

LASH Dock
5 Miles
See Inset

Pier 2 Site
Figure 3

St. Paul Harbor
Breakwater Site
Figure 4

Near Island Site
Figure 2

Pier 1 Site
Figure 7

Transient Float
Figure 8

Lash Dock Site
Figure 5

Womens Bay

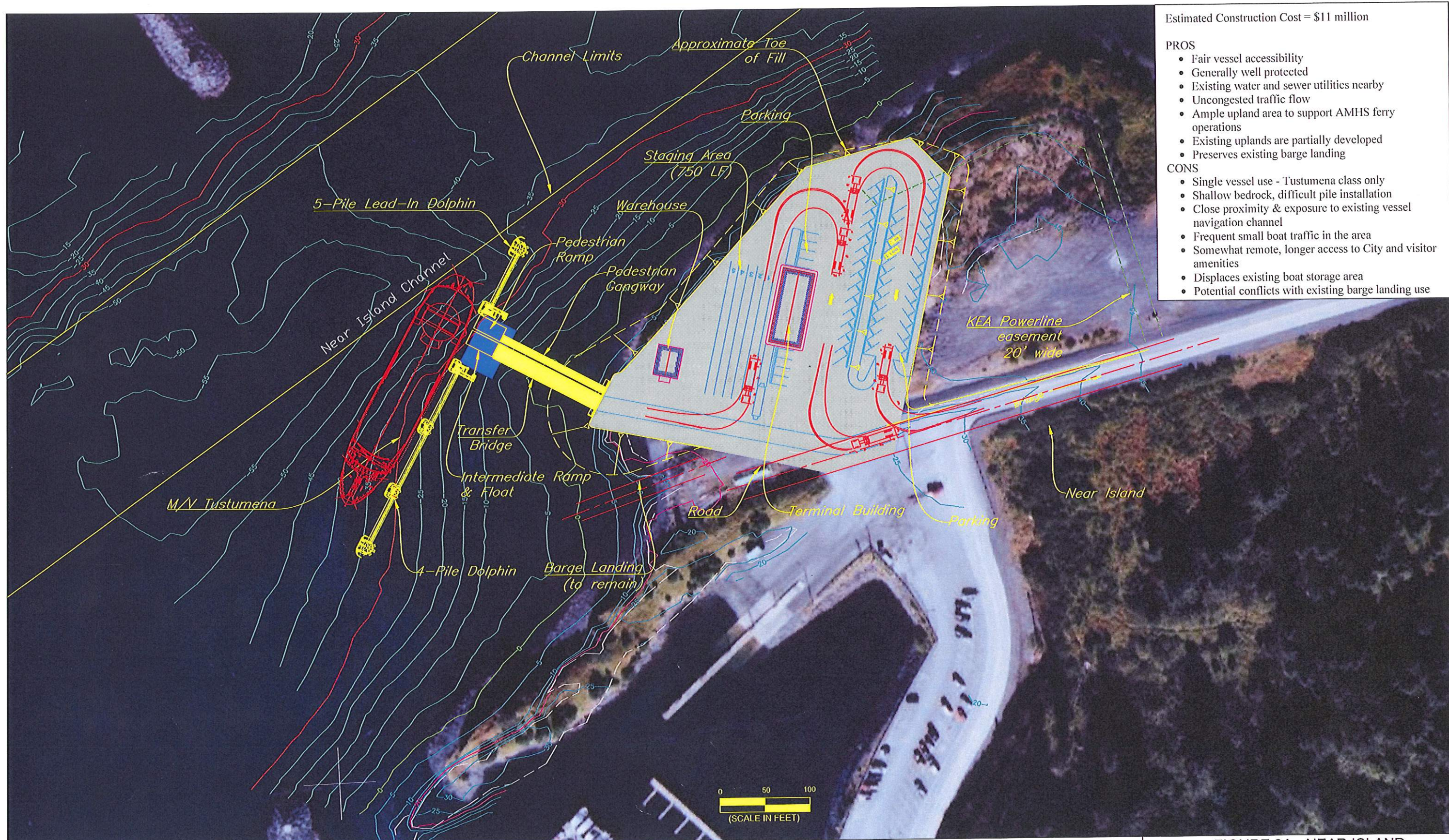
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LOCATION MAP

FIGURE 1-PROPOSED SITES
Kodiak Ferry Terminal

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction Cost = \$11 million

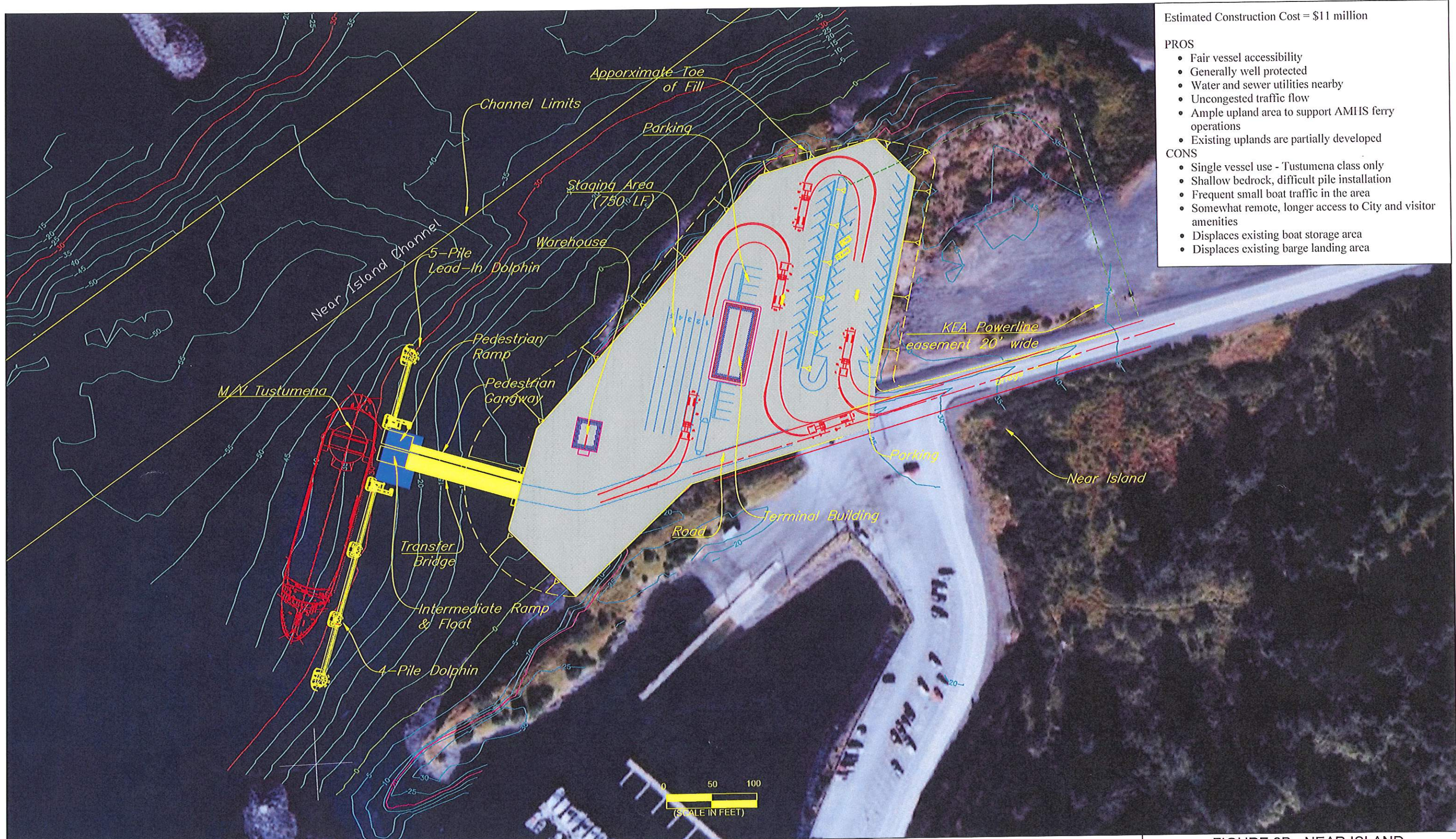
- PROS**
- Fair vessel accessibility
 - Generally well protected
 - Existing water and sewer utilities nearby
 - Uncongested traffic flow
 - Ample upland area to support AMHS ferry operations
 - Existing uplands are partially developed
 - Preserves existing barge landing
- CONS**
- Single vessel use - Tustumena class only
 - Shallow bedrock, difficult pile installation
 - Close proximity & exposure to existing vessel navigation channel
 - Frequent small boat traffic in the area
 - Somewhat remote, longer access to City and visitor amenities
 - Displaces existing boat storage area
 - Potential conflicts with existing barge landing use

NEAR ISLAND - ALTERNATE 2A / BY CHANNEL

**FIGURE 2A - NEAR ISLAND
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA

Q:\Kdk\68938\MF\Recon report\Recon 6-10\FINAL RECON FIGS 6-10\Fig 2 Near Island ALT A.dwg



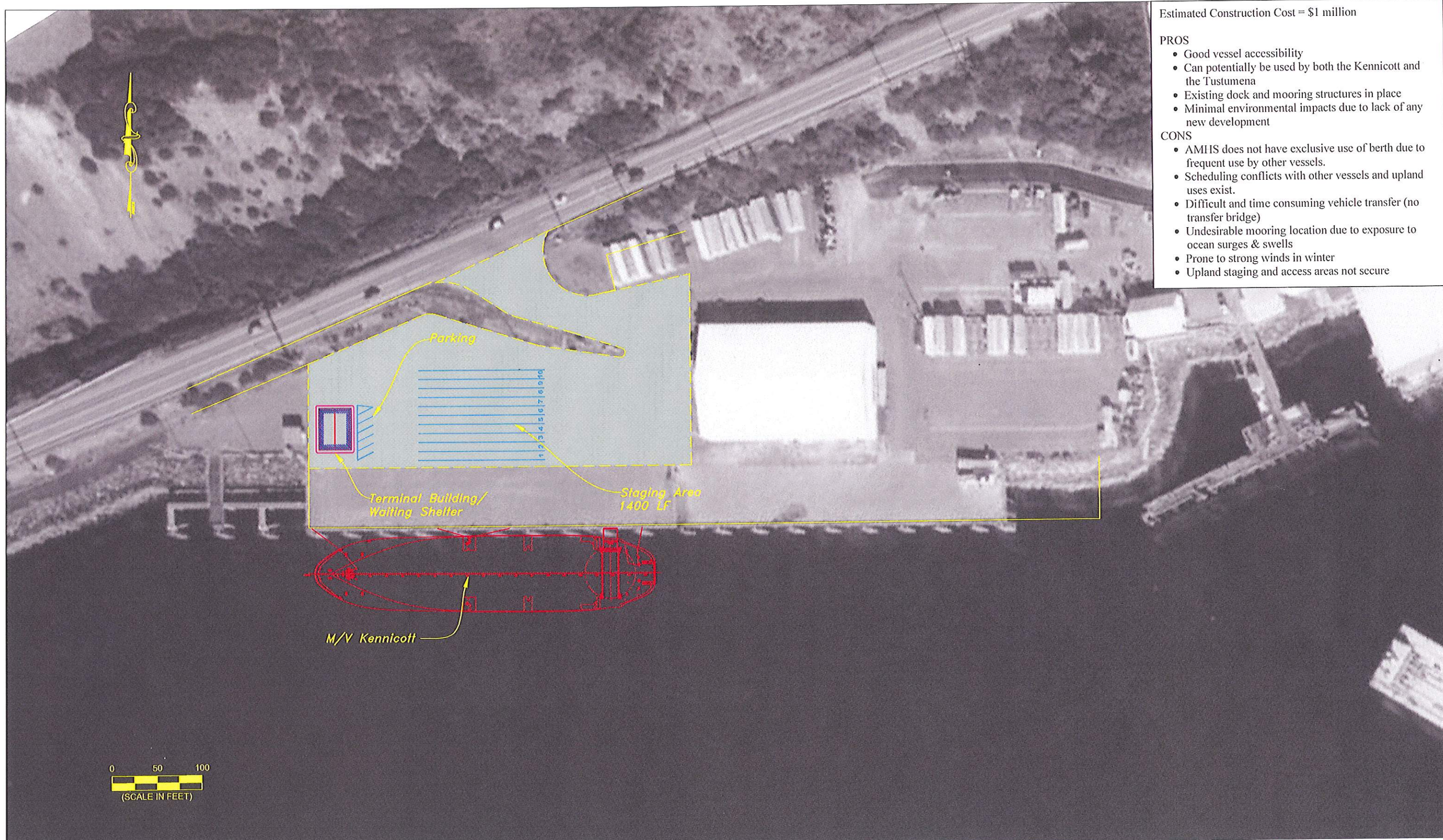
Estimated Construction Cost = \$11 million

- PROS**
- Fair vessel accessibility
 - Generally well protected
 - Water and sewer utilities nearby
 - Uncongested traffic flow
 - Ample upland area to support AMHS ferry operations
 - Existing uplands are partially developed
- CONS**
- Single vessel use - Tustumeha class only
 - Shallow bedrock, difficult pile installation
 - Frequent small boat traffic in the area
 - Somewhat remote, longer access to City and visitor amenities
 - Displaces existing boat storage area
 - Displaces existing barge landing area

NEAR ISLAND - ALTERNATE 2B / AWAY FROM CHANNEL

**FIGURE 2B - NEAR ISLAND
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction Cost = \$1 million

PROS

- Good vessel accessibility
- Can potentially be used by both the Kennicott and the Tustumena
- Existing dock and mooring structures in place
- Minimal environmental impacts due to lack of any new development

CONS

- AMIIS does not have exclusive use of berth due to frequent use by other vessels.
- Scheduling conflicts with other vessels and upland uses exist.
- Difficult and time consuming vehicle transfer (no transfer bridge)
- Undesirable mooring location due to exposure to ocean surges & swells
- Prone to strong winds in winter
- Upland staging and access areas not secure

PIER 2 - ALTERNATE 3A / EXISTING DOCK

**FIGURE 3A - PIER 2
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction Cost = \$6 million

PROS

- Good vessel accessibility
- Can potentially be used by both the Kennicott and the Tustumena
- Proposed transfer bridge greatly speeds vessel loading time and safety
- Existing dock and mooring structures in place
- Relatively low environmental impacts due to presence of existing dock & mooring infrastructure

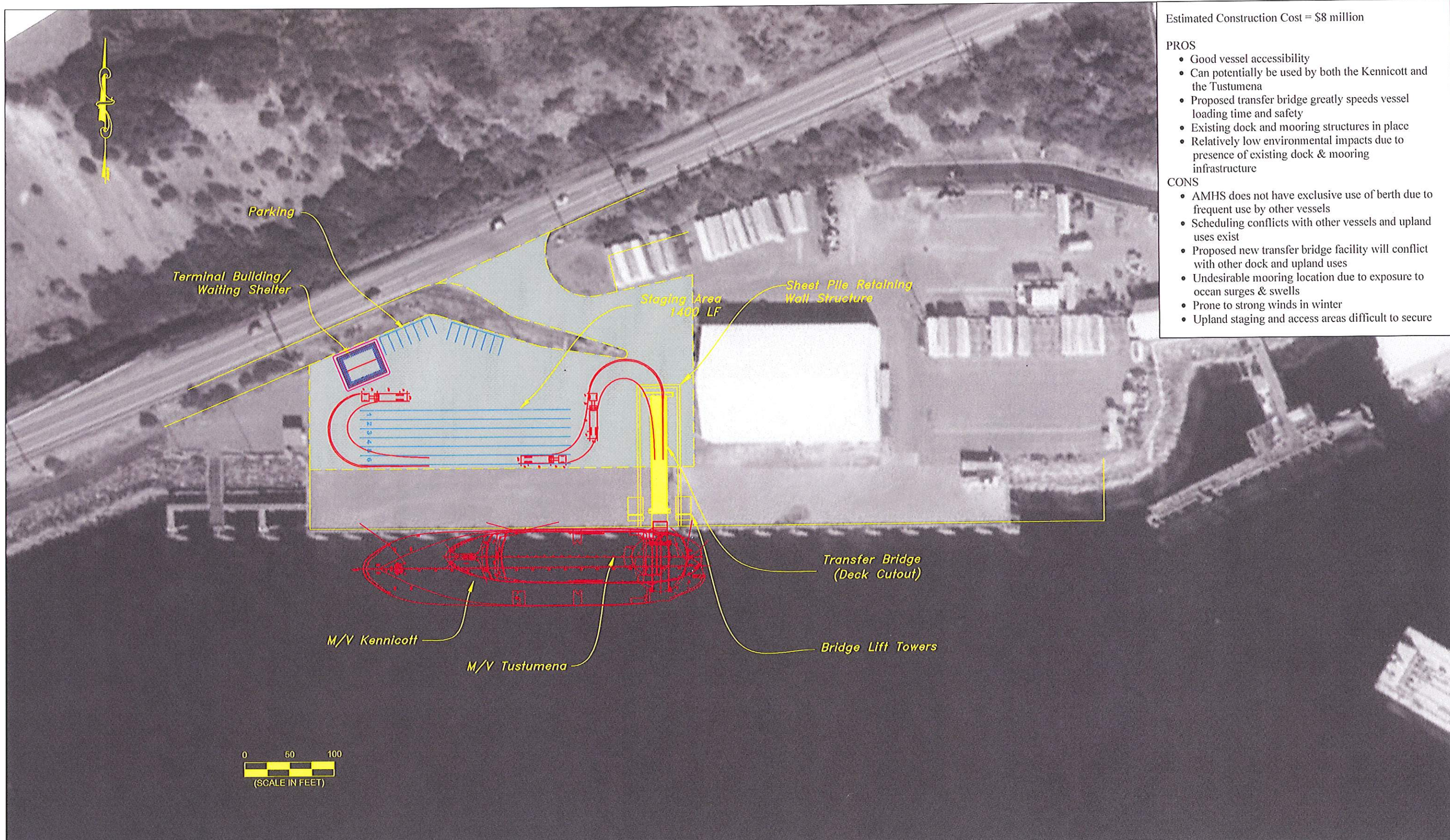
CONS

- AMIIS does not have exclusive use of berth due to frequent use by other vessels.
- Scheduling conflicts with other vessels and upland uses exist.
- Proposed new transfer bridge facility may conflict with other dock and upland uses
- Undesirable mooring location due to exposure to ocean surges & swells
- Prone to strong winds in winter
- Upland staging and access areas difficult to secure

PIER 2 - ALTERNATE 3B / NEW TRANSFER BRIDGE (West Side)

**FIGURE 3B - PIER 2
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction Cost = \$8 million

PROS

- Good vessel accessibility
- Can potentially be used by both the Kennicott and the Tustumena
- Proposed transfer bridge greatly speeds vessel loading time and safety
- Existing dock and mooring structures in place
- Relatively low environmental impacts due to presence of existing dock & mooring infrastructure

CONS

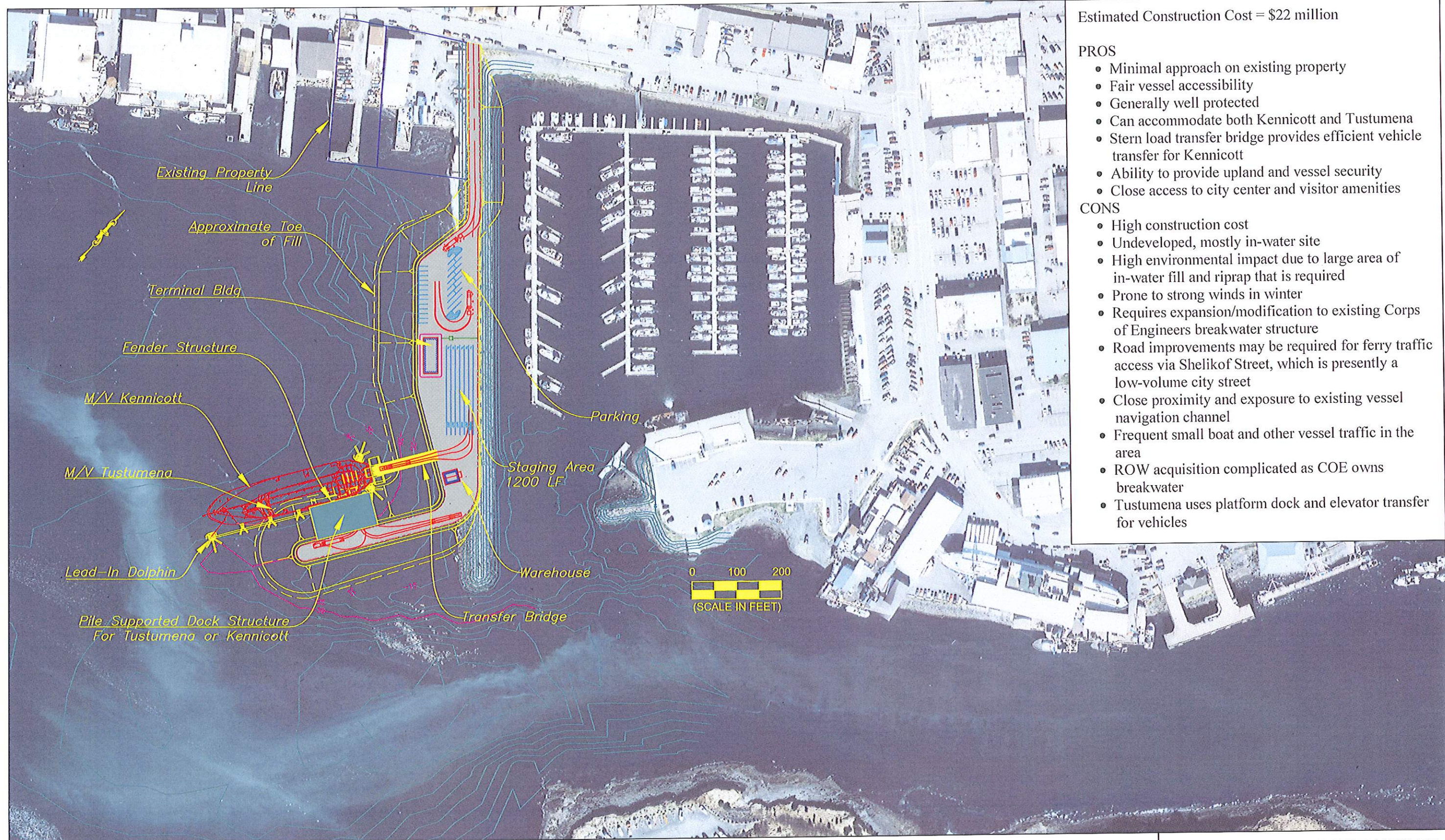
- AMHS does not have exclusive use of berth due to frequent use by other vessels
- Scheduling conflicts with other vessels and upland uses exist
- Proposed new transfer bridge facility will conflict with other dock and upland uses
- Undesirable mooring location due to exposure to ocean surges & swells
- Prone to strong winds in winter
- Upland staging and access areas difficult to secure

PIER 2 - ALTERNATE 3C / NEW TRANSFER BRIDGE (Middle)

FIGURE 3C - PIER 2

Kodiak Ferry Terminal

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 PROPOSED KODIAK FERRY TERMINAL
 KODIAK, ALASKA



Estimated Construction Cost = \$22 million

PROS

- Minimal approach on existing property
- Fair vessel accessibility
- Generally well protected
- Can accommodate both Kennicott and Tustumena
- Stern load transfer bridge provides efficient vehicle transfer for Kennicott
- Ability to provide upland and vessel security
- Close access to city center and visitor amenities

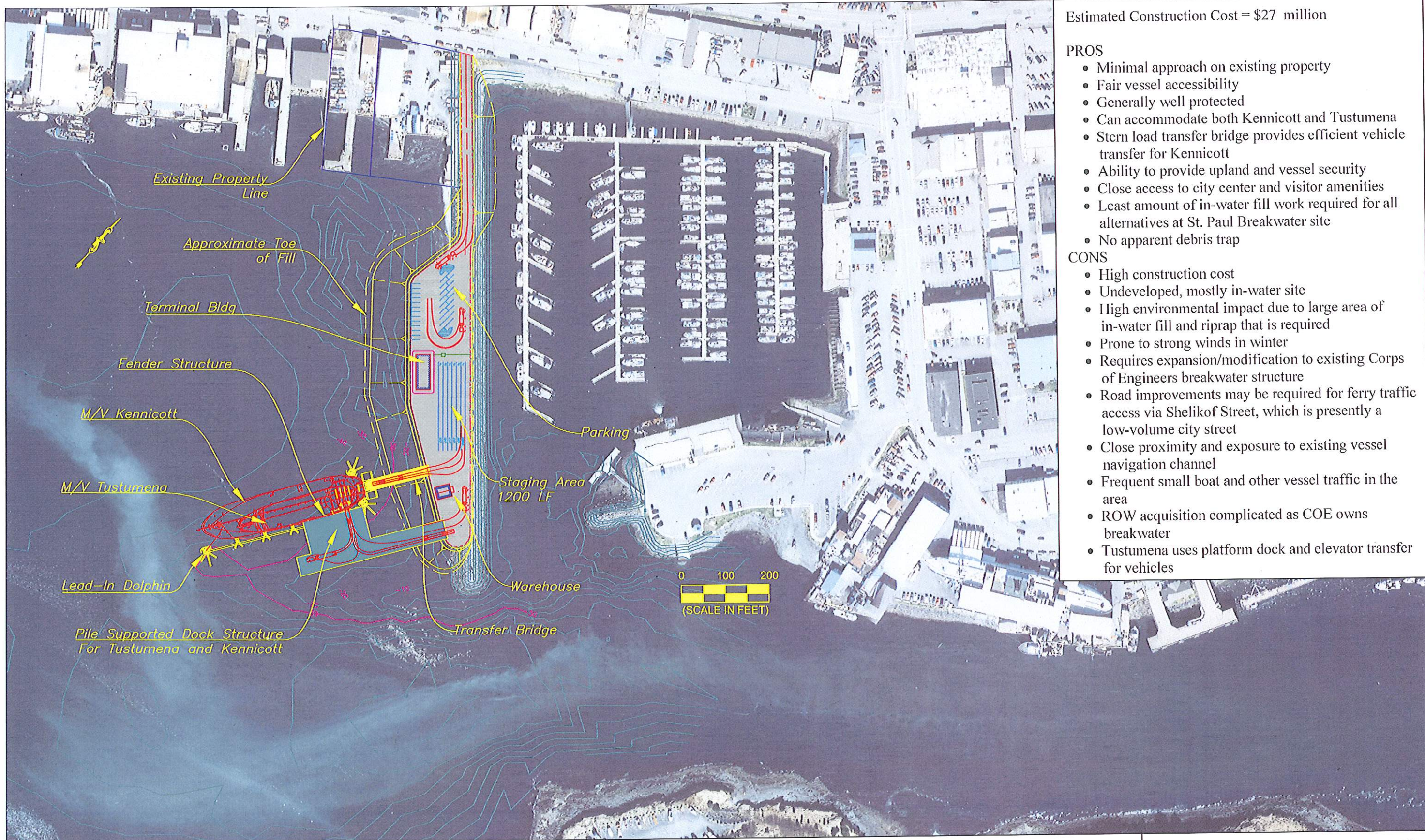
CONS

- High construction cost
- Undeveloped, mostly in-water site
- High environmental impact due to large area of in-water fill and riprap that is required
- Prone to strong winds in winter
- Requires expansion/modification to existing Corps of Engineers breakwater structure
- Road improvements may be required for ferry traffic access via Shelikof Street, which is presently a low-volume city street
- Close proximity and exposure to existing vessel navigation channel
- Frequent small boat and other vessel traffic in the area
- ROW acquisition complicated as COE owns breakwater
- Tustumena uses platform dock and elevator transfer for vehicles

ST. PAUL BREAKWATER - ALTERNATE 4A / SIDE-STERN LOAD

**FIGURE 4A - ST. PAUL BREAKWATER
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC
FACILITIES PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction Cost = \$27 million

PROS

- Minimal approach on existing property
- Fair vessel accessibility
- Generally well protected
- Can accommodate both Kennicott and Tustumena
- Stern load transfer bridge provides efficient vehicle transfer for Kennicott
- Ability to provide upland and vessel security
- Close access to city center and visitor amenities
- Least amount of in-water fill work required for all alternatives at St. Paul Breakwater site
- No apparent debris trap

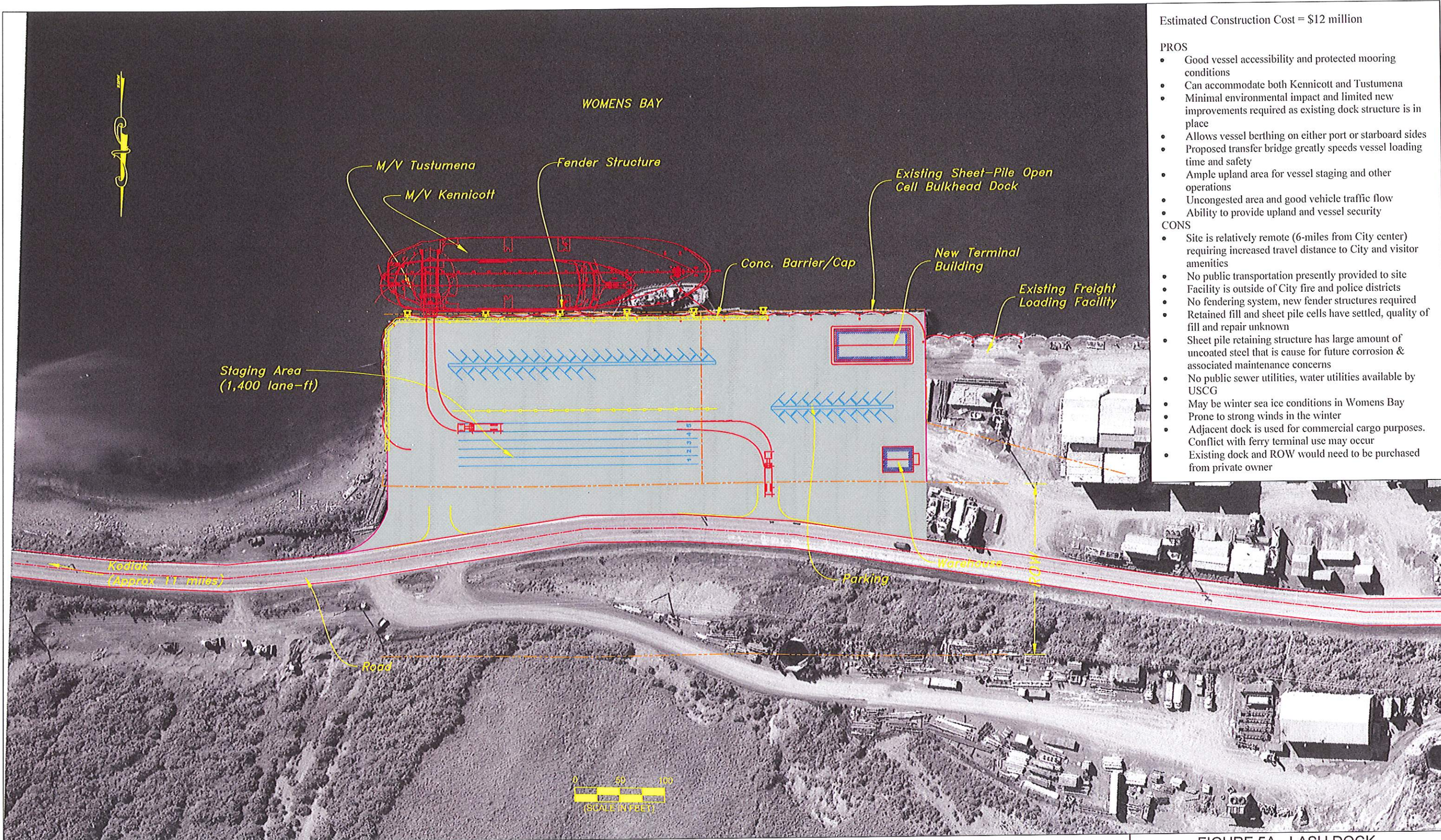
CONS

- High construction cost
- Undeveloped, mostly in-water site
- High environmental impact due to large area of in-water fill and riprap that is required
- Prone to strong winds in winter
- Requires expansion/modification to existing Corps of Engineers breakwater structure
- Road improvements may be required for ferry traffic access via Shelikof Street, which is presently a low-volume city street
- Close proximity and exposure to existing vessel navigation channel
- Frequent small boat and other vessel traffic in the area
- ROW acquisition complicated as COE owns breakwater
- Tustumena uses platform dock and elevator transfer for vehicles

ST. PAUL BREAKWATER - ALTERNATE 4B / SIDE-STERN LOAD

**FIGURE 4B - ST. PAUL BREAKWATER
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC
FACILITIES PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction Cost = \$12 million

PROS

- Good vessel accessibility and protected mooring conditions
- Can accommodate both Kennicott and Tustumena
- Minimal environmental impact and limited new improvements required as existing dock structure is in place
- Allows vessel berthing on either port or starboard sides
- Proposed transfer bridge greatly speeds vessel loading time and safety
- Ample upland area for vessel staging and other operations
- Uncongested area and good vehicle traffic flow
- Ability to provide upland and vessel security

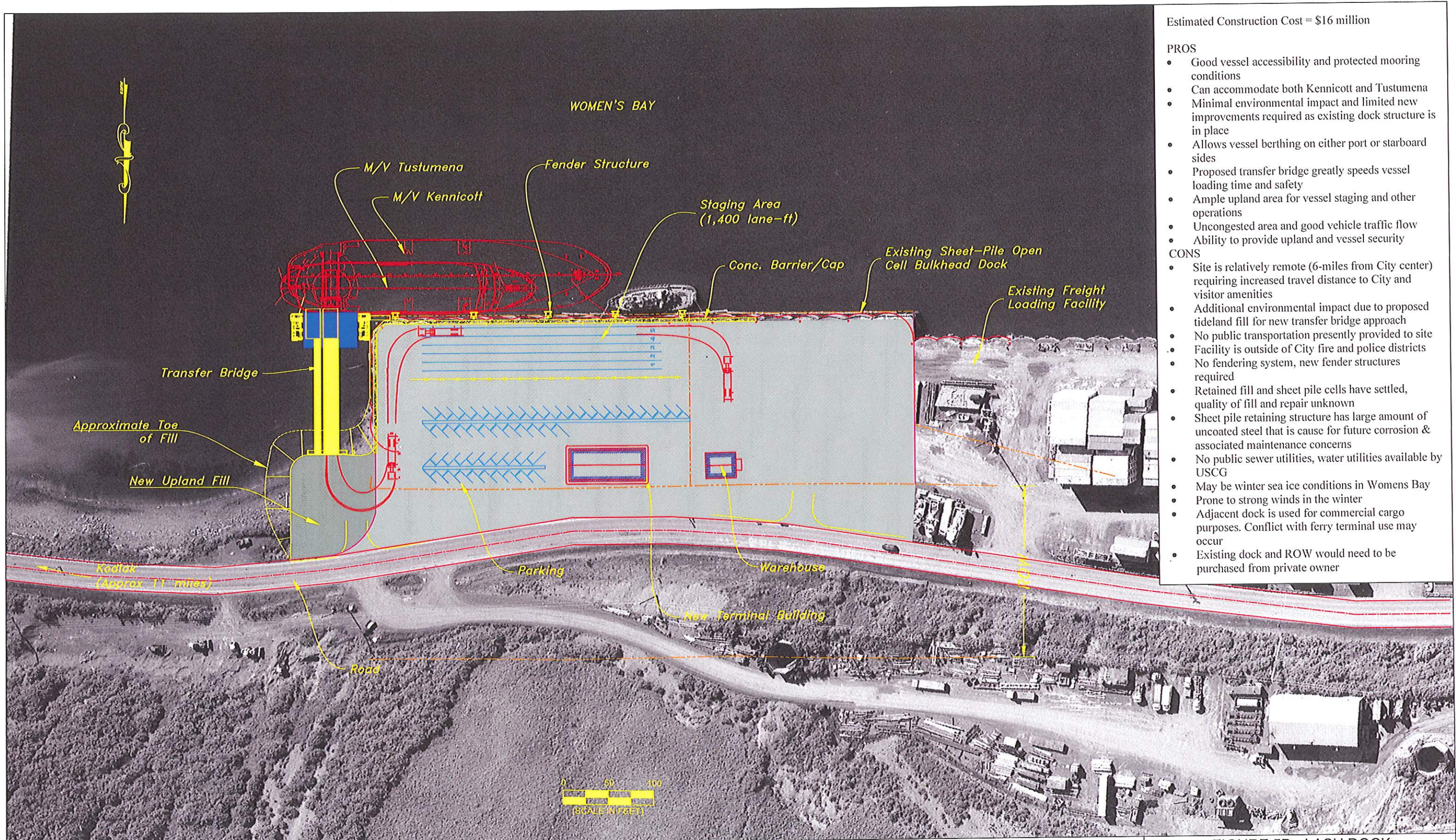
CONS

- Site is relatively remote (6-miles from City center) requiring increased travel distance to City and visitor amenities
- No public transportation presently provided to site
- Facility is outside of City fire and police districts
- No fendering system, new fender structures required
- Retained fill and sheet pile cells have settled, quality of fill and repair unknown
- Sheet pile retaining structure has large amount of uncoated steel that is cause for future corrosion & associated maintenance concerns
- No public sewer utilities, water utilities available by USCG
- May be winter sea ice conditions in Womens Bay
- Prone to strong winds in the winter
- Adjacent dock is used for commercial cargo purposes. Conflict with ferry terminal use may occur
- Existing dock and ROW would need to be purchased from private owner

LASH DOCK - ALTERNATE 5A / EXISTING SHEET PILE DOCK

FIGURE 5A - LASH DOCK
Kodiak Ferry Terminal

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction Cost = \$16 million

PROS

- Good vessel accessibility and protected mooring conditions
- Can accommodate both Kennicott and Tustumena
- Minimal environmental impact and limited new improvements required as existing dock structure is in place
- Allows vessel berthing on either port or starboard sides
- Proposed transfer bridge greatly speeds vessel loading time and safety
- Ample upland area for vessel staging and other operations
- Uncongested area and good vehicle traffic flow
- Ability to provide upland and vessel security

CONS

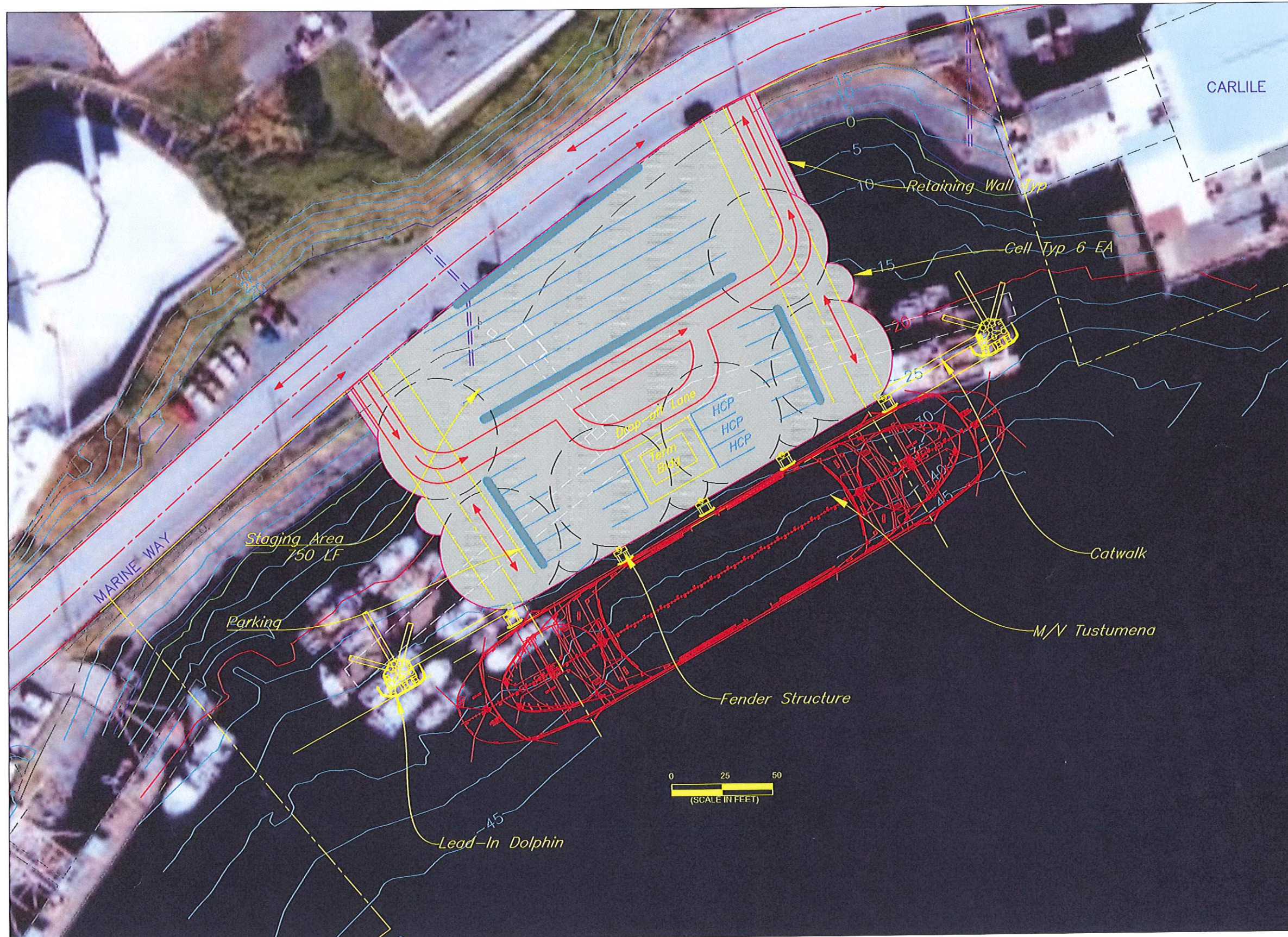
- Site is relatively remote (6-miles from City center) requiring increased travel distance to City and visitor amenities
- Additional environmental impact due to proposed tideland fill for new transfer bridge approach
- No public transportation presently provided to site
- Facility is outside of City fire and police districts
- No fendering system, new fender structures required
- Retained fill and sheet pile cells have settled, quality of fill and repair unknown
- Sheet pile retaining structure has large amount of uncoated steel that is cause for future corrosion & associated maintenance concerns
- No public sewer utilities, water utilities available by USCG
- May be winter sea ice conditions in Womens Bay
- Prone to strong winds in the winter
- Adjacent dock is used for commercial cargo purposes. Conflict with ferry terminal use may occur
- Existing dock and ROW would need to be purchased from private owner

LASH DOCK - ALTERNATE 5B / SHEET PILE DOCK & NEW TRANSFER BRIDGE

**FIGURE 5B - LASH DOCK
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA

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Estimated Construction Cost = \$22 million

PROS

- Protected moorage location
- Relatively easy vessel access
- Public sewer, water and electrical utilities nearby
- Allows vessel berthing on either port or starboard sides.
- Convenient access to City center and visitor amenities

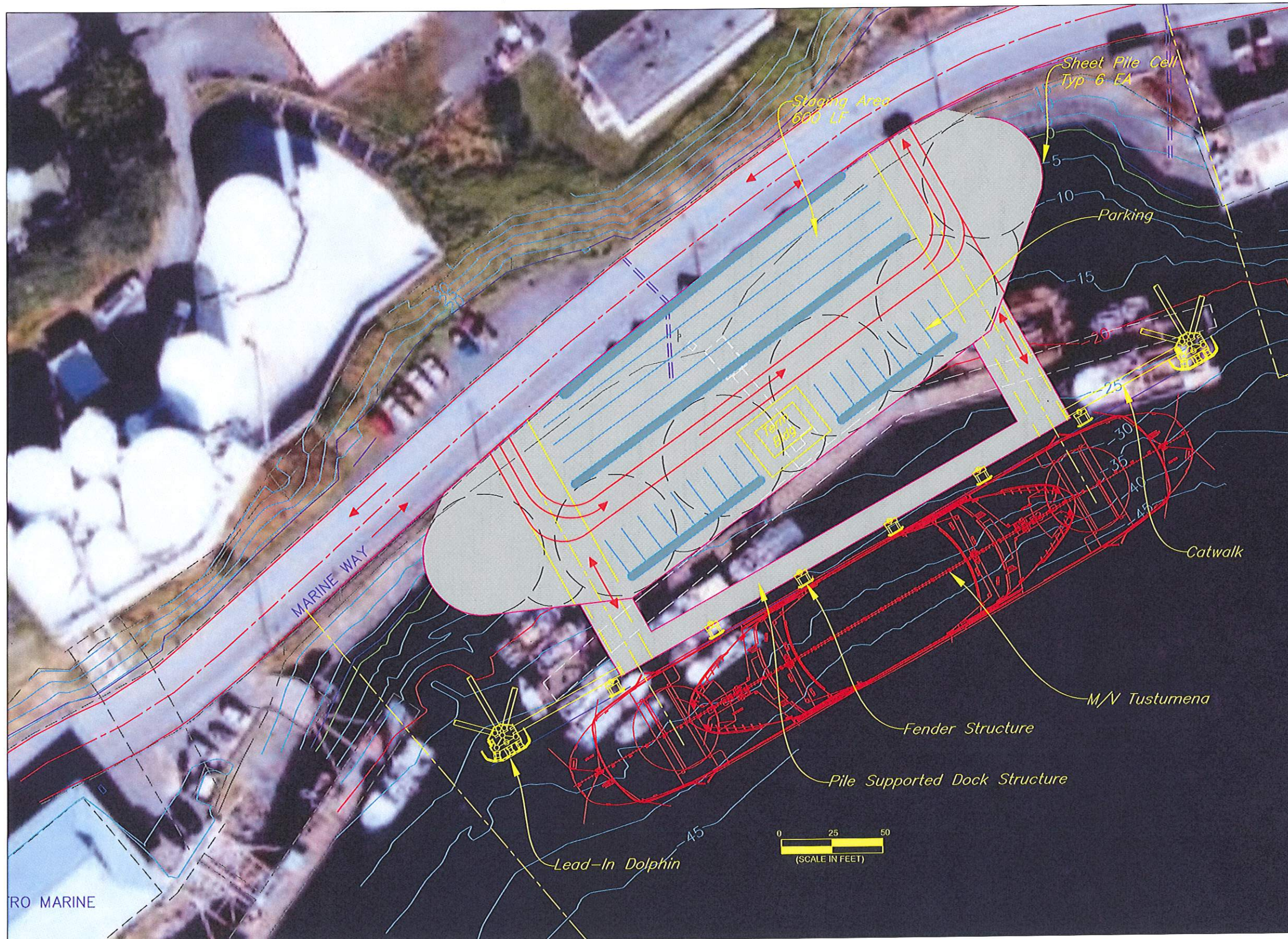
CONS

- Site can only be accessed by Tustumena class vessels
- Insufficient space to provide a transfer bridge structure, vessel must load vehicles with elevator
- Difficult and costly facility infrastructure required due to relatively deep offshore bathymetry
- Proposed offshore sheet pile retaining structures subject to long-term corrosion and maintenance concerns
- Loss of existing City transient boat moorage facility
- Limited offshore space and potential for marine congestion and vessel access conflicts - sited between busy seafood processing plant and marine fuel float facility and close proximity to Near Island navigation channel.
- High environmental impact as upland development is sited on submerged lands
- Limited vehicle parking opportunities
- Poor traffic flow and potential for upland congestion and conflict with nearby roadway and businesses

CITY TRANSIENT FLOAT - ALTERNATE 6A / SHEET PILE CELL DOCK 1

**FIGURE 6A - CITY TRANSIENT FLOAT
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction Cost = \$22 million

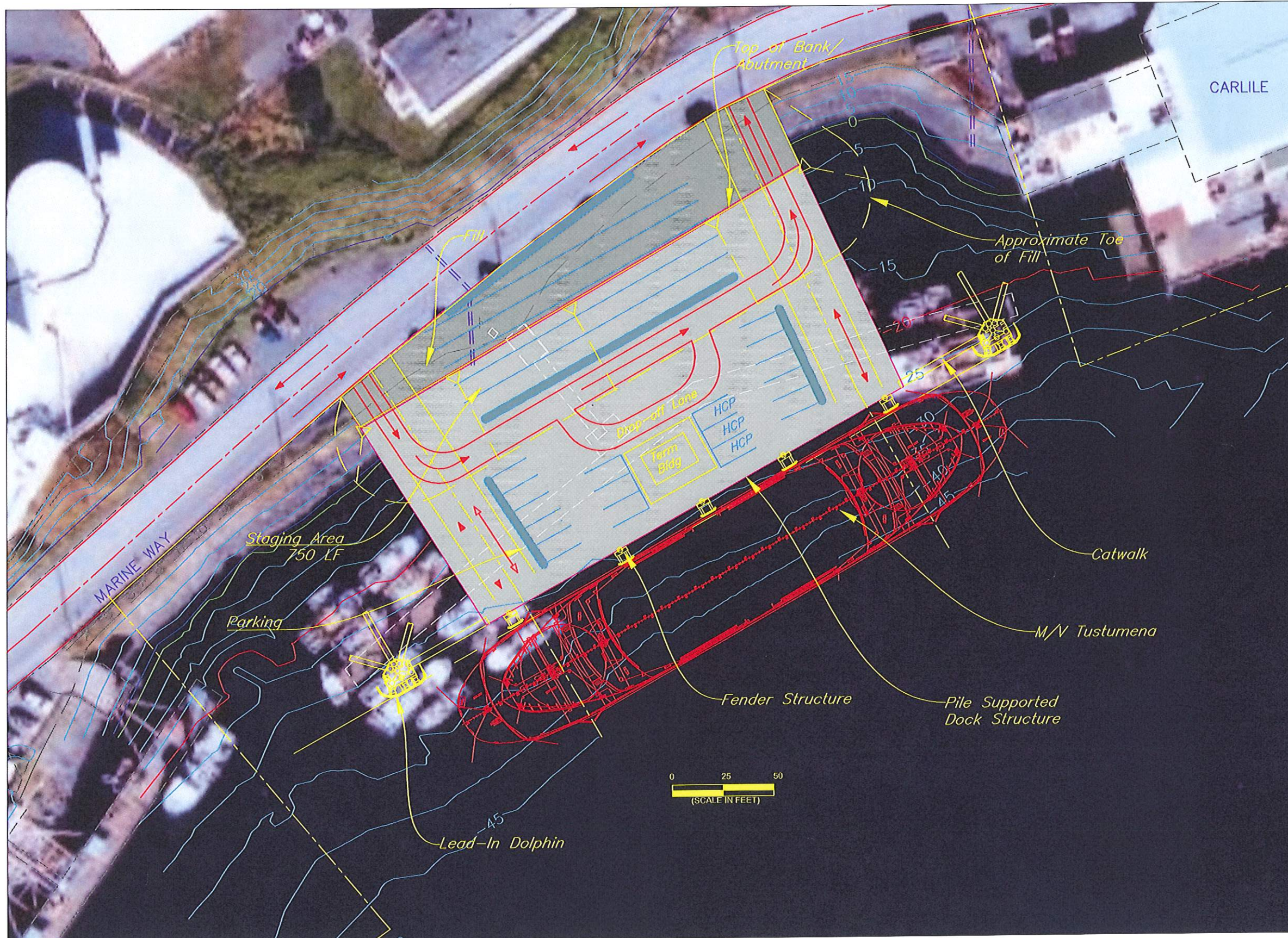
- PROS**
- Protected moorage location
 - Relatively easy vessel access
 - Public sewer, water and electrical utilities nearby
 - Allows vessel berthing on either port or starboard sides
 - Convenient access to City center and visitor amenities
 - Lower environmental impact than Alternative 6A due to less fill and use of pile supported dock

- CONS**
- Site can only be accessed by Tustumena class vessels
 - Insufficient space to provide a transfer bridge structure, vessel must load vehicles with elevator
 - Difficult and costly facility infrastructure required due to relatively deep offshore bathymetry
 - Proposed offshore sheet pile retaining structures subject to long-term corrosion and maintenance concerns
 - Loss of existing City transient boat moorage facility
 - Limited offshore space and potential for marine congestion and vessel access conflicts - sited between busy seafood processing plant and marine fuel float facility and close proximity to Near Island navigation channel.
 - Relatively high environmental impact as upland development is sited on submerged lands
 - Limited vehicle parking opportunities
 - Poor traffic flow and potential for upland congestion and conflict with nearby roadway and businesses

CITY TRANSIENT FLOAT - ALTERNATE 6B / SHEET PILE CELL DOCK 2

**FIGURE 6B - CITY TRANSIENT FLOAT
Kodiak Ferry Terminal**
ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA

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Estimated Construction Cost = \$16 million

PROS

- Protected moorage location
- Relatively easy vessel access
- Public sewer, water and electrical utilities nearby
- Allows vessel berthing on either port or starboard sides
- Convenient access to City center and visitor amenities
- Lower environmental impact due to less fill and increased use of pile supported dock

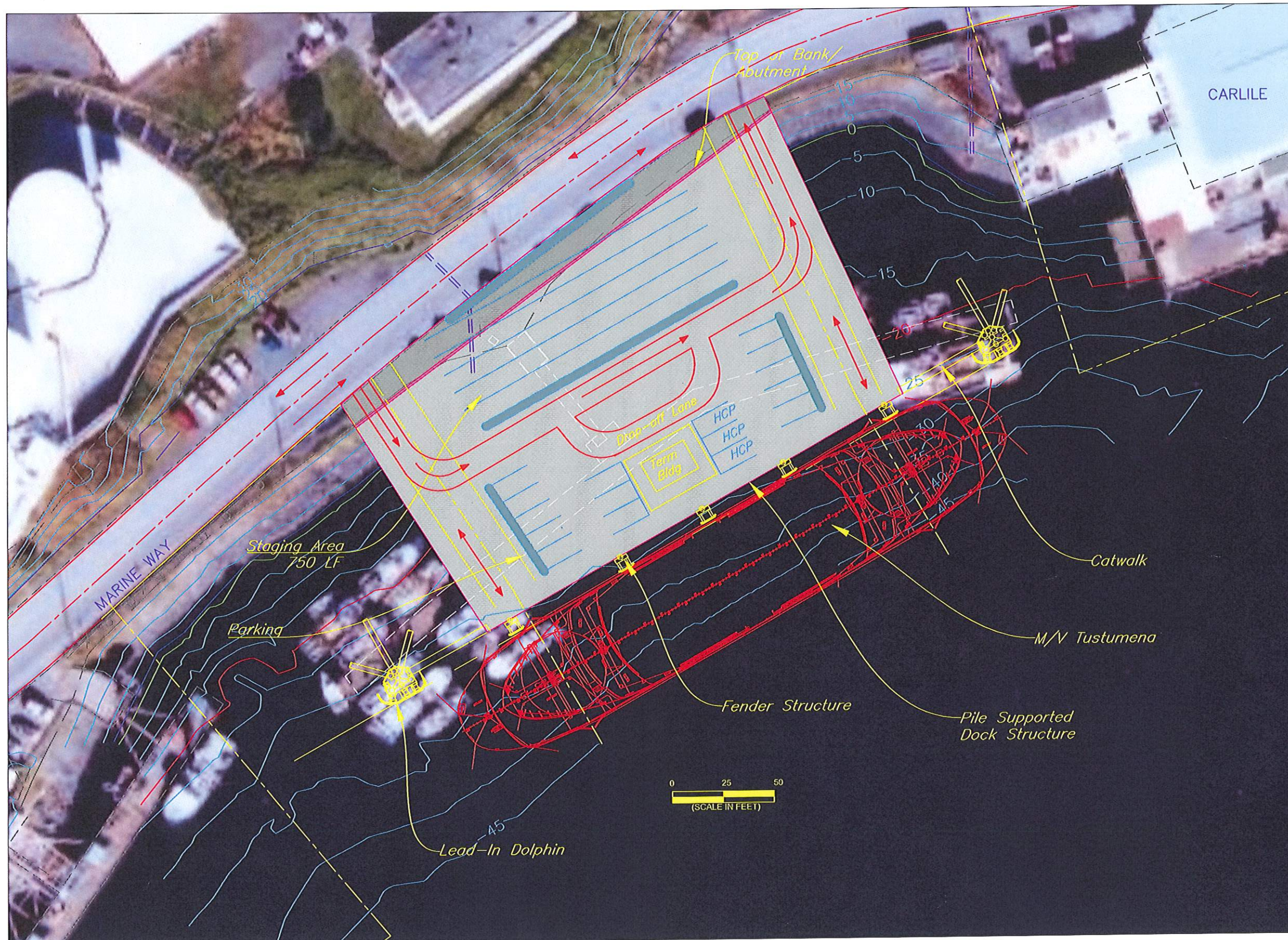
CONS

- Site can only be accessed by Tustumena class vessels
- Insufficient space to provide a transfer bridge structure, vessel must load vehicles with elevator
- Difficult and costly facility infrastructure required due to relatively deep offshore bathymetry
- Loss of existing City transient boat moorage facility
- Limited offshore space and potential for marine congestion and vessel access conflicts - sited between busy seafood processing plant and marine fuel float facility and close proximity to Near Island navigation channel.
- Relatively high environmental impact as upland development is sited on submerged lands
- Limited vehicle parking opportunities
- Poor traffic flow and potential for upland congestion and conflict with nearby roadway and businesses
- Large area of pile supported dock structure requires inspection and future maintenance

CITY TRANSIENT FLOAT - ALTERNATE 6C / FILL & PILE SUPPORTED DOCK

**FIGURE 6C - CITY TRANSIENT FLOAT
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction cost = \$17 million

PROS

- Protected moorage location
- Relatively easy vessel access
- Public sewer, water and electrical utilities nearby
- Allows vessel berthing on either port or starboard sides
- Convenient access to City center and visitor amenities
- Lowest environmental impact at this location due to elimination of tideland fill and use of pile supported dock

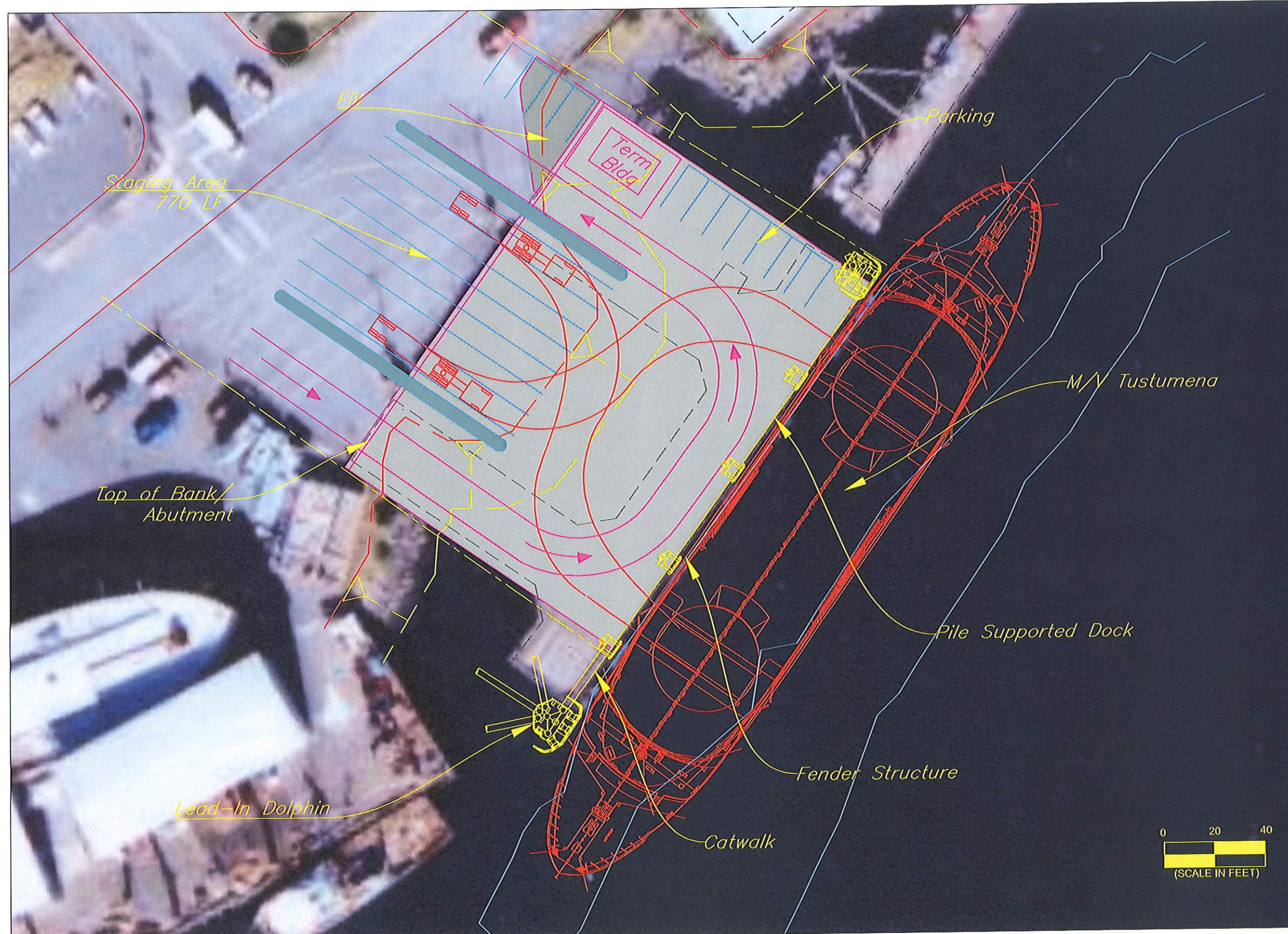
CONS

- Site can only be accessed by Tustumena class vessels
- Insufficient space to provide a transfer bridge structure, vessel must load vehicles with elevator
- Difficult and costly facility infrastructure required due to relatively deep offshore bathymetry
- Loss of existing City transient boat moorage facility
- Limited offshore space and potential for marine congestion and vessel access conflicts - sited between busy seafood processing plant and marine fuel float facility and close proximity to Near Island navigation channel.
- Relatively high environmental impact as upland development is sited on submerged lands
- Limited vehicle parking opportunities
- Poor traffic flow and potential for upland congestion and conflict with nearby roadway and businesses
- Large area of pile supported dock structure requires inspection and future maintenance

CITY TRANSIENT FLOAT - ALTERNATE 6D / REDUCED FILL & PILE SUPPORTED DOCK

**FIGURE 6D - CITY TRANSIENT FLOAT
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA



Estimated Construction Cost = \$14 million

- PROS**
- Protected moorage location
 - Existing dock site currently used by Tustumena
 - Relatively easy vessel access
 - Public sewer, water and electrical utilities nearby
 - Allows vessel berthing on either port or starboard sides
 - Convenient access to City center and visitor amenities

- CONS**
- Site can only be accessed by Tustumena class vessels
 - Significant disruption to use of existing dock and City building during construction
 - Insufficient space to provide a transfer bridge structure, vessel must load vehicles with elevator
 - Difficult and costly facility infrastructure required
 - Congested offshore and upland space. Sited between busy seafood processing plant and marine fuel float facility and close proximity to Near Island navigation channel
 - Limited vehicle parking opportunities
 - Poor traffic flow and continued potential for upland congestion and conflict due to nearby roadway and adjacent business traffic
 - Large area of pile supported dock structure requires inspection and future maintenance

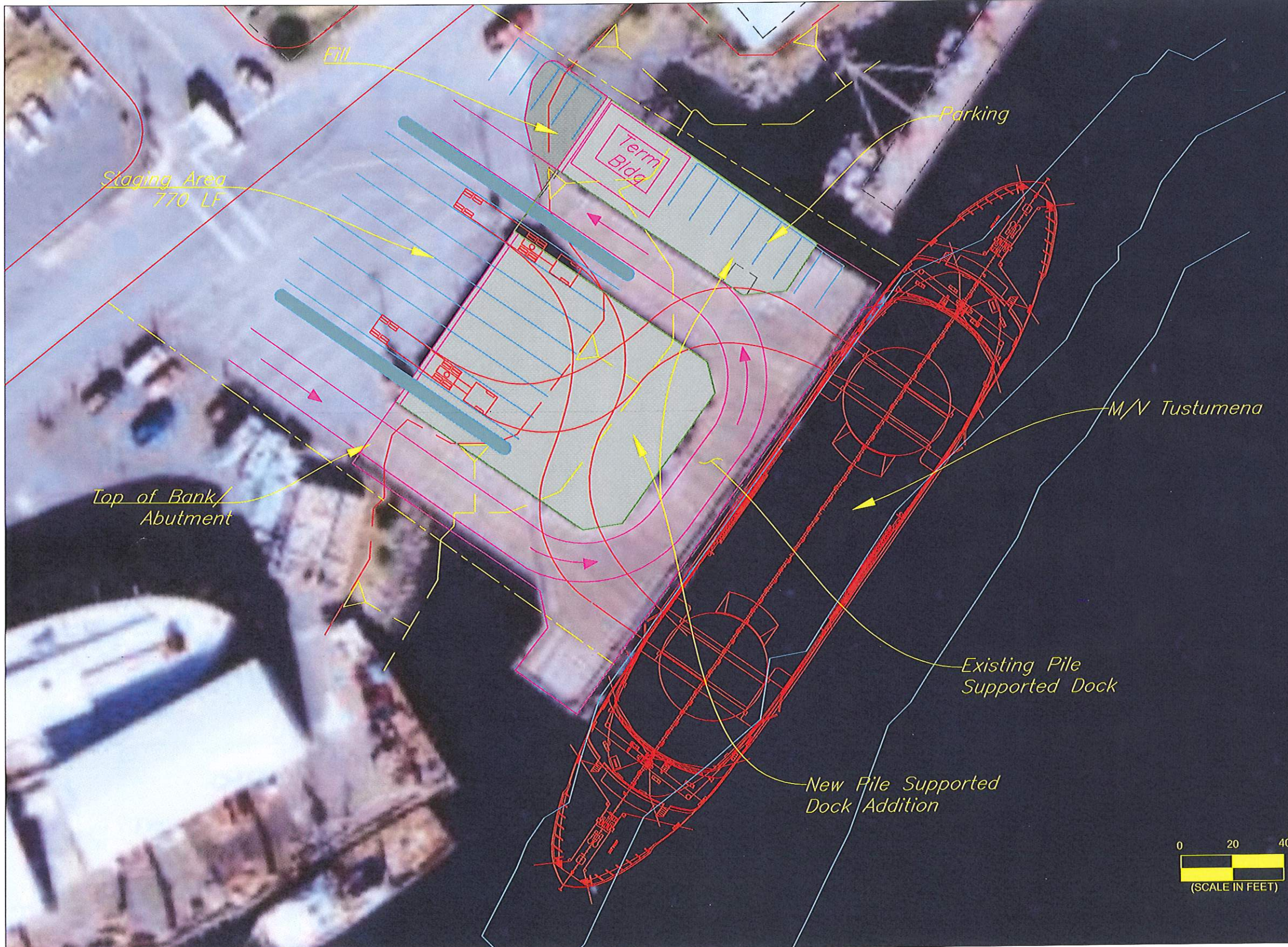


PIER 1 - ALTERNATIVE 7A / NEW DOCK

**FIGURE 7A - PIER 1
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA

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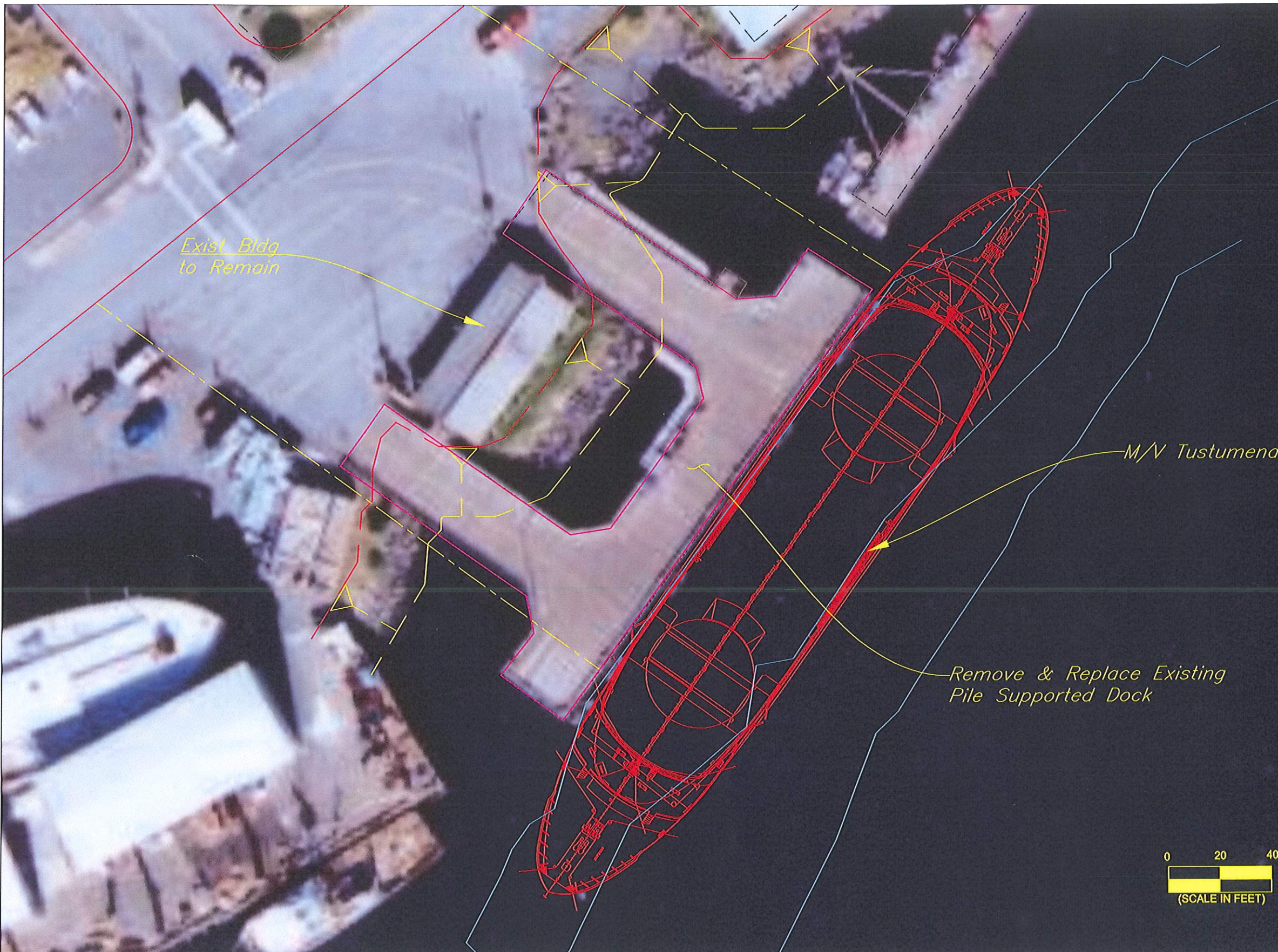


- Estimated Construction Cost = \$8 million
- PROS**
- Protected moorage location
 - Existing dock site currently used by Tustumena
 - Relatively easy vessel access
 - Public sewer, water and electrical utilities nearby
 - Allows vessel berthing on either port or starboard sides
 - Convenient access to City center and visitor amenities
 - Less disruption than Alt 7A for use of existing dock during construction
- CONS**
- Site can only be accessed by Tustumena class vessels
 - Disruption to use of existing dock and City building during construction
 - Insufficient space to provide a transfer bridge structure, vessel must load vehicles with elevator
 - Difficult and costly facility infrastructure required
 - New dock construction would need to match up to the existing, older timber structure
 - Congested offshore and upland space. Sited between busy seafood processing plant and marine fuel float facility and close proximity to Near Island navigation channel
 - Limited vehicle parking opportunities
 - Poor traffic flow and continued potential for upland congestion and conflict due to nearby roadway and adjacent business traffic
 - Large area of pile supported dock structure requires inspection and future maintenance

PIER 1 - ALTERNATIVE 7B / ADDITIONAL DOCK

**FIGURE 7B - PIER 1
Kodiak Ferry Terminal**
ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA

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Estimated Construction Cost = \$7.1 million

PROS

- Existing aged timber facility is replaced with new materials
- Protected moorage location
- Existing dock site currently used by Tustumena
- Relatively easy vessel access
- Public sewer, water and electrical utilities
- Allows vessel berthing on either port or starboard sides
- Convenient access to City center and visitor amenities
- Existing building remains in service.

CONS

- Site can only be accessed by Tustumena class vesse
- Disruption to use of existing dock and City building during construction
- Upland staging areas inadequate
- Congested offshore and upland space not improved
- Sited between busy seafood processing plant and marine fuel float facility and close proximity to Ne Island navigation channel
- Upland congestion and traffic conflicts not improve
- Large area of pile supported dock structure requires inspection and future maintenance

PIER 1 - ALTERNATIVE 7C / RECONSTRUCT EXISTING DOCK

**FIGURE 7C - PIER 1
Kodiak Ferry Terminal**

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
PROPOSED KODIAK FERRY TERMINAL
KODIAK, ALASKA