

Agency: Commerce, Community and Economic Development**Grants to Municipalities (AS 37.05.315)****Grant Recipient: Bristol Bay Borough****Federal Tax ID: 92-0029832****Project Title:****Project Type: New Construction and Land Acquisition**

Bristol Bay Borough - Port Expansion

State Funding Requested: \$2,000,000**House District: 37 / S**

Future Funding May Be Requested

Brief Project Description:

Bristol Bay Port Exxpansion and pile dock replacement.

Funding Plan:

Total Project Cost:	\$32,000,000
Funding Already Secured:	(\$6,000,000)
FY2012 State Funding Request:	<u>(\$2,000,000)</u>
Project Deficit:	\$24,000,000

*Funding Details:**FY 2010 Federal Legislation (HUD) \$1,000,000**FY 2011 Alaska State Legislature \$5,000,000***Detailed Project Description and Justification:****Existing Port Facility**

The Port of Bristol Bay, located at Naknek, in Southwest Alaska, has a single pile-supported dock constructed of steel and concrete in 1982. The dock has a face (width) of 200 feet and is subject to tidal influence, with large barges not able to approach the dock at low tides. The Port has approximately 6 acres of Terminal area. The Port shares a warehouse with Public Works that provides approximately 4,000 square feet of seasonal inside storage and distribution for smaller cargo. An additional 200 x 200 feet sheet pile dock, which was completed in the fall of 2010 provides additional dock face, storage and on the down river section some moorage, parking and amenities for commercial fishing vessels. Fishing vessels "raft" together, as there are no individual berths. Electricity, potable water, restrooms, trash and used-oil disposal are available. Dockage is charged by the day or by a season pass for unlimited docking.

Why the Dock Expansion is Needed

The existing pile supported dock has exceeded its useful life. In 2009, the Borough spent approximately \$143,000 on maintenance and repairs on the existing pile dock, including more than \$82,000 to address a failure area, where the dock is too structurally weak to support any loads. Since 2000, the Borough has spent more than \$800,000 on maintenance and repairs. Also, since the existing pile dock was built, fish processors operating in the Borough have substantially increased the volume of freight shipped across the dock. In response to increases in freight volumes, barges have gotten larger – from 200 feet to over 400 feet – and individual shipping containers have become heavier with the average weight now exceeding 60,000 pounds. PND Engineers, Inc. stated the following in a Port of Bristol Bay Expansion Project Description dated December 8, 2006:

**\$2,000,000
Approved**

"Increased loads, frequency and duration put considerable stresses upon the dock which, given its current state, could result in the need for additional repairs or possible failure. Additionally, daily functions at the Port currently conflict with the commercial fishing launch and docking facilities. The Port currently has three staging areas, two of which require traveling a significant distance up a steep graded road to access. Heavy--lift forklifts traveling to the upper staging areas and vehicles attempting to access to the launch and dock facilities must travel on the same access road, creating congestion and issues of safety especially during peak season operations."

The trend in the shipping industry is to move to even larger containers with most ships using 48 or 53-foot containers and it is anticipated that these containers will eventually be used in moving freight to and from the Port of Bristol Bay. An increase from 44,000 to 50,000 pounds is a 13% increase in weight; increased capacity per container means fewer containers compile the same cargo weight.

Phase I Improvements

In 2009, the Borough began Phase I improvements by initiating construction of a new "open-cell" dock immediately downstream of the existing dock. This new dock addition, which is now complete, added approximately 3.9 acres of dock area and 200 feet of dock face. Open cell design made use of earthen material behind a sheet pile bulkhead. This type of design provides a solid base to support the heavy loads that are typical at the Port. Phase I was completed in November 2010.

The Phase I Improvements included \$8,795,354 in State and non-State funding as follows:

\$1,995,354. Bristol Bay Borough

\$1,000,000. Bristol Bay Economic Development Corporation

\$2,400,000. State Legislative grants

\$1,700,000. Denali Commission

\$1,700,000. Economic Development Administration

Phase II Improvements

Phase II of the expansion would help to address marine shipping needs of the region through a number of improvements as shown below (Some of these improvements could be planned for a future Phase III). Of the improvements listed, there are two that are most critical to the continued operation of the Port. The first crucial improvement is expanded dredging in front of the existing pile dock and new open cell dock so that barges can access the dock face. The second most critical improvement is the construction of a second open cell dock, either upstream (preferred) or downstream of the existing pile-dock. Although not a direct cost of the Phase II Improvements, in 2009 the Borough received an award from the federal Economic Development Administration in the amount of \$2.24 million dollars for the purchase of new dock equipment including a heavy lift forklift and crane. As part of this award, the Borough is contributing a local share of \$560,000. For the Phase II Improvements, the Borough will seek other funding partners upon assessment of available funding opportunities. Below are listed the individual components of the Phase II Improvements with cost estimates:

Estimated Costs (Millions of Dollars)

\$1.5 Million: Expand the dredging footprint to accommodate a 400 ft barge to include turn around space.

\$10 Million: Build an additional section of open cell sheet pile dock equal to the size of Phase 1. There are two Alternatives for this. Alternative 1 would replace the existing concrete pile dock with open cell construction. Alternative 2 would locate the new open cell upstream of the existing dock, either solely on land presently owned by the Borough, or on land adjacent to Borough land (owned by Yard Arm Knot Fisheries, if this land can be acquired).

\$0.7 Million: Move necessary Dock Utilities which may include fuel header, shore power, water servicing and ice machine relocation.

\$1.0 Million: Reduce the bluff area on existing Port lands to provide approximately two hundred feet at the present lower level of the dock to keep the port operation at one level.

\$0.5 Million: Acquire land west of the upper level for space to build another access route into the Port and material that can be used for common fill for the new section of open cell dock.

\$0.5 Million: Acquire land upriver and downriver for additional storage space.

\$0.4 Million: Enlarge or expand the existing shore-side port office or possibly relocate to another location depending on final dock phases and design.

\$1.0 Million: Enlarge the existing Public Works facility for a Port Facility on the South or river side to accommodate the largest Forklifts to be placed inside for winter storage and preventive maintenance plus be used more extensively for the processing of cargo shipping and receiving.

\$0.4 Million: Acquire property and design for Fishermen's Small Boat Facility.

Total Phase II: \$16 Million

Benefits of the Phase II Improvements to the Port

The expansion of the Port of Bristol Bay will facilitate and support efforts to retain and grow the Bristol Bay region's wealth through providing a cost effective method of transportation to ship the salmon to market. Bristol Bay is home to the largest sockeye salmon fishery in the world, shipping over 114,410,000 pounds of salmon in 2009 with a value of over \$915,280,000. The number of container vans increased from 5,541 to 11,012 from 2001 to 2010, which is over a 100% increase in the last 8 years and totals approximately 300,000,000 pounds of cargo in 2009. The Port ships and receives more cargo than Dillingham, Nome, Kotzebue and all other Ports in the Bering Sea side of Western Alaska combined with the exception of Dutch Harbor. This is the regional hub for Bristol Bay and services 30 communities in the region. This port provides fuel to over 11 communities within the region and King Salmon Air Force Base. The Bristol Bay fishery processors have invested over \$80,000,000 in processing capacity improvements from 2004-2008. This capacity increase is limited because the Port is not large enough to handle the increased volume.

This expansion project will continue to support the economy of Bristol Bay Borough, and the region, by maintaining the capacity to ship tremendous volumes of fish and cargo. The Port of Bristol Bay is a regional port and serves a surprisingly vast area. The expansion improvements will provide a safe work place for Borough employees, as well as, safety for the fishermen that utilize the facility. By the addition of an area specifically for fishermen, it will ease the congestion and increase the capacity of the dock to cater to independent owner/operator processing vessels. Segregating the activity of

shippers and fishermen at the port site is also a requirement of the port security requirements under Homeland Security guidelines.

In the federally approved Southwest Alaska Municipal Conference (SWAMC) Community Economic Development Strategy (CEDS), it states that the primary economic benefits flow into the region through ports by allowing the distribution of goods and services to external markets. The Bristol Bay Borough Port dock handled approximately 300 million pounds of cargo in 2010, much of it fishery products, resulting in a huge economic gain for Borough and regional residents. As stated earlier, the commercial fishery is the largest economic force in the Borough, and the entire Bristol Bay region; so the expansion of this dock would vastly improve our ability to maintain our status in the ever-competitive global seafood market. In addition, it would allow the port facility to accommodate the ever-increasing cargo loads.

Besides the multiple rural communities in the immediate area, the region also includes burgeoning resource development prospects such as the possible mining projects located in the Lake Iliamna area. Oil & natural gas prospects to the south and west of the Port of Bristol Bay in Naknek hold significant resource development opportunities as well. Development of any of these resources will significantly increase the volume of marine cargo into and out of the Bristol Bay region through the Port of Bristol Bay. Given the successful 2011 Alaska Peninsula oil & gas lease sale, exploration is likely to increase significantly over the next decade. Failure to advance port expansion and repairs will result in bottlenecks in cargo handling and increased costs to operators.

Phase III Improvements \$16 Million

\$5.0 Demolish the existing pile platform dock and build a replacement bulkhead dock the size of existing dock adjacent to Phase 1 which is now complete.

\$5.0 Fisherman's Small Boat Harbor: Build a fisherman's small boat harbor at a location away from the container port facility. This would include land acquisition or a long term lease agreement for land. The facility would be equipped with shore power, the ability to take on fishing gear, fuel, water, and ice. This would also include a public boat ramp on the down river side of the small boat harbor. This would include removable floaties for fishermen to tie up fishing boats and accomplish minor repairs and maintenance. The facility could be operated by an outside contractor or operated by the Borough.

\$2.0 Build a new Public Works Facility in a location away from the Port facility.

\$2.5 Industrial Park Development: Develop recently acquired property north of the AK Peninsula Highway across the road from Public Works for an Industrial Park. Encourage Salmon processors to build freezer storage capacity for possible winter shipping markets by air freight.

\$1.5 Develop a fuel storage facility for the Borough to store a full winters supply of fuel for the Borough. This would require tapping into the Naknek Electrical Association fuel line that supplies fuel to NEA Storage tanks.

The entire Bristol Bay region depends on this dock for cargo, fuel, and shipment of the valuable fish product produced in Bristol Bay. This dock is the economic engine that supports over 30 communities within Bristol Bay not just the Bristol Bay Borough.

Project Timeline:

2011: Project funding award from Legislature. Initiate Project design.
2012: Bid, contracting and initiate construction.
2013: Complete construction and initiate operation.
2014: 1st full year of operaton.

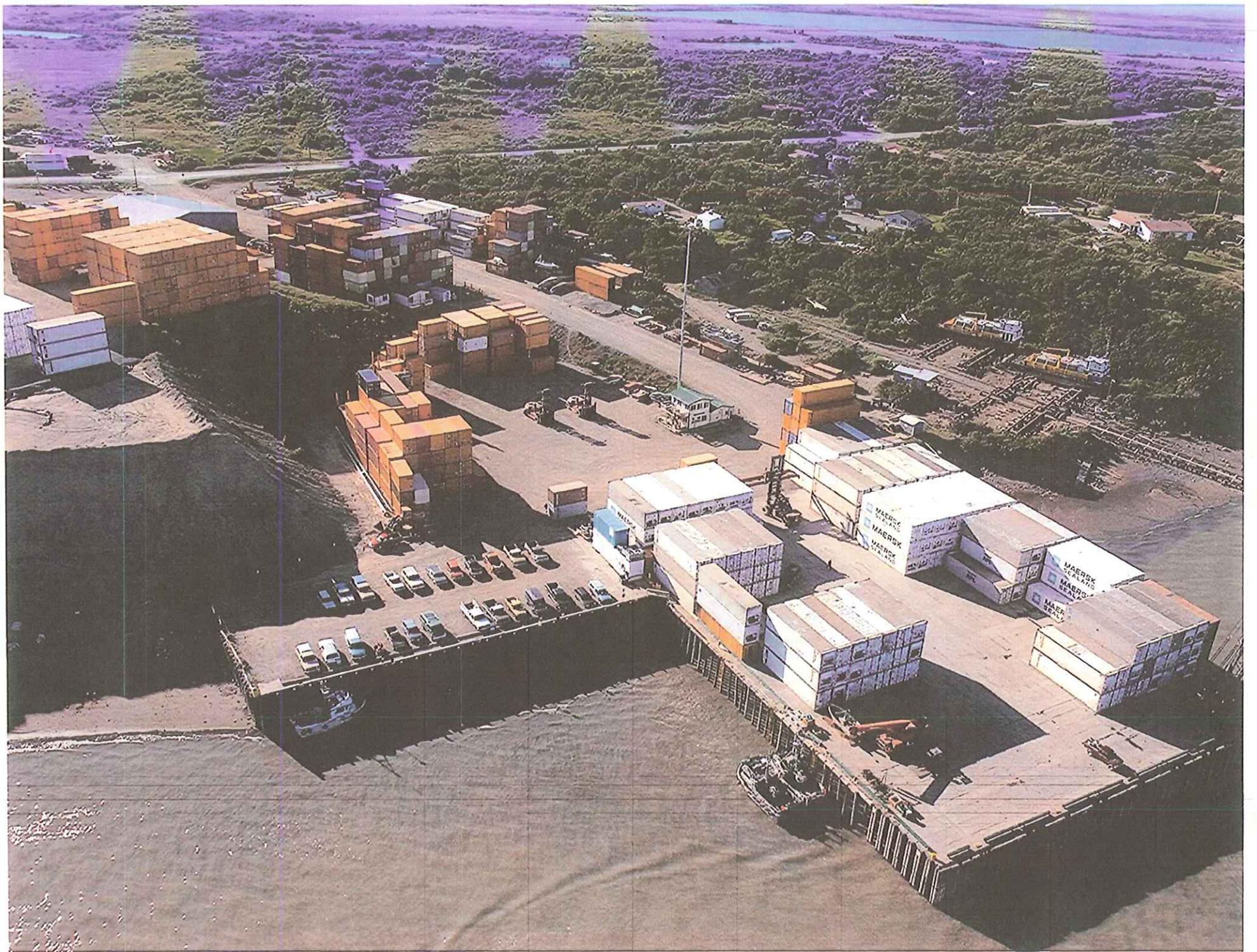
Entity Responsible for the Ongoing Operation and Maintenance of this Project:

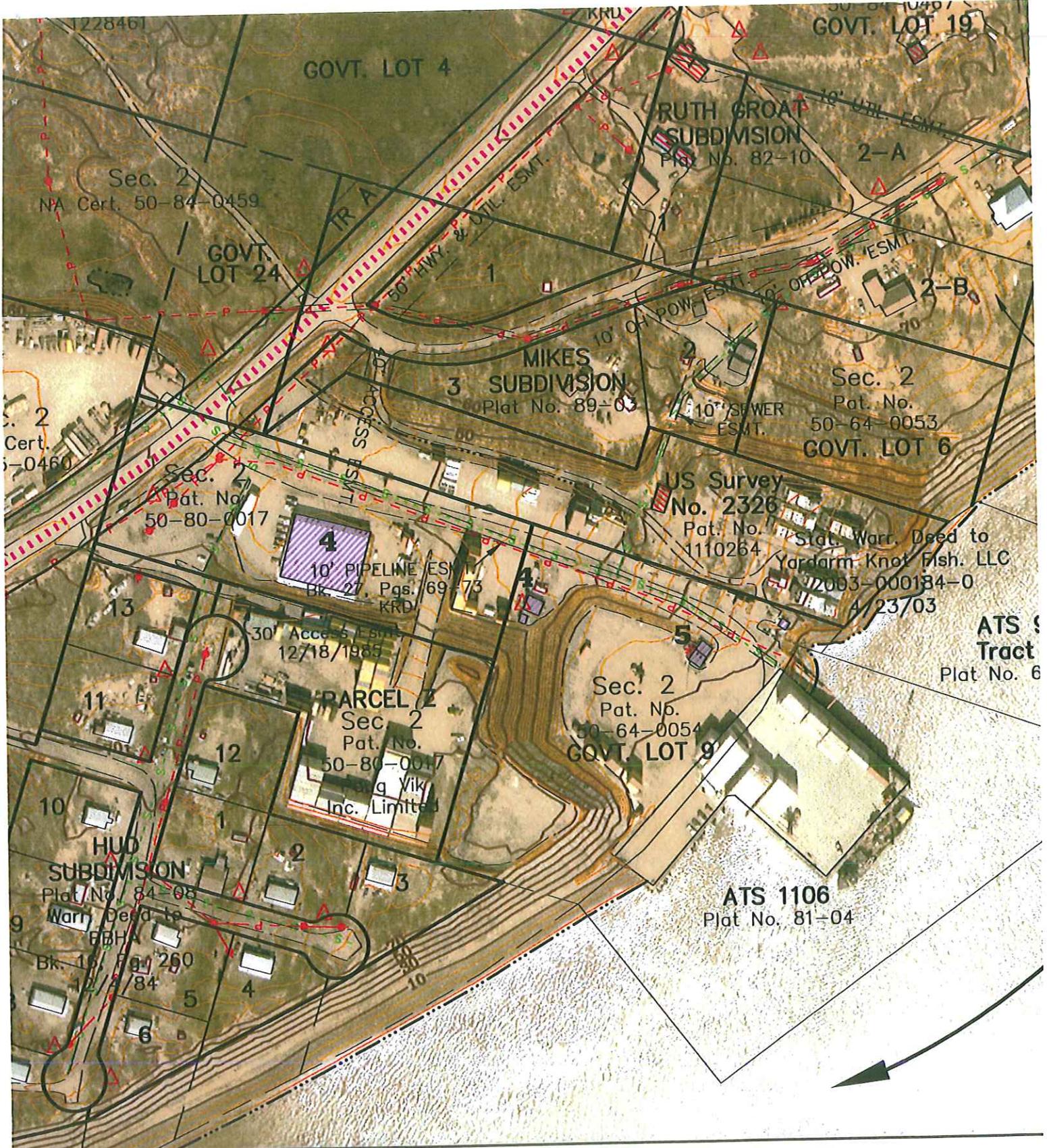
Port of Bristol Bay

Grant Recipient Contact Information:

Name: Marv Smith
Title: Borough Manager
Address: P.O. Box 189
Naknek, Alaska 99633
Phone Number: (907)246-4224
Email: marvsmith@bristolbayboroughak.us

Has this project been through a public review process at the local level and is it a community priority? Yes No



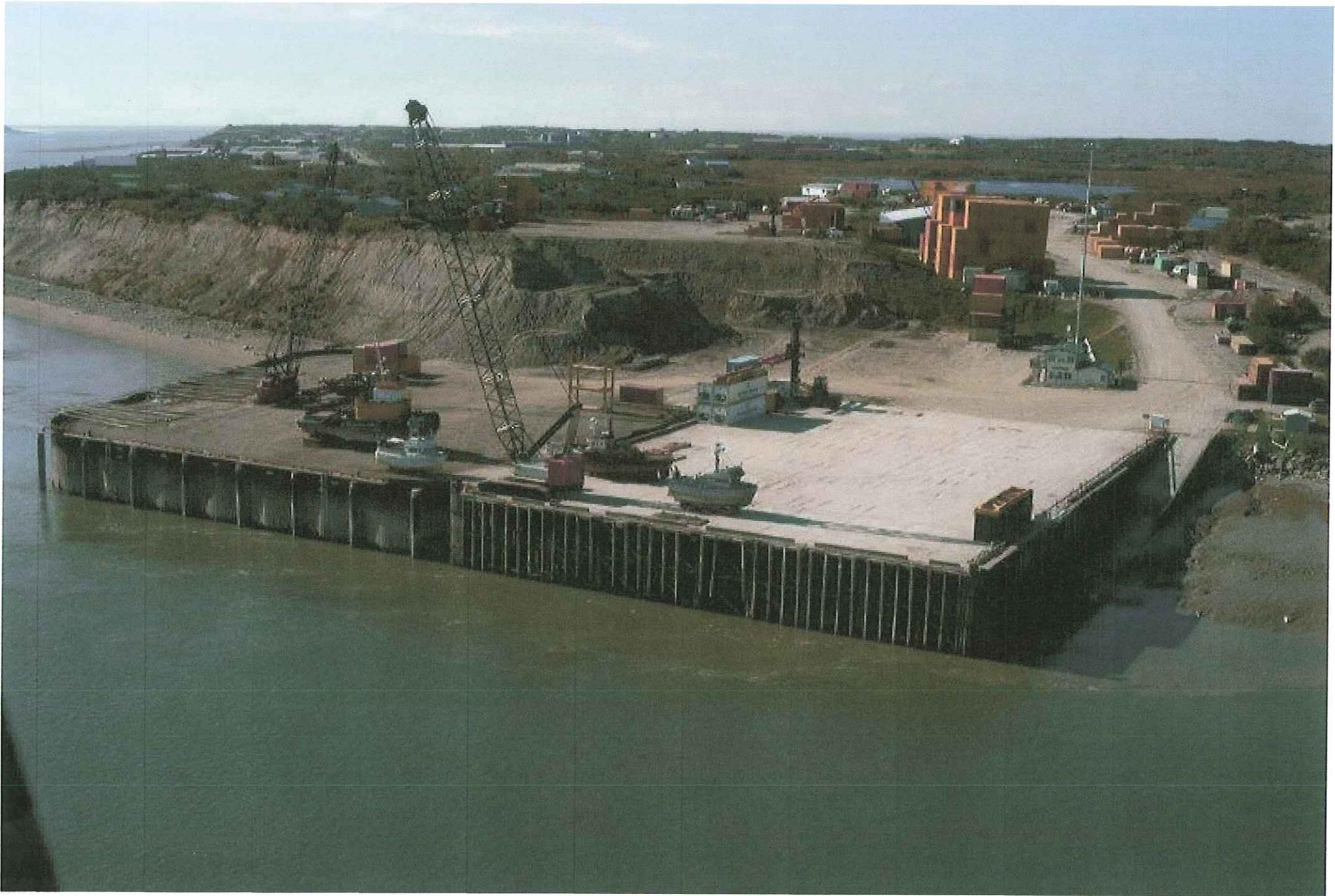


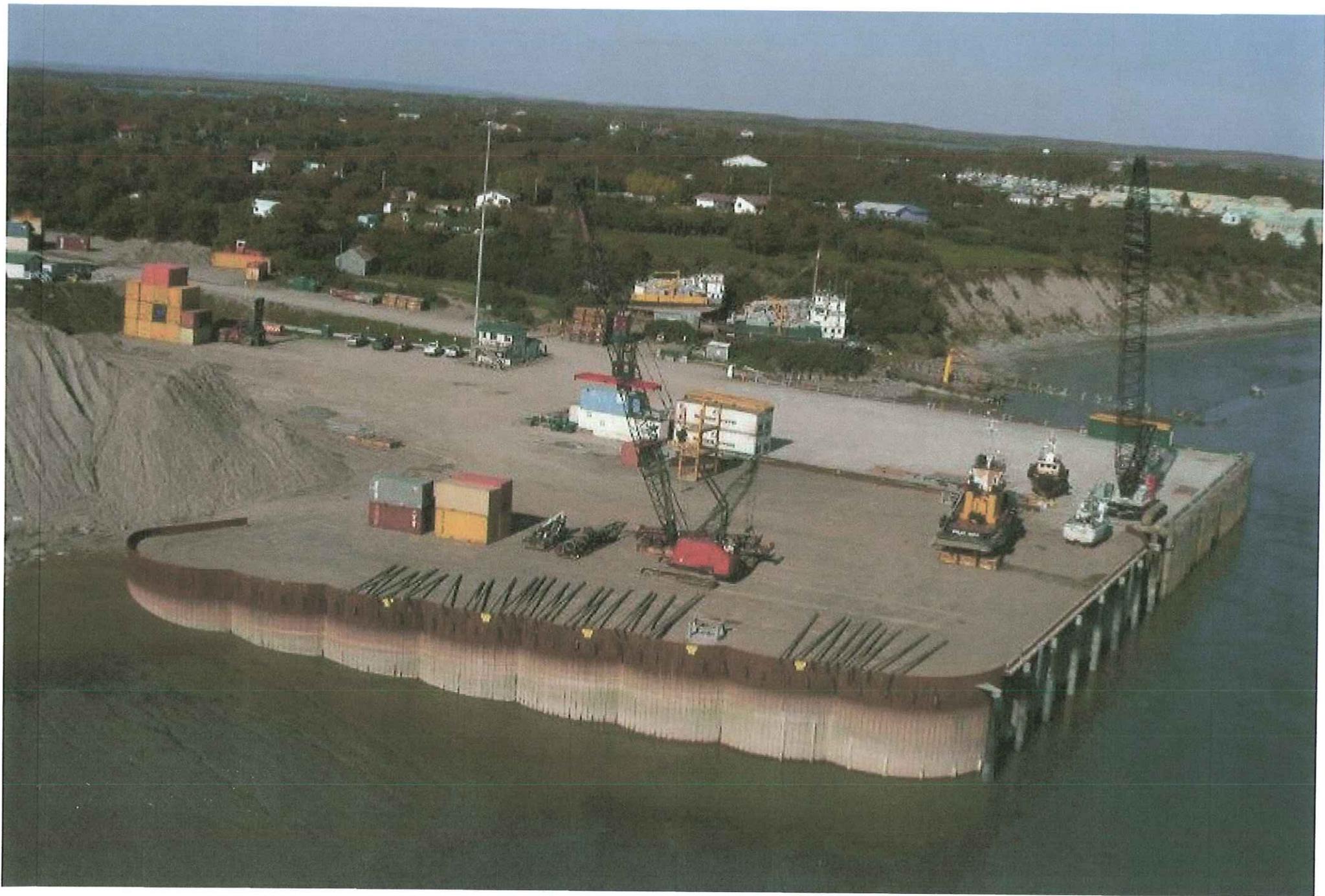
ALASKA COASTAL MANAGEMENT PROGRAM

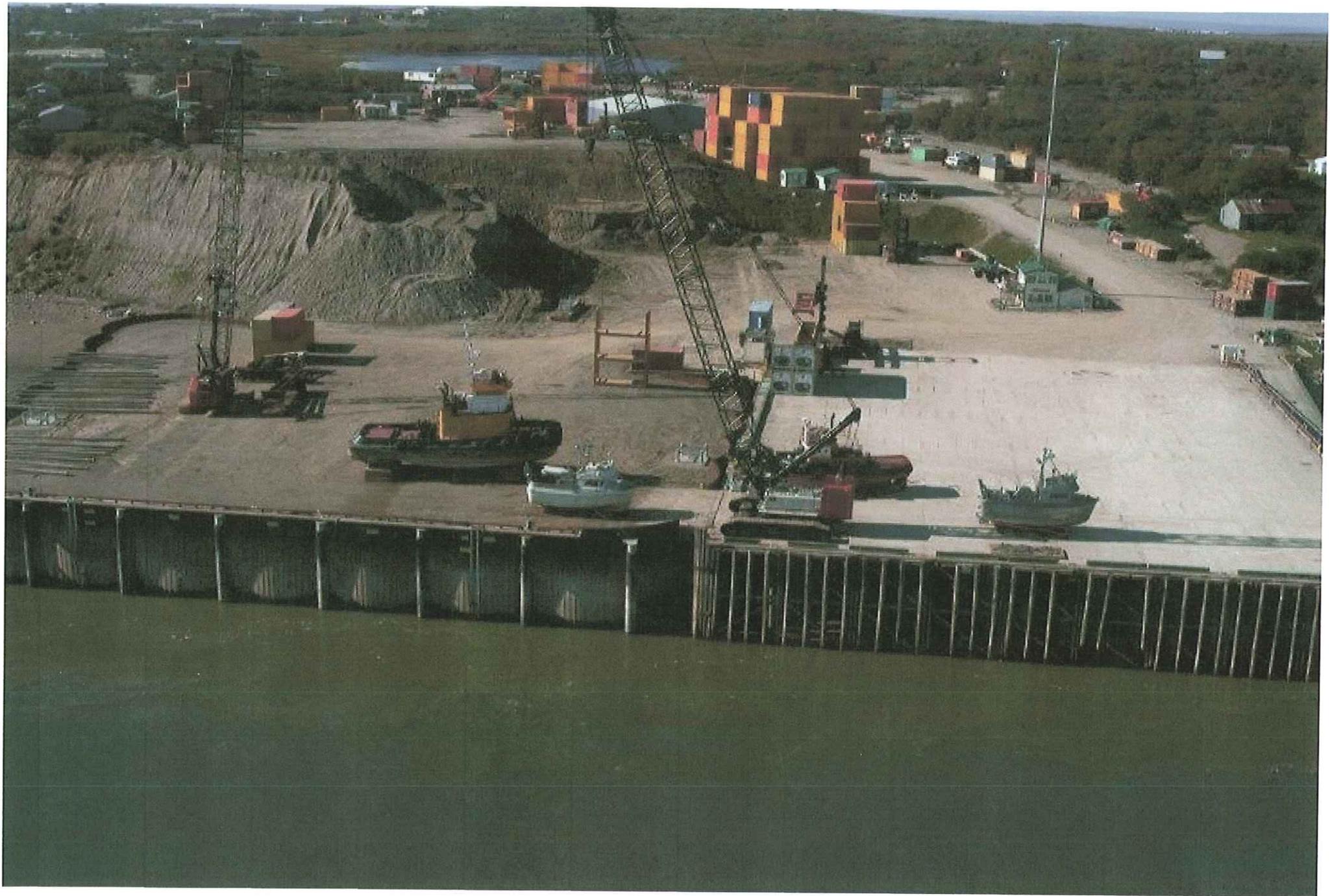


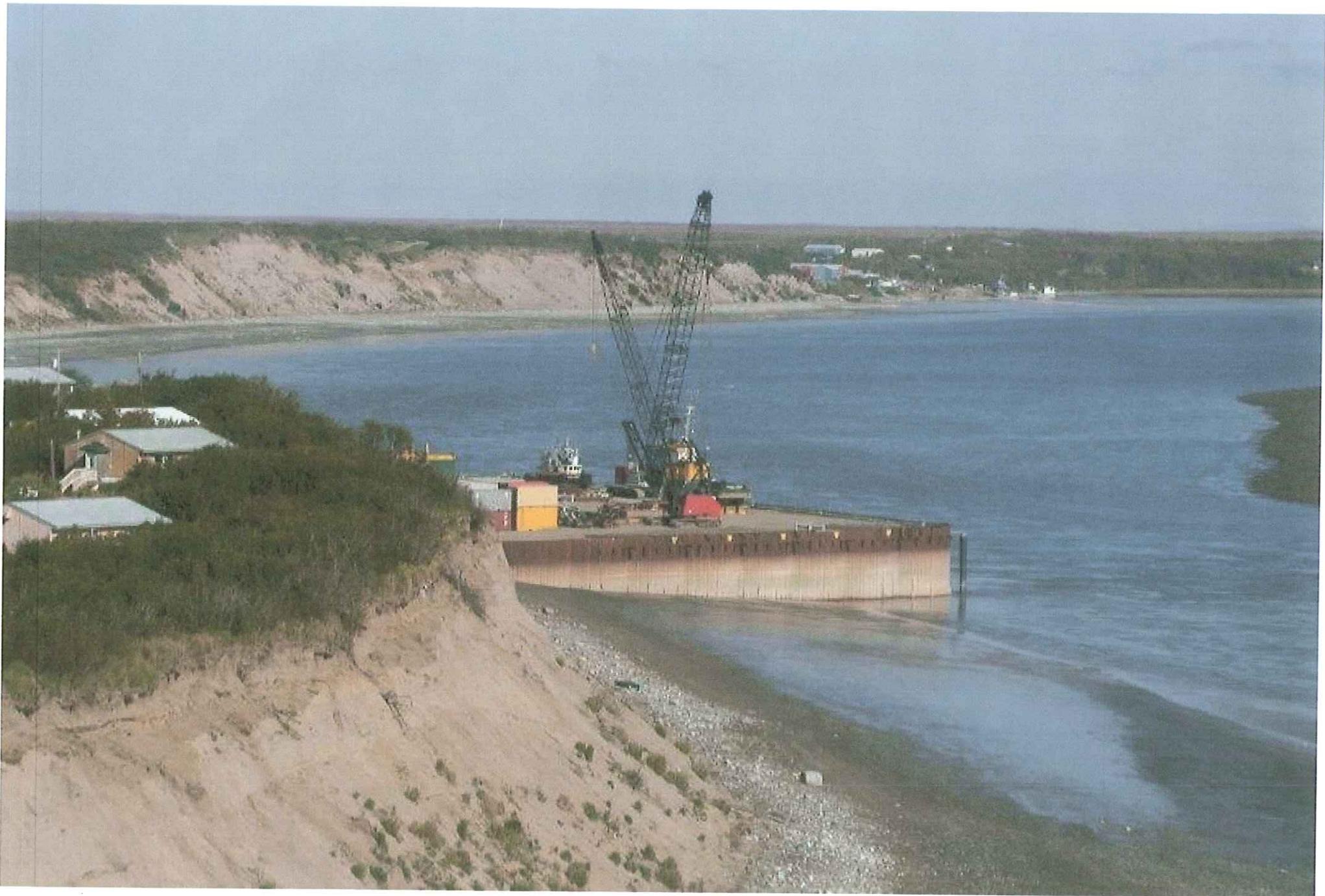
Department of Commerce, Community, and Economic Development









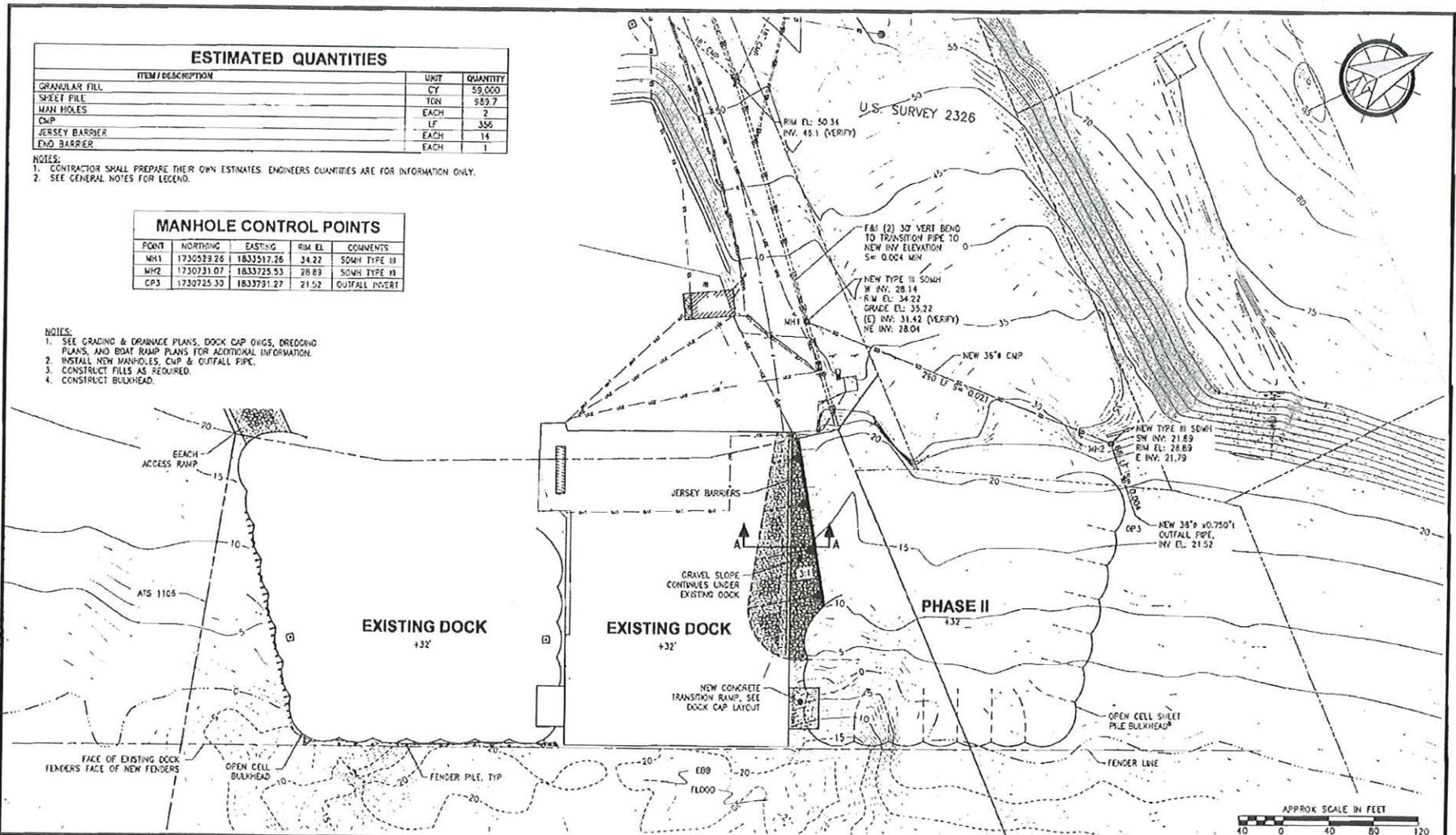


ESTIMATED QUANTITIES		
ITEM / DESCRIPTION	UNIT	QUANTITY
GRANULAR FILL	CY	59,000
SHEET PILE	TON	989.7
MAN HOLES	EACH	2
CWP	LF	356
JERSEY BARRIER	EACH	14
END BARRIER	EACH	1

- NOTES:
 1. CONTRACTOR SHALL PREPARE THEIR OWN ESTIMATES. ENGINEERS QUANTITIES ARE FOR INFORMATION ONLY.
 2. SEE GENERAL NOTES FOR LEGEND.

MANHOLE CONTROL POINTS				
POINT	NORTHING	EASTING	RIM EL.	COMMENTS
MH1	1730533.26	1833517.26	34.22	SO4H TYPE II
MH2	1730731.07	1833725.53	28.89	SO4H TYPE II
CP3	1730725.30	1833731.27	21.52	OUTFALL INVERT

- NOTES:
 1. SEE GRADING & DRAINAGE PLANS, DOCK CAP DWGS, DREDGING PLANS AND BOAT RAMP PLANS FOR ADDITIONAL INFORMATION.
 2. INSTALL NEW MANHOLES, CWP & OUTFALL PIPE.
 3. CONSTRUCT FILLS AS REQUIRED.
 4. CONSTRUCT BULKHEAD.



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NOT FOR CONSTRUCTION
8/01/10



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**BRISTOL BAY BOROUGH
NAKNEK PORT IMPROVEMENTS PHASE II**

BULKHEAD LAYOUT PLAN

DESIGNED BY:	DATE:	8/31/10	SHEET NO. B2 of 52
DRAWN BY:	PROJECT NO.:	061067	





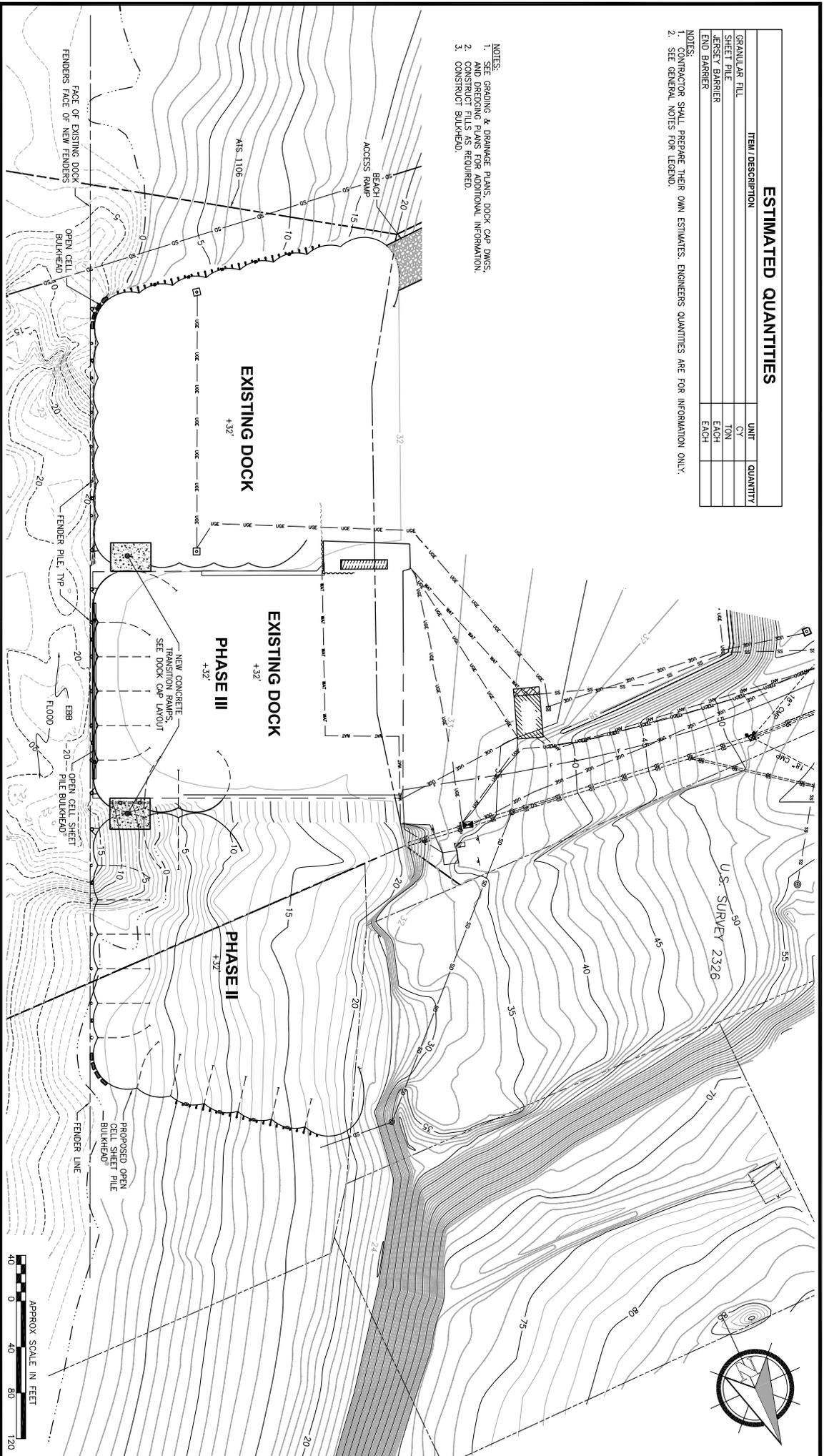
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ESTIMATED QUANTITIES

ITEM DESCRIPTION	UNIT	QUANTITY
GRANULAR FILL	CY	
SHEET PILE	TON	
JERSEY BARRIER	EACH	
END BARRIER	EACH	

- NOTES:
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- NOTES:
 1. SEE GRADING & DRAINAGE PLANS, DOCK CAP DIMS, AND DREDGING PLANS FOR ADDITIONAL INFORMATION.
 2. CONSTRUCT FILL AS REQUIRED.
 3. CONSTRUCT BULKHEAD.



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DRAFT
 2/1/11

REV	DATE	DESCRIPTION

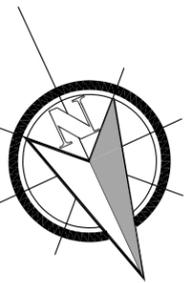
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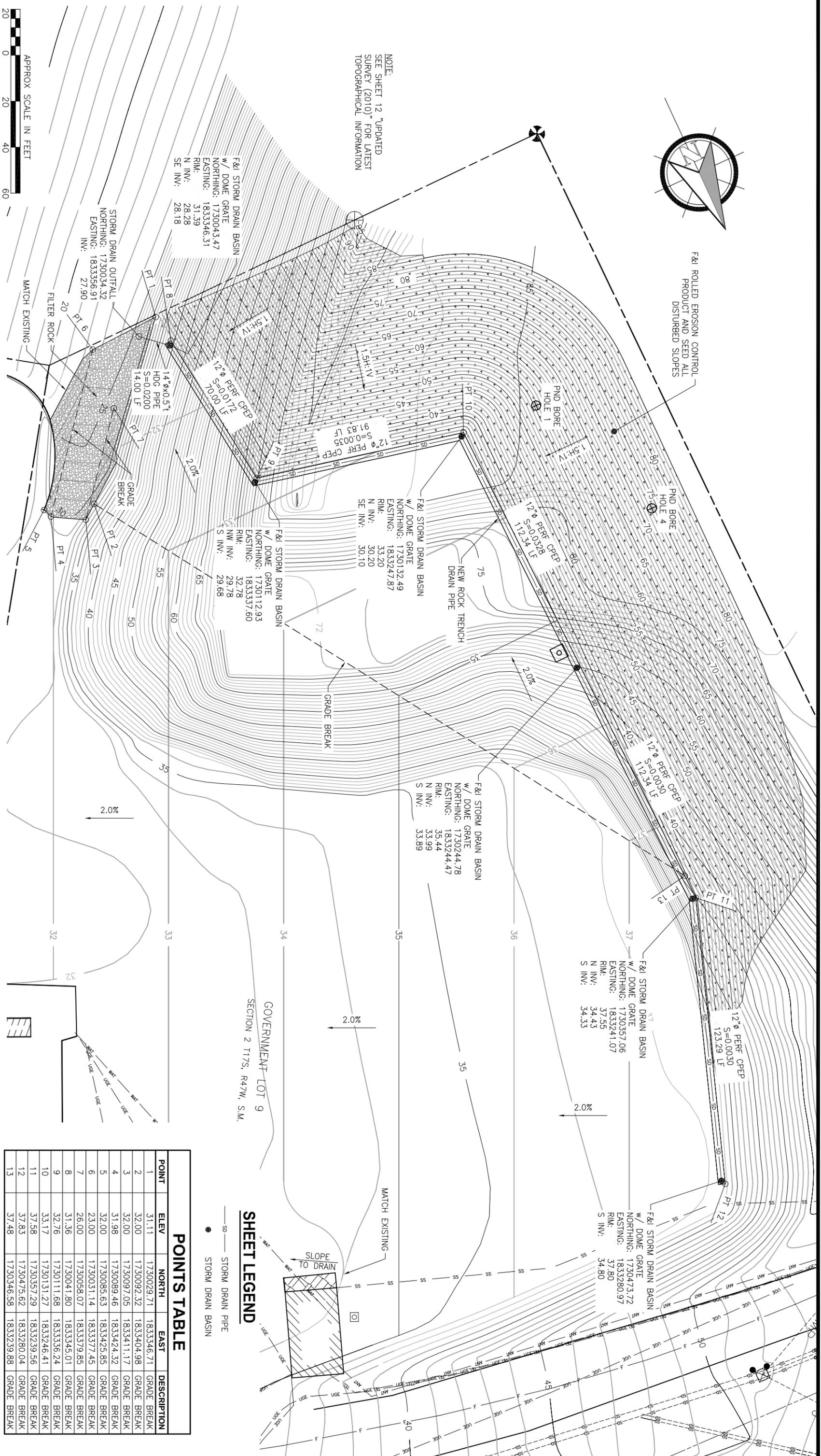
BRISTOL BAY BOROUGH
NAKNEK PILE DOCK REPLACEMENT PHASE III
BULKHEAD LAYOUT PLAN

DESIGNED BY: GH DATE: 2/1/11
 CHECKED BY: GH PROJECT NO.: 061057
 PLOT NO. **B2** OF **XX**



F&I ROLLED EROSION CONTROL
PRODUCT AND SEED ALL
DISTURBED SLOPES

NOTE:
SEE SHEET 12 "UPDATED
SURVEY (2010)" FOR LATEST
TOPOGRAPHICAL INFORMATION



F&I STORM DRAIN BASIN
w/ DOME GRATE
NORTHING: 1730043.47
EASTING: 1833346.31
RIM: 31.39
N INV: 28.28
SE INV: 28.18

STORM DRAIN OUTFALL
NORTHING: 1730034.32
EASTING: 1833356.91
INV: 27.90

F&I STORM DRAIN BASIN
w/ DOME GRATE
NORTHING: 1730112.93
EASTING: 1833337.60
RIM: 32.78
N INV: 29.78
S INV: 29.68

F&I STORM DRAIN BASIN
w/ DOME GRATE
NORTHING: 1730132.49
EASTING: 1833247.87
RIM: 33.20
N INV: 30.20
SE INV: 30.10

F&I STORM DRAIN BASIN
w/ DOME GRATE
NORTHING: 1730244.78
EASTING: 1833244.47
RIM: 35.44
N INV: 33.99
S INV: 33.89

F&I STORM DRAIN BASIN
w/ DOME GRATE
NORTHING: 1730357.06
EASTING: 1833241.07
RIM: 37.55
N INV: 34.43
S INV: 34.33

F&I STORM DRAIN BASIN
w/ DOME GRATE
NORTHING: 1730473.72
EASTING: 1833280.97
RIM: 37.80
N INV: 34.80
S INV: 34.80

GOVERNMENT LOT 9
SECTION 2 T17S, R47W, S.M.

SHEET LEGEND
—●— STORM DRAIN PIPE
● STORM DRAIN BASIN

POINTS TABLE

POINT	ELEV	NORTH	EAST	DESCRIPTION
1	31.11	1730029.71	1833346.71	GRADE BREAK
2	32.00	1730092.32	1833404.98	GRADE BREAK
3	32.00	1730097.05	1833411.17	GRADE BREAK
4	31.98	1730089.46	1833424.32	GRADE BREAK
5	32.00	1730085.63	1833425.85	GRADE BREAK
6	23.00	1730031.14	1833377.45	GRADE BREAK
7	26.00	1730058.07	1833379.85	GRADE BREAK
8	31.36	1730041.80	1833345.01	GRADE BREAK
9	32.76	1730111.68	1833336.24	GRADE BREAK
10	33.17	1730131.27	1833246.41	GRADE BREAK
11	37.58	1730357.29	1833239.56	GRADE BREAK
12	37.83	1730475.62	1833280.04	GRADE BREAK
13	37.48	1730346.58	1833239.88	GRADE BREAK

BID SET

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DATE: 9/30/10

DATE: 9/30/10

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PROJECT: **BRISTOL BAY BOROUGH**
TITLE: **NAKNEK DOCK HILL EXCAVATION & SCHOOL FILL**
EXCAVATION, SURFACING & DRAINAGE PLAN

DESIGNED BY: GH DATE: 9/30/10 SHEET NO: **6** OF **12**
CHECKED BY: GH PROJECT NO: 061057