

# Facilities Plan

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## E. RECOMMENDED DEVELOPMENT PLAN

### E.1 Evaluation of Alternatives

This section provides the methodology for the steps that led to the evaluation of the 12 Alternatives that were developed as part of the Draft Facilities Plan submittal. From the presentation of the Draft Facilities Plan and subsequent meetings with the consulting team and Port staff, it was determined that three Alternatives merited further review and refinement. The three Alternatives are:

- Alternative 1
- Alternative 2
- Alternative 3

These Alternatives were considered to represent the best scenario for meeting the Port's needs for a market driven Master Plan well into the next century. It is important to recall that the consulting team and Port staff agreed to, and initiated this Master Plan project with the intent to meet the project goal.

**The goal of this Master Plan is:**

**To provide a market driven Master Plan through the year 2020 for the Regional Port of Anchorage which will guide a pragmatic, environmentally sound program to stimulate and accommodate economic development, employment opportunities and an efficient transportation element serving Alaska.**

In support of this goal, a number of project objectives have been identified. The Master Plan must also be:

- **Market driven** and responsive to competitive commercial and economic forces, opportunities and constraints.
- **Environmentally and aesthetically responsive** to the existing, planned and potential assets of the region.
- **Balanced** to accommodate growth in local, Alaskan and international trade.
- **Integrated** to optimize an efficient water, land and air transport network.
- **Cost effective and defensible**, with maximum utilization of existing assets, at reasonable world's best practice levels, prior to relying on expensive new developments.
- **Achievable and pragmatic** with realistic early phases which can grow to accommodate long-term success.
- **Flexible and expandable**, on both Master Plan and terminal levels to allow for future variations.

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These three Alternatives were chosen because they best meet the challenges of the key project criteria and because of critical cost and environmental impacts considerations such as minimal encroachment into and fill of Knik Arm, minimal requirements for non-Port owned land, expandability and other key issues. The selection of the three Alternatives led the consulting team ultimately to the selection and refinement of one Alternative into the final Recommended Development Plan. **Alternative 3 has emerged as the clear winner in meeting the project goal and objectives.**

## E.2 Selection and Refinement of Recommended Plan

Alternative 3 has been chosen to represent the Recommended Development Plan for the Regional Port of Anchorage's Master Plan because it can be built with a modest fill program while still meeting the needs of the Port's future throughput capacity requirements. In addition, Alternative 3 represents several optional development scenarios, or phasing options that allow for the ultimate flexibility and expandability of development options.

Alternative 3's flexibility and expandability are responsive to the 'market driven' approach that the consulting team has embraced throughout the course of the Master Plan. In essence, should the Port's throughput follow the medium forecast growth scenario, we have incorporated the ability for a 'medium-build' approach to the Northern Tidelands development. We anticipate that a modest 20-24 acre (Phase III-A) cargo terminal should be considered.

However, should the high forecast be realized, then a more robust development scenario could also be accomplished with some revisions to the plan. We have indicated this more aggressive development approach with Optional Phasing scenarios that consider larger land areas. In addition, additional berths may also be needed. We have performed a Berthing Analysis that indicates that at least 1-new berth will be needed as soon as 2002-2005. However, once again, should the high forecast be realized several caveats have been incorporated into the Phasing Plan that would provide for the development of additional land in order to accommodate the increased throughput.

As mentioned in the Analysis of Capacity and Demand:

- Approximately **56 acres (medium forecast) to 89 acres (high forecast)** will be needed for new containerized cargo facilities. Approximately **0 to 12 acres** will be needed for the remainder of other uses and cargo types. The 0 acres assumes that future non-container cargo needs (mostly auto storage) can be accommodated in the Defense Fuels area. The 12-acre need is for the commodities/coal terminal, which would be needed in the North Tidelands area to accommodate the high forecast.

And as mentioned in the Berth Occupancy Analysis: If new cargo facilities are constructed in the Northern Tidelands, it will be necessary to:

## **Recommended Development Plan *(Continued)***

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- Construct 1 new berth in the Northern Tidelands area in order to accommodate all of the future cargo capacity requirements sometime between the years 2005-2010 under the medium forecast.
- Also under the medium forecast, a second berth is not needed until after 2020.
- Using the high forecast, a new berth will be needed between 2000 and 2005.
- Also using the high forecast, a second new berth may be required around 2015. Then, like the medium forecast, an additional (or third) berth could be required after 2020.
- In addition, the provision for a possible third berth should always be considered during any subsequent planning or design phases for new terminal development. This could have implications as to the subsequent configuration and arrangement of the proposed commodities/coal terminal berth.

The Recommended Master Development Plan has been further refined and modified to reflect this requirement for additional land and berths to meet the Port's future needs. And we have indicated how an additional berth could be needed (shown dashed) should the Regional Port of Anchorage achieve the high forecast. Furthermore, we have indicated on the Plan, a slightly revised alignment of the Commodities/ Coal Terminal adjacent to Cairn Point (approximately 12 acres). However, the final design and configuration of the proposed Commodities/ Coal Terminal will likely require further review and refinement to determine its optimum orientation and configuration. Because the products delivered to the wharf, for this type of terminal development can be conveyed by several means, the exact configuration of the berth(s) will require further scrutiny prior to preliminary design. We have located it in-line with the new container terminal berths for optimum berthing opportunities.

The ultimate build-out of the Recommended Master Development Plan would provide for an approximately 66 to 72 acre containerized cargo terminal, depending on the position of the bulkhead line (and possibly 2-berth scenario). However, a provision has been included (Phase III-D) which considers an expansion to approximately 102 acres, which incorporates the expansion into the adjacent bluff.

The Recommended Master Development Plan is presented in Figure E-1.