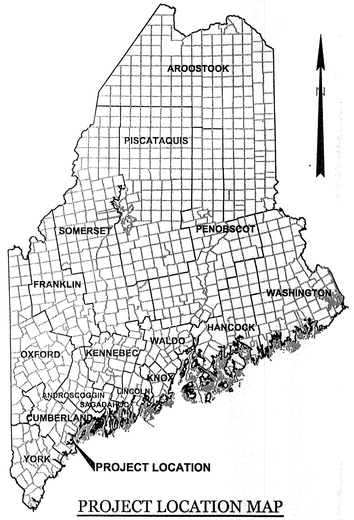
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



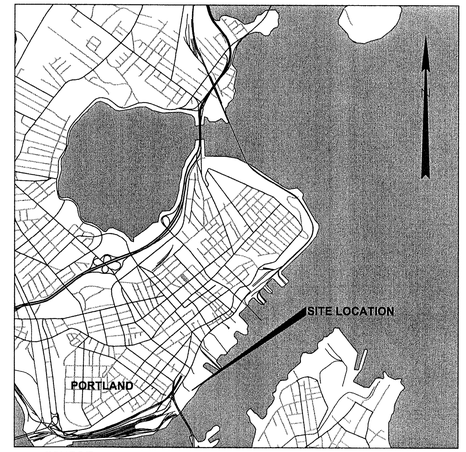
PROJECT LOCATION MAP

40 0 40 80

Scale in miles

CITY OF PORTLAND
CUMBERLAND COUNTY

PORTLAND INTERNATIONAL MARINE TERMINAL
FACILITY IMPROVEMENTS
PHASE 2 - ELECTRICAL IMPROVEMENTS
WIN: 018413.10



SOURCE:

SITE LOCATION MAP

1/2 0 1/2 1

Scale in miles

SHEET INDEX

WIN 018413.10

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE 3/5/13

COMMISSIONER

CHIEF ENGINEER 3/5/13

STATE OF MAINE — ROLAND A. LAVALLEE No. 9462 — PROFESSIONAL ENGINEER

SIGNATURE

P.E. NUMBER 9462

DATE 3/4/13

PROJECT INFORMATION

PROGRAM	M.D.T./MODAL
PROJECT MANAGER	JOEL KITTREDGE
DESIGNER	CRAIG R. MORIN, P.E.
CONSULTANT	HNTB CORP.
PROJECT RESIDENT	-
CONTRACTOR	-
PROJECT COMPLETION DATE	-

PORTLAND INTERNATIONAL MARINE TERMINAL IMPROVEMENTS
PORTLAND CUMBERLAND COUNTY

TITLE/INDEX SHEET

SHEET NUMBER 1

GENERAL NOTES:

1. RESEARCH PERFORMED BY THE MAINE DEPARTMENT OF TRANSPORTATION'S ENVIRONMENTAL OFFICE (MAINEDOT'S-ENV) SUGGESTED THAT THE SUBSURFACE ENVIRONMENT AT THE PORTLAND INTERNATIONAL MARINE TERMINAL HAD BEEN ADVERSELY AFFECTED BY PAST ACTIVITIES. SUBSEQUENT ON-SITE WORK BY MAINEDOT-ENV CONFIRMED THE REPORTED CONCERNS. HOWEVER, THE ENVIRONMENTAL ISSUES WERE NOTED TO BE LARGELY AT DEPTH; IT APPEARS THAT THE MOST RECENT WORK PROPOSED FOR THE SITE WILL NOT ENCOUNTER THE IDENTIFIED ENVIRONMENTAL CONCERNS. IN LIGHT OF THE AVAILABLE ENVIRONMENTAL DATA, THE CONTRACTOR SHALL REMAIN ALERT FOR EVIDENCE OF CONTAMINATION. IF THE CONTRACTOR ENCOUNTERS EVIDENCE OF SOIL OR GROUNDWATER CONTAMINATION, THE CONTRACTOR SHALL SECURE THE EXCAVATION, STOP WORK IN THE CONTAMINATED AREA AND IMMEDIATELY NOTIFY THE RESIDENT. THE RESIDENT SHALL CONTACT THE HYDROGEOLOGIST IN MAINEDOT'S ENVIRONMENTAL OFFICE AT 207-624-3100 AND THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION AT 800-482-0777. WORK MAY ONLY CONTINUE WITH AUTHORIZATION FROM THE RESIDENT.

2. UTILITIES REMOVED FROM SERVICE MUST BE RECONNECTED AND OPERATIONAL WITHIN A TIMEFRAME ACCEPTED BY THE OWNER. CCTV AND SECURITY SYSTEMS MUST REMAIN ONLINE AT ALL TIMES. SCHEDULING OF ALL WORK SHALL BE COORDINATED WITH CENTRAL MAINE POWER, CO., THE OWNER AND THE RESIDENT.

3. ELEVATIONS ARE IN FEET BASED ON PROJECT DATUM, NGVD29.

4. CONTRACTOR SHALL MAINTAIN ADEQUATE SURVEY CONTROL AT ALL TIMES TO ESTABLISH AND MAINTAIN ALL LINES AND ELEVATIONS.

5. 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.

6. ALL NORTH ARROWS SHOWN ARE GRID NORTH BASED ON NAD83.

7. 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 ALL CONSTRUCTION SHALL BE COORDINATED WITH THE RESIDENT.

8. EXISTING FEATURES WERE SURVEYED BY JAMES D. NADEAU, LLC UNDER SUBCONTRACT TO THE MAINE PORT AUTHORITY BETWEEN OCTOBER 2010 AND NOVEMBER 2010 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME.

9. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE RESIDENT.

10. METHODS OF CONSTRUCTION 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. INSTALL EROSIOIN CONTROL MEASURES AT STORMWATER INLET STRUCTURES AND INSTALL SEDIMENT BARRIER AT LIMITS OF PAVEMENT RECONSTRUCTION.

11. THE CONTRACTOR MAY BE CHARGED ADDITIONAL COST OF REINSPECTION OR RETEST WHEN PRIOR REJECTION MAKES REINSPECTION OR RETEST NECESSARY.

12. THE PORTLAND INTERNATIONAL MARINE TERMINAL IS IN COMPLIANCE WITH MTSA 33 CFR PART 105. ALL ACTIVITIES SHALL BE COORDINATED WITH THE PORT OPERATOR. NO ADDITIONAL TIME OR PAYMENT WILL BE MADE FOR CONTRACTOR TO ENSURE COMPLIANCE.

GEOTECHNICAL NOTES:

1. SOIL CLASSIFICATION, PROPERTIES AND DESCRIPTIONS ARE BASED ON ENGINEERING INTERPRETATION OF AVAILABLE SUBSURFACE INFORMATION BY HALEY & ALDRICH, INC. AND MAY NOT NECESSARILY REFLECT ACTUAL VARIATIONS IN SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED BETWEEN INDIVIDUAL BORINGS OR SAMPLE LOCATIONS.

2. OBSERVED WATER LEVELS AND/OR WATER CONDITIONS INDICATED ARE AS RECORDED AT THE TIME OF EXPLORATION AND MAY VARY ACCORDING TO THE PREVAILING RAINFALL, METHODS OF EXPLORATION, AND OTHER FACTORS.

3. SOUND ENGINEERING JUDGMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED HEREIN. ANALYSIS AND INTERPRETATION OF SUBSURFACE DATA WAS PERFORMED AND INTENDED FOR AUTHORITY DESIGN AND ESTIMATE PURPOSES ONLY. PRESENTATION OF THE INFORMATION ON THESE PLANS OR ELSEWHERE IS FOR THE PURPOSE OF PROVIDING INTENDED USERS WITH ACCESS TO THE SAME DATA AVAILABLE TO THE AUTHORITY. THE SUBSURFACE INFORMATION IS PRESENTED IN GOOD FAITH AND IS NOT INTENDED AS A SUBSTITUTE FOR ADDITIONAL EXPLORATIONS, INDEPENDENT INTERPRETATIONS, INDEPENDENT ANALYSIS OR JUDGMENT BY THE CONTRACTOR.

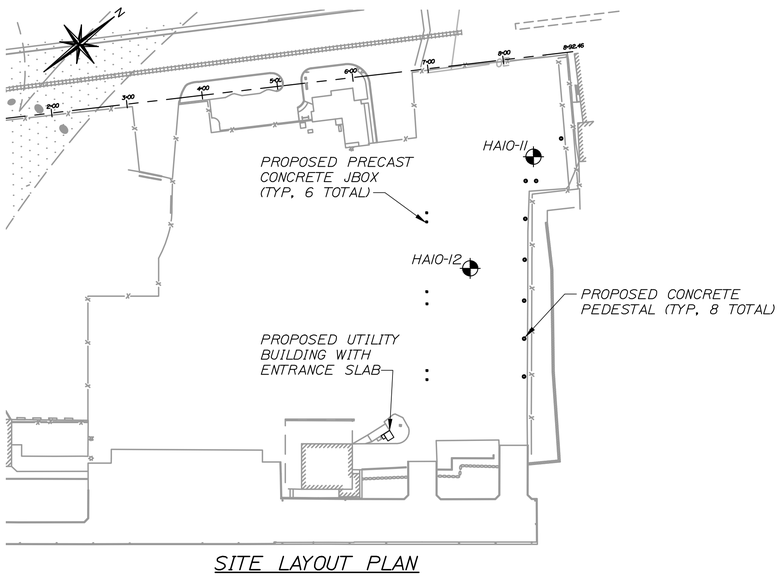
4. THE SUBSURFACE EXPLORATIONS SHOWN HEREIN WERE MADE BETWEEN NOVEMBER 15, 2010 AND NOVEMBER 18, 2010 BY HALEY & ALDRICH, INC. ALL BORINGS WERE PERFORMED BY MAINE TEST BORINGS AND WERE FIELD LOCATED BY JAMES D. NADEAU, LLC.

5. BORINGS ARE FOR THE PURPOSE OF DESIGN AND SHOW SOIL CONDITIONS AT BORING LOCATIONS ONLY, AND DO NOT NECESSARILY SHOW THE NATURE AND EXTENT OF THE MATERIALS TO BE ENCOUNTERED DURING CONSTRUCTION. ACTUAL SUBSURFACE CONDITIONS WILL VARY.

6. ELEVATIONS SHOWN ON TEST BORING LOGS ARE APPROXIMATE AND REFERENCE THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).

7. BORING STATION AND OFFSET INFORMATION IS BASED ON THE CONSTRUCTION BASELINE BETWEEN STEEL REBAR LOCATED AT THE PROPERTY CORNERS. SEE SHEET 3 FOR LAYOUT.

BORING NO.	STATION	OFFSET (RT)
HAIO-11	8+27.7	131.6'
HAIO-12	7+27.8	268.1'



SITE LAYOUT PLAN
SCALE: 1"=100'-0"

ABBREVIATIONS:

BLDG	BUILDING
CIP	CAST-IN-PLACE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CY	CUBIC YARD
DIA	DIAMETER
EA	EACH
EF	EACH FACE
ELEV	ELEVATION IN FEET
EW	EACH WAY
FFE	FIRST FLOOR ELEVATION
HDG	HOT DIPPED GALVANIZED
ID	INSIDE DIAMETER
INV	INVERT
JBOX	AT GRADE JUNCTION BOX
K (KIP)	1000 POUNDS
LBS	POUNDS
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
PSF	POUNDS PER SQUARE FOOT
R	RADIUS
REF	REFERENCE
REQ'D	REQUIRED
SCH	SCHEDULE
S	SLOPE
SQ	SQUARE
SF	SQUARE FEET
TYP	TYPICAL

LEGEND:

PLATE
CENTER LINE
#6 REINFORCING BAR SIZE
TEST BORINGS
FIRE HYDRANT
UNDERGROUND ELECTRIC BOX
EXISTING LIGHT POLE
PROPOSED LIGHT SWITCH
PROPOSED ELECTRIC METER
HARDWOOD TREE
SANITARY MANHOLE
WATER GATE
CATCH BASIN
DRAIN MANHOLE
MANHOLE
TELEPHONE MANHOLE
ELECTRICAL MANHOLE
PROPOSED JBOX
PROPOSED REEFER PEDESTAL
EXISTING CHAIN LINK FENCE
EXISTING CHAIN LINK FENCE
GUARD RAIL
OVERHEAD ELECTRIC
UNDERGROUND ELECTRIC
SANITARY SEWER
STORM DRAIN
TELEPHONE
WATER
GAS
CURBING
RAILROAD TRACKS

HALEY & ALDRICH — **TEST BORING REPORT** — **Boring No. HA10-11**

Project: Portland International Marine Terminal Improvements, Portland, Maine
Client: HNTB Corporation
Contractor: Maine Test Borings

File No. 37272-000 | Sheet No. 1 of 1 | Start 18 November 2010 | Finish 18 November 2010 | Driller R. Leonard | H&A Rep. M. Foley | Elevation 12.5 (approx.) | Datum NGVD 29 | Location See Plan

	Casing	Sampler	Barrel
Type	SSA	S	-
Inside Diameter (in.)	-	1.375	-
Hammer Weight (lb)	-	140	-
Hammer Fall (in.)	-	30	-

Drilling Equipment and Procedures: Rig Make & Model: Mobile Drill B53; Bit Type: Roller Bit; Drill Mud: None; Casing: SSA to 1.0'; Hoist/Hammer: Winch / Safety Hammer; PID Make & Model: N/A

Depth (ft)	Sample Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/(Depth ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions) GEOLOGIC INTERPRETATION	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	Sand % Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Dry Strength
0				12.2 / 0.2	SW	-BITUMINOUS CONCRETE-										
	13 30 14 18	S1	1.0 3.0	11.5 / 1.0	SW	Augered through cobble at 0.5 ft. Dense, brown, well graded SAND with gravel (SW)			20	10	15	55				
	11 30 30 15	S1	1.0 3.0	11.2 / 1.3	SP	Very dense, white, poorly graded SAND (SP) -BASE/SUBBASE-			10	5	75	10				
				9.5 / 3.0		Very dense, dark brown, well graded SAND with gravel (SW), contains brick fragments, ash, mps 2.0 in., no odor, dry -FILL-			20	10	15	50	5			
						Bottom of Exploration 3.0 ft										

Water Level Data: Date | Time | Elapsed Time (hr.) | Depth (ft) to: Bottom of Casing | Bottom of Hole | Water

Sample ID: O - Open End Rod; T - Thin Wall Tube; U - Undisturbed Sample; S - Split Spoon Sample

Well Diagram: Riser Pipe, Screen, Filter Sand, Cuttings, Grout, Concrete, Bentonite Seal

Summary: Overburden (ft) 3.0; Rock Cored (ft) --; Samples 1S; **Boring No. HA10-11**

Field Tests: Dilatancy: R - Rapid S - Slow N - None; Toughness: L - Low M - Medium H - High; Plasticity: N - Nonplastic L - Low M - Medium H - High; Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.
Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

HALEY & ALDRICH — **TEST BORING REPORT** — **Boring No. HA10-12**

Project: Portland International Marine Terminal Improvements, Portland, Maine
Client: HNTB Corporation
Contractor: Maine Test Borings

File No. 37272-000 | Sheet No. 1 of 1 | Start 18 November 2010 | Finish 18 November 2010 | Driller R. Leonard | H&A Rep. M. Foley | Elevation 13.5 (approx.) | Datum NGVD 29 | Location See Plan

	Casing	Sampler	Barrel
Type	SSA	S	-
Inside Diameter (in.)	-	1.375	-
Hammer Weight (lb)	-	140	-
Hammer Fall (in.)	-	30	-

Drilling Equipment and Procedures: Rig Make & Model: Mobile Drill B53; Bit Type: Roller Bit; Drill Mud: None; Casing: SSA to 0.5'; Hoist/Hammer: Winch / Safety Hammer; PID Make & Model: N/A

Depth (ft)	Sample Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/(Depth ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions) GEOLOGIC INTERPRETATION	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	Sand % Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Dry Strength
0				13.2 / 0.3	SW	-BITUMINOUS CONCRETE-										
	13 30 14 18	S1	0.5 2.5	12.5 / 1.0	SP	Dense, brown, well graded SAND with gravel (SW), mps 1.0 in., no odor, damp			20	15	15	50				
	17 30 14 18	S1	0.5 2.5	11.0 / 2.5	SM	Dense, dark brown to black, poorly graded SAND with gravel (SP), mps 1.5 in., no odor, moist -BASE/SUBBASE-			15	5	10	70				
	17 11 18 12	S2	2.5 4.5	9.0 / 4.5		Medium dense, dark brown, silty SAND with gravel (SM), mps 1.5 in., no odor, moist, contains ash, decomposed wood and brick fragments -FILL-			20	5	10	45	20			
						Bottom of Exploration 4.5 ft										

Water Level Data: Date | Time | Elapsed Time (hr.) | Depth (ft) to: Bottom of Casing | Bottom of Hole | Water

Sample ID: O - Open End Rod; T - Thin Wall Tube; U - Undisturbed Sample; S - Split Spoon Sample

Well Diagram: Riser Pipe, Screen, Filter Sand, Cuttings, Grout, Concrete, Bentonite Seal

Summary: Overburden (ft) 4.5; Rock Cored (ft) --; Samples 2S; **Boring No. HA10-12**

Field Tests: Dilatancy: R - Rapid S - Slow N - None; Toughness: L - Low M - Medium H - High; Plasticity: N - Nonplastic L - Low M - Medium H - High; Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.
Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER 018413.10

WIN 018413.10

	BY	DATE
PROJ. MANAGER	CRAIG R. MORIN	
DESIGN-DETAILED	HME	3/1/13
CHECKED-REVIEWED	CRM	3/1/13
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND INTERNATIONAL
MARINE TERMINAL IMPROVEMENTS
PORTLAND CUMBERLAND COUNTY

GENERAL NOTES AND SITE LAYOUT

SHEET NUMBER

2

2 OF 7

NAME: M:\jobs\60213 - IMT Eimskip Phase 2\CAD\PHASE 2\WORKING-PH2.dwg DATE: Mar 01, 2013 - 1:57pm

NOTES:
1. REEFER OUTLET ASSEMBLIES SHOWN HEREIN WILL BE PRE-PURCHASED BY THE MAINEDOT AND SHALL BE SHIPPED DIRECTLY TO THE PROJECT SITE. THE CONTRACTOR SHALL OFFLOAD AND STORE THE ASSEMBLIES ON-SITE UPON ARRIVAL OF THE SHIPMENT. THE RESIDENT WILL DESIGNATE THE STORAGE LOCATION. CONTRACTOR SHALL FULLY INSTALL THE PEDESTAL-MOUNTED REEFER OUTLET ASSEMBLIES ONCE THE CONCRETE PEDESTALS ARE COMPLETE AND WIRING IS CHASED.

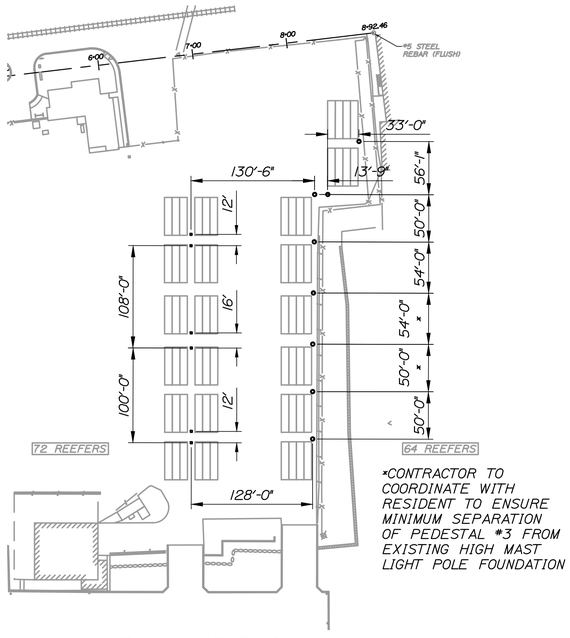
2. CORING AND CONNECTION OF UNDERDRAIN PIPE SHALL INCIDENTAL TO PAY ITEM 605.07, 4" UNDERDRAIN PIPE..

3. FOR TRENCH SECTIONS, SEE SHEETS 5 AND 6.

4. AFTER INSTALLATION OF THE 8-GANG PEDESTAL MOUNTED REEFER OUTLET ASEMBLIES, ALL CONDUIT OPENINGS MUST BE COMPLETELY SEALED WITH EXPANDING FOAM.

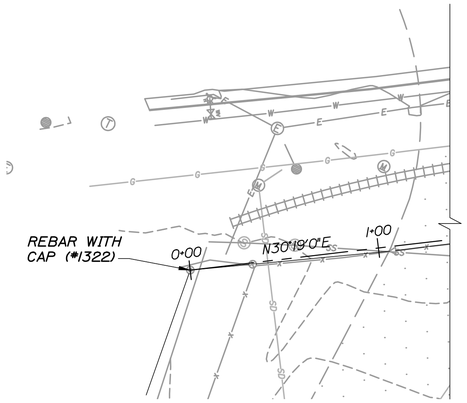
CONCRETE PEDESTAL LOCATION TABLE		
NO.	STATION	OFFSET
1	7+78.33	418.14'
2	7+84.27	368.50'
3	7+90.22	318.82'
4	7+97.16	265.29'
5	8+04.43	211.76'
6	8+10.71	162.18'
7	8+24.33	163.78'
8	8+63.66	112.02'

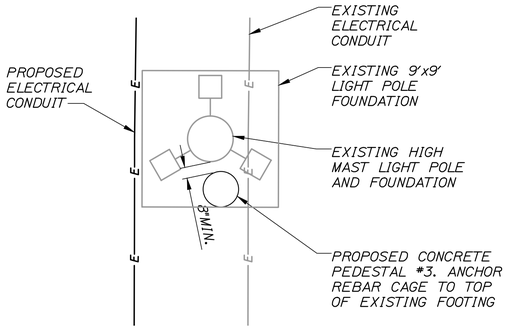
JBOX LOCATION TABLE		
NO.	STATION	OFFSET
1	6+50.73	407.19'
2	6+52.14	395.27'
3	6+62.43	307.88'
4	6+64.16	291.96'
5	6+74.77	200.57'
6	6+76.17	188.67'



*CONTRACTOR TO COORDINATE WITH RESIDENT TO ENSURE MINIMUM SEPARATION OF PEDESTAL #3 FROM EXISTING HIGH MAST LIGHT POLE FOUNDATION

OPERATIONS PLAN
SCALE: 1"=80'





DETAIL 1
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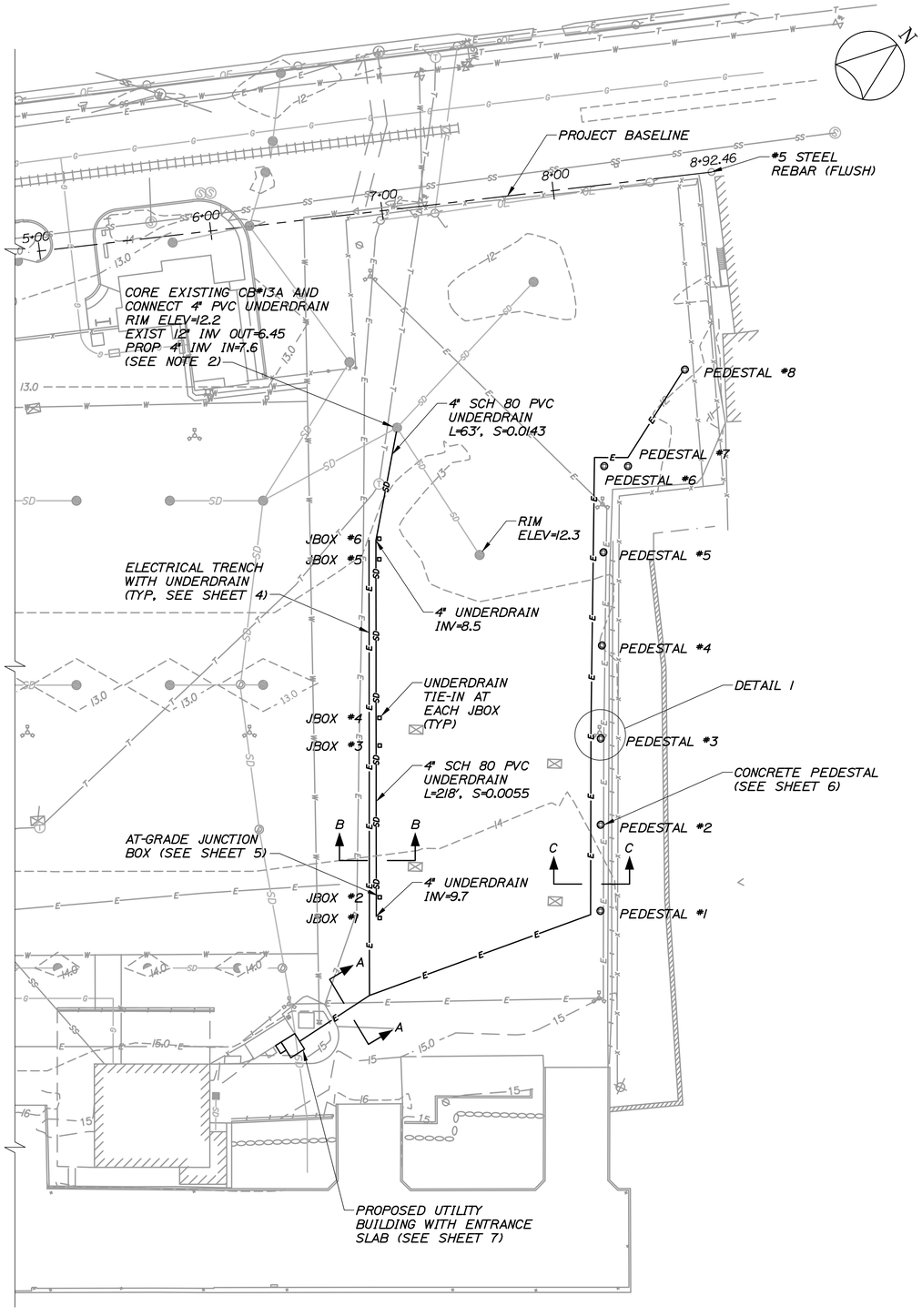
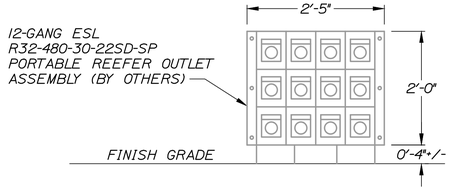
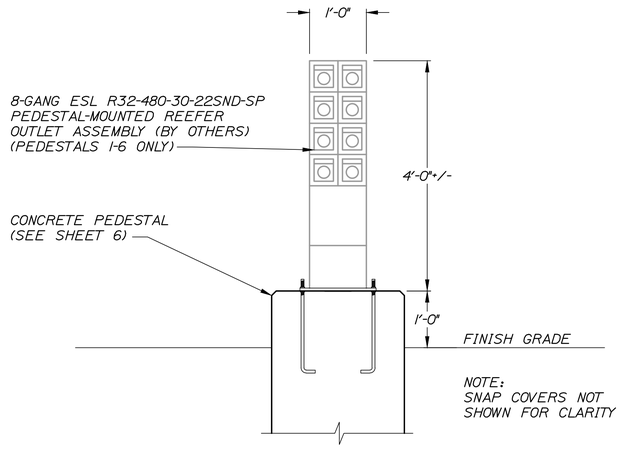


ELECTRICAL TRENCH LAYOUT
SCALE: 1"=40'



NOTE:
SNAP COVERS NOT SHOWN FOR CLARITY

12-GANG PORTABLE REEFER OUTLET ASSEMBLY
NOT TO SCALE



NOTE:
SNAP COVERS NOT SHOWN FOR CLARITY

8-GANG PEDESTAL-MOUNTED REEFER OUTLET ASSEMBLY
NOT TO SCALE

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER 018413.10

WIN
018413.10

PROJ. MANAGER CRAIG R. MORIN	BY	DATE
DESIGN-DETAILED	HME	3/1/13
CHECKED-REVIEWED	CRM	3/1/13
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

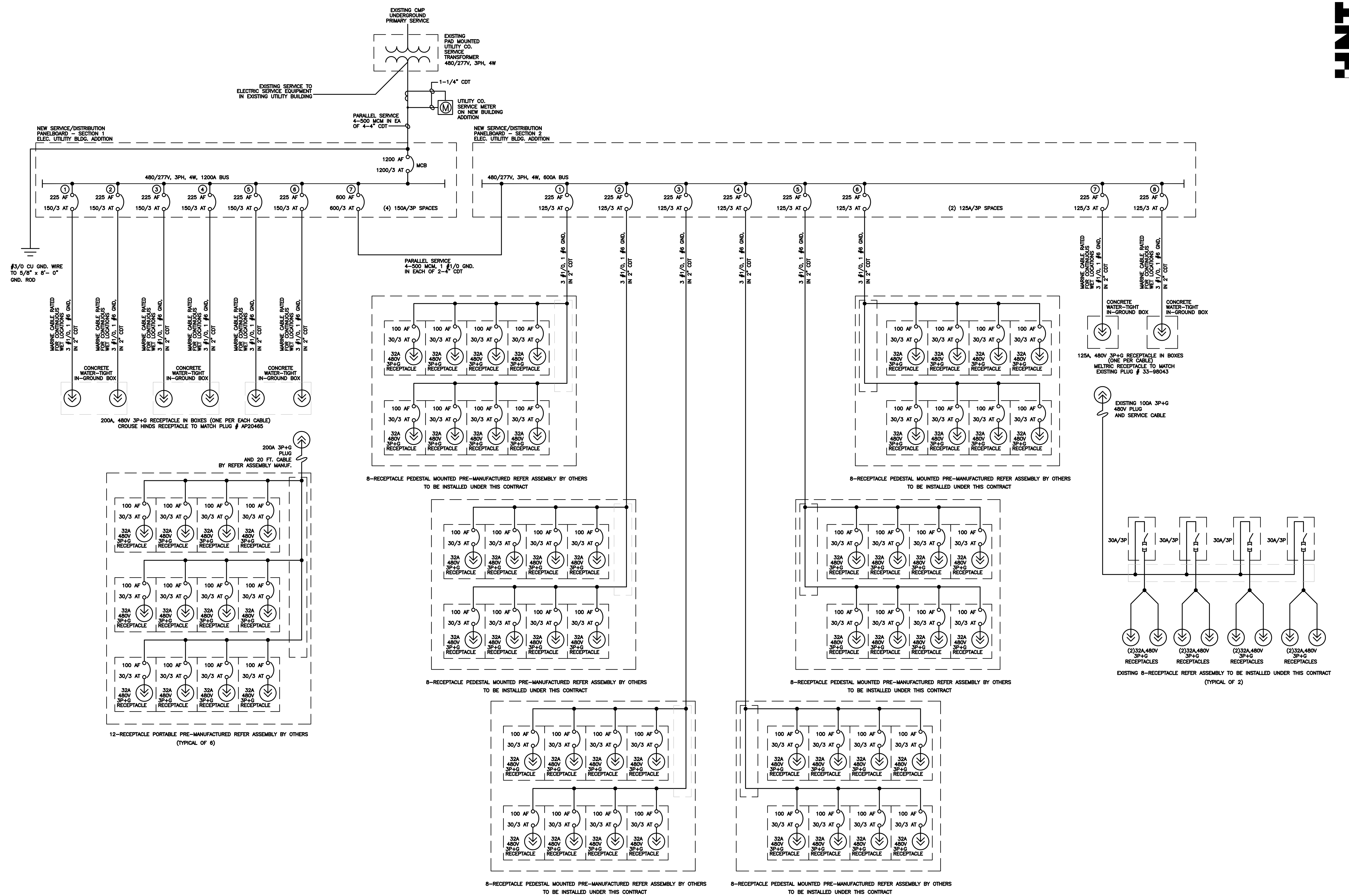
P.E. NUMBER

DATE

PORTLAND INTERNATIONAL
MARINE TERMINAL IMPROVEMENTS
PORTLAND CUMBERLAND COUNTY

PROPOSED SITE ELECTRICAL

SHEET NUMBER
3
3 OF 7



NAME: M:\jobs\60213 - IMT Elmskip Phase 2\CAD\FROM BARTLETT\1233 Sheet 4 02-20-13.dwg DATE: Mar 01, 2013 - 2:10pm

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER 018413.10

WIN 018413.10

STATE OF MAINE — LAWRENCE E. BARTLETT — #7928 — LICENSED — PROFESSIONAL ENGINEER

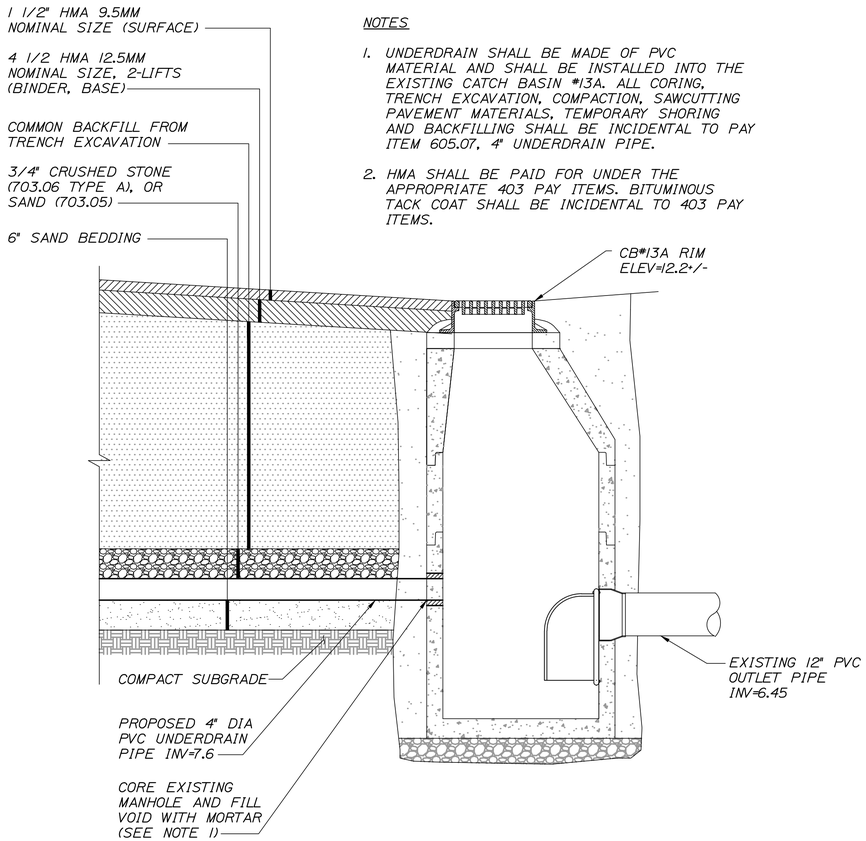
SIGNATURE	P.E. NUMBER 7928	DATE 02/25/13

	BY	DATE
PROJ. MANAGER CRAIG R. MORIN		
DESIGN-DETAILED	LEB	2/25/13
CHECKED-REVIEWED	LEB	2/25/13
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL
MARINE TERMINAL IMPROVEMENTS
PORTLAND CUMBERLAND COUNTY

ELECTRICAL SINGLE LINE DIAGRAM

SHEET NUMBER
4



NOTES

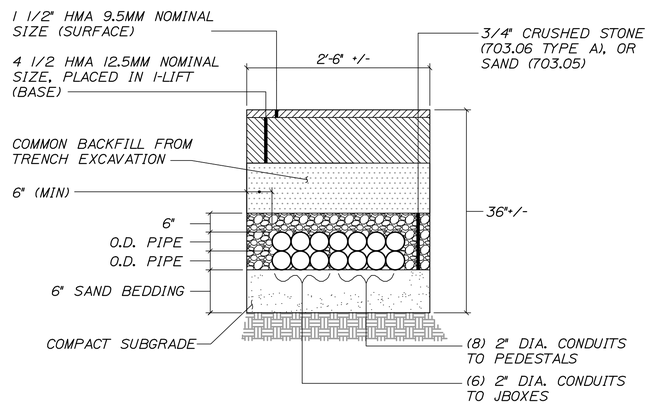
1. UNDERDRAIN SHALL BE MADE OF PVC MATERIAL AND SHALL BE INSTALLED INTO THE EXISTING CATCH BASIN #13A. ALL CORING, TRENCH EXCAVATION, COMPACTION, SAWCUTTING PAVEMENT MATERIALS, TEMPORARY SHORING AND BACKFILLING SHALL BE INCIDENTAL TO PAY ITEM 605.07, 4" UNDERDRAIN PIPE.
2. HMA SHALL BE PAID FOR UNDER THE APPROPRIATE 403 PAY ITEMS. BITUMINOUS TACK COAT SHALL BE INCIDENTAL TO 403 PAY ITEMS.

CATCH BASIN MODIFICATIONS

NOT TO SCALE

NOTES

1. ALL TRENCH WORK INCLUDING SAWCUTTING PAVEMENT, TRENCH EXCAVATION, COMPACTION, MATERIALS, TEMPORARY SHORING (IF NEEDED) AND BACKFILLING SHALL BE INCIDENTAL TO PAY ITEM 626.45 ELECTRICAL CONDUIT, WIRING AND TRENCHING.
2. ELECTRICAL CONDUITS SHALL BE SCHEDULE 80 PVC.
3. BITUMINOUS TACK BETWEEN EACH LIFT OF HMA, PAYMENT SHALL BE INCIDENTAL TO 403 PAY ITEMS.



SECTION A-A

NOT TO SCALE

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER 018413.10

WIN 018413.10

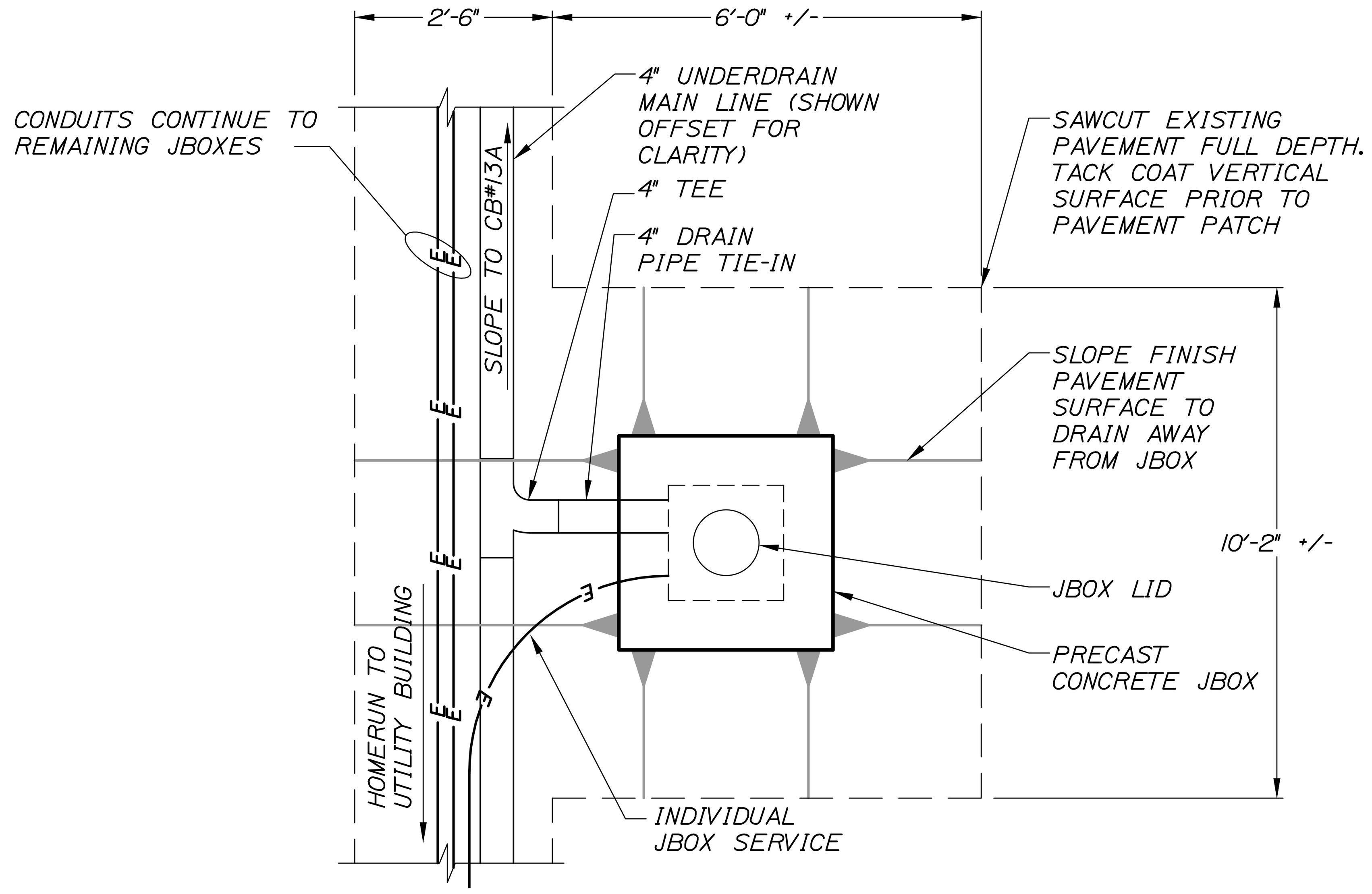
	BY	DATE
SIGNATURE		
P.E. NUMBER		
DATE		
PROJ. MANAGER CRAIG R. MORIN		
DESIGN-DETAILED	HME	3/1/13
CHECKED-REVIEWED	CRM	3/1/13
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL
MARINE TERMINAL IMPROVEMENTS
PORTLAND CUMBERLAND COUNTY

ELECTRICAL DETAILS 1

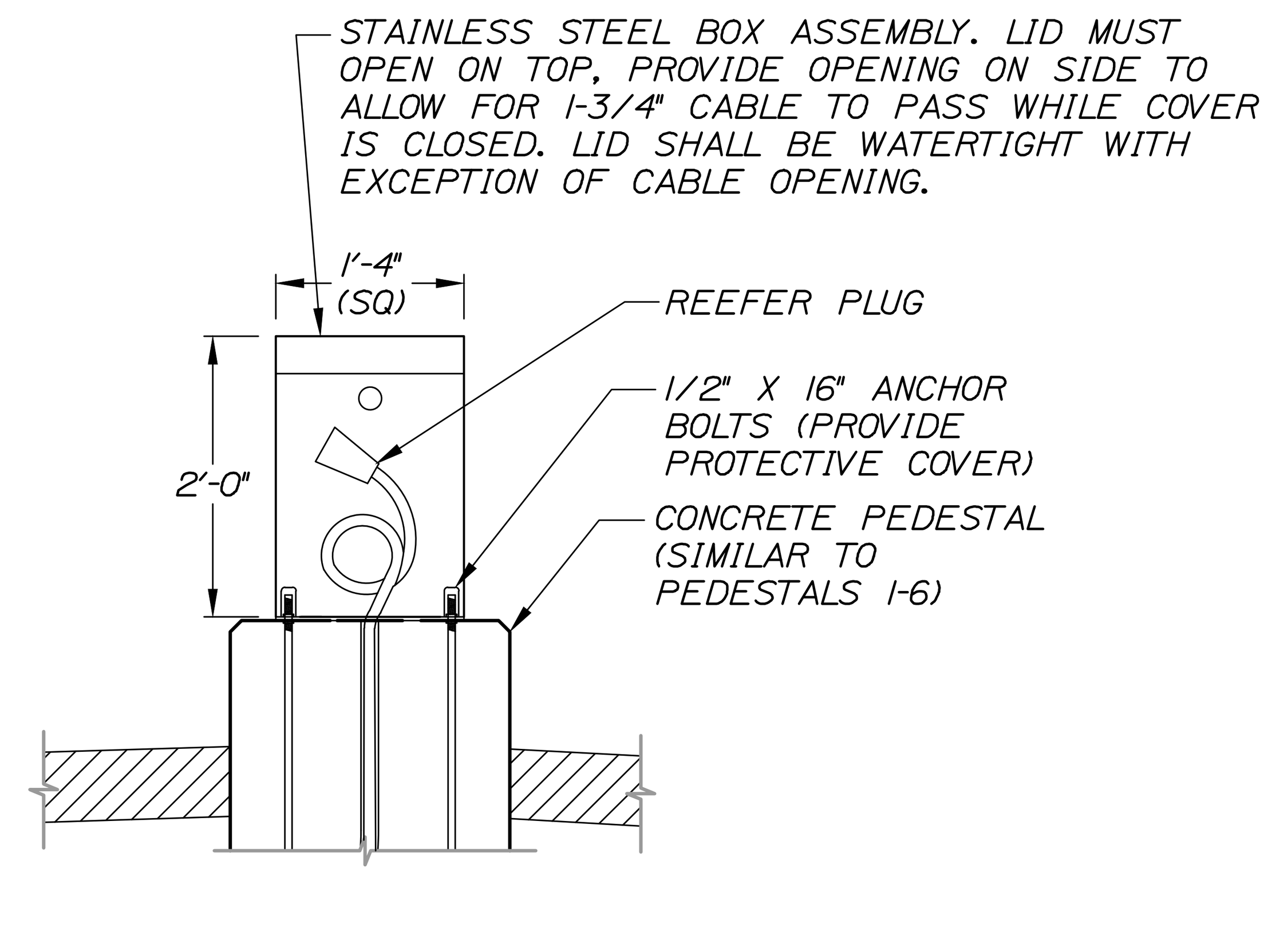
SHEET NUMBER

5



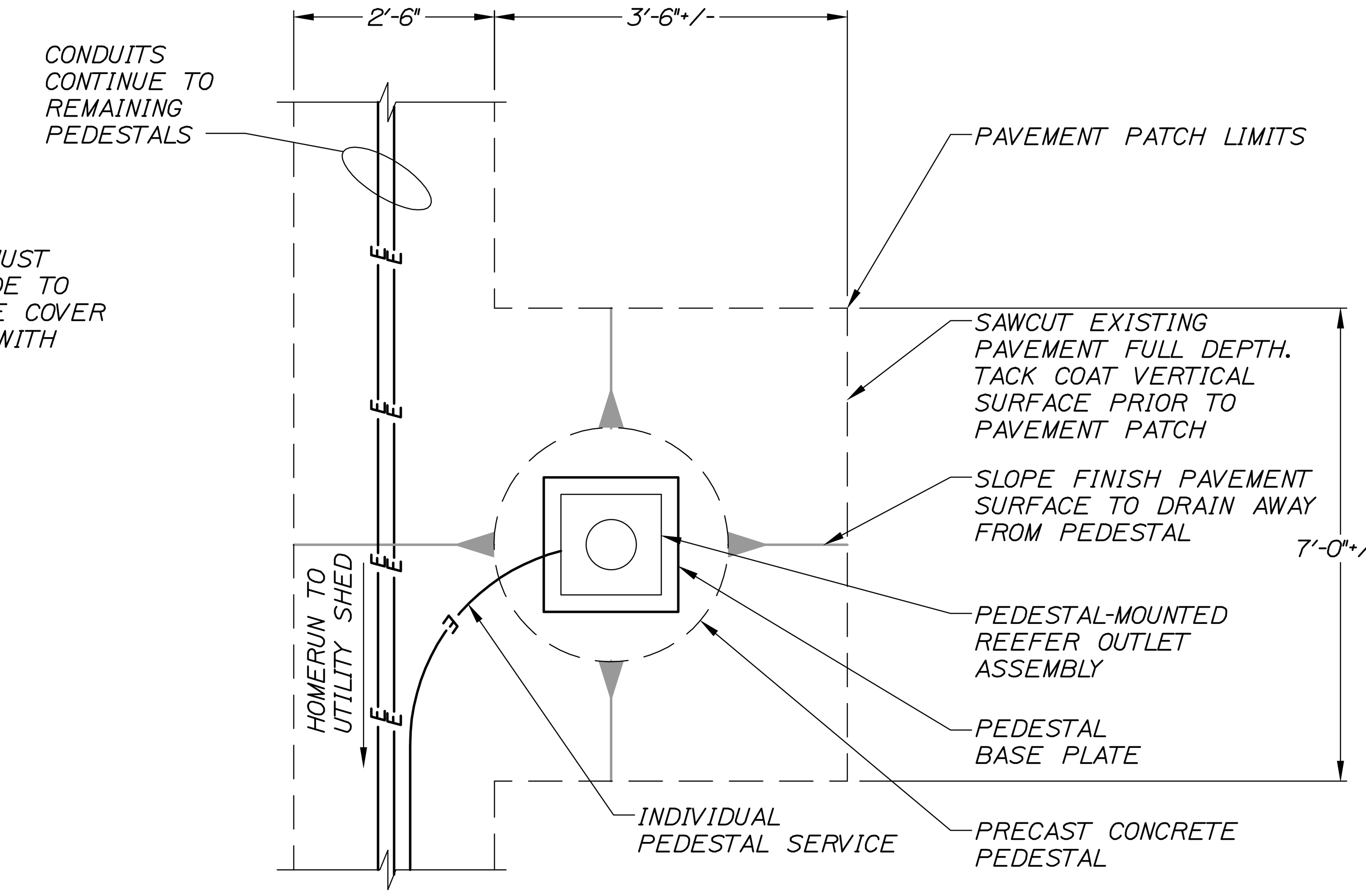
TYPICAL JBOX PLAN

NOT TO SCALE



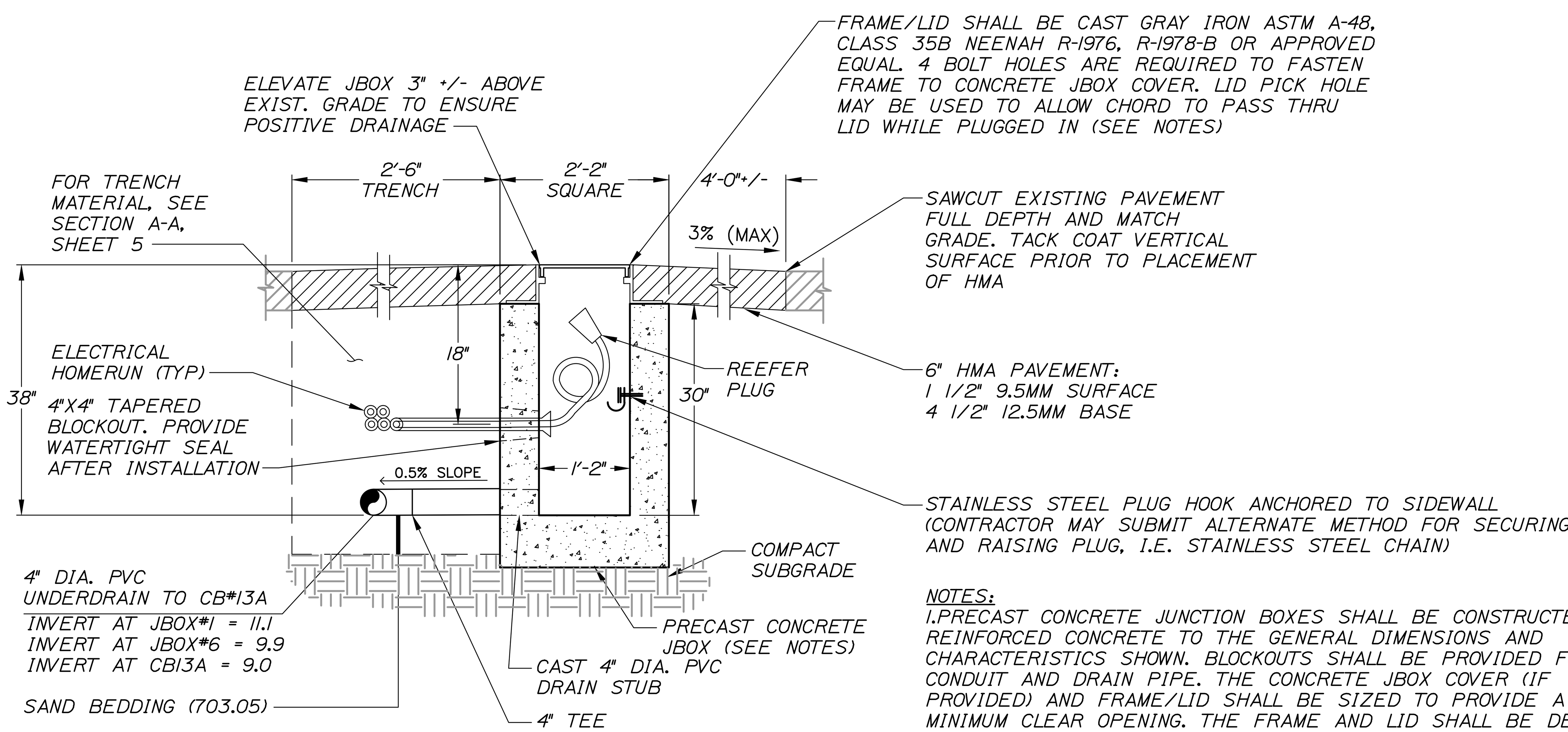
DETAIL A

NOT TO SCALE



TYPICAL PEDESTAL PLAN

NOT TO SCALE

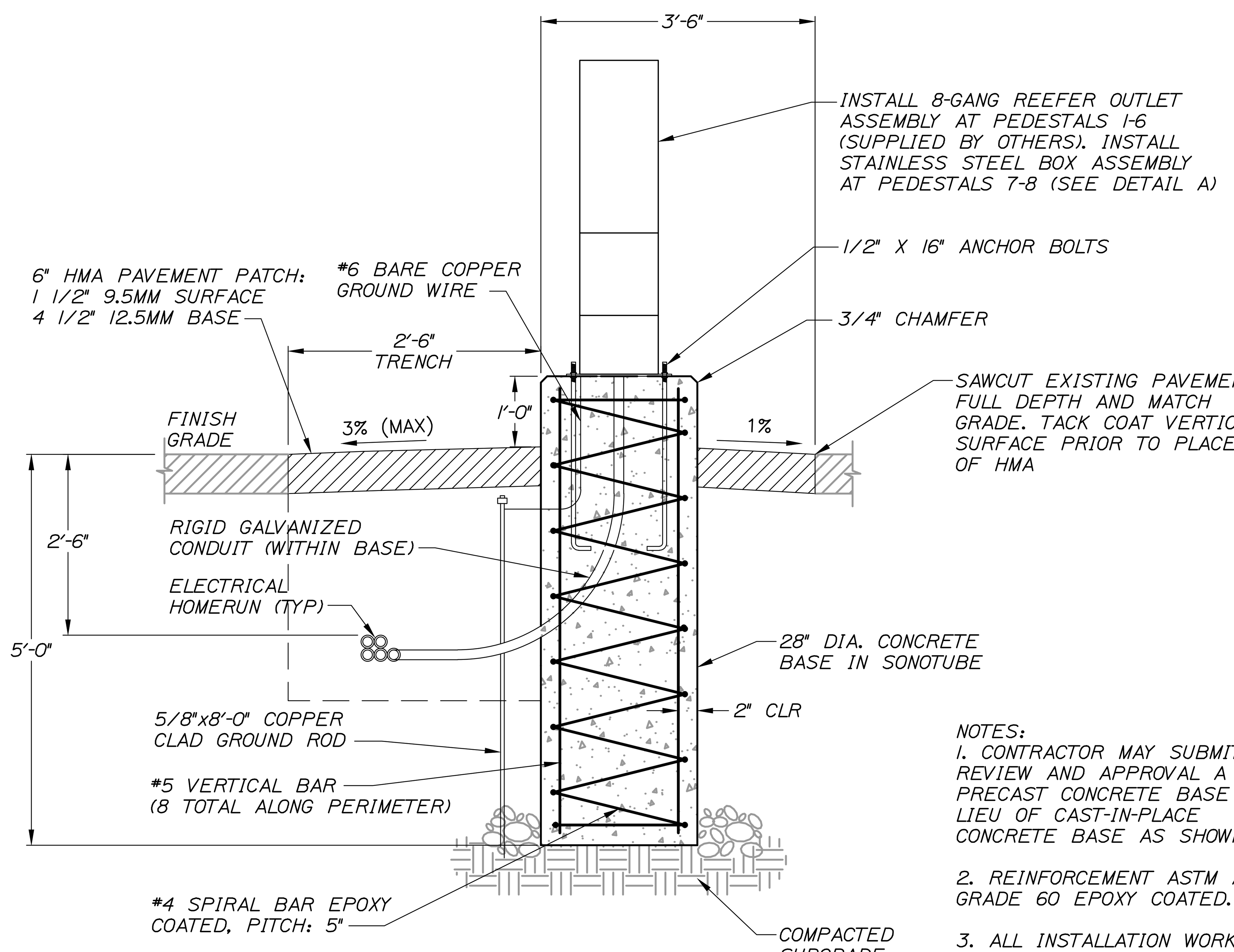


SECTION B-B (JBOXES 1-6)

NOT TO SCALE

NOTES:

1. PRECAST CONCRETE JUNCTION BOXES SHALL BE CONSTRUCTED OF REINFORCED CONCRETE TO THE GENERAL DIMENSIONS AND CHARACTERISTICS SHOWN. BLOCKOUTS SHALL BE PROVIDED FOR CONDUIT AND DRAIN PIPE. THE CONCRETE JBOX COVER (IF PROVIDED) AND FRAME/LID SHALL BE SIZED TO PROVIDE A 10" MINIMUM CLEAR OPENING. THE FRAME AND LID SHALL BE DESIGNED SO AS TO ALLOW A 1-3/4" DIAMETER CABLE TO BE PLUGGED IN WHILE CLOSED, YET REMAIN WATER TIGHT WHEN NO CABLE IS PRESENT. THE CONTRACTOR SHALL SUBMIT DESIGN PLANS AND CALCULATIONS FOR THE PRECAST JUNCTION BOX FOR REVIEW BY THE ENGINEER. DESIGN PLANS SHALL BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER AND SHALL BE DESIGNED FOR THE FOLLOWING WHEEL LOAD:
   A: 110,000 LB W/ 42"X13" WHEEL FOOTPRINT.
2. REINFORCEMENT SHALL BE ASTM A615, GRADE 60 EPOXY COATED.
3. HMA: 1 1/2" 9.5MM SURFACE, REMAINING SECTION WITH 12.5MM.
4. PROVIDE MINIMUM 8' LENGTH OF 4" DIA PVC PIPE STUB FOR CONNECTION TO UNDERDRAIN SYSTEM.
5. LEAVE 48" OF SLACK CABLE WITHIN THE JBOX FOR EACH REEFER PLUG.
5. ALL INSTALLATION WORK INCLUDING SAWCUTTING PAVEMENT, EXCAVATION, COMPACTION, MATERIALS, TEMPORARY SHORING (IF NEEDED) AND BACKFILLING SHALL BE INCIDENTAL TO PAY ITEM 626.113, PRECAST CONCRETE JUNCTION BOX - HEAVY DUTY.



NOTES:

1. CONTRACTOR MAY SUBMIT FOR REVIEW AND APPROVAL A PRECAST CONCRETE BASE IN LIEU OF CAST-IN-PLACE CONCRETE BASE AS SHOWN
2. REINFORCEMENT ASTM A615, GRADE 60 EPOXY COATED.
3. ALL INSTALLATION WORK INCLUDING SAWCUTTING PAVEMENT, EXCAVATION, COMPACTION, MATERIALS, TEMPORARY SHORING (IF NEEDED) AND BACKFILLING SHALL BE INCIDENTAL TO PAY ITEM 626.322, CONCRETE PEDESTAL FOUNDATION.

SECTION C-C

NOT TO SCALE

HNTB

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER 018413.10

WIN 018413.10

	BY	DATE
PROJ. MANAGER CRAIG R. MORIN		
DESIGN-DETAILED	HME	3/1/13
CHECKED-REVIEWED	CRM	3/1/13
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND INTERNATIONAL MARINE TERMINAL IMPROVEMENTS

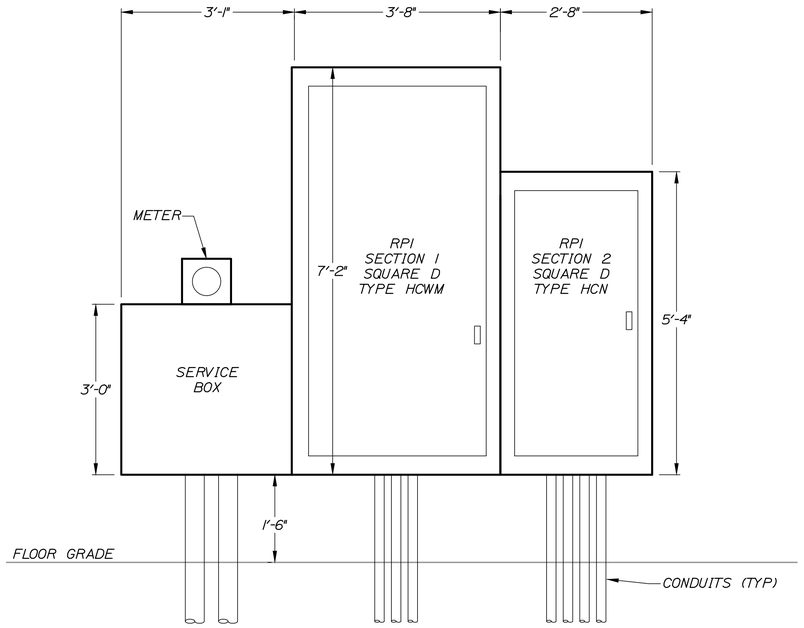
PORTLAND CUMBERLAND COUNTY

ELECTRICAL DETAILS 2

SHEET NUMBER

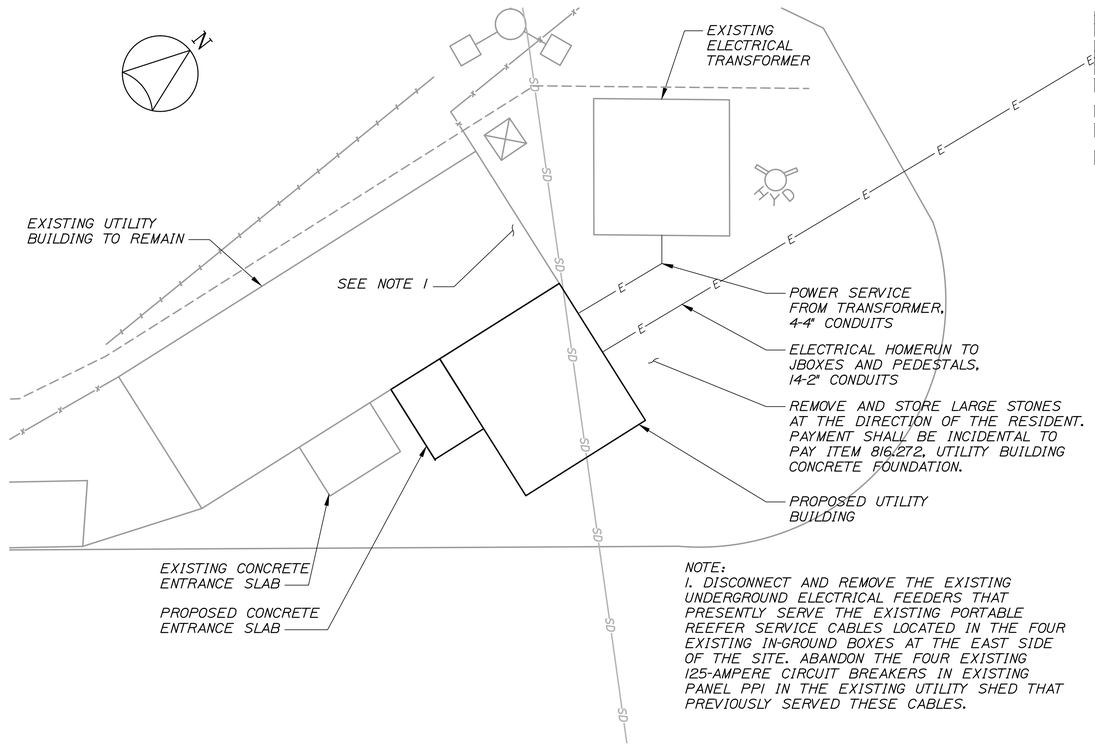
6

NAME: M:\jobs\60213 - IMT Eimskip Phase 2\CAD\PHASE 2\WORKING-PH2.dwg DATE: Mar 01, 2013 - 2:09pm



ELECTRICAL PANEL DETAILS

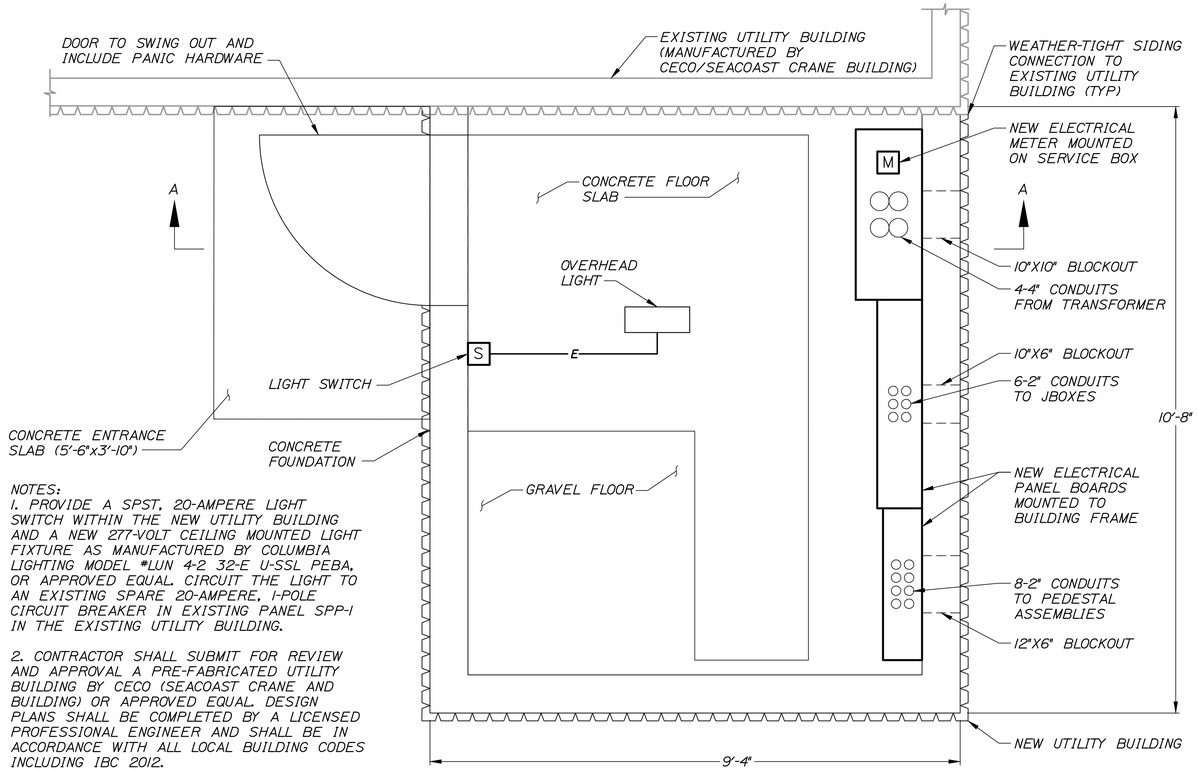
NOT TO SCALE



NOTE:
1. DISCONNECT AND REMOVE THE EXISTING UNDERGROUND ELECTRICAL FEEDERS THAT PRESENTLY SERVE THE EXISTING PORTABLE REEFER SERVICE CABLES LOCATED IN THE FOUR EXISTING IN-GROUND BOXES AT THE EAST SIDE OF THE SITE. ABANDON THE FOUR EXISTING 125-AMPERE CIRCUIT BREAKERS IN EXISTING PANEL PP1 IN THE EXISTING UTILITY SHED THAT PREVIOUSLY SERVED THESE CABLES.

UTILITY BUILDING SITE PLAN

SCALE: 1"=5'



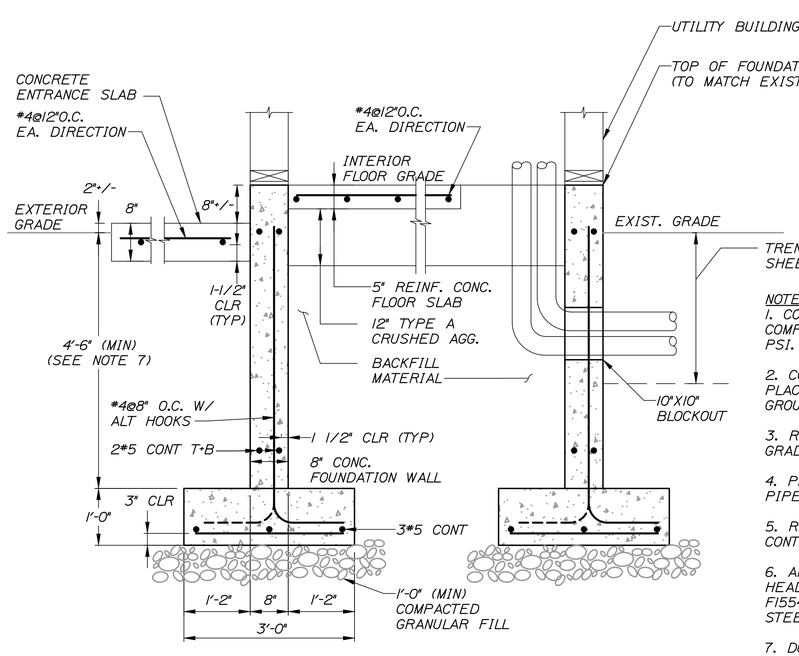
NOTES:
1. PROVIDE A SPST, 20-AMPERE LIGHT SWITCH WITHIN THE NEW UTILITY BUILDING AND A NEW 277-VOLT CEILING MOUNTED LIGHT FIXTURE AS MANUFACTURED BY COLUMBIA LIGHTING MODEL #LUN 4-2 32-E U-SSL PEBA, OR APPROVED EQUAL. CIRCUIT THE LIGHT TO AN EXISTING SPARE 20-AMPERE, 1-POLE CIRCUIT BREAKER IN EXISTING PANEL SPP-1 IN THE EXISTING UTILITY BUILDING.

2. CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL A PRE-FABRICATED UTILITY BUILDING BY CECO (SEACOAST CRANE AND BUILDING) OR APPROVED EQUAL. DESIGN PLANS SHALL BE COMPLETED BY A LICENSED PROFESSIONAL ENGINEER AND SHALL BE IN ACCORDANCE WITH ALL LOCAL BUILDING CODES INCLUDING IBC 2012.

3. CONTRACTOR'S DESIGN OF PRE-FABRICATED UTILITY BUILDING SHALL INCLUDE WEATHER-TIGHT SIDING CONNECTION AND SLOPED ROOF TO MATCH EXISTING.

NEW UTILITY BUILDING DETAILS

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



UTILITY BUILDING FOUNDATION SECTION A-A

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

NOTES:
1. CONCRETE SHALL HAVE 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.

2. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

3. REINFORCEMENT PER ASTM A615, GRADE 60 EPOXY COATED.

4. PROVIDE BLOCKOUTS WHERE PIPES PASS THROUGH CONCRETE.

5. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS.

6. ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO FI554, GRADE 36 KSI WELDABLE STEEL.

7. DURING EXCAVATIONS, CONTRACTOR SHALL IDENTIFY THE DEPTH OF FOOTING OF THE EXISTING UTILITY BUILDING AND REPORT THIS INFORMATION TO THE ENGINEER. EXISTING FOOTINGS SHALL NOT BE UNDERMINED.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND INTERNATIONAL
MARINE TERMINAL IMPROVEMENTS
PORTLAND CUMBERLAND COUNTY

UTILITY BUILDING DETAILS

SHEET NUMBER

7

7 OF 7

NAME: M:\jobs\60213 - INT Eimskip Phase 2\CAD\PHASE 2\WORKING-PH2.dwg DATE: Mar 01, 2013 - 2:10pm