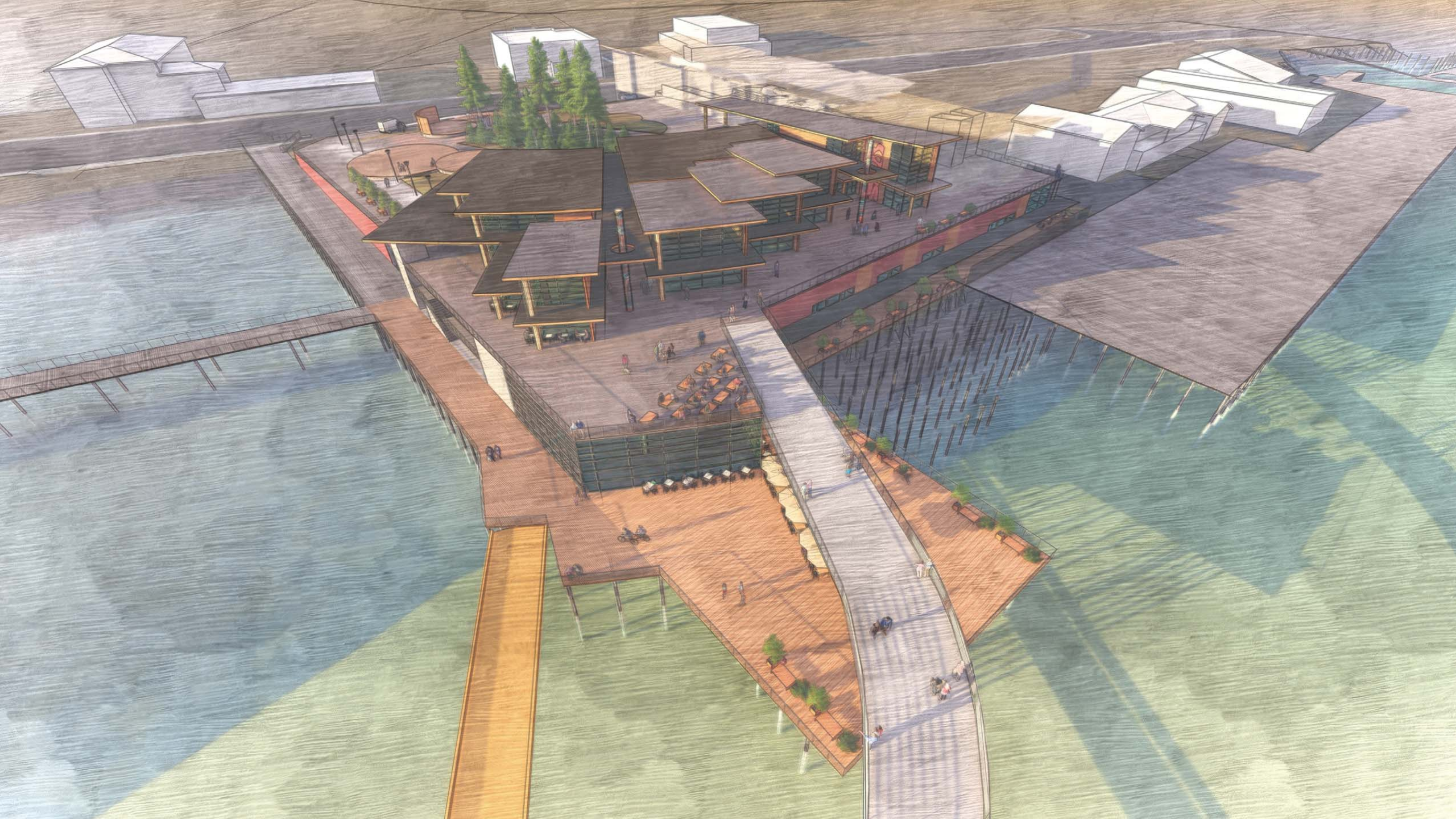


Aak'w Landing

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 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
Pedestrian 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



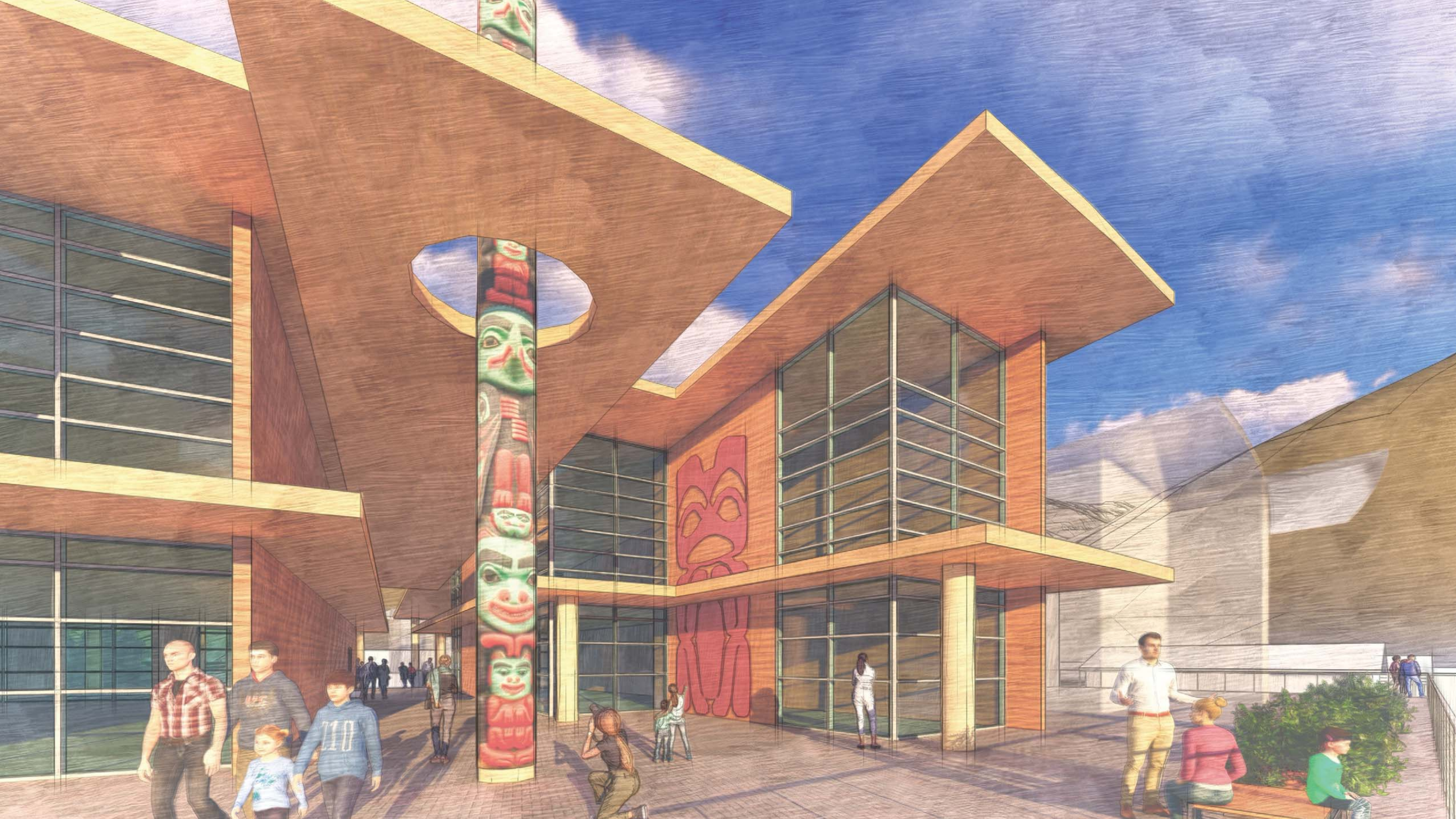
Aak'w Landing

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

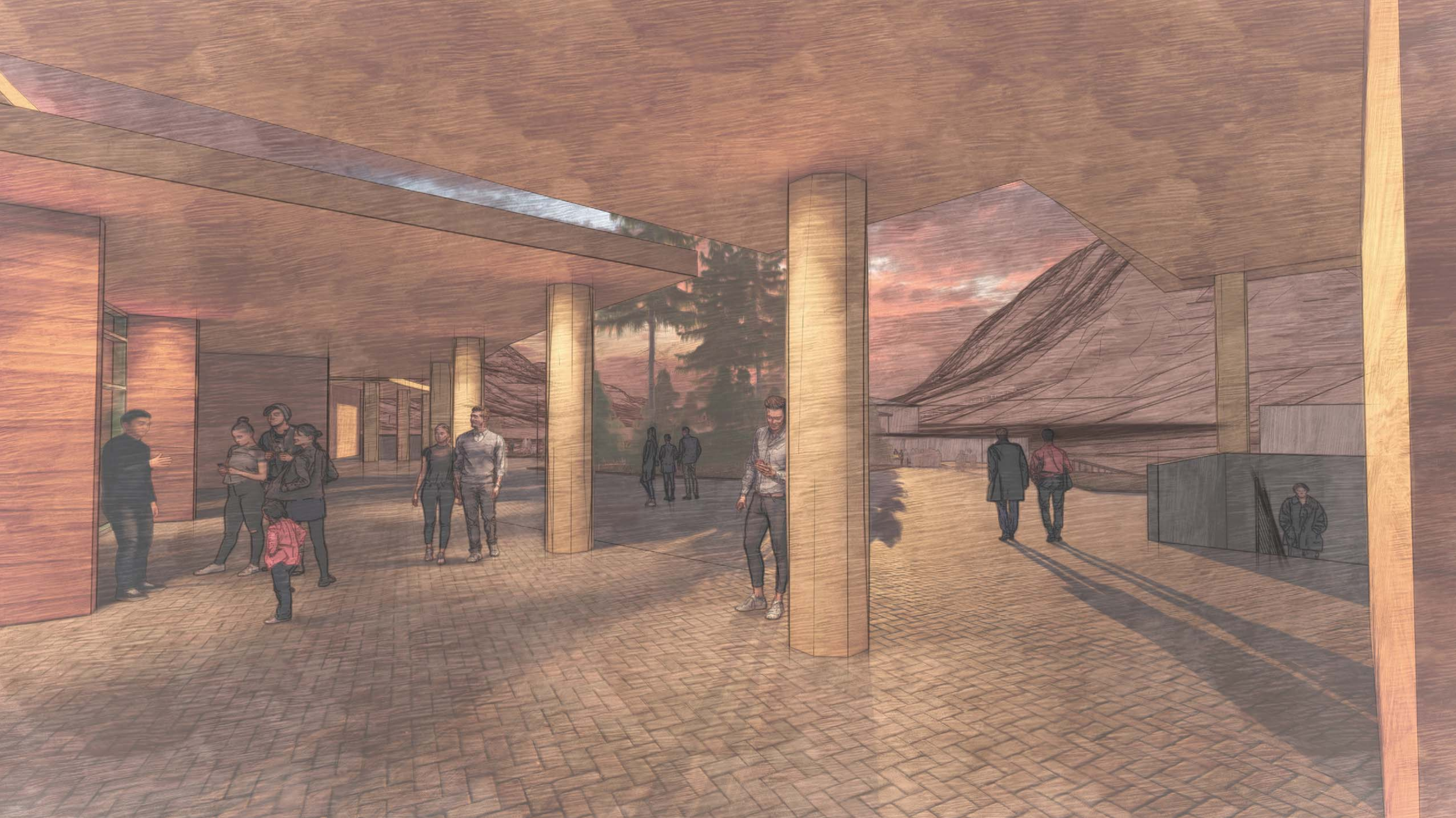
South Seawalk



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

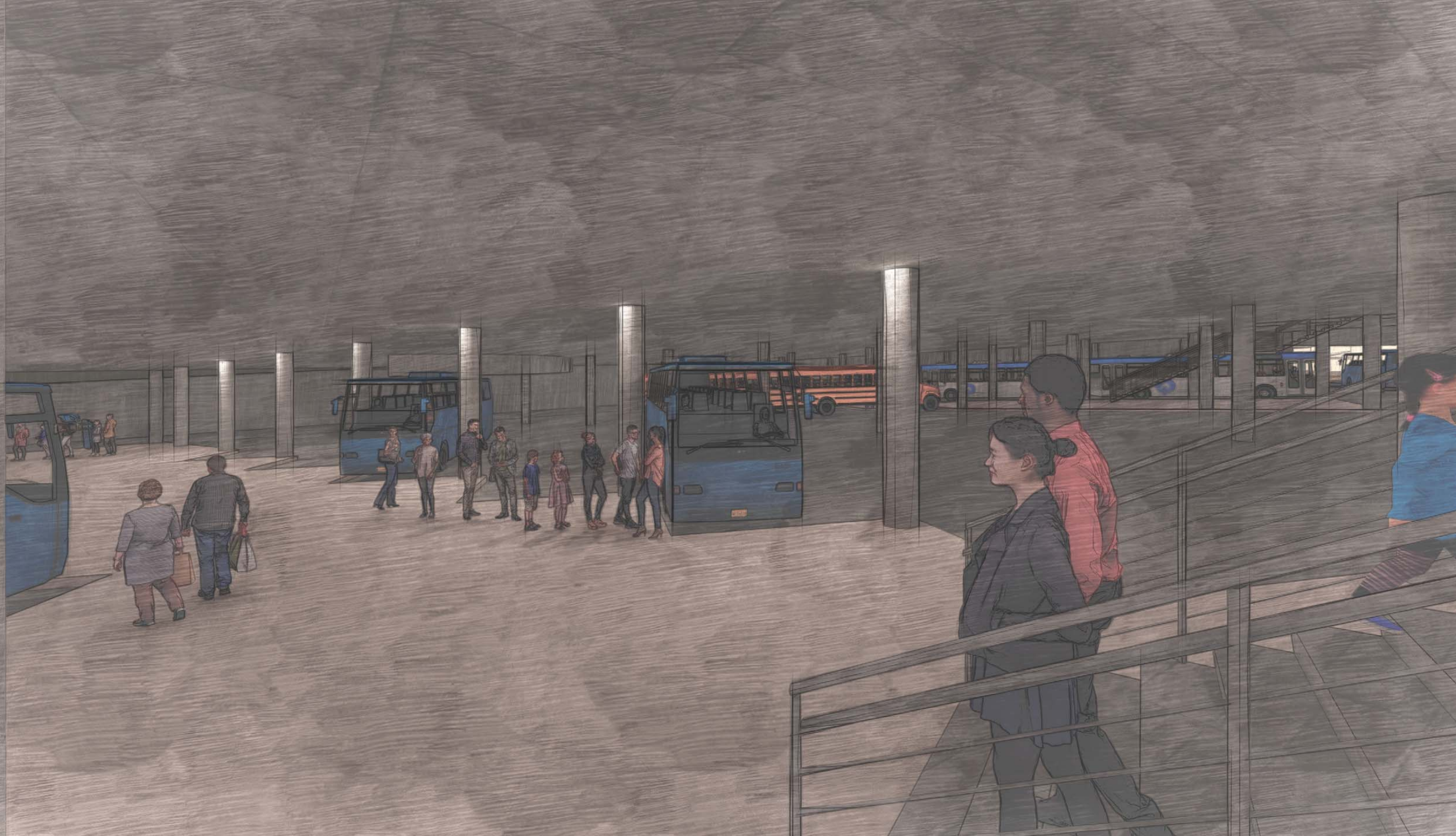
Huna Totem Corporation

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

Top of Park

Welcome Center to left

Stairs / Escalators to Tour Arrival/Departure ahead

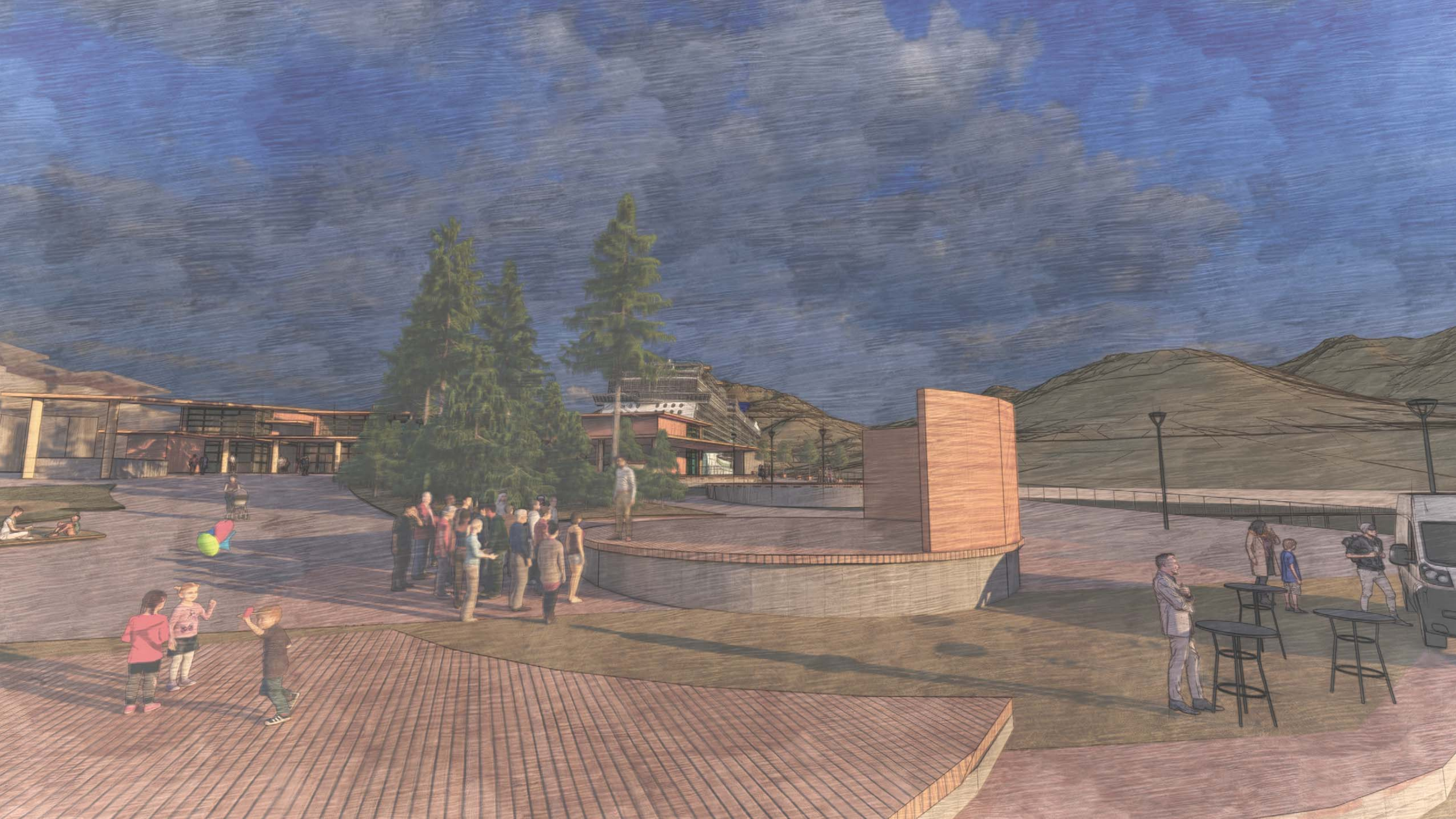


Aak'w Landing
Huna Totem Corporation

Tour Arrival / Departure Area

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

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



Aak'w Landing
Huna Totem Corporation

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

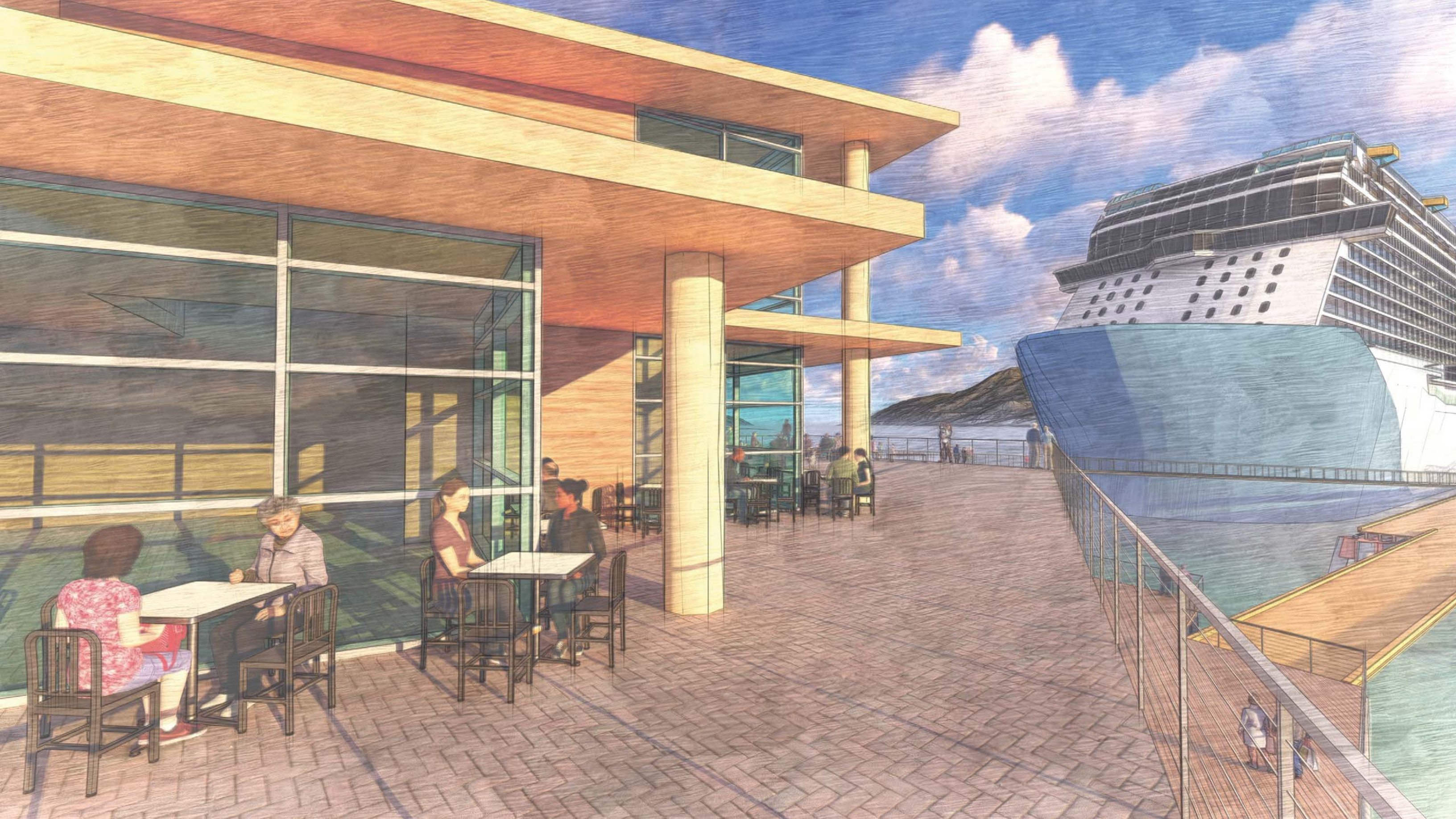
Lower Park



Aak'w Landing
Huna Totem Corporation

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

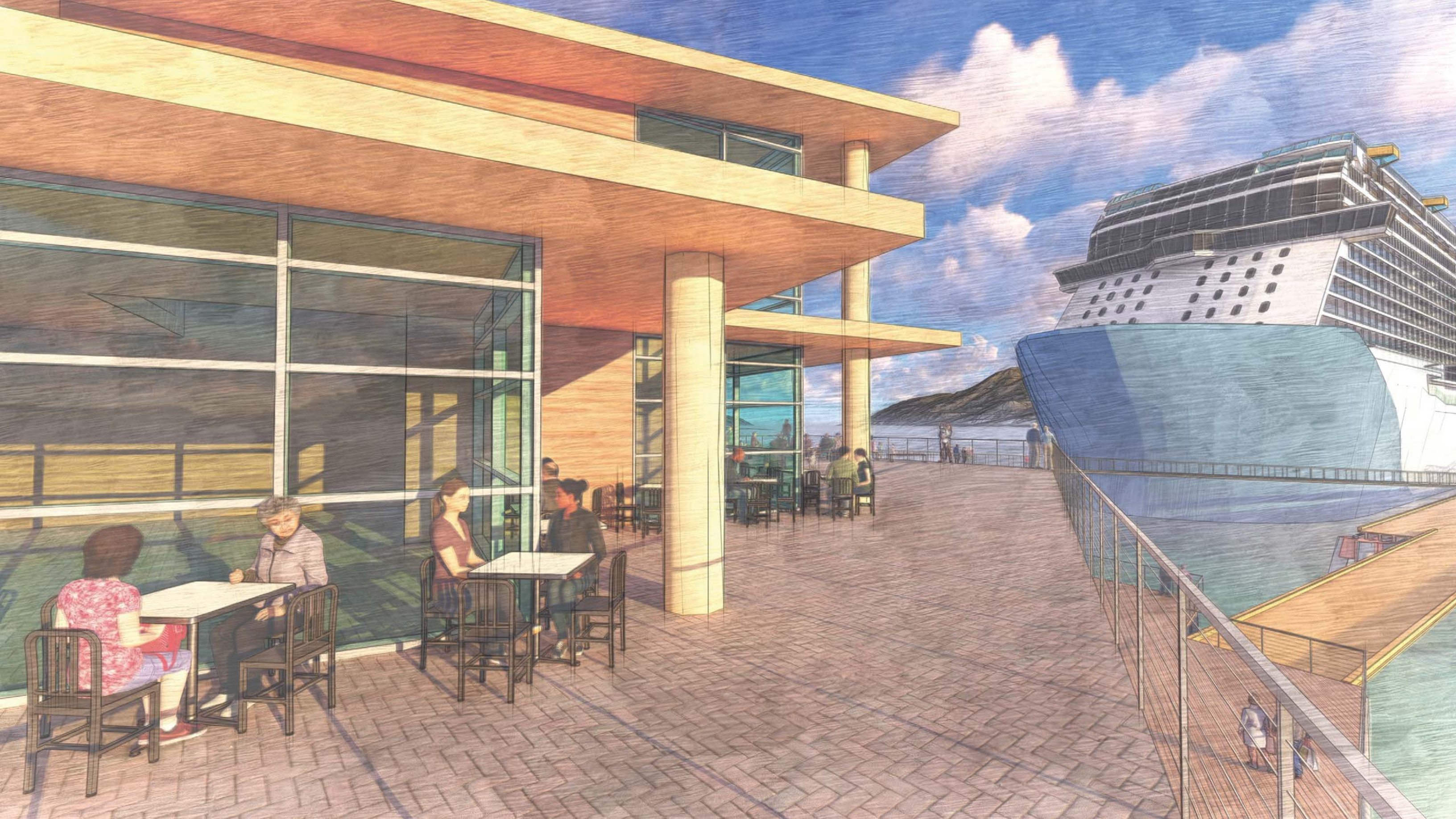
Park
Welcome Center beyond to left



Aak'w Landing
Huna Totem Corporation

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

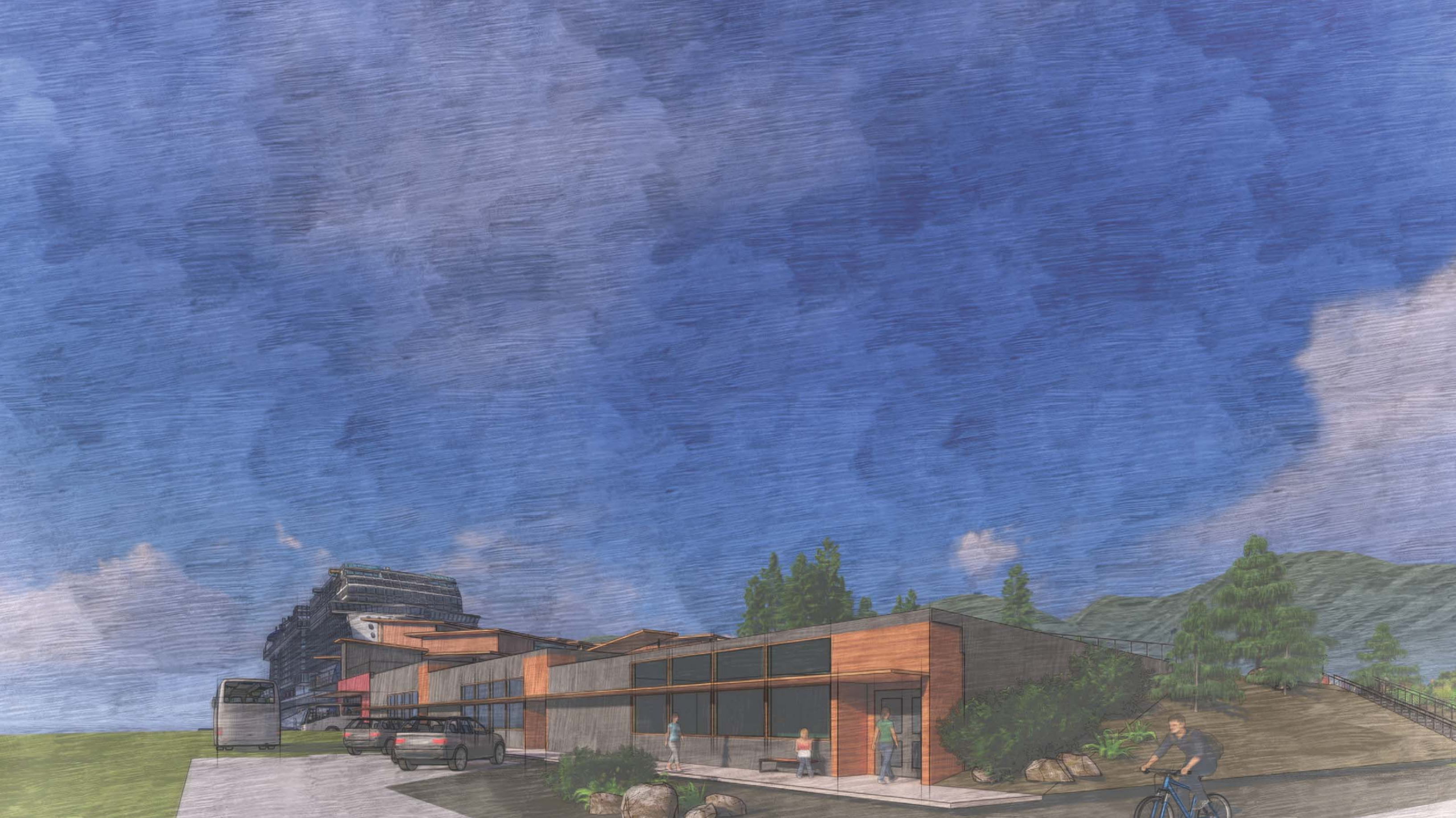
Upper Plaza from West
Phase 2 Retail / Dining to left



Aak'w Landing
Huna Totem Corporation

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

Upper Plaza from West
Phase 2 Retail / Dining to left



Aak'w Landing
Huna Totem Corporation

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

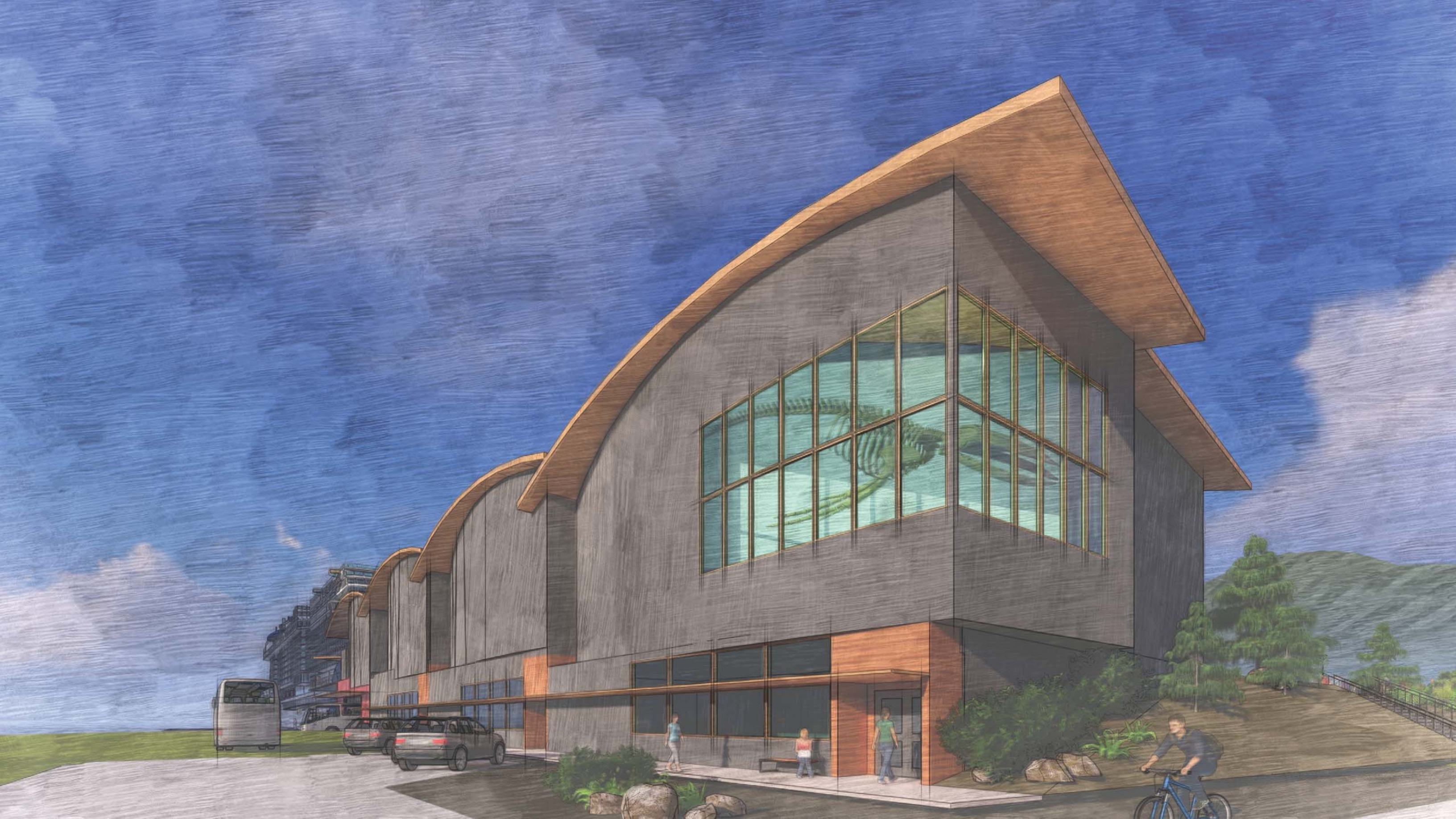
Corner of Egan and Whittier
Whittier-Level Retail



Aak'w Landing
Huna Totem Corporation

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

Corner of Egan and Whittier
Future Phase Development Option - Housing



Aak'w Landing
Huna Totem Corporation

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

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

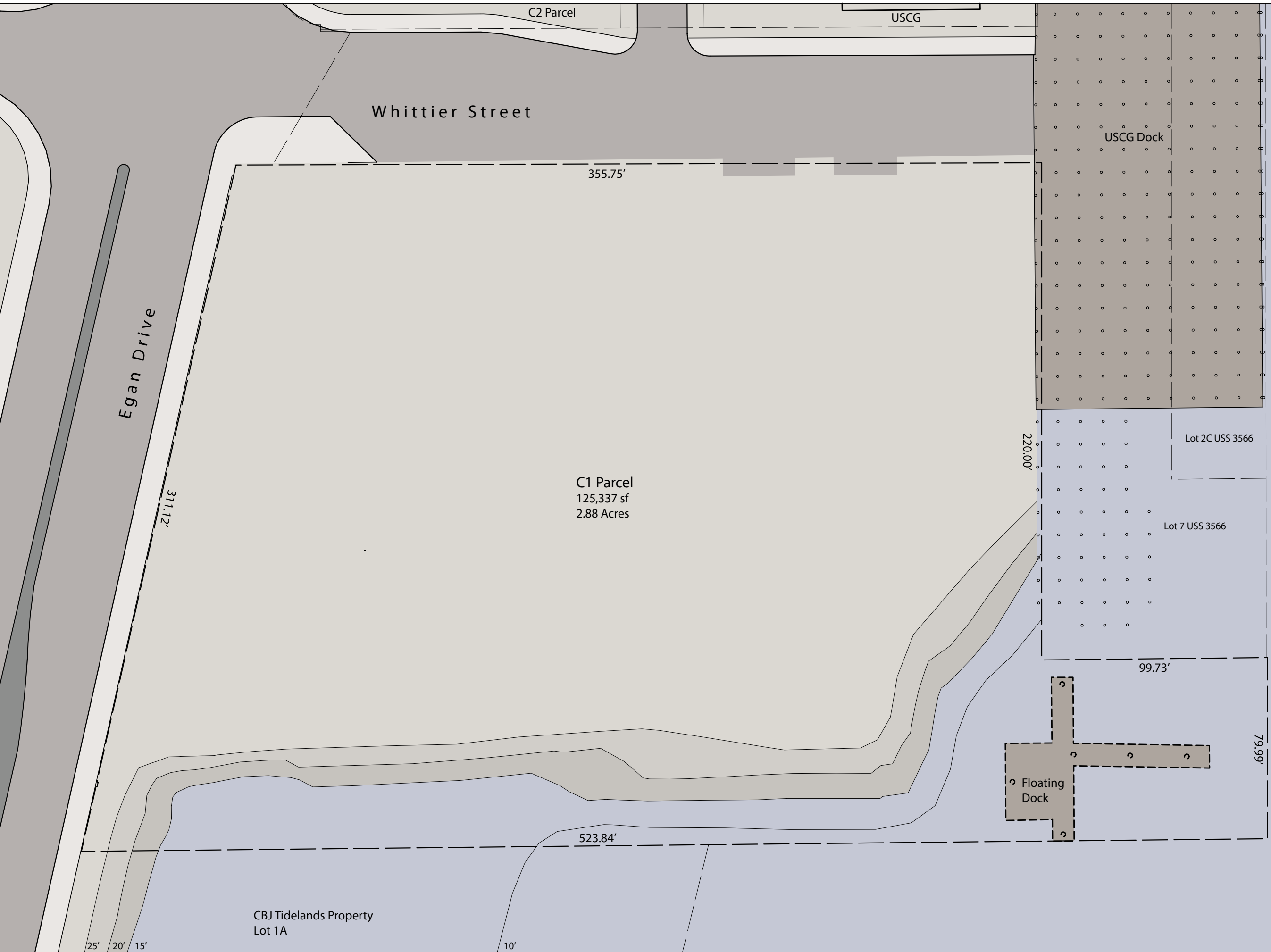
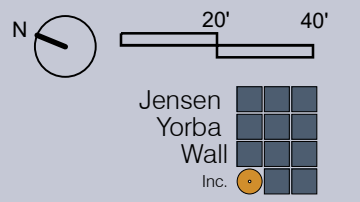


Aak'w Landing
Huna Totem Corporation

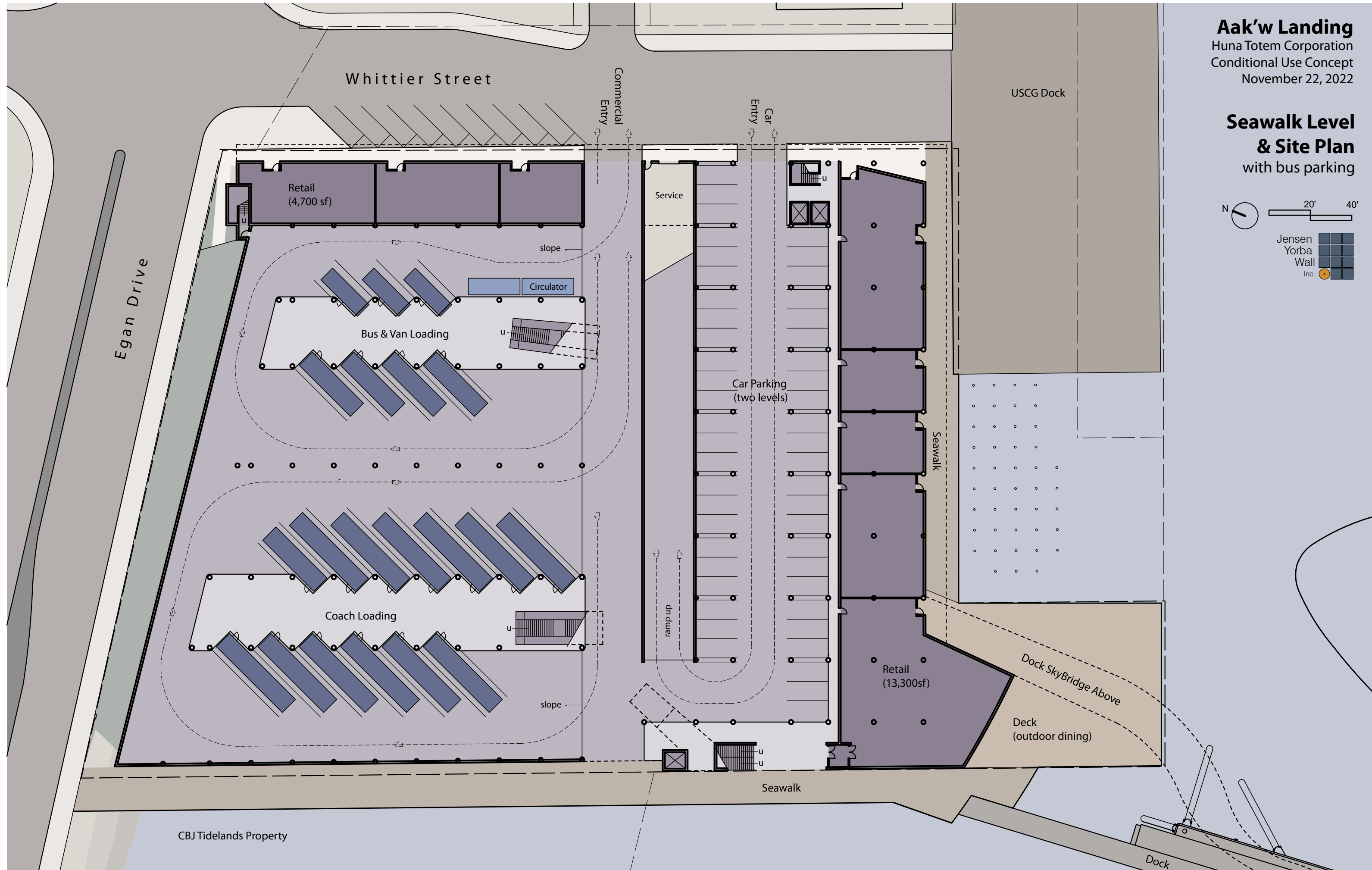
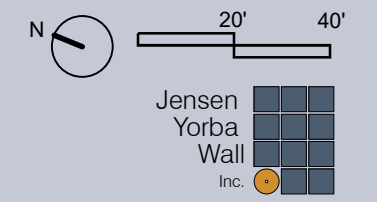
Jensen Yorba Wall, Inc. Conditional Use Concept January 6, 2023

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

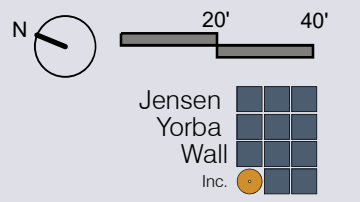
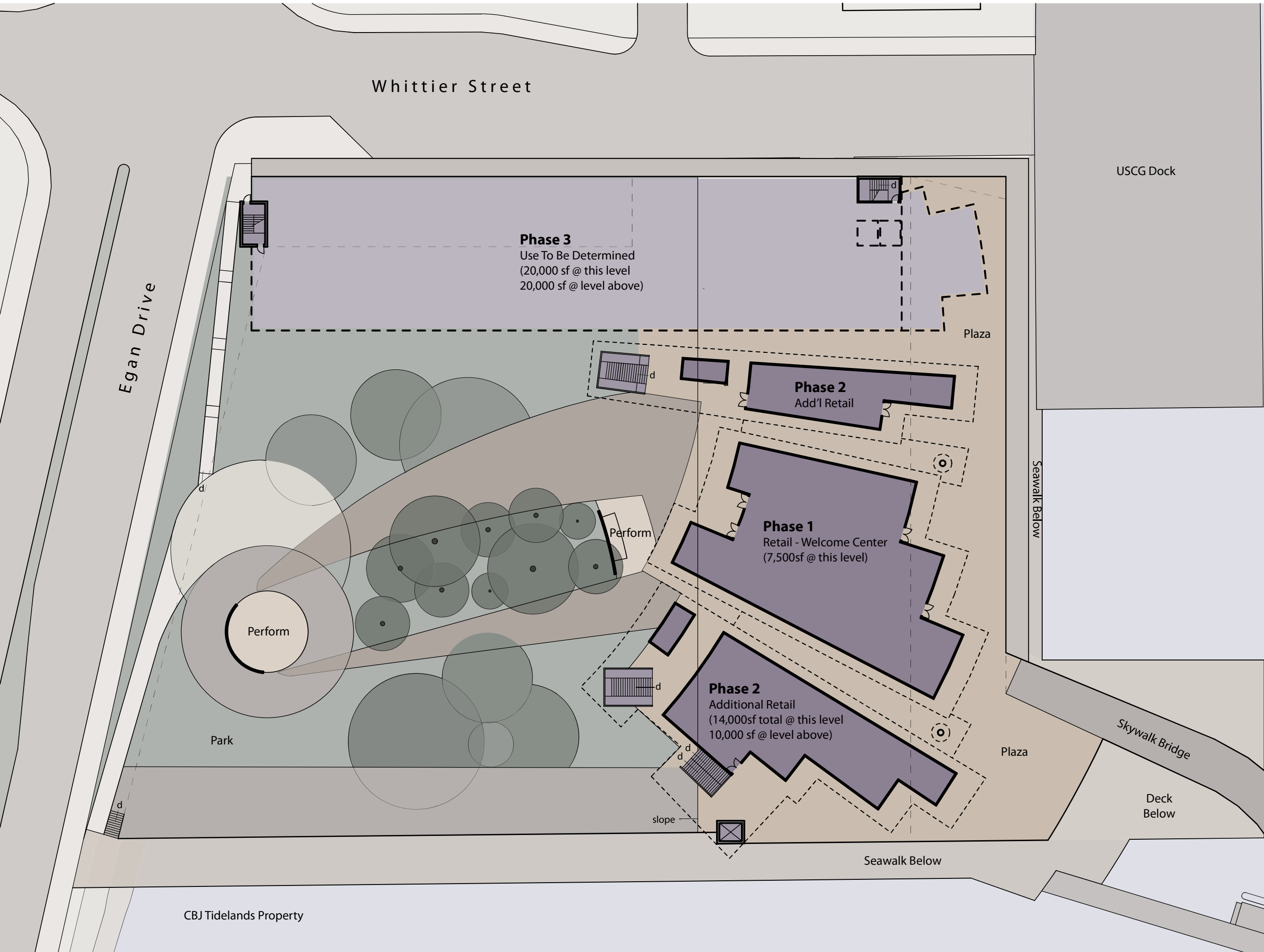
Existing Site Plan



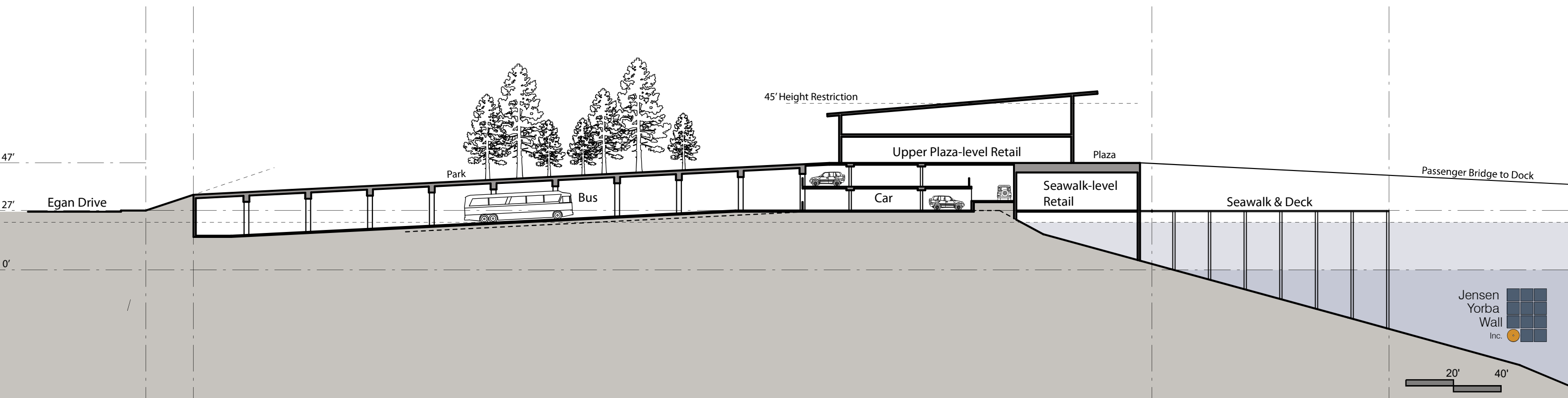
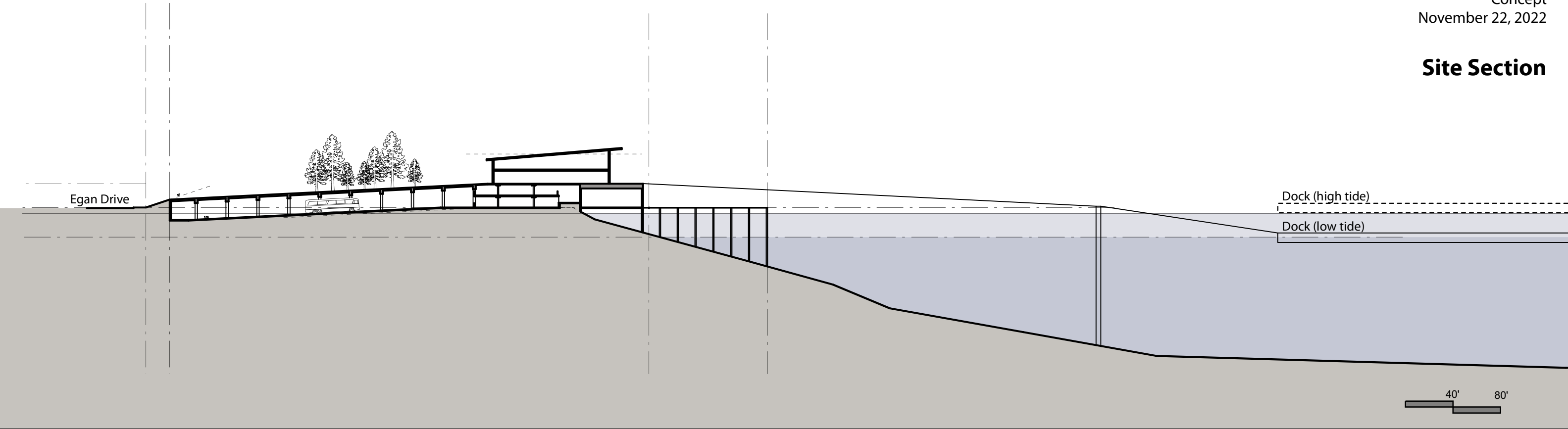
**Seawalk Level
 & Site Plan**
 with bus parking



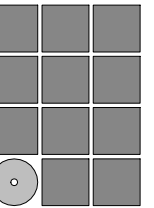
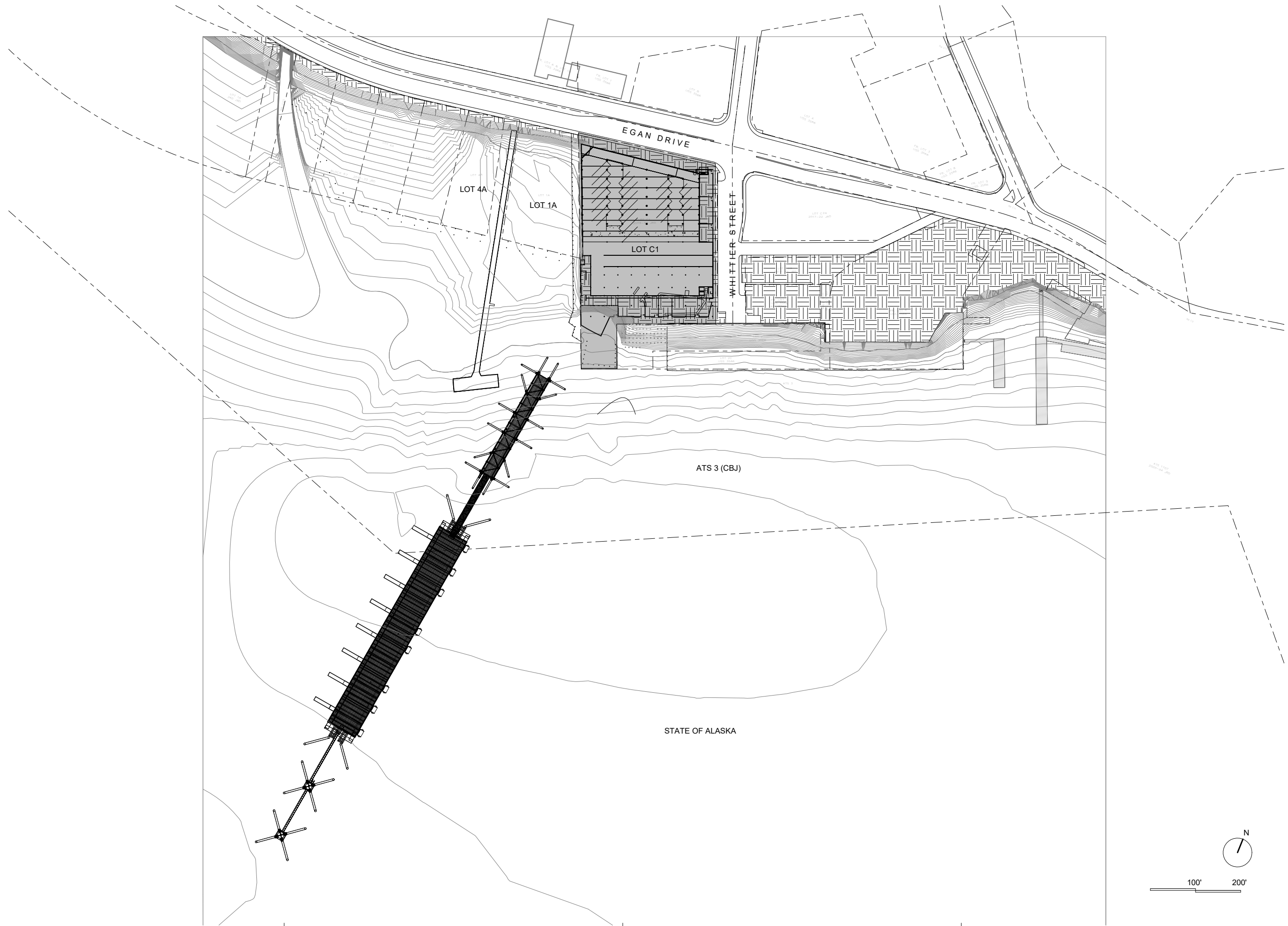
Upper Plaza Level



Site Section



1/3/2023 12:28:18 PM G:\Projects\1022\CAD\7 Revised Concept\21022 Aak'w Landing - R22.rvt



**Jensen
Yorba
Wall Inc.**

522 West 10th Street
Juneau, Alaska 99801
907.586.1070
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**Huna Totem Corporation
Aak'w Landing**

Conceptual Design

REVISIONS



SHEET TITLE

Property Location

DATE: 1.3.2023
FILE: 21022

A000

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

HCM 6th Signalized Intersection Summary

1: Egan Drive & Main Street

05/11/2023



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.

HCM 6th TWSC
2: Egan Drive & Willoughby Avenue

05/11/2023

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	-	-

HCM 6th TWSC
3: Whittier Street & Willoughby Avenue

05/11/2023

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	Minor2	Minor3
Conflicting Flow All	0	0	258	0	264
Stage 1	-	-	-	-	199
Stage 2	-	-	-	-	65
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1318	-	729
Stage 1	-	-	-	-	839
Stage 2	-	-	-	-	963
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1315	-	725
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	-

HCM 6th Signalized Intersection Summary

4: Egan Drive & Whittier Street

05/11/2023



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

HCM 6th Signalized Intersection Summary

6: Egan Drive & 10th Street

05/11/2023



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

HCM 6th Signalized Intersection Summary

1: Egan Drive & Main Street

05/11/2023



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.

HCM 6th TWSC
2: Egan Drive & Willoughby Avenue

05/11/2023

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	-	-

HCM 6th TWSC
3: Whittier Street & Willoughby Avenue

05/11/2023

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
Stage 1	-	-	-	-	94
Stage 2	-	-	-	-	294
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1432	-	619
Stage 1	-	-	-	-	935
Stage 2	-	-	-	-	761
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1429	-	603
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	-

HCM 6th Signalized Intersection Summary

4: Egan Drive & Whittier Street

05/11/2023



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

HCM 6th Signalized Intersection Summary

6: Egan Drive & 10th Street

05/11/2023

												
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

HCM 6th Signalized Intersection Summary

1: Egan Drive & Main Street

05/11/2023



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.

HCM 6th TWSC
2: Egan Drive & Willoughby Avenue

05/11/2023

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	-	-

HCM 6th TWSC
 3: Whittier Street & Willoughby Avenue

05/11/2023

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	-

HCM 6th Signalized Intersection Summary

4: Egan Drive & Whittier Street

05/11/2023



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
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	-	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

HCM 6th Signalized Intersection Summary

6: Egan Drive & 10th Street

05/11/2023

												
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

HCM 6th Signalized Intersection Summary

1: Egan Drive & Main Street

05/11/2023



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.

HCM 6th TWSC
2: Egan Drive & Willoughby Avenue

05/11/2023

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
Stage 1	-	-	-	-	122
Stage 2	-	-	-	-	383
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1376	-	530
Stage 1	-	-	-	-	908
Stage 2	-	-	-	-	694
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1373	-	510
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	-

HCM 6th Signalized Intersection Summary

4: Egan Drive & Whittier Street

05/11/2023



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
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	-	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

HCM 6th Signalized Intersection Summary

6: Egan Drive & 10th Street

05/11/2023

												
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(l)	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.												

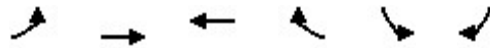
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM Analysis – Build

HCM 6th Signalized Intersection Summary

1: Egan Drive & Main Street

05/12/2023



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.

HCM 6th TWSC
2: Egan Drive & Willoughby Avenue

05/12/2023

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	-	-

HCM 6th TWSC
3: Whittier Street & Willoughby Avenue

05/12/2023

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
Stage 1	-	-	-	-	266
Stage 2	-	-	-	-	127
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1219	-	615
Stage 1	-	-	-	-	783
Stage 2	-	-	-	-	904
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1217	-	600
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	-

HCM 6th Signalized Intersection Summary

4: Egan Drive & Whittier Street

05/12/2023



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

HCM 6th Signalized Intersection Summary

6: Egan Drive & 10th Street

05/12/2023

												
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.												

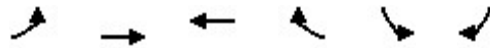
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

PM Peak Analysis

HCM 6th Signalized Intersection Summary

1: Egan Drive & Main Street

05/12/2023



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.

HCM 6th TWSC
2: Egan Drive & Willoughby Avenue

05/12/2023

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	-	-

HCM 6th TWSC
 3: Whittier Street & Willoughby Avenue

05/12/2023

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
Stage 1	-	-	-	-	134
Stage 2	-	-	-	-	429
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1348	-	491
Stage 1	-	-	-	-	897
Stage 2	-	-	-	-	661
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1345	-	462
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	-

HCM 6th Signalized Intersection Summary

4: Egan Drive & Whittier Street

05/12/2023



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(l)	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

HCM 6th Signalized Intersection Summary

6: Egan Drive & 10th Street

05/12/2023

												
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(l)	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.

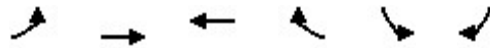
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM Analysis – Build with Mitigation

HCM 6th Signalized Intersection Summary

1: Egan Drive & Main Street

05/12/2023



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.

HCM 6th TWSC
2: Egan Drive & Willoughby Avenue

05/12/2023

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	-	-

HCM 6th TWSC
3: Whittier Street & Willoughby Avenue

05/12/2023

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
Stage 1	-	-	-	-	266
Stage 2	-	-	-	-	127
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1219	-	615
Stage 1	-	-	-	-	783
Stage 2	-	-	-	-	904
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1217	-	600
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	-

HCM 6th Signalized Intersection Summary

4: Egan Drive & Whittier Street

05/12/2023



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
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	-	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

HCM 6th Signalized Intersection Summary

6: Egan Drive & 10th Street

05/12/2023

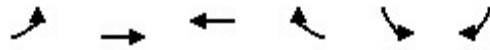
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	120	394	33	70	100	74	278	15	100	931	205
Future Volume (veh/h)	420	120	394	33	70	100	74	278	15	100	931	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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

HCM 6th Signalized Intersection Summary
 1: Egan Drive & Main Street

05/12/2023



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.

HCM 6th TWSC
2: Egan Drive & Willoughby Avenue

05/12/2023

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
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	4.1
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	2.2
Pot Cap-1 Maneuver	651	-	847
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	651	-	832
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

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	-	-

HCM 6th TWSC
3: Whittier Street & Willoughby Avenue

05/12/2023

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
Stage 1	-	-	-	-	134
Stage 2	-	-	-	-	429
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1348	-	491
Stage 1	-	-	-	-	897
Stage 2	-	-	-	-	661
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1345	-	462
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	-

HCM 6th Signalized Intersection Summary

4: Egan Drive & Whittier Street

05/12/2023



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
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.18	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.24	-	-
Pot Cap-1 Maneuver	480	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	480	-	-
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

HCM 6th Signalized Intersection Summary

6: Egan Drive & 10th Street

05/12/2023

												
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 10 th 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 be 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	

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, CBI 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.	CBI 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	

DRAFT



MEMORANDUM

DATE: March 30, 2023

TO: Maria Gladyszewski, Chair Assembly Committee of the Whole

FROM: Rorie Watt, City Manager

SUBJECT: State of the Visitor Industry 2023

This memo builds on the tourism discussion at the January 23, 2023 Lands, Housing, and Economic Development Committee. The intent of this document and the accompanying presentation and discussion is to help advance the Assembly's knowledge of this complex public policy issue from the multiple perspectives that contribute to public discourse around the visitor industry.

Too often, we talk about cruise tourism in very broad terms like total passengers per season and economic activity generated or in very specific terms from the public like flight seeing noise, whale watching boat wake, neighborhood impact. To better frame our discussions, it is important to acknowledge the varying and valid perspectives.

The cruise line perspective

Starting with cruise lines, the first thing to understand is that the Alaska market is in high demand. According to Bermello Ajamil and Partners, a cruise-industry focused planning and design firm (and authors of CBJ's Long Range Waterfront Plan), the Alaska market will grow from 4% of global market share in 2019 to 6% in 2023. This increase is significant considering the size of the global cruise markets. In individual discussions with cruise lines, most want to be good community partners and conceptually support our local initiatives. However, there is natural tension between the desire to be a good corporate citizen and the reality of being a publicly traded company predicated on growth. Simply put, everyone supports the concept of limits but everyone also wants to bring one or more new ships to Alaska. Juneau had 1.3 million visitors in 2019 and is projected to receive 1.67 million in 2023. 2024 is projected to see similar numbers to 2023 with the five ship limit in place.

Growth takes several different forms. We have all seen that ships are getting bigger. All the major lines are building new ships, most of which are either smaller luxury ships or extra-large 4,000 passenger plus ships. We're also seeing new itineraries and destinations added in an attempt to grow the industry by spreading visitation across more ports. Itineraries are becoming more creative, with lines moving away from the traditional seven day, three ports and a glacier model. Juneau plays an interesting role in this evolution. We are the mature, established Alaska port and we remain a top rated destination.

Traditionally, we have been considered a 'linchpin' port due to our size, location in the middle of the region, and shore excursion opportunities. Conventional industry wisdom is that marketable Alaska cruises depart on a weekend and include Juneau, and such itineraries will remain desirable. In discussions with the cruise lines, we have made the argument that not every ship needs to stop here and we're starting to see lines sell itineraries of varying lengths and destinations. For example, Disney is adding a new ship in Alaska and it will not call in Juneau.

Growth over the past decades has meant larger ships and busier schedules in Ketchikan, Juneau, and Skagway. The future is more complex. Hoonah has added a new dock. Sitka has a double berth. A development in Klawock is on the horizon. Cross Gulf of Alaska itineraries and longer sailings departing out of San Francisco are becoming more common. The landscape in next 10 years is going to look very different from past 10 and growth will not follow the same trajectory. Juneau will continue to be a top selling port, but we can expect to see less predictable schedules, more diversified itineraries, and new developments in the region in years to come. This can be a good thing for Juneau as we consider the right size for our visitor industry. However, we'll also likely see new market entrants. MSC and Virgin, global cruise lines with large ships, have both stated a desire to come to Alaska. While berths in Seattle and Vancouver are filling up, LA and San Francisco have space and Vancouver has stated plans to construct an additional berth.

Another consideration from the cruise line perspective is money. The graphic in the attached presentation shows that ultimately, it's all the same money. A passenger buys a ticket on a cruise ship, and it pays for everything that ship does along its itinerary. That includes passenger fees, public and private dockage fees, and everything that happens on board the ship. This is important when we consider things like passenger fee allocations and public and private infrastructure investments. There are no funds that are not derivative of passengers – any private investment must be backed by visitation and under many scenarios (but not all) that would mean a growth in visitation. Cruise lines and private dock owners have fiduciary responsibility to their investors to maintain and grow profits. That responsibility is difficult to reconcile with community needs.

The shore excursion perspective:

Shore excursions are integral to the local tourism economy. Currently, shore excursion operators are almost all local businesses and employ a lot of Juneau residents. Many of our local operators are members of our community, and are conscious of the need to follow TBMP guidelines, be good stewards of the lands where they operate, work behind the scenes to support efforts to slow or limit growth, and to train seasonal staff to respect the needs of residents. In a healthy cruise tourism market, there are enough shore excursion opportunities to disperse passengers and mitigate the impacts of a large volume of people in town at once. There are two ways that shore excursion operators sell tours: Indirectly through the cruise line in a wholesale model, and directly through online bookings and sales booths. Shore excursions, of course, have impacts. Below is a description of some of the larger shore excursion markets and CBJ's scope of management authority.

Flightseeing remains popular in Juneau and was the subject of extensive public process in the early 2000's, which contributed to the creation of TBMP with some of the early guidelines addressing flight paths and operator behavior. Around the same time, CBJ set up a revolving loan program that allowed Wings of Alaska to convert its planes operating downtown to quieter turbine engines, which translated to fewer flights that are safer and shorter in duration. Flightseeing is also heavily regulated by the FAA and CBJ has virtually no influence over how helicopters and floatplanes operate. The State of Hawaii

launched a flightseeing task force in 2020 to evaluate options for regulation. The resulting bill, which would have required helicopter tour operators to submit monthly reports on their flight activity to the State Department of Transportation, was vetoed because the FAA does not permit state agencies to impose or enforce regulations on aircraft and the state would be unable to take any substantive action based on the information gathered.

According to a 2019 McKinley Research report, Juneau accounts for 60% of the Alaska whale watch market. Whale watching has relatively low barriers to entry and its own jurisdictional challenges. CBJ regulates behavior in its harbors, NOAA regulates behavior related to interactions with wildlife, and the Coast Guard regulates boater safety. TBMP and WhaleSense are valuable programs for voluntary compliance, but CBJ currently lacks any enforcement mechanisms. A new commercial float for whale watch and charter vessels was constructed at Statter Harbor in 2021, and it is already over capacity, with operators docking elsewhere in the harbor or at private facilities. It would be possible to set up a limited permitting system for docking at CBJ facilities. However, Docks & Harbors relies partially on fees from whale watching vessels and because D&H is an enterprise fund that is charged by Ordinance and motivated by increased private activity to fund its harbors. An enterprise fund driven system is not directed to determine and balance community needs. Moreover, a permitting system would not apply to private dock facilities.

Parks & Rec currently permits tour activity on designated CBJ trails based on recommendations from the Commercial Trails Working Group in 2004. While the commercial use list is old and in need of updating, the trail permitting system has worked relatively well for the past 20 years. The Rainforest Trail was constructed using Marine Passenger Fees in 2001 to mitigate resident concerns about tour use on Outer Point Trail. The Juneau Trails Plan, started by CBJ, the USFS, Alaska State Parks, and Trail Mix in 2019, is partially complete. Staff resources were directed elsewhere during the pandemic and we have not had the capacity to staff the project since. If there is a desire to complete this plan in the near term, we would likely need to hire a consultant. Staff estimates the cost of completion at \$60,000-\$80,000.

The U.S. Forest Service also bases its trail permitting off the Juneau Trails Working Group, and all of its commercially permitted trails are within the Mendenhall Glacier Recreation Area. The glacier currently sees 700,000 visitors per year, and the USFS has conducted an extensive planning process over the past six years to expand this capacity. The final product is likely several years away and funding is uncertain.

CBJ's 2022 Tourism Survey results are evenly split on whether to spread visitors out across the borough or to confine visitor operations to a few known area. Regardless of the direction the Assembly takes on dispersion versus condensation, Juneau appears to be nearing the point where shore excursion capacity does not meet demand. Without new opportunities, we will continue to see growth in markets that already feel 'full' (i.e. whale watching). If the Eaglecrest gondola is constructed in the next few years, we can expect just over 70,000 visits in the first year. The gondola certainly represents an opportunity for disbursement, but even at full projected capacity, it will not scale up enough to make a major difference. Shore excursion growth should be strategic. New activities should happen in locations supported by public process.

The Public Perspective

CBJ survey data on public perceptions of tourism has remained relatively unchanged over the past two decades. People generally feel that the benefits outweigh the impacts and also agree that CBJ isn't doing enough to manage tourism. It is a complex public policy issue and with so many competing but also

interrelated interests, jurisdictions and choices it is hard to understand the full effect of our tourism-related decisions. The VITF did a good job of synthesizing and reporting on public comments and making a set of moderate and balanced recommendations including establishing limits, building infrastructure that supports both the public and visitors, and getting more involved in ship scheduling. Staff is working on all these recommendations and more, but in the face of steady growth, it's easy to see why many residents feel that CBJ isn't doing enough. To be blunt, growth has happened faster than negotiated policy work.

We conduct surveys because we typically hear from the people who feel disproportionately affected, either positively or negatively, by the visitor industry. It's valuable to hear from a random sample of residents. However, each time there is a proposal for tourism activity in a new area, we hear from people who are concerned about being displaced. The Marine Passenger Fee budget has not yet gone to Finance. Based on the recommendations of the VITF and the recent Assembly discussion about the Pioneer Road, staff proposes moving \$100,000 - \$120,000 in Marine Passenger Fees off the Seawalk to fund a public process around commercial use throughout the borough. The policy component should be fairly straightforward, building on the work of the VITF, but we need a focused public process about the best areas of town for visitor industry activity and that has not yet taken place.

The Assembly Perspective

The Assembly is tasked with a number of big tourism decisions in the coming months, all of which are related to the issues discussed above. The proposed fifth dock is top of mind for many of you. Without some sort of detailed capacity agreement, a fifth dock will lead to growth. A larger ship can fit at dock than at anchor. Ships are getting bigger, and with more diversified itineraries, the traditional gaps in the schedule are filling. A fifth dock will also likely spread passengers through downtown and along the waterfront. It may catalyze seawalk development and bring more people to businesses outside of the South Franklin corridor. Like everything tourism-related, it comes with benefits and drawbacks.

The concept of Juneau's visitor "capacity" has been discussed for years as our volume increases. Some believe we are past our capacity and some feel that we have room to grow. At some point, highly rated destinations lose their appeal due to overcrowding and/or lack of infrastructure and services to manage volume. CBJ's current approach is to address concerns about growth through open communication and negotiated agreements with the industry. As discussed, a result of the recently signed five ship MOA is that visitation for 2024 is projected to be level with 2023 while other ports are growing. We have good relationships with most major cruise lines and with CLIA, and are treated as an example of a port that engages proactively. Our MOAs were highlighted in the keynote address at a global cruise conference last week. Our next steps are to enter into a contractual agreement with CLAA and become more involved in scheduling. The 'best ship at best dock' may take some experimentation before we know what works, but we anticipate having more influence over port operations.

We often see the perception that CBJ does whatever the industry wants, or that staff and the Assembly are beholden to industry might. The reality is more complex. The negotiated agreement approach is largely untested elsewhere in the world and presents new and challenging territory for the cruise lines. Beyond that, we only have blunt management tools at our disposal. We can close our lightering float. We can leave a city dock empty on certain days. We can move to acquire private docks. As anyone who was present for the CLIA lawsuit knows, these tools all come with consequences. It is critical that we decide what kind of destination we want to be in the future and use the right tools to meet the right outcomes. Regardless of the method or approach, Juneau is a mature destination and is long past the

point of being successfully patronized about community benefits or authentic experiences. Our most valuable asset should be the ability to understand the complexities of our local visitor industry and make strategic decisions based on complete information about the community-wide pros and cons of any given proposal.

In conclusion, there are no easy answers and while staff continues to push for a regional strategy, that is only a piece of the solution. Our goal with this memo and the accompanying presentation is to help the Assembly understand the intricacies of the situation so you can consider all the necessary factors in your difficult decisions ahead.

Summary of Recommendations:

1. Trail Plan Funding
2. Commercial Use Funding

Summary of Upcoming:

1. Adoption of Passenger Fee expenditures in the budget
2. Planning Commission consideration of the HTC Support Dock (date)
3. Record Cruise Ship Passenger Visitation this summer
4. Ongoing negotiations of Seawalk connection between AJ Dock & Franklin Dock
5. Contractual Relationship with Cruise Line Agencies of Alaska for scheduling and use of CBJ facilities under draft.

Attachments

- A. Slide Deck of Presentation by CLIA at Juneau Chamber**
- B. CLIA letter regarding Huna Totem development**



March 3, 2023

Mayor Beth Weldon
City and Borough of Juneau
155 South Seward Street
Juneau, AK 99801

Dear Mayor Weldon,

On behalf of Cruise Lines International Association (CLIA) and our member lines, we wanted to take this opportunity to express our support for the proposed fifth dock at the Subport in Juneau, property now owned by Huna Totem Corporation (HTC).

CLIA is monitoring the public process surrounding this project, including the January 30, 2023 City and Borough of Juneau (CBJ) Assembly meeting where, during the discussion around a \$300,000 appropriation for a Downtown Subport planning study, an Assembly member inquired whether CLIA supports the dock. The answer is yes, as we believe a fifth dock is beneficial for both the community and industry.

As CLIA continues to work with CBJ Tourism Manager Alexandra Pierce and City Manager Rorie Watt to address recommendations from the report issued by the Visitor Industry Task Force (VITF) you convened in 2019, we believe building a fifth dock would assist in these endeavors.

From passenger disbursement and decreased congestion, to year-round facility uses for the community, a fifth dock supports our member lines, the greater tourism industry, and the residents of Juneau, while also addressing the broader recommendations of the VITF. We believe HTC also supports the VITF recommendations as stated in their testimony on January 30 and expect HTC's experience in responsible and sustainable tourism development projects will benefit both residents and visitors in Juneau, as they have demonstrated in the community of Hoonah.

We will follow the progress of this project and appreciate the efforts of you, Mr. Watt, Ms. Pierce and the Assembly as you shepherd this proposed development through the public process.

Sincerely,

Renée Limoge Reeve
Vice President, Government & Community Relations

CC: City & Borough of Juneau Assembly
Rorie Watt, City Manager, City & Borough of Juneau
Alexandra Pierce, Tourism Manager, City & Borough of Juneau
Russell Dick, President & CEO, Huna Totem Corporation

Attachment B - Assembly Committee of the Whole 2023 Cruise Season Presentation Materials

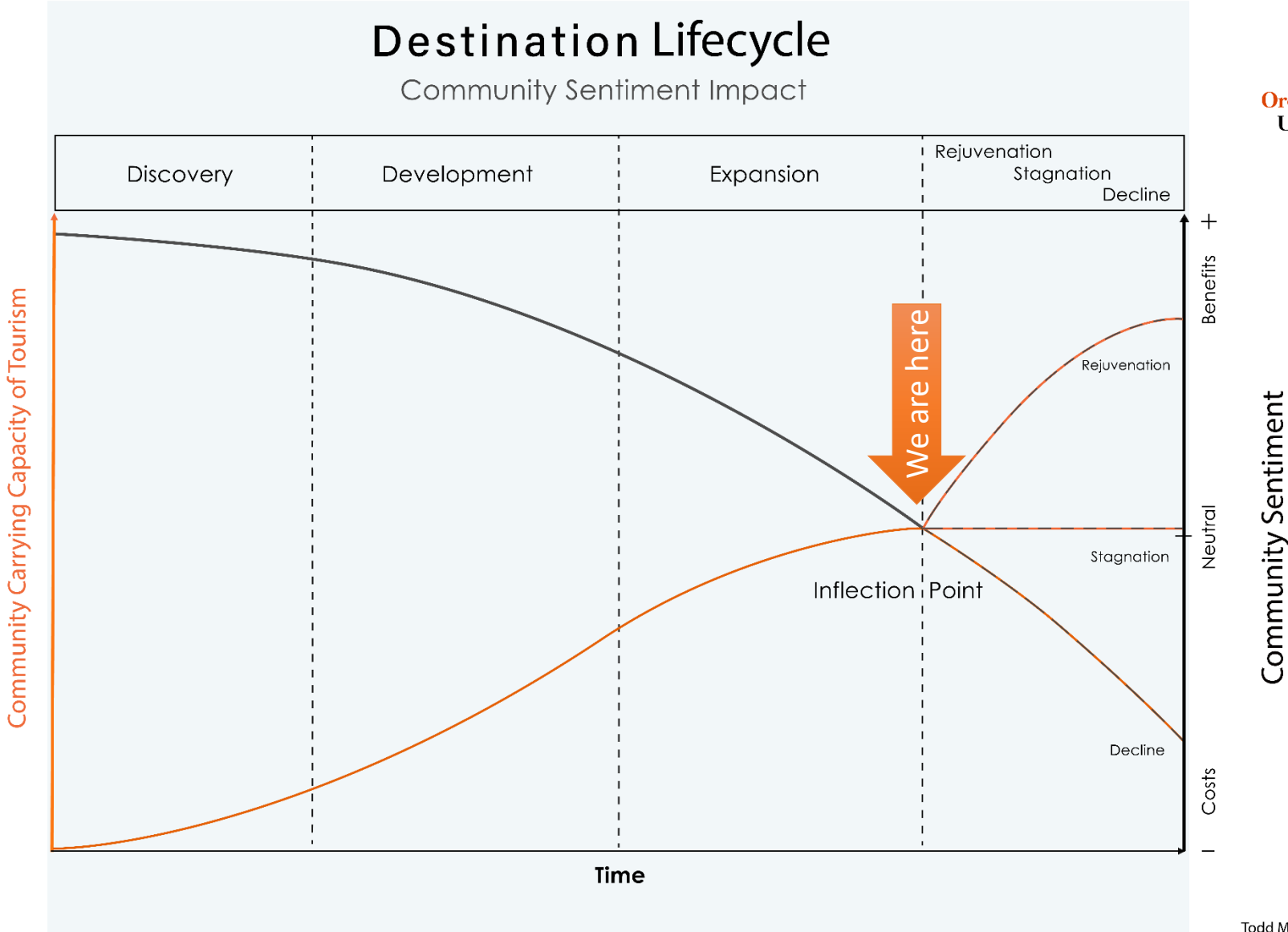
State of the Visitor Industry

Assembly COW

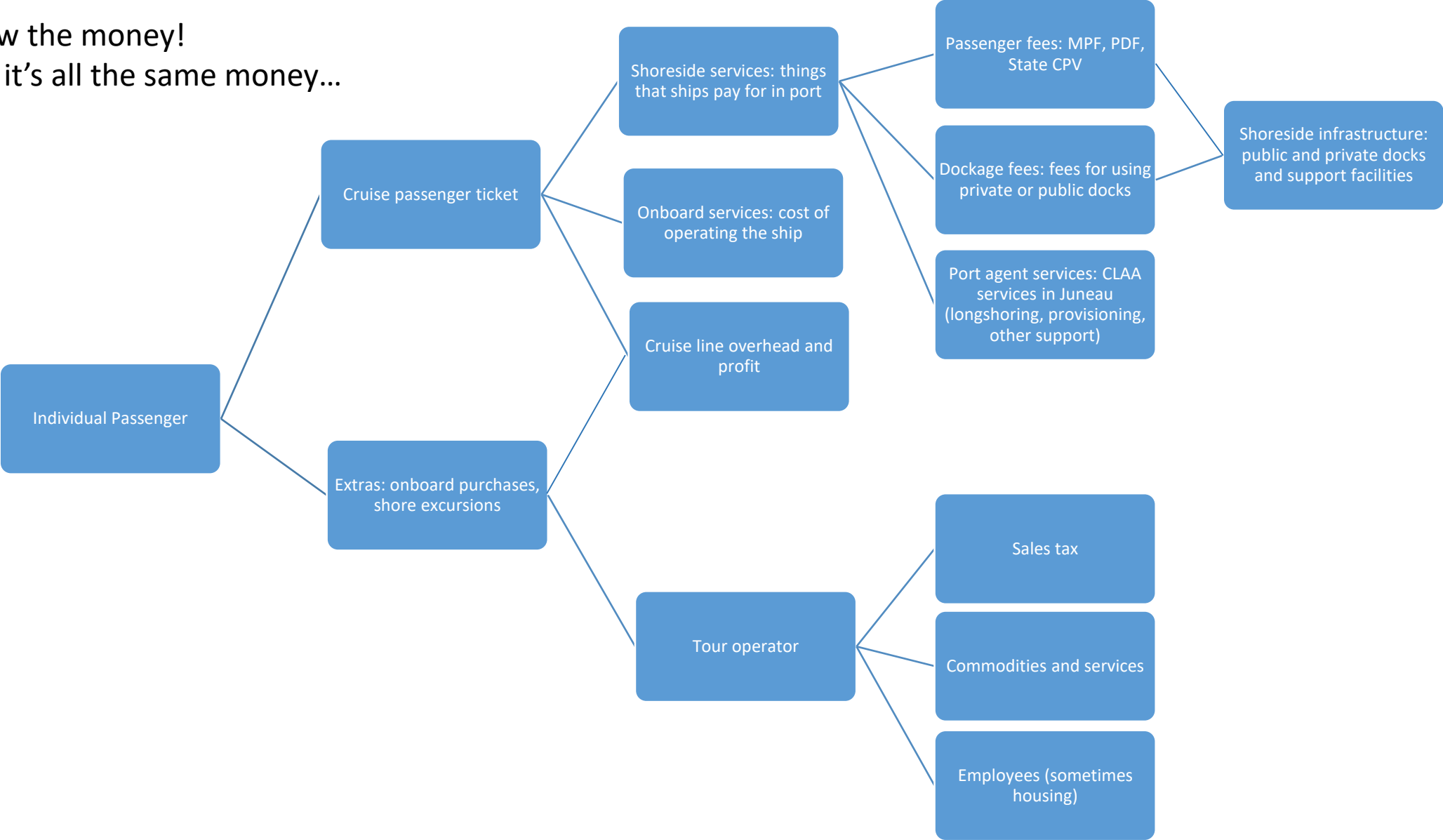
April 3, 2023



Oregon State University

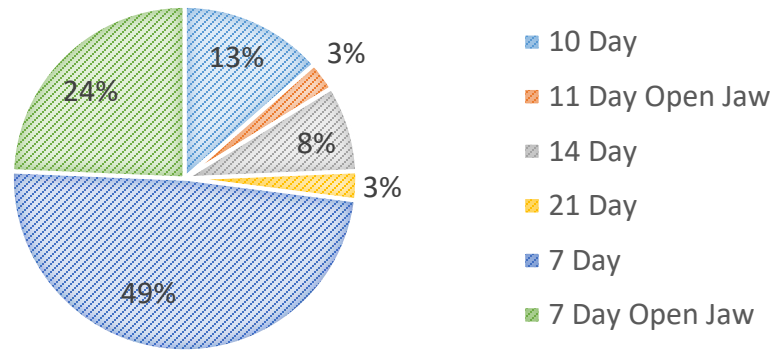


Follow the money!
Hint: it's all the same money...

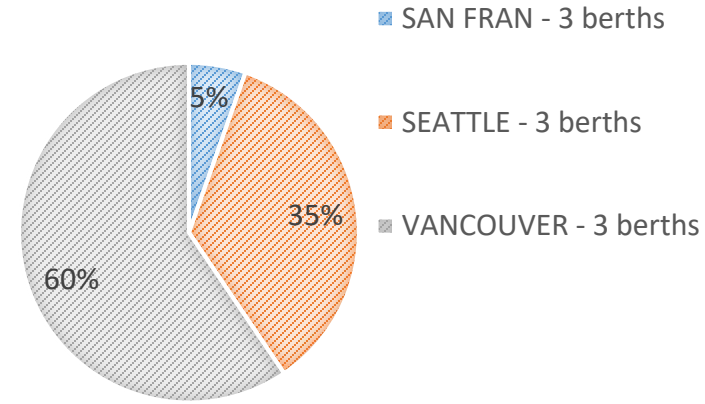


Itineraries

ITINERARY TYPES

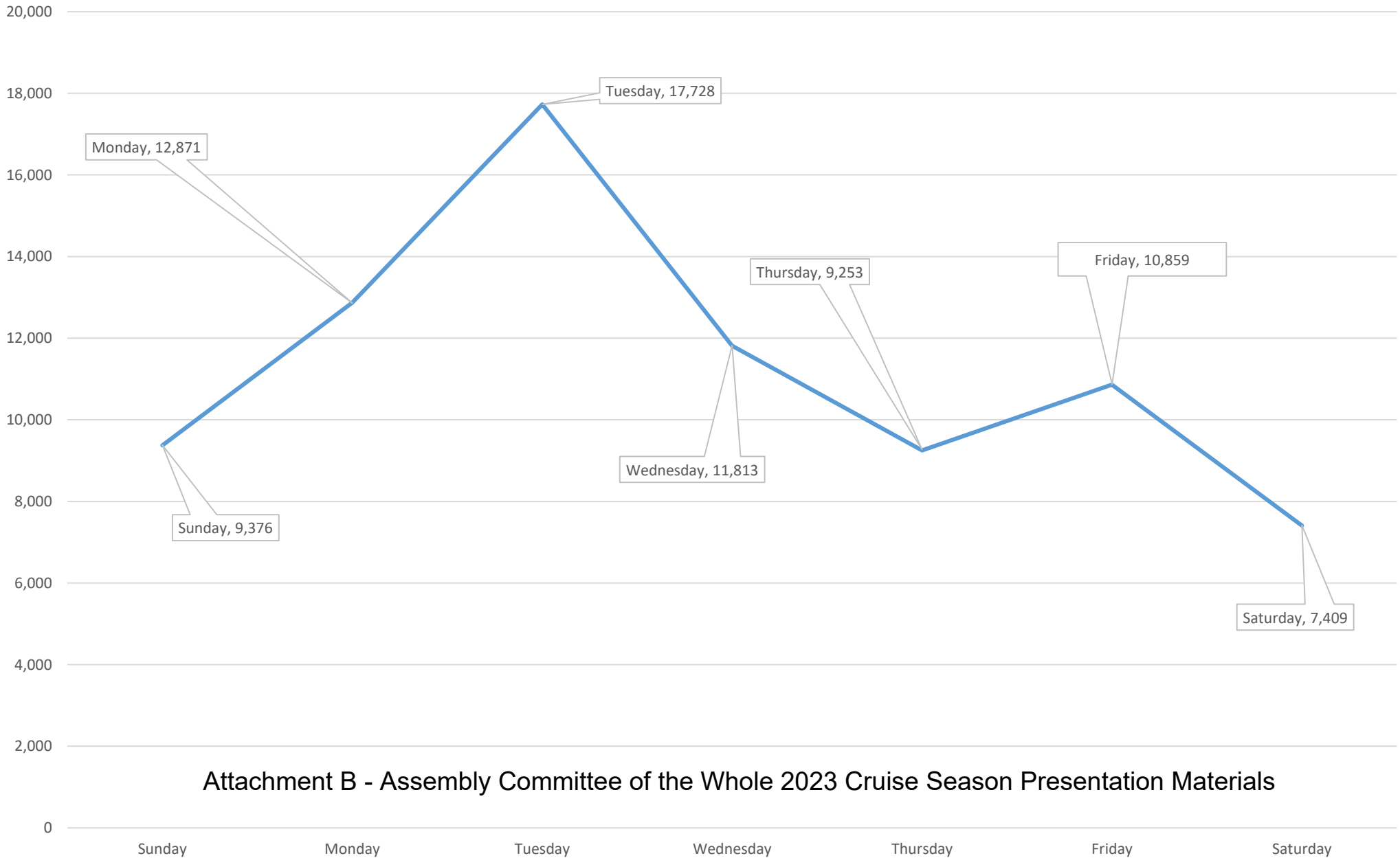


HOMEPORT



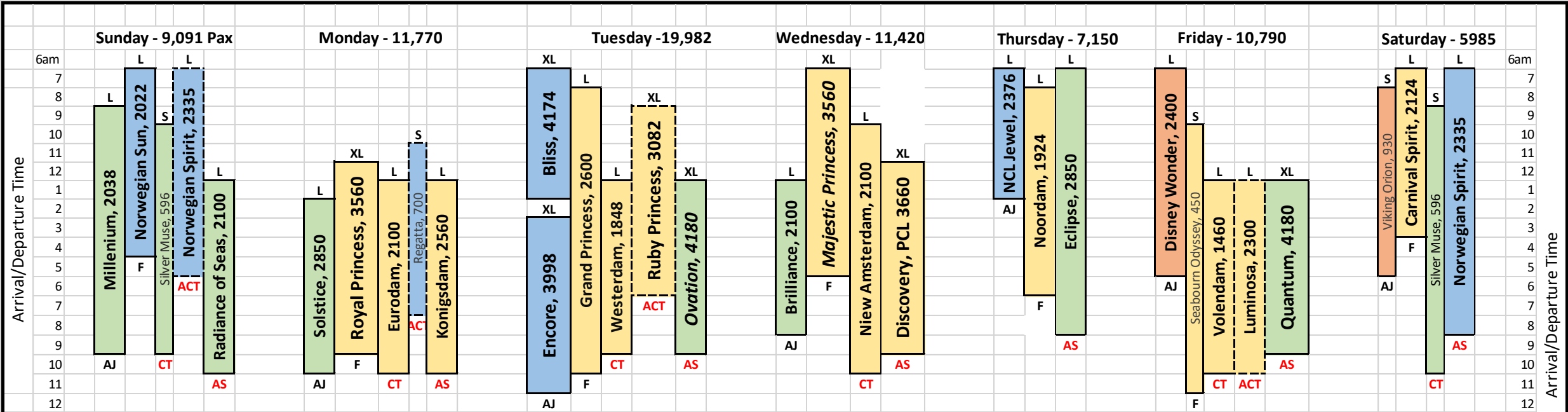
- Traditional Itinerary: 7 days round trip, Vancouver or Seattle
- Open Jaw Itinerary: 7 days point to point, Seward or Whittier, typically includes an interior tour
- Outlier Itineraries: Queen Elizabeth – rotates between 7/10/12 day itineraries, Majestic Princess – rotates between 7 day open jaw and 14 day round trip, Viking Orion – sails 11 day open jaw and spends 3 days in Seward

Average Cruise Ship Passengers/Day of the Week
Port of Juneau
June 2023



Weekly Snapshot, June 2023

Port of Juneau Cruise Ship Schedule for the Week of June 18-24, 2023



Visitation by Company - 6/18-24

	At Dock	Anchor/HB
Carnival Group (Carnival, Holland, Princess, Seabourn)	33,328	5,382
Royal Caribbean Group (RCI, Celebrity, Silversea)	21,490	0
NCLH (Norwegian, Oceania, Regent)	17,940	7,033
Other Cruise Lines	3,300	0

Ship Size by Company

S	L	XL
1	9	4
2	5	2
1	4	2
1	1	

6/18-24 Capacity Visitation : 76,088

20,866	A	AJ Dock
16,868		AJ Dock w/o Hot Berthing
16,240	F	Franklin Dock
8,700	CT	Cruise Ship Terminal
8,417	ACT	Anchor
21,865	AS	Alaska Steamship
4		Schedule Vacancies

Port of Juneau, Cruise Visitation Trends/Passengers per Month – 2019 vs 2023



Theoretical Maximum Visitation

Current Capacity					
Dock/Ship Type	Passengers	Spring Season Pax	Peak Season Pax	Fall Season Pax	Total
XL	4000	90,000	550,440	45,000	685,440
XL	3000	67,500	412,830	33,750	514,080
L	2500	56,250	344,025	28,125	428,400
S	700	15,750	96,327	7,875	119,952
L (lightered)	2000	45,000	275,220	22,500	342,720
					0
		274,500	1,678,842	137,250	2,090,592
Adjusted for Additional Dock					
Dock/Ship Type	Passengers	Spring Season Pax	Peak Season Pax	Fall Season Pax	Total
XL	4000	90,000	550,440	45,000	685,440
XL	3000	67,500	412,830	33,750	514,080
L	2500	56,250	344,025	28,125	428,400
S	1000	22,500	137,610	11,250	171,360
XL (docked)	3500	78,750	481,635	39,375	599,760
S	700	15,750	96,327	7,875	119,952
		330,750	2,022,867	165,375	2,518,992

- This represents how we get to 2 million passengers at our current capacity and how we get to 2.5 million with a new dock
- Many assumptions are made in this table – the port is full every day, we will see a 4000 passenger ship every day, etc. but it shows the path for growth.
- Data is based on current ship sizes and on trends in ship building.
 - New builds trend toward the small luxury market (<1000 pax) and the large mass market (>3000 pax)



AJ Dock
18+ Bus Spaces

Franklin (aka Princess)
15+ Bus Spaces

Cruise Ship Terminal (CBJ)
12+ Bus Spaces

Steamship Wharf (CBJ)
12 Bus Spaces

Peratrovich Plaza
12 Small Bus/Van Spaces

Proposed Support Dock
Aak'w Landing (HTC)
14+ Bus Spaces

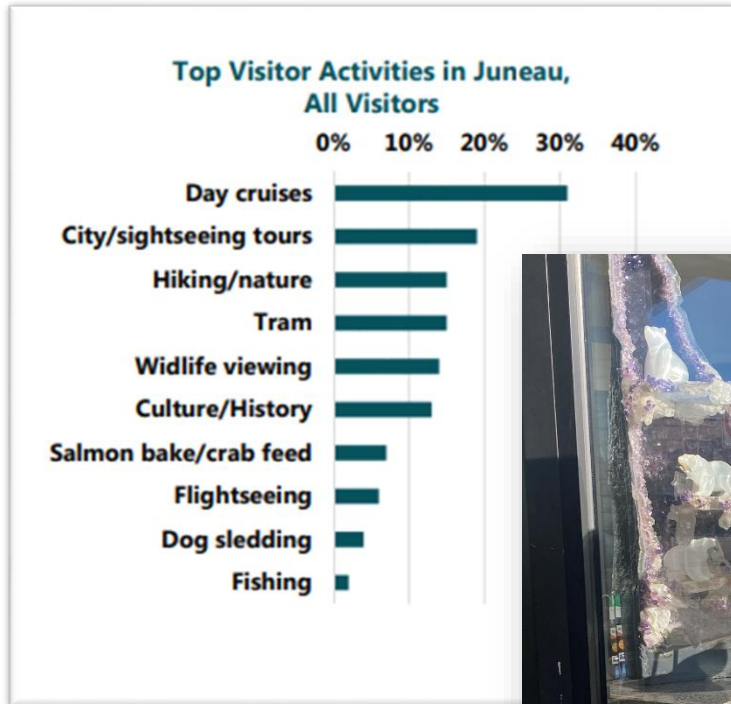
Alaska: current and future business

Coming to Alaska	Planning to Come to Alaska
Carnival – Holland America, Princess, Carnival, Cunard, Seabourn, etc. (90 ships, 8 ordered, 42% of pax 2021)	MSC – MSC, Explora (19 ships, 3 ordered, 10% of pax 2021), other business: shipping (560 ships)
Royal Caribbean – Royal Caribbean, Celebrity, Silversea (60 ships, 4 ordered, 24% of pax 2021)	Virgin (2 ships, 2 ordered, 1% of pax 2021), other business: airlines, media, etc.
Norwegian Cruise Line – Norwegian, Regent, Oceania (18 ships, 5 ordered, 10% of pax, 2021)	
Disney (5 ships, 3 ordered, 2% of pax 2021), other business: theme parks, media, merchandise, etc.	
Viking (82 ships, 9 ordered, 1% of pax 2021), mostly river cruise ships, all new builds are ocean ships	

Quick Stats

- Current Stats
 - 447 ships worldwide
 - 680,573 cruise berths carrying 31.16 million passengers
 - 90+ cruise brands
- Future Stats
 - 66 new cruise ships worldwide by 2028
 - 499 total cruise ships worldwide by 2028
 - 37.4 million passenger capacity by 2027
- Alaska is 6% of global cruise business
- Cruise lines look at desirability, revenues, and past experience when choosing itineraries. For better or worse, Juneau has all three

Shoreside Activities

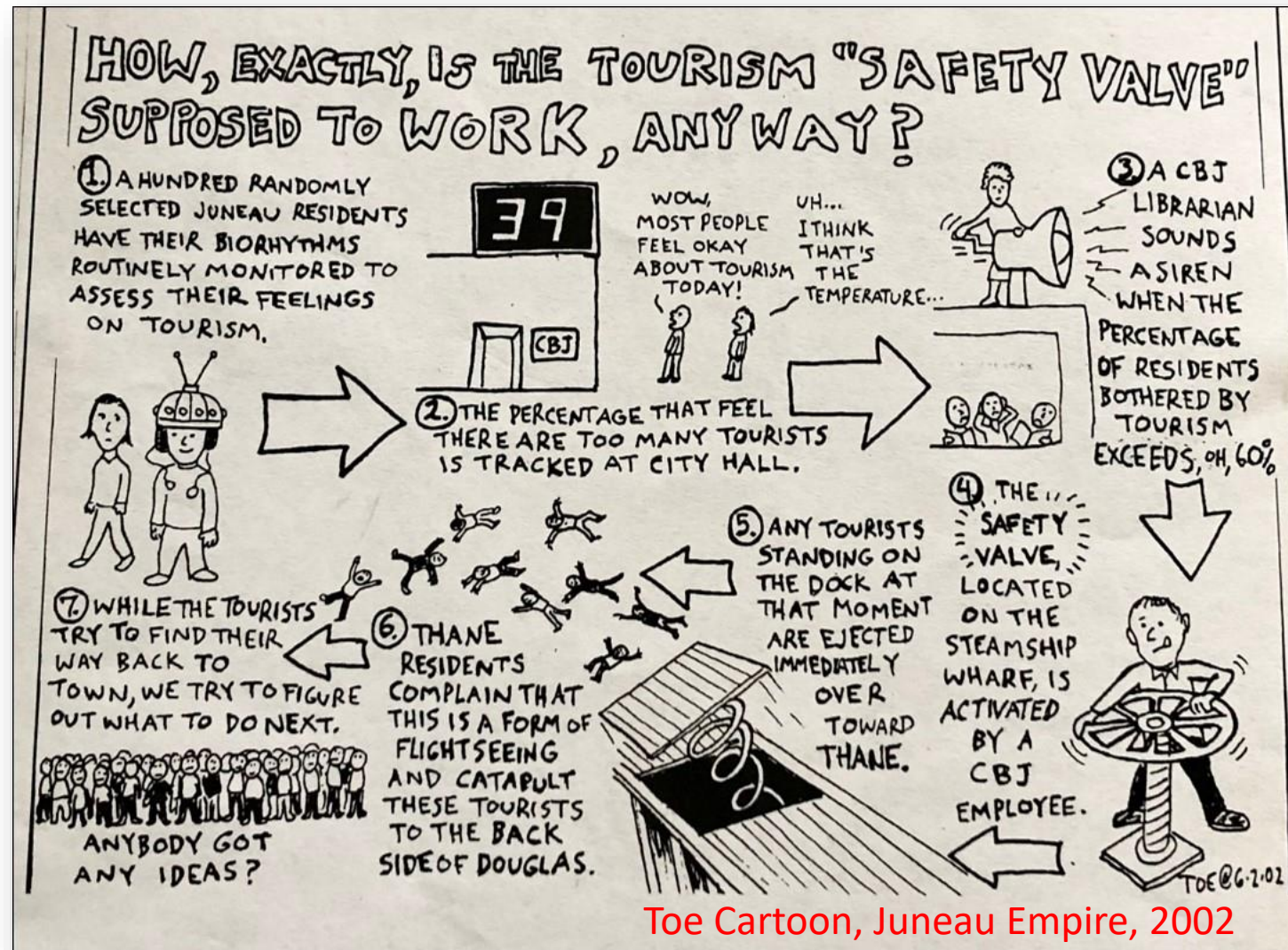


McDowell Group, 2016



- Local economic benefits of tourism are derived from the activities passengers do on shore
 - Tours, shopping, dining out, ancillary benefits
- The goal of any destination is to maximize local economic benefits while minimizing negative impacts
- A near-term public process on shore excursion disbursement and longer-term regional strategy should focus on several key principles:
 - Minimizing resident impacts
 - Recognizing that all tourism management decisions are interconnected
 - Articulating community goals and priorities (starting with the VITF recommendations)
 - Promoting a managed and sustainable industry locally and regionally
 - Maximizing local employment, business ownership, and economic activity
 - Industry-buy in and incentives to reward “good neighbor” operators

Commercial Use, Shore Excursions, Public Experience



Toe Cartoon, Juneau Empire, 2002

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: SUPPORT 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 Gladyszewski, 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

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

**VISITOR INDUSTRY TASK FORCE
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

January 21, 2020 12:05 PM
City Hall, Assembly Chambers

I. CALL TO ORDER/ROLL CALL

II. APPROVAL OF AGENDA

III. APPROVAL OF MINUTES

IV. MEETING GOAL

Regarding the persistent idea of a restriction on the number of visitors:

- A. Consider preliminary legal issues whether a restriction on the number of visitors arriving in Juneau could be enforceable and practical.
- B. Discuss pros and cons of visitor restriction concepts.
- C. Consider whether changes to ship scheduling (daily arrivals and departures) might address community concerns with impacts.
- D. What are the pros and cons of CBJ becoming involved in dock scheduling?

V. PRESENTATION BY CBJ LAW DEPARTMENT AND MANAGER

- A. Robert Palmer, City Attorney
- B. Rorie Watt, City Manager

VI. DISCUSSION

VII. UPCOMING MEETINGS

- A. Public input sessions reschedule January 16 meeting, cancelled due to weather.
- B. Future meeting topics
 - i. February 4, 2020 – Long Range Waterfront Plan
 - ii. February 18, 2020 – Committee Report and Direction for Staff

VIII. ADJOURNMENT

Note: Agenda packets are available to review online at <https://juneau.org>

ADA accommodations available upon request: Please contact the City Clerk's office 72 hours prior to any meeting so arrangements can be made to have a sign language interpreter present or an audiotape of the Assembly's agenda made available. The Clerk's office telephone number is 586-5278, TDD 586-5351, email: city.clerk@juneau.org



DATE: January 21, 2020
TO: Chair Triem, Visitor Industry Task Force
FROM: Robert Palmer, Municipal Attorney
SUBJECT: Preliminary Legal Issues with Managing Tourism

I have been asked to provide preliminary legal guidance for managing tourism from cruise ships. This topic can be legally complicated. I am not aware of any definitive legal authority that would be helpful at this stage because the overarching policy visions need to mature. At this stage, the VITF should focus on the desired policy visions and how to achieve those policy visions, while having awareness of some potential legal sideboards. The following legal issues may arise depending on what policy and regulation, if any, the CBJ ultimately wants to impose.

1. **U.S. Constitutional Right to Travel.** The Privileges and Immunities Clause limits laws that treat out-of-state citizens differently than in-state citizens. For example, there is a right to travel from one state to another and to use the instruments of interstate commerce, which includes “the right to be treated as a welcome visitor rather than an unfriendly alien when temporarily present in the second state.” *Saenz v. Roe*, 526 U.S. 489, 500 (1999).
2. **U.S. Constitution Commerce Clause.** Generally, laws that unduly burden interstate commerce are unconstitutional, which require courts to balance interests.
3. **U.S. Constitution Tonnage Clause.** See the recently settled *CLIAA v. CBJ* litigation. The Tonnage Clause limits fees imposed on vessels for entering a port and how those fees can be expended.
4. **U.S. Constitution Contract Clause.** The Contract Clause can limit laws that unreasonably and substantially impair existing contractual rights.
5. **Takings/Inverse Condemnation.** Private property shall not be taken or damaged for public use, without just compensation.
6. **Public Trust Doctrine.** The doctrine protects navigation on, commerce in, fishing on, and access to navigable water, but the rights protected are not absolute.
7. **Level of scrutiny.** All regulations must at least satisfy rational basis scrutiny (i.e. is the regulation rationally related to any governmental interest). Some regulations may need to satisfy a heightened scrutiny, which could require the CBJ to prove the regulation is

narrowly tailored to promote a compelling governmental interest and the regulation is the least restrictive means to vindicate that interest.

8. **Interference/Preemption of Aviation and Maritime Matters.** The federal government has primary jurisdiction of aviation (FAA) and maritime (USCG) matters. The FAA's jurisdiction is almost exclusive, and local governments have limited authority to regulate aviation matters. The CBJ has broader authority to regulate maritime matters especially if the local regulation does not conflict with a federal law.
9. **16B Revenue Bond limitations.** The 2015 revenue bonds include provisions that prohibit the CBJ from reducing the \$3 Port Development Fee or undertaking actions that put the debt service payments in jeopardy. The bonds are scheduled to be paid off in 2034, but the CBJ can prepay the bonds as early as March 1, 2026.
10. **CBJ as property owner versus CBJ as regulator.** The CBJ has broad authority to manage its property (i.e. CBJ docks, tidelands, trails). When the CBJ acts as a regulator of non-CBJ property (i.e. private docks, State tidelands), the CBJ has substantial authority but it is subject to a variety of other laws (i.e. Takings, Interference/Preemption). For example, the CBJ regulates commercial buses (CBJC 20.40) and land use/development (CBJC Title 49).

As the Visitor Industry Task Force and the Assembly consider the preliminary legal sideboards, the following policies may be worthy of further discussion:

- A. **Voluntary Action.** The recent cruise ship litigation settlement requires an annual consultation. As community concerns arise, the cruise ship companies may be willing to voluntarily adjust their practices, which would eliminate a substantial amount of legal risks then if the CBJ simply imposes regulations.
- B. **Prepay the 16B Revenue Bonds.** The CBJ could consider satisfying the debt service from the 16B revenue bonds at the earliest opportunity (\$12.8M on March 1, 2026), which would give the CBJ more discretion regarding how the CBJ docks are used.
- C. **Articulate Specific Governmental Interests.** Because of the potential constitutional rights implicated with restricting the number of cruise ship passengers, the CBJ could consider developing, measuring, and tracking indicators of tourism to establish specific governmental interests. Such indicators would be helpful to justify and defend any cruise ship or passenger restrictions or carrying capacities.
- D. **Proprietary Control of Docks.** The CBJ currently owns two of the four cruise ship docks. If the CBJ wants to have more control of when and how long ships are in port, the CBJ could consider purchasing the two private docks and having ownership control of any new docks.
- E. **Infrastructure and Geographical Limitations.** The size of ships, the location of docks, and the geographical features of Gastineau Channel can indirectly limit cruise ship tourism. Further consultation with the USCG could result in a regulatory scheme that prohibits "anchoring out" if a new dock was constructed, which would indirectly cap cruise ships.

Irene Gallion

From: Irene Gallion
Sent: Thursday, February 2, 2023 2:56 PM
To: Charlie Ford; General Engineering; Dan Bleidorn; Carl Uchytel
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 Uchytel <Carl.Uchytel@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 Uchytel <Carl.Uchytel@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 Uchytel <Carl.Uchytel@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.

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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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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: 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

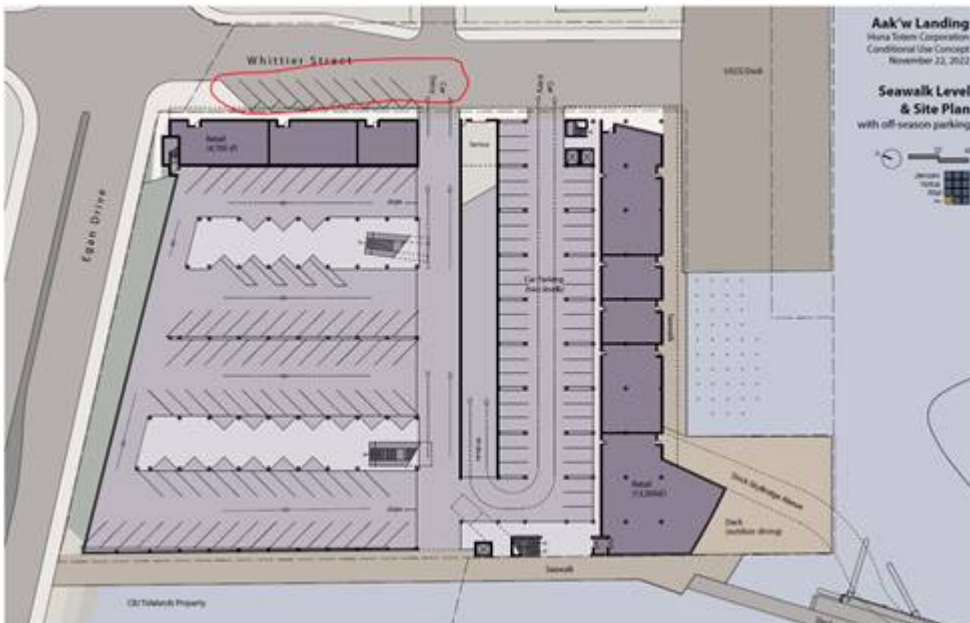
Good Day LCDR Stiles:

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)



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

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



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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,

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

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DOWL HKM
 8388 Commercial Boulevard
 Jacksonville, Florida 32217
 Phone: (904) 760-3333
 Fax: (904) 760-3335

CITY & BOROUGH OF JUNEAU
 188 S. BOWARD STREET
 JUNEAU, ALABAMA 36801

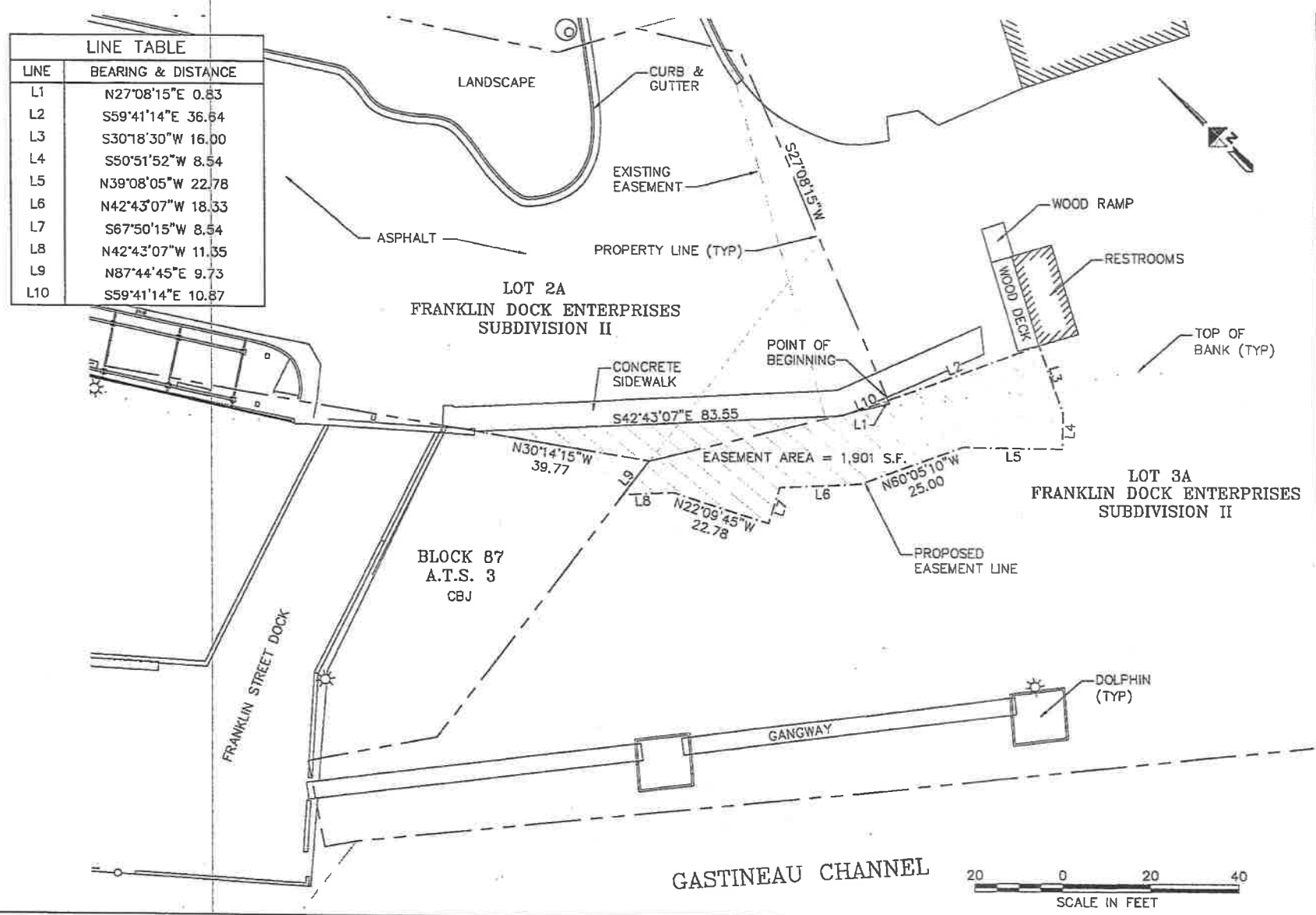
EXHIBIT 'A'
 SEAWALK EASEMENT
 ACROSS LOT 2A AND LOT 3A
 FRANKLIN DOCK ENTERPRISES
 SUBDIVISION II

Revision	By	Date

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

Proj. No. J70502

SHEET
 1 OF 1





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.

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: *Kimberly A. Kiefer*

Name: Kimberly A. Kiefer

Its: City and Borough Manager

GRANTOR:
FRANKLIN DOCK
ENTERPRISES, LLC

By: *Reed Stoops*

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 Riley
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



When recorded, Return to:

**CITY AND BOROUGH OF JUNEAU
ENGINEERING DEPARTMENT
165 SOUTH SEWARD ST.
JUNEAU, AK 99801**





DOWL HKM
4339 Commercial Boulevard
Jackson, MS 39201
Phone: 601-977-2833
Fax: 601-977-2833

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

EXHIBIT 'A'
SEAWALK EASEMENT ACROSS LOT 2A AND LOT 3A FRANKLIN DOCK ENTERPRISES SUBDIVISION II

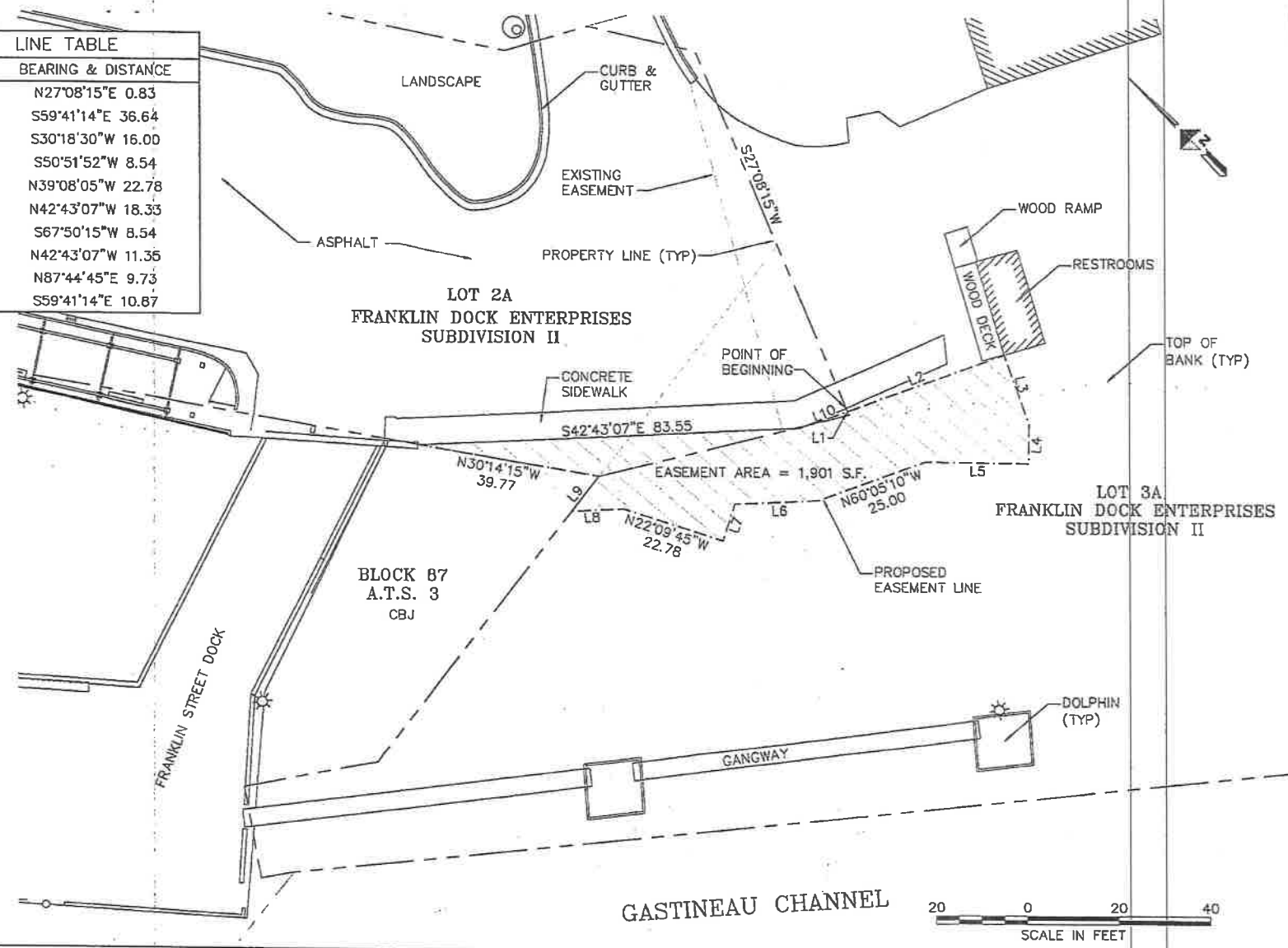
Revision	By	Date

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

Proj. No. J70502

SHEET 1 OF 1

LINE TABLE	
LINE	BEARING & DISTANCE
L1	N27°08'15"E 0.83
L2	S59°41'14"E 36.64
L3	S30°18'30"W 16.00
L4	S50°51'52"W 8.54
L5	N39°08'05"W 22.78
L6	N42°43'07"W 18.33
L7	S67°50'15"W 8.54
L8	N42°43'07"W 11.35
L9	N87°44'45"E 9.73
L10	S59°41'14"E 10.67



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

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Name: Kimberly A. Kiefer

Its: City and Borough Manager

GRANTOR:
**FRANKLIN DOCK
ENTERPRISES, LLC**

By: *Reed Stoops*

Name: Reed Stoops

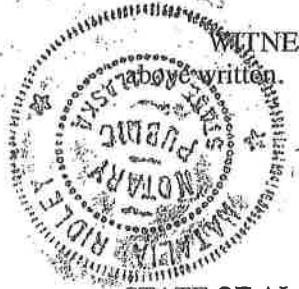
Its: MANAGING MEMBER

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 Riley
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

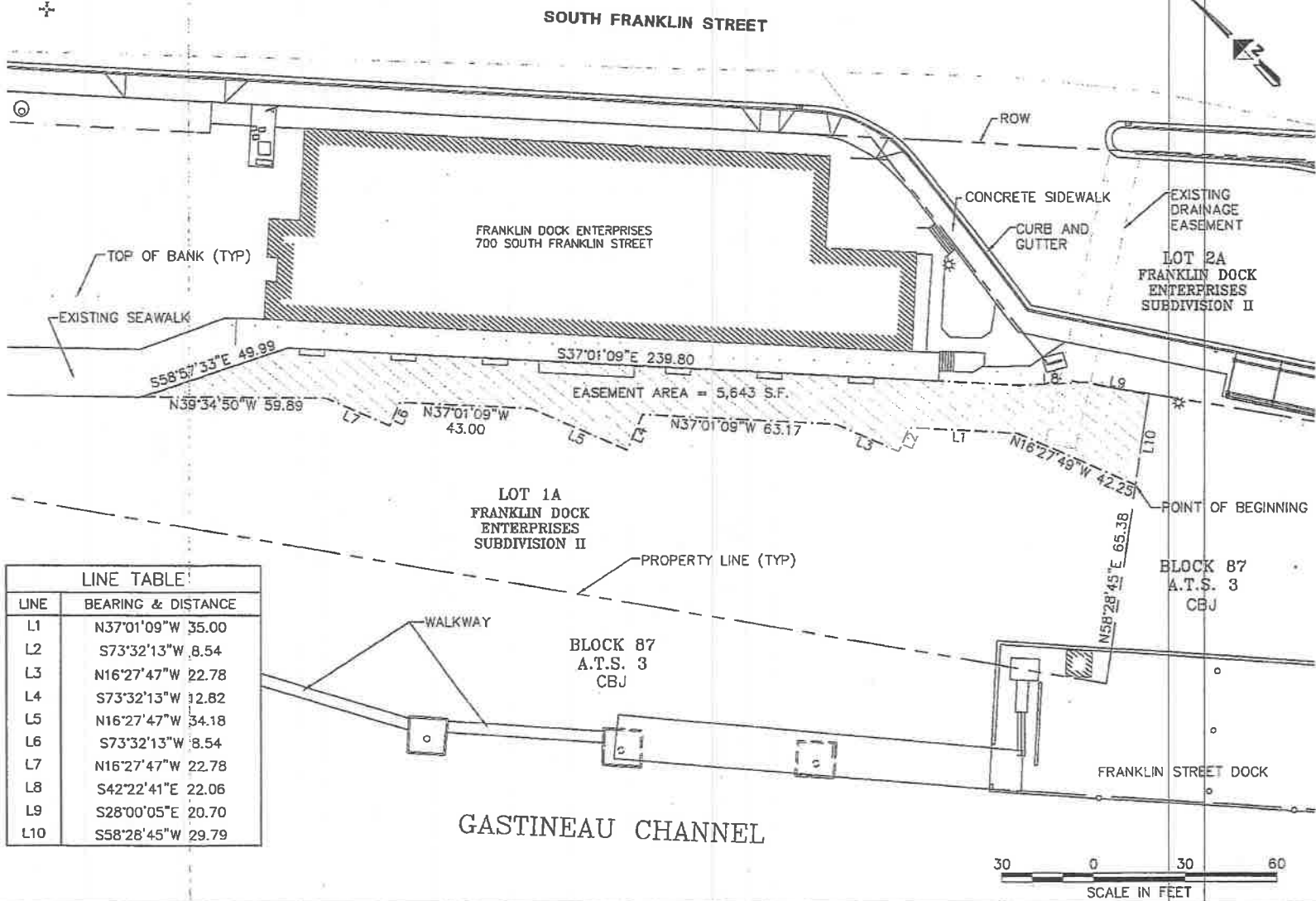
STATE OF ALASKA
OFFICIAL SEAL
Veeraya R. Branum
NOTARY PUBLIC
My Commission Expires: 6-15-2015



When recorded, Return to:

**CITY AND BOROUGH OF JUNEAU
ENGINEERING DEPARTMENT
165 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
 6588 Commercial Boulevard
 Juneau, AK 99801
 PAK (907) 780-3523

CITY & BOROUGH OF JUNEAU
 185 S. BEWARD STREET
 JUNEAU, ALASKA 99801

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

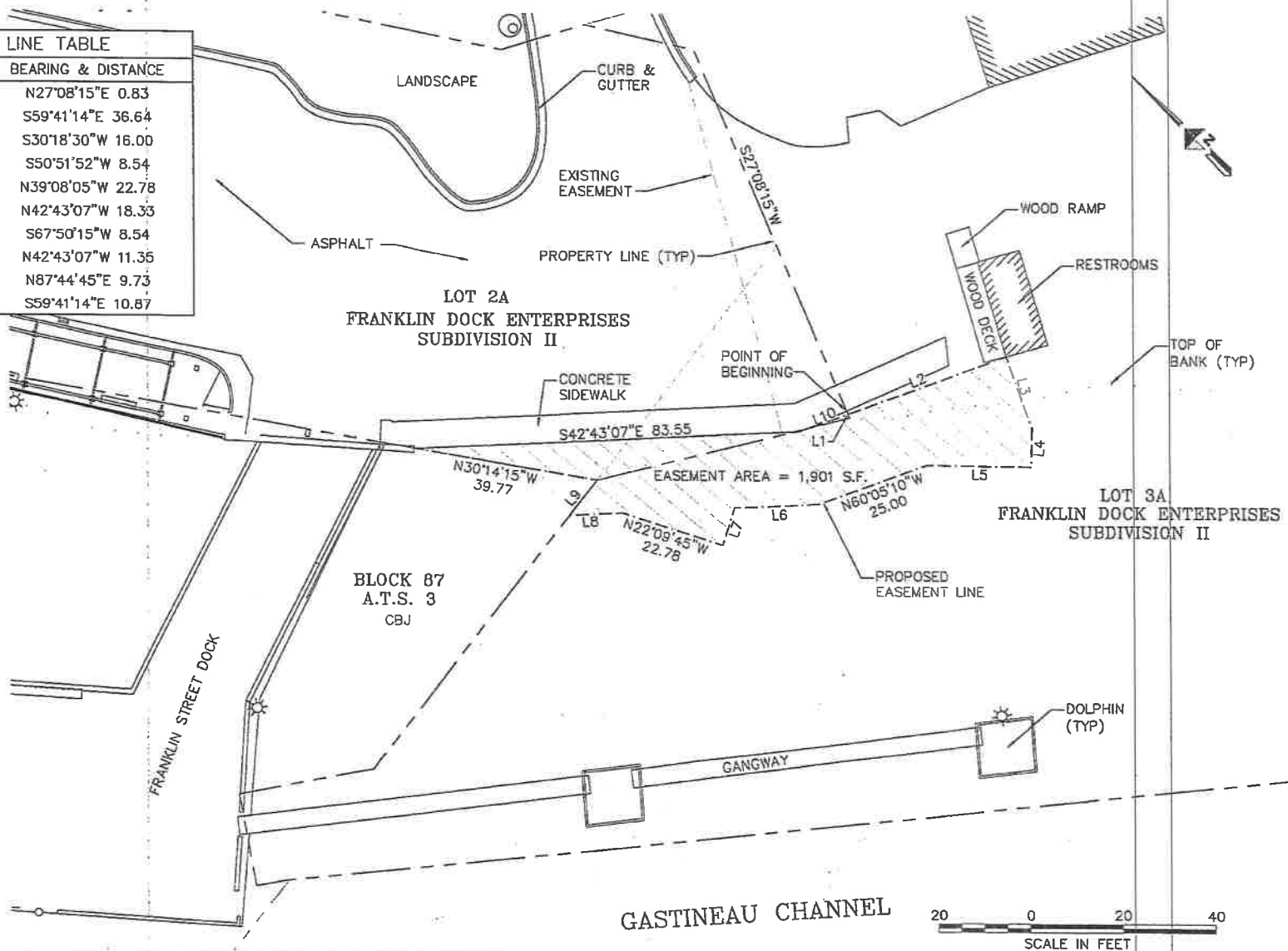
Revision	By	Date

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

Proj. No. J70502
SHEET
1 OF 1



LINE TABLE	
LINE	BEARING & DISTANCE
L1	N27°08'15"E 0.83
L2	S59°41'14"E 36.64
L3	S30°18'30"W 16.00
L4	S50°51'52"W 8.54
L5	N39°08'05"W 22.78
L6	N42°43'07"W 18.33
L7	S67°50'15"W 8.54
L8	N42°43'07"W 11.36
L9	N87°44'45"E 9.73
L10	S59°41'14"E 10.87



DOWL HKM
 6438 Canalway Boulevard
 Suite 100
 Jacksonville, FL 32217-4033
 Phone: (904) 760-3833
 Fax: (904) 760-3833

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

EXHIBIT 'A'
SEAWALK EASEMENT ACROSS LOT 2A AND LOT 3A FRANKLIN DOCK ENTERPRISES SUBDIVISION II

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

Proj. No. J70502
SHEET 1 OF 1



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.

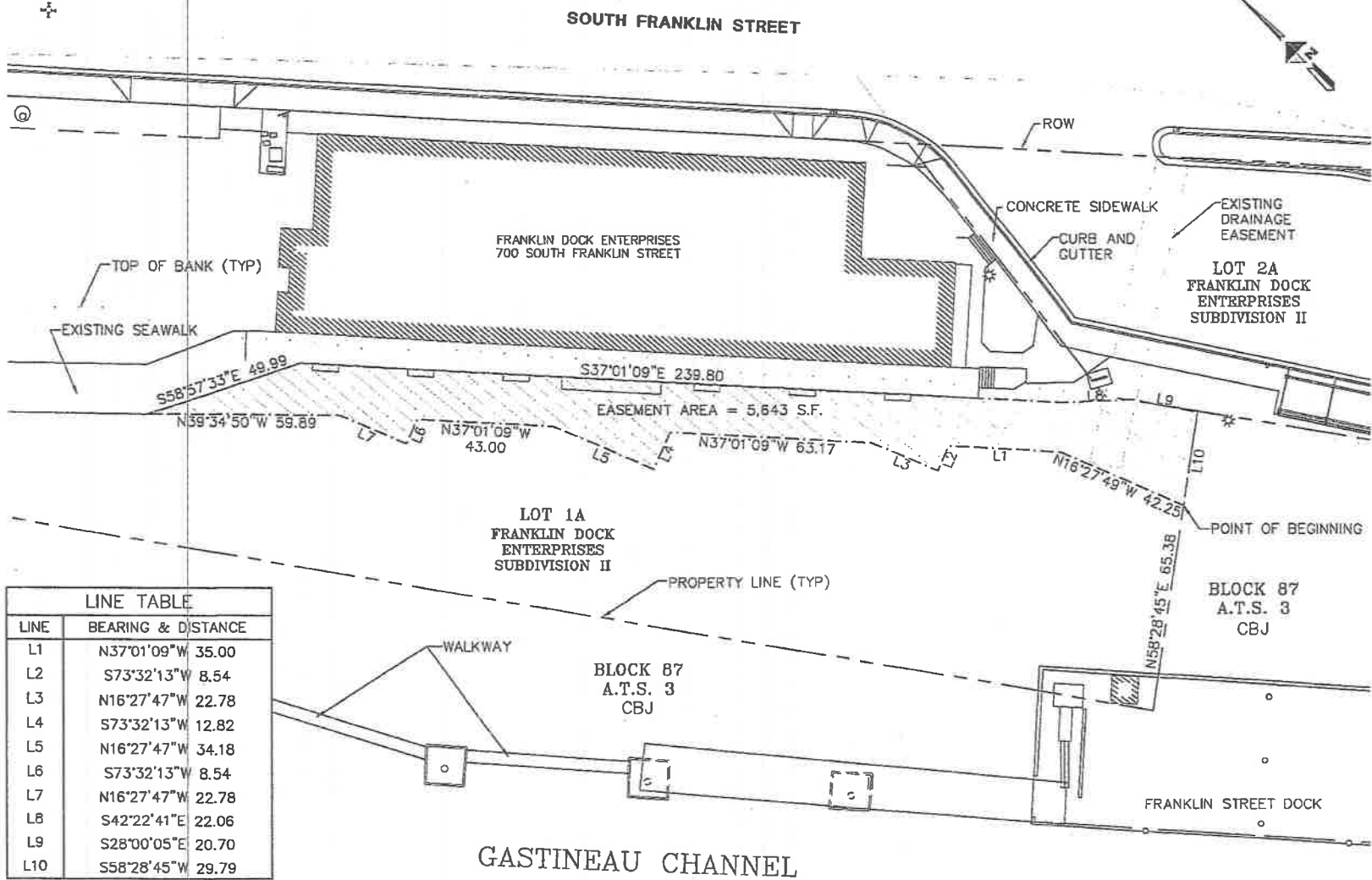
The purpose of this easement is to grant CBJ, its agents and assigns, the right to access, design, install, construct, maintain, and make improvements to a seawalk and utilities along the waterfront on Lot 1A, 2A, and 3A for public uses and purposes. This easement includes, but is not limited to, all 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.

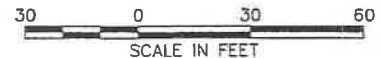
GRANTEE agrees to maintain the easement and all improvements in good and safe repair and condition and shall indemnify, defend, and hold harmless GRANTOR from and against all claims, actions, liabilities, damages, and expenses arising out of the GRANTEE'S and/or the public's use of the easement, except 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.



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DOWL HKM
 6388 Commercial Boulevard
 Juneau, AK 99801
 JUNEAU, ALASKA 99801
 FAX (907) 780-3223

CITY & BOROUGH OF JUNEAU
 185 S. BUSHARD 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

DOWL HKM
 2388 Commercial Boulevard
 Jersey, AK 99571
 PHN (907) 742-3233

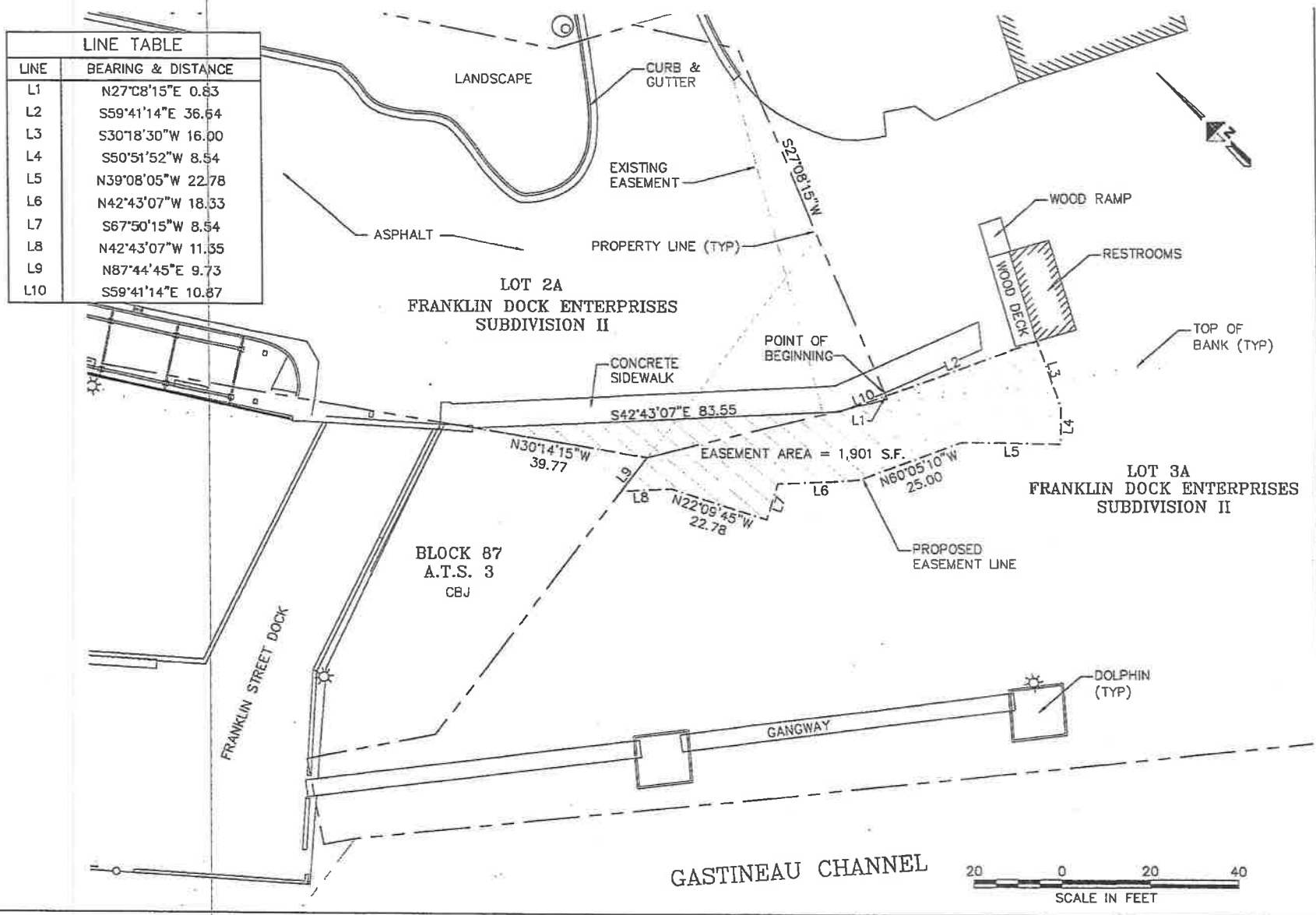
CITY & BOROUGH OF JUNEAU
 195 S. EDWARD STREET
 JUNEAU, ALASKA 99801

EXHIBIT 'A'
SEAWALK EASEMENT ACROSS LOT 2A AND LOT 3A FRANKLIN DOCK ENTERPRISES SUBDIVISION II

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

Proj. No. J70502

SHEET 1 OF 1



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L8	N42°43'07"W 11.35
L9	N87°44'45"E 9.73
L10	S59°41'14"E 10.87

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 Coast 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 Coast 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








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>

Drop-Off Summary

Your files have been sent successfully.
They will expire in 14 days.


Filename	Size	SHA-256 Checksum	Description
 01a Application paperwork.pdf	4.6 MB	0DEB30BA51F77D5B98D159CE92347A4D 4E4345854BE68BDF0A285F910EDDE12	
 01b1 Summary Revised.pdf	4.1 MB	C66DF760ACA84E9A2AD10A0A61FA8108 CCE08915BF2FBCA60A31DA91753D0712	
 01c1 Site Plan Revised.pdf	7.6 MB	62AC581B90FC02A9F453FAE865F041EA F154E34703160620469EC6492583B376	
 01d1 Renderings Revised.pdf	20.6 MB	D110508820A889DD5771812957B4D8A E680C774A3A7E9E12E931946EC910052	
 ABN_USE23-03_FINAL .pdf	232.9 KB	70986E5889C18EC9E9163CC9C8034CD3 15D3CF4B7BE7AC038BB262D1C00FE1FA	

5 files

From:
Irene Gallion <Irene.Gallion@juneau.gov> City & Borough of Juneau from cdd-ig2-w10.cbj.local on 2023-06-21 15:52

To:
jay.t.menze@uscg.mil <jay.t.menze@uscg.mil>

Comments:
Link will expire in 14 days.

i To send the files to someone else, send them this link , or else the Claim ID & Passcode:

```
https://fileshare.ci.juneau.ak.us/pickup.php?claimID=F53gnezxHXKPoHs>  
Claim ID: F53gnezxHXKPoHsX  
Claim Passcode: 2j4qsJwRavvahjMR
```

None of the files has been picked-up yet.

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

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 waived 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



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>

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

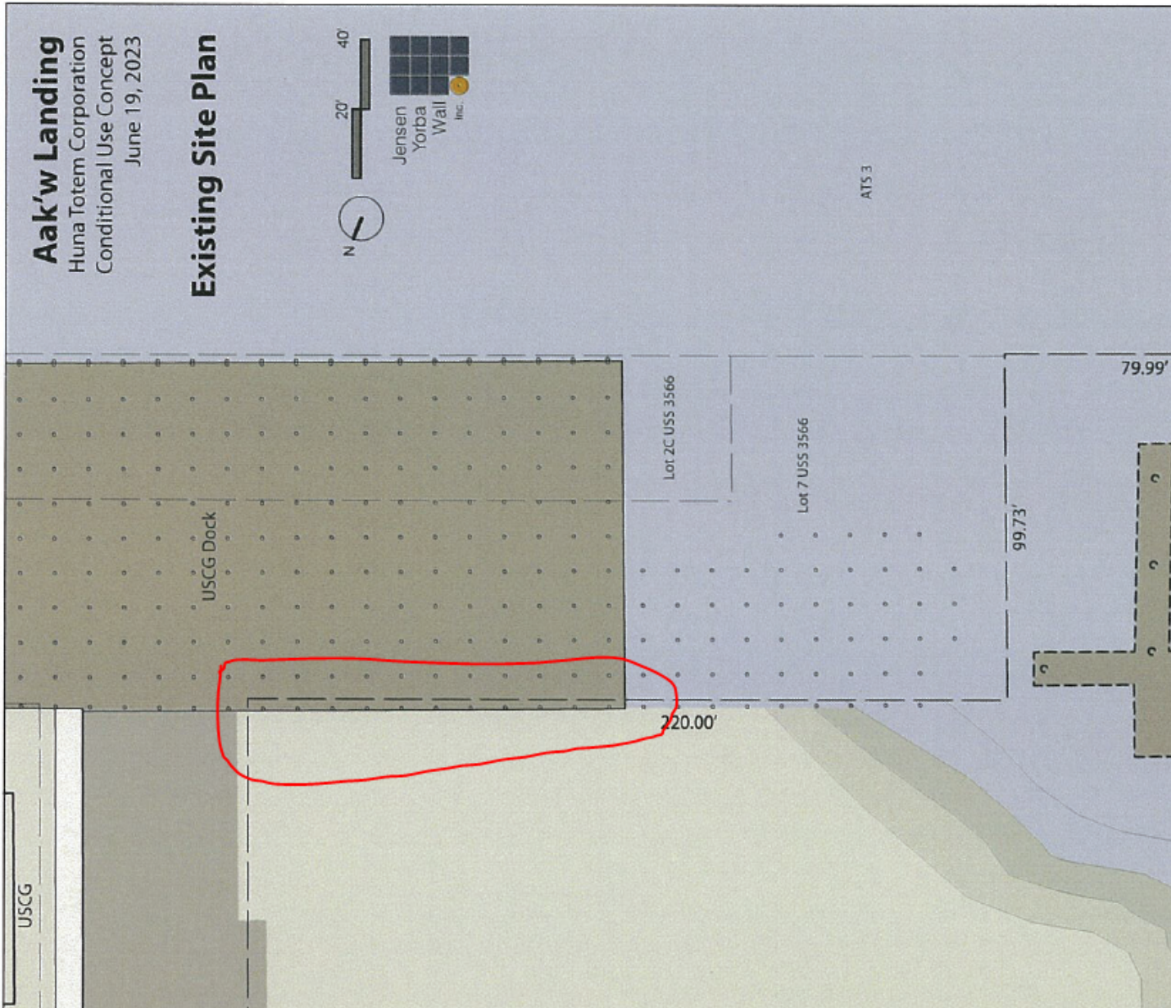
Hi Fred and Corey,

Hoping to get the staff report wrapped up today for Admin, hoping to get a quick response on these issues if able. Thanks!

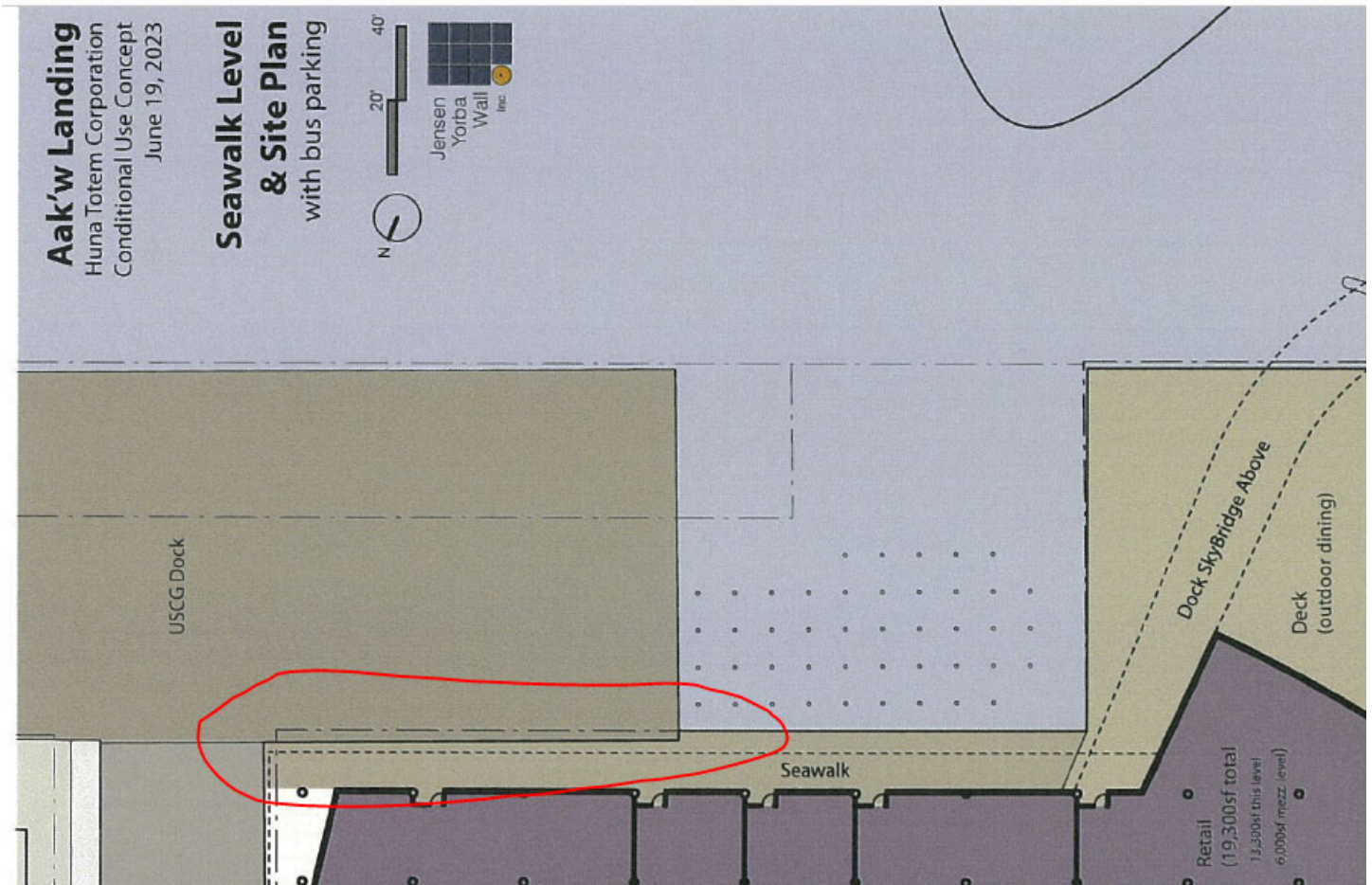
I received this comment from the Coast Guard:

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

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

You don't often get email from scott.ciambor@juneau.gov. [Learn why this is important](#)

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

Some people who received this message don't often get email from scott.ciambor@juneau.gov. [Learn why this is important](#)

CAUTION: This email originated from outside the State of Alaska mail system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

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



(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 Uchytel/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:

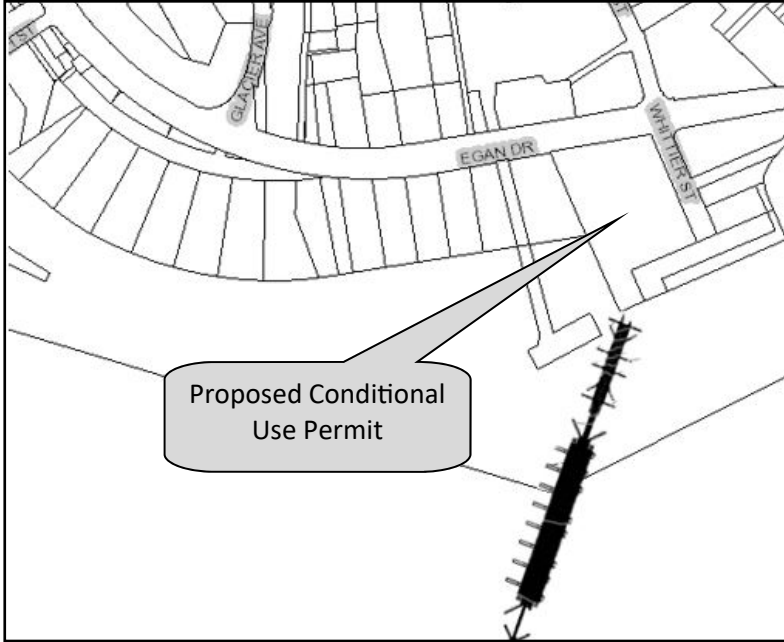
1. Docks & Harbors requests a navigability study be conducted to ensure the alignment of the proposed HTC dock does not impede access to the AS/CT Docks or to the USCG/NOAA Docks. The study should also evaluate any unreasonable impact to larger vessels (i.e. fuel/material barges) transiting Gastineau 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.

Invitation to Comment

On a proposed Conditional Use Permit at the Southwest corner of Egan Drive and Whittier Street (subport).



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>

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)...











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

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



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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

3.3 REA B: SUBPORT
A

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

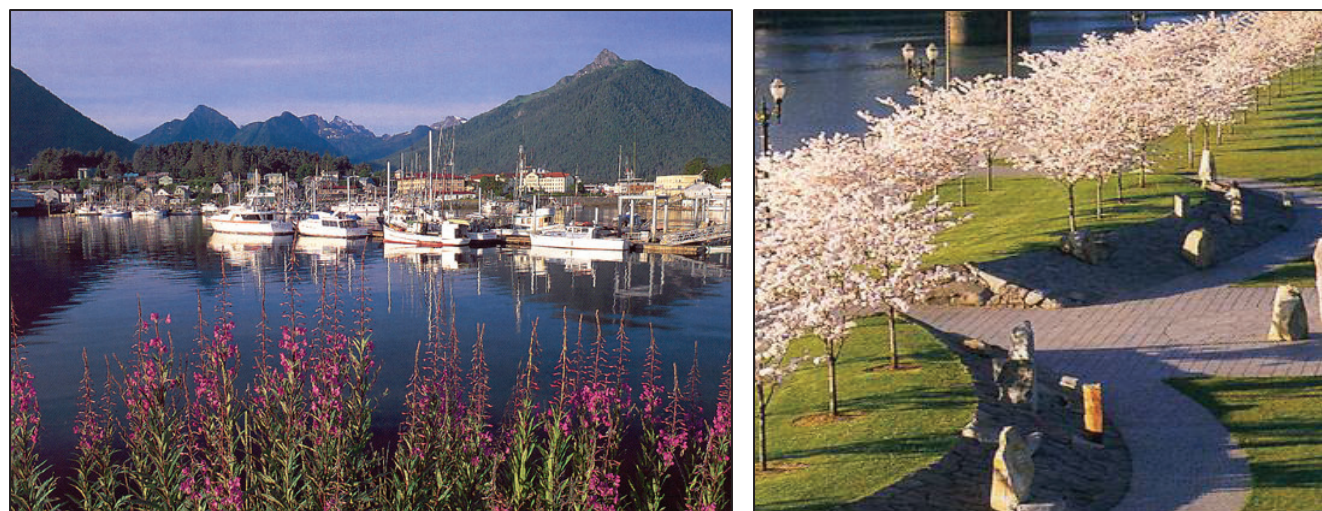


Figure 33: Area B (Overall) 2025 Concept Plan



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:

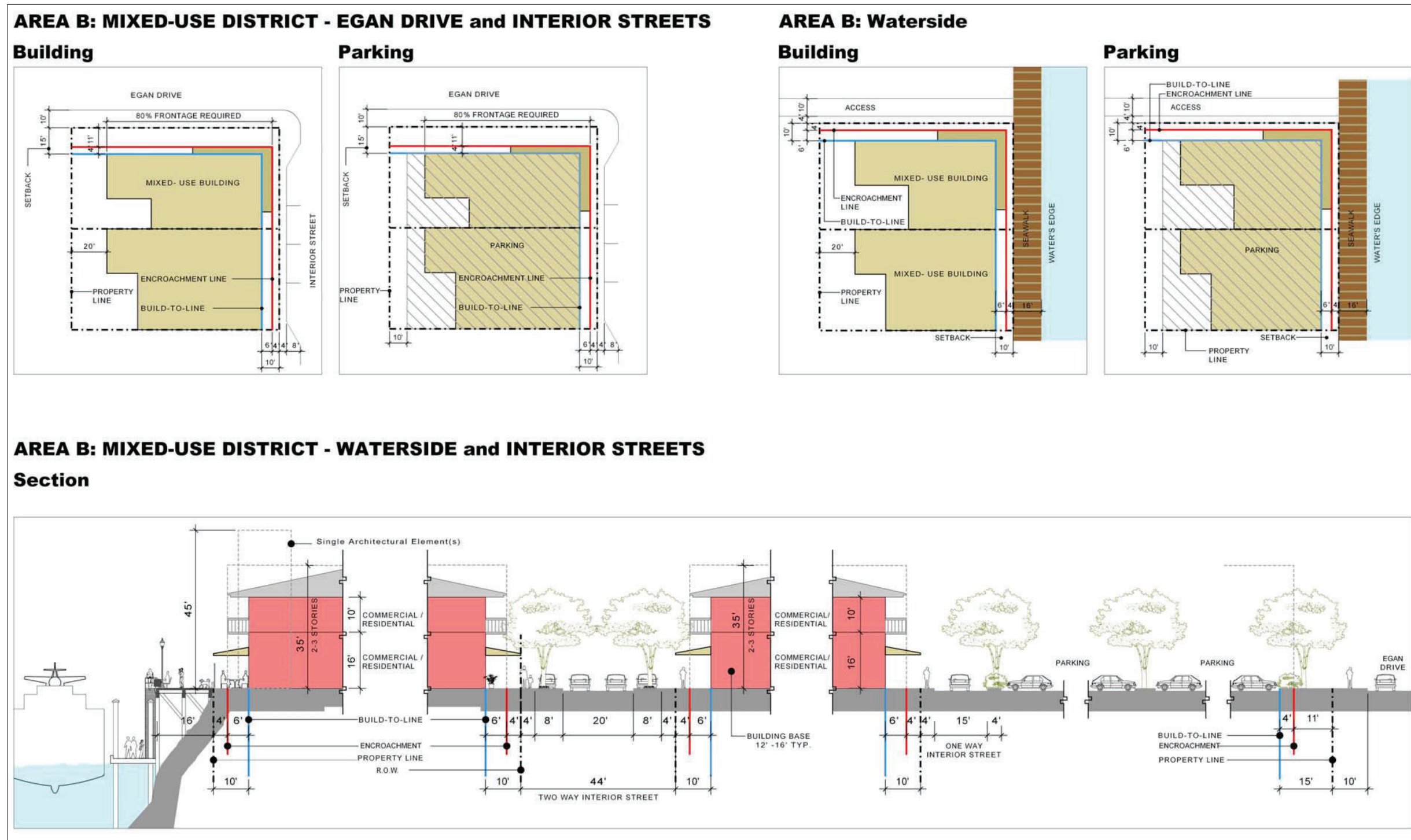
- **Site and Structures – Mixed-Use District.** If possible, incorporate a portion of the Subport’s existing warehouse building and reuse timber components.
- **Site and Structures – Gold Creek Park.** Park should be developed with a series of all weather structures designed in keeping with Juneau’s 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)

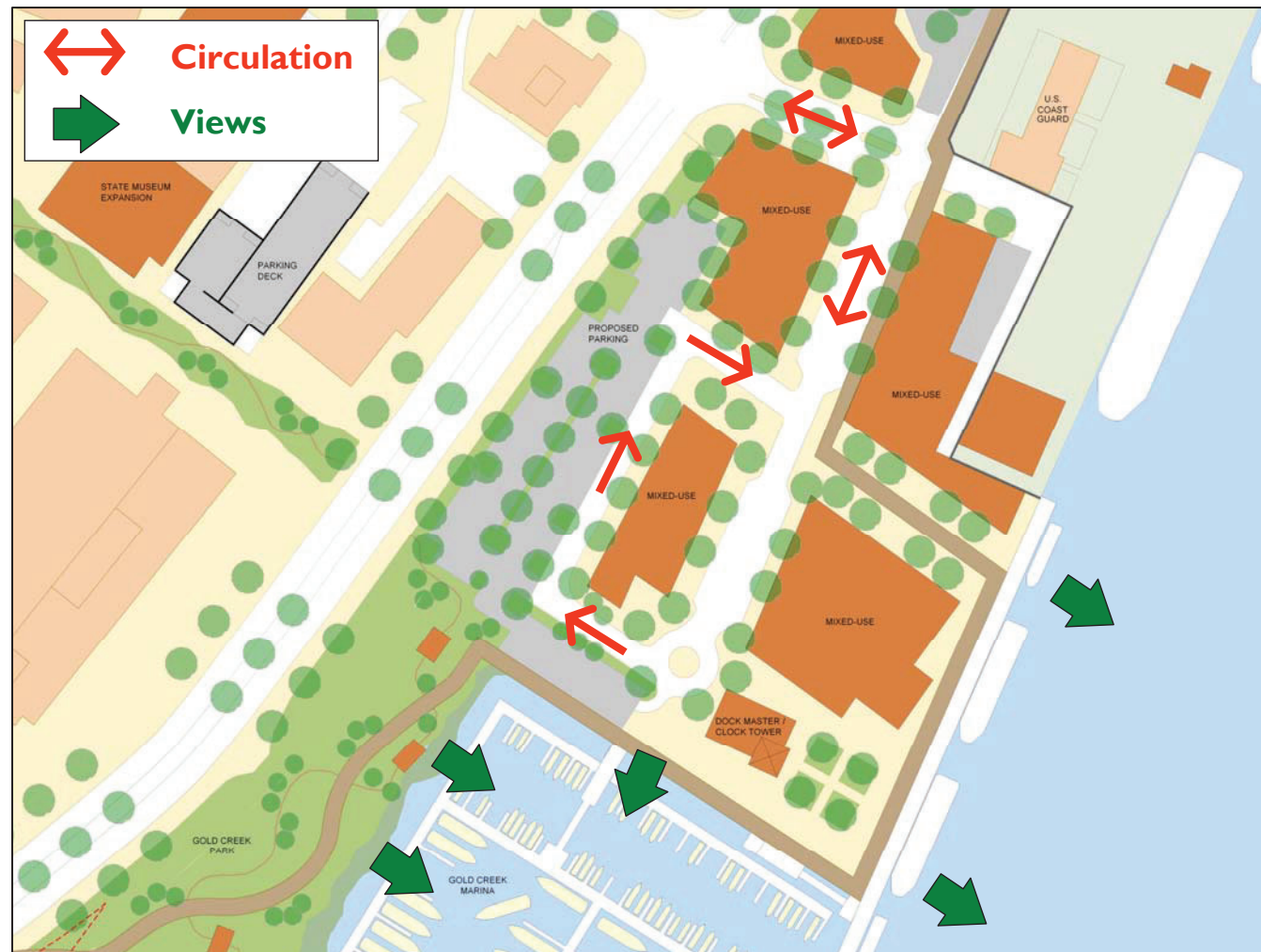


FIGURE 34: SUGGESTED DESIGN GUIDELINES, AREA B



- **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 REA C: DOWNTOWN A

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 city's 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 water's 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 modifications 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.