



CITY OF UNALASKA

Captains Bay Road Paving and Utility Extension

City of Unalaska Project No. 19201

Project Scope

The City of Unalaska has contracted with HDL Engineering Consultants, LLC, (HDL) to provide professional engineering services for paving and utility extensions on Captains Bay Road (CBR). In general, the project will:

- Pave CBR 30 feet wide for approximately 7,000 feet, from Airport Beach Road past Westward Seafoods. Include a 6-foot wide pedestrian walkway and illumination on the shore side.
- Extend and upgrade approximately 6,700 feet of utilities from Pyramid Creek Road to the end of CBR, including electrical, communications, sewer, and water.
- Optionally extend paving another 6,400 feet to the end of the roadway at Offshore Systems, including the pedestrian walkway and illumination.
- Upgrade the roadway to current design standards for criteria such as roadside clear zones, superelevation on curves, and stopping sight distance.

In the first phase of the project, HDL performed surveying, conducted a geotechnical investigation with rock mapping, mapped utilities, provided an environmental overview study, prepared technical memorandums identifying design criteria for the roadway and utilities, and prepared a preliminary roadway design and a construction cost estimate. After initial review, HDL prepared additional preliminary roadway designs and cost estimates to study alternative alignments. HDL will perform additional surveying, expand the geotechnical investigation, and prepare roadway plans, specifications, and estimates for the selected alignment. HDL will also assist to obtain permits and to acquire needed right of way and easements for the project.



Project Purpose and Need

The purpose of the project is to improve traffic and pedestrian safety, reduce road and vehicle maintenance costs, and provide public utilities for current and future development.

CBR is a relatively flat, narrow, gravel-surfaced coastal road that serves as the primary transportation route for businesses supporting the largest (by tonnage) seafood industry in the US, including Westward Seafoods, North Pacific Fuel, Northland Services, Offshore Systems, and several smaller businesses, as well as a residential area. The road is heavily traveled by truck traffic associated with fishing and supporting industries (estimated at 10% of 1,200 total vehicles per day). The truck traffic exacerbates the typical maintenance issues of gravel roads, and the relatively high travel-speeds on the frequently uneven gravel surface causes safety concerns. Additionally, the narrowness and proximity to tall rock faces poses a safety hazard associated with rock fall.

Many industry employees are transient and do not own vehicles in Unalaska; thus, they regularly walk along the roadway shoulder. The combination of frequent rough road conditions, higher traffic speeds, large trucks, and pedestrians creates a safety hazard.



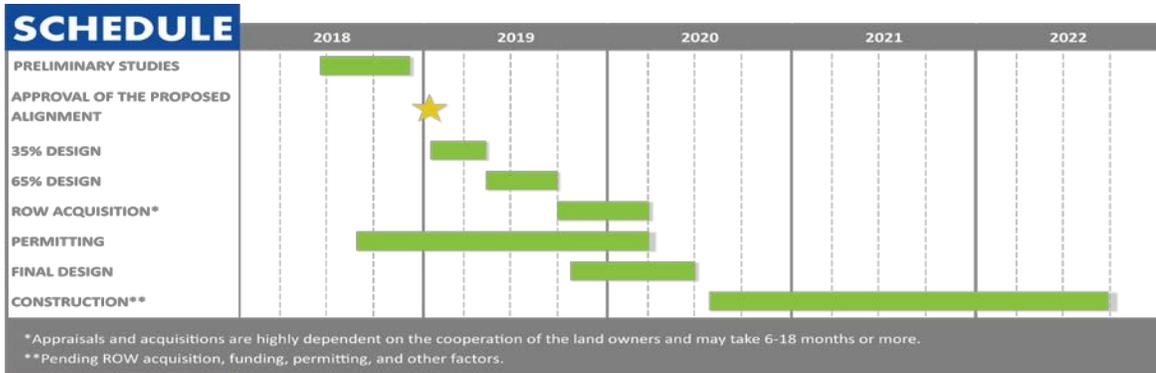
Fact Sheet

The city water distribution and wastewater collection systems extend only to Westward Seafoods. The lack of public water and sewer beyond Westward Seafoods limits development in the area. Although North Pacific Fuel is served with public water from a private pipeline starting near the Pyramid Water Treatment Facility, this pipeline is known to leak and waste significant quantities of stored and treated city water. This project will facilitate elimination of the private pipeline and the associated water loss, and may eliminate the need to build a second chlorine contact (CT) tank.

Roadway Design Constraints

City staff and HDL have identified the following roadway design constraints:

- Provide realignment and general straightening for curve radii and sight distances using a 40 mph design speed, anticipating a signed 30 mph speed limit, except through Westward Seafoods and North Pacific Fuel, use 20 mph design speed.
- Provide parking and access for traditional and subsistence uses and access for adjacent property owners.
- Minimize tall rock cuts by moving the roadway seaward where necessary; scale any unsafe rock overhangs.
- Minimize ocean fills.
- Minimize easement and right-of-way acquisitions.
- Reuse the Pyramid Creek bridge.
- Improve Airport Beach Road and Pyramid Creek Road intersections, including ADA upgrades.



Funding and Cost

The City of Unalaska has approved \$1.25 million for design and initial project costs and has identified a rough overall project cost of \$24 million in its Capital Improvement Plan.

Preliminary Estimated Project Cost

Realignment, paving, and related work from Airport Beach Road through Westward Seafoods	\$15,000,000
Utility extension and related work from Westward Seafoods through NPF	\$ 7,000,000
Realignment, paving, and related work from Westward Seafoods through NPF	\$29,000,000
Utility extension and related work from NPF to OSI	\$ 3,000,000
Realignment, paving, and related work from NPF to OSI	\$ 5,000,000
Total	\$59,000,000