

**GENERAL NOTES:**

- THESE DRAWINGS FORM PART OF THE CONTRACT DOCUMENTS. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- ELEVATIONS AND SOUNDINGS ARE IN FEET BASED ON PROJECT DATUM, NGVD29.
- CONTRACTOR SHALL MAINTAIN ADEQUATE SURVEY CONTROL AT ALL TIMES TO ESTABLISH AND MAINTAIN ALL LINES AND ELEVATIONS.
- ALL DIMENSIONS, ELEVATIONS, & CONDITIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- ALL NORTH ARROWS SHOWN ARE GRID NORTH BASED ON NAD83 MAINE WEST.
- THE EXACT SIZE & LOCATION OF ALL EXISTING UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES PRESENT AND CONSTRUCTION SHALL BE COORDINATED WITH THE RESIDENT.
- EXISTING FEATURES WERE SURVEYED BY JAMES D. NADEAU, LLC, UNDER SUBCONTRACT TO THE MAINE PORT AUTHORITY BETWEEN OCTOBER 2010 AND NOVEMBER 2010 AND SUPPLEMENTED BY OWEN HASKELL (JUNE 2017), AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME.
- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING DEMOLITION AND ERECTION UNLESS OTHERWISE DIRECTED BY THE RESIDENT. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, OR TIE DOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- METHODS OF DEMOLITION, CONSTRUCTION, AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE, AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT NOT BE LIMITED TO NOISE, TURBIDITY, LIQUIDS, AND DUST.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO STRUCTURES AND VESSELS OR INJURIES TO THE PUBLIC DURING CONSTRUCTION. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY FACILITIES FOR THE PROTECTION OF THE WORK, WORKERS, AND PUBLIC SAFETY.
- ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS AND PERMITS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR, SAFETY, AND HEALTH, U.S. ARMY CORPS OF ENGINEERS, AND STATE/LOCAL WETLANDS CONTROL.
- THE CONTRACTOR MAY BE CHARGED ANY ADDITIONAL COST OF REINSPECTION OR RETEST WHEN PRIOR REJECTION MAKES REINSPECTION OR RETEST NECESSARY.
- PILE DRIVING, DRILLING, AND OTHER CONSTRUCTION ACTIVITY WHICH GENERATES LOUD NOISE OR VIBRATION ARE LIMITED TO THE HOURS NOTED IN THE SPECIFICATIONS.
- THE PORTLAND INTERNATIONAL MARINE TERMINAL IS IN COMPLIANCE WITH MTA 33 CFR PART 105. SPECIFIC DESIGN DETAILS AND CONSTRUCTION SEQUENCING ARE PROVIDED TO ENSURE COMPLIANCE IS MAINTAINED THROUGHOUT THE PROJECT. CONTRACTOR MAY PROPOSE VARIATIONS TO THE CONSTRUCTION PHASES SHOWN HEREIN UPON COMMENCEMENT OF CONSTRUCTION ACTIVITIES BUT SHALL NOT ASSUME THAT PROPOSED VARIATIONS WILL BE AUTHORIZED. ALL ACTIVITIES SHALL BE COORDINATED WITH THE PORT OPERATOR.
- THE CONTRACTOR, ITS EMPLOYEES, AND SUBCONTRACTORS SHALL OBTAIN SECURITY PASSES INCLUDING TWIC CARDS AND INTERNATIONAL MARINE TERMINAL ID'S FOR THE DURATION OF THE PROJECT. NO PERSONNEL WILL BE PERMITTED OUTSIDE THE DESIGNATED PRIMARY CONSTRUCTION ZONE WITHOUT THE REQUIRED SECURITY PASS.
- THE CONTRACTOR MAY BE REQUIRED TO RELOCATE TEMPORARY FENCING AND STAGING AREAS ALONG THE PIER IN THE EVENT THE OWNER REQUIRES ADDITIONAL SPACE FOR CRANE OPERATIONS. THE PORT AUTHORITY WILL PROVIDE THE CONTRACTOR WITH A VESSEL SCHEDULE WITH WEEKLY UPDATES.
- THE CONTRACTOR SHALL MAINTAIN DUST CONTROL AT ALL TIMES DURING THE PROJECT. PERIODIC SWEEPING OF PAVEMENT SURFACES WITHIN THE CONSTRUCTION AREA MAY BE REQUIRED DURING CONSTRUCTION AS DIRECTED BY THE RESIDENT AND REQUIRED BY MAINE DOT EROSION CONTROL SPECIFICATIONS.
- ALL WORK ADJACENT TO OR WITHIN THE FORE RIVER REQUIRES ALL PERSONNEL TO WEAR NECESSARY FLOATATION EQUIPMENT AND/OR HARNESSSES. THE CONTRACTOR SHALL PROVIDE A WORK SAFETY PLAN TO THE RESIDENT FOR APPROVAL PRIOR TO WORK.
- WHERE DRILLING AND ANCHORING OF REINFORCING STEEL IS SPECIFIED, THE CONTRACTOR SHALL USE A MATERIAL LISTED ON THE MAINE DEPARTMENT OF TRANSPORTATION PRE-QUALIFIED LIST OF CHEMICAL ANCHORING MATERIALS. THE DEPTH OF THE EMBEDMENT SHALL BE SUFFICIENT TO DEVELOP 125% OF THE YIELD STRENGTH OF THE BAR, BUT SHALL BE NO LESS THAN THE MINIMUM DEPTH OF EMBEDMENT SPECIFIED. WHERE MINIMUM DEPTHS HAVE NOT BEEN SPECIFIED, BAR LENGTHS HAVE BEEN DEVELOPED BASED ON AN ASSUMED EMBEDMENT DEPTH OF 9 INCHES FOR #5 BARS, AND 11 INCHES FOR #6 BARS. THE CONTRACTOR SHALL VERIFY THE REQUIRED DEPTH OF EMBEDMENT AND ADJUST THE REQUIRED BAR LENGTHS AS NECESSARY.
- ALL SCALES ARE INTENDED FOR FULL SIZE 22X34-INCH DRAWINGS.

99% DESIGN  
December 15, 2017

**CODES**

- AASHTO, "LRFD BRIDGE SPECIFICATIONS", 7TH EDITION, 2014 W/ INTERIMS
- AASHTO, "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES", 17TH EDITION, 2002 W/ INTERIMS (PILES)
- AWS, D.I.1, "STRUCTURAL WELDING CODE STEEL", CURRENT EDITION
- AWS, D.I.2, "STRUCTURAL WELDING CODE ALUMINUM", CURRENT EDITION
- AWS, D.I.5, "BRIDGE WELDING CODE", CURRENT EDITION

**WHARF DESIGN CRITERIA**

**LIVE LOAD:**

UNIFORM LOAD:	1,000 PSF
TRUCK LOAD:	AASHTO HS-25
CRANE LOAD:	LIEBHERR LHM 320 (MODIFIED)
CRANE LOAD:	ASSUMED NEW CRANE (LOADING TBD)
STACKER LOAD:	MI-JACK MJ50RS KALMAR DRF450-65S5

**CONSTRUCTION SEQUENCE NOTES:**

1. IN ORDER TO MAINTAIN FACILITY OPERATIONS AND OVERALL SITE SECURITY THROUGHOUT THE PROJECT, A CONSTRUCTION PHASING PLAN IS INCLUDED HEREIN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE PROPOSED CONSTRUCTION SEQUENCE AND ENSURE THAT THE FACILITY'S OPERATIONS AND SITE SECURITY ARE NOT COMPROMISED AT ANY TIME DURING THE PROJECT. ONCE THE PROJECT IS UNDERWAY, THE CONTRACTOR MAY SUBMIT VARIATIONS TO THIS SEQUENCE BUT SHALL NOT ASSUME THAT SAID VARIATIONS WILL BE AUTHORIZED.

**DEMOLITION NOTES:**

1. DEMOLITION SHALL BE CONDUCTED TO PREVENT DEBRIS FROM FALLING INTO THE RIVER. TO THE MAXIMUM EXTENT PRACTICABLE, ALL CONSTRUCTION DEBRIS, INCLUDING ANY LIQUIDS OR SLURRIES THAT ARE PRODUCED AS PART OF THE DEMOLITION, SHALL BE CAPTURED AND DISPOSED OF PROPERLY. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE PERMIT CONDITIONS AND ENVIRONMENTAL REGULATIONS LISTED IN THE SPECIFICATIONS. WORK SHALL INCLUDE REMOVAL OF ANY CONSTRUCTION DEBRIS FROM THE RIVER AND INSTALLATION AND MAINTENANCE OF APPROPRIATE TURBIDITY CONTROLS DURING DEMOLITION AND CONSTRUCTION SUCH THAT NO TURBIDITY ESCAPES THE IMMEDIATE WORK AREA. UNDERWATER INSPECTIONS MAY BE CONDUCTED BY THE OWNER'S REPRESENTATIVE TO ENSURE ALL DEMOLITION AND CONSTRUCTION DEBRIS IS REMOVED FROM THE RIVER.

2. THE EXISTING SECURITY SYSTEM AND CLOSED CIRCUIT TELEVISION SYSTEM SHALL REMAIN FULLY FUNCTIONAL DURING ALL PHASES OF CONSTRUCTION. WORK SHALL BE COORDINATED WITH GALAXY INTEGRATED TECHNOLOGIES AND THE RESIDENT.

**TIDAL DATA:**

	NGVD29	MLLW
TOP OF PIER DECK (ALONG EDGE OF DECK)	15.32±	19.84
FIRST FLOOR ELEVATION (FFE), OFFICE BUILDING	13.77	18.29
100 YR FLOOD RECURRENCE FLOOD WAVE ZONE (BFE) (V ZONE)	12.00	16.52
100 YR RECURRENCE FLOOD ZONE (STILL WATER)	10.00	14.52
HIGHEST OBSERVED WATER LEVEL (02/07/78)	9.61	14.13
MEAN HIGHER HIGH WATER (MHHW)	5.39	9.91
MEAN HIGH WATER (MHW)	4.95	9.47
NOTIONAL GEODETIC VERTICAL DATUM (NGVD) 1929	0.00	4.52
MEAN LOW WATER (MLW)	-4.18	0.34
MEAN LOWER LOW WATER (MLLW)	-4.52	0.00
LOWEST OBSERVED WATER LEVEL (11/30/55)	-7.97	-3.45

NOAA TIDAL STATION ID: 8418150, PORTLAND, CASCO BAY, MAINE  
EPOCH: 1983-2001, UNITS: FEET

**CORNERLOADS OF THE LHM320, SUPPORTING BASE 48'X37'-4"**

JIB ANGLE (DEG)	MAX CORNER LOADS			
	SUPPORT PAD A (LBS)	SUPPORT PAD B (LBS)	SUPPORT PAD C (LBS)	SUPPORT PAD D (LBS)
0	36290	36290	414345	414345
MAX (38)	40565	194000	293215	446656
90	78023	372580	78024	372612
0	20328	20328	430307	430307
MAX (38)	0	127207	254193	519850
90	65585	385050	65585	385050

**CORNERLOADS OF THE [TBD], SUPPORTING BASE [TBD]**

JIB ANGLE (DEG)	MAX CORNER LOADS			
	SUPPORT PAD A (LBS)	SUPPORT PAD B (LBS)	SUPPORT PAD C (LBS)	SUPPORT PAD D (LBS)
0				
MAX (38)				
90				
0				
MAX (38)				
90				

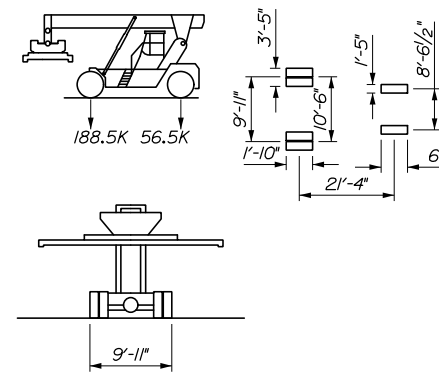
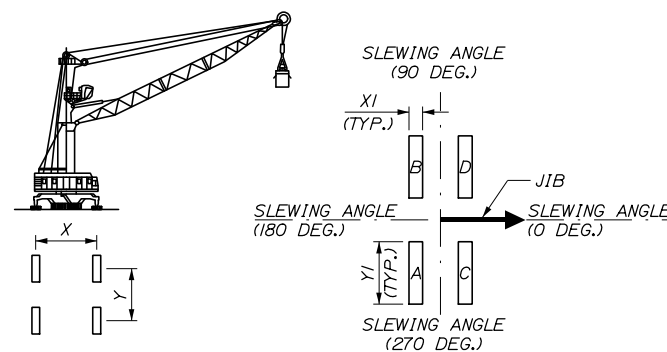
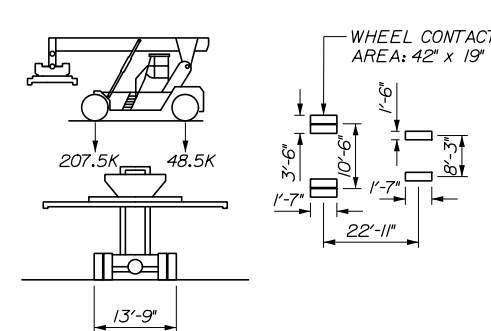
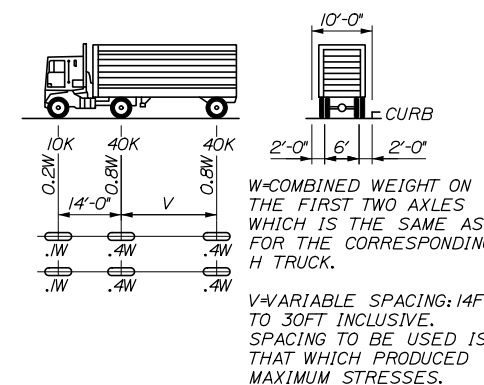
**CORNERLOADS OF THE [TBD], SUPPORTING BASE [TBD]**

**ABBREVIATIONS:**

BLDG	BUILDING
CB	CATCH BASIN
CIP	CAST-IN-PLACE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CY	CUBIC YARD
DIA	DIAMETER
EA	EACH
EF	EACH FACE
EL	ELEVATION IN FEET
EW	EACH WAY
EXP. JT.	EXPANSION JOINT
FFE	FIRST FLOOR ELEVATION
FS	FAR SIDE
HDG	HOT DIPPED GALVANIZED
HSS	HOLLOW STRUCTURAL SECTIONS
ID	INSIDE DIAMETER
IMT	INTERNATIONAL MARINE TERMINAL
K (KIP)	1000 POUNDS
LBS	POUNDS
LF	LINEAR FEET
MAX	MAXIMUM
MIL	.001 INCHES
MIN.	MINIMUM
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
PSF	POUNDS PER SQUARE FOOT
R	RADIUS
REF	REFERENCE
REQ'D	REQUIRED
SF	SQUARE FEET
SS	STAINLESS STEEL
STD	STANDARD
SWL	SAFE WORKING LOAD
TBM	TEMPORARY BENCHMARK
TEMP	TEMPORARY
TYP.	TYPICAL
UON	UNLESS OTHERWISE NOTED

**LEGEND:**

	PLATE
	CENTER LINE
	REINFORCING BAR SIZE
	SPOT ELEVATION (FEET)
	PROJECT BENCHMARK
	TEST BORINGS
	FIRE HYDRANT
	UNDERGROUND ELECTRIC BOX
	EXISTING LIGHT POLE
	PROPOSED LIGHT POLE
	HARDWOOD TREE
	SANITARY MANHOLE
	WATER GATE
	CATCH BASIN
	DRAIN MANHOLE
	MANHOLE
	TELEPHONE MANHOLE
	ELECTRICAL MANHOLE
	EXISTING CHAIN LINK FENCE
	GUARD RAIL
	ELECTRIC LINES
	SANITARY SEWER
	STORM DRAIN
	TELEPHONE
	WATER
	GAS
	CURBING
	RAILROAD TRACKS
	BEDROCK
	CONCRETE
	SAND
	STEEL



**CRANE DIMENSIONS**

	X (FT.)	Y (FT.)	XI (FT.)	YI (FT.)
LHM 320	37'-4"	48'-0"	4'-0"	26'-0"
ASSUMED CRANE	--	--	--	--

NOTE: 100 TON MOBILE HARBOR CRANE, LIEBHERR LHM (320) MODIFIED

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STP 2194(206)  
WIN 021942.06

PROJ. MANAGER	DATE	BY	DATE
J. Burns	12/17	P. Bishop	12/17
T. Poulin		C. Marin	

DESIGN-DETAILED	CHECKED-REVIEWED	DESIGN-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES

PORTLAND INTERNATIONAL MARINE TERMINAL  
MAINE INTERMODAL PORT PRODUCTIVITY PROJECT  
WHARF INFILL & BUILDING REMOVAL  
CUMBERLAND COUNTY  
PORTLAND  
**GENERAL NOTES & DESIGN CRITERIA**

SHEET NUMBER

G02



Date: 12/15/2017

Username:

Division:

Filename: 002\_GeneralNotes (G02).dgn