

July 15, 2020

Freeport Coastal Waters Commission
Attn: Charles Tetreau -Harbor Master
Jeffrey Stenzel- Chairman
Town of Freeport
30 Main Street
Freeport, ME 04032-1209

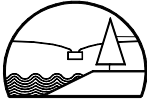
Subject: **HYC Hoist and Float Improvements**
Dixon Wharf Road, South Freeport, Maine

Dear Charles, Jeff,

This letter and the attached Coastal Waters application support a Wharfing Out application submitted for waterfront improvements at the Harraseeket Yacht Club. In accordance with CHAPTER 31 COASTAL WATERS ORDINANCE, Article XIII Dock Permits, please consider this project at the August meeting of the Coastal Waters Commission.

- I have provided eight (8) copies to be distributed to members of the commission.
- Letters to property owners within 250' of the proposed project will be sent to abutting property owners as soon as I get confirmation that the application will be considered at the August Coastal Waters Commission meeting.
- A separate NRPA application has been provided to Maine DEP, the Army Corps of Engineers, and the Submerged Lands Bureau for state and federal project approvals. This has also been provided electronically to your attention.
- A separate application will be provided to the Freeport Project Review Board as directed by Nick Adams.

The attached Freeport Coastal Waters Commission application and project plans together with the NRPA permit application submitted separately is intended to meet the submission requirements of Article XIII.



HYC Hoist and Float Improvements
Dixon Wharf Road, South Freeport, Maine

July 15, 2020
Page 2 of 2

Please let me know if you need any additional information at this time to consider the application complete.

Sincerely,

BAKER DESIGN CONSULTANTS, Inc.

A handwritten signature in cursive script that reads "Barney Baker".

Barney Baker, PE
Project Engineer
BJB
JN: 19-74
CC:

HYC Commodore Adam White
Freeport Code Enforcement Officer

Wharfing Out Application



Town of Freeport Coastal Waters Commission

Application Form – Page 2

Submission Checklist – Page 3

Required Standards – Pages 4-6

Signature Page – Pages 7

INSTRUCTIONS:

1. Please complete pages two through seven. Obtain or get copies of information as required by the application on these pages.
2. Use the checklist on page two to make sure submission requirements are met. The checklist is a summary of the standard requirements in the Coastal Waters Ordinance.
3. All waiver requests will require a written statement.
4. Make ten (10) copies of the application and required submissions as well as **one digital PDF copy. Please submit these copies and the original application as well as any fees (see fee schedule) to the Harbor Master by 1:00 pm seven days prior to the requested meeting.**

Applicant Name:

Date of Board Review:



TOWN OF FREEPORT

30 Main Street
Freeport, ME 04032
(207)865-4546

Wharfing Out Application

FOR OFFICIAL USE ONLY

Date Received

MBLU

Permit Fee

Payment Info

Date of CWC
Review

Permit Number: _____

1. If you have questions about what is required in order to obtain a permit, contact the Harbor Master, at 207-865-4546 or harbormaster@freeportmaine.com.
2. DEP Certification is required for soil disturbances located in the Shoreland Zone.

Project Address:

Tax Map and Lot:

Estimated Cost:

Please Describe Your Project:

Property Owner Information

Owner(s) Name:

Book and Page

Phone Number:

Mailing Address:

Email Address:

Contractor or Applicant Information

Contractor or Applicant
Name:

Mailing Address:

Phone Number:

Email Address:

DEP Certification:

Submissions Checklist

The following list is the information required by section Ch. 31 Art. XIII of the Coastal Waters Ordinance for the Town of Freeport Please check in the column on the left if the information has been provided, a waiver has been requested, or you believe the information is not applicable to your application. If a waiver has been requested, or the information is not applicable, a written explanation is required.

FOR APPLICANT USE				FOR COASTAL WATERS USE			
Provided	Waiver	N/A	<u>"Application and Plan Requirements"</u>	Received	On File	Waived	N/A
			Application Received 30 Days prior				
			Application Fee Paid				
			Signed copy of application				
			Name & Address of owner				
			Seven Copies of Application				
			Name & Address of all abutters within 250 feet and Certified Mail Receipts				
			Map of general location				
			Show all adjacent properties				
			Name, Map & Lot numbers on drawings				
			Copy of Deeds & Agreements				
			Scaled Site Plan drawings				
			Visual Map with Latitude and Longitude				
			Photographs of site including aerial				
			HAT, MLLW lines shown				
			<u>"Additional Information"</u>				
			Location of Temp Structures in Winter Months				
			Anticipated date for start of construction.				
			Anticipated date for completion of construction				
			Shared Access?				
			Contractor for Construction				
			Contractor for Storage				
			Contractor for Maintenance				
			Any Future Plans				
			Abutter objections				
			<u>"Structure (Project) Standards"</u>				
			No larger in Dimension				
			Required Frontage				
			No longer than 125 Feet				
			No interference with existing public access				
			Hazard to Navigation				
			Hazard to Navigation				
			Shore access soils described				
			Locations of development and natural beaches shown				
			Effect on fish & wildlife				
			Superstructure on piers				
			Registration				
			State and Federal permits				

The Coastal Waters Commission shall make a positive finding on each the following standards, please describe in the area provided below, how your proposed application will meet the applicable criteria.

No more than one (1) pier, dock, wharf or similar structure extending or located below the normal high-water line of a water body or within a wetland is allowed on a single lot; except that when a single lot contains at least twice the minimum shore frontage as specified in Town of Freeport Zoning Ordinance, a second structure may be allowed and may remain as long as the lot is not further divided.

1. The project shall be no larger in dimension than is consistent with the conditions, use and character of its surroundings; it will not adversely affect water use by adjacent properties; and will remain in general harmony with that of existing activities in adjacent areas within the Freeport Coastal Water Commission’s jurisdiction. The property for which the project will be constructed shall have a minimum of sixty (60) feet of ~~water~~ shore frontage. The total length of the structure from the highest annual tide water mark shall not exceed one hundred twenty-five (125) feet and must be completed within two (2) years of final approval.

2. The project must not unreasonably interfere with customary or traditional public access ways to, or public trust rights (fishing, fowling, and navigation) in, on, or over the submerged lands; unreasonably interfere with fishing or other existing marine uses of the area; unreasonably diminish the availability of services and facilities necessary for commercial marine activities; and unreasonably interfere with ingress and egress or riparian owners. Project may require accommodations such as steps or pier elevations allowing passage over or beneath the structure

3. The project will not pose hazard to navigational channels, nor pose a hazard to navigation by obscuring visibility or by the display of distracting lights or reflective material. If appropriate the float will display appropriate warning lights to aid in navigation and public safety at the discretion of the Harbor Master, the US Coast Guard, or the Army Corps of Engineers.

4. The project will not encroach into, interfere with, or pose a hazard to: municipal or federal navigational channels; existing mooring or berthing areas (commercial and recreational); public access, public rights of way, public and private launching ramps in any Freeport Coastal Waters.

5. The project will be developed on soils appropriate for such use and construction so as to control erosion.

6. The project will not cause water quality or other coastal resources to be degraded including developed or natural beach areas, marshes, grasses and wildlife habitats

7. The project shall not significantly impact fisheries or shellfish harvesting. Prior to approval applications may be reviewed by the Shellfish Commission.

8. Registration and Identification will be required on all ramps and floats.

9. No new structure shall be built on, over or abutting a pier, wharf, dock or other structure extending beyond the normal high-water line of a water body or within a wetland unless the structure requires direct access to the water body or wetland as an operational necessity.

10. No existing structures built on, over or abutting a pier, dock, wharf or other structure extending beyond the normal high-water line of a water body or within a wetland shall be converted to residential dwelling units in any district.

11. Except in the Marine Waterfront District, structures built on, over or abutting a pier, wharf, dock or other structure extending beyond the normal high-water line of a water body or within a wetland shall not exceed twenty (20) feet in height above the pier, wharf, dock or other structure.

12. Temporary Floats shall be stored outside of the mud flats and in compliance with the Town of Freeport Zoning Ordinance.

After the submission of a complete application to the Coastal Waters Commission, the Coastal Waters Commission shall approve an application or approve it with conditions if it makes a positive finding based on the information presented that the proposed use:

a) Will maintain safe and healthful conditions;

b) Will not result in water pollution, erosion, or sedimentation to surface waters;

c) Will adequately provide for the disposal of all wastewater;

- d) Will not have an adverse impact on spawning grounds, fish, aquatic life, bird or other wildlife habitat;

- e) Will conserve shore cover and visual, as well as actual, points of access to inland and coastal waters;

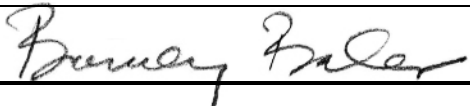
- f) Will protect archaeological and historic resources as designated in the comprehensive plan;

- g) Will not adversely affect existing commercial fishing or maritime activities in the Maritime Waterfront district;

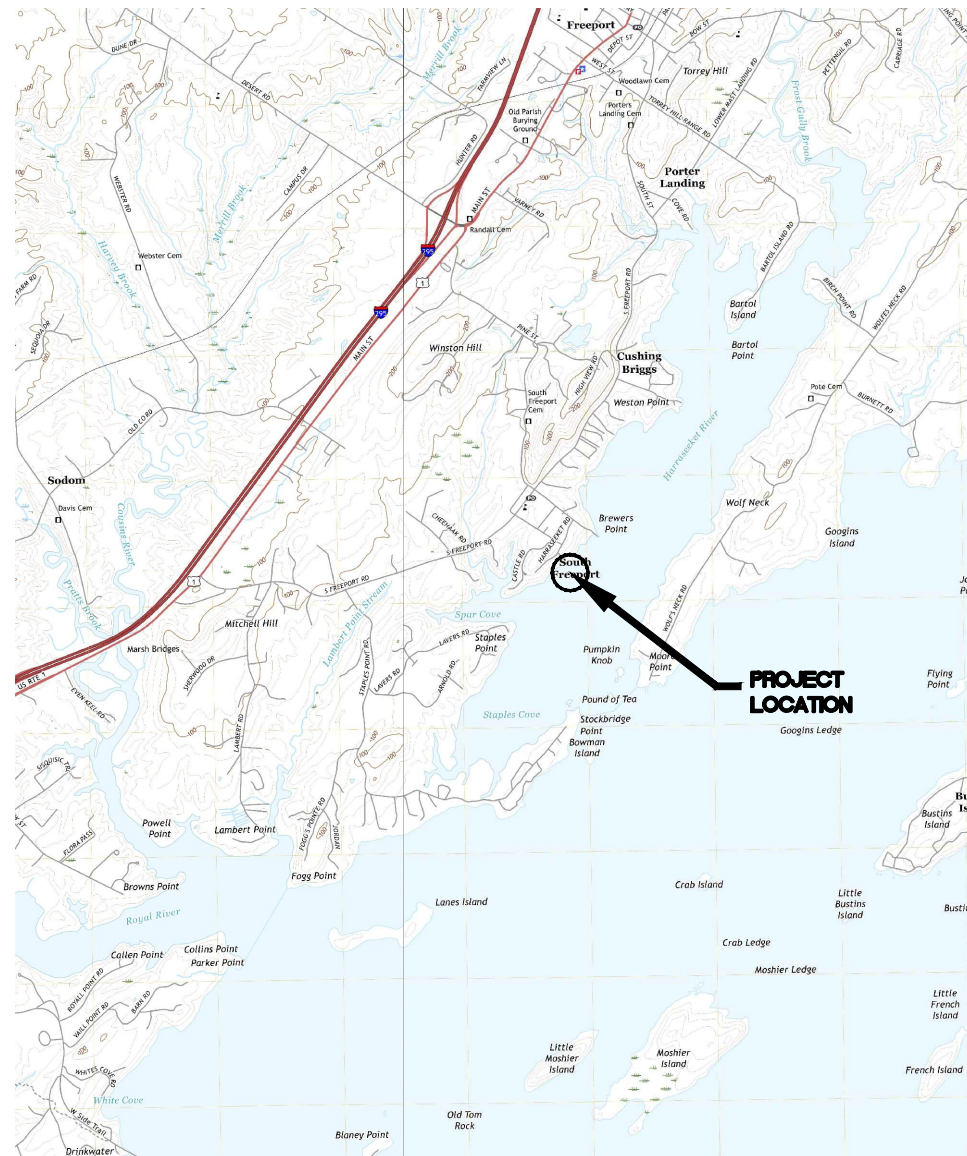
- h) Will avoid problems associated with floodplain development and use; and

- i) Is in conformance with the provisions of the Town of Freeport Zoning Ordinance, verification from the CEO is required.

1. I hereby acknowledge that I have read this application and pertinent sections of the ordinances, and state that the information in this application is to the best of my knowledge to be true and accurate. I agree to comply with all of the Town of Freeport's ordinances and the State of Maine's statutes regulating the activities sought in this application as well as any permit(s) that may be approved with this application.
2. I understand that any approval is valid for only the use(s) as specified in this application. The permitting authority must approve any change(s) made to the use(s) sought in the application. Any approval issued for this application is approved on the basis of truthful information provided by the applicant(s), and as allowed by the ordinances of the town.
3. I understand that it is my responsibility to assure that the lot description herein accurately describes its ownership, its boundary lines, and the setback measurements from the legal boundary lines.
4. I understand that I have the burden of proof as to the legal right to use the property, and that approval of this application in no way relieves me of this burden. Any approval issued does not constitute a resolution in favor of me or the landowner in any matters regarding the property boundaries, ownership, or similar ties.
5. I understand that all necessary **Building and Use Permits** shall be secured from the Codes Enforcement Officer if the Coast Waters Commission grants approval of this application.
6. I understand that the approval becomes invalid if construction or use has not commenced within twelve (12) months of the approval date or it is found that false statements have been furnished in this application.
7. I understand that if I fail to comply with the aforementioned statements, a **"STOP WORK"** order may be issued for which I will immediately halt any construction and/or use(s) that are approved for this application. This failure may also require that I return the property to its natural state or as closely thereto before the use(s) was/were approved.
8. I understand that failure to follow these requirements may lead to **Violation**. The notice may result in referring the matter to the Town's attorney for legal action and possible civil penalties as provided in Ch. 21 Art. VI § 601.B & C of the Zoning Ordinance and Title M.R.S.A 30-A 4452. Fines of \$100.00 to \$2,500.00 per violation per day may be imposed.
9. I understand that all state and federal permits are my responsibility as the applicant and/or owner.
10. I understand that the Codes Enforcement Officer and Harbor Master shall have the authority to enter all areas covered by this application at any reasonable hour to enforce the provisions of the codes and ordinances applicable to this application.
11. An appeal may be taken from a decision of the Coastal Waters Commission, within thirty (30) days after the decision is rendered, to Superior Court in accordance with rule 80-B of the Maine Rules of Civil Procedure.

Applicant Signature:		Date:
<p>This application was first reviewed by the Coast Waters Commission (CWC) on ____ / ____ / ____ .</p> <p>By vote of the CWC this application requires an on-site inspection: ____ Yes ____ No</p> <p>If yes, an onsite inspection is scheduled for ____ / ____ / ____ at ____ : ____ AM PM</p> <p>By vote of the CWC this application requires a public hearing: ____ Yes ____ No</p> <p>If yes, public hearing is scheduled for ____ / ____ / ____ at ____ : ____ AM PM</p> <p style="text-align: center; margin-top: 20px;"><u>Conditions of Approval:</u></p> <p>_____</p> <p>_____</p> <p>_____</p>		

FREEPORT, MAINE
PROJECT NO. 18-58

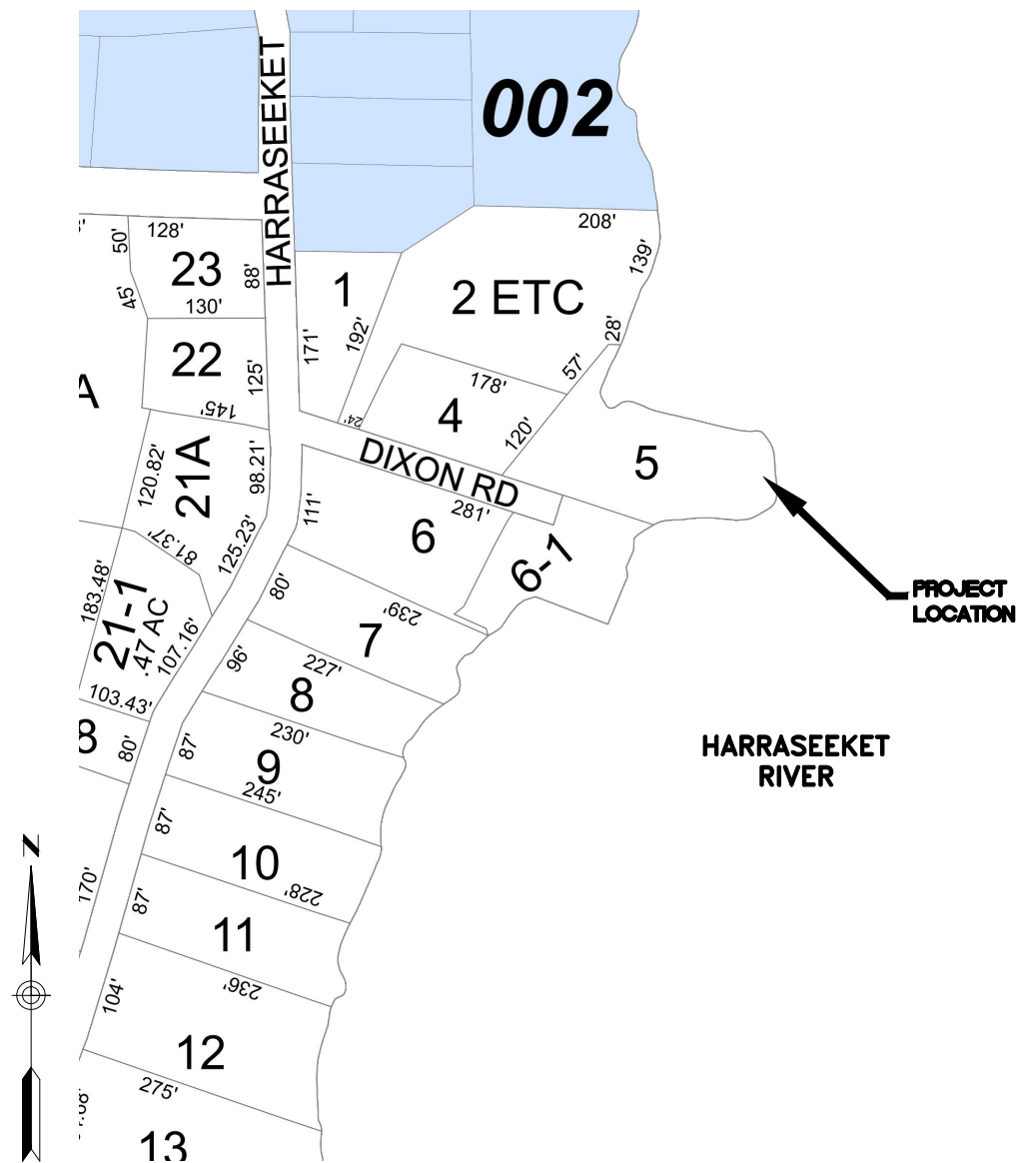


USGS LOCATION MAP

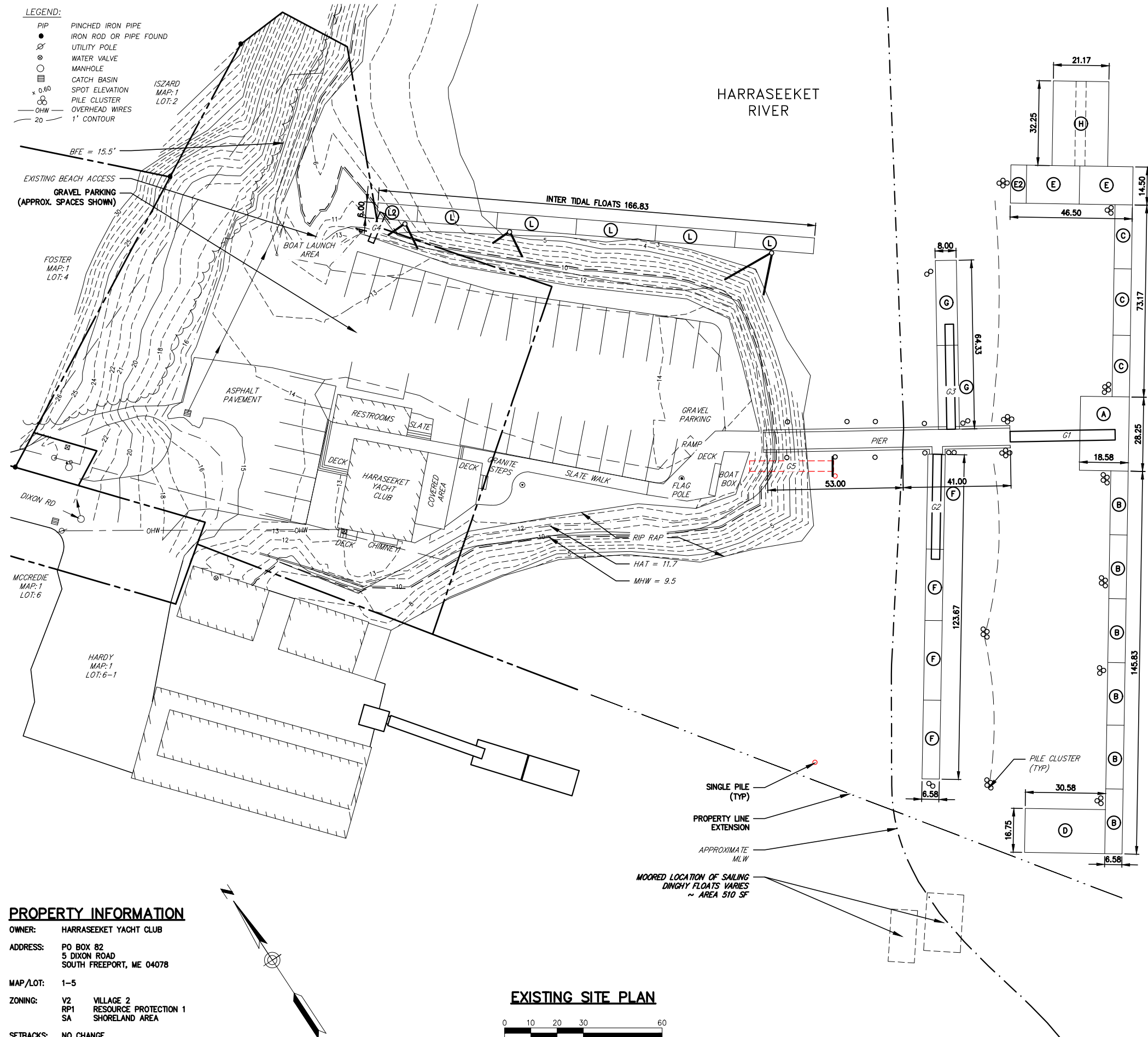
INDEX OF SHEETS

SHEET NO.	DESCRIPTION
BAKER DESIGN CONSULTANTS	
G-1	COVERSHEET
C-0	EXISTING CONDITIONS
C-1	PROPOSED SITE PLAN
GAGNON ENGINEERING INC.	
SHEET 1 OF 5	PLAN & SECTION
SHEET 2 OF 5	PLAN & SECTION
SHEET 3 OF 5	CURBS & RAILS
SHEET 4 OF 5	MISCELLANEOUS DETAILS
SHEET 5 OF 5	NOTES & MATERIALS

NOT FOR CONSTRUCTION



FREEPORT TAX MAP #1 LOCATION



PROJECT ELEVATIONS (BY DATUM)				
ELEVATION	CHART (ft)	NGVD29 (ft)	NAVD88 (ft)	Reference Notes
FEMA BFE (Prelim 2017)	19.3	14.8	14.0	FEMA Zone VE (EL 14.0 NAVD88)
Clubhouse Finish Floor EL	15.9	11.4	10.7	2003 Topo Survey
FEMA BFE (Effective 1985)	15.5	11.0	10.3	FEMA Zone A5 (EL 11.0 NGVD29)
Existing Timber Pier Deck EL	14.7	10.2	9.5	2003 Topo Survey
Highest Annual Tide	11.7	7.2	6.5	2018 MEDEP Predictions
MHW	9.9	5.4	4.7	
MHW	9.5	5.0	4.2	
NAVD88	5.3	0.8	0.0	
NGVD29	4.5	0.0	-0.8	
MLW	0.3	-4.2	-4.9	
MLW	0.0	-4.5	-5.3	

BASED ON TIDAL
 BM "PORTLAND"

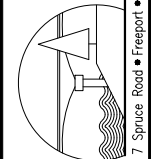
GANGWAY INVENTORY				
Location		Total		
		Length	Width	Area SF
Beyond MLW				
G1	Gangway from Pier to Float A	40.00	4	160
G2	Gangway from Pier to Float F	40.00	3.33	133
G3	Gangway from Pier to Float G	40.00	3.33	133
Total				266
Inter Tidal				
G4	Ramp from Parking Lot to Float L	12.00	2.25	27
G5	Unconnected	32.00	4.00	128
Total				155
Total Float Area Overall				421

2020 FLOAT INVENTORY					
Location		Total			
		Quantity	Length	Width	Area SF
Beyond MLLW					
A	Main	1	28.25	18.58	524.97
B	Front West	6	24.33	6.58	961.10
C	Front East	3	24.52	6.58	484.17
D	West End	1	30.58	16.75	512.27
E	East End	2	20.25	14.50	587.25
E2	East End	1	6.00	14.50	87.00
F	Inside West	4	30.17	6.58	793.97
G	Inside East	2	32.17	8.00	514.66
H	Sailing Dinghy	1	32.25	21.17	682.73
				Total	5148.11
Fixed Pier beyond Low Water			41.00	8.00	328.00
Inter Tidal					
L	Back East	5	30.33	6.00	909.90
L2	Back East	1	15.33	6.00	91.98
				Total	1001.88
Fixed Pier Inter Tidal			53.00	8.00	424.00
				Total Area Overall	6901.99

NOT FOR CONSTRUCTION

SURVEY NOTES

1. "PLAN OF COMMON PROPERTY LINE ON HARRASECKET ROAD, FREEPORT, MAINE" BY OWEN HASKELL, INC. DATED MARCH 20, 1998.
2. BOUNDARY INFORMATION AND BEARING BASES ARE TAKEN FROM THE PLAN REFERENCE I.
3. ELEVATIONS ARE BASED ON THE OCTOBER TIDE CHART FOR SOUTH FREEPORT OBTAINED FROM WWW.MAINEHARBORS.COM BENCH MARK IS TOP OF WATER AS SHOT AT 12:10 PM, OCTOBER 10, 2003. ELEVATIONS FOR HIGHTIDE = 9.8'.
4. ELEVATIONS SHOWN ARE IN RELATION TO ELEVATION 0. NEGATIVE NUMBERS REFER TO THE ACTUAL ELEVATIONS, NOT THE DEPTH OF THE WATER.



C	PERMIT SET	6.3.20	BUB	
B	REVIEW	3.6.20	BUB	
A	PRELIMINARY REVIEW	3.3.20	BUB	
NO.	SUBMISSION	DATE	INT.	



DESIGNED BY:	BJB
DRAWN BY:	JLD
CHECKED BY:	BJB
SCALE:	AS SHOWN

EXISTING CONDITIONS

HARRASEKET YACHT CLUB
BURWELL HOIST
FREEPORT, MAINE

SHEET TITLE:

PROJECT:

DATE
FEB 2020

CONTRACT NO.
19-74

SHEET NO.

C-0

xc:\19\19-74 hyc hoist\cad\19-74 hyc-civ.dwg 7/6/2020

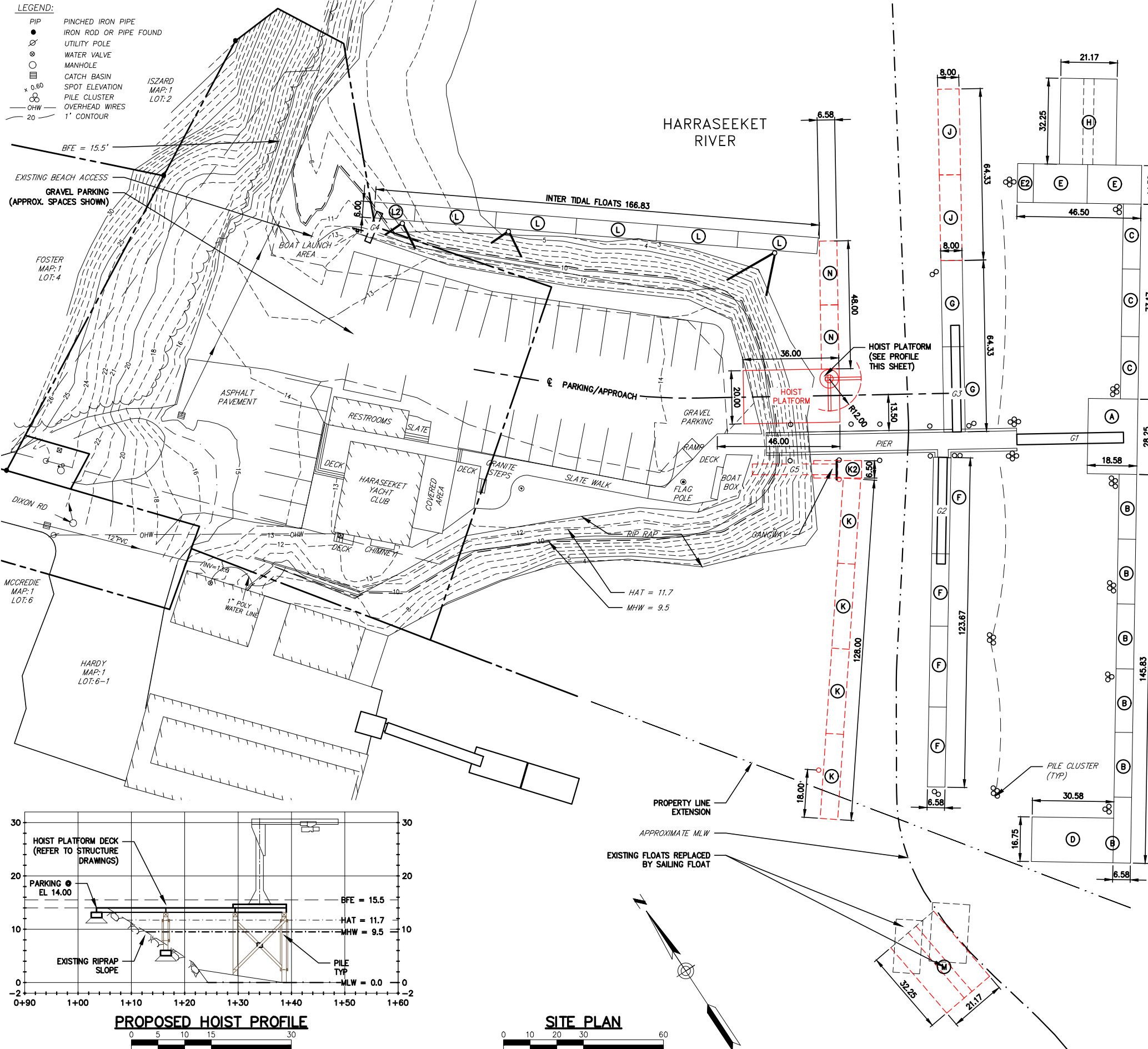
LEGEND:

- PIP PINCHED IRON PIPE
● IRON ROD OR PIPE FOUND
○ UTILITY POLE
○ WATER VALVE
○ MANHOLE
○ CATCH BASIN
x 0.50 SPOT ELEVATION
○ PILE CLUSTER
— OHW OVERHEAD WIRES
— 20 1' CONTOUR

ISZARD
MAP:1
LOT:2

FOSTER
MAP:1
LOT:4

HARDY
MAP:1
LOT:6-1



PROJECT ELEVATIONS (BY DATUM)

ELEVATION	CHART (ft)	NGVD29 (ft)	NAVD88 (ft)	Reference Notes
FEMA BFE (Prelim 2017)	19.3	14.8	14.0	FEMA Zone VE (EL 14.0 NAVD88)
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Highest Annual Tide	11.7	7.2	6.5	2018 MEDEP Predictions
MHHW	9.9	5.4	4.7	BASED ON TIDAL BM "PORTLAND"
MHW	9.5	5.0	4.2	
NAVD88	5.3	0.8	0.0	
NGVD29	4.5	0.0	-0.8	
MLW	0.3	-4.2	-4.9	
MLLW	0.0	-4.5	-5.3	

GANGWAY INVENTORY

Location	Length	Width	Area SF
Beyond MLLW			
G1 Gangway from Pier to Float A	40.00	4	160
G2 Gangway from Pier to Float F	40.00	3.33	133
G3 Gangway from Pier to Float G	40.00	3.33	133
Total			266
Inter Tidal			
G4 Ramp from Parking Lot to Float L	12.00	2.25	27
G5 Unconnected	32.00	4.00	128
Total			155
Total Float Area Overall			421

2021 FLOAT INVENTORY

Location	Quantity	Length	Width	Area SF	Piles
Beyond MLLW					
A Main	1	28.25	18.58	524.97	8
B Front West	6	24.33	6.58	961.10	7
C Front East	3	24.52	6.58	484.17	3
D West End	1	30.58	16.75	512.27	3
E East End	2	20.25	14.50	587.25	-
E2 East End	1	6.00	14.50	87.00	4
F Inside West	4	30.17	6.58	793.97	2
G Inside East	2	32.17	8.00	514.66	2
H Sailing Dinghy	1	32.25	21.17	682.73	-
J Inside East	2	32.17	8.00	514.67	-
Fixed Pier		41.00	8	328	14
Total				5991	43
Inter Tidal					
K Back West	4	32.00	6.58	842.62	1
K2 Back West	1	18.00	6.58	118.44	-
L Back East	5	30.33	6.00	909.90	2
L2 Back East	1	15.33	6.00	91.98	1
N Back East	2	24.00	6.58	316.00	-
M Sailing Dinghy	1	32.25	21.17	682.73	-
Total Float				2962	4
Fixed Pier		53.00	8	424	4
Dinghy Tieback Piles					8
Hoist Platform		36.00	20.00	720	12
Total Area Overall				10096	71

PROPERTY INFORMATION

OWNER: HARRASEEKET YACHT CLUB

ADDRESS: PO BOX 82
5 DIXON ROAD
SOUTH FREEPORT, ME 04078

MAP/LOT: 1-5

ZONING: V2 VILLAGE 2
RP1 RESOURCE PROTECTION 1
SA SHORELAND AREA

SETBACKS: NO CHANGE

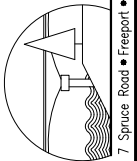
NOT FOR CONSTRUCTION

PROJECT SCOPE OF WORK

1. INSTALL PLATFORM AND HOIST IN LOCATION SHOWN TO PROVIDE LIFT CAPABILITY FOR SMALL BOATS UP TO 2 TON DISPLACEMENT.
2. UPDATE FLOAT LAYOUT UTILITIES REGULATORY AGENCIES.

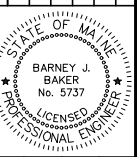
NOTES

1. BASE MAPPING TAKEN FROM THE FOLLOWING SOURCES
 - a) EXISTING CONDITIONS PLAN OF HARRASEEKET YACHT CLUB; DIXON ROAD, FREEPORT, MAINE; 10/20/2003; FILE 78009F BY OWEN HASKEL.
 - b) AERIAL IMAGERY TAKEN FROM MEGIS (2018)
2. ALL ELEVATIONS ARE BASED ON MLLW = 0 (CHART DATUM).



DESIGNED BY:	DRAWN BY:	CHECKED BY:	SCALE:
BUB	JLD	BUB	AS SHOWN

PERMIT SET	PERMIT PRE-APPLICATION MEETING	REVIEW	PRELIMINARY REVIEW	SUBMISSION
D	C	B	A	NO



DESIGNED BY:	DRAWN BY:	CHECKED BY:	SCALE:
BUB	JLD	BUB	AS SHOWN

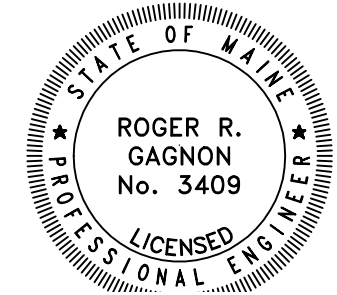
SHEET TITLE:	PROJECT:
PROPOSED SITE PLAN	HARRASEEKET YACHT CLUB BURWELL HOIST FREEPORT, MAINE

DATE:	CONTRACT NO.:	SHEET NO.:	REV.:
FEB 2020	19-74	C-1	D

PROJECT: Freeport — Dixon Rd Dock
SUBJECT: Combined Jib & Access Dock
ITEM: Plan & Section

GAGNON ENGINEERING INC.
Structural Consultants

DATE: 04/30/20
BY: RG
SHEET: 1 OF 9999
PROJECT NO. 001fd

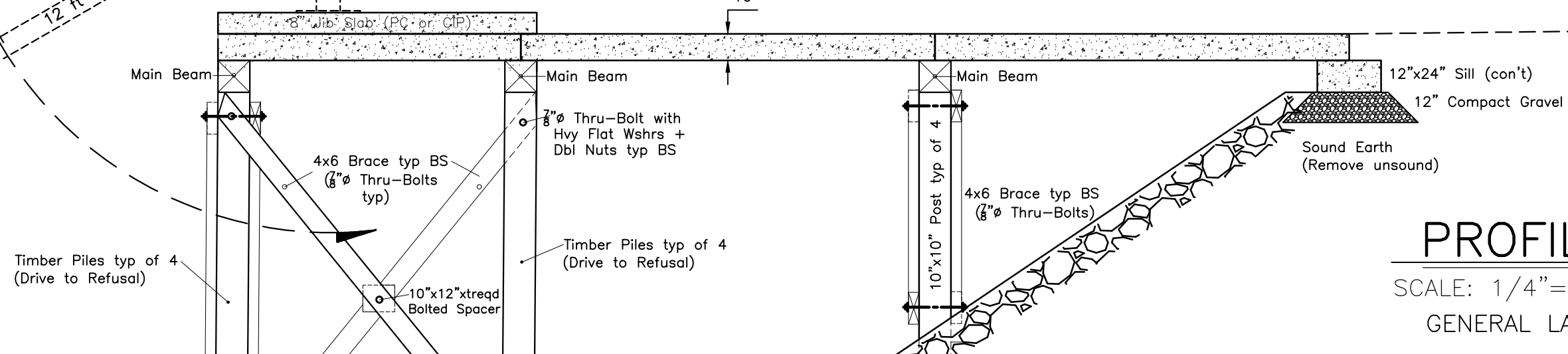
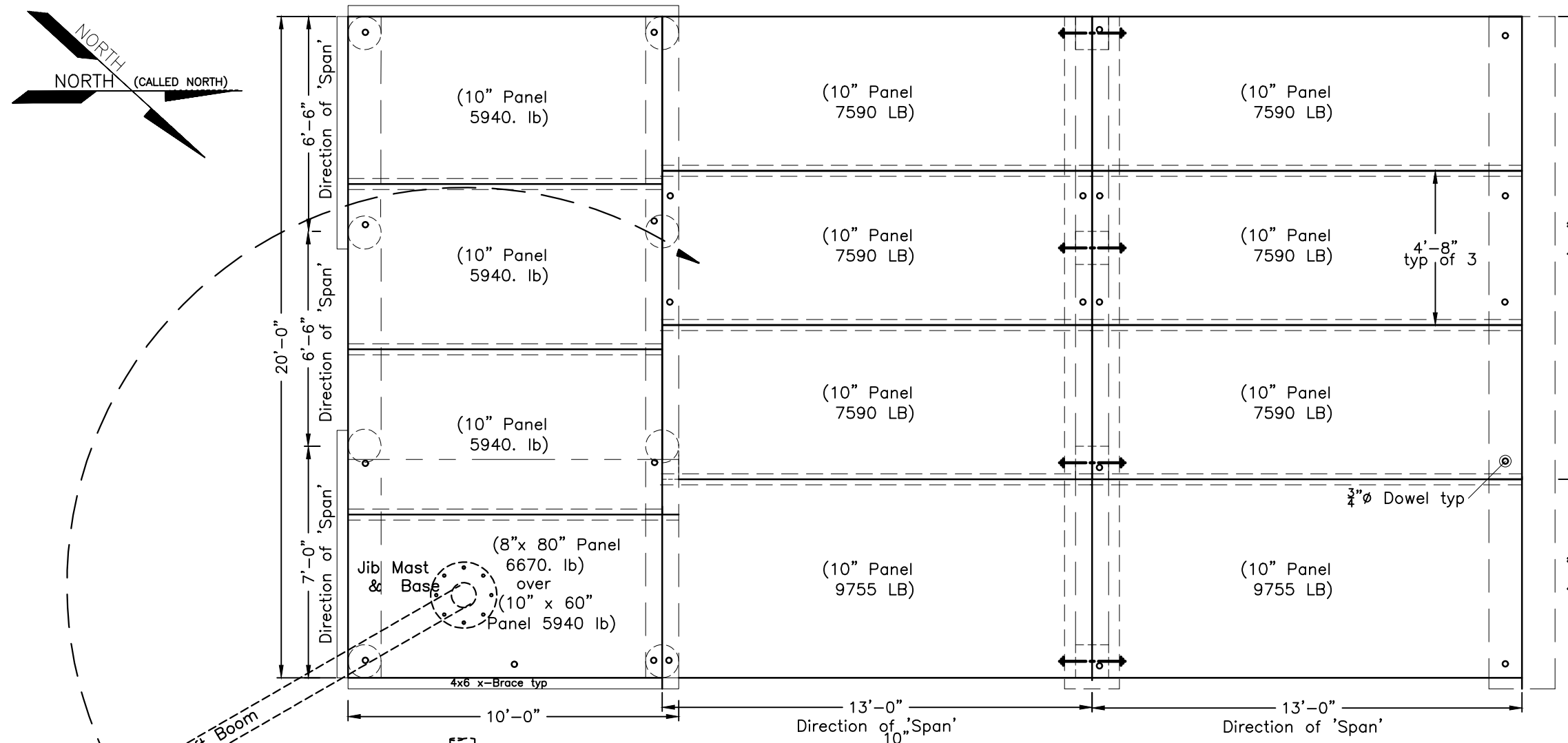


R. Gagnon

April 30, 2020
5 Sheets total

PLAN

SCALE: $1/4" = 1'-0"$
GENERAL LAYOUT
(NOTE: CURBS & RAILS not SHWN)



PROFILE

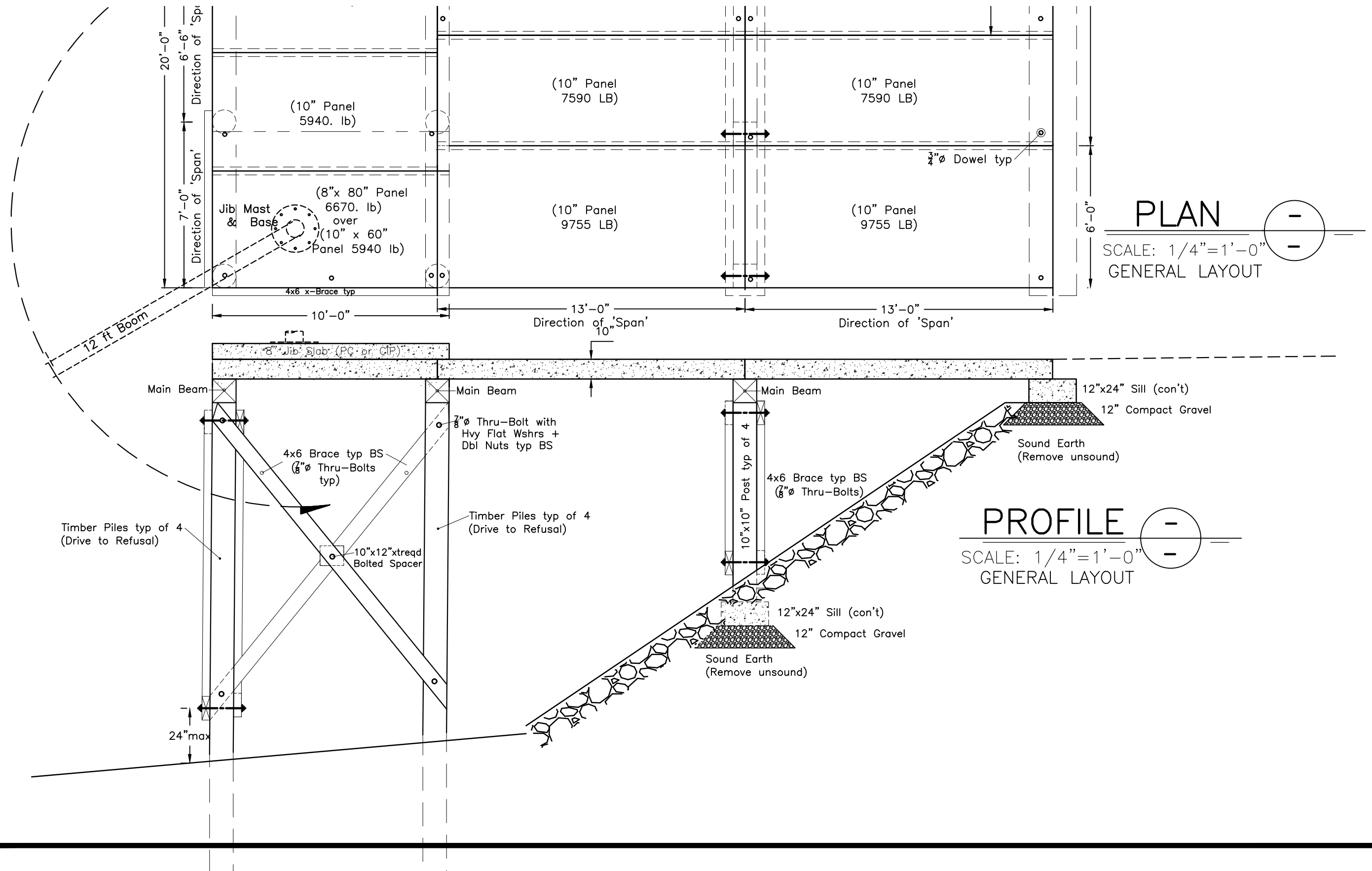
SCALE: $1/4" = 1'-0"$
GENERAL LAYOUT

PROJECT: Freeport — Dixon Rd Dock
SUBJECT: Combined Jib & Access Dock
ITEM: Plan & Section

PRELIMINARY
NOT FOR CONSTRUCTION

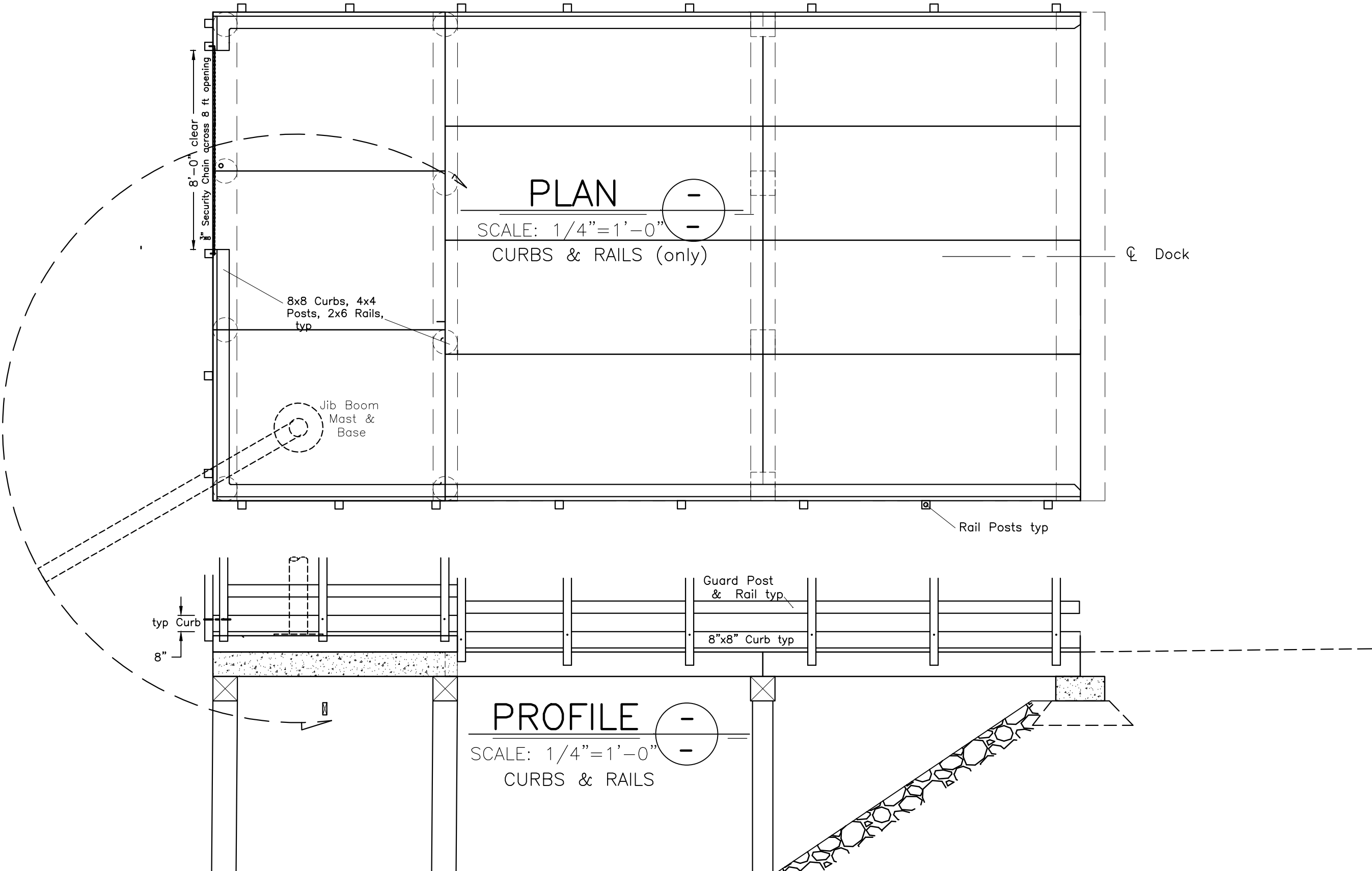
GAGNON ENGINEERING INC.
Structural Consultants

DATE: 04/30/20
BY: RG
SHEET: 2 OF 9999
PROJECT NO. 001fd



PROJECT: Freeport — Dixon Rd Dock
SUBJECT: Combined Jib & Access Dock
ITEM: Curbs & Rails

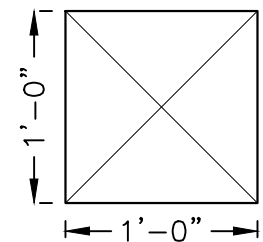
DATE: 04/30/20
BY: RG
SHEET: 3 OF 9999
PROJECT NO. 001fd



PROJECT: Freeport — Dixon Rd Dock
 SUBJECT: Combined Jib & Access Dock
 ITEM: Miscellaneous Details

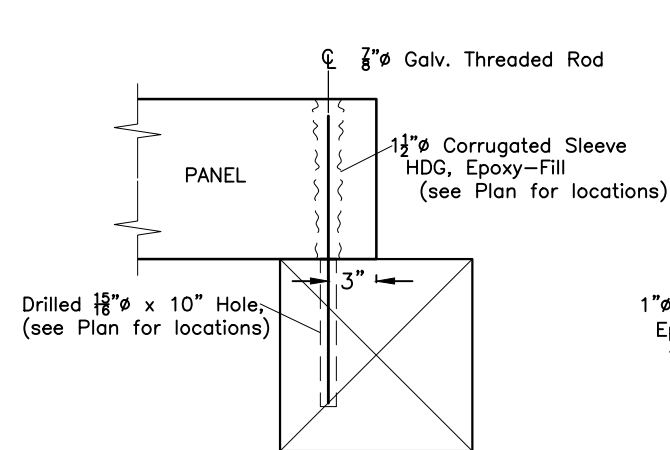
GAGNON ENGINEERING INC.
 Structural Consultants

DATE: 04/30/20
 BY: RG
 SHEET: 4 OF 9999
 PROJECT NO. 001fd

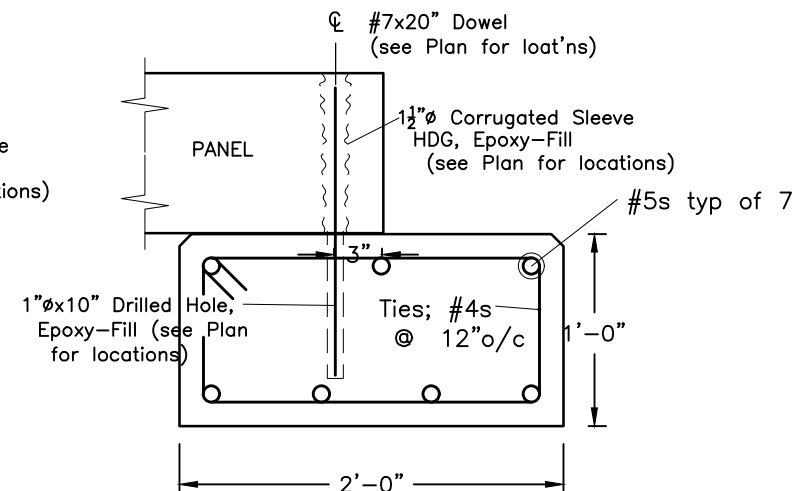


BEAM SECTION

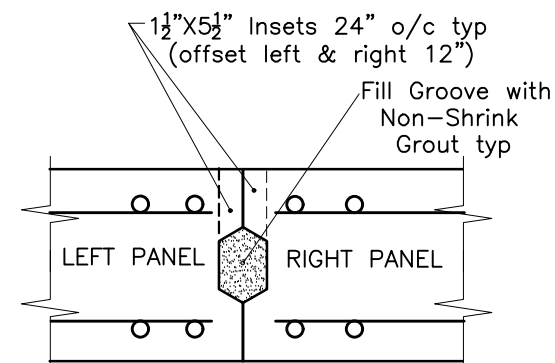
Cap Beam typ
 (12x12 Timber)



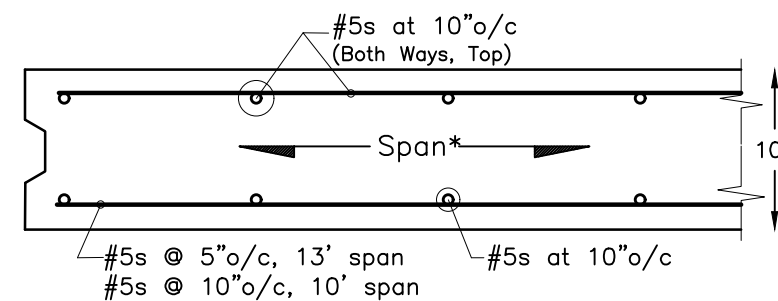
PANEL DOWEL typ UNO
 (REINFORCING NOT SHOWN)



SILL SECTION typ

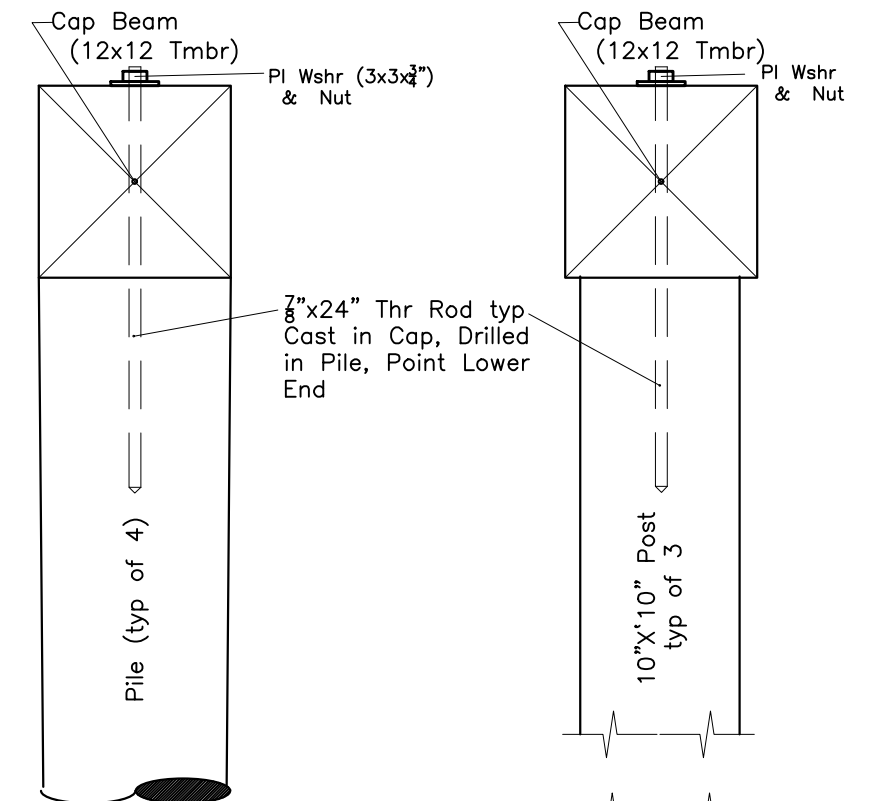


INTER-PANEL JOINT typ

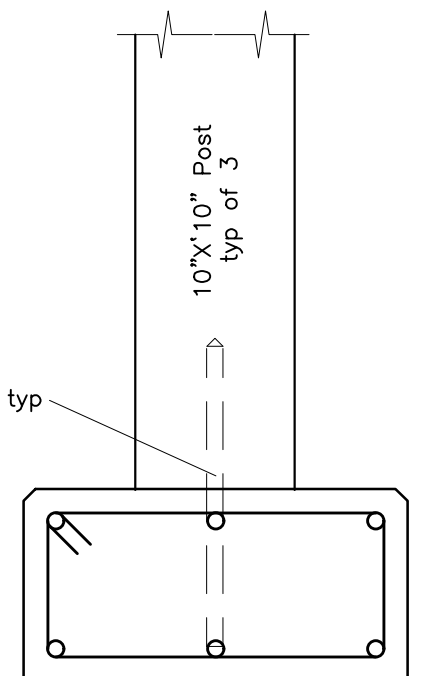


SECTION: 10" PANELS (typ)

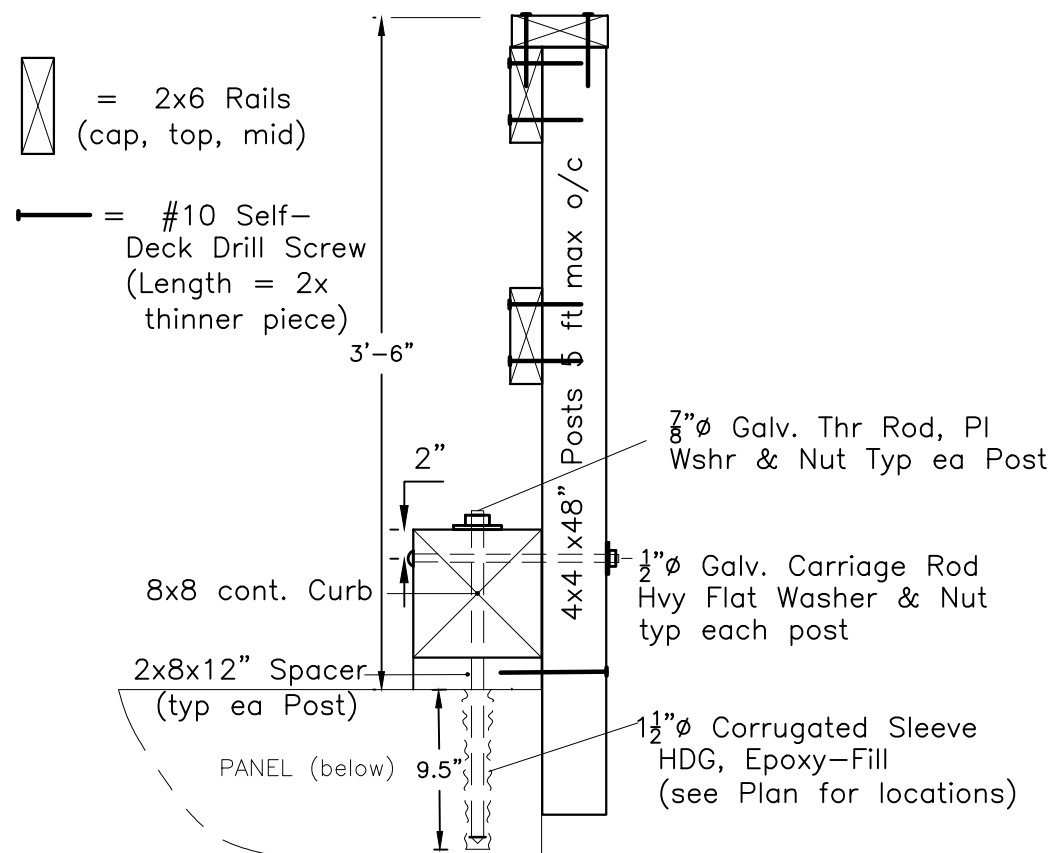
NOTE: Span* see Plan for Direction



CAP at PILE typ



SILL SECTION typ



CURB DETAILS typ

= 2x6 Rails
 (cap, top, mid)
 = #10 Self-
 Deck Drill Screw
 (Length = 2x
 thinner piece)

PROJECT: Freeport — Dixon Rd Dock
SUBJECT: Combined Jib & Access Dock
ITEM: Notes & Materials



DATE: 04/30/20
BY: RG
SHEET: 5 OF 9999
PROJECT NO. 001fd

NOTES:

DESIGN LOADS:

JIB HOIST; 4,000 lb

DESIGN VEHICLE;

DUAL WHEEL AXLES: 20,000 lb Axles, 2 at 2.75' o/c

GROSS WT (2 Axles): 40,000 lb (16,000 lb Front Axle is off-span)

ALL CONCRETE MEMBERS, EXCEPT 12"x12" CAPS, ARE DETAILED ASSUMING
PRE-CAST CONSTRUCTION (Member Weights are noted in the Plan View.)
12"x12" CAPS ARE CAST-IN-PLACE.

MATERIALS: (typ UNO):

PILES; PRESSURE-TREATED (Marine-Grade) SOUTHERN PINE (9"Ø min @ Tip)
DRIVEN TO REFUSAL, 45 ton Ultimate Capacity, 30 ton Safe Working Cap).

BOLTS & THREADED RODS; ASTM A572 Grade 50, HDG (Hot Dip Galvanized)
HDG WASHERS & NUTS.

CONCRETE; 4000 psi, 4" SLUMP. CHAMFER EXPOSED EDGES $\frac{3}{4}$ " x $\frac{3}{4}$ ".

REINFORCING BARS: ASTM A615, GRADE 60, DEFORMED BARS;
2" CLEAR COVER (on main Bars), 40 BAR DIAMETER LAP-SPLICES (UNO).

COMPACT GRAVEL (Sill Base); MDOT 703.06, 95% COMPACTION (ASTM D1557)

EPOXY; TWO-COMPONENT HIGH-STRENGTH STRUCTURAL EPOXY, SIKADUR 32
HI MOD, OR PRE-APPROVED EQUAL

NON-SHRINK GROUT; HIGH-STRENGTH SHRINKAGE-COMPENSATING PORTLAND
CEMENT-BASED GROUT; SIKAGROUT-212 OR PRE-APPROVED EQUAL.