

Exhibit A

E1-18214

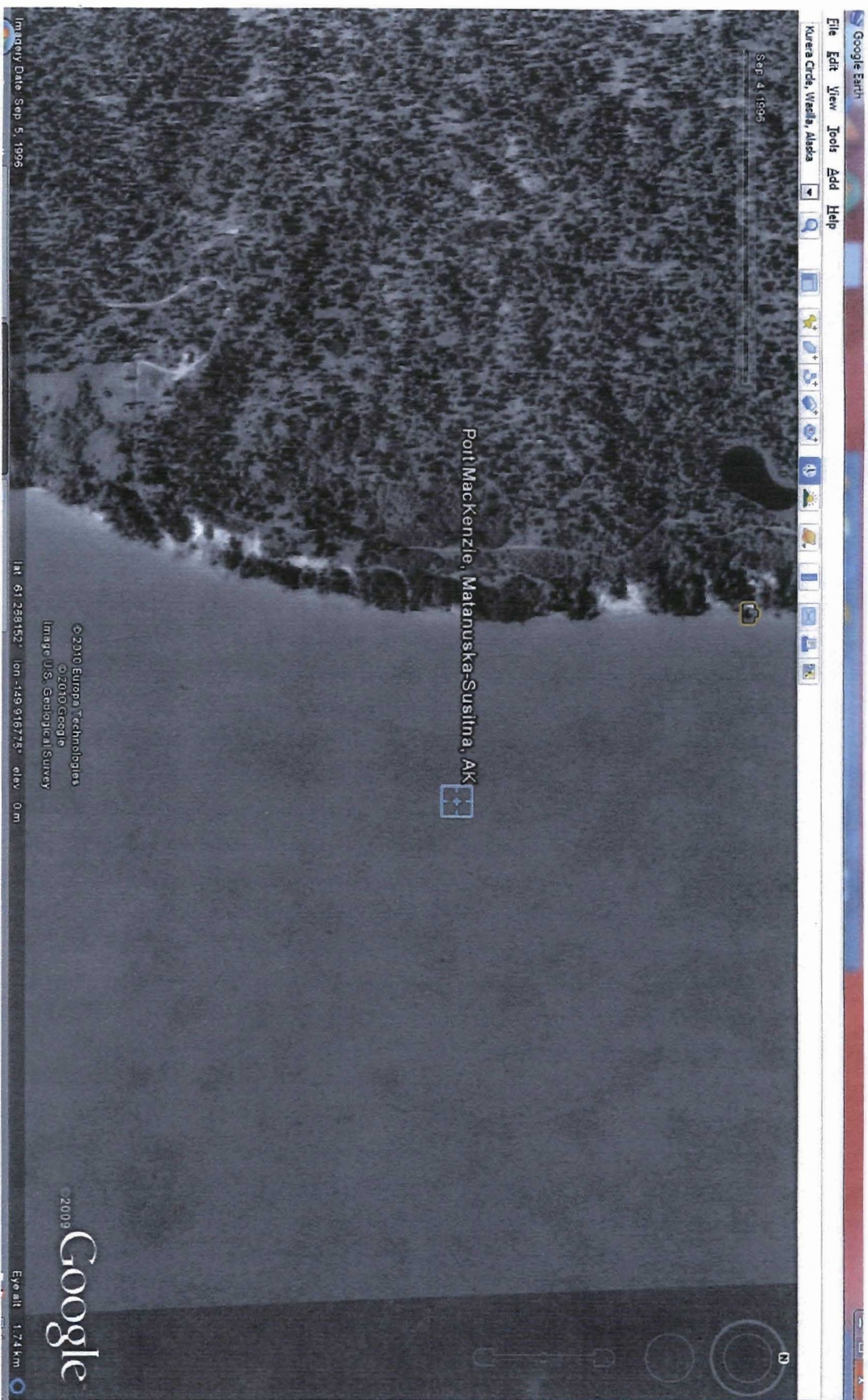


Exhibit B

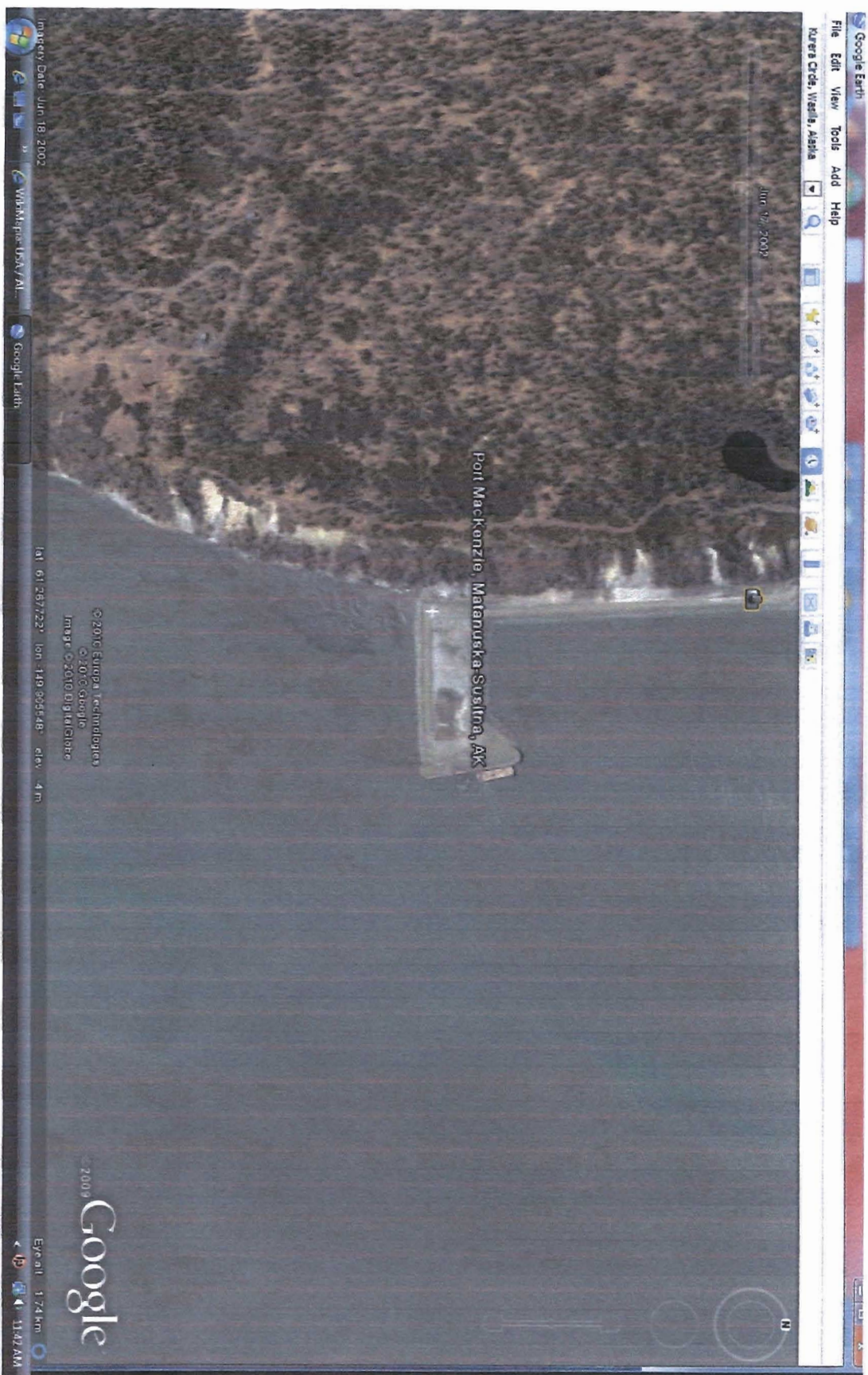
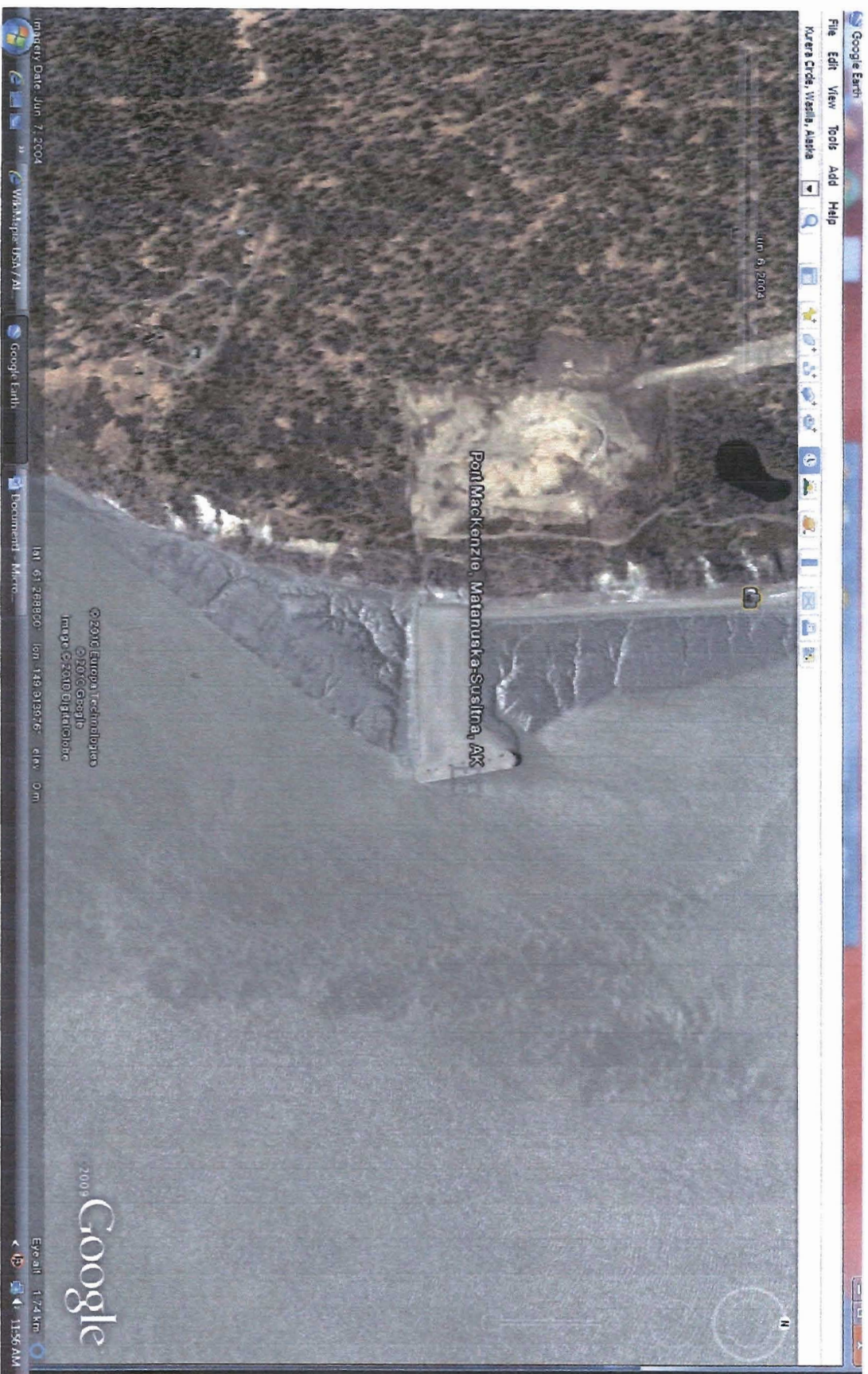


Exhibit C



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Web posted Sunday, June 19, 2005

Influx of silt in inlet drives increase in dredging, costs

By Melissa Campbell
Alaska Journal of Commerce

Sediment in the Knik Arm near Anchorage is building up at a faster pace than normal, and no one is quite sure why, according to a navigational consultant and officials at the U.S. Army Corps of Engineers.

The Corps of Engineers Civil Works department each year oversees dredging of the navigational channel of Knik Arm for access to the Port of Anchorage.

From May 15 to Nov. 1, 2004, more than 2 million cubic yards of sediment were dredged from the area. Similar numbers are expected this year, said the corps' Allen Churchill. In the 1980s and 1990s, the average amount dredged each year was roughly 250,000 cubic yards.

Costs for Anchorage-area dredging has gone from about \$3 million a year to nearly \$12 million last year, said port director Bill Sheffield.

Several factors could be contributing to the increase, navigational consultant John Oliver told the corps' Coastal Engineering Research Board at its annual meeting in Anchorage earlier this month.

One possibility is the warmer weather the region has seen in recent years has created more sediment from fresh water runoff and has loosened up silt earlier in the season in the tidal flats along the Knik Arm.

Construction at the ports of Anchorage and McKenzie could be contributing to disruptions in water flows and may be creating more gyres, a sort of water vortex. Naturally occurring gyres may also be an issue.

Previously dredged material may also be making its way back into the system. Or it could be a combination of all these factors.

"The simple answer is, we don't know," Oliver told the board. "The sediment transport here is extremely complex. There is no model in the world that can handle this type of sediment transfer."

A lot more study needs to be done to figure it all out, Oliver said in a later interview.

"It's not a simple cause-and-effect relationship," he said. "We have a basic understanding of the dynamics of the system, but how that couples with the sediment is another subject altogether."

Oliver has worked since 2002 to try to figure out why sediment is increasing and what effects construction on the ports of Anchorage and McKenzie may be having on the area.

It's not an easy task. The area has extreme tides and a huge span of mud flats. Several rivers flow into the inlet, including the silt-laden Knik and Matanuska rivers to the north and the Susitna River to the south.

"Material comes from the north and the south and it meets in the middle," Churchill said. "We haven't surveyed yet to determine where else sediment is coming from."

Previously dredged material may also be making its way back to the channel to be dredged again. The dredged material is deposited in the waters less than a mile southwest of the port, Churchill said. No studies have been done to determine how long that material stays there, he told the research board.

Disposal of dredged material comes down to money, Oliver said in an interview.

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Disposal of dredged material comes down to money, Oliver said in an interview.

"It costs too much to haul it away," he said. "The 5 or 10 percent return (of the sediment) may be cheaper to dredge again than it is to take it somewhere where it will never return."

To look at the hydrodynamics of the waterway, Oliver designed a small-scale physical model of the Knik Arm. He tried to correlate various factors to determine possible causes - water and air temperatures, stream flows, precipitation - but nothing made mathematical sense, he told the board.

Oliver did determine that sediment starts to build after ice melts and comes to a near standstill during the freeze. There also seems to be a good connection between high tides and high deposits.

He also believes that once sediment gets into the system, it tends to stay for several tide cycles, as new sediments enter into the waterway.

The problem is likely to get worse. Oliver and Churchill both noted that past spikes in sediment coincided with past port construction projects.

Port McKenzie, on the Matanuska Valley side, has recently added an 800-foot dock, and has plans for other improvements.

The Port of Anchorage has large-scale construction plans that will continue through 2011. The project includes filling in portions of the tidelands and adding several berths to the docks.

As part of that expansion, the corps will also begin to dredge a deeper channel to accommodate larger ships coming into the port.

If the Knik Arm bridge is eventually built, that too will likely add to the sediment problem.

Oliver recommended to the board to develop a 3-D model of the area to better determine the various possibilities of the increasing sediment, and the possible effects of construction underway in the area. The large-scale model would cost \$3 million and the study would take three years to complete, he said.

He also recommended that the corps gain a better understanding of the area by defining the topography in upper Knik Arm and by continuously measuring the suspended sediment loads through at least a summer season.

Melissa Campbell can be reached at

melissa.campbell@alaskajournal.com.

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EXHIBIT C



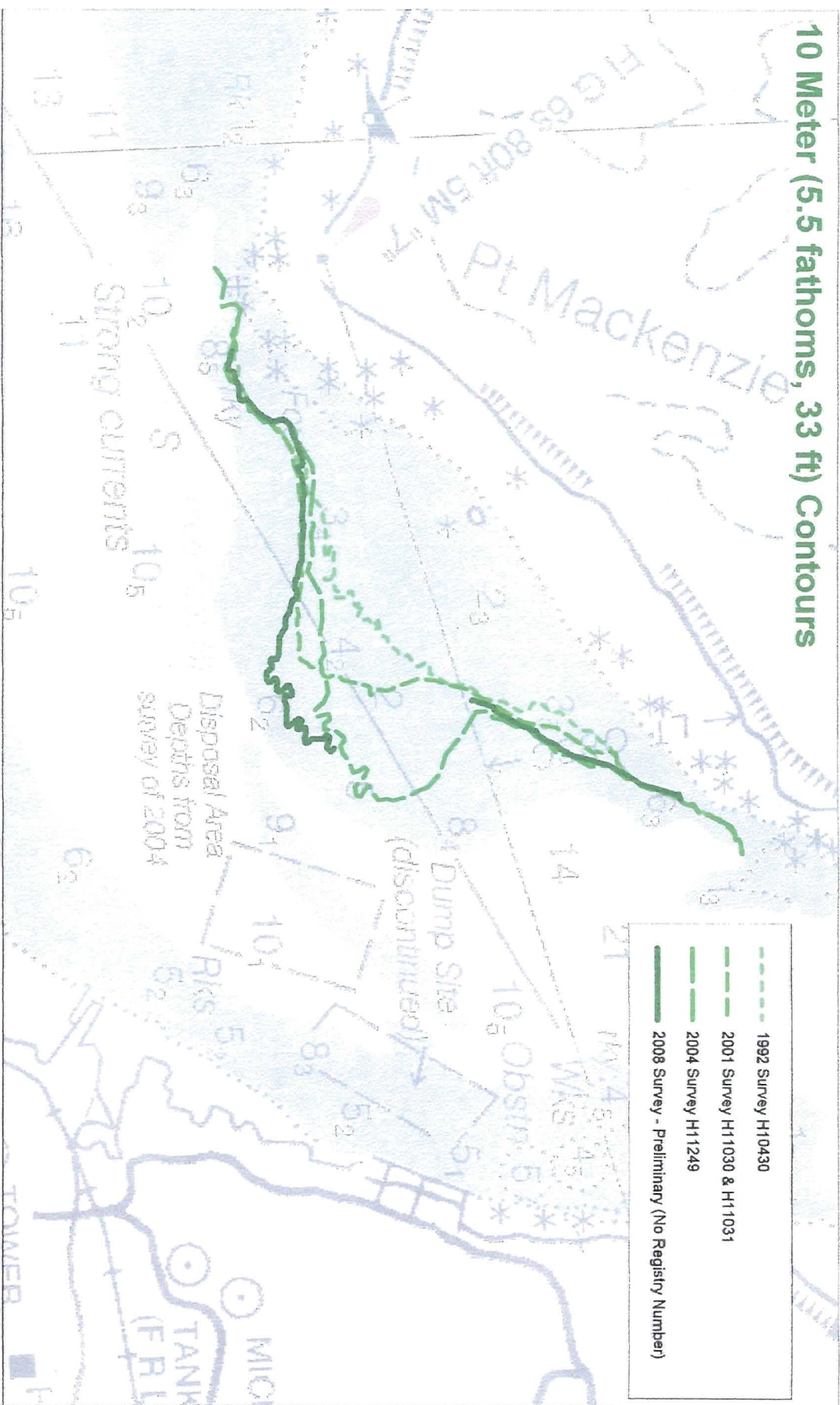
- Click the +/- buttons and drag the slider tool (solid triangle) to zoom in and out.
- Click the arrow buttons to pan left/right and up/down.
- Drag the navigation box in the upper left hand corner to move around the chart image.

This chart display or derived product can be used as a planning or analysis tool and may not be used as a navigational aid.

NOTE: Use the official, full scale NOAA nautical chart for real navigation whenever possible. These are available from authorized NOAA

EXHIBIT F

10 Meter (5.5 fathoms, 33 ft) Contours



Chartlet 1 of 2 Point Mackenzie Shoal 10 Meter Contours (2008 Data Gap Due to Limited Survey)
 2008 data are PRELIMINARY and subject to further review and final tide application. 2008 soundings corrected using preliminary observed tides. Data reflects state of sea floor in existence on day and at time the survey was conducted.

This chartlet has been corrected through
 Notice to Mariners dated 03/17/2007
 NOT FOR NAVIGATION.



NATIONAL OCEANIC AND
 ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE

Project: Multiple
 Survey: H10430, H11030-31, H11249
 State: Alaska
 Locality: Approaches to Anchorage
 Sub-locality: Point Mackenzie Shoal
 Survey Scale: 1:10,000

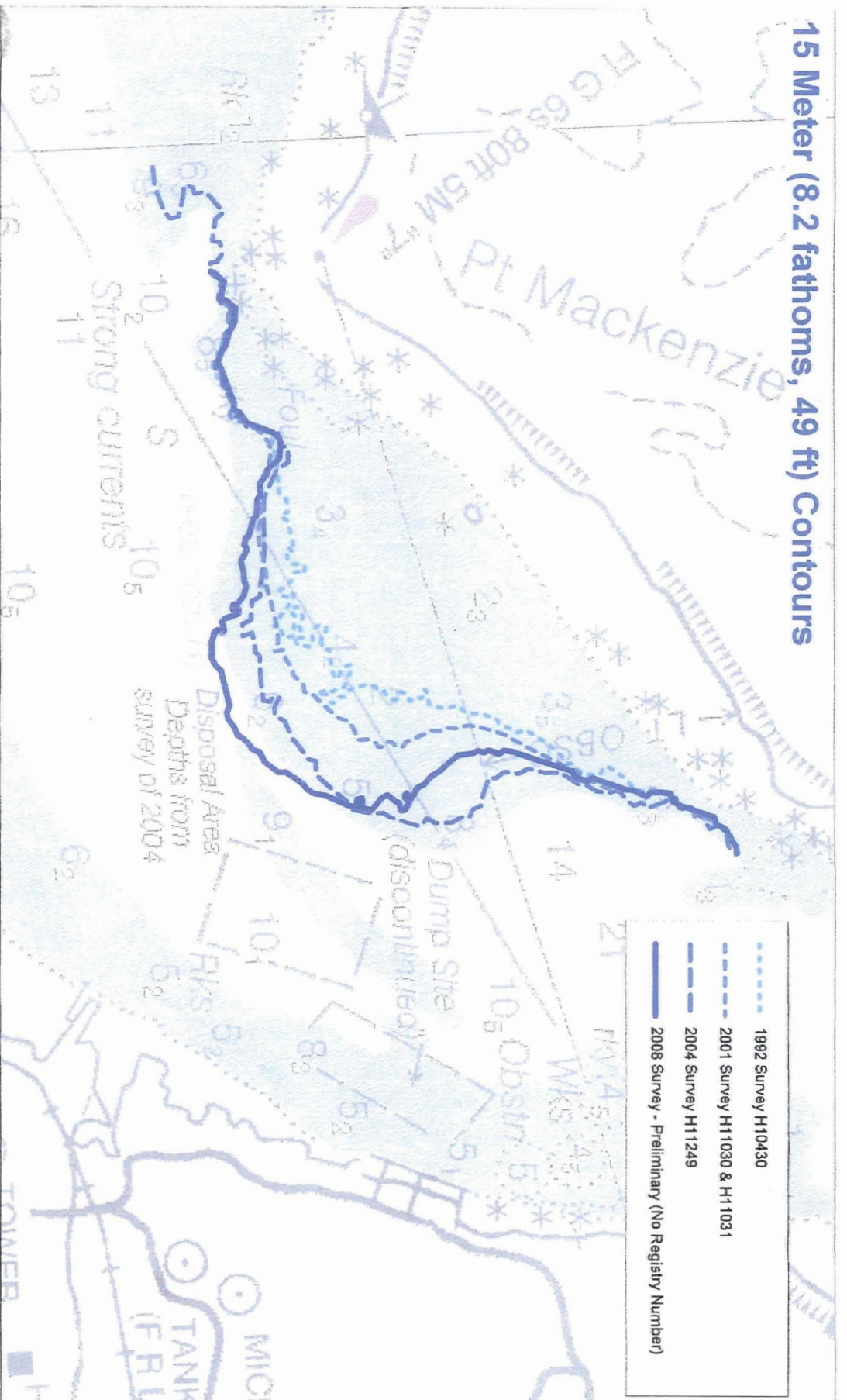
Sounding Units: Fathoms
 Sounding Datum: MLLW
 Horizontal Datum: NAD 83
 Chart Number: 16663
 Chart Edition: 8, Mar./06
 NOS Ref: n/a

SURVEY COMPARISON

Survey Dates
 1992, 2001, 2004 &
 2008(preliminary)

EXHIBIT G

15 Meter (8.2 fathoms, 49 ft) Contours



Chartlet 2 of 2 Point Mackenzie Shoal 15 Meter Contours

2008 data are PRELIMINARY and subject to further review and final tide application. 2008 soundings corrected using preliminary observed tides. Data reflects state of sea floor in existence on day and at time the survey was conducted.

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