PUBLIC NOTICE

Alaska Department of Environmental Conservation (DEC)
Wastewater Discharge Authorization Program/§401 Certification
555 Cordova Street, Anchorage AK 99501-2617
Phone: 907-269-6285 | Email: DEC-401Cert@alaska.gov

Notice of Application for State Water Quality Certification

Public Notice (PN) Date: August 7, 2024
PN Expiration Date: September 7, 2024
PN Reference Number: POA-2003-00502-M21 v1.0
Waterway: Knik Arm

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into waters of the United States, in accordance with Section 401 of the Clean Water Act (CWA), must also apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the CWA and the Alaska Water Quality Standards (18 AAC 70). The scope of certification is limited to the water quality-related impacts from the activity subject to the Federal license or permit (40 CFR 121.3, 18 AAC 15.180).

Notice is hereby given that a request for a CWA §401 Water Quality Certification of a Department of the Army Permit application, Corps of Engineers' PN Reference Number indicated above has been received[1] for the discharge of dredged and/or fill materials into waters of the United States (WOTUS), including wetlands, as described below, and shown on the project figures/drawings. The public notice and related project figures/drawings are accessible from the DEC website at https://dec.alaska.gov/water/wastewater/.

To comment on the project or request for a public hearing with respect to water quality, submit comments via email to the DEC email address: DEC-401Cert@alaska.gov with the subject line referencing Public Notice Reference Number: **POA-2003-00502-M21 v1.0** on or before the public notice expiration date listed above.

Applicant: Port of Alaska, Steve Ribuffo, 2000 Anchorage Port Road, Anchorage, AK 99501, (907) 343-6201; steve.ribuffo@anchorageak.gov

Agent: HDR Inc., Michiel Holley, \582 E 36th Ave, Suite 500 Anchorage, AK 99503; (907) 885-5798; michiel.holley@hdrinc.com.

Project Name: Cargo Terminal Replacement Project

Dates of the proposed activity is planned to begin and end: 03/24/2025 to 03/31/2029.

Location: The proposed activity is located within Section 7, T. 13N, R. 3W, Seward Meridian, in Anchorage, Alaska. Project Site (Latitude, Longitude): 61.240000, -149.88833.

Purpose: The applicant's stated purpose is to replace Anchorage's aging docks and related infrastructure before it fails, to improve operational safety and efficiency; accommodate modern shipping operations: and improve resiliency – to survive extreme seismic events and sustain ongoing cargo operations.

Description of Proposed Work: The overall scope of the Project includes:

1. Ground improvements like deep soil mixing (DSM) for shoreline stabilization
2. Shoreline expansion and protection
3. General cargo terminal (new Terminals 1 and 2) construction
4. Demolition of the existing Petroleum, Oil, and Lubricants Terminal 1 (POL1) and general cargo terminals (Terminals 1, 2, and 3)
5. Onshore utilities and storm drain outfall replacement

[1] Reference submission #: HPR-W6RK-711PZ Revision 4; Received: 07/02/2024

The Port of Alaska proposes the removal of existing infrastructure and the construction of newly configured general cargo terminals including ground improvement for shoreline stabilization, shoreline expansion and protection, construction of general cargo terminals 1 and 2, demolition of the existing petroleum, oil, and lubricants terminal 1 (POL1), demolition of general cargo docks terminals 1, 2, and 3, construction of onshore utilities, and replacement of storm drain outfall.

Ground improvements for shoreline stabilization would consist of installation of five (5) work pads at the site of each of the five trestle abutments to mitigate the potential for slope failure. Ground improvements would create a block of treated soil extending from near the final surface grade down through the in-situ soil approximately 85-feet below the crest of the foreshore slope to the top of the Bootlegger Cove Formation clay layer. The five work pads would consist of a total of 61,100 cubic yards of fill material below the High Tide line into 3.6- acres of waters of the U.S.

Shoreline expansion and protection would consist of excavation of approximately 50,000 cubic yards of silt material to be disposed offshore in the Anchorage Harbor Open Water Disposal Site. The silt material is not suitable for shoreline protection and would be replaced by discharging 60,000 cubic yards of rip-rap material below the High Tide line into 3.7-acres of waters of the U.S. at select areas behind Terminals 1, 2, and 3 to protect the upland container storage area.

Installation of new Terminals 1 and 2 would be pile-supported structures and would be constructed as adjoining wharves on a continuous berth line located parallel and approximately 140-ft seaward of existing Terminals 1, 2, and 3. The continuous wharf face would be fixed at +44 ft mean-low-low-water (MLLW), and would provide flexibility for military, cruise/passenger ships, and cargo functions. Terminal 1 would consist of an 870-foot-long by 120-foot-wide wharf and would be accessed from shore by two (2) 36-foot-wide trestles. The southern trestle would be 270-ft long, and the northern trestle would be 318-ft long. A144-inch-diameter mooring dolphin and catwalk would be constructed on the southern end of the terminal to help secure and control vessel movements while berthed. Terminal 1 wharf would be supported by 139 - 72-inch-diameter piles. The terminal would also include structural, in-deck, and surface features to support three cranes. Utilities, including electrical power and water, would be installed for terminal operations, and connected to the existing public utility infrastructure. Lighting, communications, and signal equipment would be added to support the terminal.

Terminal 2 would consist of a 938-foot-long by 120-foot-wide wharf with three (3) access trestles each approximately 300-foot-long. The southern and northern access trestles would be 36-foot-wide. The middle trestle would be 60-foot-wide to provide an additional emergency vehicle access lane. A 144-inch-diameter mooring dolphin and catwalk would be constructed on the northern end of the terminal to help secure and control the movements of the vessels while berthed. Terminal 2 wharf would be supported by 145 - 72-inch diameter piles. The terminal would include structural, in-deck, and surface features to support roll on, roll off, and load on, load off operations (rail-mounted gantry cranes and associated appurtenances). Power, lighting, communications, signal infrastructure, and water utilities would be installed to support terminal operations. The two Terminal 1 trestles would be supported by 21 - 72-inchdiameter piles and 6 - 48-inch-diameter piles. The 48-inch diameter piles would be installed in the dry. The three (3) access trestles for Terminal 2 would be supported by 40 - 72-inchdiameter piles and 10 – 48-inch-diameter piles. Sediment inside the first four (4) hollow steel piles per row of the access trestles would be hydraulically removed to a depth of 20 to 25-ft below mudline to allow for placement of reinforced concrete to start below the mudline and continue to the top of the pile once installation is complete. Approximately 1,000 cubic yards of fill material would be removed in this manner and discharged below High Tide line as side cast over a 4-acre area dispersed via strong tidal currents.

Construction of the wharves and trestles would require installation and removal of temporary steel pipe piles, including template piles, and installation of permanent steel pipe piles. During construction, approximately 690 – 24 to 36-inch-diameter temporary piles will be used to anchor templates for the driving of permanent piles and to support temporary access trestles. Vibratory and impact hammers would be used for installation of the larger, permanent piles. Vibratory drivers would be used for installation and removal

of the temporary piles. Where conditions are possible, temporary, and permanent steel pipe piles would be installed or removed in the dry, depending on construction sequencing and tide heights. During pile installation it may become necessary to remove relic anode sleds. The old anode sleds are currently buried in the sediment behind the existing terminals. If an old sled is encountered in the footprint of a new pile to be installed, the anode sled would be excavated and removed. The excavated anode sled(s) would be hauled to an appropriate disposal location in uplands. All other relic anode sleds would be abandoned in place.

After construction of the new Terminals 1 and 2 are complete the remaining existing Terminals 1, 2, and 3 and POL1 platforms and trestles would be removed. All temporary work structures would be removed. Existing and temporary piles would be cut and removed or left in place to avoid/minimize potential impacts on marine mammals. Demolition would take place above the water, and demolished decking, pipes, and other superstructure materials would be contained before they fall into the water following best management practices. Demolished materials would be removed by barge or truck and stored or disposed properly in an approved landfill or salvage yard.

Onshore utilities and utility connections would be removed and replaced, including electrical, water, and gas. Additionally, shore stabilization activities would require the removal and replacement of up to four (4) existing storm drain outfalls and associated maintenance holes.

Additional Information: Other authorizations needed as identified by the applicant include an Incidental Take Authorization from National Marine Fisheries Service, a Flood Hazard Permit from the Municipality of Anchorage, and an Army Corps of Engineers 404 Permit. The applicant states that they plan to pursue the demolition of Terminal 3, a separate and complete project from the proposed work, as the last phase of the Port of Alaska Modernization Project (PAMP) in 2032 or later.

Special Area Designation: The project is located within the Port of Alaska and Anchorage Harbor. Anchorage Harbor is a federally maintained harbor in the Municipality of Anchorage, Alaska, near the confluence of the Knik Arm and Turnagain Arm of Cook Inlet and is home to the Port of Alaska (Port), the state of Alaska's primary commercial port. Anchorage Harbor was authorized in 1958 and the U.S. Army Corps of Engineers (USACE) has dredged Anchorage Harbor annually since 1965 to maintain adequate depths for shipping. Dredging typically begins in April and ends in October. The harbor's main Federal feature is an authorized harbor depth of -45 feet mean lower low water (MLLW) along 10,860 feet of the Port. The project is currently maintained at -35 feet MLLW as the funding for dredging to -45 feet mean lower low water has not been appropriated by Congress. Dredged materials are transported to the Anchorage Harbor in-water disposal site located 3,000 feet abeam the dock face. Annual maintenance dredging volumes vary substantially and have approached 2 million cubic yards.

Applicant Proposed Mitigation: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the United States from activities involving discharges of dredged or fill material.

a. Avoidance: Avoidance of impacts to waters of the United States (U.S.) was limited by geographic and logistic constraints. Given the physical requirements of locating a port on a waterbody, complete avoidance of waters of the U.S. was not feasible for the Cargo Terminals Replacement (CTR) Project (Project).

   Upland disposal of the excavated material from the proposed upland expansion area and augured material from the trestle piles was considered but is not possible because the Port of Alaska (Port) does not have physical space for permanent disposal of this material. To move that amount of material (31,000 cubic yards) to an offsite upland disposal site will require more than 2,000 dump truck loads. Offshore disposal will require approximately 16 barge loads, making this option much more efficient and less costly, and reducing air emissions from diesel engines.

b. Minimization: Development of the Project included analysis of 25 alternatives for marine terminal development. These alternatives included redirecting Port facilities to other locations, relocating the Port, or expanding the Port at its current location. In addition to location alternatives, multiple design

alternatives were also analyzed, including various pile sizes and types and foundation types. Constructability, minimizing environmental impacts, and addressing cost constraints were included in the screening criteria used to identify the proposed Project's preferred alternative.

Fill placement and work within waters of the U.S. was minimized using a pile-supported structure for the cargo terminals instead of a coastline extension, which would have required extensive fill within the intertidal area to bring the area up to a usable grade. The number of piles was minimized to that necessary for constructing a seismically resilient replacement dock while maximizing the life of the structure to minimize the need for future in-water work. During further design and construction work planning, the following changes were made to the Project:

• Potential emergency access trestles have been removed from the current design. Analysis results during the original design showed that the permanent access trestle would suffer significant damage after the design earthquake event, and the extensive repairs that would be required could not be achieved in a 7-day period. The inclusion of emergency trestles that could be rapidly deployed after an earthquake event were included in the original design to support the rapid repair requirement.

The current design instead includes ground improvement through soil replacement with cementitious materials using deep-soil mixing within the near-shore area. This ground improvement mitigates earthquake damage, eliminating the need for emergency trestles. Eliminating the emergency access trestles reduces the Project footprint by up to 16 48-inch piles.

- By modifying the current Project design to use 72-inch-diameter piles (instead of 48-inch-diameter piles), the total number of permanent piles is reduced from more than 752 to 354.
- Additional modifications to the design include a new dolphin design composed of 144-inch-diameter monopiles. This new design eliminates the need for 16 of the deepest driven piles used in the previous

c. Mitigation: Due to the described avoidance and minimization measures, and the CTR Project not impacting wetlands, the Port does not propose compensatory mitigation for impacts to waters of the U.S. currently. If USACE determines that compensatory mitigation is required, then the Port will purchase credits from an approved mitigation bank or in-lieu fee sponsor.

After reviewing the application, the Department will evaluate whether the activity will comply with applicable water quality requirements (any limitation, standard, or other requirement under sections 301, 302, 306, and 307 of the CWA, any Federal and state laws or regulations implementing those sections, and any other water quality-related requirement of state law). The Department may certify (or certify with conditions) with reasonable assurance the activity and any discharge that might result will comply with water quality requirements. The Department also may deny or waive certification.

The permit application and associated documents are available for review. For inquires or to request copies of the documents, contact dec-401cert@alaska.gov, or call 907-269-6285.

Disability Reasonable Accommodation Notice

The State of Alaska, Department of Environmental Conservation complies with Title II of the Americans with Disabilities Act (ADA) of 1990. If you are a person with a disability who may need special accommodation in order to participate in this public process, please contact ADA Coordinator Megan Kohler at 907-269-4198 or TDD Relay Service 1-800-770-8973/TTY or dial 711 prior to the expiration date of this public notice to ensure that any necessary accommodations can be provided.

APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward
Meridian DATE: July 2024
FIGURE 1 of 29 Site Location and Vicinity

APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

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LOCATION: Section 7, Township 13N, Range 3W, Seward
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FIGURE 2 of 29 Existing Facilities

KNIK ARM

Terminal 1

Terminal 2

Mooring Dolphin

Mooring Dolphin

Access Trestle T1A

Access Trestle T1B

Access Trestle T2A

Access Trestle T2B

Access Trestle T2C

Pad 1

Pad 2

Pad 3

Pad 4

Pad 5

Anchorage Port Road

Tidewater Road

0 500 Feet

APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

Legend

Project Components

Shoreline Protection

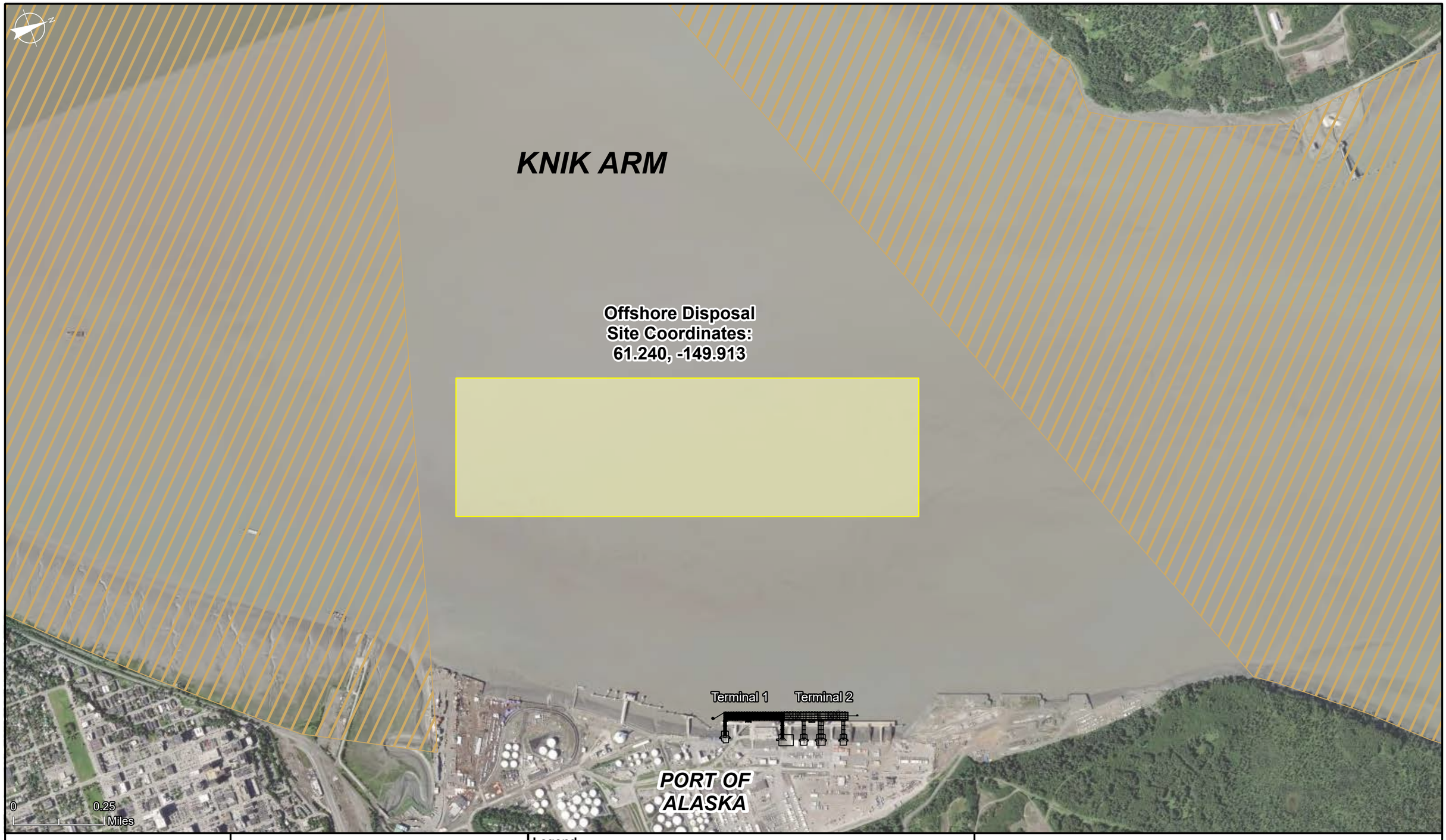
Shoreline Expansion Area

Ground Improvements Area

Approximate Ground Improvements Work Pad

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024
FIGURE 3 of 29 Facilities to be Constructed

PORT OF ALASKA MODERNIZATION PROGRAM	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	**Legend** Demolition Area	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 4 of 29 Structures to be Demolished



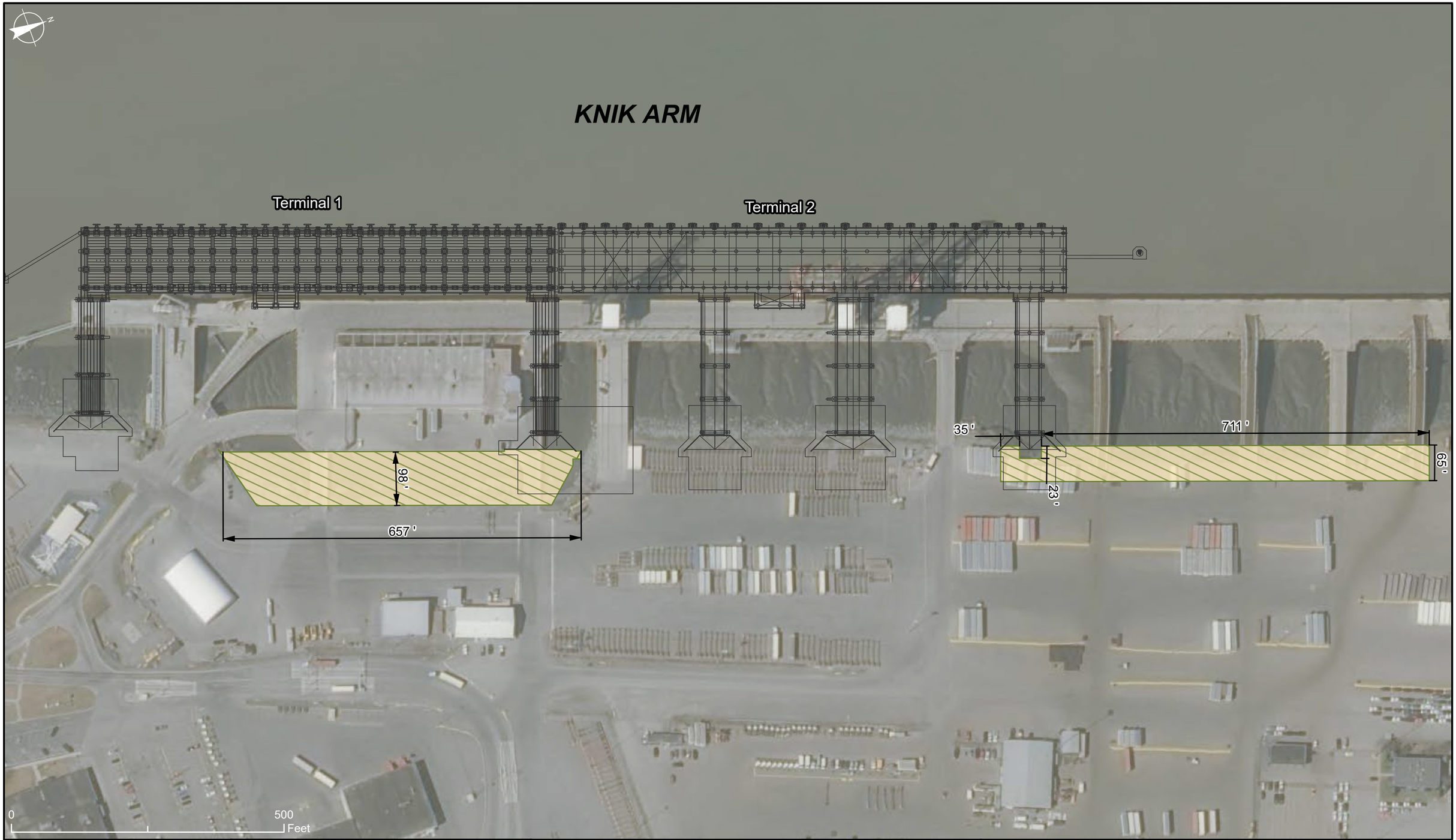
APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

Legend

- Project Components
- Anchorage Dredged Material Disposal Area
- Beluga Critical Habitat

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward
Meridian DATE: July 2024
FIGURE 5 of 29 Offshore Disposal Site

KNIK ARM



APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

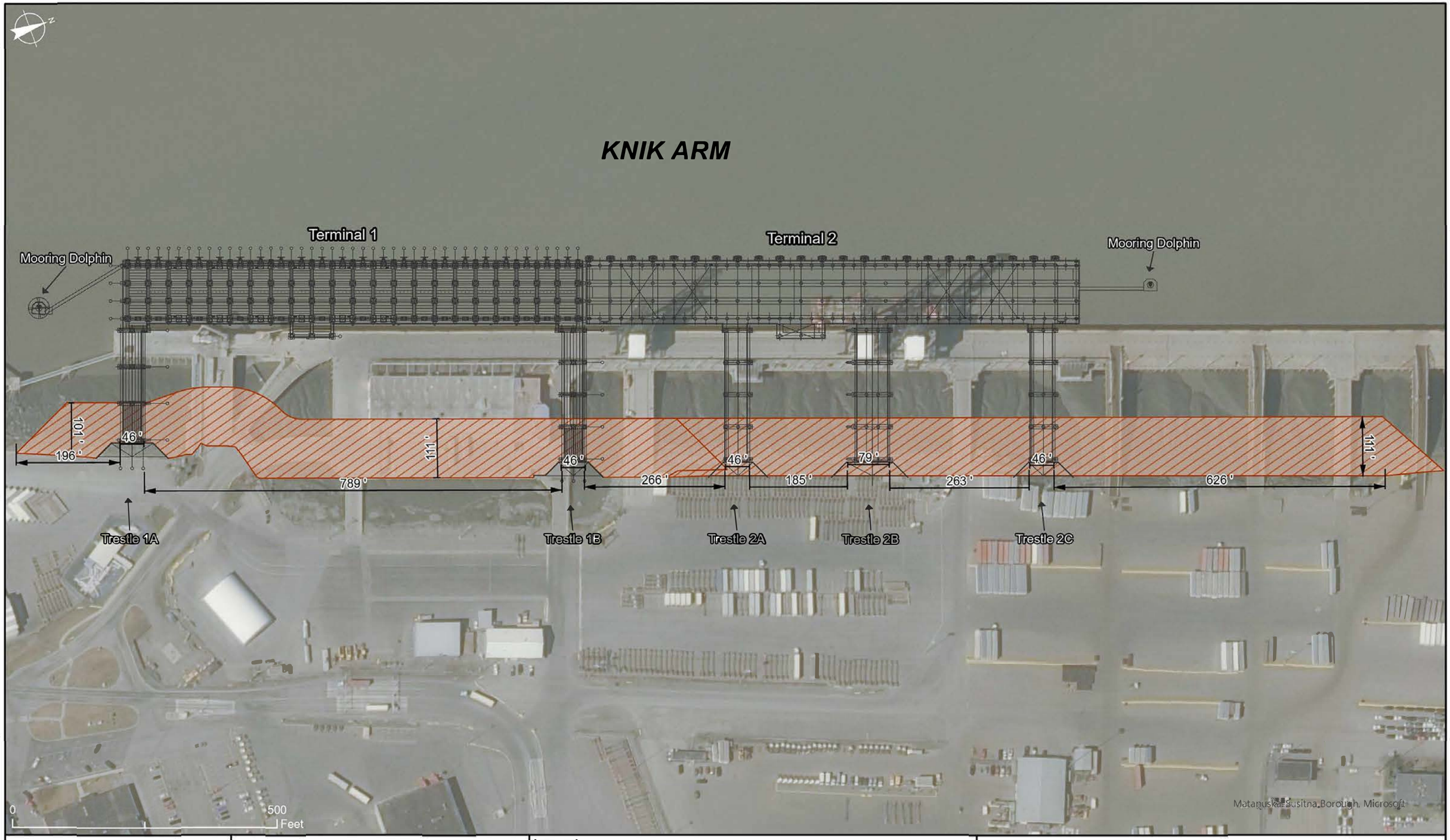
Legend

Project Components

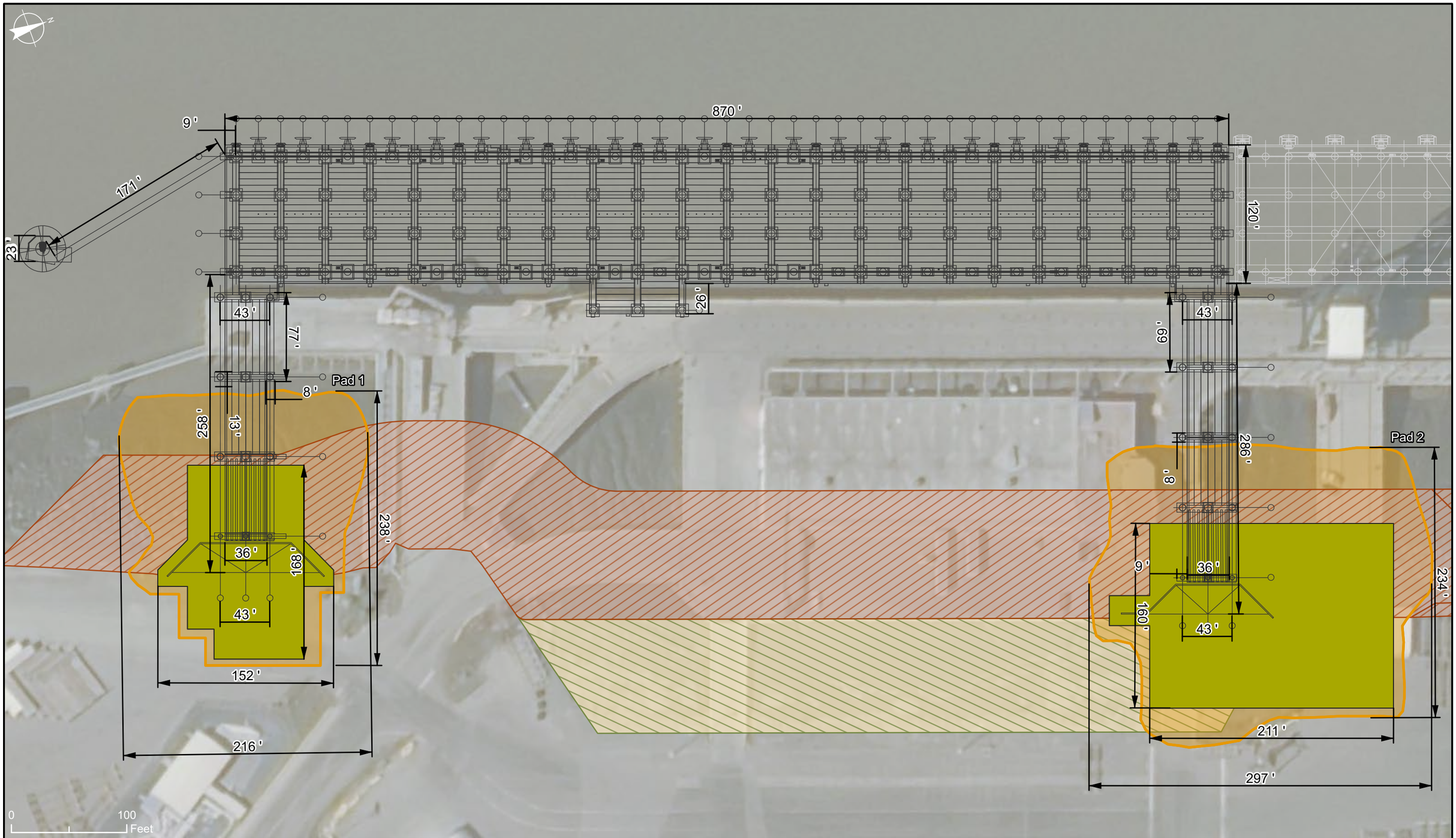
Shoreline Expansion Area

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward
Meridian DATE: July 2024
FIGURE 6 of 29 Shoreline Expansion Area

KNIK ARM



PORT OF ALASKA MODERNIZATION PROGRAM	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	**Legend** Project Components Shoreline Protection	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 7 of 29 Shoreline Protection



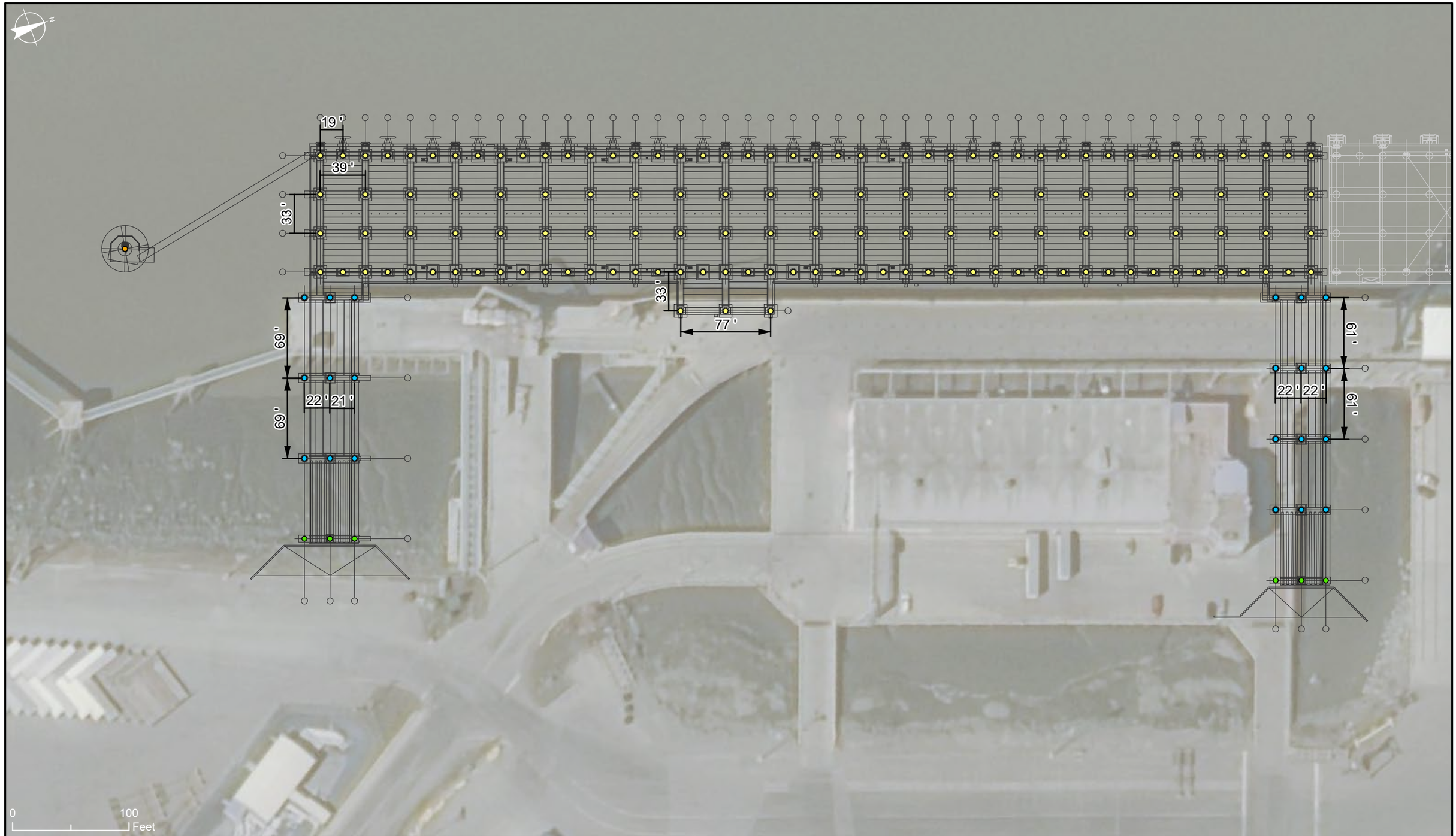
APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

Legend

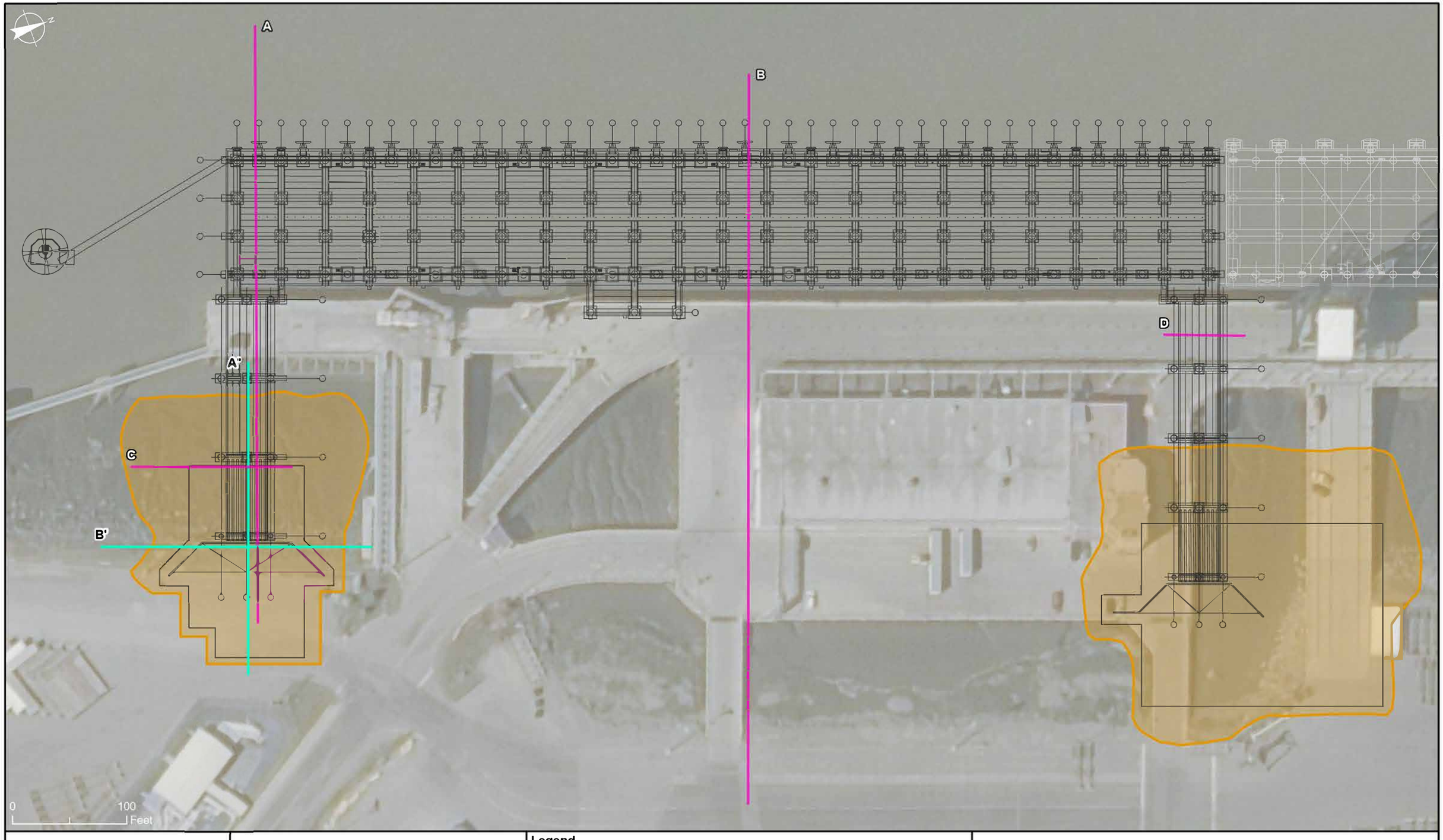
Project	Components	Ground Improvements Area
Shoreline Protection		Approximate Ground Improvements Work Pad
Shoreline Expansion Area		

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024
FIGURE 8 of 29 Terminal 1 Site Figure*

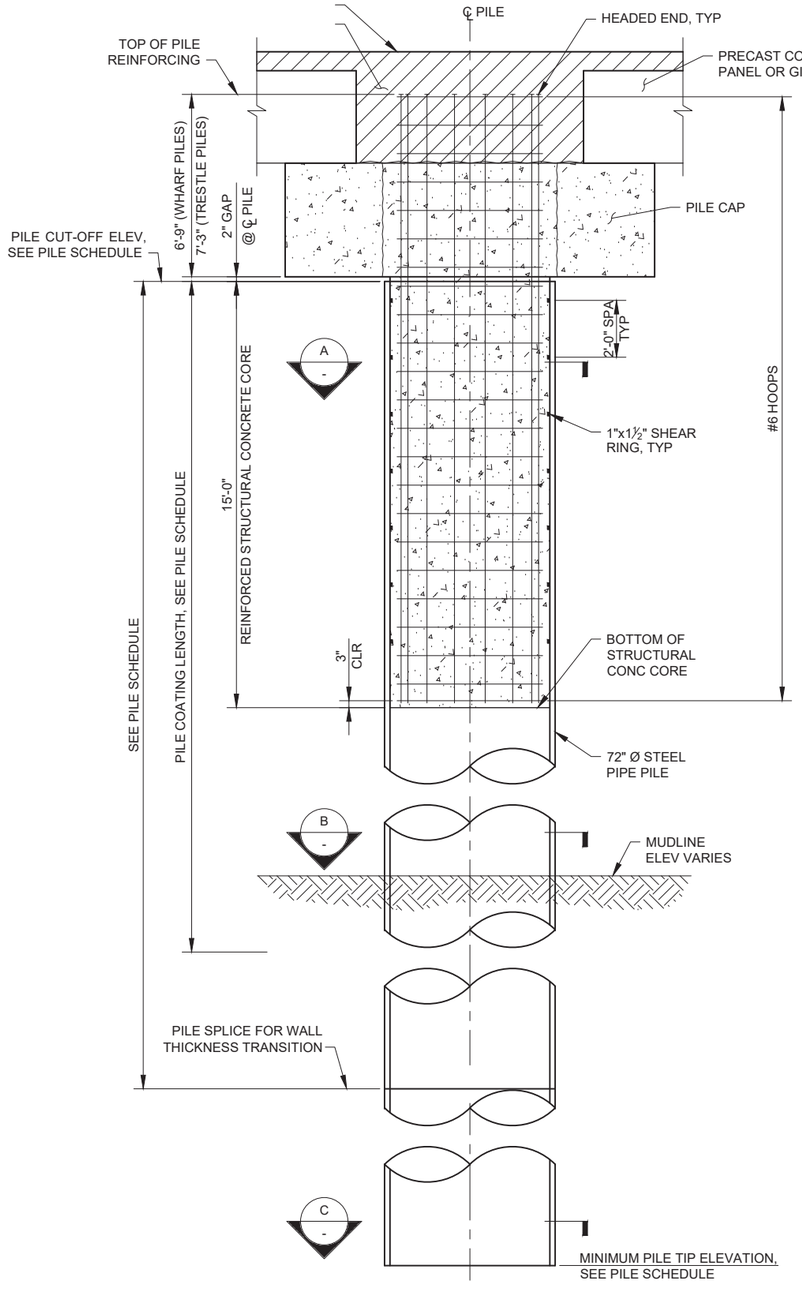
**Figure based on 30% design drawings*



	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	**Legend** Project Components 48" Pile - Trestle 72" Pile - Wharf 72" Pile - Trestle 144" Dolphin Monopile	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 9 of 29 Terminal 1 Pile Locations* **Figure based on 30% design drawings*

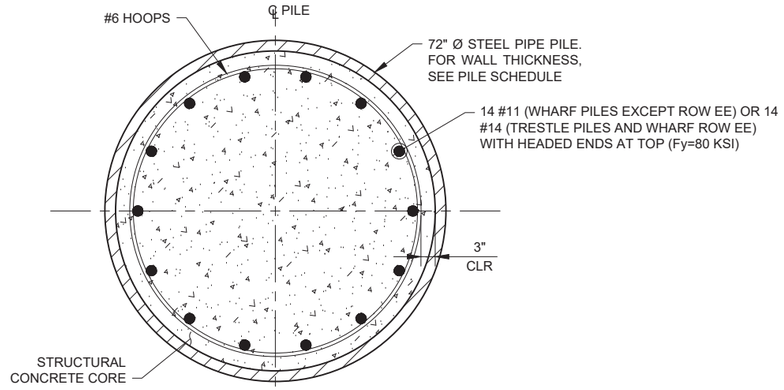


	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	**Legend** Project Components Terminal 1 Cross Section Ground Improvements Work Pad Cross Section Approximate Ground Improvements Work Pad	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 10 of 29 Terminal 1 Structural - General Layout* **Figure based on 30% design drawings*



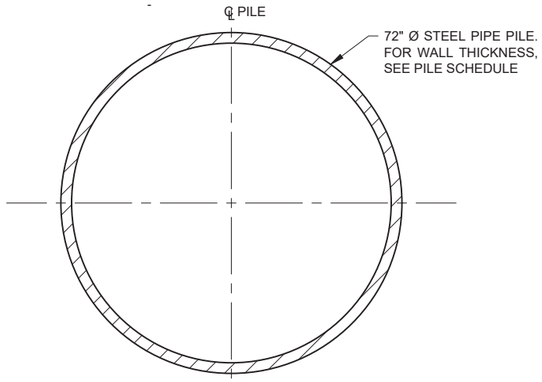
TYPICAL PILE ELEVATION

SCALE: 3/8" = 1'-0"



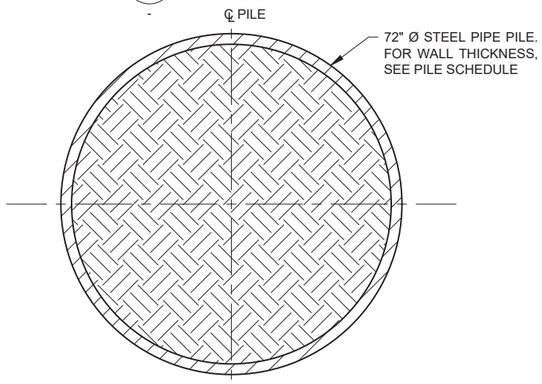
A PILE SECTION

SCALE: 3/4" = 1'-0"



B PILE SECTION

SCALE: 3/4" = 1'-0"



C PILE SECTION

SCALE: 3/4" = 1'-0"

30% DESIGN - NOT FOR CONSTRUCTION

CONCEPTUAL

APPLICANT: Municipality of Anchorage,
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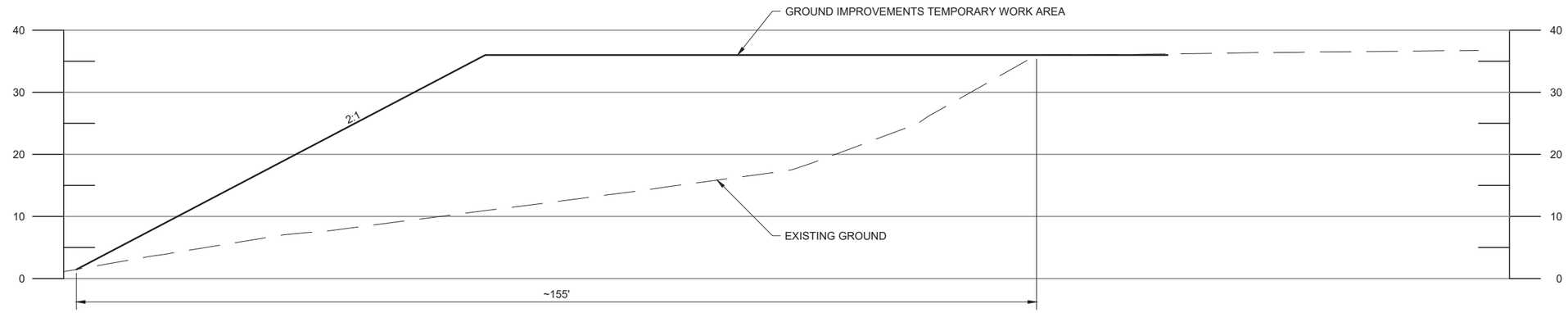
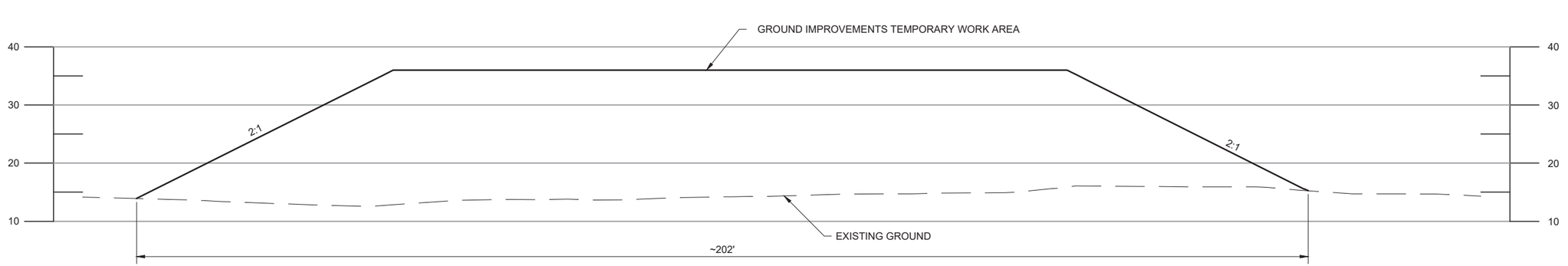
WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward
Meridian DATE: July 2024
FIGURE 11 of 29 Pile Details



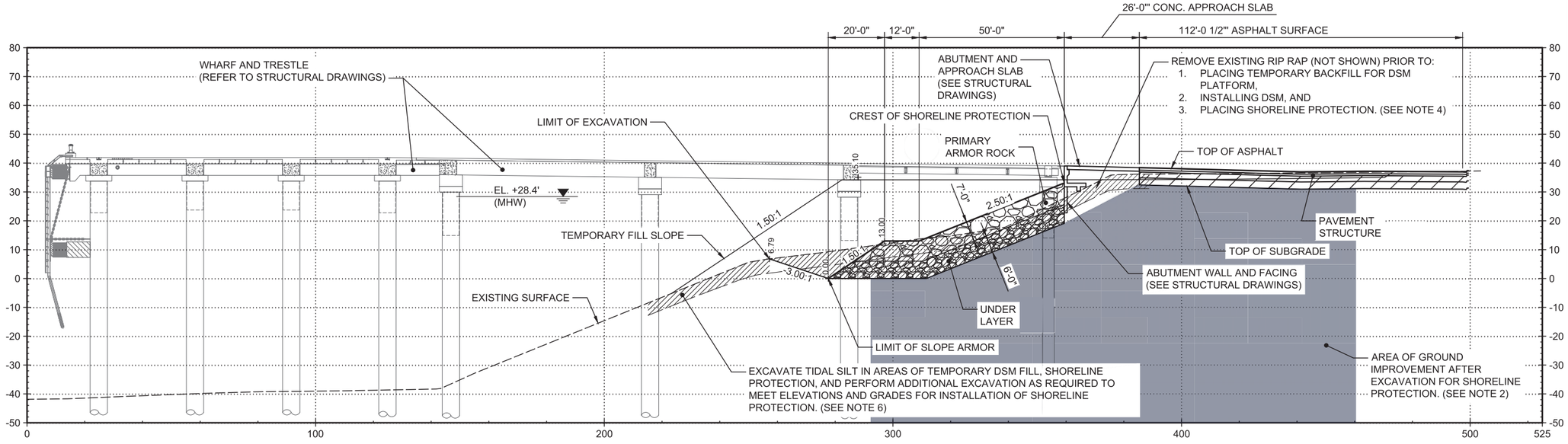
SECTION A'



SECTION B'

CONCEPTUAL

	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 12 of 29 Ground Improvements Work Pad Cross Sections



A TERMINAL 1

T1-C-2001, T1-C-2801

1" = 20' scale 20 0 20 40 feet

GENERAL CIVIL NOTES

1. UNSUITABLE MATERIAL (ORGANICS OR SILT) WITHIN THE AREA OF THE SHORELINE INFILL ARE TO BE EXCAVATED, REMOVED, AND DISPOSED OF.
2. REFER TO GROUND IMPROVEMENTS DESIGN DRAWINGS (T1-B-301, T1-B-302, T1-B-303).
3. REFER TO SHEET T1-W-543 FOR ICCP CATHODE CABLE INSTALLATION.
4. NES1 STOCKPILE IS ASSUMED TO BE SUITABLE FOR USE AS TYPE III FILL.
5. REMOVE AND DISPOSE OR RECYCLE EXISTING RIP RAP (IN ITS ENTIRETY) IN AREA OF SHORELINE PROTECTION AND AREA OF DSM INSTALLATION. EXTENT OF EXISTING RIP RAP AREA IS NOT FULLY VISIBLE DUE TO SILT COVERING EXISTING ROCK, AND DEPTH OF RIP RAP VARIES (OVER 5-FT IN PLACES). IN AREAS OUTSIDE OF DSM BOUNDARIES, FIELD VERIFY FULL EXTENT OF RIP RAP AND COMPLETELY REMOVE. WITHIN DSM BOUNDARIES, REFER TO DRAWINGS T1-B-202 AND T1-B-203. FOR BASIS OF BID, ASSUME 10,000 CY OF EXISTING RIP RAP TO BE REMOVED.
6. THE OWNER'S GEOTECHNICAL REPRESENTATIVE MUST BE PRESENT ONSITE DURING EXCAVATION OF TIDAL SILT AND WILL DETERMINE THE EXCAVATION DEPTH REQUIRED BASED ON MATERIAL WITNESSED IN THE FIELD. NOTIFY OWNER'S REPRESENTATIVE A MINIMUM OF 48 HOURS PRIOR TO BEGINNING OF WORK. DEPTH OF TIDAL SILT VARIES ALONG THE SHORELINE (OVER 5-FT IN AREAS). FOR BASIS OF BID, ASSUME 50,000 CY OF EXISTING TIDAL SILT TO BE EXCAVATED. THIS MATERIAL MAY BE DISPOSED OFFSHORE (NOT DEEP WATER) IF ALLOWED BY PERMITS.

PORT OF ALASKA MODERNIZATION PROGRAM	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 13 of 29 Terminal 1 Typical Section

GENERAL CIVIL NOTES

1. UNSUITABLE MATERIAL (ORGANICS OR SILT) WITHIN THE AREA OF THE SHORELINE INFILL ARE TO BE EXCAVATED, REMOVED, AND DISPOSED OF.
2. REFER TO DRAWING T1-W-543 FOR ICCP CATHODE CABLES INSTALLATION.
3. NES1 STOCKPILE IS ASSUMED TO BE SUITABLE FOR USE AS TYPE III FILL.
4. REMOVE AND DISPOSE OR RECYCLE EXISTING RIP RAP (IN ITS ENTIRETY) IN AREA OF SHORELINE PROTECTION AND AREA OF DSM INSTALLATION. EXTENT OF EXISTING RIP RAP AREA IS NOT FULLY VISIBLE DUE TO SILT COVERING EXISTING ROCK, AND DEPTH OF RIP RAP VARIES (OVER 5-FT IN PLACES). IN AREAS OUTSIDE OF DSM BOUNDARIES, FIELD VERIFY FULL EXTENT OF RIP RAP AND COMPLETELY REMOVE. WITHIN DSM BOUNDARIES, REFER TO DRAWINGS T1-B-202 AND T1-B-203. FOR BASIS OF BID, ASSUME 10,000 CY OF EXISTING RIP RAP TO BE REMOVED.
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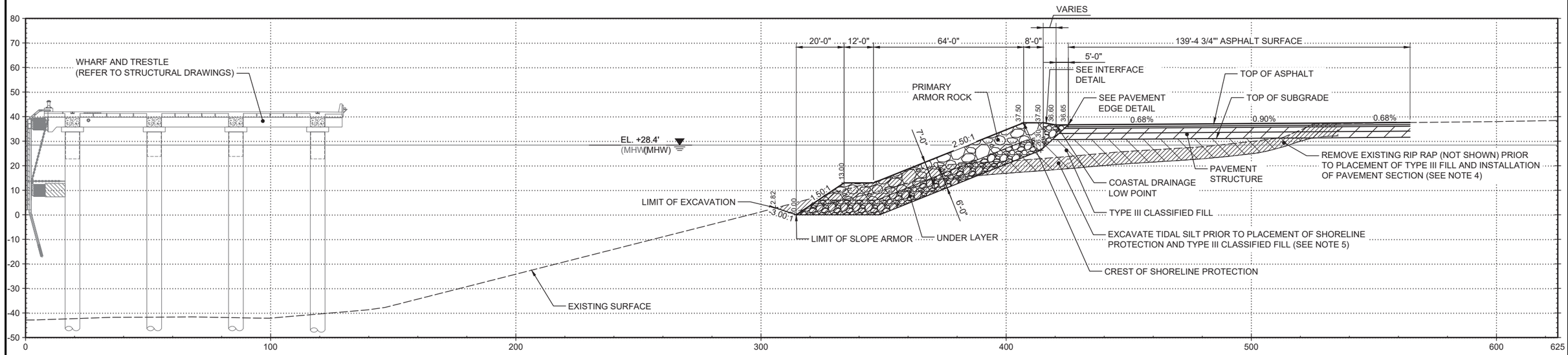


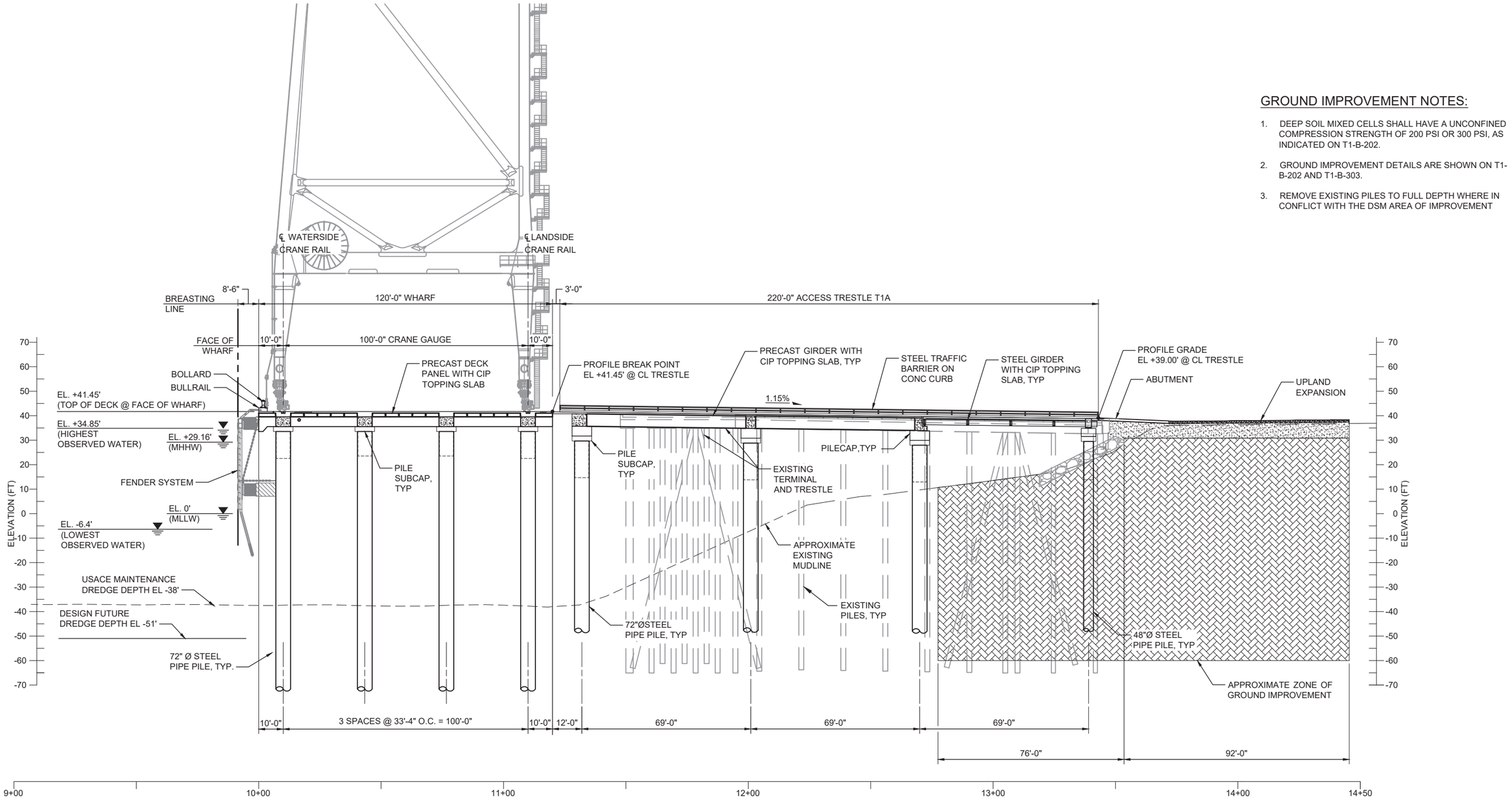
B SECTION - UPLAND EXPANSION

1" = 20' scale 20 0 20 40 feet

PORT OF ALASKA MODERNIZATION PROGRAM	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 14 of 29 Upland Expansion Typical Section

GROUND IMPROVEMENT NOTES:

1. DEEP SOIL MIXED CELLS SHALL HAVE A UNCONFINED COMPRESSION STRENGTH OF 200 PSI OR 300 PSI, AS INDICATED ON T1-B-202.
2. GROUND IMPROVEMENT DETAILS ARE SHOWN ON T1-B-202 AND T1-B-303.
3. REMOVE EXISTING PILES TO FULL DEPTH WHERE IN CONFLICT WITH THE DSM AREA OF IMPROVEMENT



TYPICAL ELEVATION - TRESTLE 1A

SCALE: 1" = 20' T1-B-201

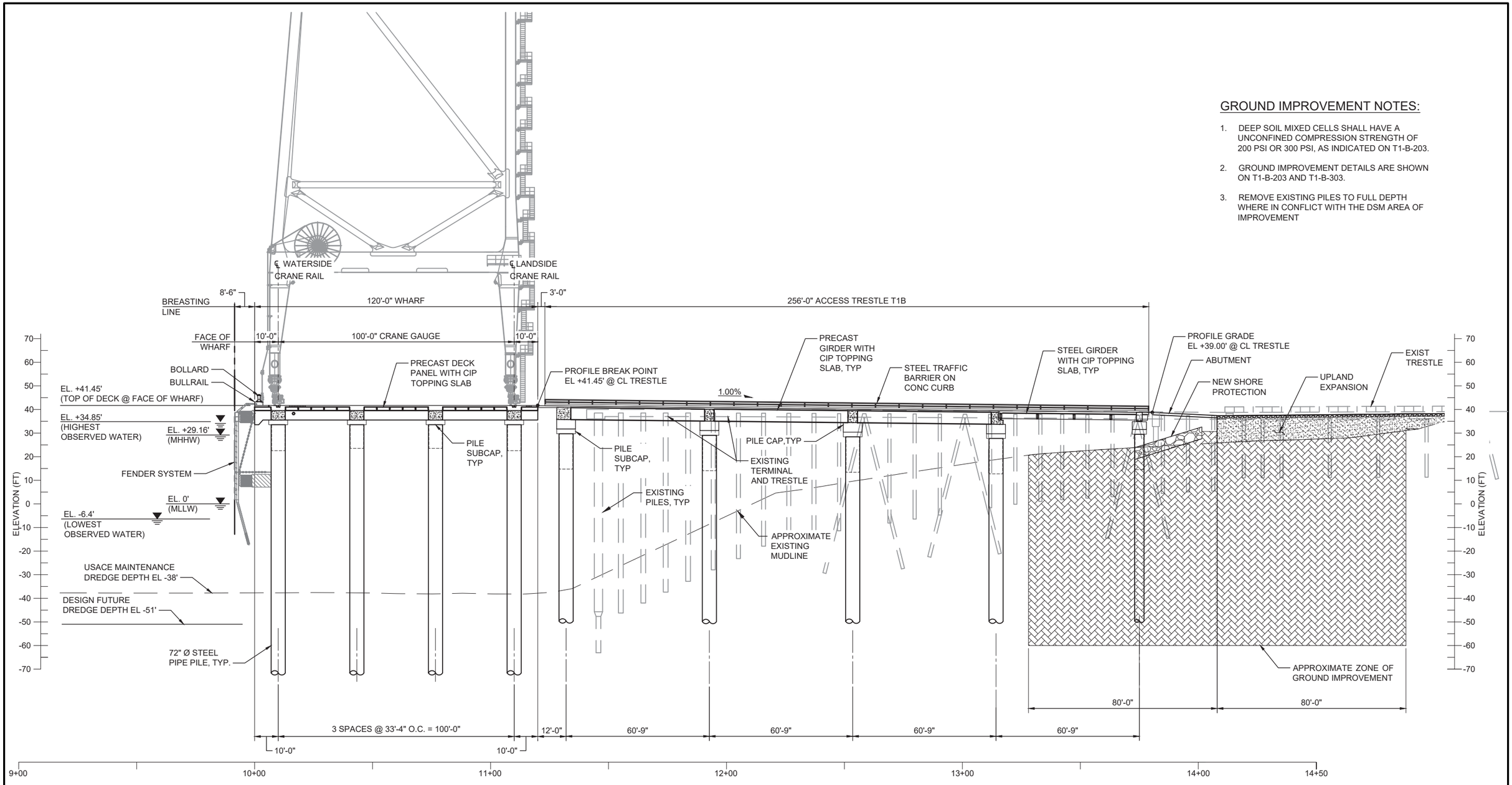
1" = 20' scale 20 0 20 40 feet

APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian
DATE: July 2024
FIGURE 15 of 29 Terminal 1 Typical Elevation - Access Trestle T1A

GROUND IMPROVEMENT NOTES:

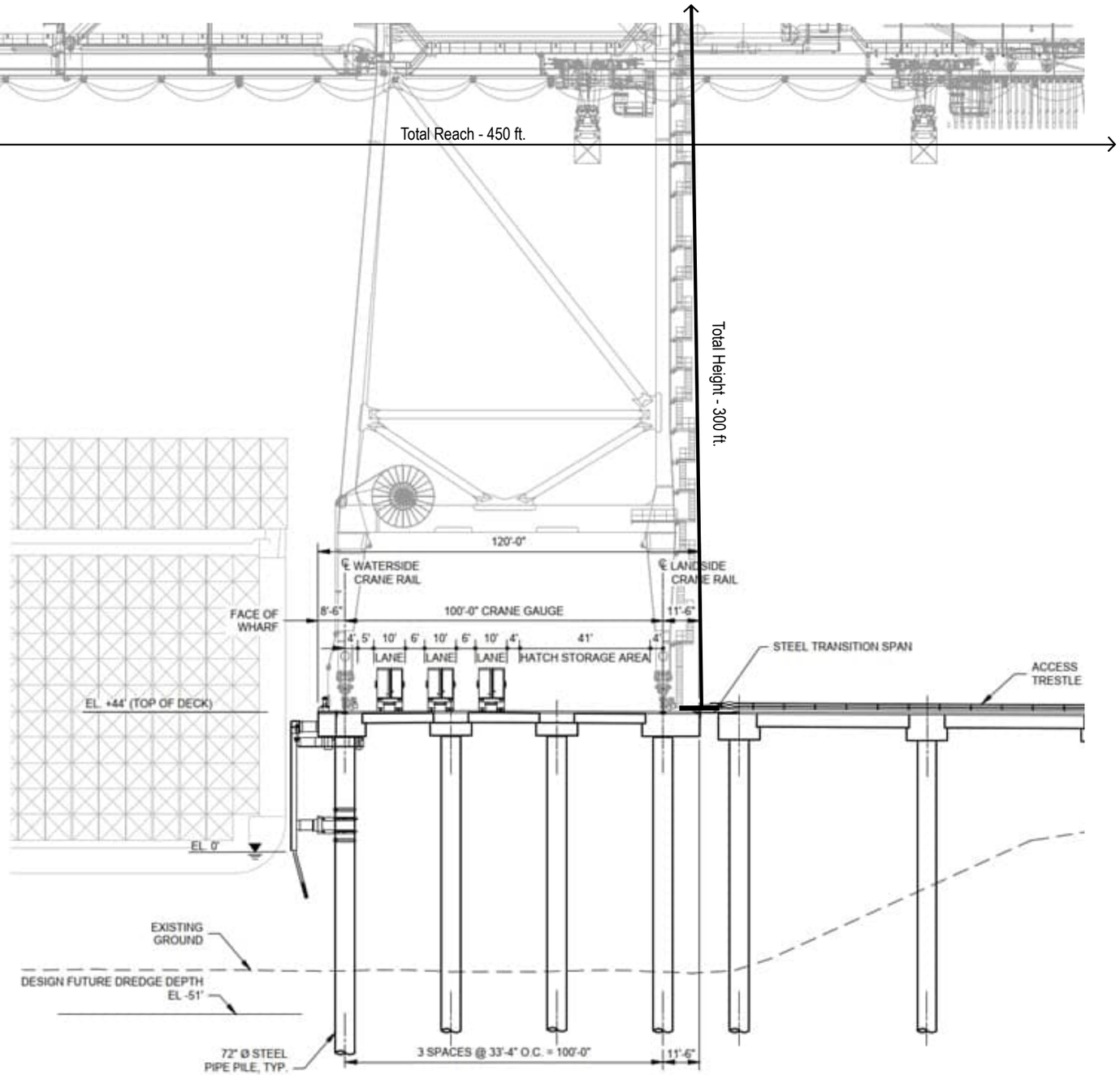
1. DEEP SOIL MIXED CELLS SHALL HAVE A UNCONFINED COMPRESSION STRENGTH OF 200 PSI OR 300 PSI, AS INDICATED ON T1-B-203.
2. GROUND IMPROVEMENT DETAILS ARE SHOWN ON T1-B-203 AND T1-B-303.
3. REMOVE EXISTING PILES TO FULL DEPTH WHERE IN CONFLICT WITH THE DSM AREA OF IMPROVEMENT



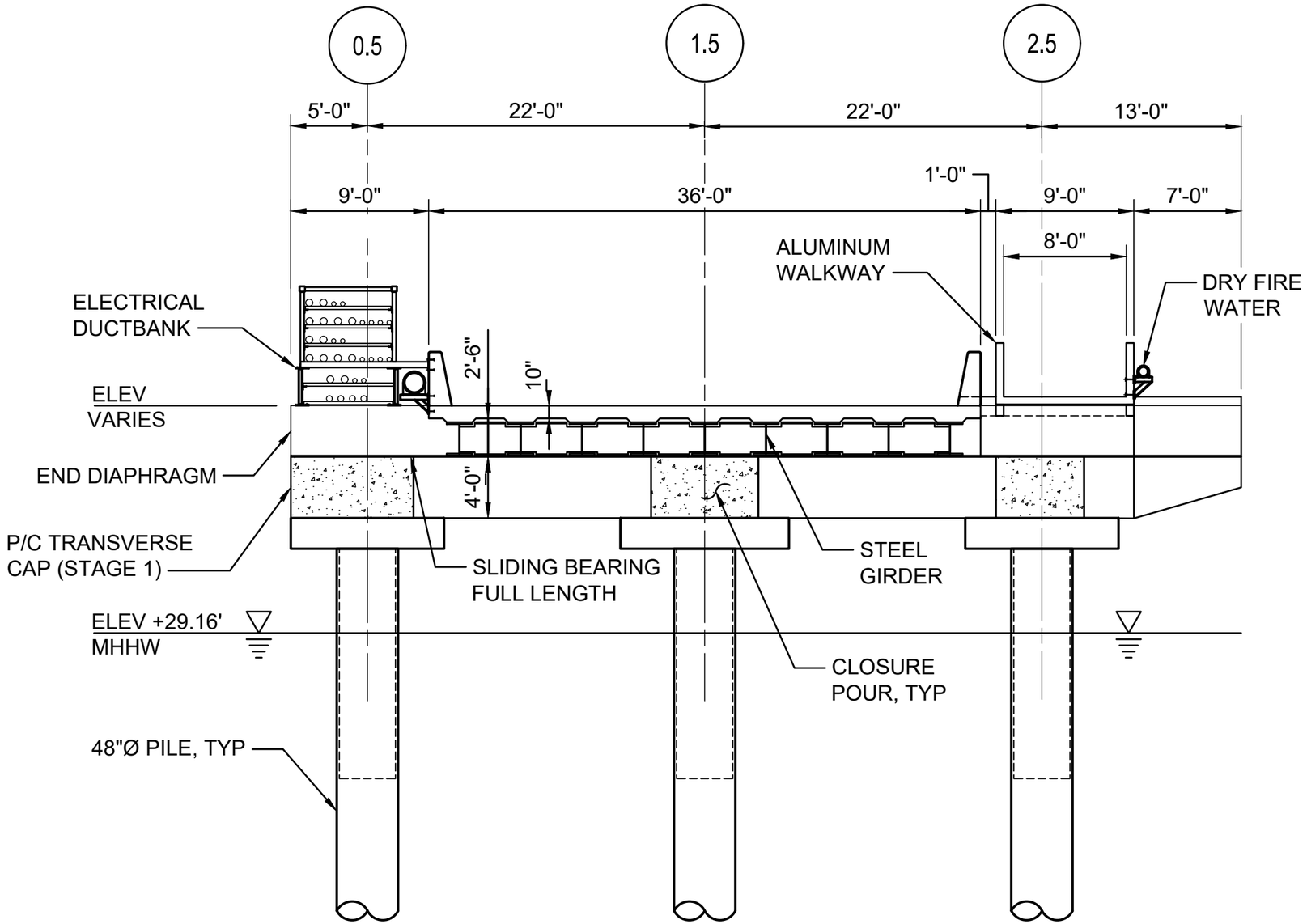
TYPICAL ELEVATION - TRESTLE 1B
SCALE: 1" = 20' T1-B-201

1" = 20' 20 0 20 40 scale feet

PORT OF ALASKA MODERNIZATION PROGRAM	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 16 of 29 Terminal 1 Typical Elevation - Access Trestle T1B



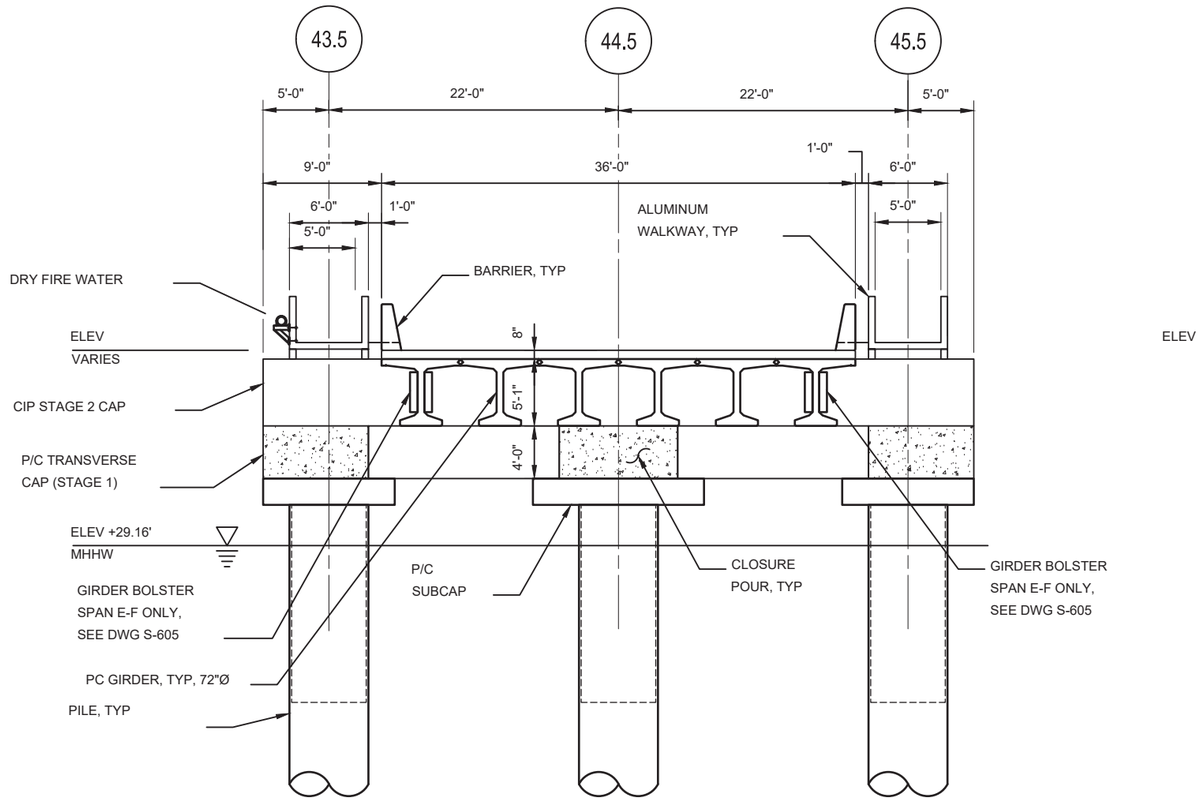
	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July, 2024 FIGURE 17 of 29 Height and Reach of Crane



C SECTION - TRESTLE 1A

SCALE: 1/8" = 1'-0"

	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 18 of 29 Terminal 1 Access Trestle Typical Section C

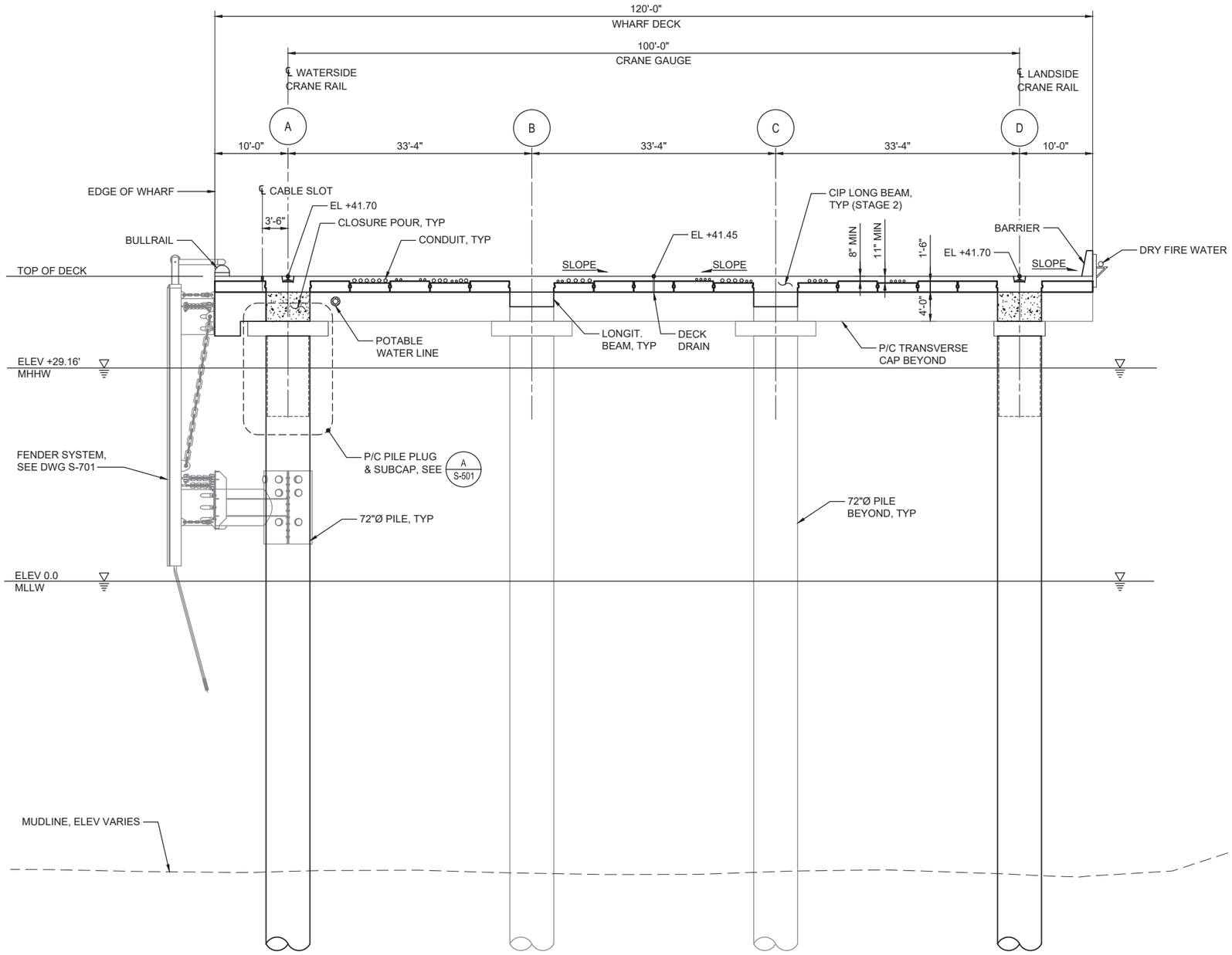


ELEV

D SECTION - TRESTLE 1B

SCALE: 1/8" = 1'-0"

	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 19 of 29 Terminal 1 Access Trestle Typical Section D

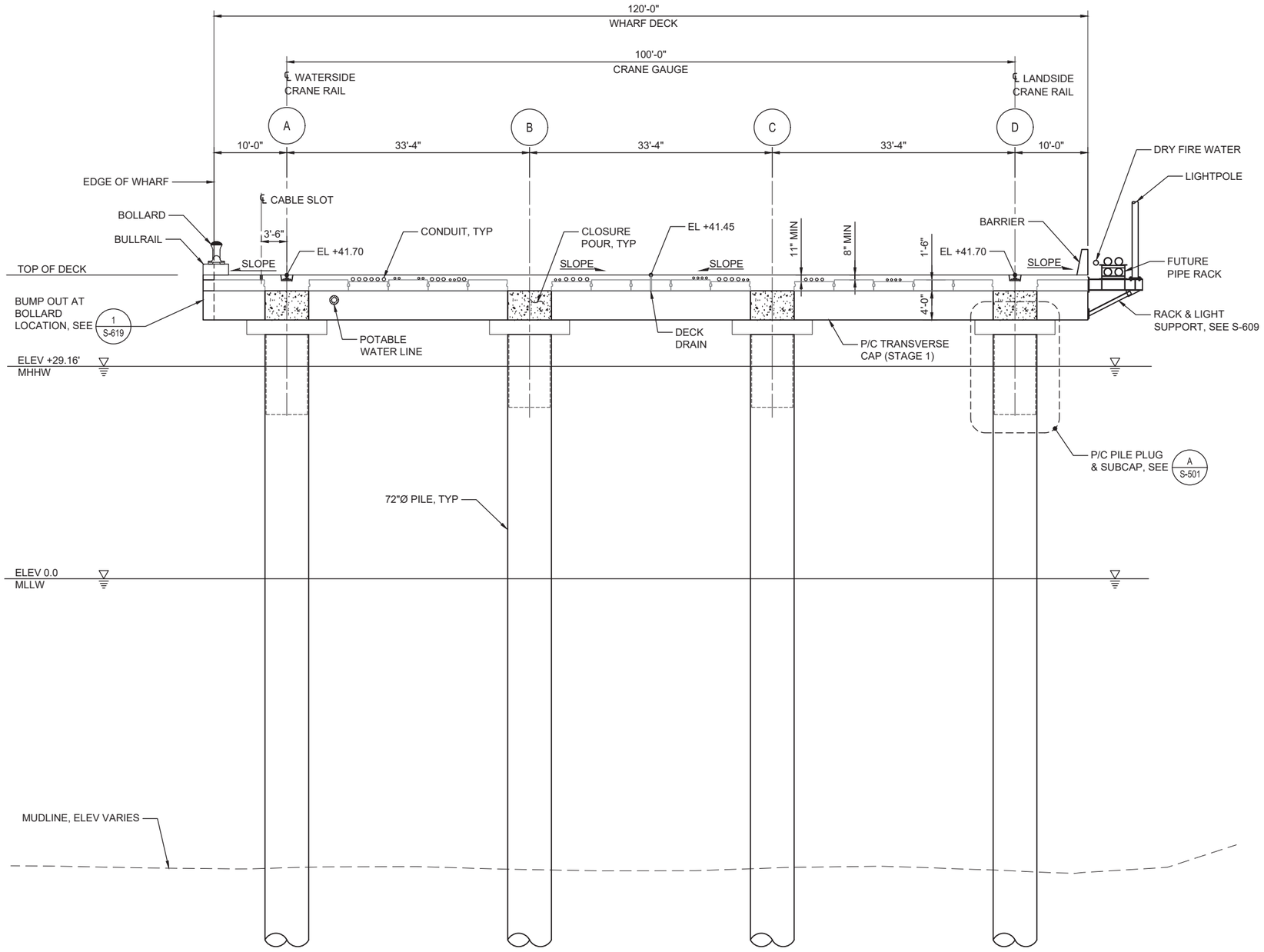


TYPICAL SECTION - WHARF @ FENDER LOCATIONS

SCALE: 1/8" = 1'-0"

1/8" = 1'-0" scale 8 0 8 16 feet

	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 20 of 29 Terminal 1 Wharf Deck Typical Cross Section



TYPICAL SECTION - WHARF @ BOLLARD LOCATIONS

SCALE: 1/8" = 1'-0"

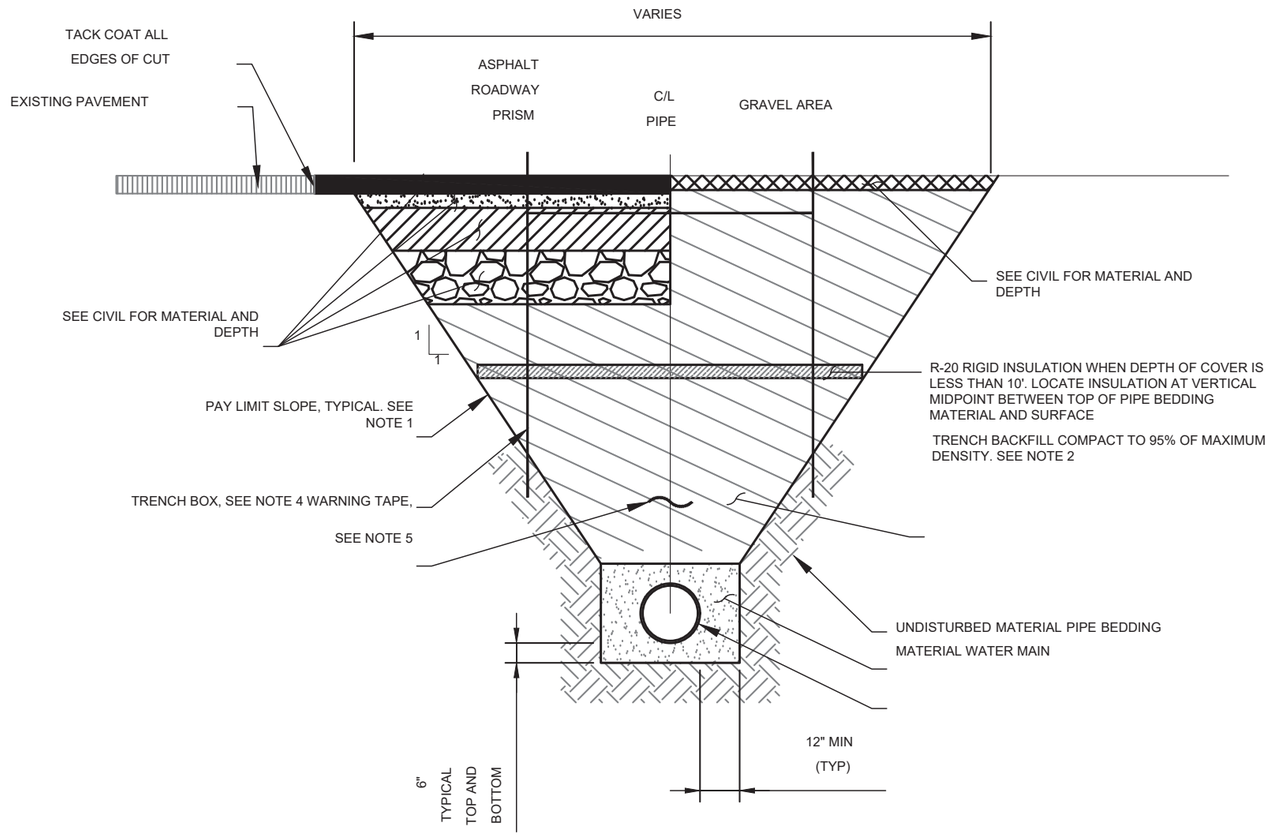
CONSTRUCTION SEQUENCE NOTES:

1. DRIVE PILES AS INDICATED IN PLANS AND IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS
2. INSTALL PRECAST PILE PLUGS & SUBCAPS
3. SET PRECAST PILE CAPS AND BEAMS
4. POUR STAGE 1 CLOSURE POURS
5. SET PRECAST DECK PANELS
6. POUR STAGE 2 CLOSURE POURS
7. POUR TOPPING SLAB, BARRIERS, BULLRAIL
8. INSTALL APPURTENANCES AND SURFACE MOUNT FEATURES.

1/8" = 1'-0" scale 8 0 8 16 feet

APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward
Meridian DATE: July 2024
FIGURE 21 of 29 Terminal 1 Wharf Dock Typical Cross Section

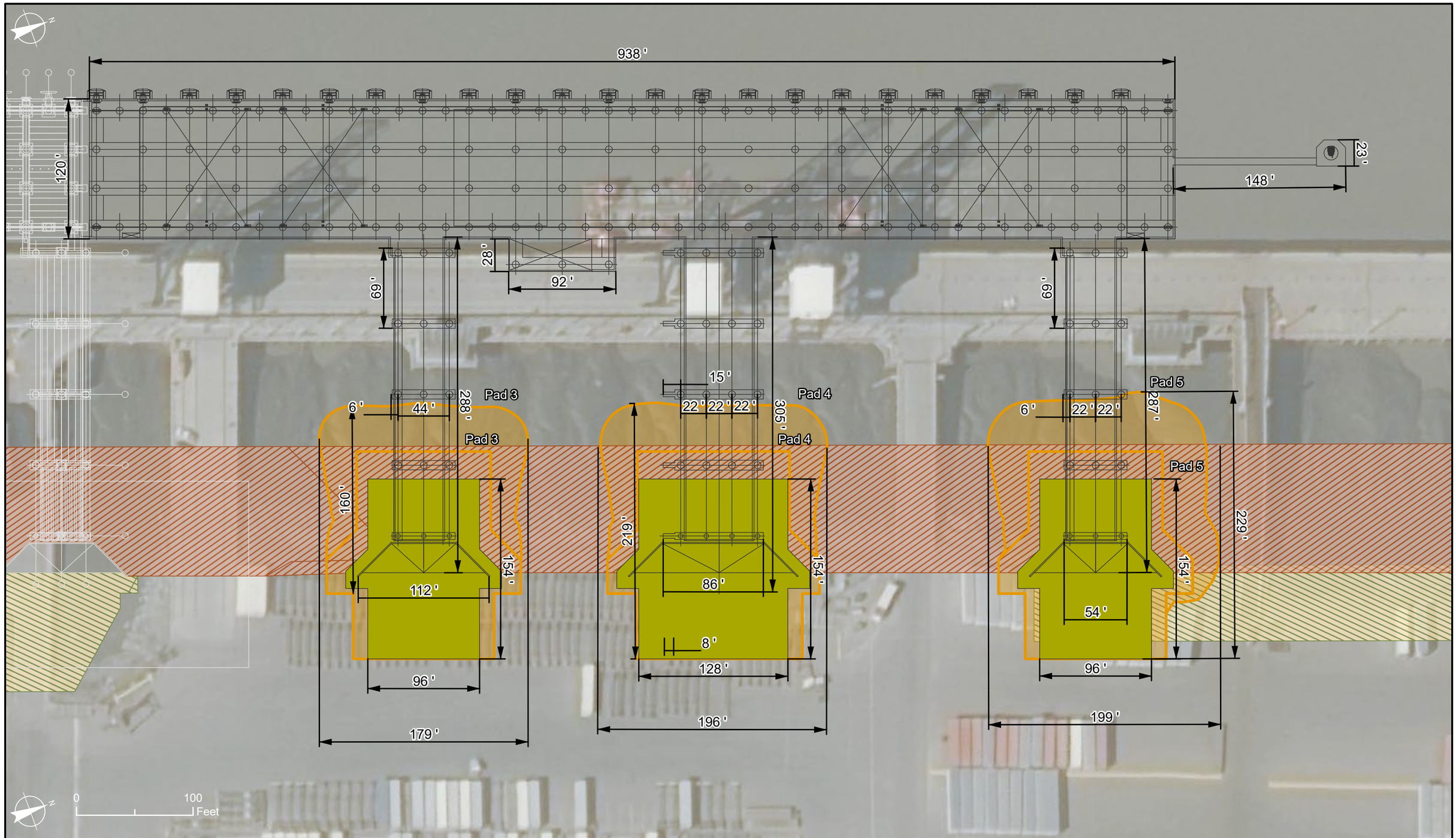


2 TYPICAL UTILITY TRENCH SECTION

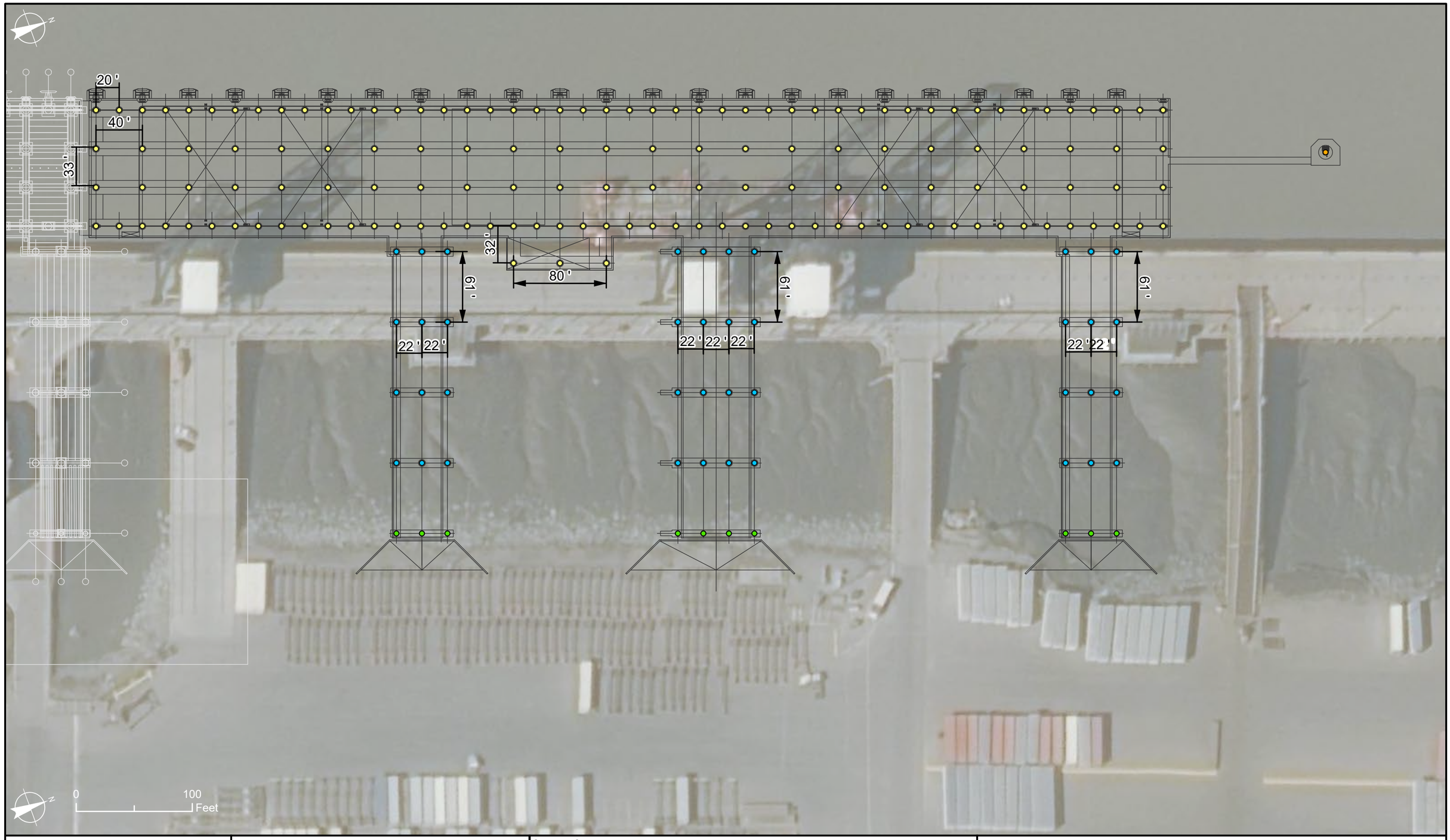
SCALE:

TRENCH SECTION NOTES:

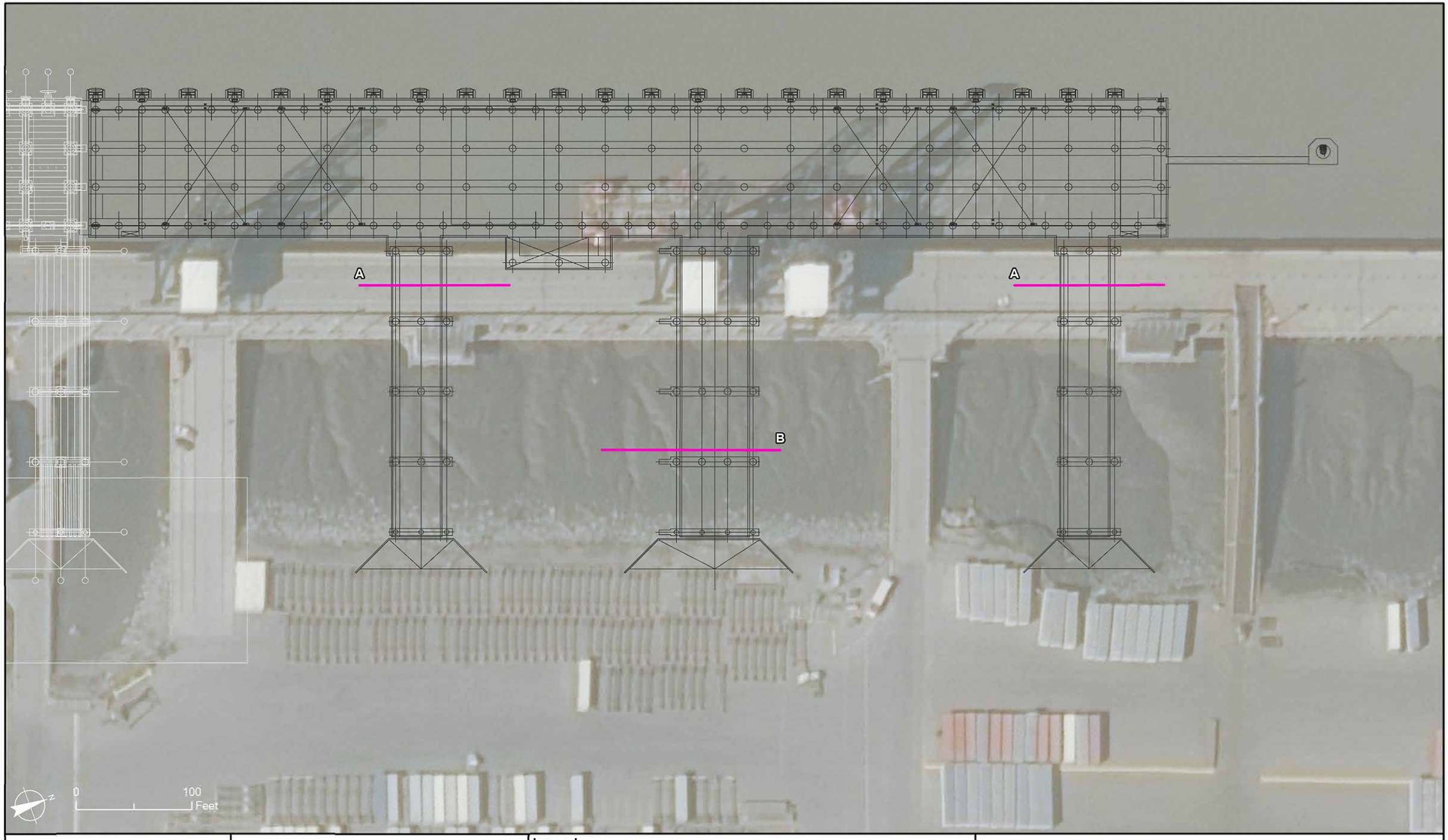
1. TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH ALL LOCAL, STATE AND OSHA REGULATIONS AND REQUIREMENTS. INDICATED SLOPE IS FOR PAY QUANTITY DETERMINATIONS ONLY. CONTRACTOR SHALL SHORE EXCAVATIONS AS NECESSARY TO KEEP EXCAVATIONS WITHIN EXISTING RIGHT-OF-WAY AND EASEMENTS AND TO PROTECT EXISTING UTILITIES AND STRUCTURES.
2. TRENCH BACKFILL SHALL BE EXISTING NATIVE MATERIAL MEETING TYPE III CLASSIFIED FILL AND BACKFILL CLASSIFICATION (MINIMUM) AS APPROVED BY ENGINEER. NATIVE MATERIAL MOT MEETING TYPE III CLASSIFIED FILL AND BACKFILL CLASSIFICATION SHALL BE REMOVED AND REPLACED WITH TYPE IIA CLASSIFIED FILL AND BACKFILL. REUSING MATERIAL IS CONSIDERED INCIDENTAL TO CONTRACT. CONTRACTOR MAY NEED TO HAUL AND STORE EXISTING MATERIAL AT SOIL STOCKPILE AREA.
3. REMOVE AND PROPERLY DISPOSE OF ALL ORGANIC MATERIALS IN ACCORDANCE WITH MASS SECTION 20.13.
4. TRENCH BOX SHALL BE UTILIZED TO MINIMIZE TRENCH WIDTH, REDUCE IMPACTS TO ADJACENT PROPERTIES AND TO REMAIN WITHIN EXISTING ROW OR EASEMENTS.
5. INSTALL DETECTABLE WARNING TAPE AT LEAST 18 INCHES BUT NO MORE THAN 36 INCHES ABOVE THE CROWN OF THE PIPE.
6. CONTRACTOR SHALL COMPLY WITH OSHA SAFETY STANDARDS BASED ON SOIL CHARACTERISTICS AND MASS SECTION 10.06 ARTICLE 6.8 - SAFETY.
7. FOUNDATION BACKFILL SHALL BE PLACED IN AREAS WHERE EXISTING SOILS DO NOT PROVIDE SUITABLE SUPPORT OF BEDDING MATERIAL AS DIRECTED BY THE ENGINEER, DEPTH MAY VARY.
8. SUITABLE CONTAMINATED SOIL MEETING THE REQUIREMENTS OF EXISTING NATIVE MATERIAL DEFINED IN NOTE 2 WILL BE ALLOWED TO BE REUSED AS TRENCH BACKFILL. UNSUITABLE CONTAMINATED SOIL SHALL BE HANDLED AND DISPOSED OF AS SPECIFIED IN THE SPECIFICATIONS.
9. A DEWATERING PLAN MUST BE AUTHORIZED PRIOR TO ANY EXCAVATION.



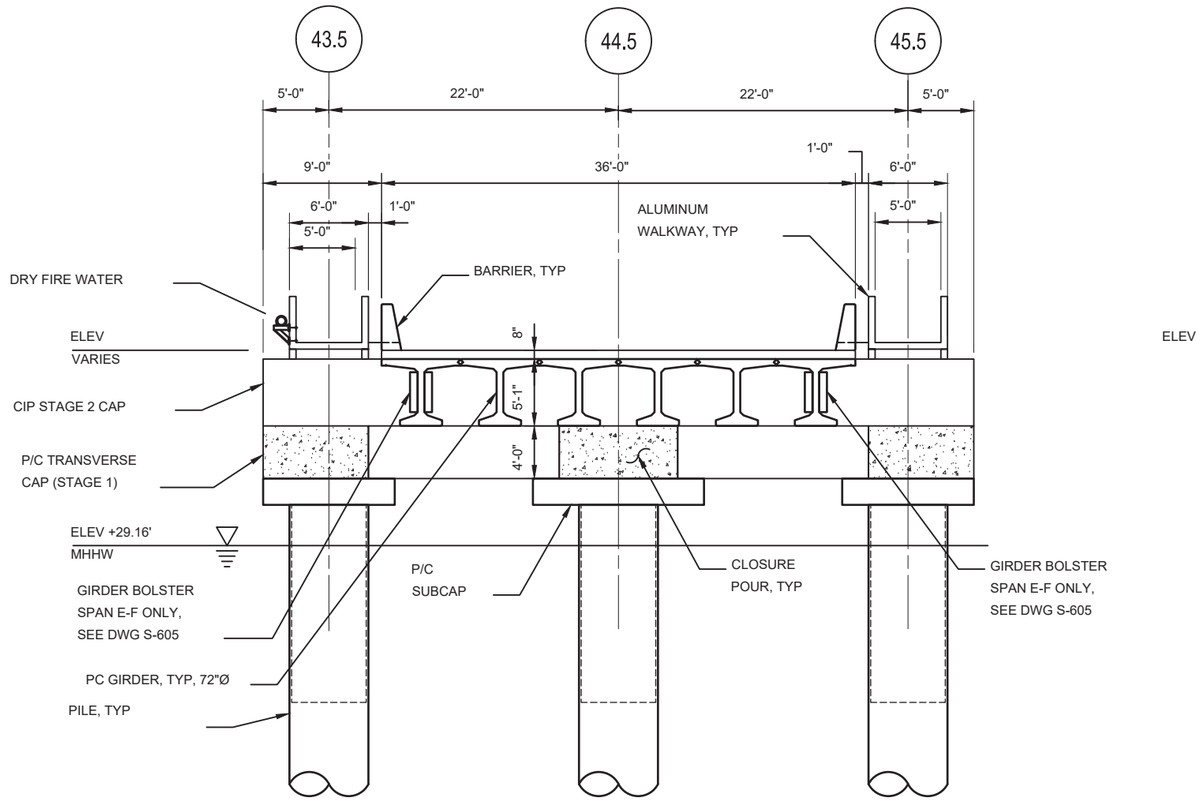
PORT OF ALASKA MODERNIZATION PROGRAM	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	**Legend** Project Shoreline Protection Components Shoreline Expansion Area Ground Improvements Area Approximate Ground Improvements Work Pad
		WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 23 of 29 Terminal 2 Site Figure* **Figure based on 15% design drawings*



PORT OF ALASKA MODERNIZATION PROGRAM	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	**Legend** Project Components 48" Pile - Trestle 72" Pile - Wharf 72" Pile - Trestle 144" Dolphin Monopile	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 24 of 29 Terminal 2 Pile Locations* **Figure based on 15% design drawings*

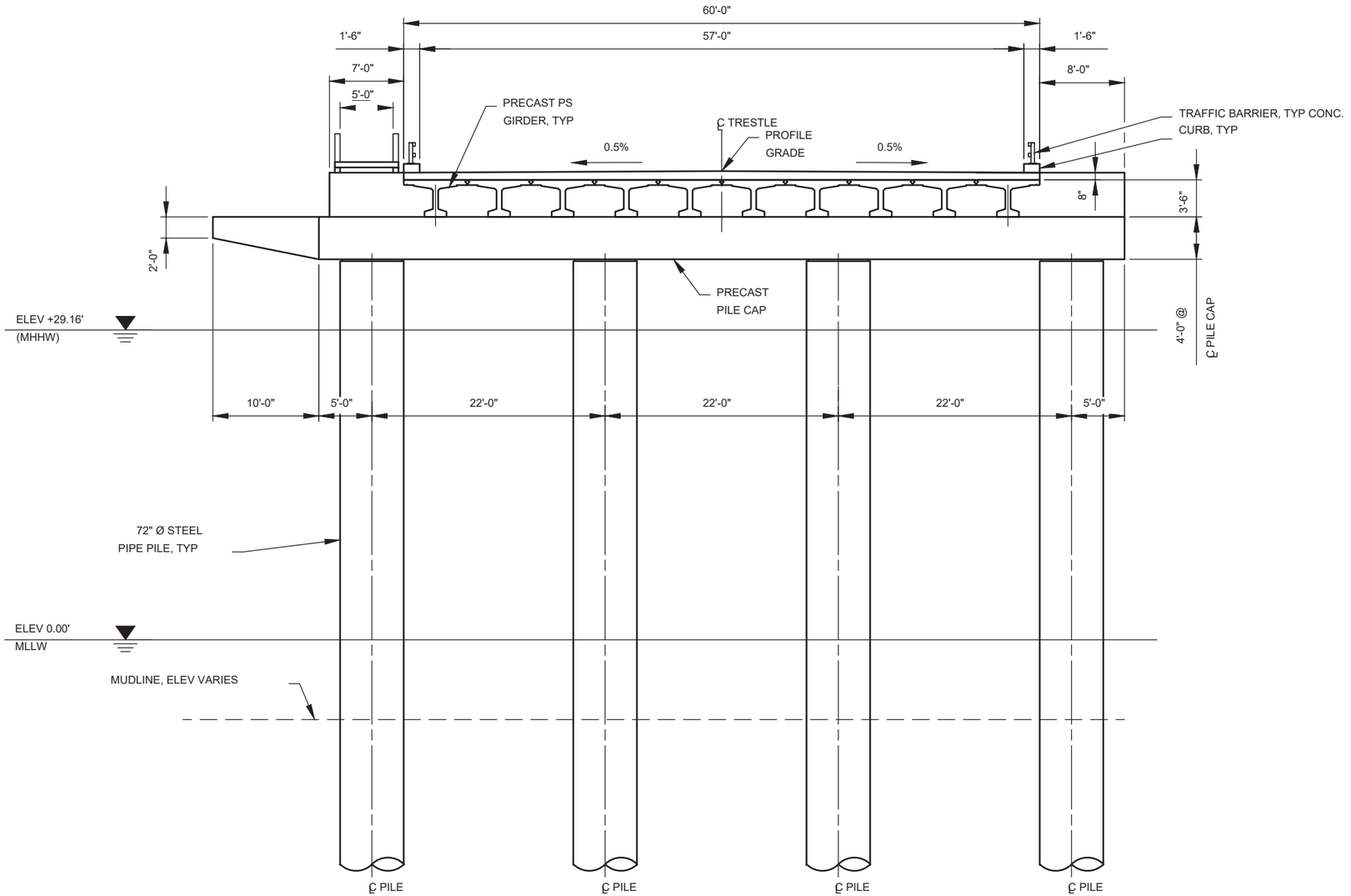


	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	**Legend** Project Components Cross Section	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 25 of 29 Terminal 2 Structural - General Layout* **Figure based on 15% design drawings*



A — **SECTION - Trestles 2A and 2C**
SCALE: 1/8" = 1'-0"
T2-S-011

	APPLICANT: Municipality of Anchorage, Port of Alaska Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm	WATERWAY: Knik Arm LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024 FIGURE 26 of 29 Terminal 2 Access Trestle Section A - Trestles T2A & T2C



B **TYPICAL SECTION - TRESTLE T2B**

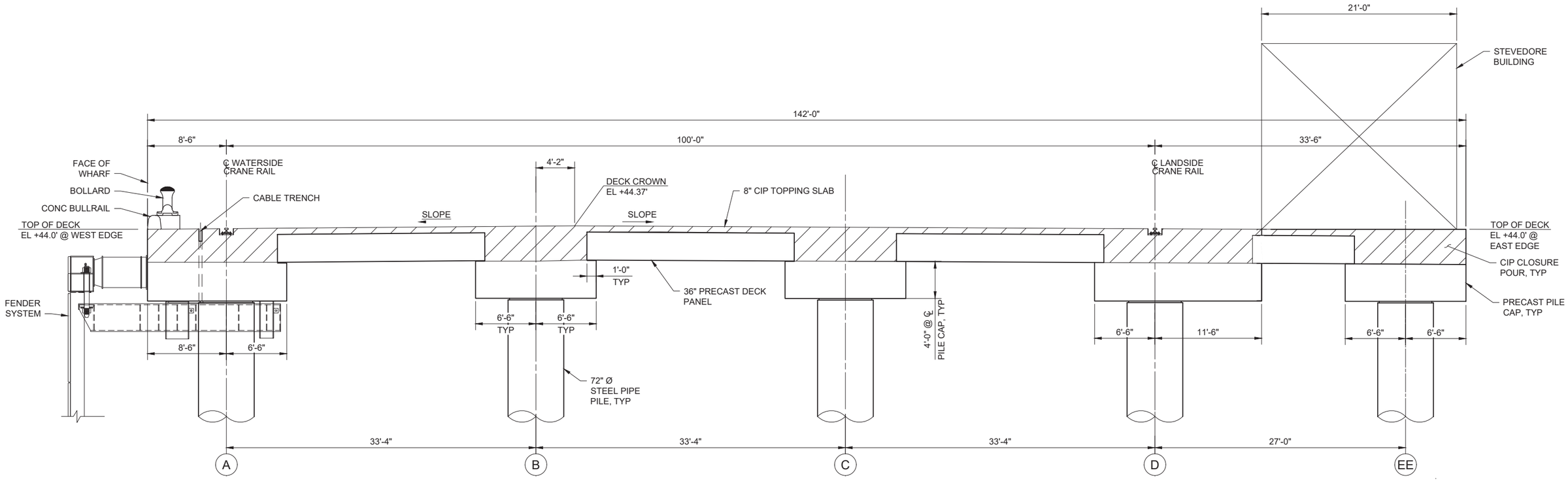
SCALE: 1/8" = 1'-0"

15% DESIGN - NOT FOR CONSTRUCTION

CONCEPTUAL

APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024
FIGURE 27 of 29 Terminal 2 Access Trestle Typical Section
B - Trestle 2B



TYPICAL SECTION @ STEVEDORE BUILDING

3/16" = 1'-0"

15% DESIGN - NOT FOR CONSTRUCTION

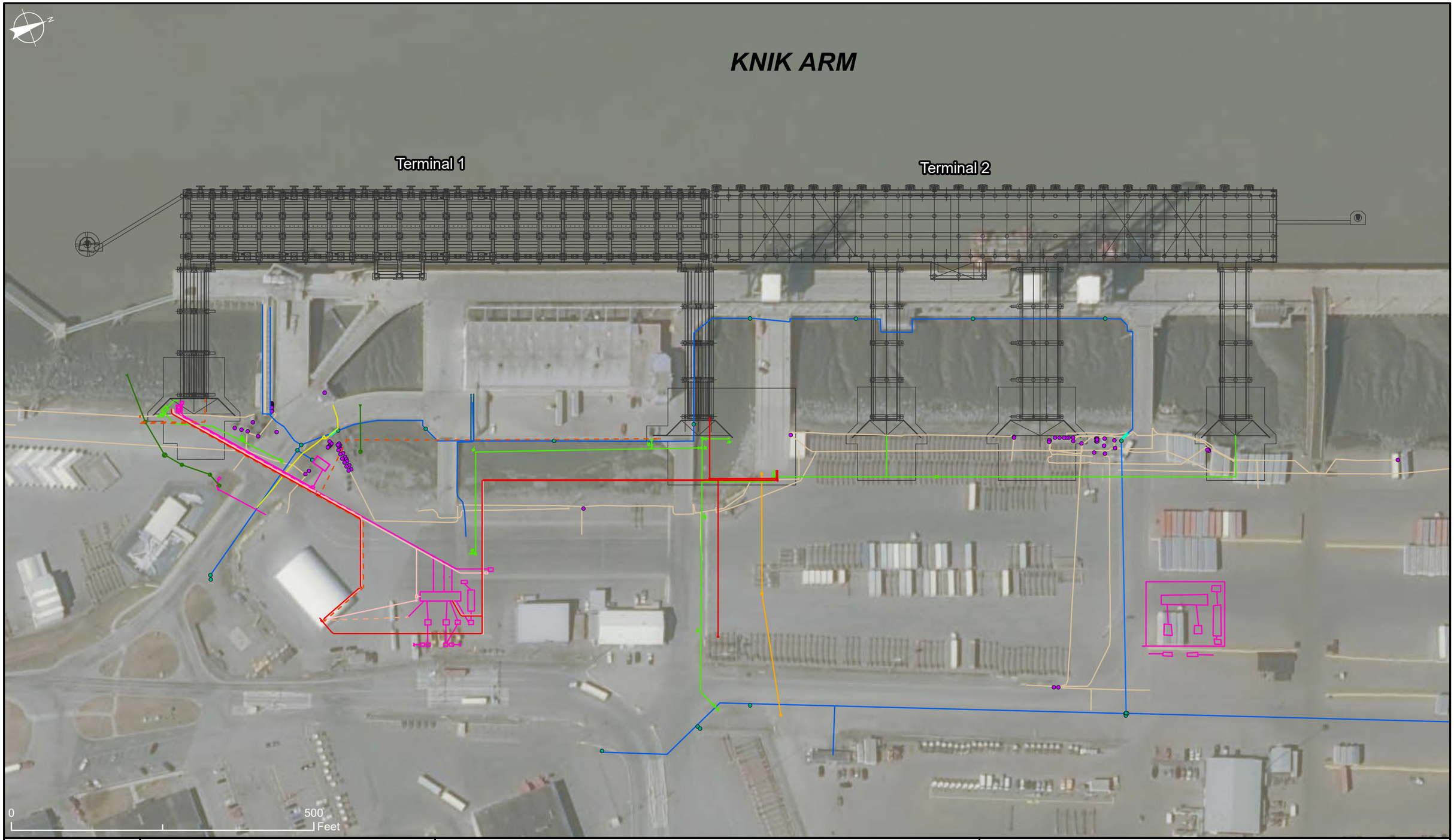
T2-S-011

CONCEPTUAL

APPLICANT: Municipality of Anchorage,
Port of Alaska
Cargo Dock Replacement Project
FILE NO: POA-2003-00502-M21, Knik Arm

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024
FIGURE 28 of 29 , Terminal 2 Wharf Deck Typical Sections

KNIK ARM



APPLICANT: Municipality of Anchorage, Port of Alaska
Cargo Dock Replacement Project FILE NO: POA-2003-00502-M21, Knik Arm

Legend

- Project Components
- Proposed
  - Fiber Optic
  - CC TV
  - Data Comm
  - Communication
  - Storm Water
  - Water Line
  - Sewer Line
- Existing
  - Electric
  - Natural Gas Line
  - Water Utility Feature
  - Water Pipe
  - Water Line
  - Electric Underground Line
  - Electric Overhead Line

WATERWAY: Knik Arm
LOCATION: Section 7, Township 13N, Range 3W, Seward Meridian DATE: July 2024
FIGURE 29 of 29, T1 and T2 Utility Plan