



US Army Corps
of Engineers
Alaska District

ANCHORAGE
Regulatory Division (1145)
CEPOA-RD
P.O. BOX 6898
JBER, AK 99506-0898

Public Notice of Application for Permit

PUBLIC NOTICE DATE:	July 24, 2023
EXPIRATION DATE:	August 23, 2023
REFERENCE NUMBER:	POA-1938-00006
WATERWAY:	Orca Inlet

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States as described below and shown on the enclosed project drawings.

All comments regarding this public notice should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the project manager's email as listed below or to regpagemaster@usace.army.mil. All comments should include the public notice reference number listed above.

All comments should reach this office no later than the expiration date of this public notice to become part of the record and be considered in the decision. Please contact Kerri Hancock at (907) 753-2719, toll free from within Alaska at (800) 478-2712, or by email at Kerri.C.Hancock@usace.army.mil if further information is desired concerning this public notice.

APPLICANT: The City of Cordova, Public Works, 602 Railroad Avenue, Cordova, Alaska 99574; Contact: Ms. Sam Greenwood, (907) 424-6231, publicworks@cityofcordova.net

AGENT: Solstice Alaska Consulting, Incorporated, 2607 Fairbanks Street, Suite B, Anchorage, Alaska 99508; Contact: Ms. Natalie Kiley-Bergen, (907) 929-5960, natalie@solsticeak.com

LOCATION: The project site is located within Section 28, T. 15 S., R. 3 W., Copper River Meridian; Latitude 60.54358° N, Longitude 145.76418° W; South Harbor; in Cordova, Alaska.

SPECIAL AREA DESIGNATION: The project is located within Cordova Harbor, which is a Federally maintained harbor, in southcentral Alaska on the southeast shore of Orca Inlet near the eastern entrance to Prince William Sound. Cordova Harbor was authorized in 1935, constructed in 1938, restored and expanded following the March 1964 earthquake, and expanded again in 1983. The harbor's main Federal features are an entrance/maneuvering channel approximately 125 feet wide dredged to -16 feet mean lower low water, a silt barrier, and breakwaters. The U.S. Army Corps of Engineers (USACE) conducts maintenance dredging of the entrance/maneuvering channel on approximately a 12-year interval with the most recent dredging occurring in 2009. The City of Cordova (City), as the non-Federal sponsor of the harbor, is responsible for the mooring basin and associated mooring facilities.

PURPOSE: The applicant's stated purpose is to improve the Cordova Harbor and return it to a state of good repair. The project is needed to offer safe vessel mooring and better accommodate the current and future commercial fishing industry and associated freight to protect the local economy.

PROPOSED WORK: The City proposes to remove all five concrete main walk floats and associated piles, all three timber trestles and associated piles, and the concrete seaplane float and associated piles from the southern portion of the harbor which were constructed in 1983 with an anticipated service life of 25 years. After removal of this harbor infrastructure, the City proposes to construct five main walk floats each with an end float and numerous stall floats arranged in two complexes, two 8-foot-wide main walk floats connecting the main walk floats and gangways, two 6-foot-wide by 80-foot-long Americans with Disabilities Act (ADA) compliant pedestrian gangways, one of which connects to a 16-foot by 32-foot gangway float, and the other connects to a 16-foot by 20-foot gangway float. The gangway floats are connected to the main float complexes and accessed by a fixed dock, a 15-foot by 125-foot drive-down transfer bridge leading to an 80-foot by 80-foot drive-down float with mounted hydraulic cranes, sewer pump out station, potable water, electrical connections, access to the eastward float complex, float components such as bull rail, floating fenders, mooring cleats, electricity connections, potable water service, fire suppression waterlines, wireless connections, lighting, and handrails, approximately 1,150 linear feet of bulkhead wall supported by H-piles, and steel piles to support floats and access ramp infrastructure. This work includes the placement of 225 permanent piles below the high tide line and 66 temporary piles.

Work occurring outside of waters of the United States includes a service area with a parking area expansion (adding 81 parking spaces), a walkway connecting the Fisherman's Memorial with the Veterans Memorial (to remain in the same location), greenspace, and stormwater treatment capabilities to include an oil water grit separator.

The proposed project involves discharge of 183 cubic yards of drill cuttings into 0.009-acres below the high tide line of Orca Inlet, and the construction and placement of structures below the mean high water mark of Orca Inlet requiring permits pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. The project also proposes structures which will occupy the Federal entrance/maneuvering channel as well as

the silt barrier of Cordova Harbor, requiring review under Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408), hereafter referred to as Section 408.

All work would be performed in accordance with the enclosed plan (sheets 1–25), dated June 20, 2023.

ADDITIONAL INFORMATION: Other authorizations needed as identified by the applicant include Incidental Harassment Authorizations from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

The applicant states that they plan to pursue phase two of the Cordova Harbor Rebuild, North Harbor, a separate and complete project from phase one, South Harbor, but have not secured funding and do not have a projected start date for that phase.

ALTERATION OR OCCUPATION OF A FEDERAL CIVIL WORKS PROJECT: Section 408 authorizes USACE to grant permission for the alteration, occupation, or use of a USACE Civil Works Project provided it is determined that the activity will not be injurious to the public interest and will not impair the usefulness of the Federal project. The requester's proposed project will alter/occupy the Federal entrance/maneuvering channel as well as the silt barrier of Cordova Harbor. The requester proposes to remove and replace float "G" as well as the seaplane float, and associated piles for both features, which currently occupy the entrance/maneuvering channel; however, a new drive down float would be constructed in place of the seaplane float. The proposed bulkhead wall supported by H-piles, fill and parking area expansion (adding 81 parking spaces), walkway connecting the Fisherman's Memorial with the Veterans Memorial (to remain in the same location), greenspace, and stormwater treatment capabilities would occupy and alter the silt barrier. Comments received as a result of this public notice will help inform the determinations required under Section 408.

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: The entire project footprint is within the previously developed harbor area. Complete avoidance is not possible to meet the purpose and need of the project.
- b. Minimization: "To meet the project purpose and need, construction must occur within WOTUS [waters of the United States]. The project will use the most compact design practicable (with the least number of piles and smallest size of piles) to minimize impacts to WOTUS. No discharge into marine waters is expected for this project beyond a small amount of drill cuttings during down the hole (DTH) drilling."
- c. Compensatory Mitigation: Given that the project footprint is within the existing developed harbor and associated waterfront area, the proposed project is not expected to have significant impacts, and compensatory mitigation is not proposed by the applicant.

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: The lead Federal agency, Maritime Administration (MARAD), designated Solstice Alaska Consulting, Inc. as the non-federal designee for consultation and is responsible for compliance with the requirements of Section 106 of the National Historic Preservation Act. USACE has reviewed the Section 106 documentation from Solstice Alaska and concurs with their determination of No Historic Properties Affected.

ENDANGERED SPECIES: The project area is within the known range of the short-tailed albatross (*Phoebastria albatrus*), western distinct population segment (DPS) steller sea lion (*Eumetopias jubatus*) and its critical habitat, Mexico DPS humpback whale (*Megaptera novaeangliae*), western north pacific DPS humpback whale (*Megaptera novaeangliae*), fin whale (*Balaenoptera physalus*), and sunflower sea star (*Pycnopodia helianthoides*).

Solstice Alaska, on behalf of MARAD, has determined the described activity would have no effect on short-tailed albatross or it's designated critical habitat. Therefore, no consultation with the U.S. Fish and Wildlife Service is required. However, any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

Solstice Alaska, on behalf of MARAD, has determined the described activity may affect, but is not likely to adversely affect, Mexico and Western North Pacific DPSs of Humpback Whale, and fin whale, or their designated critical habitat, and that the described activity may adversely affect western DPS steller sea lion and its designated critical habitat, and the sunflower sea star. They have initiated the appropriate consultation procedures under section 7 of the Endangered Species Act with the National Marine Fisheries Service (NMFS). Any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The project area is within mapped EFH for chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), pink salmon (*O. gorbuscha*), chum salmon (*O. keta*), sockeye salmon (*O. nerka*), walleye pollock (*Gadus chalcogrammus*), sablefish (*Anoplopoma fimbria*), pacific cod (*G. macrocephalus*), yellowfin sole (*Limanda aspera*), Northern rock sole (*Lepidopsetta polyxystra*), Alaska Plaice (*Pleuronectes quadrituberculatus*), Rex sole, (*Glyptocephalus zachirus*), dover sole (*Microstomus pacificus*), flathead sole (*Hippoglossoides elassodon*), arrowtooth flounder (*Atheresthes stomias*), and Pacific ocean perch (*Sebastes alutus*).

Solstice Alaska, on behalf of MARAD, is coordinating with NMFS. Any comments they may have concerning EFH will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The USACE fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the USACE, Alaska District, on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This public notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal rights or resources. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process. That decision should reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines and criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

USACE is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by USACE to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors

listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Perform work in or affecting navigable waters of the United States – Section 10 Rivers and Harbors Act 1899 (33 U.S.C. 403).

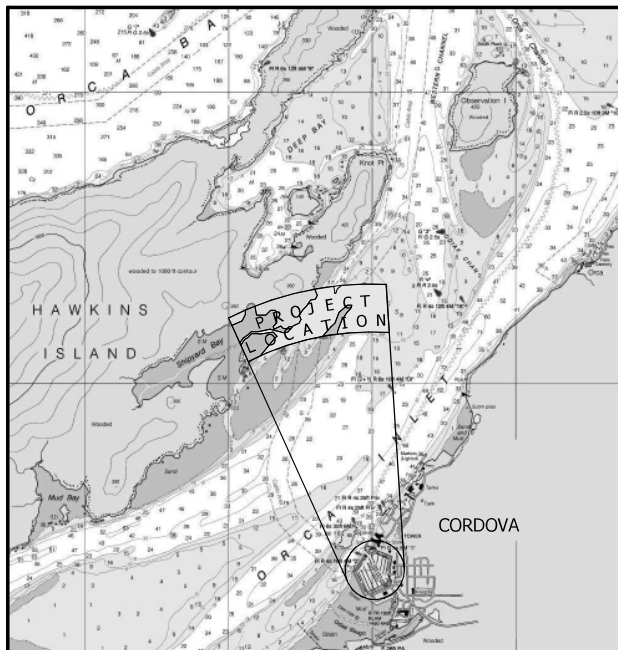
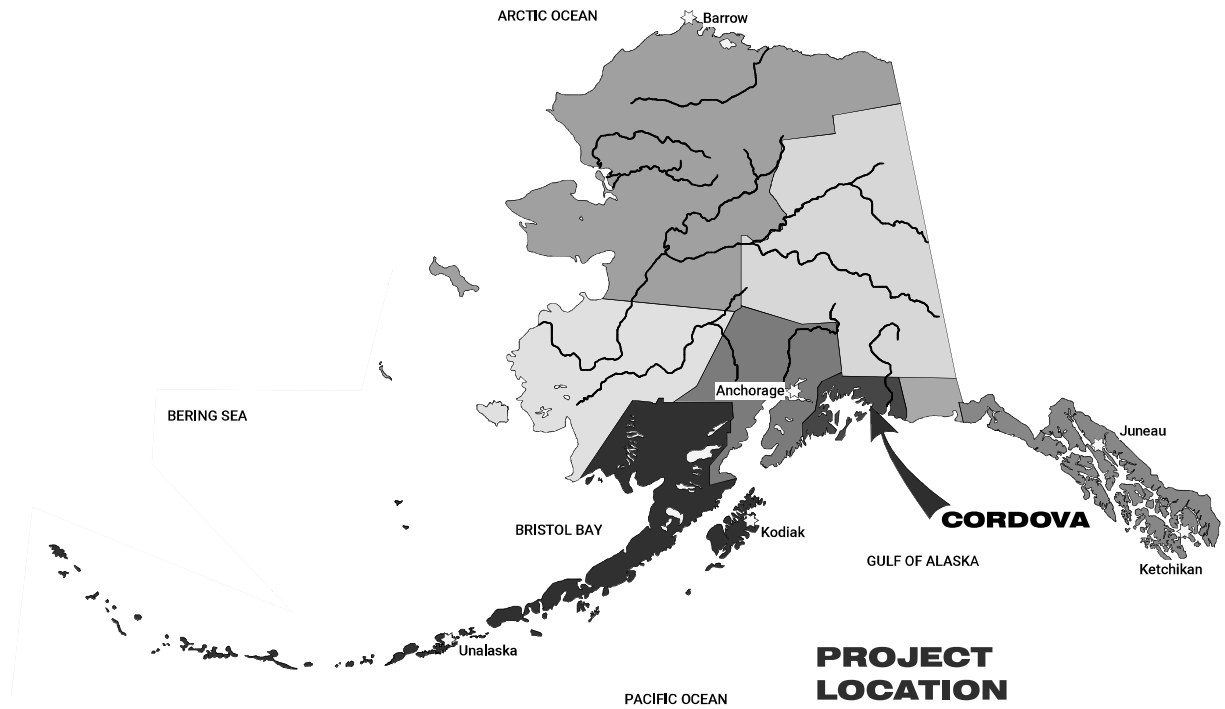
(X) Discharge dredged or fill material into waters of the United States – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

(X) Request to Alter or Occupy a Federal Civil Works Project – Section 14 Rivers and Harbors Act 1899 (33 U.S.C. 408)

Project drawings are enclosed with this public notice.

District Commander
U.S. Army, Corps of Engineers

Enclosure



TIDAL DATA	
HAT	16.17
MHHW	12.59
MHW	11.67
MLW	1.51
MLLW	0.00
LAT	-3.97

PURPOSE: NEW CRUISE SHIP DOCK

VICINITY MAP & LOCATION MAP

DATUM: 0.0
 MTL = 5.55
 MHW = 10.63
 MLLW = 0.0'

JOB NO. 21_116_A

PROPOSED: CSBH PERMIT DRAWINGS

IN: CORDOVA, ALASKA

AT: SMALL BOAT HARBOR
 APPLICATION BY: SOLSTICE ALASKA
 CONSULTING, LLC.

DATE: SHEET: 1 OF 23

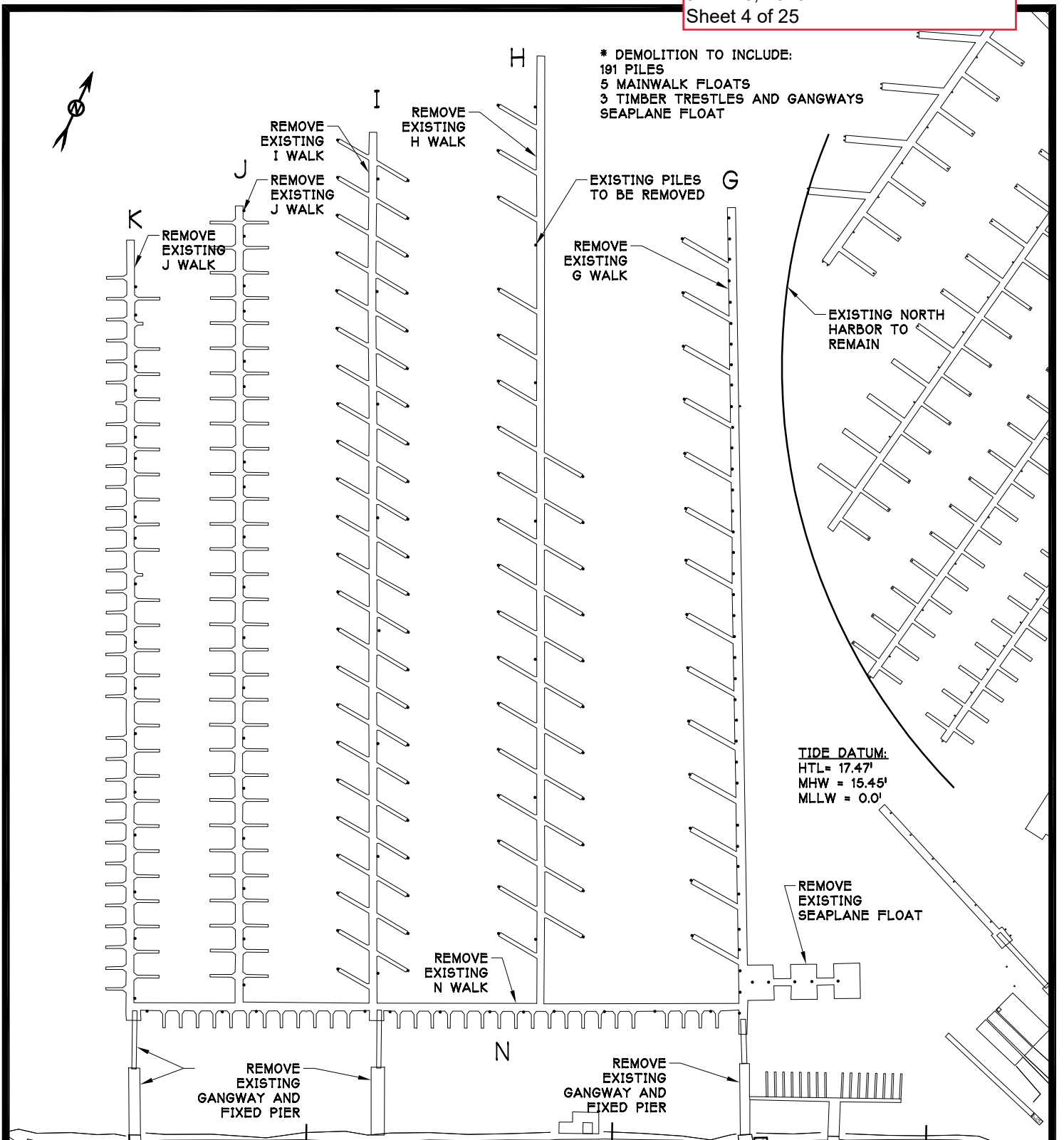
Figure 1. Cordova Harbor Existing Infrastructure



Figure 2. Cordova Harbor Conditions



(Source: SolsticeAK Site Visit, April 2022)



PURPOSE: REPLACEMENT
 MARINA

DEMOLITION PLAN

PROPOSED: CORDOVA SOUTH HARBOR
 IN: PRINCE WILLIAM SOUND
 AT: CORDOVA, AK

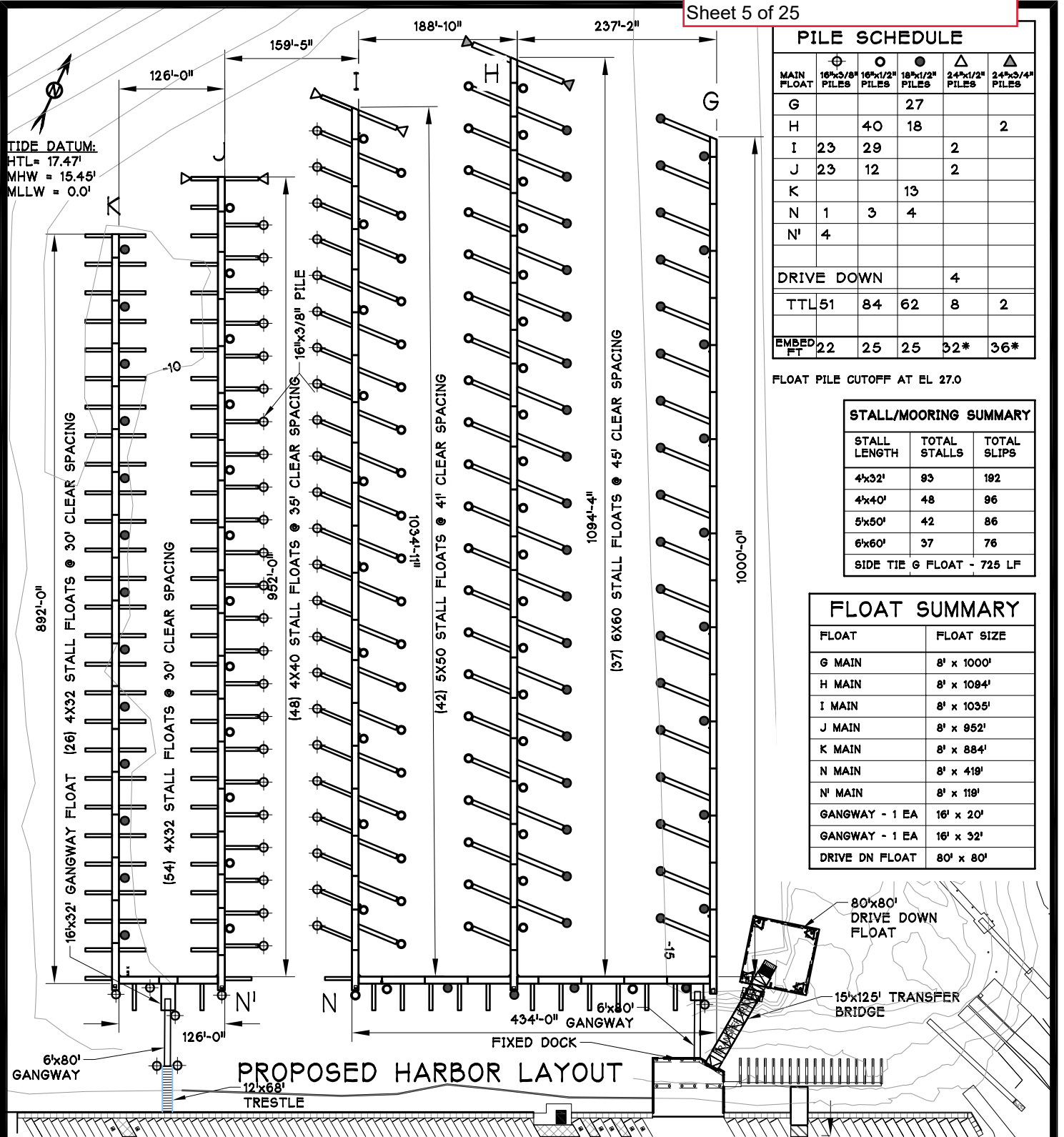
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 HTL = 17.47'
 MHW = 15.45'
 MLLW = 0.0

JOB NO.

APPLICATION BY: CITY OF CORDOVA

DATE: 7 JUNE, 2023

SHEET: 2 OF 23



PURPOSE: REPLACEMENT MARINA

SITE PLAN

PROPOSED:

CORDOVA SOUTH HARBOR

IN:

PRINCE WILLIAM SOUND

AT:

CORDOVA, AK

APPLICATION BY: CITY OF CORDOVA

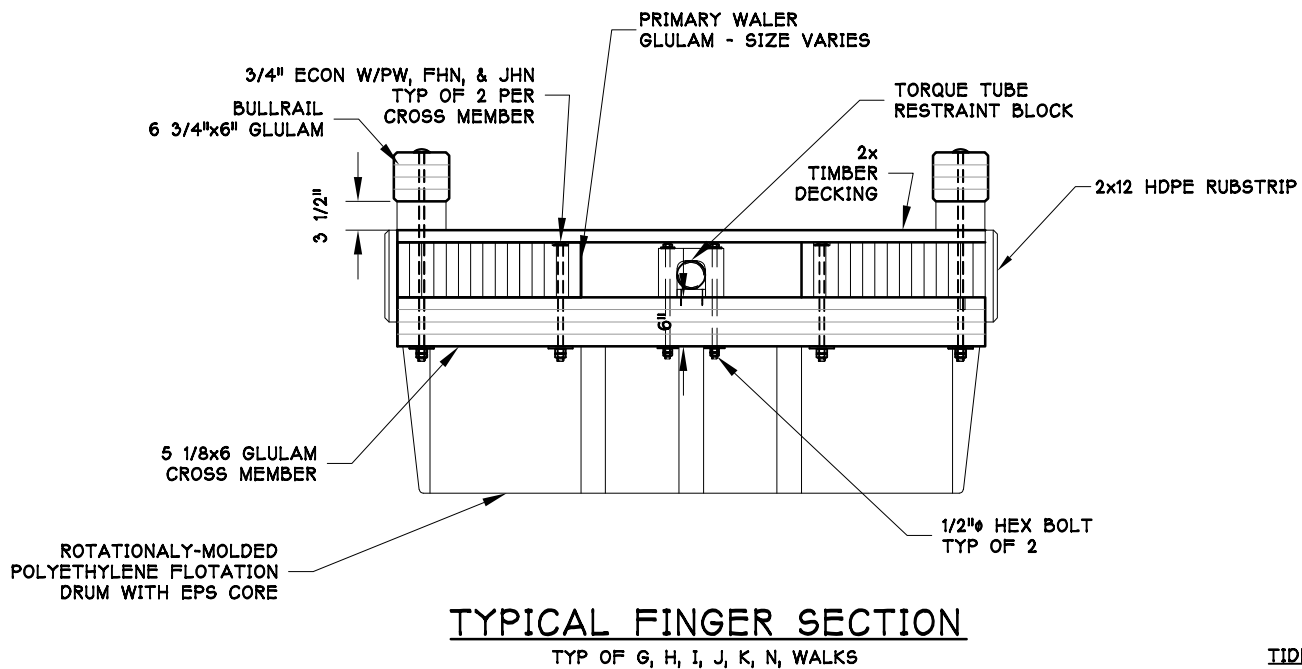
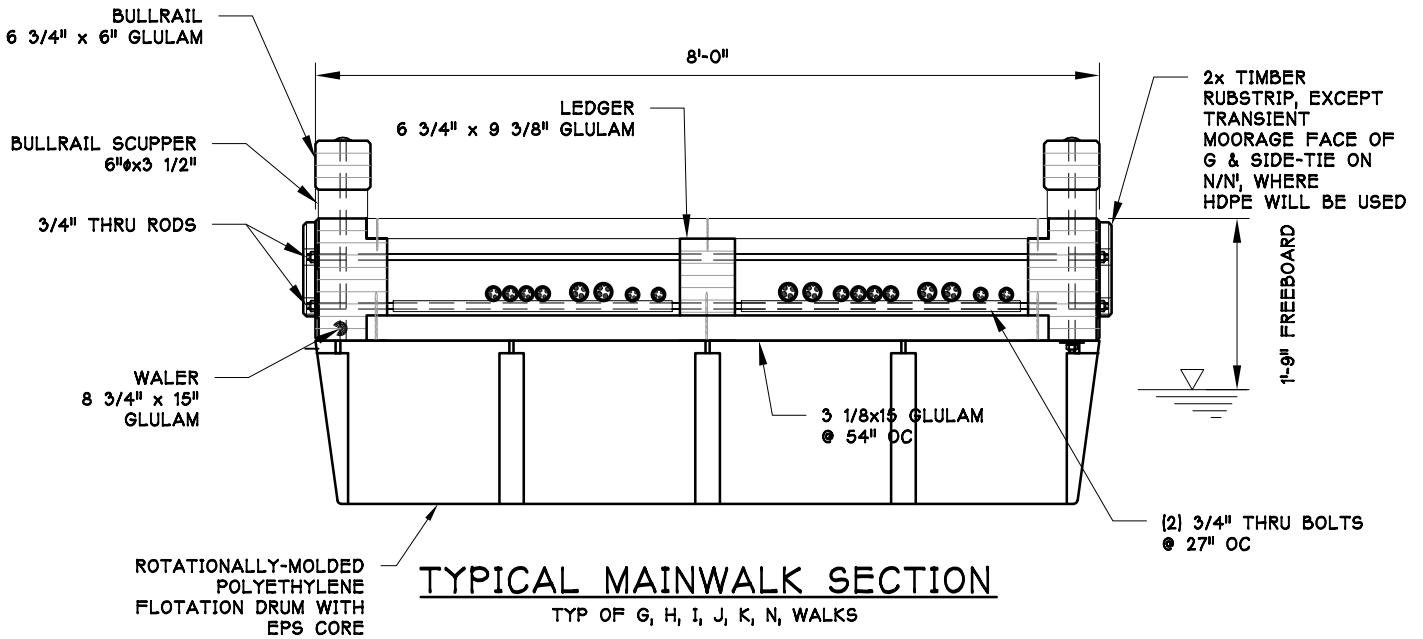
DATUM:

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 MHW = 15.45'
 MLLW = 0.0

JOB NO.

DATE: 7 JUNE, 2023

SHEET: 3 OF 23



TIDE DATUM:
HTL= 17.47'
MHW = 15.45'
MLLW = 0.0'

PURPOSE: REPLACEMENT
MARINA

DATUM: HTL = 17.47'
MHW = 15.45'
MLLW = 0.0'

FLOAT SECTIONS

JOB NO.

PROPOSED:

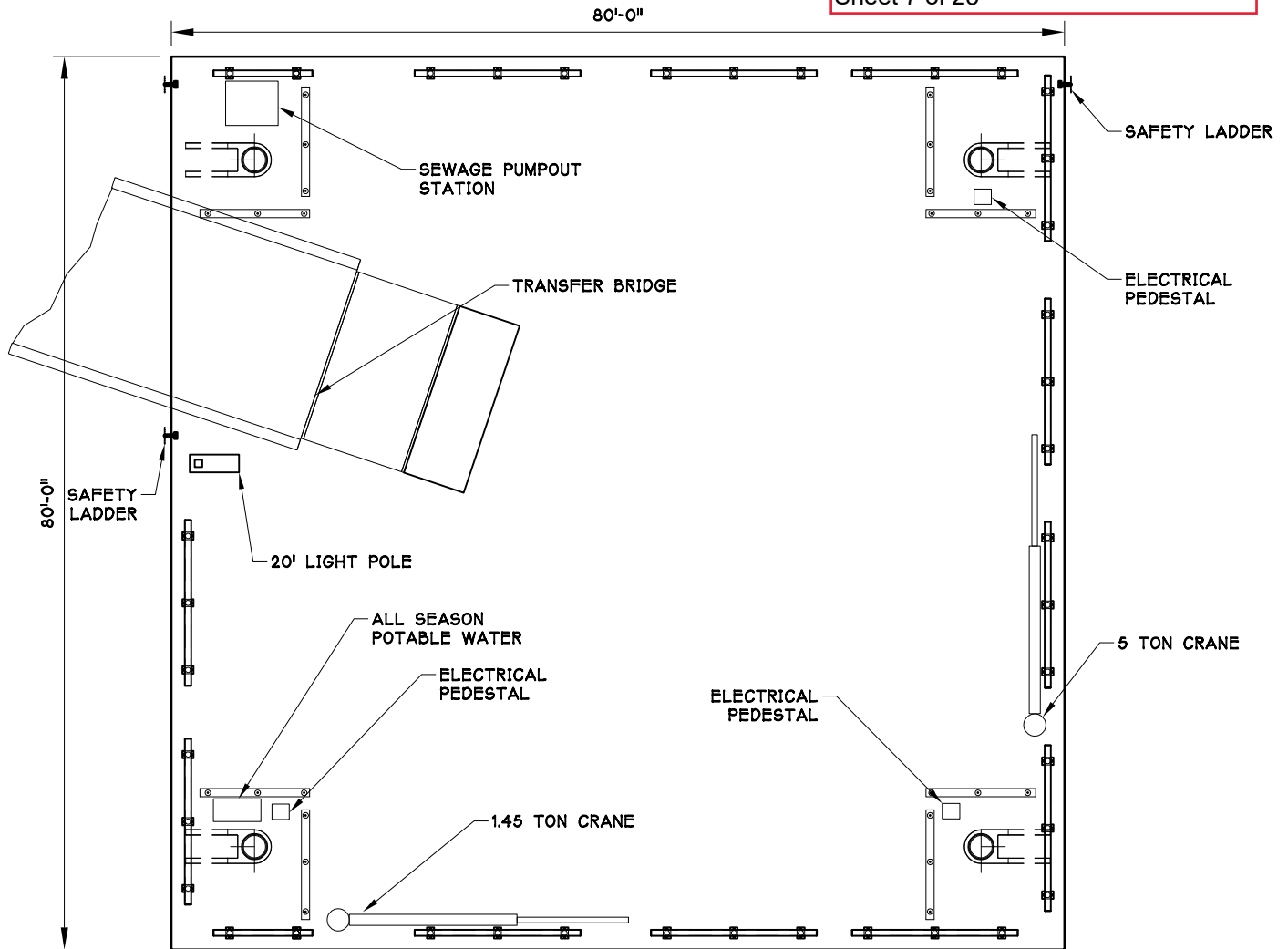
IN:

AT:

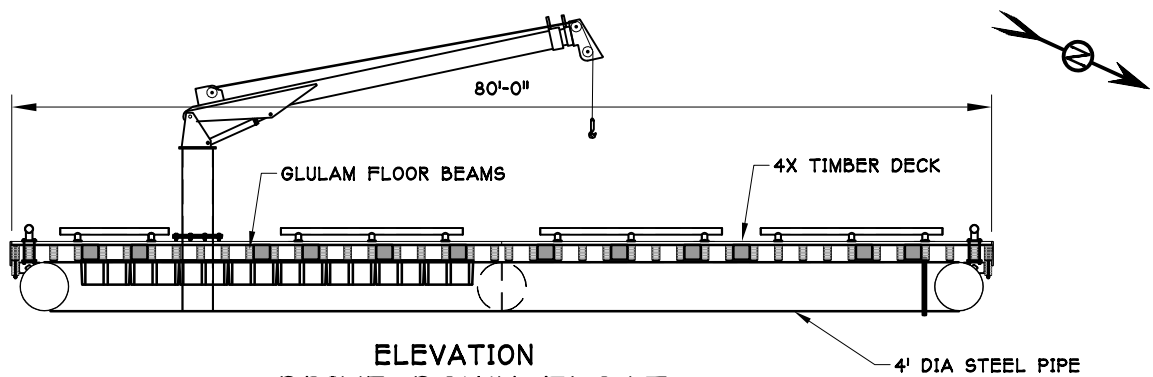
APPLICATION BY: **CITY OF CORDOVA**

DATE: 7 JUNE, 2023

SHEET: **4** OF **23**



DECK PLAN



ELEVATION
 DRIVE DOWN FLOAT

TIDE DATUM:
 HTL = 17.47'
 MHW = 15.45'
 MLLW = 0.0'

PURPOSE: REPLACEMENT
 MARINA

DRIVE DOWN FLOAT

PROPOSED: CORDOVA SOUTH HARBOR
 IN: PRINCE WILLIAM SOUND
 AT: CORDOVA, AK

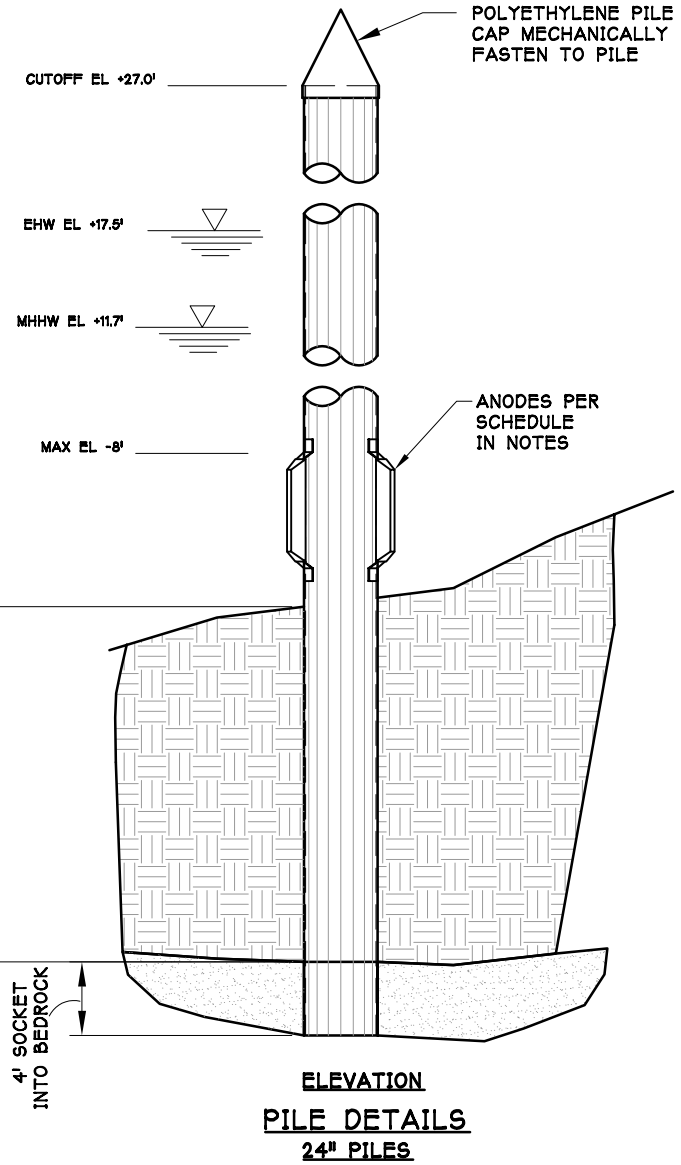
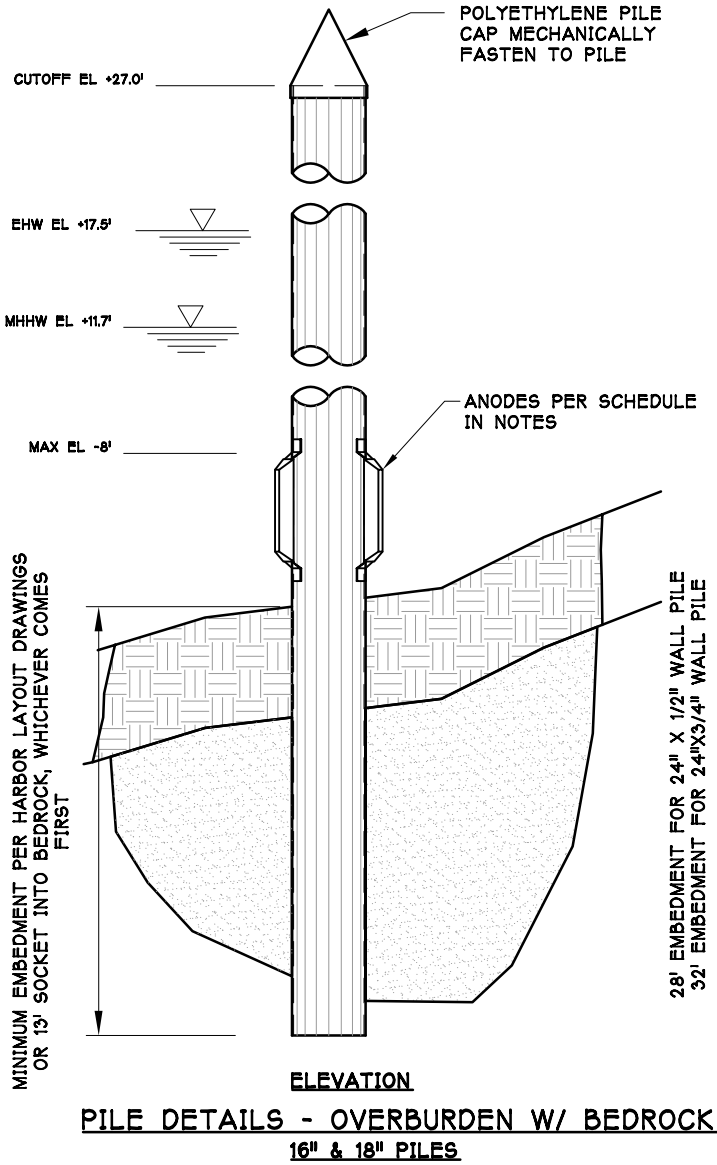
DATUM: HTL = 17.47'
 MHW = 15.45'
 MLLW = 0.0'

JOB NO.

APPLICATION BY: CITY OF CORDOVA

DATE: 7 JUNE, 2023

SHEET: 5 OF 23



ANODE NOTES:

1. INSTALL ONE EA 200 LB ANODE PER 12" & 16" PILE
2. INSTALL TWO EA 150 LB ANODES PER 18" PILE
3. INSTALL TWO EACH 150 LB ANODES FOR EACH 24" PILE
WEIGHT SHALL BE ANODE MATERIAL NOT INCLUDING
MOUNTING TAB.
4. TOP OF INSTALLED ANODE SHALL BE NO HIGHER THAN EL
-8.
5. ANODES SHALL BE INSTALLED BY AN ADCI CERTIFIED
DIVER. WET WELD TO AWS D3.6 CLASS B STANDARDS.

NOTES:

1. USE A252 GR 3, MIN Fy = 50 KSI FOR 16"x1/2" WALL, 18" AND 24" PILE
2. USE A252 GR 2, MIN Fy = 36 KSI OR BETTER FOR 16"x3/8" WALL
3. HOT DIP GALVANIZE PILE
4. SEE SHEET 1 FOR PILE SCHEDULE.

TIDE DATUM:

HTL = 17.47'
MHW = 15.45'
MLLW = 0.0'

PURPOSE: REPLACEMENT
MARINA

PILE SECTIONS

PROPOSED: CORDOVA SOUTH HARBOR
IN: PRINCE WILLIAM SOUND
AT: CORDOVA, AK

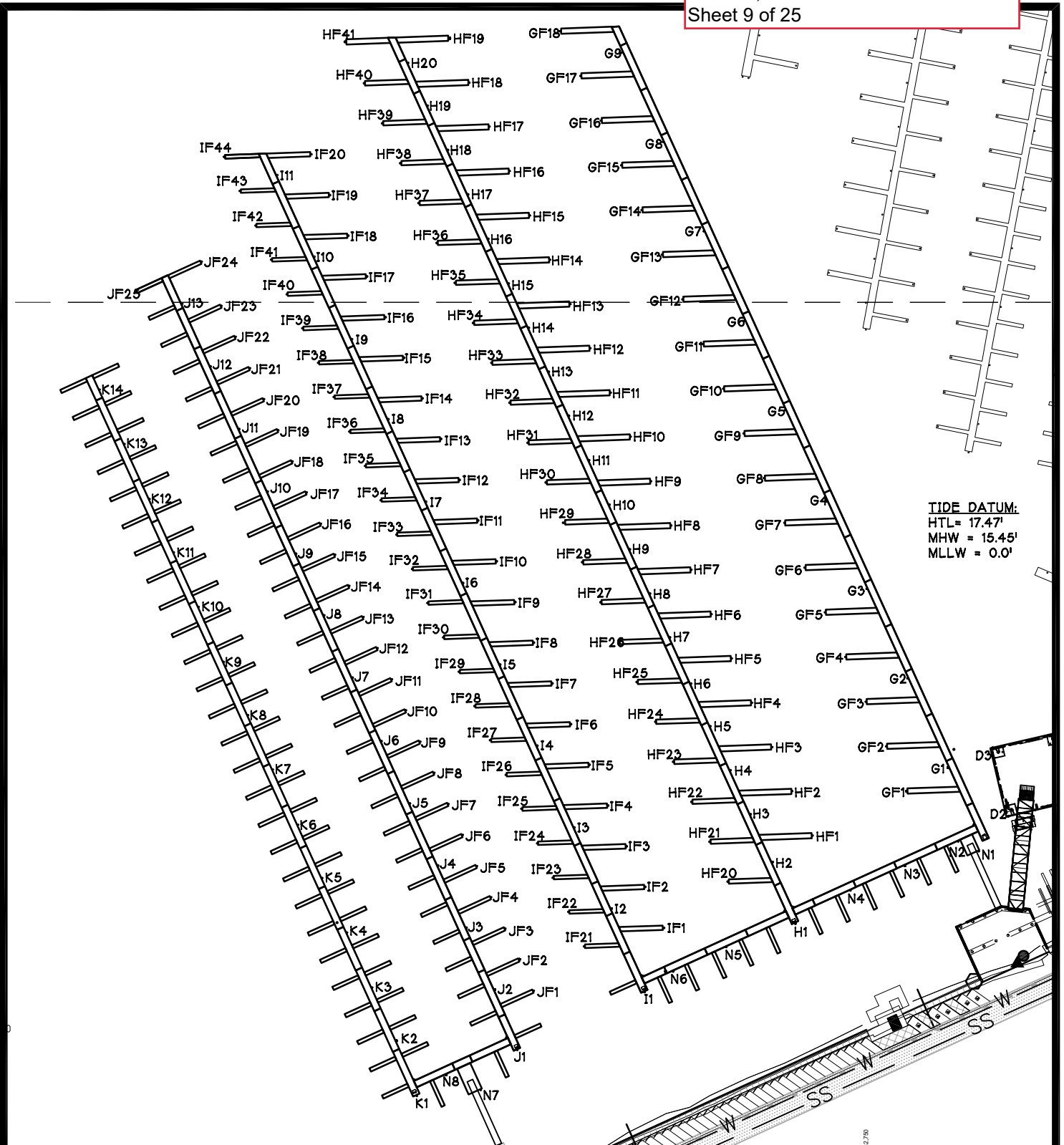
APPLICATION BY: CITY OF CORDOVA

DATUM: HTL = 17.47'
MHW = 15.45'
MLLW = 0.0

JOB NO.

DATE: 7 JUNE, 2023

SHEET: 6 OF 23



PURPOSE: REPLACEMENT
 MARINA

PILE LAYOUT

PROPOSED: CORDOVA SOUTH HARBOR
 IN: PRINCE WILLIAM SOUND
 AT: CORDOVA, AK

APPLICATION BY: CITY OF CORDOVA

DATUM:
 HTL = 17.47'
 MHW = 15.45'
 MLLW = 0.0'

JOB NO.

DATE: 7 JUNE, 2023

SHEET: 7 OF 23

G PILE COORDINATES			
PILE NO.	PILE SIZE	NORTHING	EASTING
G1	18"x1/2"	2,390,719.65	1,682,843.31
G2	18"x1/2"	2,390,821.56	1,682,796.86
G3	18"x1/2"	2,390,923.48	1,682,750.41
G4	18"x1/2"	2,391,025.39	1,682,703.96
G5	18"x1/2"	2,391,127.30	1,682,657.50
G6	18"x1/2"	2,391,229.22	1,682,611.05
G7	18"x1/2"	2,391,331.13	1,682,564.60
G8	18"x1/2"	2,391,433.04	1,682,518.15
G9	18"x1/2"	2,391,534.96	1,682,471.70
GF1	18"x1/2"	2,390,692.95	1,682,795.79
GF2	18"x1/2"	2,390,743.90	1,682,772.56
GF3	18"x1/2"	2,390,794.86	1,682,749.34
GF4	18"x1/2"	2,390,845.82	1,682,726.11
GF5	18"x1/2"	2,390,896.78	1,682,702.89
GF6	18"x1/2"	2,390,947.73	1,682,679.66
GF7	18"x1/2"	2,390,998.69	1,682,656.44
GF8	18"x1/2"	2,391,049.64	1,682,633.21
GF9	18"x1/2"	2,391,100.604	1,682,609.98
GF10	18"x1/2"	2,391,151.56	1,682,586.76
GF11	18"x1/2"	2,391,202.51	1,682,563.53
GF12	18"x1/2"	2,391,253.47	1,682,540.31
GF13	18"x1/2"	2,391,304.43	1,682,517.08
GF14	18"x1/2"	2,391,355.40	1,682,493.86
GF15	18"x1/2"	2,391,406.34	1,682,470.63
GF16	18"x1/2"	2,391,457.30	1,682,447.41
GF17	18"x1/2"	2,391,508.25	1,682,424.18
GF18	18"x1/2"	2,391,559.22	1,682,400.95

H PILE COORDINATES			
PILE NO.	PILE SIZE	NORTHING	EASTING
H1	16"x1/2"	2,390,542.06	1,682,669.23
H2	16"x1/2"	2,390,612.02	1,682,642.93
H3	16"x1/2"	2,390,666.62	1,682,618.05
H4	16"x1/2"	2,390,716.78	1,682,595.18
H5	16"x1/2"	2,390,766.94	1,682,572.32
H6	16"x1/2"	2,390,815.39	1,682,550.24
H7	16"x1/2"	2,390,868.28	1,682,526.13
H8	16"x1/2"	2,390,918.10	1,682,503.42
H9	16"x1/2"	2,390,968.49	1,682,480.46
H10	16"x1/2"	2,391,019.33	1,682,457.28
H11	16"x1/2"	2,391,070.17	1,682,434.11
H12	16"x1/2"	2,391,120.9	1,682,410.99
H13	16"x1/2"	2,391,171.06	1,682,388.13
H14	16"x1/2"	2,391,221.22	1,682,365.26
H15	16"x1/2"	2,391,271.5	1,682,342.35
H16	16"x1/2"	2,391,322.46	1,682,319.12
H17	16"x1/2"	2,391,373.19	1,682,296.00
H18	16"x1/2"	2,391,423.69	1,682,272.98
H19	16"x1/2"	2,391,474.30	1,682,249.91
H20	16"x1/2"	2,391,522.98	1,682,227.73

H PILE COORDINATES			
PILE NO.	PILE SIZE	NORTHING	EASTING
HF1	18"x1/2"	2,390,642.26	1,682,688.86
HF2	18"x1/2"	2,390,692.80	1,682,665.83
HF3	18"x1/2"	2,390,743.15	1,682,642.88
HF4	18"x1/2"	2,390,793.65	1,682,619.86
HF5	18"x1/2"	2,390,844.26	1,682,596.79
HF6	18"x1/2"	2,390,894.54	1,682,573.88
HF7	18"x1/2"	2,390,945.27	1,682,550.75
HF8	18"x1/2"	2,390,995.69	1,682,527.77
HF9	18"x1/2"	2,391,046.20	1,682,504.75
HF10	18"x1/2"	2,391,096.92	1,682,481.63
HF11	18"x1/2"	2,391,147.20	1,682,458.72
HF12	18"x1/2"	2,391,197.89	1,682,435.61
HF13	18"x1/2"	2,391,248.05	1,682,412.75
HF14	18"x1/2"	2,391,298.70	1,682,389.66
HF15	18"x1/2"	2,391,349.17	1,682,366.66
HF16	18"x1/2"	2,391,399.90	1,682,343.54
HF17	18"x1/2"	2,391,450.40	1,682,320.52
HF18	18"x1/2"	2,391,500.56	1,682,297.66
HF19	24"x3/4"	2,391,551.16	1,682,274.85
HF20	16"x1/2"	2,390,589.85	1,682,592.09
HF21	16"x1/2"	2,390,635.25	1,682,571.35
HF22	16"x1/2"	2,390,680.73	1,682,550.66
HF23	16"x1/2"	2,390,726.34	1,682,529.88
HF24	16"x1/2"	2,390,771.83	1,682,509.14
HF25	16"x1/2"	2,390,817.22	1,682,488.45
HF26	16"x1/2"	2,390,862.94	1,682,467.61
HF27	16"x1/2"	2,390,908.21	1,682,446.98
HF28	16"x1/2"	2,390,953.75	1,682,426.23
HF29	16"x1/2"	2,390,998.75	1,682,404.49
HF30	16"x1/2"	2,391,044.85	1,682,384.70
HF31	16"x1/2"	2,391,090.09	1,682,364.08
HF32	16"x1/2"	2,391,135.74	1,682,343.28
HF33	16"x1/2"	2,391,181.08	1,682,322.61
HF34	16"x1/2"	2,391,226.69	1,682,301.82
HF35	16"x1/2"	2,391,272.30	1,682,281.03
HF36	16"x1/2"	2,391,317.80	1,682,260.30
HF37	16"x1/2"	2,391,363.30	1,682,239.56
HF38	16"x1/2"	2,391,408.68	1,682,218.87
HF39	16"x1/2"	2,391,454.18	1,682,198.14
HF40	16"x1/2"	2,391,499.71	1,682,177.38
HF41	24"x3/4"	2,391,546.99	1,682,155.79

I PILE COORDINATES			
PILE NO.	PILE SIZE	NORTHING	EASTING
I1	16"x1/2"	2,390,463.72	1,682,497.32
I2	16"x1/2"	2,390,559.03	1,682,459.47
I3	16"x1/2"	2,390,651.51	1,682,417.32
I4	16"x1/2"	2,390,744.55	1,682,374.91
I5	16"x1/2"	2,390,837.02	1,682,332.76
I6	16"x1/2"	2,390,930.18	1,682,290.31

I PILE COORDINATES			
PILE NO.	PILE SIZE	NORTHING	EASTING
I7	16"x1/2"	2,391,022.88	1,682,248.05
I8	16"x1/2"	2,391,116.94	1,682,205.18
I9	16"x1/2"	2,391,207.93	1,682,163.71
I10	16"x1/2"	2,391,302.11	1,682,120.78
I11	16"x1/2"	2,391,395.00	1,682,078.44
IF1	16"x1/2"	2,390,536.95	1,682,519.30
IF2	16"x1/2"	2,390,583.62	1,682,498.03
IF3	16"x1/2"	2,390,630.03	1,682,476.88
IF4	16"x1/2"	2,390,676.43	1,682,455.72
IF5	16"x1/2"	2,390,722.84	1,682,434.57
IF6	16"x1/2"	2,390,769.25	1,682,413.42
IF7	16"x1/2"	2,390,815.66	1,682,392.27
IF8	16"x1/2"	2,390,862.06	1,682,371.12
IF9	16"x1/2"	2,390,908.47	1,682,349.97
IF10	16"x1/2"	2,390,954.88	1,682,328.81
IF11	16"x1/2"	2,391,001.40	1,682,307.61
IF12	16"x1/2"	2,391,047.69	1,682,286.51
IF13	16"x1/2"	2,391,094.29	1,682,265.27
IF14	16"x1/2"	2,391,140.58	1,682,244.17
IF15	16"x1/2"	2,391,186.76	1,682,223.13
IF16	16"x1/2"	2,391,233.17	1,682,201.97
IF17	16"x1/2"	2,391,279.69	1,682,180.77
IF18	16"x1/2"	2,391,326.21	1,682,159.57
IF19	16"x1/2"	2,391,372.39	1,682,138.52
IF20	24"x1/2"	2,391,418.92	1,682,117.56
IF21	16"x3/8"	2,390,515.94	1,682,428.11
IF22	16"x3/8"	2,390,555.18	1,682,410.22
IF23	16"x3/8"	2,390,594.08	1,682,392.49
IF24	16"x3/8"	2,390,633.32	1,682,374.60
IF25	16"x3/8"	2,390,672.67	1,682,356.67
IF26	16"x3/8"	2,390,711.57	1,682,338.94
IF27	16"x3/8"	2,390,750.93	1,682,321.00
IF28	16"x3/8"	2,390,789.83	1,682,303.27
IF29	16"x3/8"	2,390,829.07	1,682,285.38
IF30	16"x3/8"	2,390,868.08	1,682,267.60
IF31	16"x3/8"	2,390,907.44	1,682,249.66
IF32	16"x3/8"	2,390,946.11	1,682,232.04
IF33	16"x3/8"	2,390,985.24	1,682,214.20
IF34	16"x3/8"	2,391,024.48	1,682,196.32
IF35	16"x3/8"	2,391,063.61	1,682,178.48
IF36	16"x3/8"	2,391,102.85	1,682,160.60
IF37	16"x3/8"	2,391,142.20	1,682,142.66
IF38	16"x3/8"	2,391,181.10	1,682,124.93
IF39	16"x3/8"	2,391,220.46	1,682,106.99
IF40	16"x3/8"	2,391,259.24	1,682,089.32
IF41	16"x3/8"	2,391,298.71	1,682,071.33
IF42	16"x3/8"	2,391,337.61	1,682,053.60
IF43	16"x3/8"	2,391,376.97	1,682,035.66
IF44	24"x1/2"	2,391,415.93	1,682,017.65

TIDE DATUM:
HTL = 17.47'
MHW = 15.45'
MLLW = 0.0'

PURPOSE: REPLACEMENT
MARINA

PILE COORDINATES

PROPOSED:

CORDOVA SOUTH HARBOR

IN:

PRINCE WILLIAM SOUND

AT:

CORDOVA, AK

APPLICATION BY: CITY OF CORDOVA

DATUM:

HTL = 17.47'
MHW = 15.45'
MLLW = 0.0

JOB NO.

DATE: 7 JUNE, 2023

SHEET: 8 OF 23

J PILE COORDINATES			
PILE NO.	PILE SIZE	NORTHING	EASTING
J1	16"x1/2"	2,390,397.61	1,682,352.26
J2	16"x1/2"	2,390,466.42	1,682,326.49
J3	16"x1/2"	2,390,537.16	1,682,294.24
J4	16"x1/2"	2,390,608.14	1,682,261.89
J5	16"x1/2"	2,390,678.89	1,682,229.65
J6	16"x1/2"	2,390,749.86	1,682,197.30
J7	16"x1/2"	2,390,822.20	1,682,164.32
J8	16"x1/2"	2,390,893.18	1,682,131.97
J9	16"x1/2"	2,390,963.58	1,682,099.88
J10	16"x1/2"	2,391,034.45	1,682,067.59
J11	16"x1/2"	2,391,105.65	1,682,035.13
J12	16"x1/2"	2,391,177.08	1,682,002.58
J13	16"x1/2"	2,391,248.59	1,681,969.98
JF1	16"x3/8"	2,390,465.43	1,682,371.04
JF2	16"x3/8"	2,390,501.14	1,682,354.76
JF3	16"x3/8"	2,390,536.29	1,682,338.74
JF4	16"x3/8"	2,390,571.95	1,682,322.49
JF5	16"x3/8"	2,390,607.61	1,682,306.24
JF6	16"x3/8"	2,390,642.94	1,682,290.13
JF7	16"x3/8"	2,390,678.35	1,682,273.99
JF8	16"x3/8"	2,390,713.92	1,682,257.78
JF9	16"x3/8"	2,390,749.33	1,682,241.64
JF10	16"x3/8"	2,390,785.05	1,682,225.36
JF11	16"x3/8"	2,390,820.31	1,682,209.29
JF12	16"x3/8"	2,390,856.02	1,682,193.01
JF13	16"x3/8"	2,390,891.43	1,682,176.87
JF14	16"x3/8"	2,390,927.00	1,682,160.66
JF15	16"x3/8"	2,390,962.41	1,682,144.52
JF16	16"x3/8"	2,390,997.86	1,682,128.37
JF17	16"x3/8"	2,391,033.46	1,682,112.14
JF18	16"x3/8"	2,391,068.72	1,682,096.07
JF19	16"x3/8"	2,391,104.28	1,682,079.86
JF20	16"x3/8"	2,391,139.92	1,682,063.61
JF21	16"x3/8"	2,391,175.18	1,682,047.54
JF22	16"x3/8"	2,391,210.90	1,682,031.26
JF23	16"x3/8"	2,391,246.23	1,682,015.16
JF24	24"x1/2"	2,391,296.53	1,681,992.51
JF25	24"x1/2"	2,391,262.12	1,681,917.03

K PILE COORDINATES			
PILE NO.	PILE SIZE	NORTHING	EASTING
K1	18"x1/2"	2,390,345.35	1,682,237.60
K2	18"x1/2"	2,390,408.24	1,682,214.53
K3	18"x1/2"	2,390,468.98	1,682,186.85
K4	18"x1/2"	2,390,531.77	1,682,158.23
K5	18"x1/2"	2,390,593.87	1,682,129.92
K6	18"x1/2"	2,390,654.61	1,682,102.24
K7	18"x1/2"	2,390,717.40	1,682,073.62
K8	18"x1/2"	2,390,779.50	1,682,045.32
K9	18"x1/2"	2,390,840.24	1,682,017.63
K10	18"x1/2"	2,390,903.02	1,681,989.02
K11	18"x1/2"	2,390,965.13	1,681,960.71
K12	18"x1/2"	2,391,025.87	1,681,933.03
K13	18"x1/2"	2,391,088.65	1,681,904.41
K14	18"x1/2"	2,391,115.57	1,681,876.19

N PILE COORDINATES			
PILE NO.	PILE SIZE	NORTHING	EASTING
N1	16"x3/8"	2,390,624.11	1,682,878.33
N2	18"x1/2"	2,390,635.45	1,682,854.84
N3	16"x1/2"	2,390,607.78	1,682,794.09
N4	18"x1/2"	2,390,579.46	1,682,731.99
N5	18"x1/2"	2,390,515.00	1,682,590.57
N6	16"x1/2"	2,390,487.33	1,682,529.83
N7	16"x3/8"	2,390,352.12	1,682,310.53
N8	16"x3/8"	2,390,369.39	1,682,271.06

D PILE COORDINATES			
PILE NO.	PILE SIZE	NORTHING	EASTING
D1	24"x1/2"	2,390,686.30	1,682,978.20
D2	24"x1/2"	2,390,671.87	1,682,915.72
D3	24"x1/2"	2,390,737.25	1,682,900.63
D4	24"x1/2"	2,390,751.68	1,682,963.11

TIDE DATUM:
HTL = 17.47'
MHW = 15.45'
MLLW = 0.0'

PURPOSE: REPLACEMENT
MARINA

DATUM: HTL = 17.47'
MHW = 15.45'
MLLW = 0.0'

PILE COORDINATES

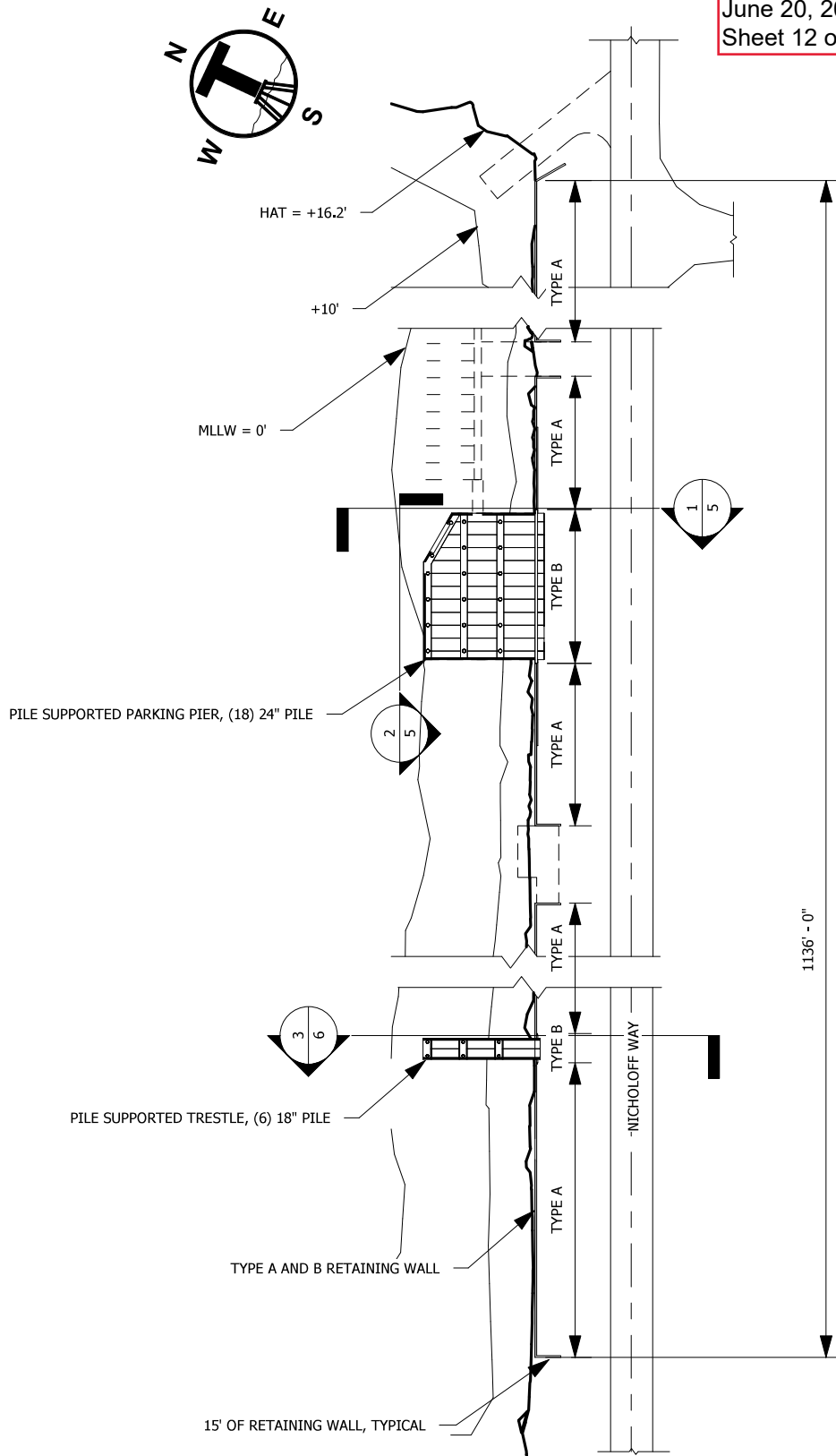
JOB NO.

PROPOSED: CORDOVA SOUTH HARBOR
IN: PRINCE WILLIAM SOUND
AT: CORDOVA, AK

APPLICATION BY: CITY OF CORDOVA

DATE: 7 JUNE, 2023

SHEET: 9 OF 23



PURPOSE:
**CORDOVA SOUTH
 HARBOR REBUILD**

**UPLANDS
 STRUCTURAL PLAN**

JOB NO. 23-013

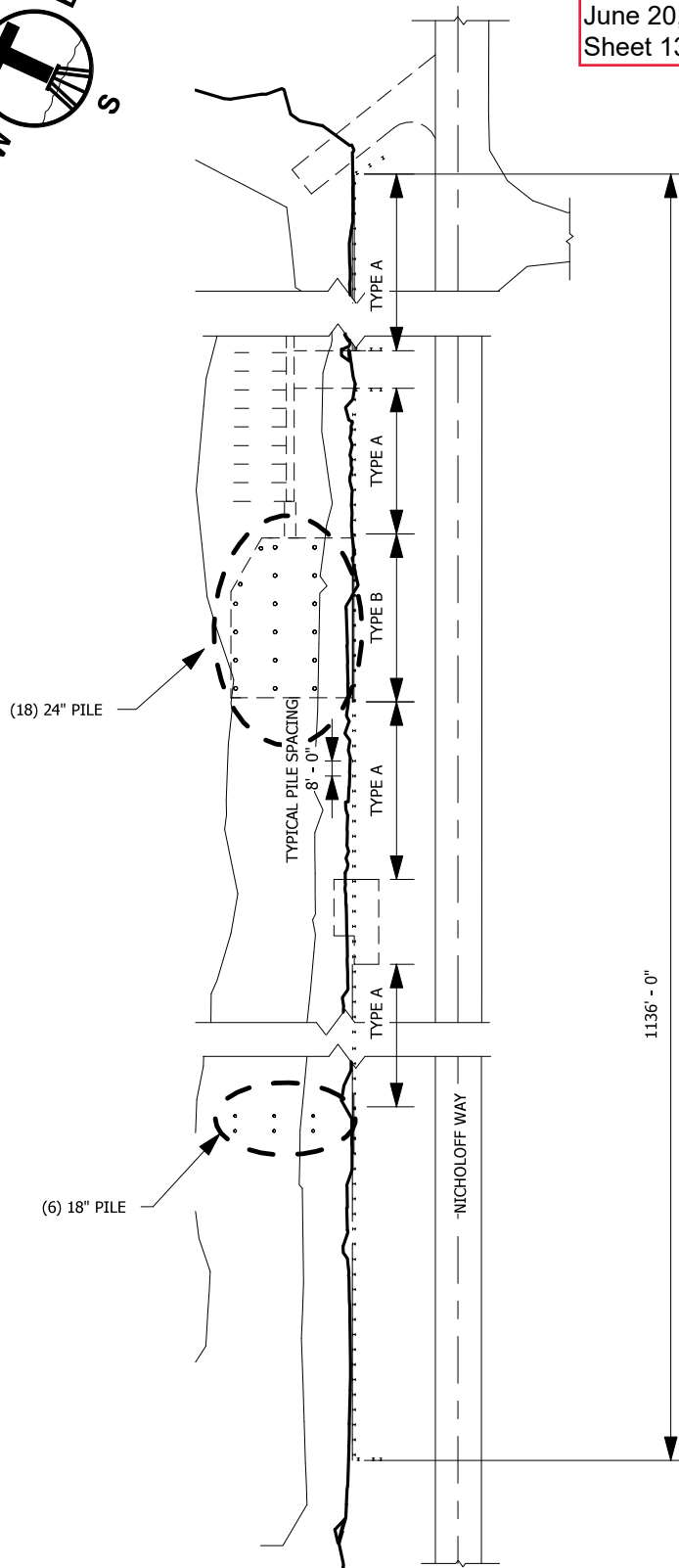
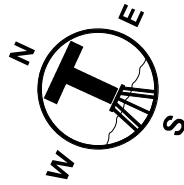
PROPOSED: **CSBH PERMIT DRAWINGS**

AT: **CORDOVA, ALASKA**

APPLICATION BY: **SOLSTICE ALASKA
 CONSULTING INC.**

DATE: JUNE 19, 2023

SHEET: **10** OF: **23**



PURPOSE:
**CORDOVA SOUTH
 HARBOR REBUILD**

PILE PLAN

JOB NO. 23-013

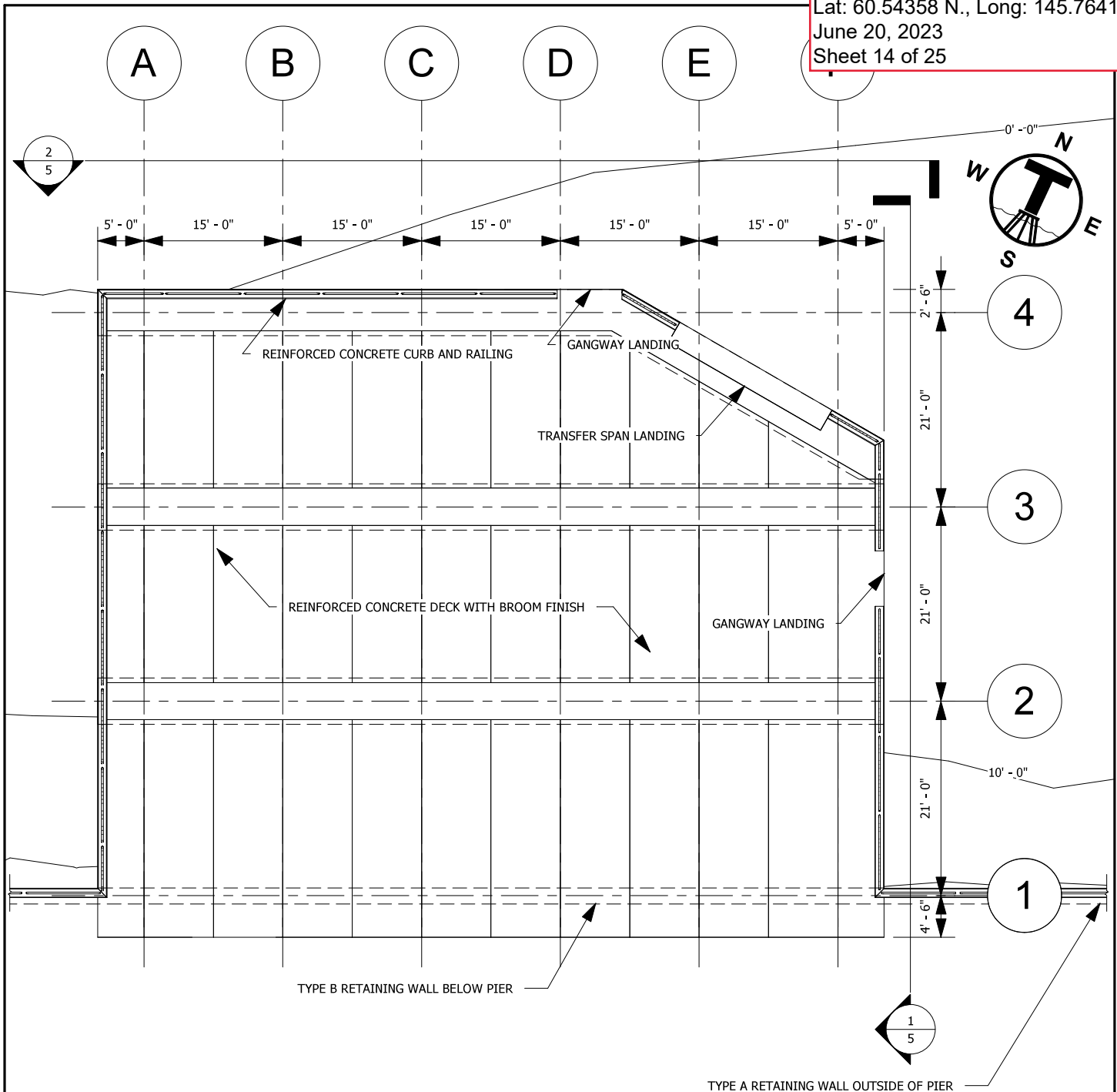
PROPOSED: **CSBH PERMIT DRAWINGS**

AT: **CORDOVA, ALASKA**

APPLICATION BY: **SOLSTICE ALASKA
 CONSULTING INC.**

DATE: JUNE 19, 2023

SHEET: **11** OF: **23**



PURPOSE:
 CORDOVA SOUTH
 HARBOR REBUILD

PARKING PIER
 PLAN

JOB NO. 23-013

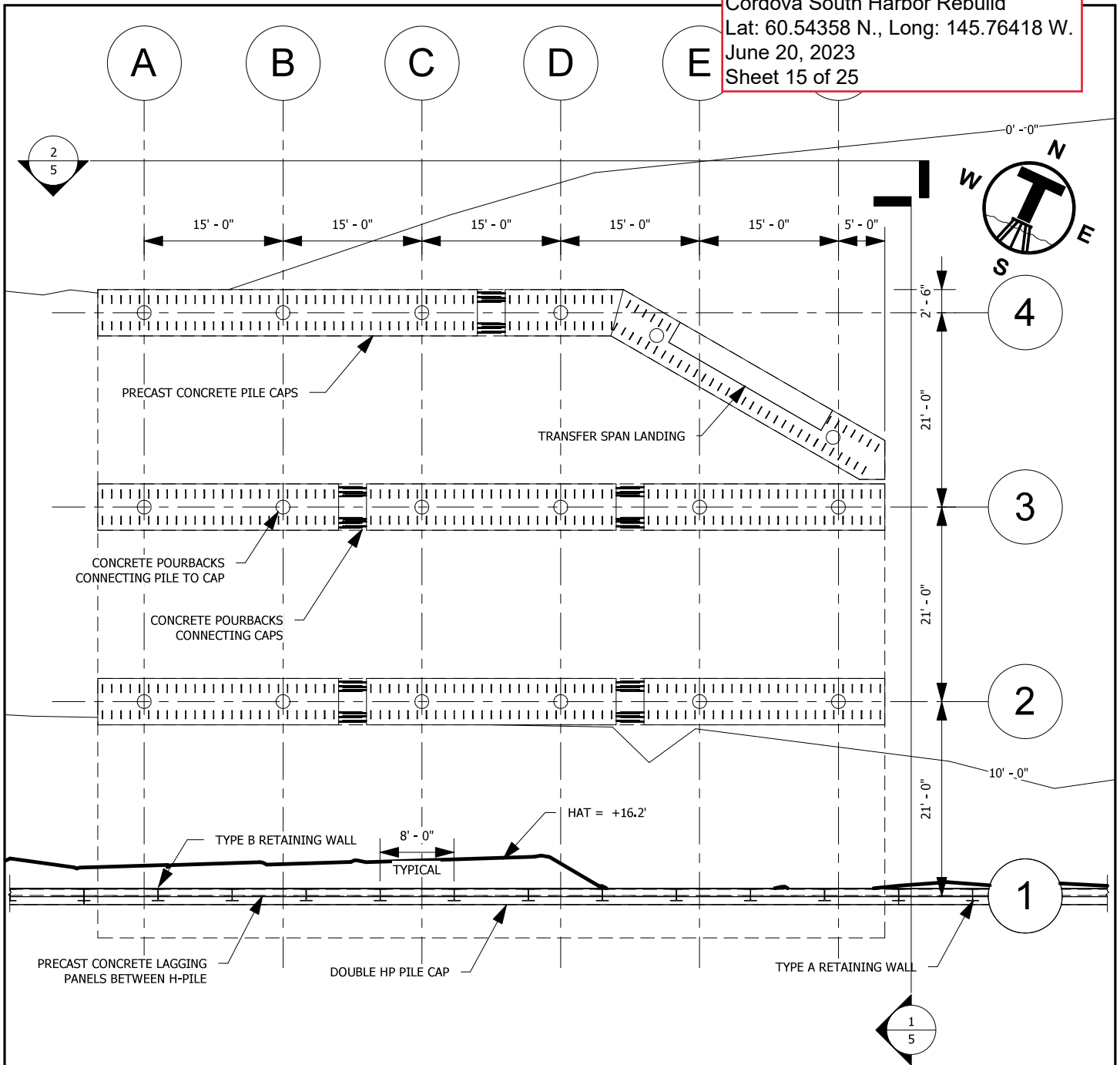
PROPOSED: CSBH PERMIT DRAWINGS

AT: CORDOVA, ALASKA

APPLICATION BY: SOLSTICE ALASKA
 CONSULTING INC.

DATE: JUNE 19, 2023

SHEET: 12 OF: 23



PURPOSE:
**CORDOVA SOUTH
 HARBOR REBUILD**

**PARKING PIER
 PLAN**

JOB NO. 23-013

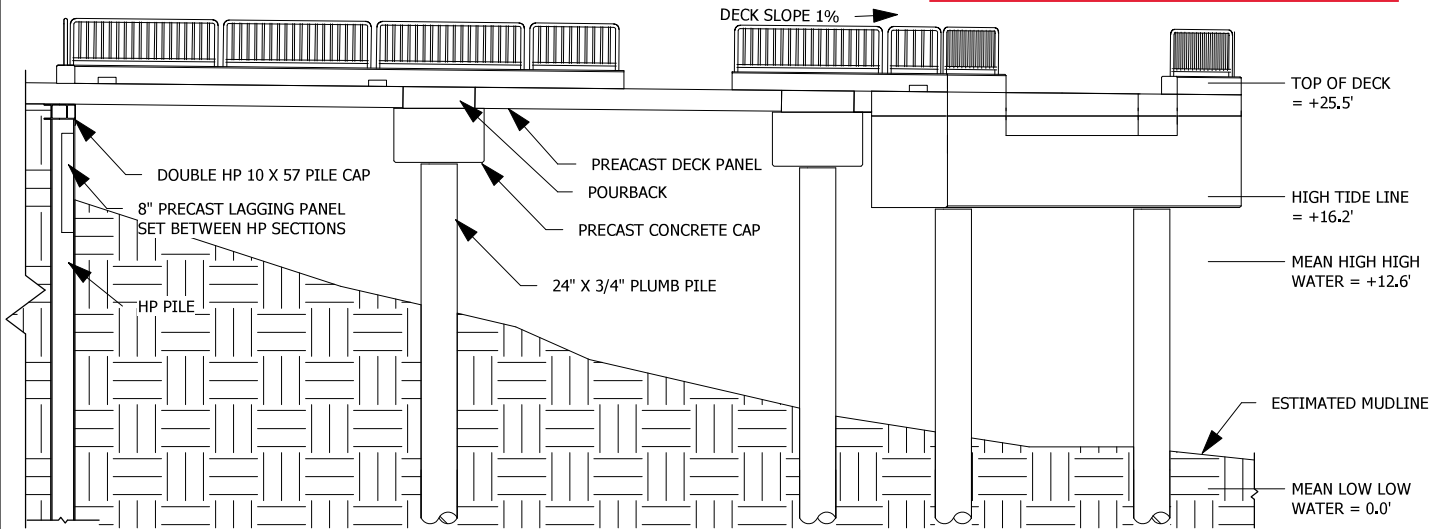
PROPOSED: **CSBH PERMIT DRAWINGS**

AT: **CORDOVA, ALASKA**

APPLICATION BY: **SOLSTICE ALASKA
 CONSULTING INC.**

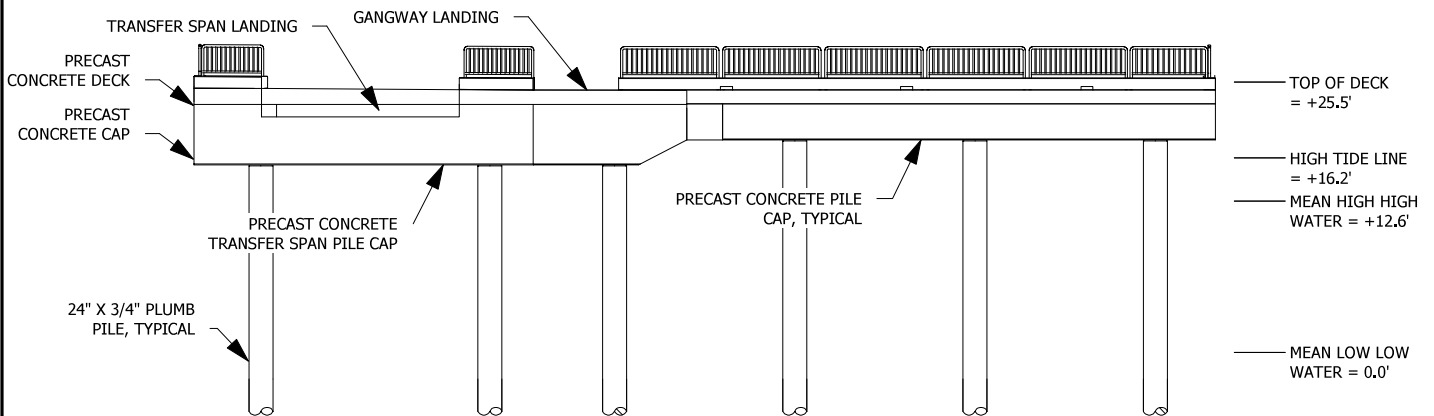
DATE: JUNE 19, 2023

SHEET: **13** OF: **23**



1

EAST ELEVATION - PERMIT
 3/32" = 1'-0"



2

NORTH ELEVATION - PERMIT
 1/16" = 1'-0"

PURPOSE:
 CORDOVA SOUTH
 HARBOR REBUILD

PARKING PIER
 ELEVATIONS

JOB NO. 23-013

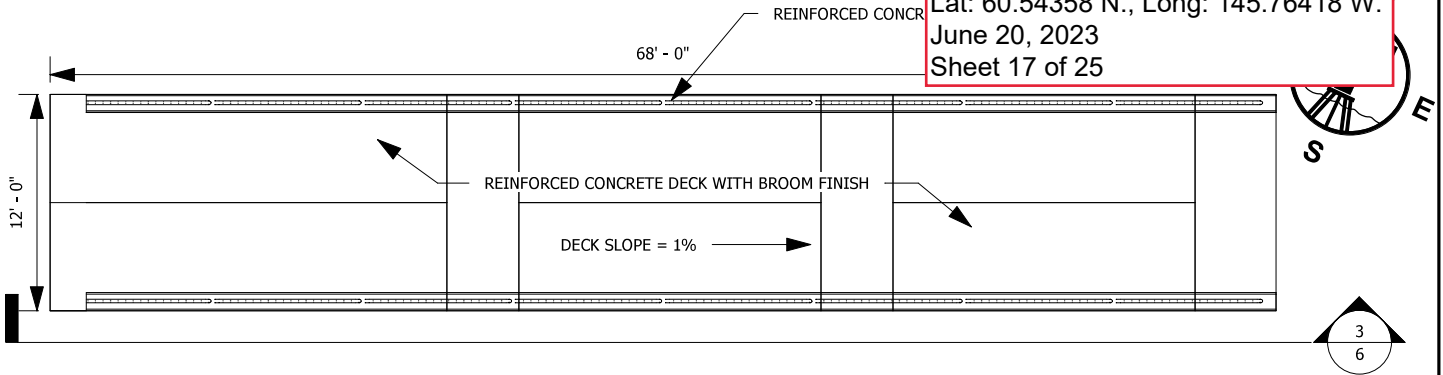
PROPOSED: CSBH PERMIT DRAWINGS

 AT: CORDOVA, ALASKA

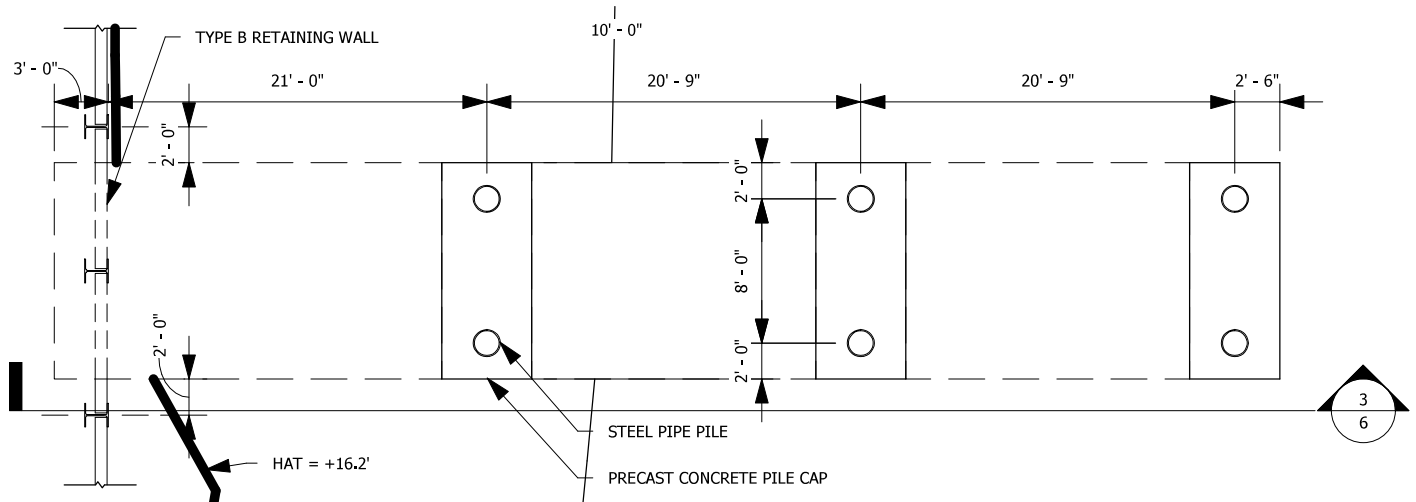
 APPLICATION BY: SOLSTICE ALASKA
 CONSULTING INC.

 DATE: JUNE 19, 2023

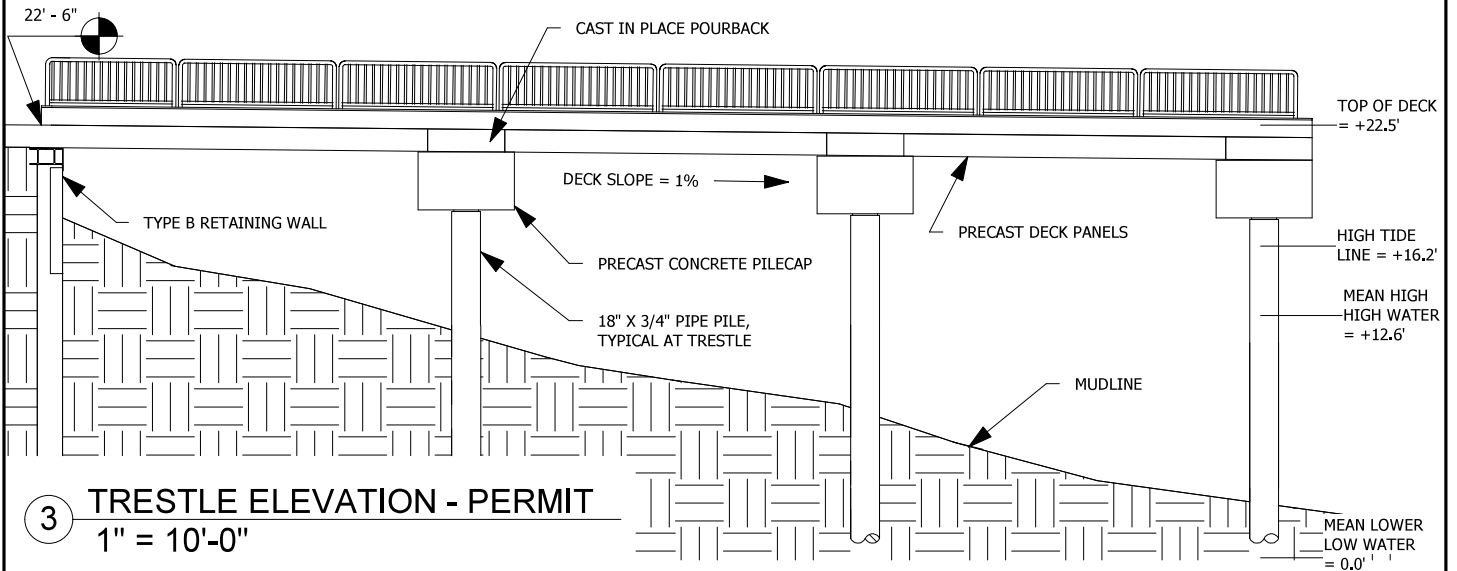
SHEET: 14 OF: 23



1 TRESTLE DECK FINISH PLAN - PERMIT
3/32" = 1'-0"



2 TRESTLE PILE PLAN - PERMIT
3/32" = 1'-0"



3 TRESTLE ELEVATION - PERMIT
1" = 10'-0"

PURPOSE:
CORDOVA SOUTH
HARBOR REBUILD

TRESTLE PLAN AND
ELEVATION

JOB NO. 23-013

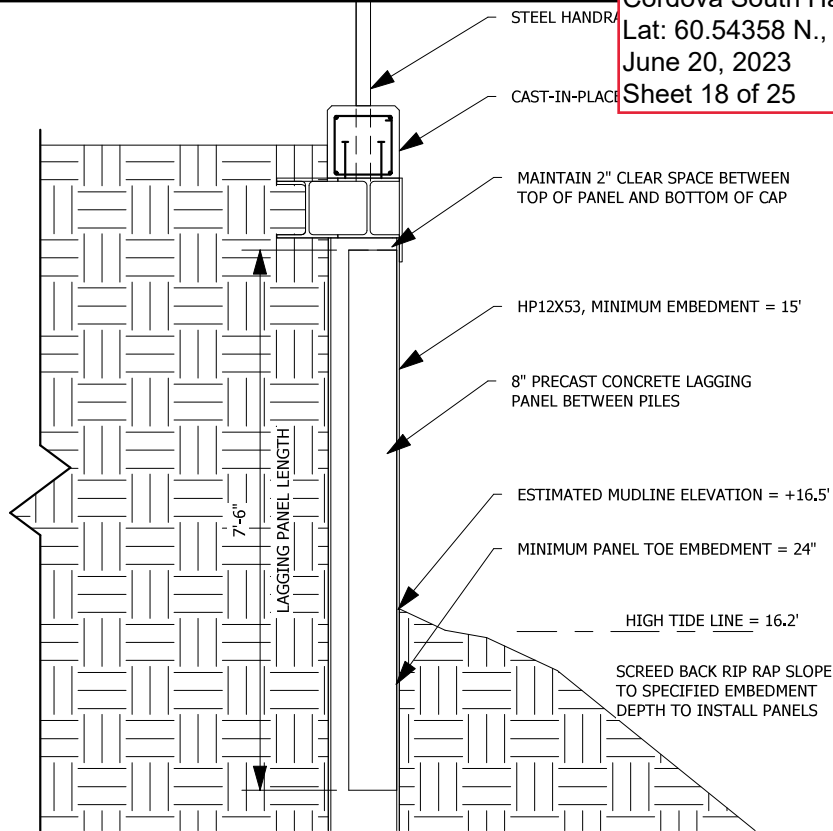
PROPOSED: CSBH PERMIT DRAWINGS

AT: CORDOVA, ALASKA

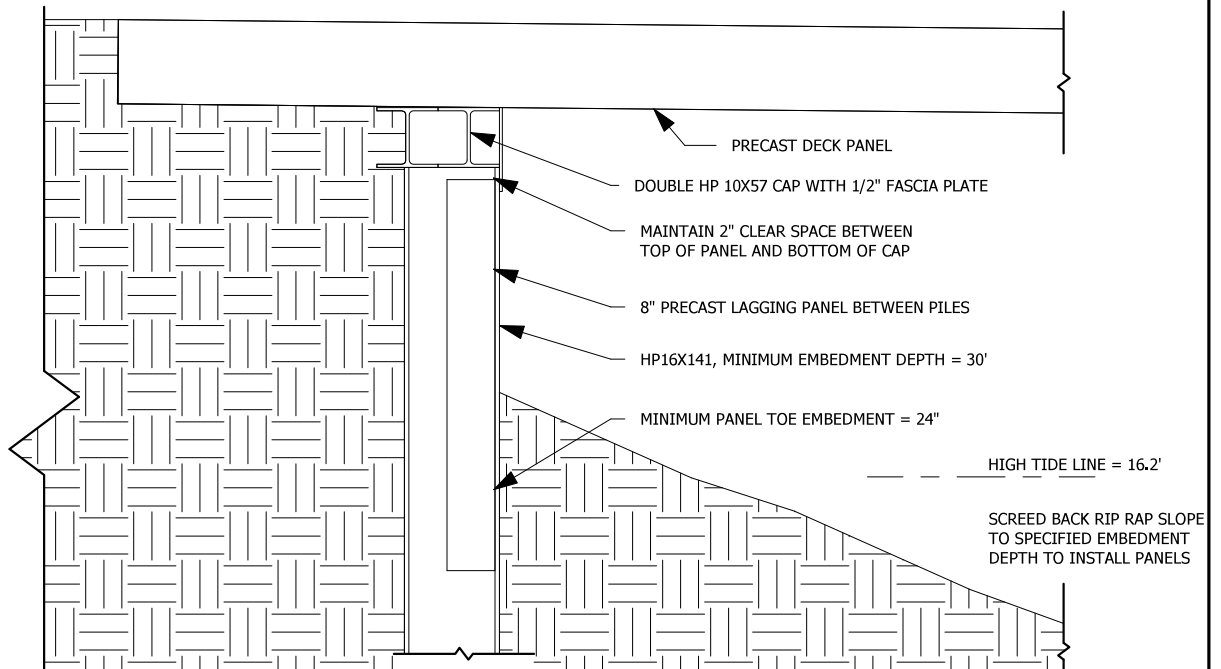
APPLICATION BY: SOLSTICE ALASKA
CONSULTING INC.

DATE: JUNE 19, 2023

SHEET: 15 OF: 23



1 TYPE A RETAINING WALL
 3/8" = 1'-0"



2 TYPE B RETAINING WALL
 3/8" = 1'-0"

PURPOSE:
 CORDOVA SOUTH
 HARBOR REBUILD

RETAINING WALL
 SECTIONS

JOB NO. 23-013

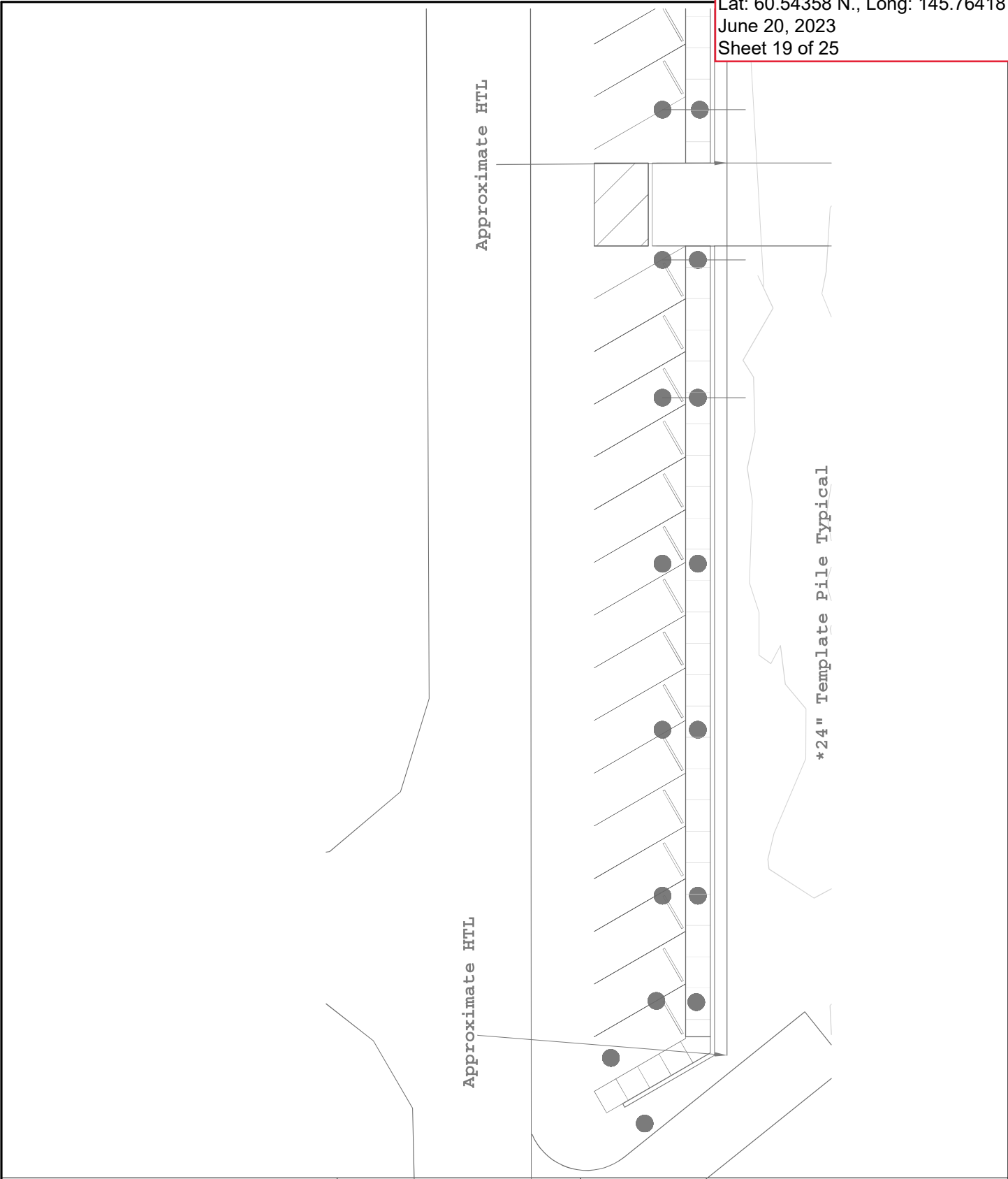
PROPOSED: CSBH PERMIT DRAWINGS

AT: CORDOVA, ALASKA

APPLICATION BY: SOLSTICE ALASKA
 CONSULTING INC.

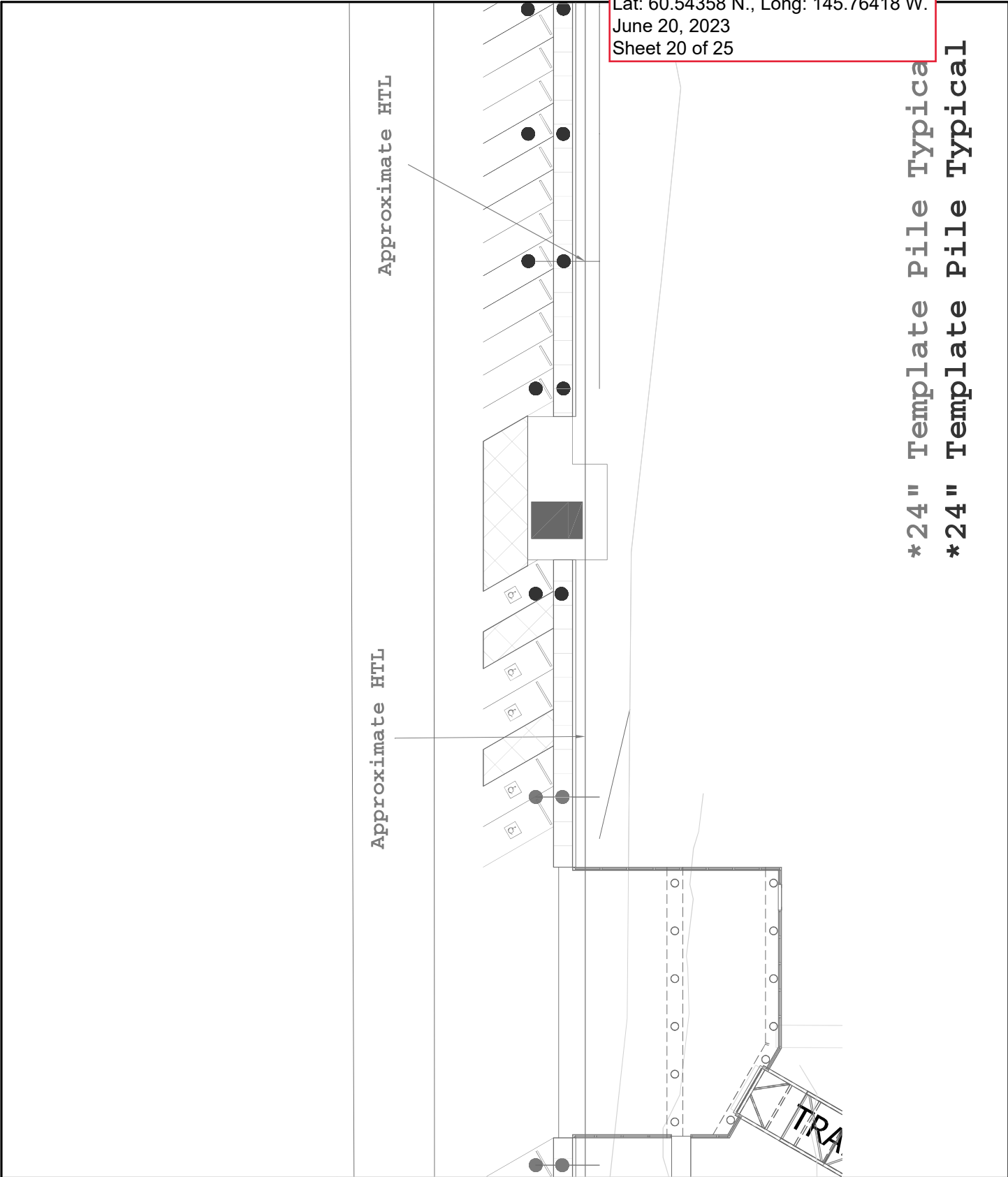
DATE: JUNE 19, 2023

SHEET: 16 OF: 23



<p>PURPOSE:</p> <p>CORDOVA SOUTH HARBOR REBUILD</p>	<p>BULKHEAD TEMPLATE PILE</p> <p>JOB NO. 23-013</p>	<p>PROPOSED: CSBH PERMIT DRAWINGS</p> <p>AT: CORDOVA, ALASKA</p> <p>APPLICATION BY: SOLSTICE ALASKA CONSULTING INC.</p> <p>DATE: JUNE 16, 2023</p> <p>SHEET: 17 OF: 23</p>
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POA-1938-00006, City of Cordova
Cordova South Harbor Rebuild
Lat: 60.54358 N., Long: 145.76418 W.
June 20, 2023
Sheet 20 of 25



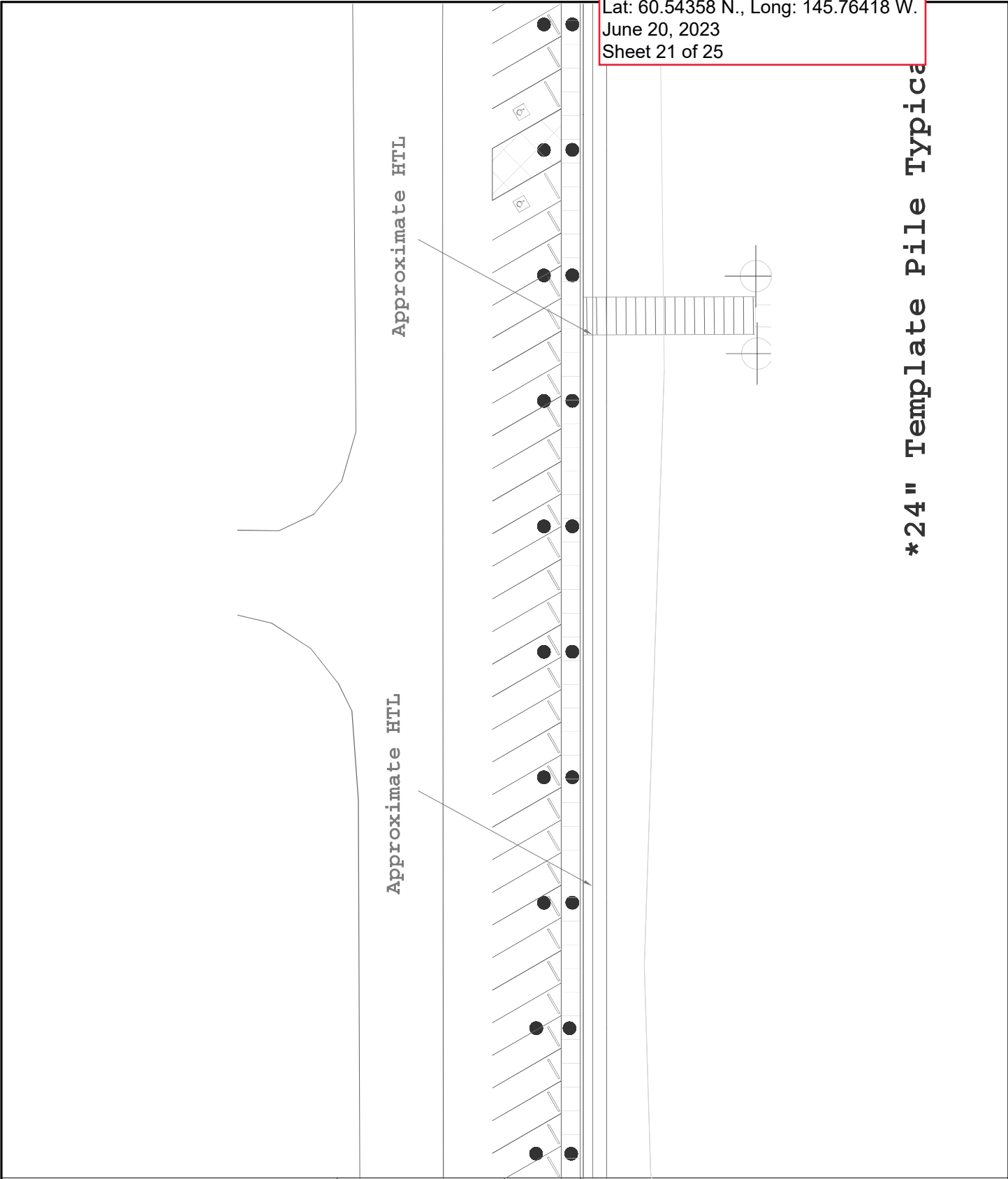
*24" Template Pile Typical
*24" Template Pile Typical

PURPOSE:
CORDOVA SOUTH
HARBOR REBUILD

BULKHEAD
TEMPLATE PILE

JOB NO. 23-013

PROPOSED: CSBH PERMIT DRAWINGS
AT: CORDOVA, ALASKA
APPLICATION BY: SOLSTICE ALASKA
CONSULTING INC.
DATE: JUNE 16, 2023 SHEET: 18 OF: 23



PURPOSE:
CORDOVA SOUTH
HARBOR REBUILD

BULKHEAD
TEMPLATE PILE

JOB NO. 23-013

PROPOSED: CSBH PERMIT DRAWINGS
AT: CORDOVA, ALASKA
APPLICATION BY: SOLSTICE ALASKA
CONSULTING INC.
DATE: JUNE 16, 2023 SHEET: 19 OF: 23

*24" Template Pile Typical

Approximate HTL

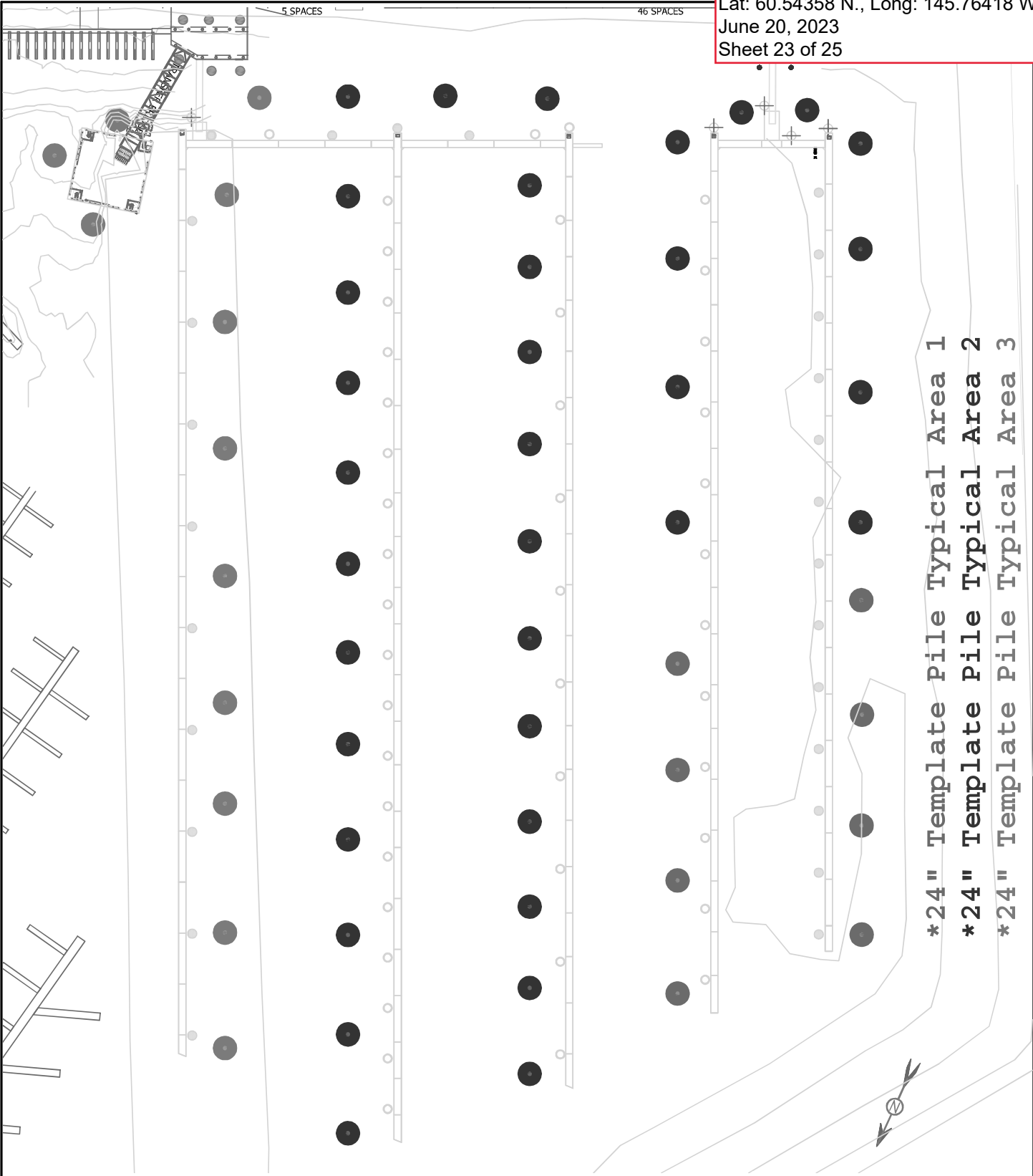
Approximate HTL

PURPOSE:
CORDOVA SOUTH
HARBOR REBUILD

BULKHEAD
TEMPLATE PILE

JOB NO. 23-013

PROPOSED: CSBH PERMIT DRAWINGS
AT: CORDOVA, ALASKA
APPLICATION BY: SOLSTICE ALASKA
CONSULTING INC.
DATE: JUNE 16, 2023 SHEET: 20 OF: 23



PURPOSE:
**CORDOVA SOUTH
HARBOR REBUILD**

**HARBOR/FIXED DOCK
TRESLTE TEMPLATE
PILE**

JOB NO. 23-013

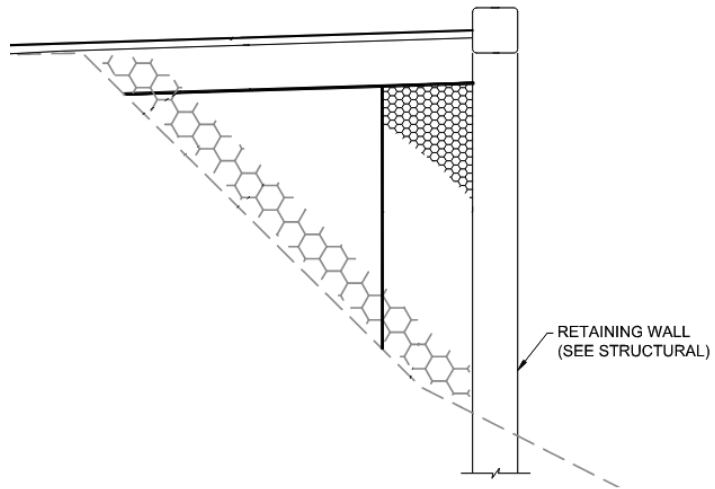
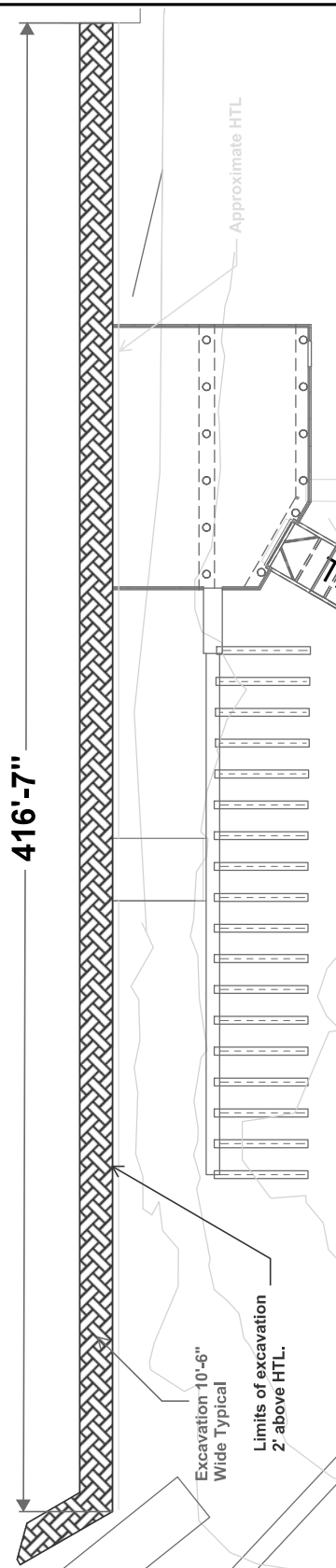
PROPOSED: **CSBH PERMIT DRAWINGS**

AT: **CORDOVA, ALASKA**

APPLICATION BY: **SOLSTICE ALASKA
CONSULTING INC.**

DATE: JUNE 16, 2023

SHEET: **21** OF: **23**



Excavation Detail TYP

PURPOSE:
**CORDOVA SOUTH
 HARBOR REBUILD**

**HARBOR/FIXED DOCK
 TRESLTE TEMPLATE
 PILE**

JOB NO. 23-013

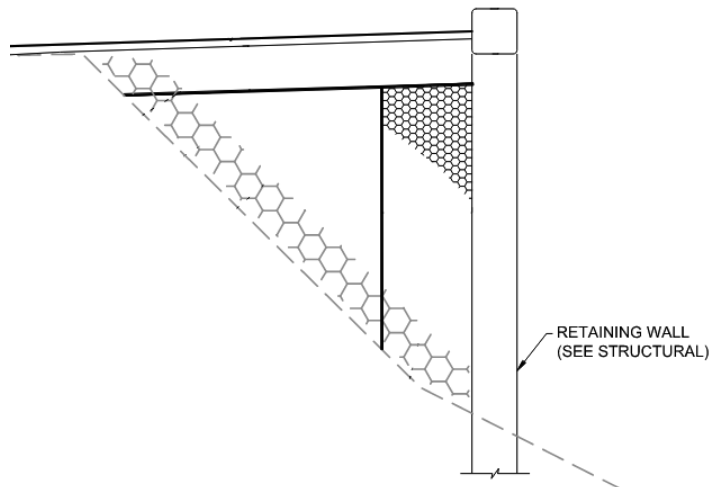
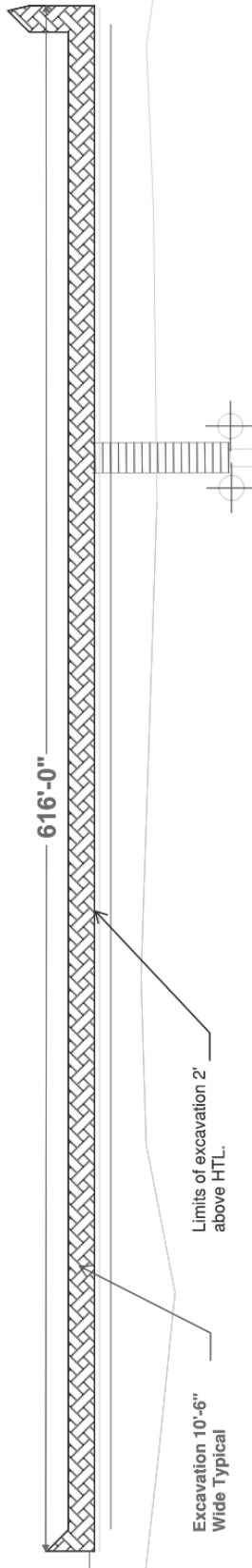
PROPOSED: **CSBH PERMIT DRAWINGS**

AT: **CORDOVA, ALASKA**

APPLICATION BY: **SOLSTICE ALASKA
 CONSULTING INC.**

DATE: JUNE 16, 2023

SHEET: **22** OF: **23**



Excavation Detail TYP

PURPOSE:
**CORDOVA SOUTH
 HARBOR REBUILD**

**HARBOR/FIXED DOCK
 TRESLTE TEMPLATE
 PILE**

JOB NO. 23-013

PROPOSED: **CSBH PERMIT DRAWINGS**

AT: **CORDOVA, ALASKA**

APPLICATION BY: **SOLSTICE ALASKA
 CONSULTING INC.**

DATE: JUNE 16, 2023

SHEET: **23** OF: **23**