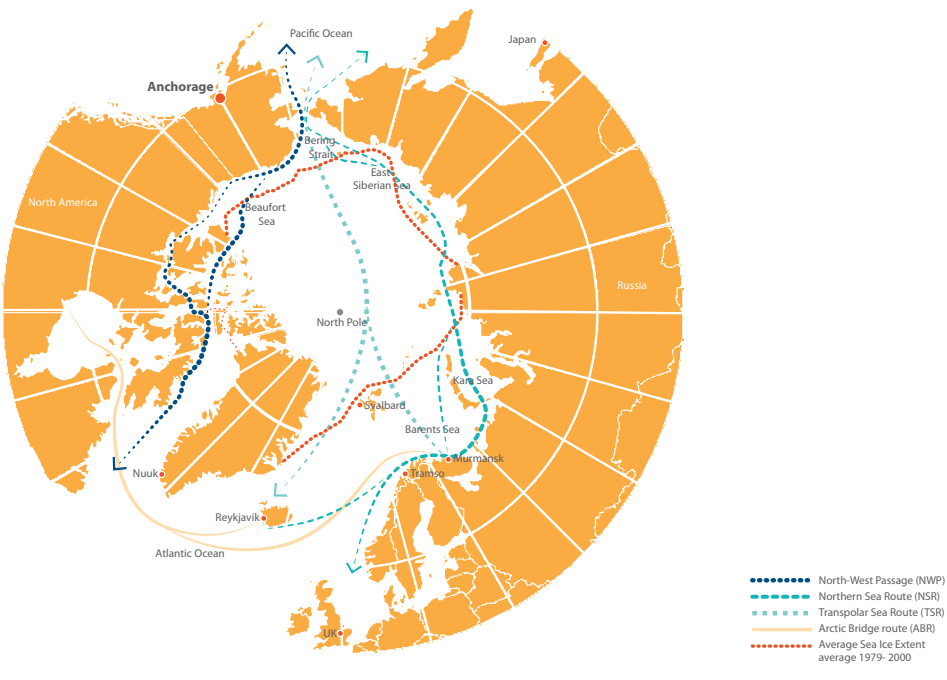


## SITE ANALYSIS

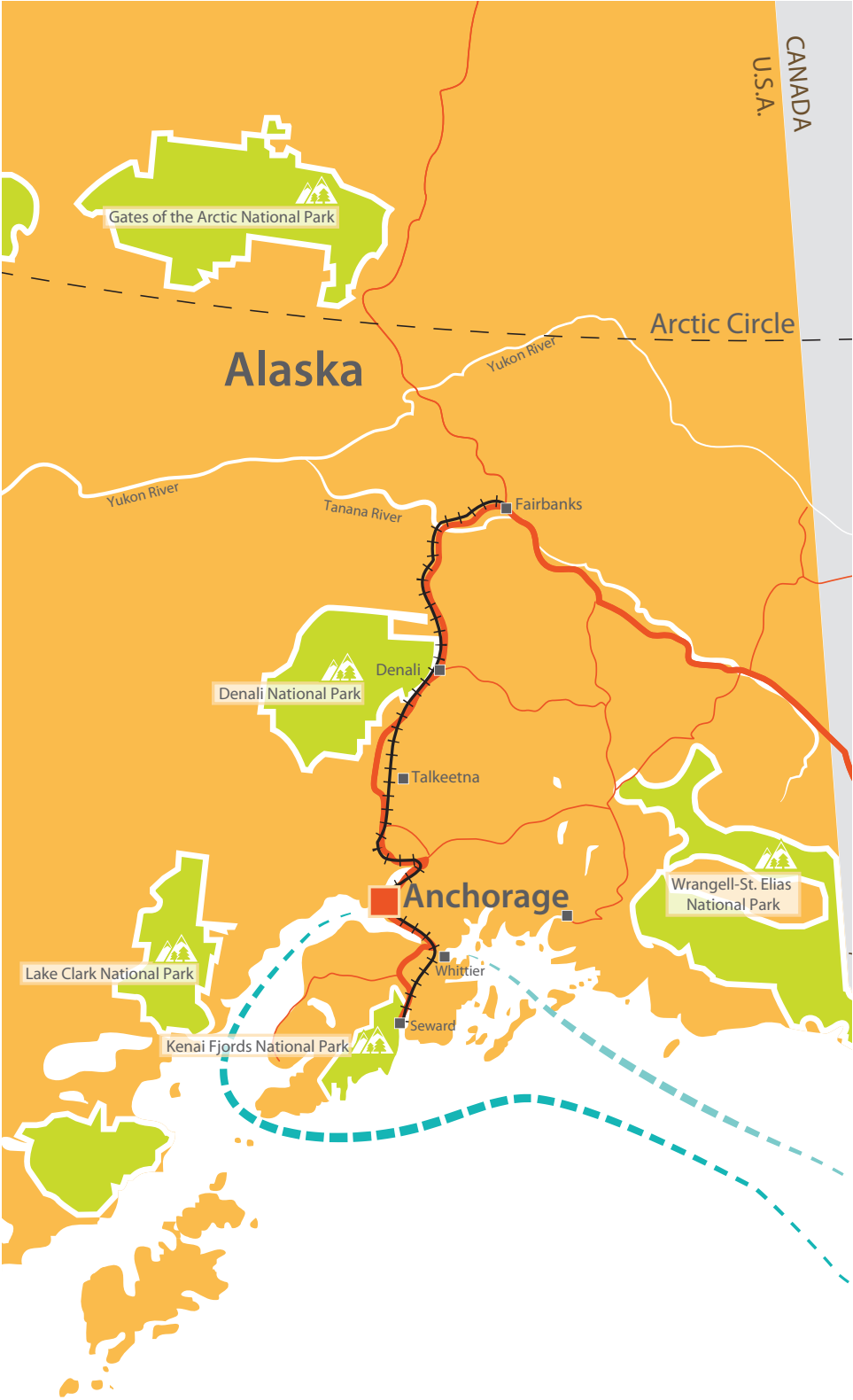
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Alaska Railroad route and Connecting Carriers



Arctic Ocean Routes



Alaska Tourism Mobility & National Parks

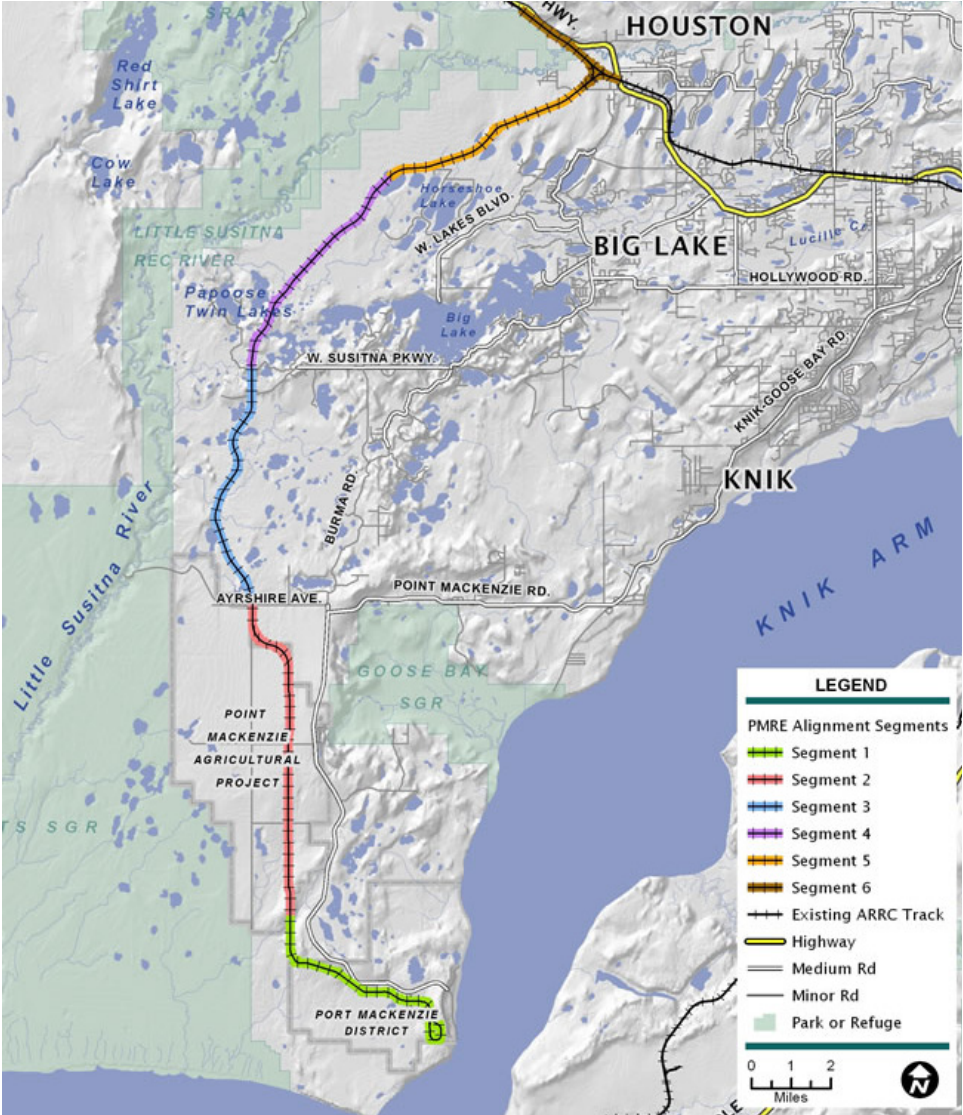


International Flights from Anchorage

Anchorage plays a pivotal role in Alaskan economy, situated on the primary highway and rail corridor for the state, and being the location for the Port of Anchorage, where the bulk of the material goods serving the state's economy arrive. Anchorage is also a critical link in the international air transport network, being particularly important for air cargo routes serving North America, the Pacific Rim, and northern Europe. As Arctic shipping routes open up in the future, Alaska and Anchorage will likely take on increased significance in the global economy.

Currently Anchorage lies along the primary route for tour groups between the ports of Seward and Whittier and the Alaskan interior, but it does not capture as much of the tourism trade as it potentially could. With careful redevelopment along the waterfront Anchorage has the potential to transform itself into a more desirable arrival point for Alaska as well as a destination unto itself.

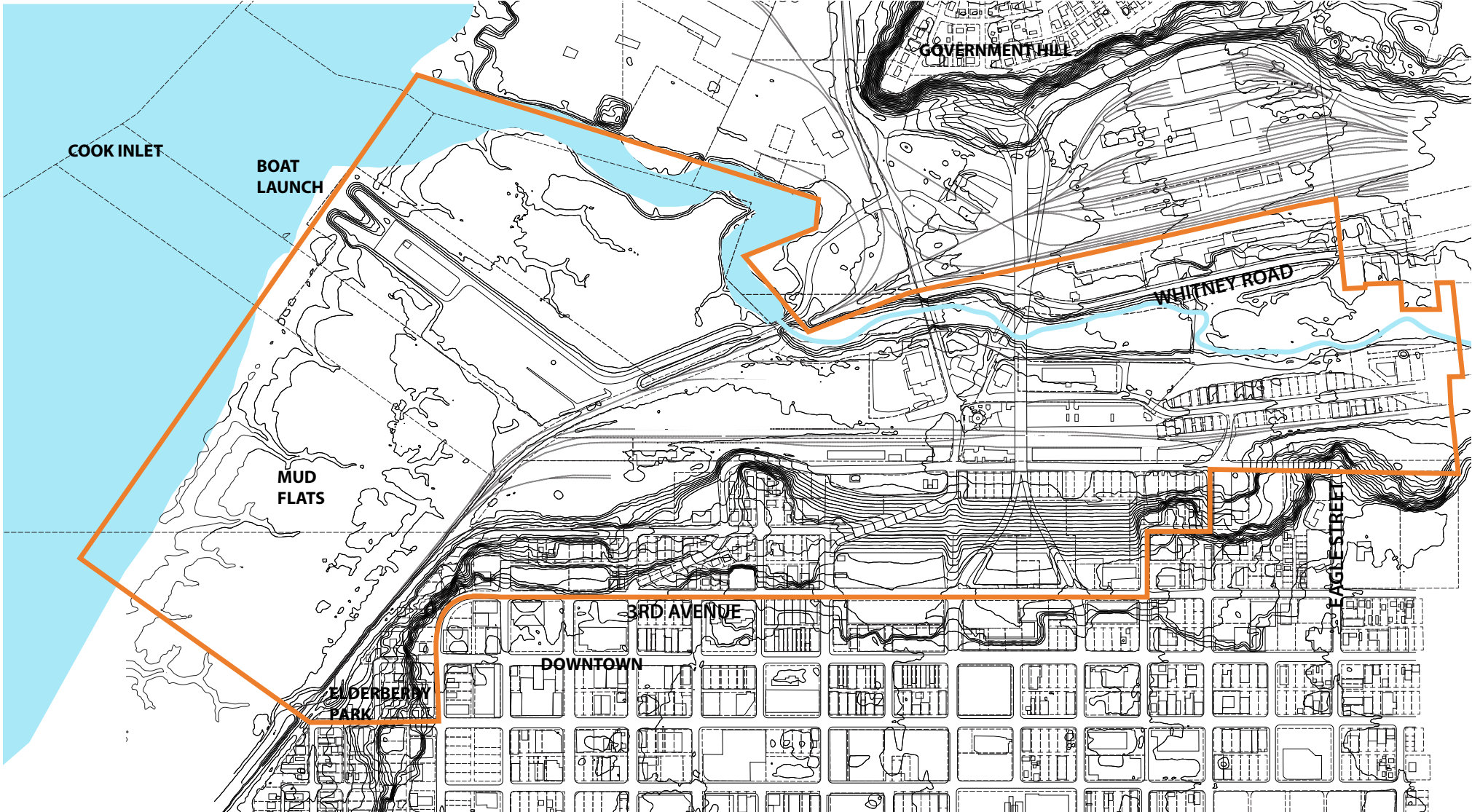




Planned Transportation Projects

**Future Transportation Projects**

Anchorage and the Ship Creek site are critical elements to the rail, highway and shipping network for the state of Alaska and they have historically been and will remain the primary entry point to the Alaskan interior. As planned transportation projects move forward this position will be further strengthened by the expansion of the highway system, with the potential of the Knik Arm Bridge linking Anchorage more directly with the MatSu Valley and creating a more direct land route to Fairbanks. In order to prepare for these changes the transportation infrastructure in and around Ship Creek must be modernized to allow for continued and improved port and rail operations.

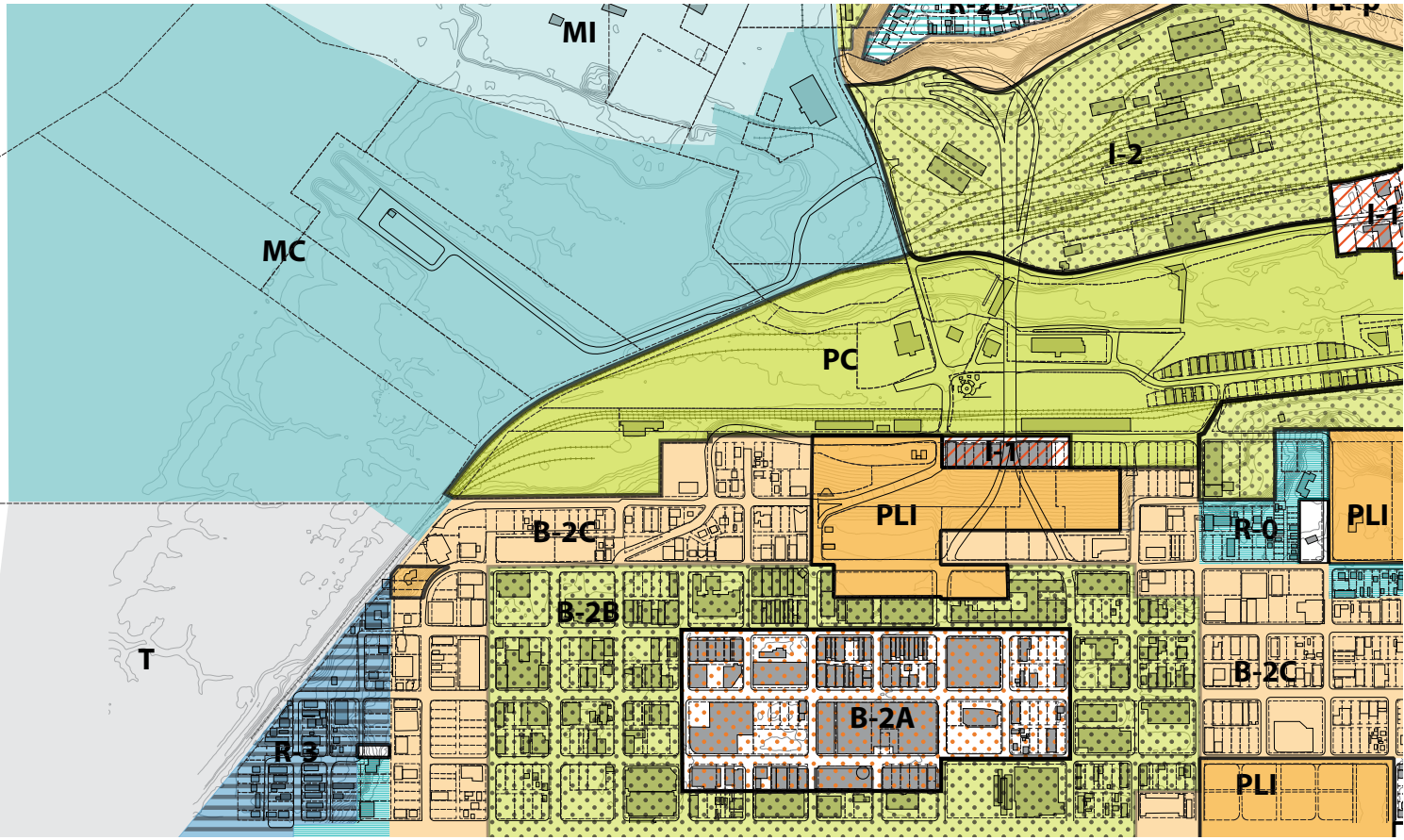
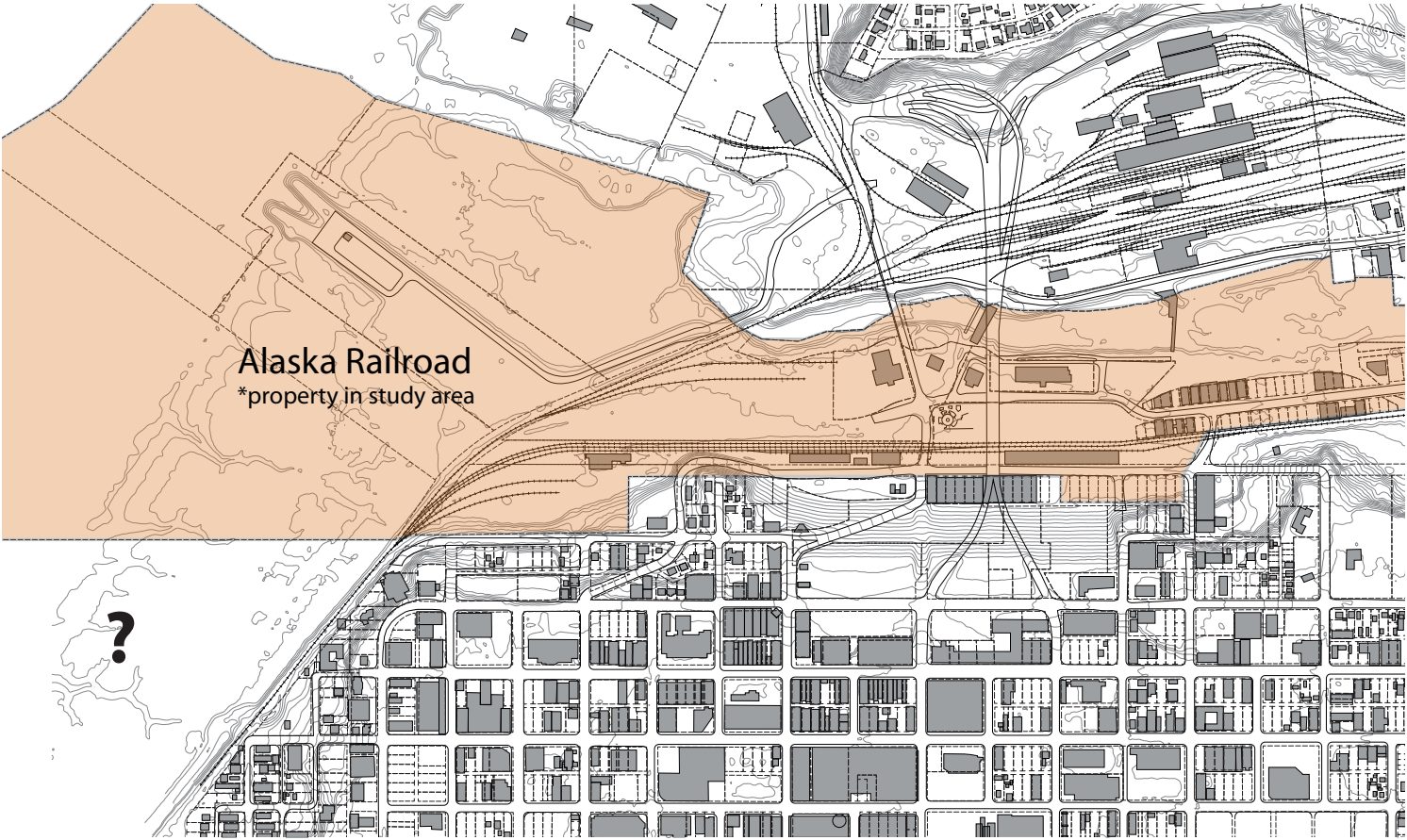


Framework Plan Study Area

**Framework Plan Study Area**

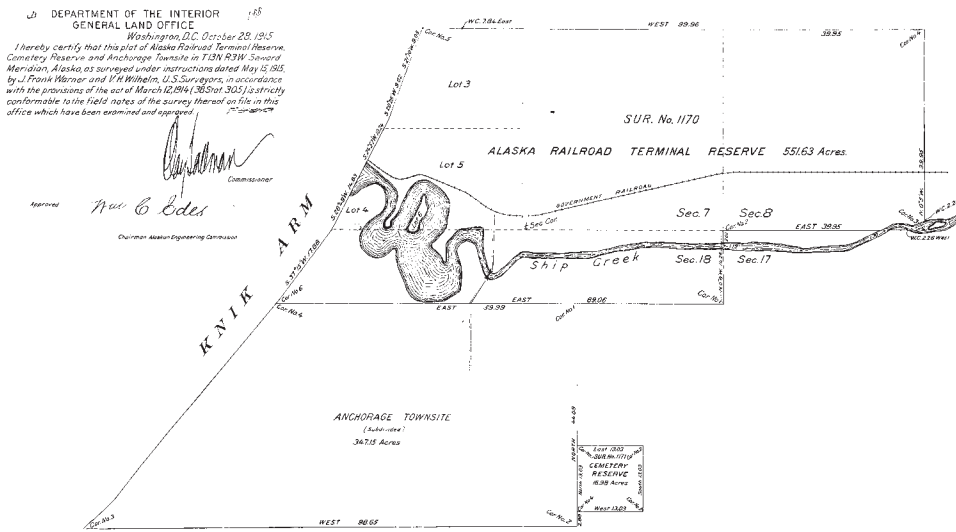
The area studied for redevelopment in this study is primarily land in the Ship Creek valley that is owned by the Alaska Railroad Corporation. The area extends in the east-west direction from the Knik Arm Dam to the boat launch on Cook Inlet. The northern boundary is the north bank of Ship Creek on the western end and the southern edge of the rail yards on the eastern end. The southern boundary of the study area is the approximate edge of downtown along 3rd Avenue, although most of the redevelopment is proposed in the bottom of the valley. The mud flats are also included in the study area, from Ship Creek to Elderberry Park.





Property

The Alaska Railroad Corporation owns almost all of the land covered by this plan. There are some privately owned sites (parking lots) in the transition area between downtown and the valley floor on 2nd and 3rd Avenues identified for future redevelopment. The ownership of the mud flats south of 2nd Avenue and west of the rail line is undetermined at this point.

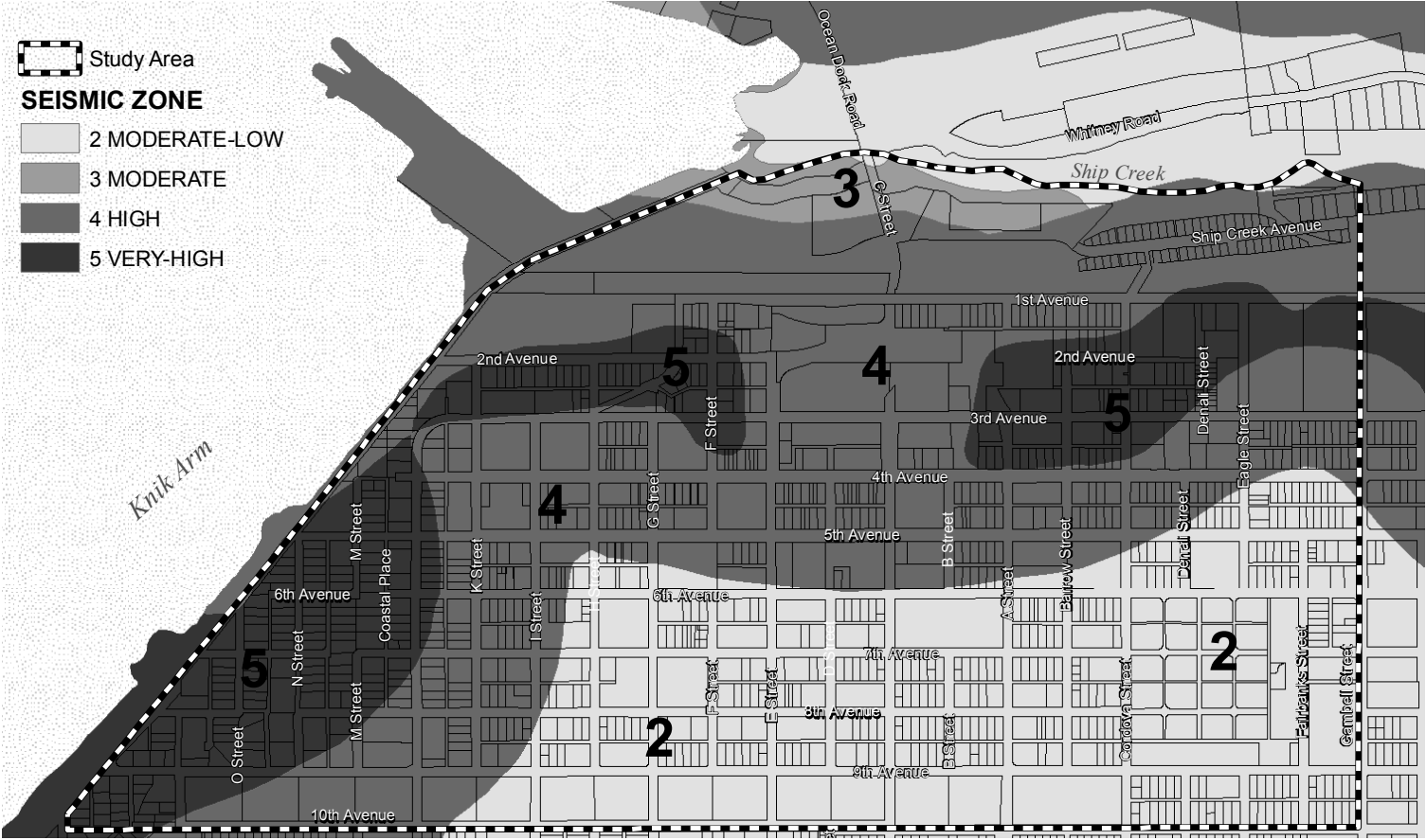
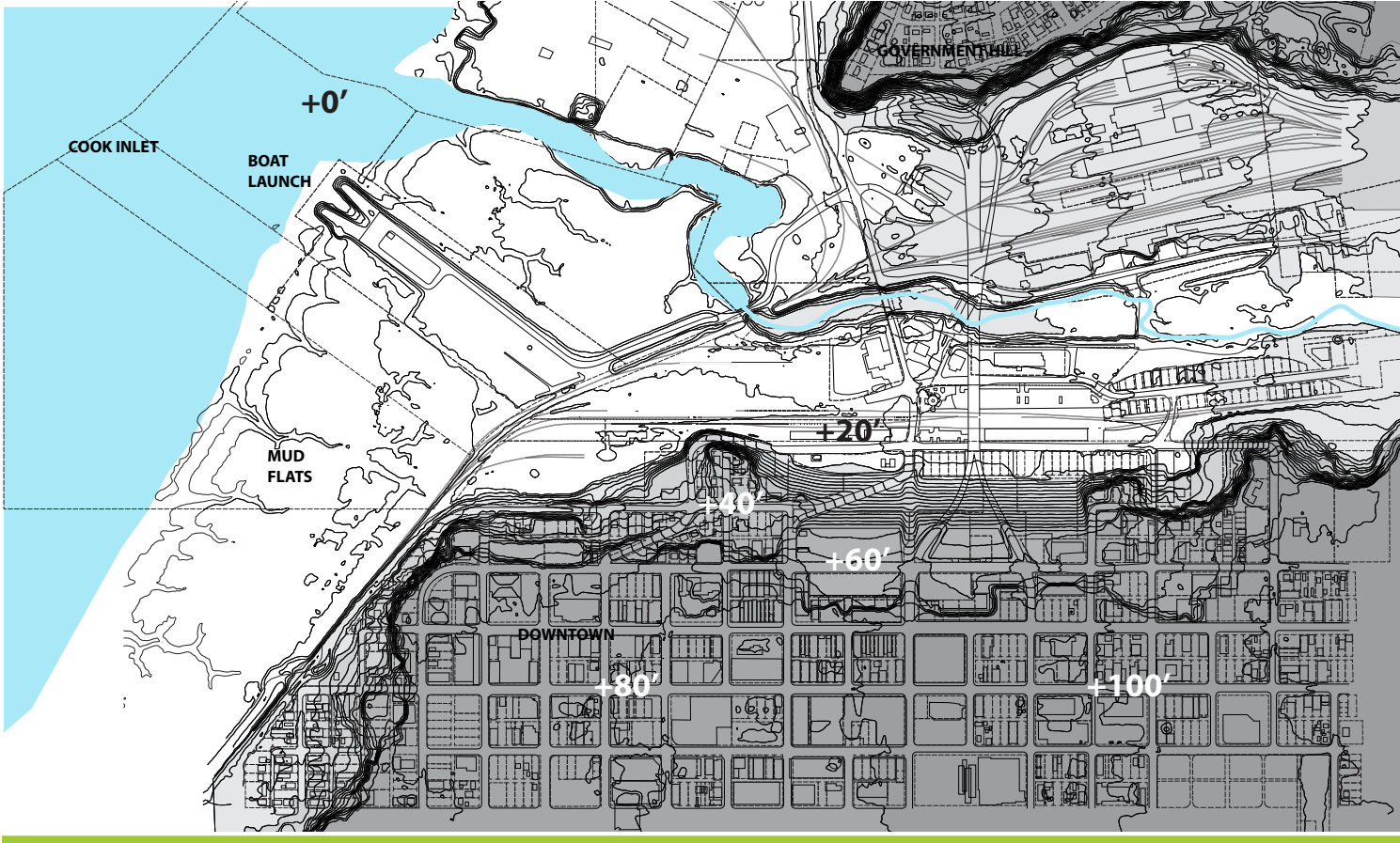


1915 Survey

Zoning

The existing railroad property in Ship Creek is zoned Planned Community with some Industrial 1 and 2 at the periphery, including the Odom Warehouse, the Knik Arm Power Plant, and the auto shipping operations. The boat launch is zoned MC Marine Commercial. The remaining Mud Flats are zoned T – Transition. The small railroad lot at the corner of 2nd and Christensen is zoned B2C – Central Business Community. The parking lot and ARRC Police Station across from the Depot is zoned PLI – Public Land and Institutional. The PC Zone is governed by a set of Ship Creek Design Guidelines that serve this plan well. No changes to the guidelines are proposed in this plan.





Topography

The topography of the site is one of its most defining and challenging characteristics. The Ship Creek site lies in a stream valley bounded by two steep bluffs: Downtown Anchorage to the south and Government Hill to the north. The floor of the valley is generally 20 feet above sea level, while the tops of the bluffs are approximately 60 to 80 feet in elevation, with steep, forested slopes along their edges. This elevation difference has historically created a barrier for connections between the Ship Creek site and adjoining areas.

Seismic Hazard

The bluffs overlooking Ship Creek were subjected to considerable ground failure and landslide activity during the 1964 Great Alaska Earthquake and risk still remains that future seismic events may cause additional landslides. The “Downtown Anchorage Seismic Risk Assessment & Land Use Regulations to Mitigate Seismic Risk” recognizes that the study area includes lands that range from low to very high and some very high seismic risk. Most land within the Plan area in the Ship Creek basin bottomlands are of low-moderate to moderate risk seismic



Seismic Ground Failure- 4th Avenue Slide

zones (zones 2 and 3). Lands that are at or near the bluffs range from high to very high risk (zones 4 and 5), with those areas east of A Street and west of F Street, along the south bluff of Ship Creek, being of very high seismic risk.

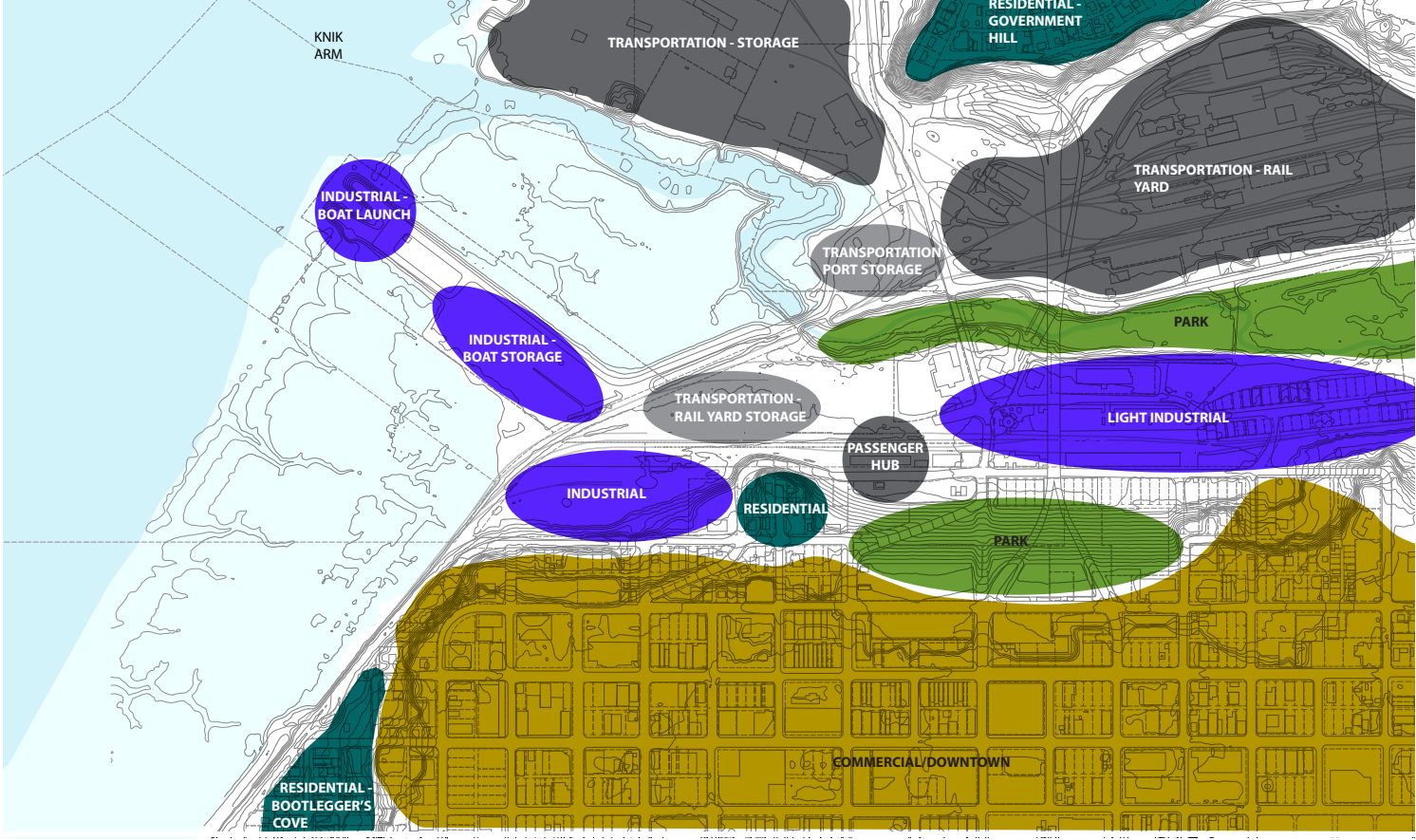
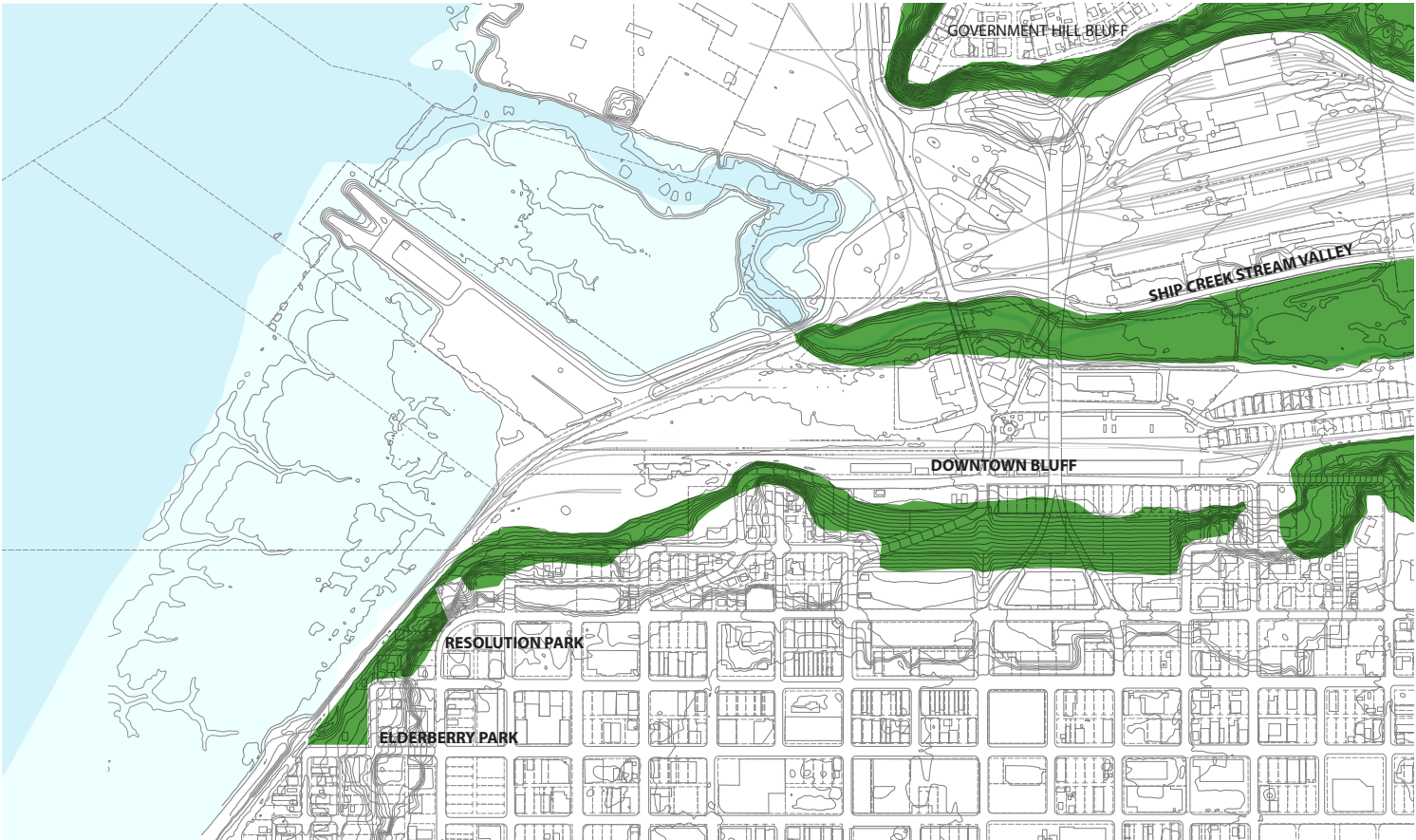
The Risk Study recommends that an overlay be provided to minimize

development in areas with “Very High Vulnerability and High Vulnerability”. It proposes to restrict emergency service providers, occupancies generating potentially high demand for emergency services, and very high and high vulnerability buildings such as large offices, large hotels, and certain types of construction of large multifamily residential occupancies.

The Risk Study identifies appropriate structural design to address the seismic issues within the area. It recommends that large offices or large hotels in zone 4 not use concrete moment frame high rise or concrete sheer wall high rise construction. This would apply to much of the proposed development on the western end of study area, particularly applying to the area shown as fill into the tidelands.

Proposed development in the area will need more detailed analysis of the seismic and subsoil parameters that will establish the specific criteria for the design of foundations and structural systems for each area of the site.





**Anchorage's Green Fingers**

Three distinct zones of natural greenery extend into the western end of the Ship Creek valley that largely define its visual character, and make it a unique place in the context of downtown Anchorage. The wooded hillsides on the northern and southern bluffs visually frame the site and create a green backdrop for low level views. The stream valley and banks of Ship Creek itself form the third finger, particularly east of the Knik Arm Dam, creating the sense of a green refuge in the heart of the city that connects downtown to the Chugach Mountains.



Anchorage's green fingers at Ship Creek

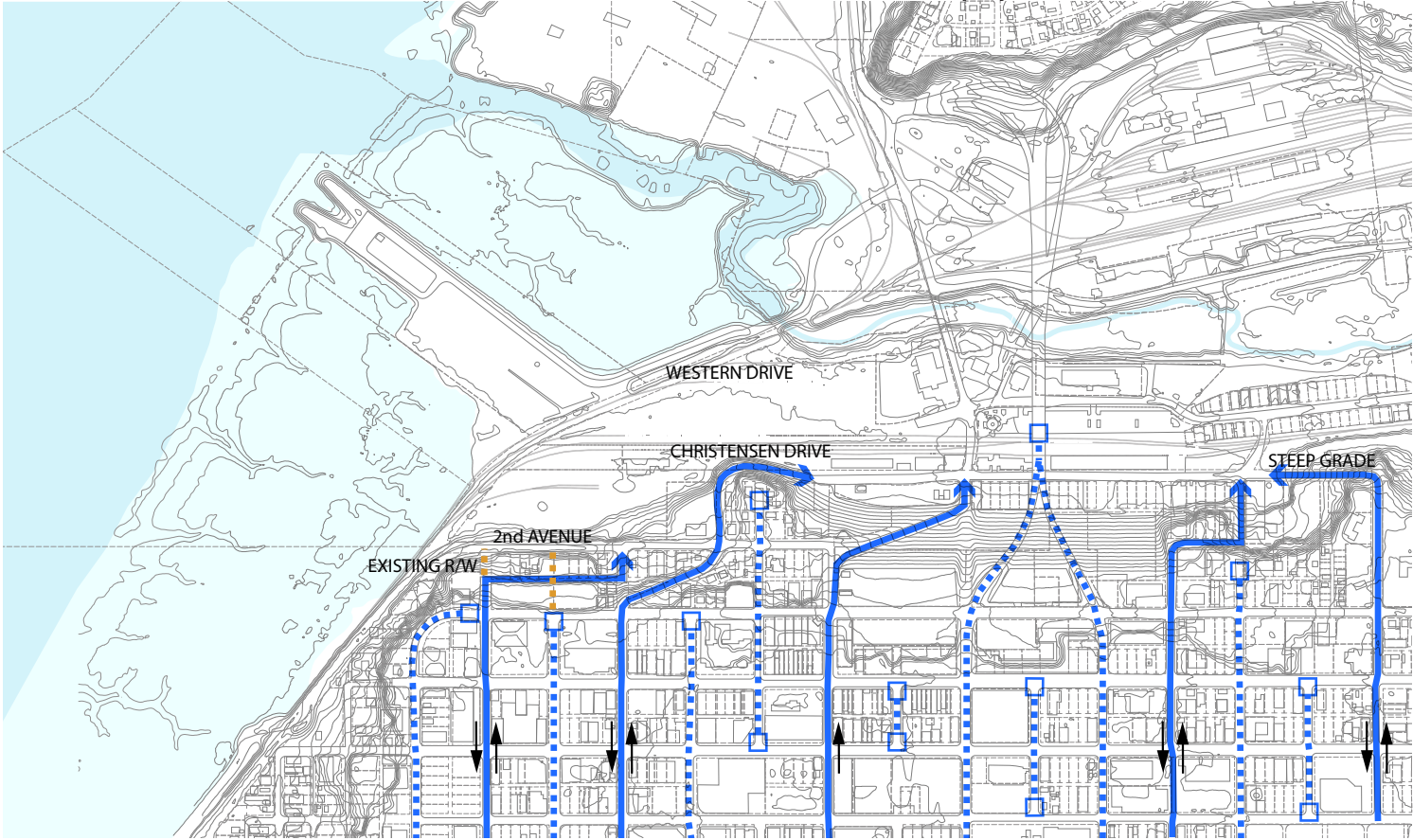
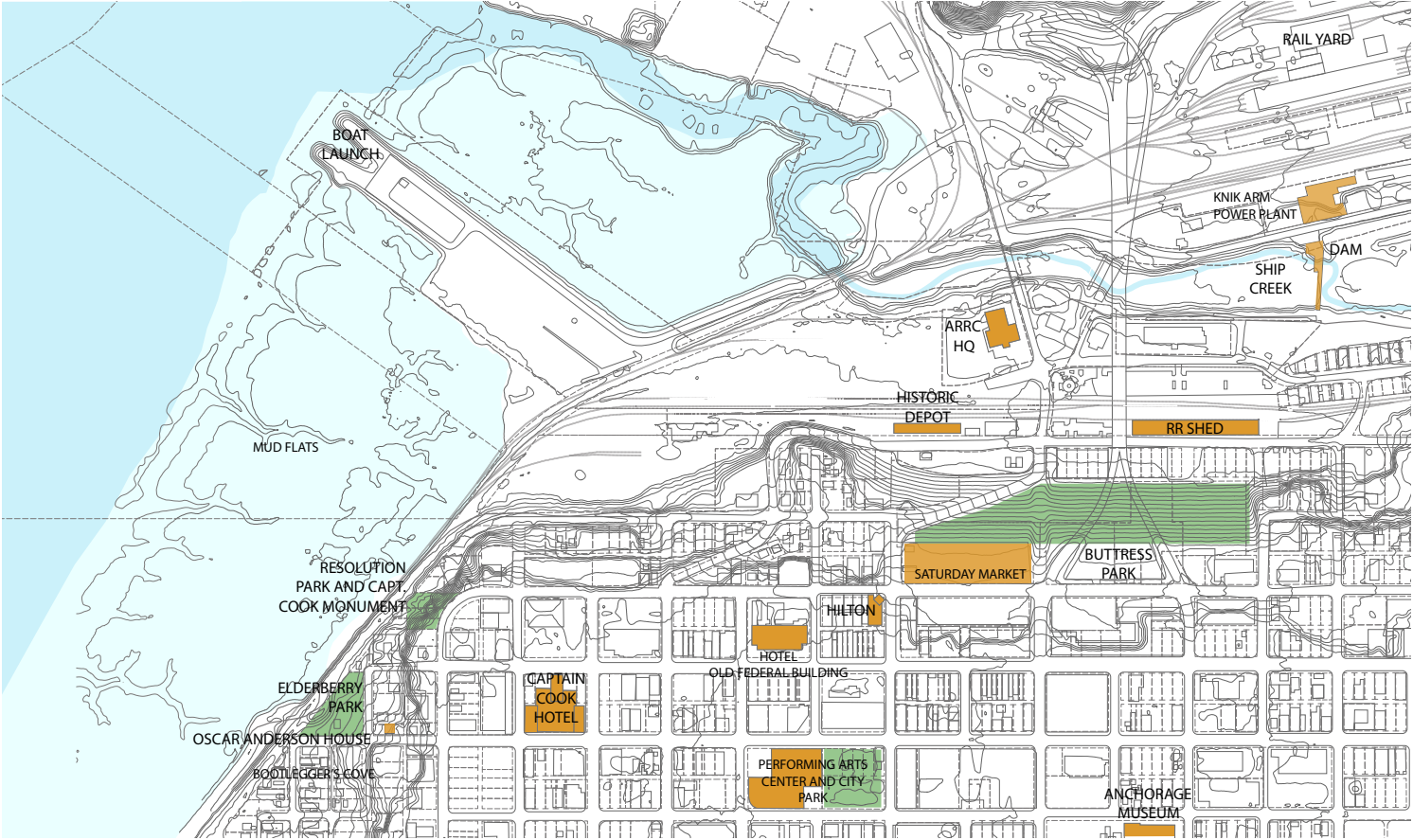
**Land Use**

Like many waterfronts in cities around the country and the world, the Ship Creek site has historically been predominantly used for transportation and shipping related functions, but also in close proximity to commercial and residential uses in downtown and Government Hill as well as parks and open spaces. This density and diversity of uses presents challenges in the master planning of the site, but also is part of the unique character and history of the site and provides the area with its own sense of vitality.



Ship Creek Panorama





**Neighborhoods and Landmarks**

Ship Creek is in close proximity to many of the most notable neighborhoods, parks, and buildings in the city of Anchorage. With improved pedestrian and trail connections most of these destinations would be within easy walking distance from the Ship Creek site.



Captain Cook Monument at Resolution Point



F Street dead end

**Downtown Street Connections**

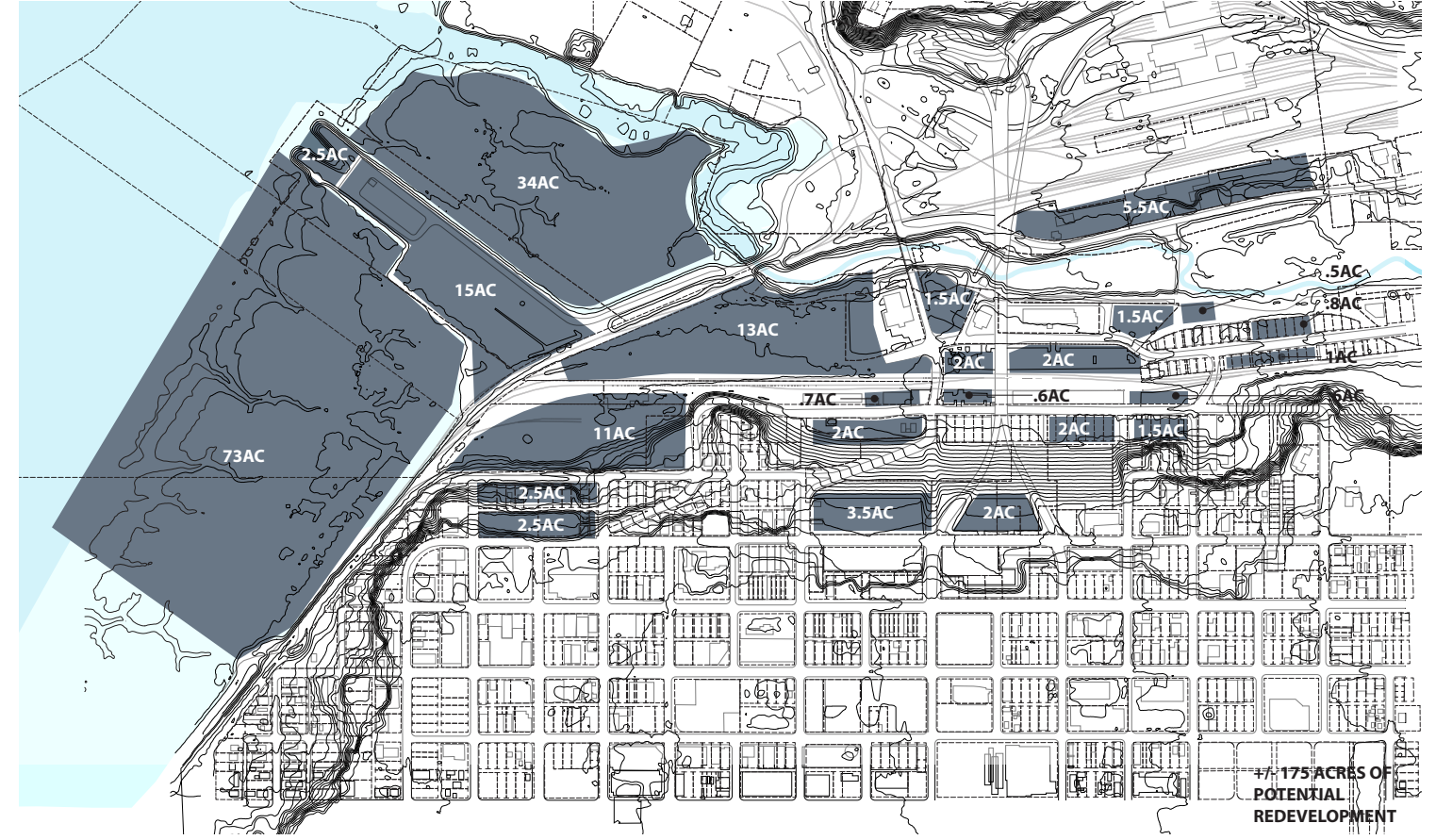
Due to the elevation difference between Ship Creek and downtown most of the north-south streets do not connect to the Ship Creek site, creating a sense of remoteness of the site relative to the rest of Anchorage. Presently the primary connections are Christensen Drive connecting H Street and 1st Avenue, and E Street connecting to North C Street. Further to the east Barrow Street connects to 1st Avenue, but via a narrow dogleg alley, and Eagle Street also connects down the hill to 1st Avenue, but with a very steep gradient that is not safe for all vehicles in winter.





## Neighborhood Connections

Redevelopment of Ship Creek creates the opportunity to strengthen pedestrian, trail and bike connections to neighborhoods and amenities beyond the immediate vicinity, such as Mountain View, Fairview, the fish hatchery and the JBER golf course.



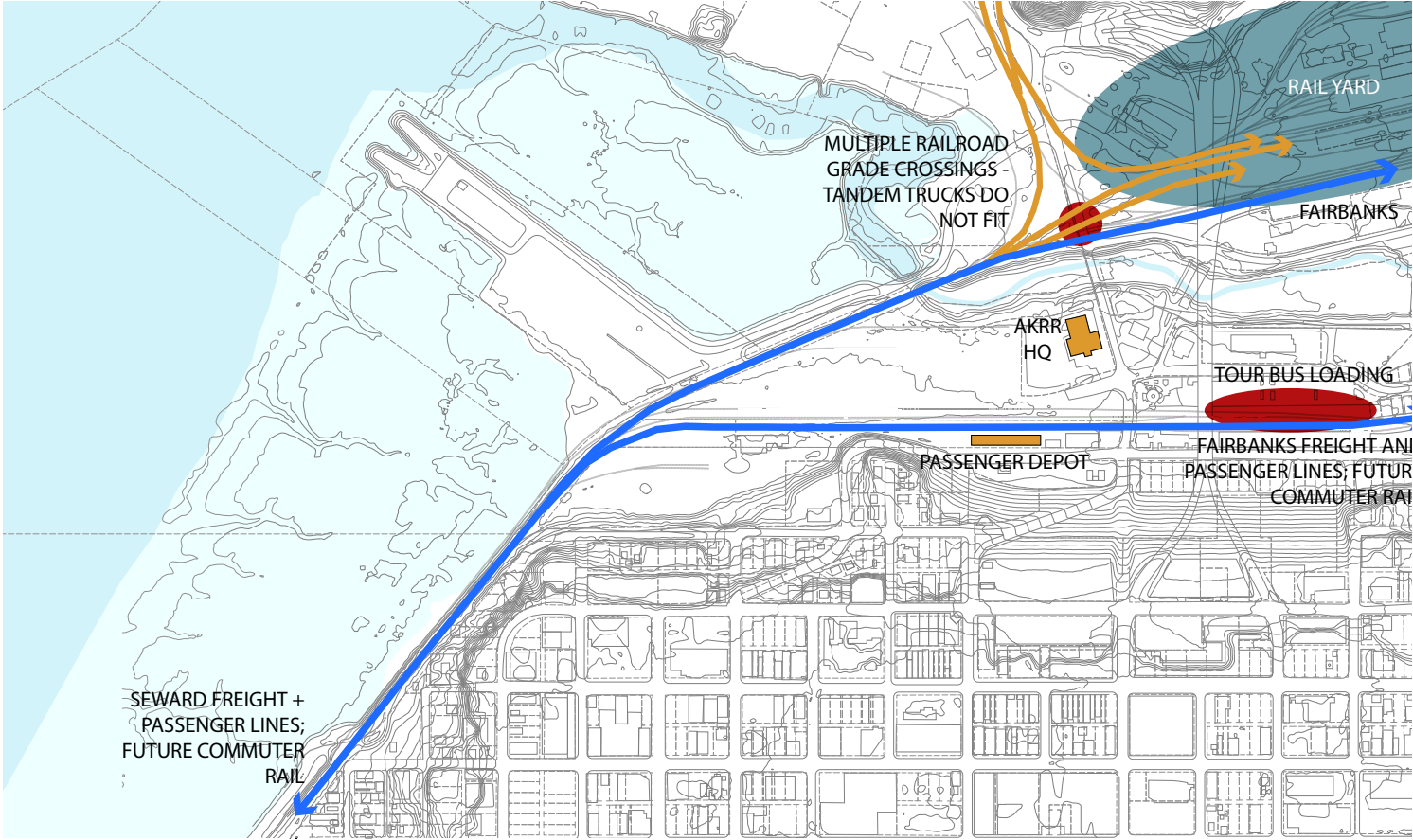
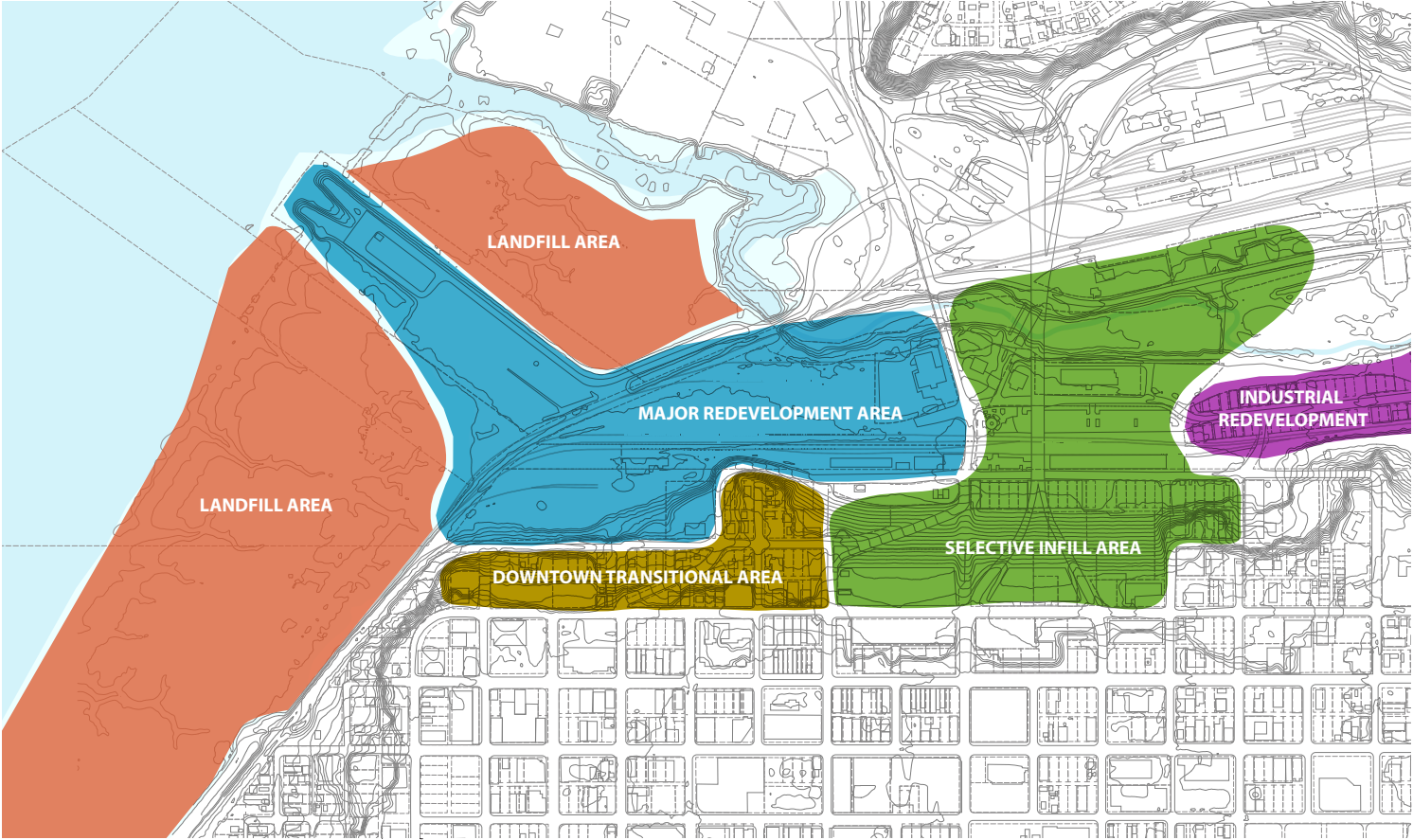
## Ship Creek Opportunity Sites

The Ship Creek site and immediate vicinity contain various sites with potential for re-development. The core of the site is on land owned by the Railroad, while some of the peripheral land is controlled by the Municipality or private owners. The total re-development area of existing sites is approximately 70 acres, with the potential of filling in the mud flats adding potentially 70 or more additional acres.



### Anchorage Aerial Image

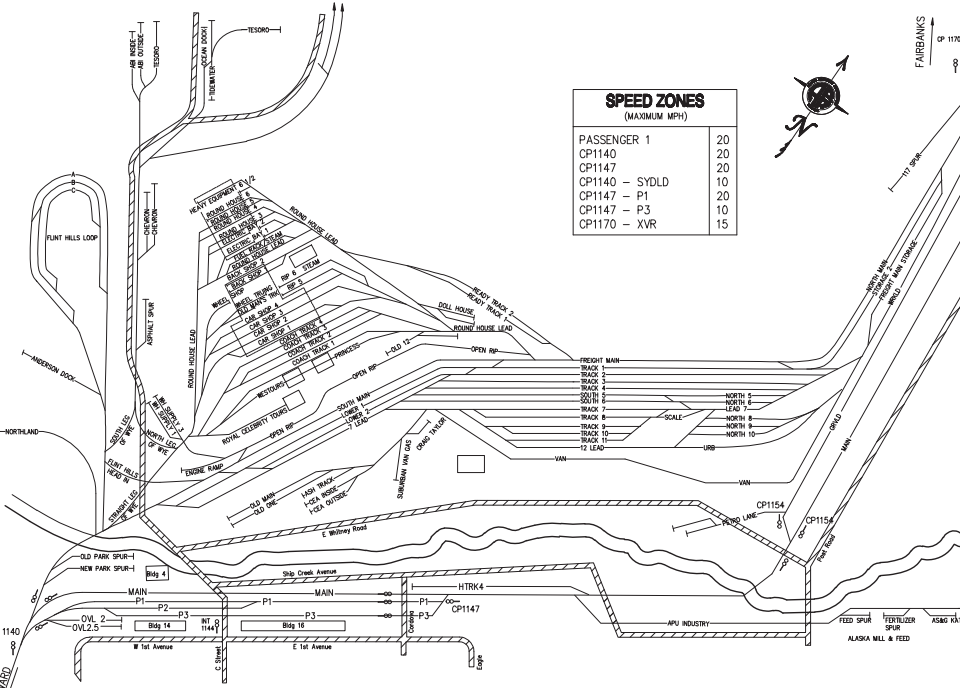




Ship Creek Opportunity Regions

Re-development of Ship Creek would fall into five zones:

1. **Major redevelopment area:** Largely undeveloped land owned by the Alaska Railroad previously identified as redevelopment sites.
2. **Land fill area:** Mud flats that could potentially filled to create new waterfront development sites and parks.
3. **Selective infill area:** Previously developed land owned by the Alaska Railroad and Municipality with the potential for more intensive development.
4. **Downtown transitional area:** The area on the bluff on the eastern end of 2nd and 3rd Avenues with the potential for redevelopment to tie the Ship Creek site to the east end of downtown.
5. **Industrial redevelopment area:** Sites owned by the Alaska Railroad with light industrial use that could be potentially redeveloped over time.

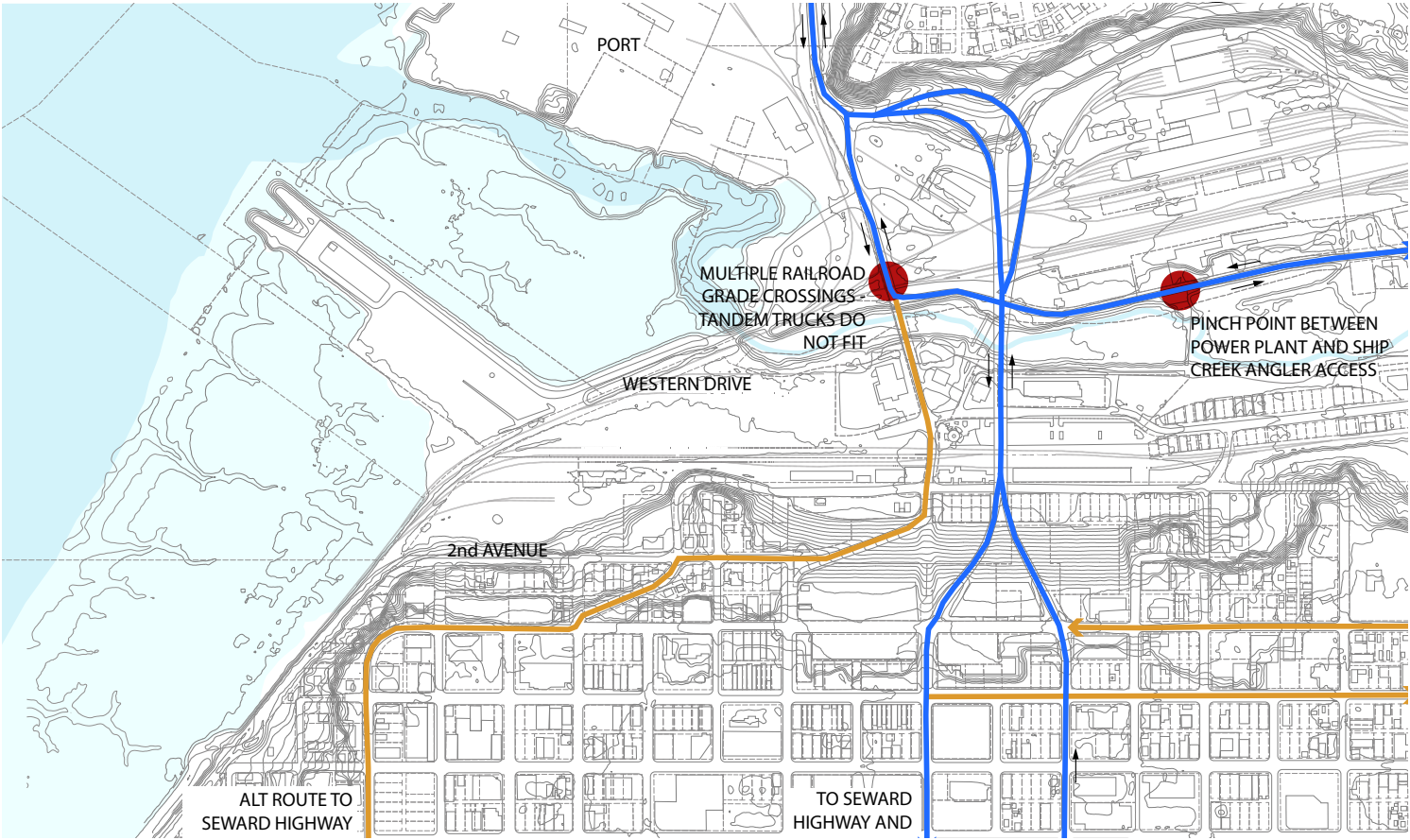


2010 ARRC Track Chart, Anchorage Yard

Rail Operations

Modern day Ship Creek, and of course Anchorage itself began with the Alaska Railroad and it remains as a fundamental element of the Anchorage and Alaskan economy. Its operational efficiency and safety must remain as a primary design parameter for any redevelopment plan for the site, both for freight and passenger rail functions. Wherever possible conflicts between trains, cars and pedestrians should be eliminated or reduced in the master plan. All new track crossings will be grade separated and street alignments will be configured to reduce conflicts between truck movements and rail lines.



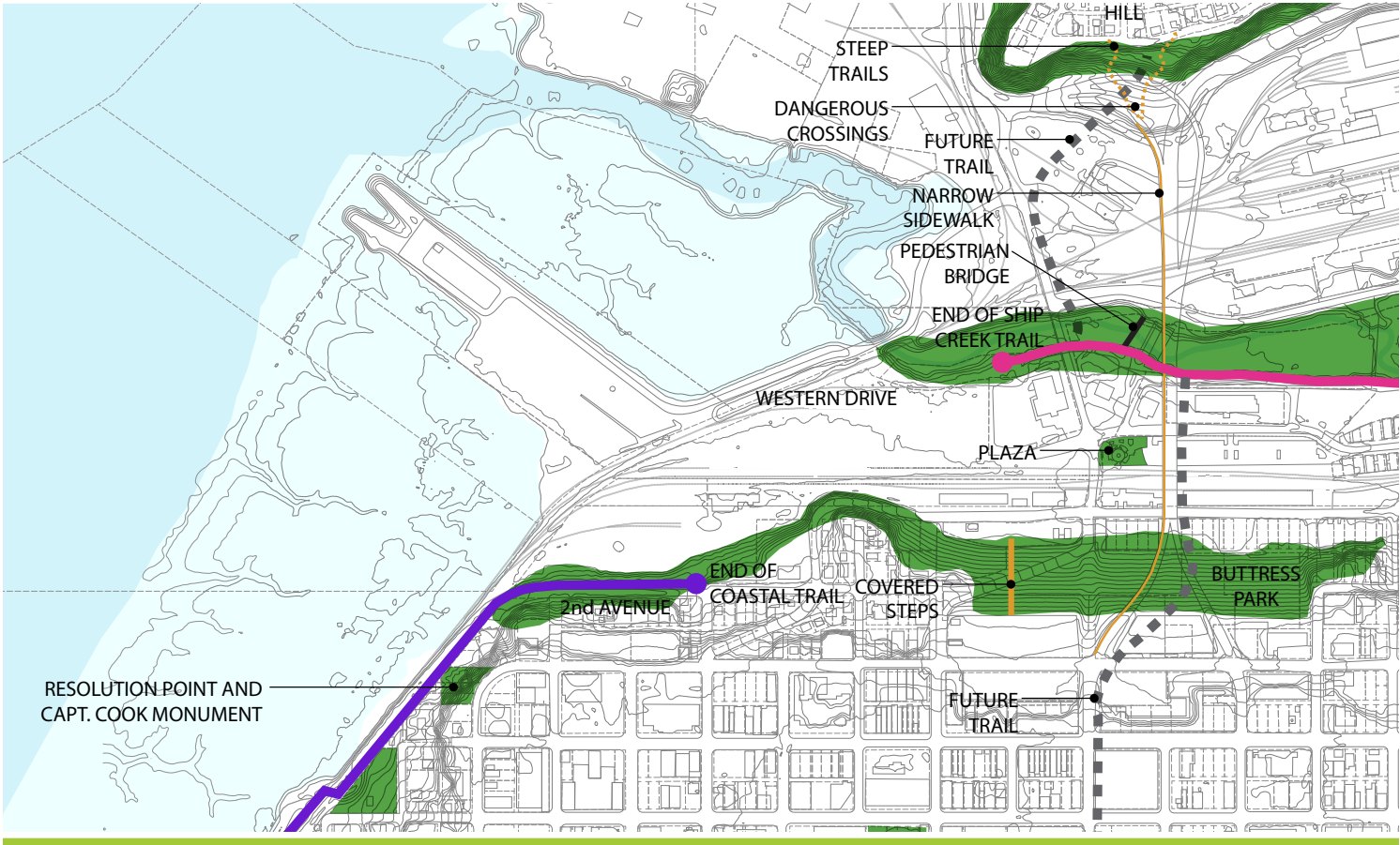


**Truck Routes**

The Port of Anchorage is the second major transportation use that impacts the Ship Creek site. Like the railroad, the Port is critical to the Alaska economy, and the ability to move goods into and from the Port must be maintained and improved. Currently there are numerous conflicts in the way that trucks move through the site, including at grade railroad crossings, inadequate intersections, and pedestrian conflicts. One of the main goals of the master plan is to improve truck movement and access to the Port and improve safety for pedestrians and bike riders in the Ship Creek site.



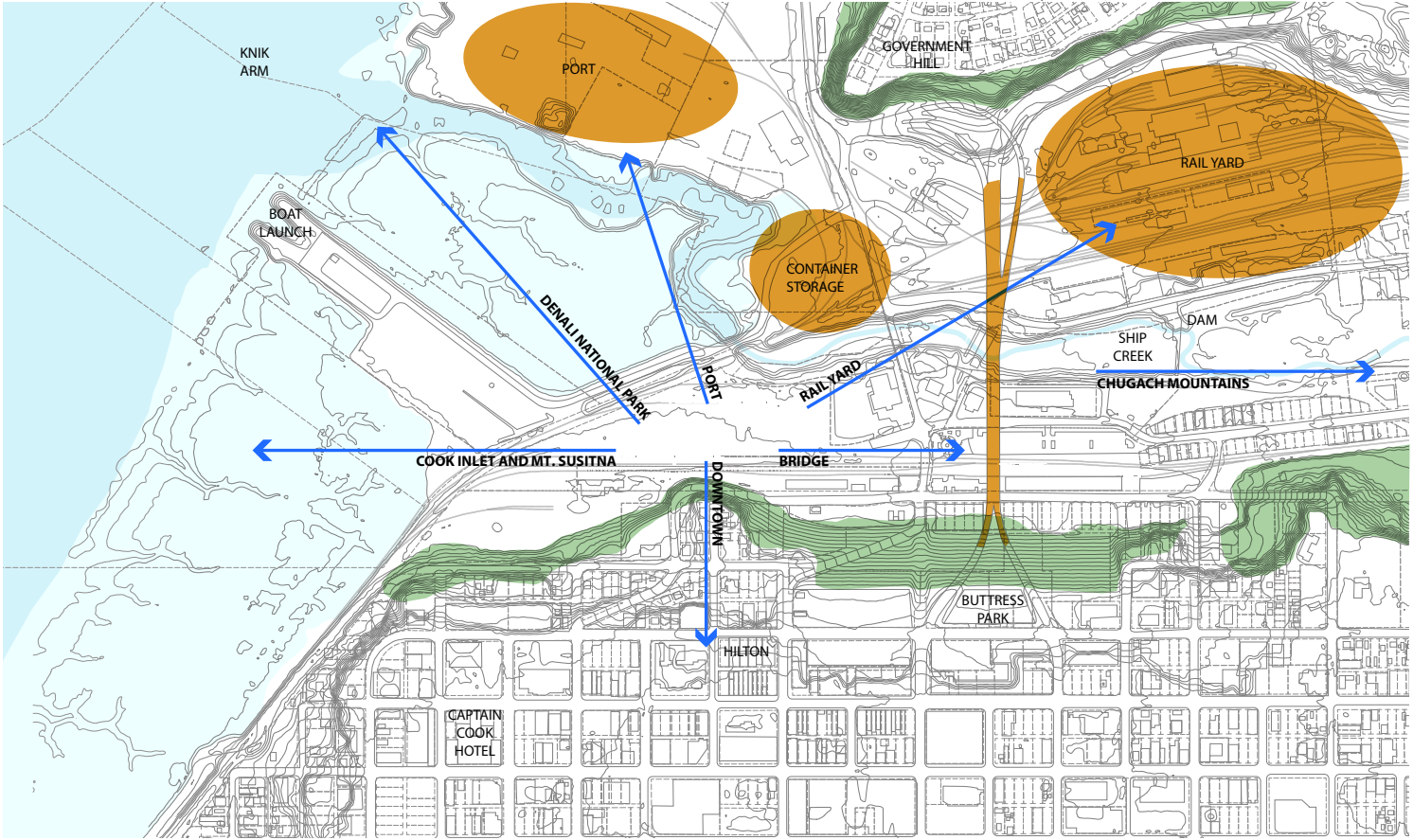
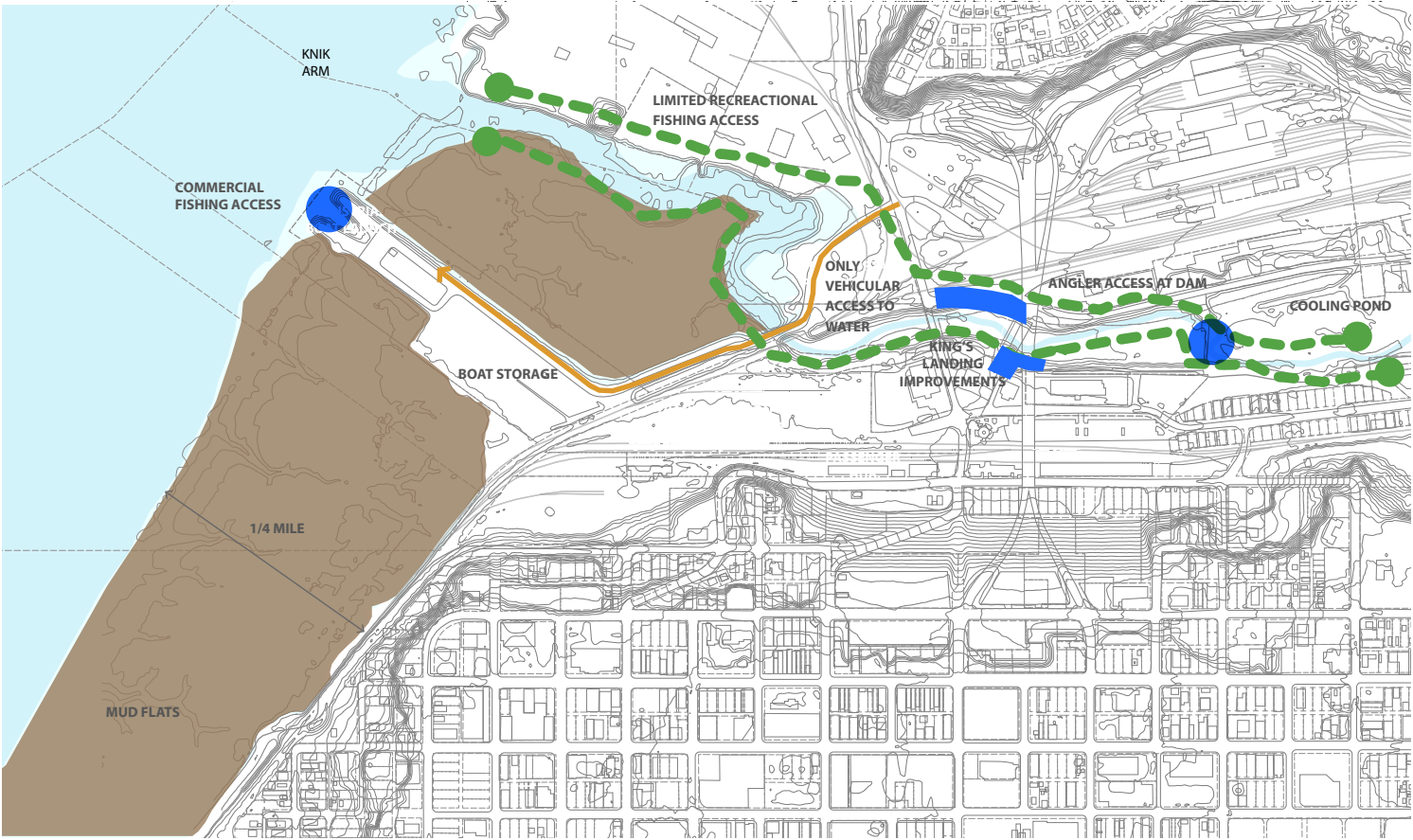
Truck route on Whitney Road, by Knik Arm Power Plant



**Pedestrian Paths**

Anchorage has one of the best urban trail systems of any city in the United States. The Tony Knowles Coastal Trail and the Ship Creek Trail link the site and downtown with greater Anchorage, including neighborhoods and parks to the south and east and to natural areas beyond. Ironically these two trails do not connect within Ship Creek, and one of the primary goals of the master plan is to create this connection. Improved pedestrian connections to downtown and a safe and pleasant pedestrian link from Government Hill to downtown and Ship Creek is also much needed.





**Water Access**

Anchorage and Ship Creek, while enjoying a location on two bodies of water, offer very limited access to the water's edge, and each with physical challenges.

**Cook Inlet:** There currently is no pedestrian access to the Cook Inlet waterfront. All of the downtown frontage abuts mud flats, which are approximately a quarter mile wide, and are extremely dangerous for pedestrians due to the mud and the extreme tidal range. While the Tony Knowles Coastal Trail provides excellent views to the Inlet and the mountains beyond, access to the water itself is nearly impossible. The only vehicular access to the water is on Western Drive, a gravel road that leads through a shipping container storage area. This provides important access to the commercial boat launch, but is not an appealing route for those wanting to get to the water's edge for whale watching, bird watching or just to enjoy the view.

**Ship Creek:** The creek is a popular fishing spot during salmon runs, both for the anglers themselves as well as for spectators. Access to the creek valley has challenges, however, due to the steep banks, mud and tidal



Mud Flats: Anchorage's Current Waterfront

range. There are stone and metal steps in some locations in varying states of physical condition, and improvements are planned in the King's Landing project, and the redevelopment plan should expand these access points to make the creek itself a more accessible amenity for the public.

**Views**

Views to and from Ship Creek include an extreme range of scale of natural and man-made features. Set against the dramatic backdrop of the Chugach Mountains to the east, the site like all of Anchorage gives the visitor to Ship Creek a sense of immediate connection to the Alaskan landscape. To the west, Mt. Susitna dominates the view across the Cook Inlet, while on clear days Denali can be seen to the northwest, conveying a sense of scale and majesty that makes this site uniquely Alaskan. Closer views to the north and south are dominated by urban development of downtown, the rail and port operations. In order for residential development to be attractive, the views to the container storage yards to the immediate north should be screened. For all new development, views from buildings should focus on the east and western views, while at the same time care must be taken with new construction not to block views of the current occupants of sites in downtown and Government Hill.

