

Town of Camden
29 Elm Street
Camden, ME 04843



May 7, 2015

Subject: Camden Harbor SHIP Grant Project
State WIN: 018534.12
Amendment No. 2

Dear Sir/Ms:

This amendment includes changes to the Bid Documents and questions /RFIs received and responses.

Notable changes to the bid documents:

- One mobilization in the fall rather than two separate mobilizations.
- Electrical supply for the hoist will be from the panelboard at the decorative pole rather than from the Harbormaster's building. The panelboard will be relocated as part of the work.
- There will be no paving work as part of this contract. Any incidental paving repair as a result of hoist foundation work will be performed by the Town.

BID DOCUMENTS:

Please make the following changes to the Bid Documents:

1. Changes to the Bid Form:
 - a. Item 626.45: remove
 - b. Item 634.01: change name to "Electrical Work"
 - c. Item 634.02: remove.

A copy of the revised Bid Form is attached.

2. Changes to Special Provisions:
 - a. SP 107 Section 107 PROSECUTION AND PROGRESS (Contract Time):
Remove all language and replace with the following: "There will be one mobilization for this project, beginning after Columbus Day on Tuesday, October 13, 2015. The hoist foundation and associated work shall be completed no later than December 31, 2015."

- b. SP 107 Section 107 PROSECUTION AND PROGRESS (Scheduled Events):
Replace the first paragraph with the following: “Description. There will be ongoing marine operations (e.g., commercial fishing) as well as limited tourism activities within and adjacent to the limits of work during time of this contract. The Public Landing is also the location of a heavily-used municipal parking lot. The Contractor shall coordinate with the Town Harbormaster, Town Public Works, and private owners as appropriate. The work under this contract has been scheduled into one mobilization that occurs after Columbus Day in order to avoid the majority of community events that are held at and / or nearby the Public Landing.”
- c. SP 400 PAVEMENTS: Delete in its entirety.
- d. SP Section 403 Hot Mix Asphalt: Delete in its entirety.
- e. SS Section 634 Highway Lighting: Delete in its entirety and replace with the revised SS Section 634 Highway Lighting, attached.
- f. SP 700 – MATERIALS: Delete in its entirety.

A copy of the revised SS Section 634 Highway Lighting is attached.

3. Changes to Drawings:

- a. Sheet T-1: Changed “PS&E SUBMITTAL April 21, 2015” to “ADDENDUM NO. 2 MAY 7, 2015”.
- b. Sheet S-1 (Rev. C): Added Survey Notes, Line 6. Revised Structural Notes, Timber Piles, Line 4. Revised Timber Schedule. Revised Fastener Schedule.
- c. Sheet S-2 (Rev. D): Added location of Boring B-1.
- d. Sheet S-3 (Rev. C): Added location of Boring B-1 and interpretive subsurface information. Revised hoist foundation detail and backfill notes.
- e. Sheet S-4 (Rev. C): Revised Notes on pile embedment and limits of face sheathing.
- f. Sheet E-1 (Rev. 1): Revised electrical supply to be from panelboard on decorative pole rather than from panelboard at Harbormaster’s building.
- g. Sheet E-2 (Rev. 1): Removed table in upper left corner; revised receptacle mounting detail and hoist area detail; revised Notes 4, 5, 7, 8, and 9.

A revised full set of drawings is attached.

QUESTIONS / RFIs

- 1. **Question:** Does the Mobilization item cover both mobilizations necessary for the project? Can two mobilization line items be provided? Deadlines for start and end of each phase of work?

Response: *The project scope has been revised to have one mobilization in the fall for all work under this contract. The onsite work will begin after Columbus Day on October 13, 2015 and be completed by December 31, 2015.*

2. **Question:** Bonding – Is bonding required regardless of bid price or is there a limit (e.g. \$100,000) under which no bonds are required?

Response: *For bids below \$100,000, bonding is not required.*

3. **Question:** Can the existing 240V power at the decorative light pole be used to power the hoist, eliminating the need for trenching and installation of new conduit?

Response: *Yes. Supplemental Specification 634 has been revised as well as the electrical drawings; see attached.*

4. **Question:** Caps for piles, copper or PVC? Drawings show copper but one place in the specs indicates PVC.

Response: *All timber fender and guide piles(including those covered by alternate bid items, if selected), are to be capped with copper sheet in accordance with the notes on Sheet S-4. Reference to PVC caps has been removed from Structural Notes on Sheet S-1 in the appended version of the drawings.*

5. **Question:** Paving

- Can the paving spec be relaxed? Several pavers have been contacted and there is going to be difficulty in getting the small quantity required to meet the project specs. This is going to be very costly.
- Is it possible to remove the paving from the contractor's scope and make this the Town's responsibility?

Response: *There is no longer any paving work in the scope of this work.. Power for the hoist will be from the decorative pole; the electrical conduits from the Harbormaster's building have been eliminated. There will be a small amount of pavement repair associated with the hoist foundation; the Town will be responsible for this paving work.*

6. **Question:** Pile installation:

- Is proofing with an impact hammer required for fender and guide piles?
- If ledge is encountered at less than the specified 6' embedment, will drilling/socketing be required?

Response: *Proofing fender/guide piles with an impact hammer is not required.*

Based on the subsurface information available, we anticipate that pile embedment will be at or near 6' and no drilling/socketing is anticipated.

7. **Question:** Define limits of timber cap replacement.

Response: *The Timber Cap Replacement is between Piles P-1 and P-12. The exact limits may vary slightly depending on locations of joints in existing caps/granite, locations of attachment hardware. The unit price bid item should be priced at the quantity in the bid documents and the quantity paid will be based on the final quantity installed.*

8. **Question:** Conduits are shown beneath boardwalk potentially impacted by hoist foundation. Will the contractor be responsible for relocating conduits?

Response: *The conduits shall be relocated as necessary to install the hoist foundation and associated improvements.*

9. **Question:** Will the town retain the 3 existing floats that are being replaced? When will they be removed?

Response: *The Town will retain ownership of the three (3) floats being replaced. The Town will be responsible for removal of the floats, and will complete by October 16.*

10. **Question:** When will the finger floats be removed in the fall? The floats will make barge access difficult for the fall mobilization.

Response: *The floats normally come out Nov. 15. If earlier removal of a portion of the floats is necessary to provide barge access, this can be arranged by the Town.*

11. **Question:** Is it possible for all the work to be done during the fall mobilization? i.e. remove the June 26 deadline for hoist related work.

Response: *See response to Question 1.*

12. **Question:** How wide is the granite wall? What modifications will be necessary to the hoist foundation if the wall is wider than what is shown on the drawings?

Response: *See foundation details on revised Sheet S-3 Appended as part of Addendum #2.*

13. **Question:** Does the hoist design require a PE seal or is a shop drawing acceptable?

Response: *Shop submittals for the hoist are required to be sealed by a licensed Professional Engineer.*

14. **Question:** Face Sheathing:

- On Sheet S-3, it shows the Face Sheathing going from P-9 to P-11. On sheet S-4 states that the Face Sheathing goes from Piles P-8 to P-12. Clarify.

Response: *Face sheathing and mid and lower fender beam and chock are required from pile P9 to P11 only.*

- Show Face Sheathing details as attachment details, sheathing spacing etc.

Response: *Sheathing is shown in " Fender Pile Connection Detail" on Sheet S-4. Sheathing size and fastening requirements are included in the Timber Schedule and Fastener Schedule on Sheet S-1. See Appended drawings for updated Timber Schedule and Fastener Schedule.*

15. **Question:** 85 feet for the piling installation: starting and ending points?

Response: *We interpret this question as an inquiry about the limits of timber cap replacement. A response has been provided to Question 7.*

16. **Question:** Electrical Supply

- Can the utility pole be cut off at grade?
- Where are the buried electrical lines and conduits located?
- If the lines have to be relocated, is it part of the bid or cost plus?

Response: *The utility pole (decorative pole) shall be removed to 2 ft below grade. The approximate locations of buried electrical conduits are shown on the drawings. As noted, the Contractor shall take all necessary precautions to protect existing underground conduits. Any relocations necessary are part of the base bid and incidental to Pay Item 634.01, Electrical Work. Please refer to revised Supplemental Specification 634, attached.*

17. **Question:** What is under the surface of the timber boardwalk and pavement?

Response: *A single boring was conducted onsite to assess subsurface conditions beneath the pavement. See Geotechnical Report provided in Project Manual.*

The existing timber boardwalk construction consists of 2x decking, 2x6 joists (running parallel to granite bulkhead), and timber sleepers. The sleepers sit on crushed stone.

18. **Question:** Please provide detail drawings of the 2 new 8' by 20' floats to include structural attachments, timber and tub specifications, cleat numbers and specs, as well the bumper specifications and pile connection rollers and cable details.

Response: *Floats are to be designed by supplier to meet the performance specifications of Section 06131. The Float Schedule on Sheet S-1 also lists float connection and cleat requirements. The items requested shall be included in the float suppliers shop drawings.*

19. **Question:** Please provide the details of the trench excavation showing depth of trench, type of back fill required and the number of lifts of pavement along with the thickness of each lift.

Response: *The conduit trenches from the Harbormaster's building have been eliminated. See response to Question 5.*

20. **Question:** Do the piles require a driving shoe?

Response: *Driving Shoes are not required.*

21. **Question:** What is the minimum foot pounds required for the pile hammer to drive the piles?

Response: *Piles shall be driven to the embedment and capacity shown in the contract documents. The contractor is responsible for providing a hammer suitable for achieving these installed conditions.*

22. **Question:** Under the Bidding instructions it states that the DBE form must be submitted with the bid, but under Notice to Contractors it states that there are no DBE requirements associated with this bid. Please Clarify.

Response: *The reference to DBE form is listed under the heading 'IN ADDITION, FOR FEDERAL AID PROJECTS:'. This project has no federal aid, just State SHIP Grant funding. There are no DBE requirements associated with this project, as noted in the Notice to Contractors.*

23. **Question:** What kind of Barriers are required to separate the public from the construction activities?

Response: *Drums and cones.*

24. **Question:** The specifications state that the Electrical Supply at the Hoist will be 240V, 20 amp single-phase electrical service. Is that available from the Harbor masters Office?

Response: *See revised electrical drawings, attached.*

25. **Question:** Under the Contract Agreement and Award section it states all work to be complete on or before 12-31-2015. Under Section 107 it states that the foundation and associated work shall be completed no later than June 26,2015. In section 14601 page 2 item 3.01 it states that the hoist shall be complete and available for delivery by May 20, 2015 or 30 days after the contract is executed. Please Clarify. Having the Hoist available in 30 days, with the design, shop drawings, shop drawings being reviewed and fabrication and galvanizing in Boston, I feel is unobtainable and request that the time frame listed be reviewed and reconsidered.

Response: *The project timeline has been amended to reflect fall installation of the hoist. The new deadline for hoist installation, per Addendum #2, is November 20, 2015.*

26. **Question:** On sheet S-3 between Pile #9 and Pile #11 is a section of face sheathing that is to be replaced as part of the bid. Please provide drawings and details of the face sheathing design.

Response: *See response to Question 14.*

27. **Question:** Item 528.493 Face Sheathing. Please describe how you envision using bolts to hold the sheathing in place. Shouldn't you be using lag bolts????

Response: *See revised Fastener Schedule, Sheet S-1, in Appended drawings.*

28. **Question:** Do the oak fender piles get the stainless steel strapping or is it just the Greenheart Piles?

Response: *Stainless steel strapping is required on all timber piles.*

29. **Question:** Can the timber face sheathing material be Oak instead of SYP?

Response: *See revised Timber Schedule, Sheet S-1, in appended drawings.*

30. **Question:** On sheet S-4, on the fender pile detail, you show the top bolt being countersunk, do you want the two lower fender pile bolts to be counter sunk?

Response: *All exposed fasteners to piles and timber members shall be countersunk in accordance with Structural Notes, Sheet S-1.*

BASE BID FORM – CAMDEN PUBLIC LANDING – SHIP GRANT PROJECT					
<i>ITEM NO.</i>	<i>ITEM</i>	<i>UNIT</i>	<i>QUANTITY</i>	<i>UNIT COST</i>	<i>COST</i>
501.203	GREENHEART GUIDE PILE	EA	7		
501.204	GREENHEART FENDER PILE	EA	5		
502.111	HOIST FOUNDATION	LS	1		
528.493	FENDERING, FACE SHEATHING, AND LADDERS	LS	1		
528.49	CAP REPLACEMENT	LF	85		
528.4906	TIMBER FLOAT	EA	2		
634.01	ELECTRICAL WORK	LS	1		
652.33	DRUM	EA	15		
652.34	CONE	EA	15		
652.35	CONSTRUCTION SIGNS	SF	100		
659.10	MOBILIZATION	LS	1		
WIN 18534.12 Total Base Bid Amount					

ALTERNATE BID FORM – CAMDEN PUBLIC LANDING – SHIP GRANT PROJECT					
<i>ITEM NO.</i>	<i>ITEM</i>	<i>UNIT</i>	<i>QUANTITY</i>	<i>UNIT COST</i>	<i>COST</i>
501.19	OAK FENDER PILES	EA	1		
501.56	SUBSTITUTE COMPOSITE PILES	EA	1		
WIN 18534.12 Total Alternate Bid Amount					

SUPPLEMENTAL SPECIFICATIONS
SECTION 634
HIGHWAY LIGHTING

The applicable provisions of Section 634 of the Standard Specifications shall apply with the following additions and modifications:

634.1 DESCRIPTION

This work shall consist of the relocation of existing panelboard presently located on decorative poles to a location on hoist foundation adjacent to hoist; furnishing and installation of receptacles at hoist; installation of new 50A, 2 pole circuit breaker in panelboard; and the removal of existing pole (decorative piles).

Final connection of the hoist to the electrical supply shall be the responsibility of the hoist supplier (not part of this contract).

634.2 GENERAL

Motorized hoist complete with work lights will be furnished and installed by hoist supplier. Hoist supplier shall make final connections to the power and lighting circuits on the hoist.

634.021 MATERIALS

Materials shall meet the applicable requirements specified in the following Subsection of Division 700 – Materials:

Steel Conduit	715.02
Non-Metallic Conduit	715.03
Secondary Wiring	715.07
Miscellaneous Material	As specified on drawings.

634.4 CONDUCTOR INSTALLATION

All conductors shall be furnished and installed under this contract. The Contractor shall furnish and install conductors. The connections to hoist will be by the hoist supplier, as indicated on drawings.

The trench shall be excavated to a width of 18” and a depth of 30”, in accordance with Standard Detail 626(07). Backfill of aggregate subbase shall be to existing grade. Any pavement repair will be performed by the Town.

634.81 BONDING AND GROUNDING

A separate, continuous, green insulated ground conductor shall be provided to extend from all equipment and devices to equipment ground bus at the relocated panelboard.

Town: Camden
WIN: 018534.12
May 7, 2015
Addendum No.2

634.92 BASIS OF PAYMENT

Payment shall be based on a lump sum for all electrical work indicated on Sheets E-1 and D-2 and as outlined in this specification.

Payment will be made under:

Pay Item

Pay Unit

634.01 Electrical Work

Lump Sum

TOWN OF CAMDEN, MAINE

CAMDEN

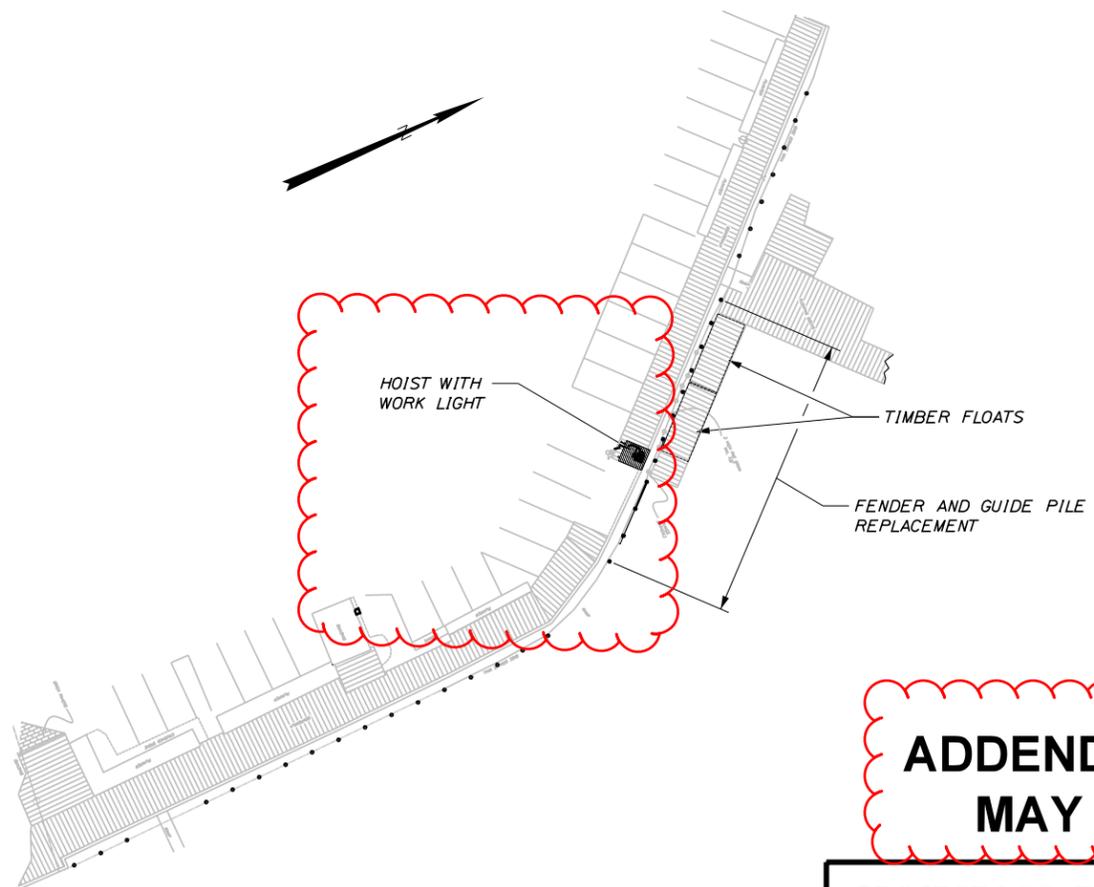
KNOX COUNTY PUBLIC LANDING IMPROVEMENTS WIN 018534.12

PLAN LEGEND

Town, County, State	-----	Centerline-Existing	-----
Property Lines	-----	Centerline-Proposed	-----
R/W Lines-Existing	-----	Travelway-Existing	-----
R/W Lines-Proposed	-----	Travelway-Proposed	-----
Culvert-Existing	-----	Railroad	-----
Culvert Proposed	-----	Catch Basins	Existing Proposed
Curbing	Existing Proposed	Manholes	Existing Proposed
Type 1	-----	Proposed Underdrain	-----
Type 3	-----	Proposed Ditch	-----
Type 5	-----	Existing Ditch	-----
Outline of Bodies of Water	-----	Utility Poles	Existing Proposed
Ledge	-----	Fire Hydrants	Existing Proposed
Buildings	-----	Existing Water Line	-----
Trees	Conifer Deciduous	Existing San. Sewer	-----
Tree Line	-----	Existing San. Sewer Manhole	-----
Clearing Limit Line	-----	Guardrail-Existing	-----
		Guardrail-Proposed	-----
		Guardrail-Cable, Other	-----

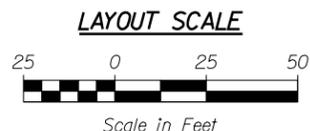
INDEX OF SHEETS

Description	Sheet No.
Title Sheet	T-1
Structural Notes & Schedules	S-1
Site Plan	S-2
Hoist Area Plan & Elevation	S-3
Structural Details	S-4
Lighting Plan	E-1
Lighting Notes & Details	E-2



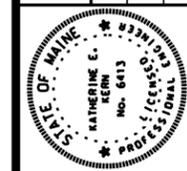
**ADDENDUM NO. 2
MAY 7, 2015**

TY·LIN INTERNATIONAL



PROJECT LOCATION:	INTERSECTION OF MAIN STREET (U.S. ROUTE ONE) AND COMMERCIAL STREET
OUTLINE OF WORK:	TIMBER FENDER AND GUIDE PILE INSTALLATIONS; TIMBER FRAMING, FACE SHEATHING, AND LADDER INSTALLATIONS; TIMBER FLOAT CONSTRUCTION AND INSTALLATION; REINFORCED CONCRETE FOUNDATION CONSTRUCTION FOR 1,000 LB HOIST (SUPPLIED AND INSTALLED BY OTHERS); AND ELECTRICAL IMPROVEMENTS

TOWN OF CAMDEN	DATE
APPROVED	



<i>Katherine E. Kern</i>	SIGNATURE
6413	P.E. NUMBER
04-21-2015	DATE

PROJECT INFORMATION	
PROGRAM	PAT FINNIGAN
PROJECT MANAGER	KATHERINE KERN
DESIGNER	T.Y. LIN INTERNATIONAL
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

**CAMDEN PUBLIC LANDING
IMPROVEMENTS**

TITLE SHEET

SHEET NUMBER

T-1

Date: 5/7/2015

Username:

Division: HIGHWAY

Filename: ... \000\HIGHWAY\MSTA\Title.dgn

WIN 018534.12

GENERAL NOTES

1. THE CONTRACTOR SHALL BE GOVERNED BY THE CONSTRUCTION SAFETY RULES AS ADOPTED BY THE STATE BOARD OF CONSTRUCTION SAFETY, AUGUSTA, MAINE AND THE SAFETY AND HEALTH REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AS PROMULGATED BY THE US DEPARTMENT OF LABOR.
2. THE CONTRACTOR SHALL INCLUDE IN HIS BID, COSTS FOR COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATORY REQUIREMENTS.
3. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAKE ALL IMPROVEMENTS IN ACCORDANCE WITH THE STATE OF MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION, NOVEMBER 2014 EDITION.
4. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL CONSTRUCTION DEBRIS AT AN APPROVED FACILITY IN ACCORDANCE WITH ALL APPLICABLE LOCAL STATE AND FEDERAL REGULATORY REQUIREMENTS.

CONSTRUCTION SEQUENCE & COORDINATION

1. SCHEDULE FOR ALL ACTIVITIES SHALL BE COORDINATED WITH THE TOWN OF CAMDEN AND THE HARBORMASTER SO AS TO MINIMIZE DISRUPTION TO WORKING WATERFRONT ACTIVITIES.
2. INSTALLATION OF HOIST FOUNDATION SHALL BE COMPLETED DURING THE FIRST MOBILIZATION TO ALLOW FOR INSTALLATION OF THE HOIST BY OTHERS. DATE OF COMPLETION SHALL BE AS INDICATED IN THE PROJECT SPECIFICATIONS.
3. PILE AND FLOAT REPLACEMENT SHALL DURING THE SECOND MOBILIZATION. DATES FOR MOBILIZATION AND COMPLETION SHALL BE AS INDICATED IN THE PROJECT SPECIFICATIONS.

EROSION CONTROL NOTES

1. APPLICATION OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES FOR THE PROJECT SHALL BE IN ACCORDANCE WITH PROCEDURES AND SPECIFICATIONS OF THE CURRENT MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION, BEST MANAGEMENT PRACTICES.
2. ALL WORK SHALL BE EXECUTED FROM SHORE OR BARGE. NO TRACKED OR WHEELED EQUIPMENT SHALL BE OPERATED OR PLACED BELOW THE TIDE LEVEL.
3. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED UPON COMPLETION OF GRADING OPERATIONS AND ESTABLISHMENT OF ACCEPTABLE GROUND COVER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES DURING CONSTRUCTION.

DEMOLITION NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL DEMOLITION MATERIALS FROM THE SITE THAT ARE NOT SELECTED FOR RETAINAGE BY THE OWNER.
2. EXISTING TIMBER AND PILE MEMBERS RETAINED BY THE OWNER SHALL BE SET ASIDE IN A PROTECTED AREA FOR REUSE OR REMOVAL FROM THE SITE BY THE OWNER.
3. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF DEMOLITION MATERIALS AT AN APPROVED FACILITY IN ACCORDANCE WITH ALL APPLICABLE REGULATORY REQUIREMENTS.

SURVEY NOTES

1. BASE SURVEY IS FROM A PLAN ENTITLED "TOPOGRAPHIC SURVEY OF THE TOWN OF CAMDEN PUBLIC LANDING, COMMERCIAL STREET, TOWN OF CAMDEN, KNOX COUNTY, MAINE" PREPARED BY GOOD DEEDS, INC. LAND SURVEYING FOR T.Y. LIN INTERNATIONAL, DATED JUNE 24, 2014 AND REVISED THROUGH JULY 9, 2014.
2. BOUNDARY INFORMATION SHOWN HAS BEEN REPRODUCED FROM A PLAN ENTITLED "BOUNDARY SURVEY, TOWN OF CAMDEN PUBLIC LANDING" PREPARED BY GARTLEY & DORSKY ENGINEERING & SURVEYING FOR THE TOWN OF CAMDEN, DATED AUGUST 20, 2010.
3. ALL ELEVATIONS ARE TO NAVD88 UNLESS OTHERWISE NOTED.
4. LIMIT OF FEDERAL NAVIGATION CHANNEL DIGITIZED FROM "TOWN OF CAMDEN ZONING MAP B" PREPARED BY GARTLEY & DORSKY ENGINEERING & SURVEYING FOR THE TOWN OF CAMDEN, DATED AUGUST 12, 2008. LOCATION IS APPROXIMATE.
5. BASE FLOOD/TIDAL INFORMATION TAKEN FROM MEDEP, FEMA AND NOAA PUBLISHED DATA FOR ROCKLAND.
6. INTERPRETIVE SUBSURFACE INFORMATION IS FROM THE PROJECT GEOTECHNICAL REPORT ENTITLED "GEOTECHNICAL REPORT, FISHERMAN JIB HOIST, PUBLIC LANDING, CAMDEN, MAINE" PREPARED BY SUMMIT GEOENGINEERING, INC. FOR THE TOWN OF CAMDEN, DATED APRIL 2015. REFER TO SHEET S-2 FOR BORING LOCATION AND S-3 FOR INTERPRETIVE SUBSURFACE PROFILE. REFER TO SPECIFICATIONS FOR A COMPLETE COPY OF THE PROJECT GEOTECHNICAL REPORT

PROJECT ELEVATIONS (BY DATUM)				
ELEVATION	CHART (ft)	NGVD29 (ft)	NAVD88 (ft)	Notes
Base Flood Elevation	16.1	11.0	10.3	FEMA Zone "AE" (Effective 1988 FIS/FIRM)
500 Year Stillwater	16.1	11.0	10.3	
100 Year Stillwater	15.4	10.3	9.6	
50 Year Stillwater	15.1	10.0	9.3	
10 Year Stillwater	14.3	9.2	8.5	
Highest Annual Tide	12.7	7.7	7.0	2015 MDEP Predictions
MH+HW	10.6	5.5	4.8	BASED ON TIDAL BM "ROCKLAND"
MHW	10.2	5.1	4.4	
NAVD88	5.7	0.7	0.0	
NGVD29	5.1	0.0	-0.7	
MLW	0.4	-4.7	-5.4	
MLLW	0.0	-5.1	-5.7	

1. BASE FLOOD INFORMATION TAKEN FROM FEMA FLOOD INSURANCE RATE MAP
2. HIGHEST ANNUAL TIDE TAKEN FROM MAINE DEP PUBLISHED PREDICTIONS
3. TIDAL INFORMATION TAKEN FROM NOAA PUBLISHED DATA

DESIGN CRITERIA

1. FISHERMAN'S HOIST (SEPARATE CONTRACT)
 - MAXIMUM LIFT - 1,000 LB
 - MAXIMUM SWING - 14 FT
 - RANGE OF MOTION - AS INDICATED ON DRAWINGS
2. ALL VESSELS TO PROVIDE FENDERING AND SHALL DOCK IN SETTLED WEATHER.
3. ALL COMPONENTS TO BE SUPPORTED DURING HANDLING TO PREVENT DAMAGE. ANY DAMAGE (INCLUDING BUT NOT LIMITED TO FRACTURED, BENT OR CRACKED SECTIONS, THAT IMPACT THE STRUCTURAL, FUNCTIONAL OR VISUAL INTEGRITY WILL BE REJECTED AT THE SITE.
4. FLOATS (SEE SPECIFICATION SECTION 06131)
 - DL FREEBOARD - 18" +/-2"
 - LIVE LOAD CAPACITY (FLOAT DRUMS FULLY SUBMERGED) - 20 PSF
 - A CONCENTRATED LIVE LOAD OF 400 LBS APPLIED AT ANY POINT SHALL NOT TILT THE DECK MORE THAN SIX DEGREES TO THE HORIZONTAL.

STRUCTURAL NOTES

TIMBER PILES

1. TIMBER PILES SHALL HAVE A MINIMUM PILE BUTT DIAMETER OF 12-INCHES AT 3-FEET FROM THE BUTT AND MEET ASTM D2899 DESIGN VALUES FOR ROUND TIMBER PILES, WITH MINIMUM TIP CIRCUMFERENCE AND DESIGN LOAD CAPACITY AS INDICATED BELOW:

LOCATION	TIP	P (KIPS)	MATERIAL
GUIDE PILES	22"	5	GREENHEART
FENDER PILES:WORKING AREA	22"	5	GREENHEART
FENDER PILES:OTHER	22"	5	OAK
2. VERTICAL TIMBER PILES SHALL CONFORM TO ASTM D25. PROVIDE PROTECTION TO PILE TIP AND BUTT TO AVOID DAMAGE DURING DRIVING.
3. EXPOSED FASTENERS TO PILES SHALL BE COUNTERSUNK A MINIMUM OF 1-1/2 INCHES.
4. ALL FENDER AND GUIDE PILES SHALL BE Banded WITH 3/4" STAINLESS STEEL UTILITY STRAPPING BY BAND-IT IDEX INC. (800-525-0758). "GIANT BAND" PRODUCT #G44099 OR EQUAL, AND FITTED WITH COPPER CAPS, IN ACCORDANCE WITH NOTES ON SHEET S-4. STAINLESS STRAPS SHALL BE INSTALLED APPROXIMATELY 6" BELOW THE CUTOFF ELEVATION PRIOR TO MAKING THE FINAL CUT.
5. REFER TO SPECIFICATIONS FOR PILE DRIVING CRITERIA. THE CONTRACTOR IS CAUTIONED OF ANTICIPATED RAPID INCREASE IN DRIVING RESISTANCE DUE TO ABRUPT CHANGES IN SOIL STRATA. CARE SHOULD BE TAKEN TO AVOID DAMAGE TO THE PILE.
6. THE CONTRACTOR SHALL ORDER PILES OF SUFFICIENT LENGTH TO ALLOW FOR 5 FT VARIATION IN THE TABULATED LENGTH PROVIDED. REFER TO PILE SCHEDULE ON SHEET S-1 AND DETAILS ON SHEET S-4.

TIMBER STRUCTURAL MEMBERS

1. REFER TO TIMBER SCHEDULE.
2. ALL EXPOSED EDGES SHALL BE PLANED OR SANDED TO PROVIDE SMOOTH SURFACE FREE OF ROUGH EDGES OR DEFECTS.
3. ALL EXPOSED FASTENERS SHALL BE COUNTERSUNK.

CAST-IN-PLACE CONCRETE

1. MIX DESIGN:
 - a. MDOT CLASS A, $f_c = 4,000$ PSI
2. DCI ADMIXTURE: 3-GAL/CY.
3. MINIMUM COVER TO REINFORCEMENT = 3"
4. REINFORCING STEEL:
 - a. ASTM A615 GRADE 60; $f_y = 60,000$ PSI, EPOXY COATED

MISCELLANEOUS METALS AND FASTENERS

1. ALL METAL ITEMS TO BE A36 STEEL, HOT-DIP GALVANIZED AFTER FABRICATION UNLESS OTHERWISE NOTED.
2. ALL FASTENERS SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
3. ALL BOLTS SHALL CONFORM TO ASTM A-307. MINIMUM SIZE SHALL BE 3/4" DIA. UNLESS OTHERWISE NOTED. ALL BOLTS TO BE HEAVY HEX UNLESS OTHERWISE NOTED.
4. AT ALL TIMBER CONNECTIONS, WASHERS SHALL BE PROVIDED AT FASTENER BEARING AS NOTED BELOW:
 - a. FENDER PILE CONNECTIONS - OGEE WASHERS
 - b. OTHER BOLTED CONNECTIONS - NY DOCK WASHERS

TIMBER SCHEDULE

Timber Size	Location	Species	% Moisture at Treatment	Treatment Type	Grading to SPIB	Surface Finishing	Minimum Length (if not shown on drawings)
6 x 10	Walers	SYP	25%	CCA 2.5	No. 2	S2E	16'-0"
6 x 10	Chocks	SYP	25%	CCA 2.5	No. 2	S2E	Full width between piles
10 X 10	Curbs	SYP	19%	ACQ 0.6	No. 1	S4S	10'-0"
4 x 12	Pier Face Sheathing	Oak		Untreated	No. 2	S4S	14'-0"
4 x 10	Ladder Rails	SYP	19%	ACQ 0.6	No. 1	S4S	Full length

Chromated Copper Arsenate (CCA)
 Alkaline Copper Quaternary (ACQ) OR APPROVED EQUAL
 Quantities shall include sufficient material to include blocking and splices (where authorized).
 R = Rough Sawn, S2E = Finished Top and Bottom, S2S = Finished Each Side, S4S = Finished All Sides.

FASTENER SCHEDULE

Location	Diameter in	No / Connection	Finish	Length in	
Timber Bolted Connections (Heavy Hex unless otherwise noted)					
Guide Pile Top Connection	1"	1	Hot Dip Galv.	Length to suit construction	
Guide Pile Standoff Brackets	1"	4	Hot Dip Galv.		
Ladder Brackets	3/4"	See detail	Hot Dip Galv.		
Threaded Rod					
Fender Pile Top Connection	1"	1	Hot Dip Galv.		
Timber Cap to Granite	1"	1	Hot Dip Galv.		
Pile Chocks	1"	2 (min), 1per 4'	Hot Dip Galv.		
Pile Walers	1"	2 (min), 1per 4'	Hot Dip Galv.		
Ladder Wale	1"	2 per wale	Hot Dip Galv.		
Ladder Rungs	3/4"	6 total	Hot Dip Galv.		
Lag Bolts					
Sheathing Framing	1"	2 per plank at each waler connection	Hot Dip Galvanized "Weather Tuff" Timber Bolts Sea Port Marine (800) 446-8056, or Equal		

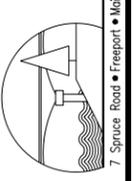
PILE SCHEDULE

Elevations based on NAVD88 Datum											
Location	Pile	Pile Type	Bid Item	Approx. Cutoff Elev.	Approx. Ground Elev.	Pile Embedment*	Pile Tip Elevation	Est. Pile Length	Pile Order Length	Quantity	Total Pile Length
Greenheart Piles - Base Bid											
Guide Piles	P1-P7	Greenheart	501.203	12.5	-7.0	6.0	-13.0	26	30	7	210
Fender Piles	P8-P12	Greenheart	501.204	8.3	-8.0	6.0	-14.0	22	25	5	125
										Approximate Total Pile Length	335
										No. of Piles	12
										Avg Pile Length FT	27.9
Oak Piles - Alternate Bid Item - UNIT PRICE ITEM											
Bulkhead Fender Piles	All Other	OAK	501.19	12.5	-8.0	6.0	-14.0	27	30	--	30

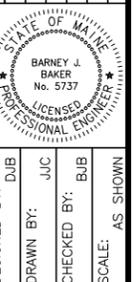
*Piles shall be driven to minimum 6' embedment, or to refusal if ledge is encountered prior to reaching the specified minimum embedment.

FLOAT SCHEDULE

Unit	New Float No.	Width FT	Length FT	Float Area SF	Connection Requirements			Cleats (See Specification Below)
					Pile Guide	End	Side	
EF	1	---	---	---	---	---	1	
PF	1	8	20	160	2	2	---	2 Type A on outer face
PF	2	8	20	160	2	2	---	2 Type A on outer face
Total New		2		320	4	4	1	
Cleat Size/specification (Hot Dip Galvanized; Seaport Marine (800) 436-4400 or approved equal)								
Type A = 12 in SPC 190 Ship								

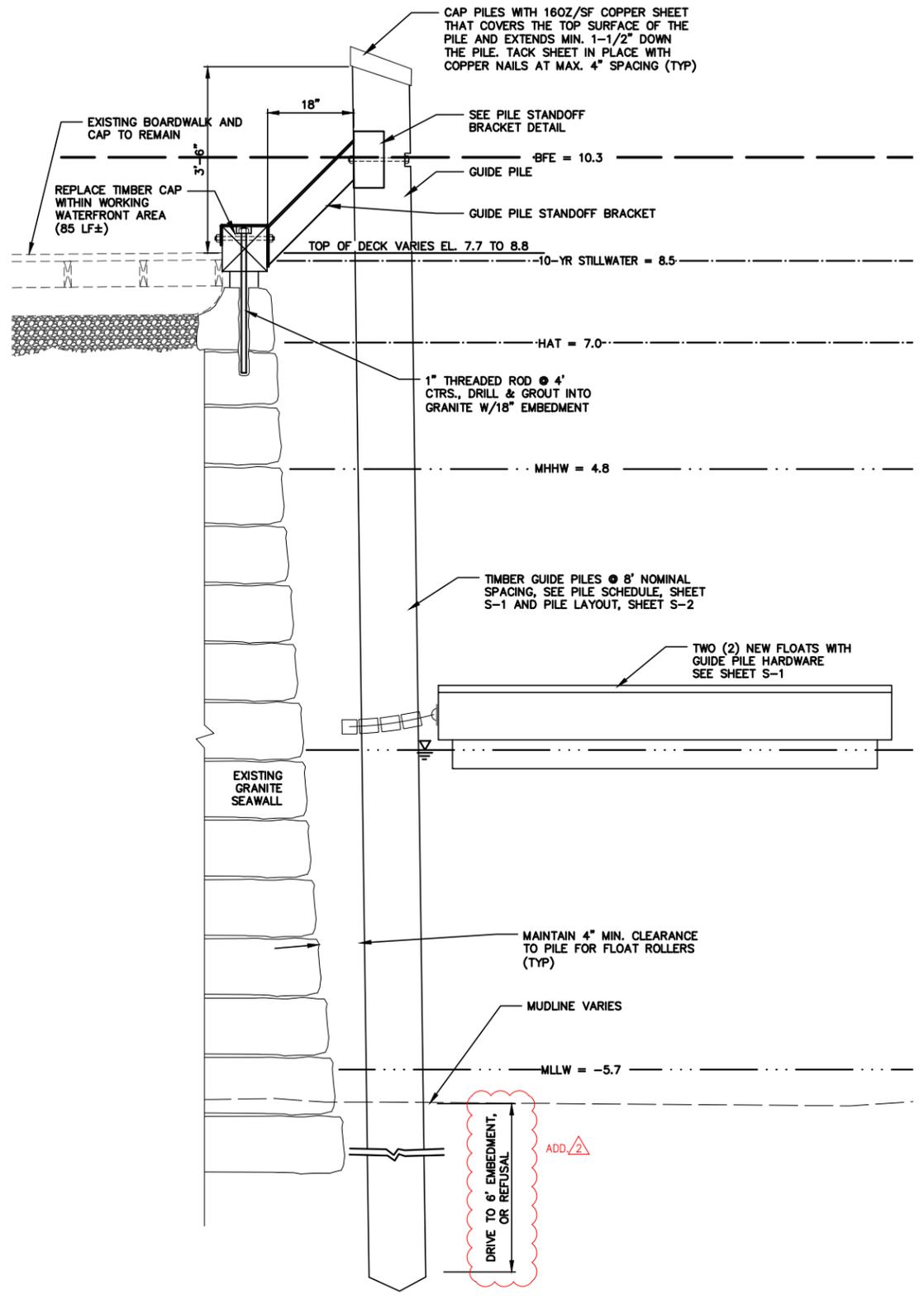


ADDENDUM #	DATE	INT.
5-7-15	DJB	
4-17-15	DJB	
3-30-15	DJB	

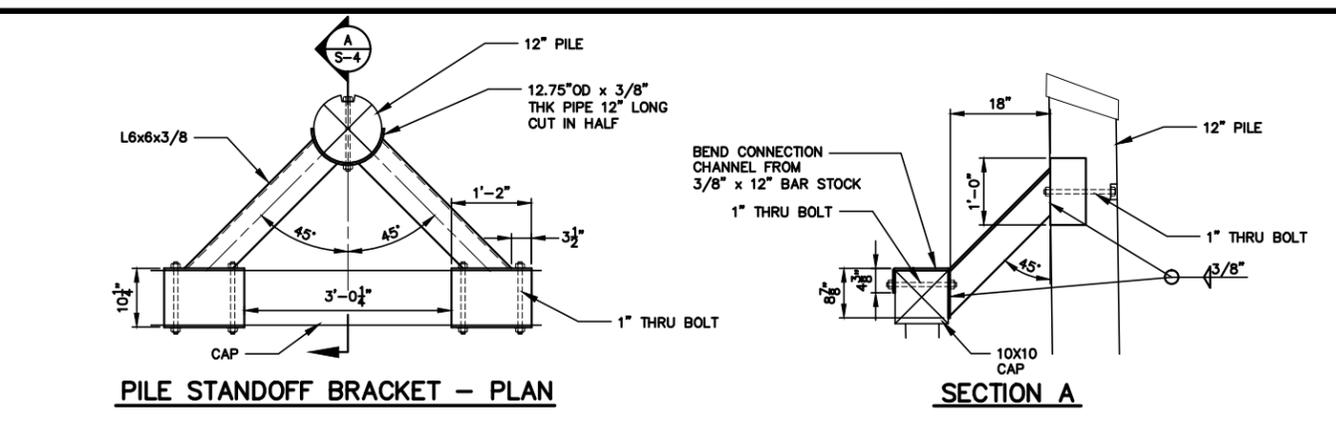


\\bdc-srv\projects\14\14-15 camden public landing\14-15 camden public landing_civil3d.dwg

\\bdc-srv\projects\14\14-15 camden public landing\cod\14-15 camden public landing structural.dwg

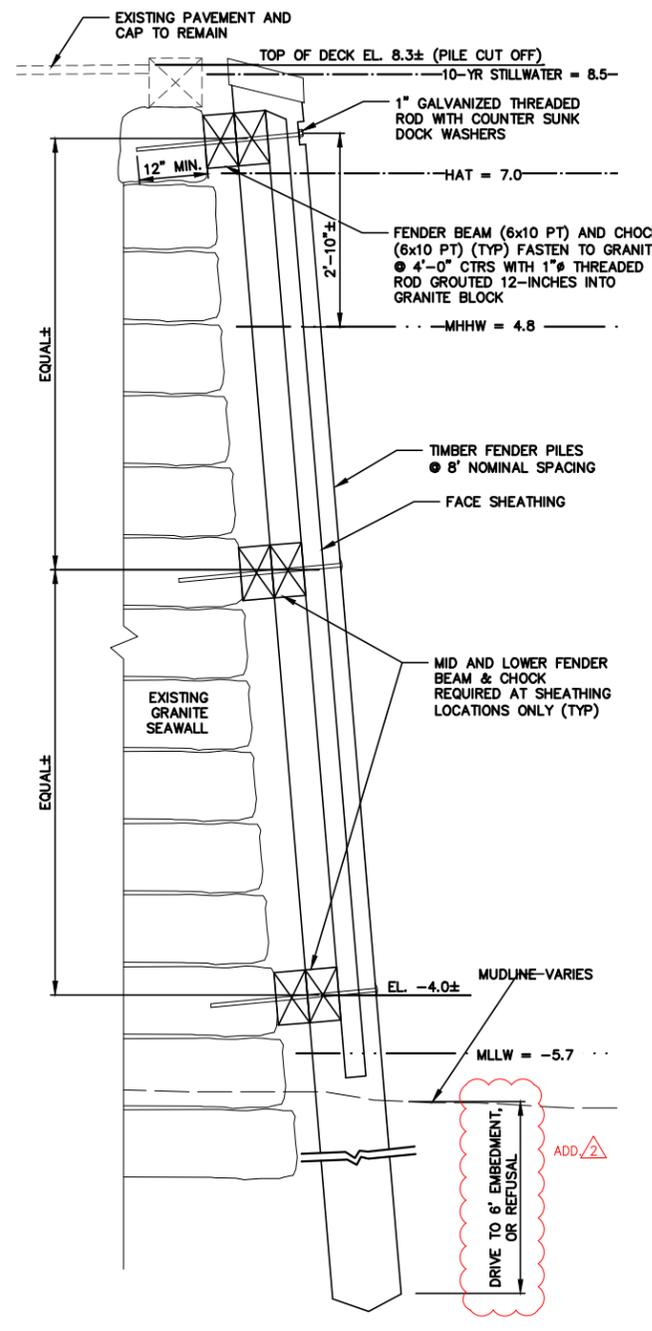


GUIDE PILE CONNECTION DETAIL PILES P1 THRU P7

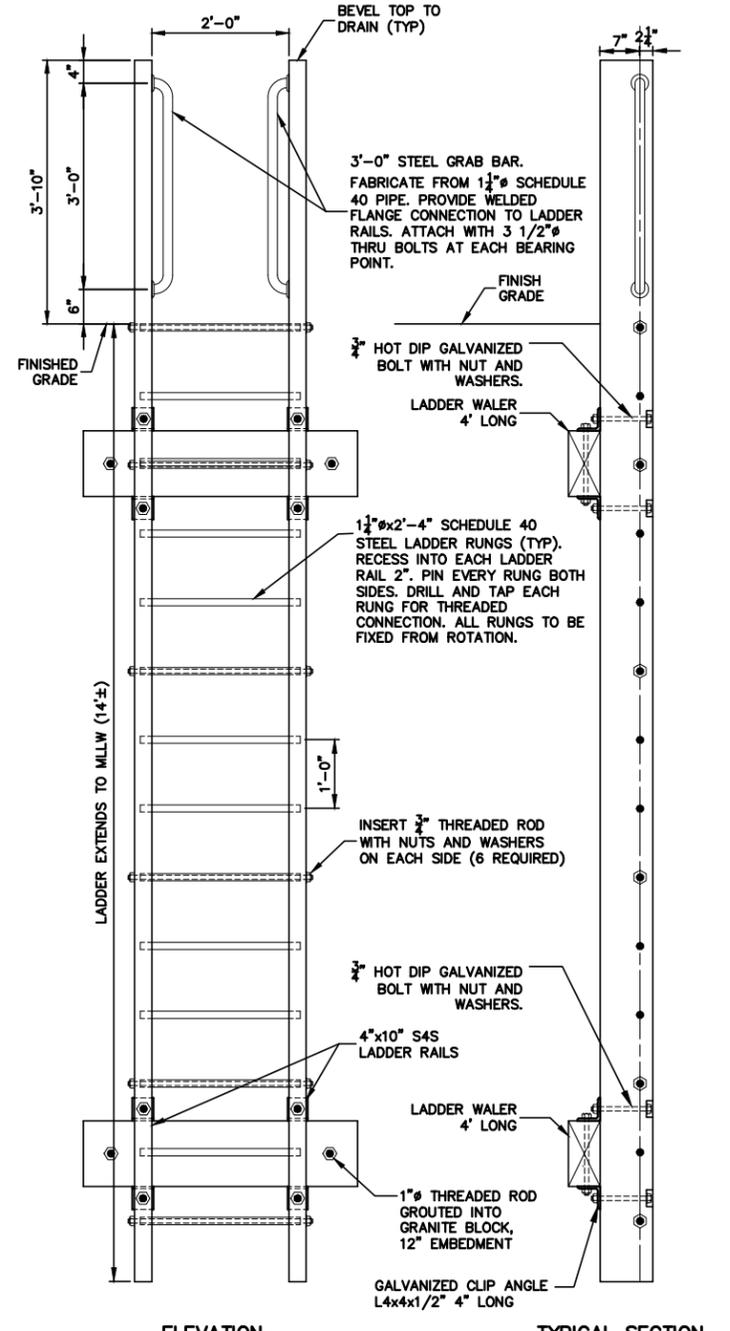


PILE STANDOFF BRACKET - PLAN

SECTION A



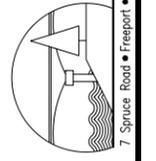
FENDER PILE CONNECTION DETAIL WITH FACE SHEATHING AT PILES P9 THRU P11



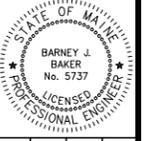
ELEVATION

TYPICAL SECTION

LADDER DETAIL



NO.	DATE	DESCRIPTION
1		INIT.
2		D/B
3		D/B
4		D/B
5		D/B
6		D/B
7		D/B
8		D/B
9		D/B
10		D/B



DESIGNED BY:	DJB
DRAWN BY:	JJC
CHECKED BY:	BUB
SCALE:	AS SHOWN

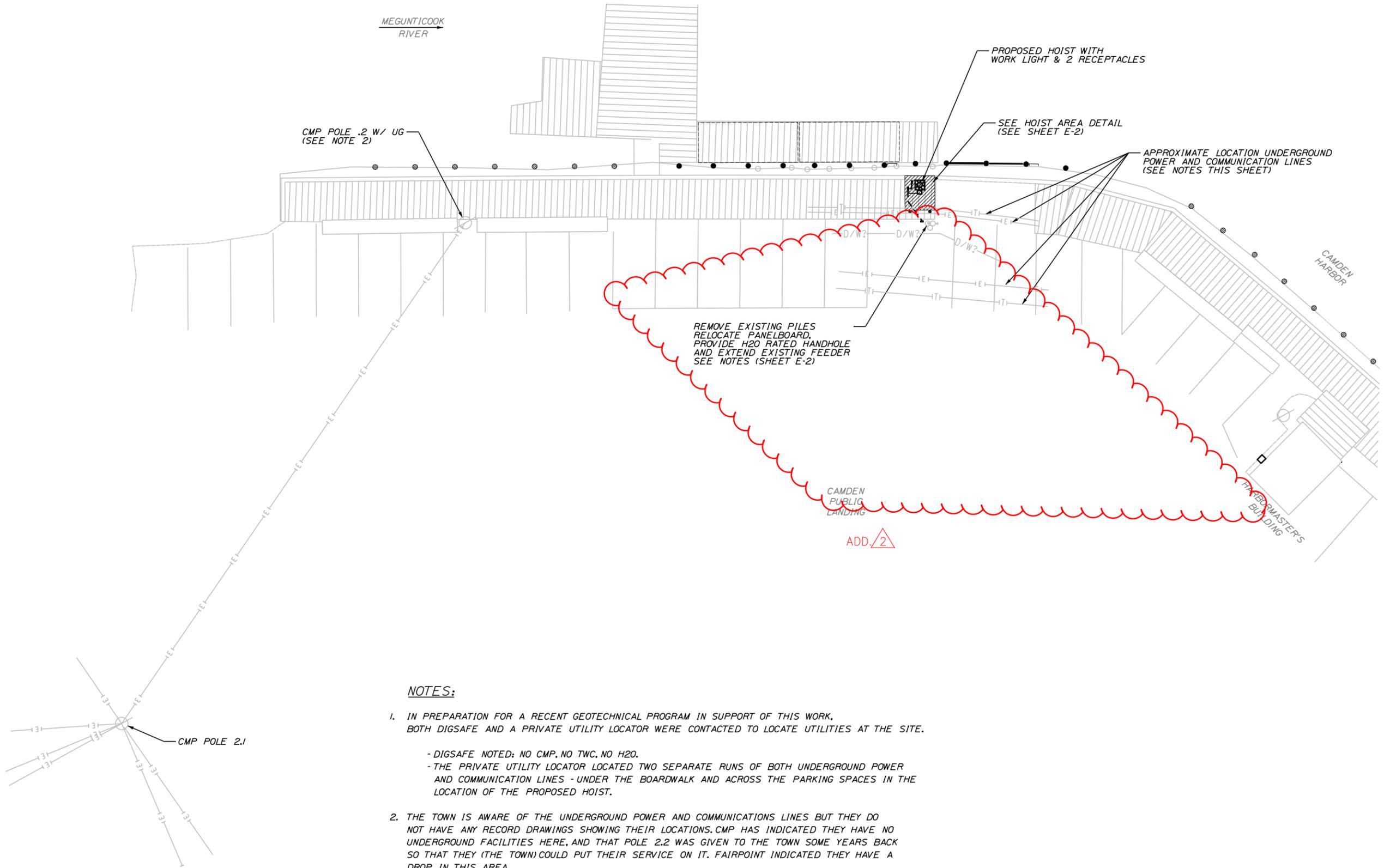
SHEET TITLE:	STRUCTURAL DETAILS
PROJECT:	TOWN OF CAMDEN PUBLIC LANDING IMPROVEMENTS
DATE:	MAR 2015
CONTRACT NO.:	14-15
SHEET NO.:	S-4
REV.:	C

Date: 5/7/2015

Username:

Division: HIGHWAY

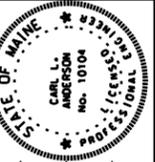
Filename: ...MSTALightingPlan_E-1.dgn



NOTES:

1. IN PREPARATION FOR A RECENT GEOTECHNICAL PROGRAM IN SUPPORT OF THIS WORK, BOTH DIGSAFE AND A PRIVATE UTILITY LOCATOR WERE CONTACTED TO LOCATE UTILITIES AT THE SITE.
 - DIGSAFE NOTED: NO CMP, NO TWC, NO H2O.
 - THE PRIVATE UTILITY LOCATOR LOCATED TWO SEPARATE RUNS OF BOTH UNDERGROUND POWER AND COMMUNICATION LINES - UNDER THE BOARDWALK AND ACROSS THE PARKING SPACES IN THE LOCATION OF THE PROPOSED HOIST.
2. THE TOWN IS AWARE OF THE UNDERGROUND POWER AND COMMUNICATIONS LINES BUT THEY DO NOT HAVE ANY RECORD DRAWINGS SHOWING THEIR LOCATIONS. CMP HAS INDICATED THEY HAVE NO UNDERGROUND FACILITIES HERE, AND THAT POLE 2.2 WAS GIVEN TO THE TOWN SOME YEARS BACK SO THAT THEY (THE TOWN) COULD PUT THEIR SERVICE ON IT. FAIRPOINT INDICATED THEY HAVE A DROP IN THIS AREA.
3. THE UNDERGROUND LINE MARKED "D/W?" IS A LINE ALSO LOCATED BY THE PRIVATE UTILITY COORDINATOR AT A DEPTH OF APPROXIMATELY 5 FEET. THIS COULD BE A TOWN WATER LINE OR DRAINAGE LINE.
4. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT DIGSAFE TO LOCATE ALL UTILITIES WITHIN THE WORK AREA. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES - INCLUDING THOSE IDENTIFIED BY PRIVATE UTILITY LOCATION AS PART OF THE GEOTECHNICAL PROGRAM - PRIOR TO PERFORMING INTRUSIVE WORK AT THE SITE.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



Signature: *Carl L. Anderson*
 SIGNATURE: CARL L. ANDERSON
 No. 10104
 P.E. NUMBER: 10104
 DATE: 04-21-2015

PROJ. MANAGER	DATE	BY	P. FINISH
DESIGN DETAILED	4/6/2012	PEM	CLA
CHECKED-REVIEWED	7/13/2012	CLA	KEK
DESIGNS DETAILED			
REVISIONS 1		Addendum No. 2	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CAMDEN
PUBLIC LANDING
LIGHTING PLAN

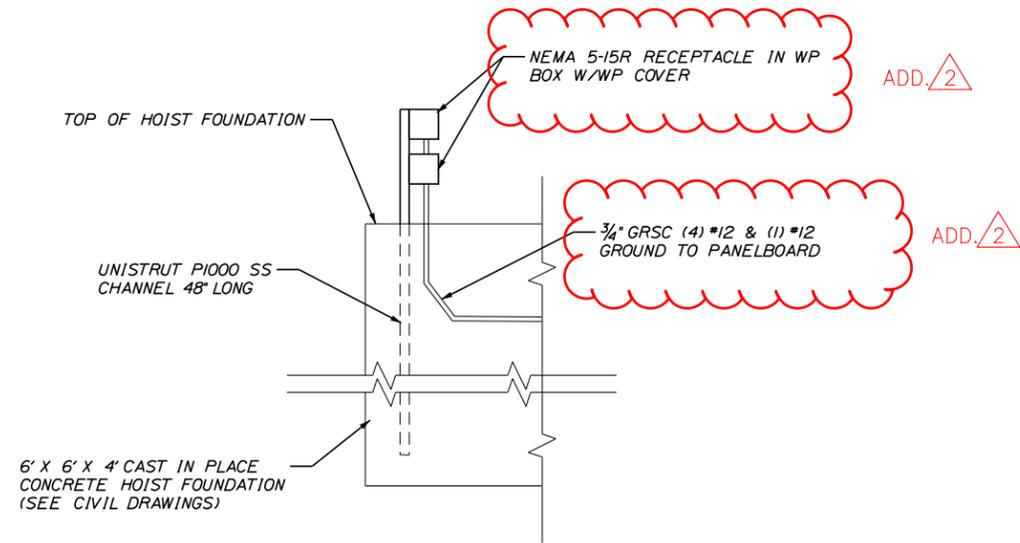
SHEET NUMBER

E-1

TYLIN INTERNATIONAL



ADD. 2



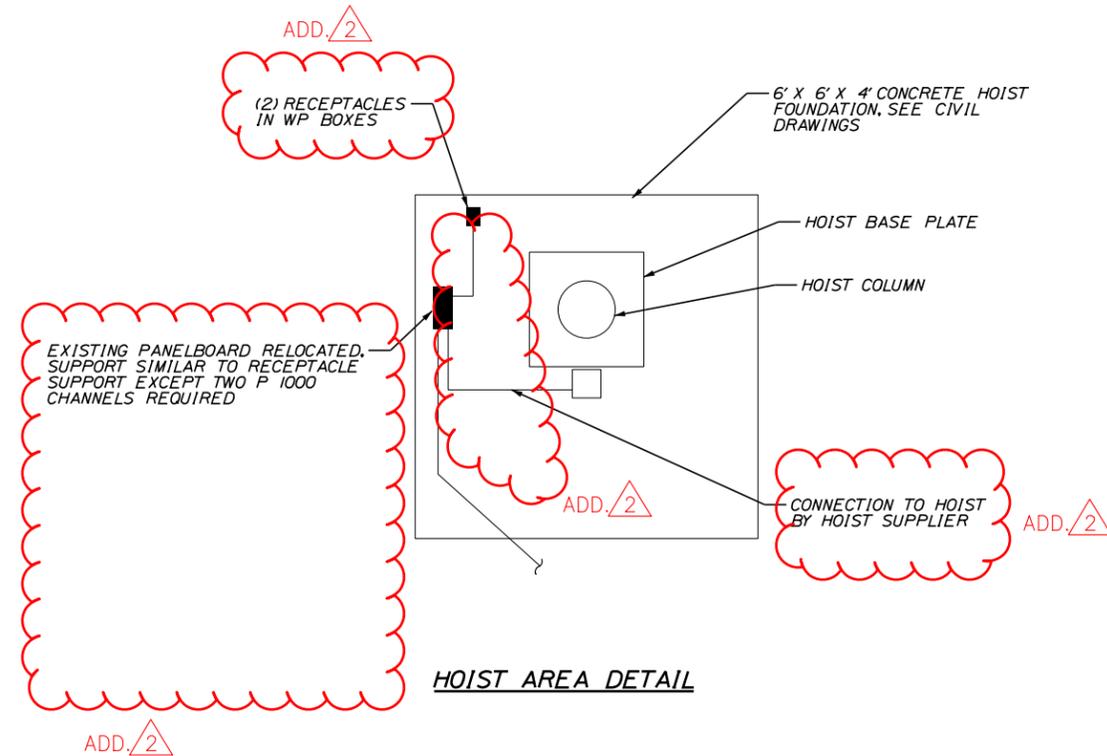
RECEPTACLE MOUNTING DETAIL

LIGHTING NOTES:

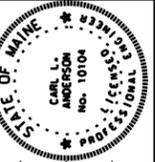
1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), TOWN OF CAMDEN REQUIREMENTS AND APPLICABLE ITEMS OF THE MOST RECENT MAINE DEPT. OF TRANSPORTATION (MEDOT) SPECIFICATIONS FOR MISCELLANEOUS CONSTRUCTION, SECTION 634-HIGHWAY LIGHTING AND STANDARD DETAILS FOR DIVISION 600 MISCELLANEOUS CONSTRUCTION UNLESS NOTED OTHERWISE.
2. WHERE CONDUIT IS REQUIRED TO PASS OVER DRAINAGE CULVERTS OR OTHER OBSTRUCTIONS AND THE SPECIFIED BURIAL DEPTH OF CONDUIT CANNOT BE MAINTAINED THE CONTRACTOR SHALL PROVIDE CONCRETE PROTECTION OF CONDUIT IN ACCORDANCE WITH NEC TABLE 300.5.
3. IN GENERAL THE SCOPE OF WORK WILL INCLUDE THE INSTALLATION OF A COMPLETE SYSTEM INCLUDING CONDUIT, CIRCUIT CONDUCTORS, GROUNDING, JUNCTION BOXES, RECEPTACLES, SUPPORTS AND RELOCATION OF EXISTING PANELBOARD. BACKFILLING, PLACEMENT OF AGGREGATE, SUBBASE AND HMA, AND PAVEMENT MARKINGS ARE INCIDENTAL TO PAY ITEM 626.45.
4. DRAWINGS ARE DIAGRAMMATIC. THE ACTUAL CONDUIT, AND RECEPTACLE PLACEMENT SHALL BE SUCH AS TO NOT CONFLICT WITH ANY EXISTING OR NEW UTILITIES OR SITE FEATURES. PLACEMENT OF RECEPTACLES AND PANELBOARD AT HOIST LOCATION SHALL NOT INTERFERE WITH OPERATION OR MOVEMENT OF HOIST.
5. INSTALLATION OF ALL UNDERGROUND CONDUITS WILL COMPLY WITH MAINE DOT STANDARD DETAIL 626 (07).
6. ALL CONDUCTORS SHALL BE COPPER WITH TYPE XHHW INSULATION.
7. ALL RECEPTACLES SHALL BE 15 AMP NEMA 5-15R WITH NYLON FACE AND BODY IN CAST MALLEABLE IRON GALVANIZED BOX WITH WEATHERPROOF WHILE IN-USE COVER (COOPER WIU-IVX OR EQUAL).
8. THE EXISTING PILES WITH DECORATIVE LIGHTING AND RECEPTACLES (FORMERLY POLE P5 1/3) SHALL BE REMOVED. THE CONTRACTOR SHALL RELOCATE EXISTING PANELBOARD TO HOIST PAD ADJACENT TO HOIST, PROVIDE ONE 50A 2-POLE CIRCUIT BREAKER FOR HOIST POWER UNIT AND UTILIZE THE TWO EXISTING GFCI CIRCUIT BREAKERS FOR RECEPTACLES AT HOIST.
9. CONDUIT LOCATED UNDERGROUND MAY BE SCHEDULE 40 PVC, PRIOR TO RISING UP FROM BELOW GROUND TRANSITION TO RIGID TO RIGID STEEL CONDUIT. ALL EXPOSED CONDUIT SHALL BE GALVANIZED RIGID STEEL.

ADD. 2

ADD. 2



HOIST AREA DETAIL



Signature: Carl L. Anderson
P.E. NUMBER: 10104
DATE: 04-21-2015

PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DESIGN-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES
	CLA	CLA						
	KEK	KEK						
			ADDENDUM No. 2					

CAMDEN
PUBLIC LANDING
LIGHTING PLAN NOTES
& DETAILS

SHEET NUMBER

E-2