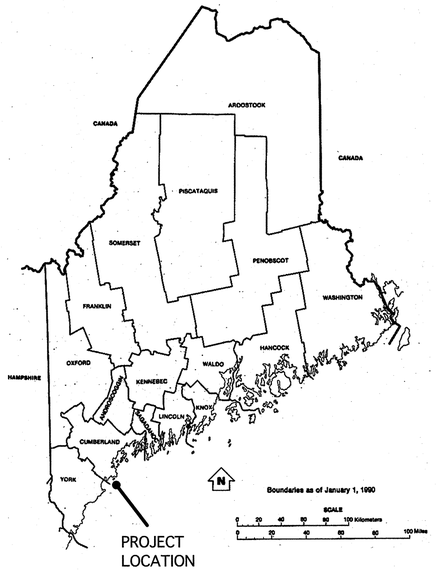
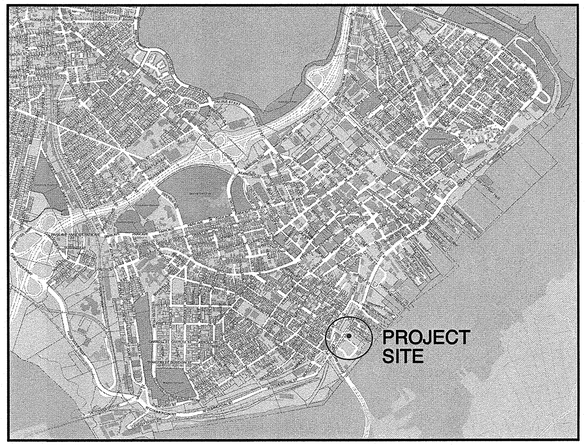
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



CITY OF PORTLAND
CUMBERLAND COUNTY

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS CENTER
FEDERAL PROJECT NO. 2194202
WIN 021942.02



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WIN 021942.02 FEDERAL PROJECT NO. 2194202

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED	DATE
COMMISSIONER: Jam Wass	3/14/18
DEPUTY CHIEF ENGINEER: Debra L	3/14/18

STATE OF MAINE * JOHN A BURGESS * 5745 * REGISTERED PROFESSIONAL ENGINEER

PROJECT INFORMATION		
PROGRAM	MULTIMODAL	SIGNATURE
PROJECT MANAGER	JOEL KITTREDGE	ME PE# 5745
DESIGNER	JOHN A. BURGESS, P.E.	P.E. NUMBER
CONSULTANT	BECKER STRUCTURAL ENGINEERS	2/16 / 2018
PROJECT RESIDENT	-	DATE
CONTRACTOR	-	
PROJECT COMPLETION DATE	-	

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS CENTER
CUMBERLAND COUNTY
PORTLAND

TITLE / INDEX SHEET

SHEET NUMBER

G1

1 OF 55

GENERAL CONSTRUCTION NOTES

1. THESE DRAWINGS FORM PART OF THE CONTRACT DOCUMENTS. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

2. THE PORTLAND INTERNATIONAL MARINE TERMINAL IS IN COMPLIANCE WITH MSTA 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.

3. 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 INSIDE THE DESIGNATED SECURITY ZONE WITHOUT THE REQUIRED SECURITY PASSES.

4. ALL SCALES ARE INTENDED FOR FULL SIZE 22X34 INCH DRAWINGS.

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

6. 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.

7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY 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.

8. 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.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO STRUCTURES OR INJURIES TO THE PUBLIC DURING CONSTRUCTION RESULTING FROM RELATED CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY FACILITIES FOR THE PROTECTION OF THE WORK, WORKERS, AND PUBLIC SAFETY.

10. 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/FEDERAL WETLANDS CONTROLS.

11. THE CONTRACTOR SHALL MAINTAIN DUST CONTROL AT ALL TIMES DURING THE PROJECT. PERIODIC SWEEPING OF THE PAVEMENT SURFACES WITHIN THE CONSTRUCTION AREA MAY BE REQUIRED DURING CONSTRUCTION AS DIRECTED BY THE RESIDENT AND REQUIRED BY MAINEDOT EROSION CONTROL SPECIFICATIONS.

12. DUE TO THE INDUSTRIAL HISTORY OF THE SITE, COAL ASH MAY BE PRESENT IN ISOLATED AREAS ON THE PROJECT. THE MATERIAL IS IDENTIFIED AS BEING FINE GRAINED BLACK MATERIAL. THIS MATERIAL, IF ENCOUNTERED, MUST BE REUSED ON-SITE AS FILL MATERIAL. IF THE MATERIAL CANNOT BE REUSED ON SITE, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL APPROVALS OR PERMITS AND ANY REQUIRED ANALYTICAL RESULTS FOR PROPER DISPOSAL AT A LICENSED MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (MDEP) FACILITY. THE CONTRACTOR SHALL REMAIN ALERT FOR EVIDENCE OF CONTAMINATION AND SHALL EMPLOY APPROPRIATE HEALTH AND SAFETY MEASURES TO PROTECT ITS WORKERS AGAINST HAZARDS ASSOCIATED WITH WORKING NEAR PETROLEUM IMPACTED SOILS. ALSO, IF THE CONTRACTOR ENCOUNTERS EVIDENCE OF GROUNDWATER CONTAMINATION, THE CONTRACTOR SHALL SECURE THE EXCAVATION, STOP WORK IN THE CONTAMINATED AREA, AND IMMEDIATELY NOTIFY THE RESIDENT. THE RESIDENT SHALL CONTACT THE SENIOR GEOLOGIST IN THE MAINE DEPARTMENT OF TRANSPORTATION OFFICE OF SAFTEY AND COMPLIANCE (MAINEDOT-OSC) AT (207)-624-3004 AND THE MDEP AT 800-482-0777. WORK MAY ONLY CONTINUE WITH AUTHORIZATION FROM THE RESIDENT.

13. COMPACTED GRANULAR FILL (CGF) SHALL CONFORM TO THE REQUIREMENTS OF SECTION 703.06C AGGREGATE FOR SUBBASE TYPE D. PAYMENT WILL BE MADE UNDER ITEM 304.10 AGGREGATE SUBBASE COURSE-GRAVEL.

14. COMMON FILL SHOULD CONFORM TO THE REQUIREMENTS OF SECTION 703.18. PAYMENT WILL BE MADE UNDER ITEM 203.24 COMMON BORROW.

15. ALL EXISTING UNDERGROUND STORM DRAIN, WATERMAIN, ELECTRICAL AND TELEPHONE UTILITY LINES NOTED TO BE REMOVED WILL BE PAID FOR UNDER ITEM 203.20, COMMON EXCAVATION.

16. PAYMENT FOR CUTTING AND CAPPING EXISTING WATERMAIN WILL BE INCIDENTAL TO ITEM 203.20, COMMON EXCAVATION.

17. PAYMENT FOR MASONRY PLUG NOTED AT EXISTING CATCH BASIN CB-1.3A FOR REMOVAL OF EXISTING 8" STORM DRAIN WILL BE INCIDENTAL TO ITEM 203.20, COMMON EXCAVATION.

18. DO NOT EXCAVATE FOR AGGREGATE BASE AND SUBBASE BENEATH PAVEMENT AREAS WHERE EXISTING MATERIAL IS SUITABLE AS DETERMINED BY THE RESIDENT.

19. IN AREAS WHERE THE RESIDENT DIRECTS THE CONTRACTOR NOT TO EXCAVATE TO THE SUBGRADE LINE SHOWN ON THE PLANS, PAYMENT FOR REMOVING EXISTING PAVEMENT, GRUBBING, SHAPING, DITCHING AND COMPACTING THE EXISTING SUBBASE AND LAYERS OF NEW SUBBASE 6 INCHES OR LESS WILL BE MADE UNDER APPROPRIATE EQUIPMENT RENTAL ITEMS.

BECKER STRUCTURAL ENGINEERS
75 York Street, Portland, Maine 04101
207.879.1838 ▪ beckerstructural.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN 021942.02

STRUCTURAL PLANS

STATE OF MAINE * JOHN A BURGESS #5745 * REGISTERED PROFESSIONAL ENGINEER

	BY	DATE
PROJ. MANAGER JOEL KITTREDGE		
DESIGN-DETAILED	JAB	
CHECKED-REVIEWED	JAB	
DESIGN2-DETAILED2	-	
DESIGN3-DETAILED3	-	
REVISIONS 1	-	
REVISIONS 2	-	
REVISIONS 3	-	
REVISIONS 4	-	
FIELD CHANGES	-	
	APP	2/16/18
	DSB	2/16/18

SIGNATURE
5745
P.E. NUMBER
02/16/2018
DATE

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

GENERAL CONSTRUCTION NOTES

SHEET NUMBER

G2

GENERAL NOTES:

1. SITE AND TOPOGRAPHIC DATA GATHERED BY NADEAU LAND SURVEYS, 918 BRIGHTON AVENUE, PORTLAND, MAINE BY WAY OF TOPOGRAPHIC SURVEY PERFORMED IN MAY OF 2017. EXISTING 10" WATERLINE AND OFFICE BUILDING GAS SERVICE WAS DIGITIZED FROM MAINE DOT, PORTLAND INTERNATIONAL MARINE TERMINAL IMPROVEMENTS AS-BUILT PLAN, SHEET 21 OF 71, DATED 3/24/11. ADDITIONAL UNDERGROUND ELECTRICAL AND TELEPHONE WAS OBTAINED FROM AN AUTOCAD FILE (Marked Up Survey – Bartlett Design 07-10-17.DWG) OBTAINED FROM BARTLETT DESIGN INC. ON JULY 10, 2017.

2. VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929). HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.

3. THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION, AND SURFACING OF PARKING AREAS, AND LOCATION AND SIZE OF BUILDINGS.

4. THE UTILITY LOCATIONS SHOWN IN PLAN ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION BY THE CONTRACTOR. CONTACT THE OWNER IMMEDIATELY UPON DISCOVERING ANY CONFLICTS WITH EXISTING AND PROPOSED UTILITY LOCATIONS. NOT ALL EXISTING UTILITIES ARE SHOWN ON PLANS.

5. CLEAN AND/OR FLUSH ALL MANHOLES, CATCH BASINS, AND ASSOCIATED PIPING AFTER THE WORK HAS BEEN COMPLETED.

6. COORDINATE CONSTRUCTION ACTIVITY WITH UTILITY COMPANIES, EMERGENCY SERVICES AND CITY. NOTIFY UTILITY COMPANIES WITHIN 48 HOURS OF WORK ACTIVITY ADJACENT TO THOSE UTILITIES.

7. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK, ALLOWING SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF BURIED UTILITIES. CONTRACTOR SHALL CONTACT "DIG SAFE", TELEPHONE 811, PRIOR TO EXCAVATION.

8. RESTORE ALL AREAS DISTURBED BY CONTRACTOR'S OPERATIONS TO ORIGINAL FINISH (GRAVEL, PAVEMENT, GRASS, ETC.). RESTORATION OF PAVED SURFACES, GRAVEL SURFACES, DRIVEWAYS, AND LAWNS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE PERFORMED AT NO ADDITIONAL COST TO OWNER. ANY CURB DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND AND SHALL CONFORM TO CITY OF PORTLAND AND MAINE DOT SPECIFICATIONS AT NO ADDITIONAL COST TO OWNER.

9. PROPERLY PROTECT AND DO NOT DISTURB PROPERTY IRONS AND MONUMENTS. IF DISTURBED, THE PROPERTY MONUMENT SHALL BE RESET AT THE CONTRACTOR'S EXPENSE BY A LICENSED LAND SURVEYOR ACCEPTABLE TO THE CITY. PROPERTY MONUMENTS SHALL BE RESET IN ACCORDANCE WITH CITY OF PORTLAND STANDARDS.

10. EXISTING FACILITIES (I.E. TREES, POLES, LIGHT POSTS, CATCH BASINS, ETC.) SHALL BE REMOVED AND PROTECTED DURING CONSTRUCTION. OWNER RETAINS RIGHT TO KEEP ANY AND ALL REMOVED FACILITIES. CONTRACTOR TO DISPOSE OF ANY REMOVED FACILITY AT THE REQUEST OF OWNER AT CONTRACTOR'S EXPENSE.

11. DO NOT PARK, IMPEDE ACCESS TO, OR STORE EQUIPMENT ON ADJACENT CITY OR PRIVATELY OWNED LOTS, UNLESS PERMISSION HAS BEEN GRANTED IN WRITING BY CITY AND/OR LAND OWNER.

12. COORDINATE DISRUPTION OF PRIVATE UTILITY SERVICES WITH LANDOWNERS AT LEAST TWO DAYS (48 HOURS) PRIOR TO DISRUPTION. ALL UTILITY COORDINATION IS RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY CONNECTION, RETIREMENT, AND COORDINATION FEES.

13. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.

14. FINAL SETS OF AS-BUILT PLANS SHALL BE SUBMITTED DIGITALLY TO THE PLANNING AND URBAN DEVELOPMENT DEPARTMENT ON A CD OR DVD IN AUTOCAD FORMAT (*DWG) RELEASE AUTOCAD 2005 OR GREATER, AS SPECIFIED IN THE CITY OF PORTLAND TECHNICAL MANUAL.

15. WORK IS IN CLOSE PROXIMITY TO EXISTING UTILITIES. PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION SHALL BE INCIDENTAL.

16. IF CONTRACTOR PROPOSES TO TEMPORARILY STOCKPILE ANY SURPLUS SOIL AND ROCK IN THE CITY OF PORTLAND, THE CONTRACTOR SHALL OBTAIN APPROVAL FOR EACH STOCKPILE LOCATION FROM THE ENGINEER. IF CONTRACTOR PROPOSES TO PERMANENTLY STOCKPILE ANY SURPLUS SOIL AND ROCK ON PROPERTY IN THE CITY OF PORTLAND, THE CONTRACTOR MUST OBTAIN ANY SITE PLAN PERMITS REQUIRED FROM THE CITY PLANNING AUTHORITY OR ANY FILL PERMITS REQUIRED FROM MDEP OR U.S. ARMY CORPS OF ENGINEERS. BOTH TEMPORARY AND PERMANENT STOCKPILE LOCATIONS SHALL MEET THE APPLICABLE SETBACK REQUIREMENTS IN THE CITY LAND USE CODE AND SHALL RECEIVE PROPER STABILIZATION AND EROSION & SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH APPROVED SOIL EROSION & WATER POLLUTION CONTROL PLAN.

17. PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORK'S REPRESENTATIVE, AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.

18. EXISTING PAVEMENT SHALL BE SAWCUT AND BUTTED TO THE NEW PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE PERMITTED.

19. CONTRACTOR SHALL DEVELOP A CONSTRUCTION MANAGEMENT PLAN FOR REVIEW AND ACCEPTANCE BY THE CITY OF PORTLAND, THE OWNER, AND ENGINEER. THE CONSTRUCTION MANAGEMENT PLAN SHALL ADDRESS ITEMS INCLUDING BUT NOT LIMITED TO PUBLIC ACCESS TO SIDEWALKS, CITY STREETS, AND ADJACENT LOTS. THE INTERNATIONAL MARINE TERMINAL SITE SHALL REMAIN OPEN DURING CONSTRUCTION AND THE PLAN SHALL ADDRESS MEANS OF MAINTAINING ACCESS TO THE SITE. THE PLAN SHALL DESCRIBE IMPACTS ON ADJACENT PARKING AREAS, NOISE AND DUST CONTROL, FENCING AND TRAFFIC MANAGEMENT. THE PLAN SHALL INCLUDE A SCHEDULE OF WORK ITEMS AND A DESCRIPTION OF THE PUBLIC COMMUNICATION PROCESS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION ACTIVITIES WITH THE CITY OF PORTLAND AND OBTAINING CITY APPROVAL OF THE CONSTRUCTION MANAGEMENT PLAN PRIOR TO ISSUANCE OF THE BUILDING PERMITS.

20. CONTRACTOR IS RESPONSIBLE FOR ALL SNOW REMOVAL AND WINTER MAINTENANCE OF ACCESS PATHS WITHIN THE LIMIT OF WORK.

21. RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.

22. CONTRACTOR SHALL DEVELOP A SITE SPECIFIC SPILL PREVENTION AND SOIL EROSION AND WATER POLLUTION CONTROL PLANS IN CONFORMANCE WITH THE CONSTRUCTION DRAWINGS AND MAINE DOT'S BEST MANAGEMENT PRACTICES FOR EROSION CONTROL.

23. CONTRACTOR SHALL ARRANGE AND PREPARE FOR ALL NECESSARY TEMPORARY UTILITIES AS REQUIRED TO COMPLETE WORK, INCLUDING ANY NECESSARY SUB-METERING OR TEMPORARY CONNECTIONS.

24. ALL WATERLINE (MAINS, SERVICES, HYDRANTS, ETC.) CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT TECHNICAL SPECIFICATIONS, LATEST EDITION. PORTLAND WATER DISTRICT TECHNICAL SPECIFICATIONS SHALL GOVERN IN THE CASE OF ANY AND ALL CONFLICTS IN THE PROJECT CONSTRUCTION DOCUMENTS AT NO ADDITIONAL COST TO OWNER.

25. ALL GAS LINE (MAINS, SERVICES, GATE VALVES, METERS, ETC.) CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH UNITIL'S TECHNICAL SPECIFICATIONS, LATEST EDITION. UNITIL'S TECHNICAL SPECIFICATIONS SHALL GOVERN IN THE CASE OF ANY AND ALL CONFLICTS IN THE PROJECT CONSTRUCTION DOCUMENTS AT NO ADDITIONAL COST TO OWNER.

SYMBOLS

DESCRIPTION	EXISTING	PROPOSED
SANITARY SEWER MANHOLE	S	
STORM DRAIN MANHOLE	D	
CATCH BASIN		
ELECTRICAL MANHOLE	E	
COMMUNICATIONS MANHOLE	T	
CABLE MANHOLE	C	
UTILITY POLE W/GUY		
UTILITY POLE		
UTILITY POLE W/LIGHT		
LIGHT POLE		
WATER GATE		
WATER VALVE		
WATER SHUT OFF		
HYDRANT		
GAS METER		G
SIGN		
MAILBOX	MB	
CONIFEROUS TREE		
DECIDUOUS TREE		
IRON PIN (FOUND)		
MONUMENTS (FOUND)		
TEST PIT		
BITUMINOUS PAVEMENT		
MILL AND OVERLAY		
CONCRETE SIDEWALK		

LINE TYPES

DESCRIPTION	EXISTING	PROPOSED
CONTOUR (1' INTERVAL)	11	11
CONTOUR (INDEX)	10	10
SANITARY SEWER	S	S
STORM DRAIN	SD	SD
UNDERDRAIN	UD	UD
WATER MAIN	W	W
UNDERGROUND ELECTRIC	E	E
GAS LINE	G	G
OVERHEAD ELECTRIC	OE	
UNDERGROUND ELECTRICAL /COMMUNICATIONS/CABLE	T	T
PROPERTY LINE		
RIGHT OF WAY		
EASEMENT		
FENCE		
RETAINING WALL		
STONEWALL		
CURB		
TYPE 1 GRANITE CURB		
FLUSH GRANITE CURB		
EDGE OF PAVEMENT		
BUILDING OUTLINE		
SAWCUT		
ROOF OVERHANG		

ABBREVIATIONS

&	AND	N.I.C.	NOT IN CONTRACT
A.G.	ABOVE GROUND	NO.	NUMBER
		NR	NO REFUSAL
BC	BOTTOM OF CURB	N.T.S.	NOT TO SCALE
BIT	BITUMINOUS		
BW	BOTTOM OF WALL	OE	OVERHEAD ELECTRIC
B/W	BETWEEN	OH	OVERHEAD
CB	CATCH BASIN	±	PLUS OR MINUS
CI	CAST IRON	LLS	LICENSED LAND SURVEYOR
CMP	CENTRAL MAINE POWER	PROP.	PROPOSED
CMP	CORRUGATED METAL PIPE	PT.	POINT
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
DI	DUCTILE IRON	R.O.W.	RIGHT-OF-WAY
DIA.	DIAMETER	RCP	REINFORCED CONCRETE PIPE
DMH	DRAIN MANHOLE	REINF.	REINFORCED
DTL.	DETAIL	REQ'D	REQUIRED
E	UNDERGROUND ELECTRICAL	S	SLOPE (FT./FT.)
EL.	ELEVATION	S	SEWER
E.O.P.	EDGE OF PAVEMENT	SD	STORM DRAIN
EXIST.	EXISTING	SMH	SEWER MANHOLE
		SCH	SCHEDULE
FF	FINISH FLOOR	STA.	STATION
FT	FOOT/FEET		
G	GAS MAIN	TS	TOP OF STAIRS
GS	GAS SERVICE	TW	TOP OF WALL
GALV.	GALVANIZED	TYP.	TYPICAL
GRAN.	GRANITE	UP	UTILITY POLE
HDPE	HIGH DENSITY POLYETHYLENE	VC	VITRIFIED CLAY
HYD	HYDRANT	VIT.	VITRIFIED CLAY
INV.	INVERT	W	WEST
		W	WATER
LF	LINEAR FEET	W/	WITH
		W	WATERMAIN
MAX.	MAXIMUM	WS	WATER SERVICE
MDOT	MAINE DEPARTMENT OF TRANSPORTATION	WV	WATER VALVE
MIN.	MINIMUM		
MLLW	MEAN LOWER LOW WATER		
MON	MONUMENT		

WOODARD & CURRAN
COMMITMENT & INTEGRITY DRIVE RESULTS
41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

CIVIL PLANS

STATE OF MAINE · DAVID A. SENUS · 10791 · REGISTERED PROFESSIONAL ENGINEER

	DATE
SIGNATURE	
P.E. NUMBER 10791	
DATE 02/09/2018	

	BY	DATE
PROJ. MANAGER	JOEL KITTREDGE	
DESIGN-DETAILED	CMS/JBC	11-28-17
CHECKED-REVIEWED	DAS	11-28-17
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

GENERAL NOTES, LEGEND, AND ABBREVIATIONS

SHEET NUMBER

C-01

\\woodardcurran.net\shared\Projects\02307690.00 BSE – IMT O&M Ctr\wip\Drawings\GENERAL\230769.00-C-01.dwg, Feb 27, 2018 – 3:30pm

Legend:

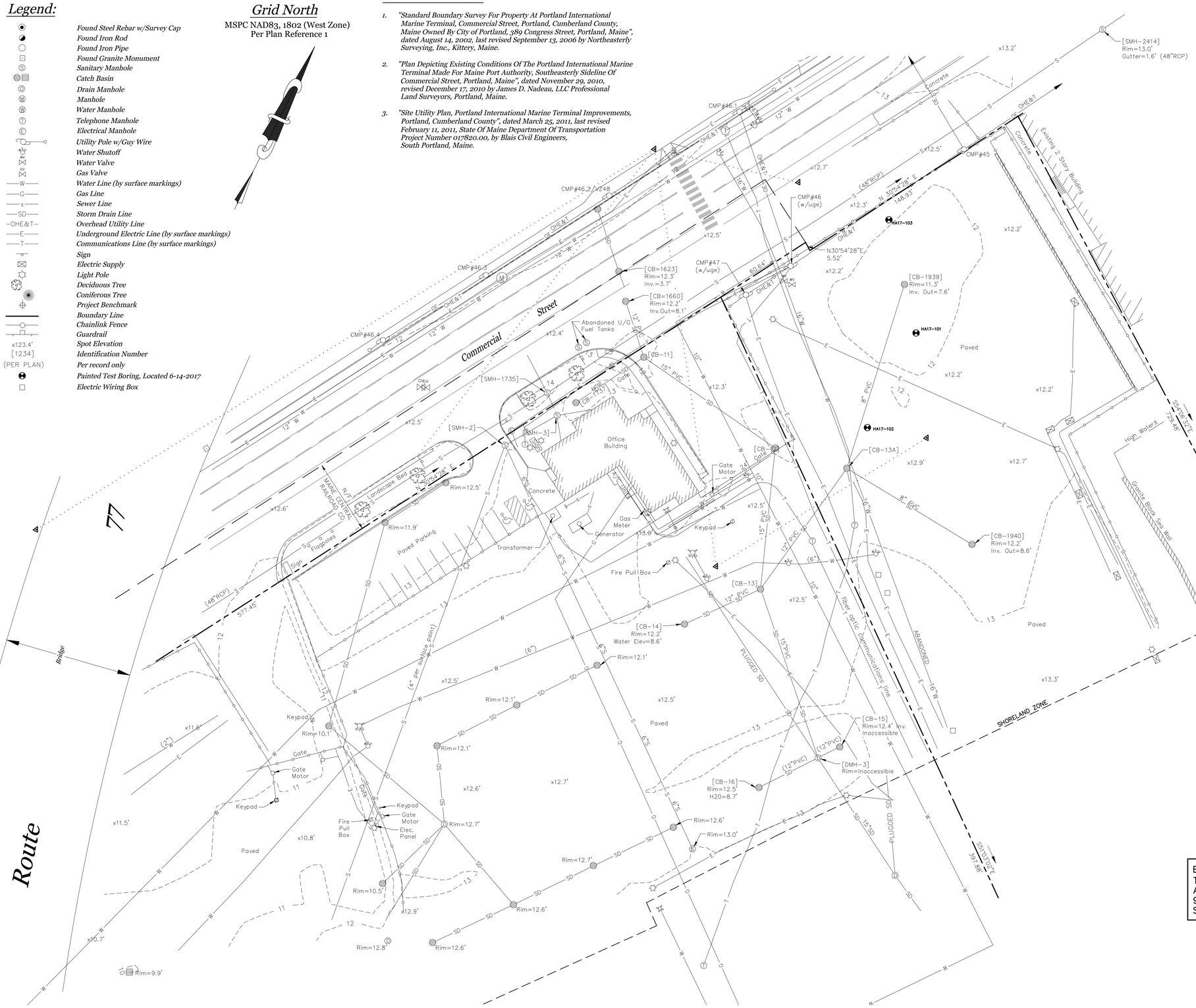
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- *Found Iron Rod*
- *Found Iron Pipe*
- *Found Granite Monument*
- *Sanitary Manhole*
- *Catch Basin*
- *Drain Manhole*
- *Manhole*
- *Water Manhole*
- *Telephone Manhole*
- *Electrical Manhole*
- *Utility Pole w/Guy Wire*
- *Water Shutoff*
- *Water Valve*
- *Gas Valve*
- *Water Line (by surface markings)*
- *Gas Line*
- *Sewer Line*
- *Storm Drain Line*
- *Overhead Utility Line*
- *Underground Electric Line (by surface markings)*
- *Communications Line (by surface markings)*
- *Sign*
- *Electric Supply*
- *Light Pole*
- *Deciduous Tree*
- *Coniferous Tree*
- *Project Benchmark*
- *Boundary Line*
- *Chainlink Fence*
- *Guardrail*
- x123.4' *Spot Elevation*
- [1234] *Identification Number*
- (PER PLAN) *Per record only*
- *Painted Test Boring, Located 6-14-2017*
- *Electric Wiring Box*

Grid North

MSPC NAD83, 1802 (West Zone)
Per Plan Reference 1

Plan References:

1. *"Standard Boundary Survey For Property At Portland International Marine Terminal, Commercial Street, Portland, Cumberland County, Maine Owned By City of Portland, 389 Congress Street, Portland, Maine", dated August 14, 2002, last revised September 13, 2006 by Northeasterly Surveying, Inc., Kittery, Maine.*
2. *"Plan Depicting Existing Conditions Of The Portland International Marine Terminal Made For Maine Port Authority, Southeasterly Sideline Of Commercial Street, Portland, Maine", dated November 29, 2010, revised December 17, 2010 by James D. Nadeau, LLC Professional Land Surveyors, Portland, Maine.*
3. *"Site Utility Plan, Portland International Marine Terminal Improvements, Portland, Cumberland County", dated March 25, 2011, last revised February 11, 2011, State Of Maine Department Of Transportation Project Number 017820.00, by Blais Civil Engineers, South Portland, Maine.*



Structure Table:

[CB-1737] Rim=12.0'
Inv. Out=8.9' CB-11

[CB-11] Rim=12.1'
Inv. In=6.8' CB-1737
Inv. In=6.8' CB-1660
Inv. Out=4.3' CB-12

[CB-12] Rim=11.5'
Inv In=3.7' CB-11
Inv. Out=3.6' CB-13

[CB-13] Rim=12.1'
Inv. In=3.0' CB-13A
Inv. In=7.6' CB-14
Inv. In=5.7' CB-12
Inv. Out=3.0' DMH-3

[CB-13A] Rim=12.2'
Inv. In=7.1' CB-1939
Inv. In=8.1' CB-1940
Inv. In=7.5' 4" PVC
Inv. Out=5.7' CB-13

[SMH-2] Rim=12.9'
Inv. Out=6.3' 6"SDR SMH-3
Inv. In=6.4' 6"SDR
Inv. In=6.5' (4"FM)

[SMH-3] Rim=13.5'
Inv. In=6.1' 6"SDR SMH-2
Inv. In=6.1' 6"SDR BUILDING
Inv. In=6.1' 6"SDR BUILDING
Inv. Out=5.9' 1735

[SMH-1735] Rim=14.2'
Inv. In=4.2' SMH-3
Gutter=2.0' (48"RCP)
Inv. In=5.4' TOP SHELF

GENERAL NOTES:

1. THE BOUNDARY LINES AND ON-SITE APPURTENANCES SHOWN ON THIS PLAN ARE BASED SOLELY ON THE NOTED PLAN REFERENCE 1.
2. THIS PLAN IS NOT INTENDED TO DEPICT LIMITS OR EXTENT OF FEE TITLE OWNERSHIP. AN OPINION OF TITLE SHOULD BE RENDERED BY A TITLE ATTORNEY.
3. ELEVATIONS AND CONTOUR LINES SHOWN ON THIS PLAN ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29). SEE PLAN REFERENCE 2 FOR PROJECT BENCHMARKS.
4. PER PLAN REFERENCE 1, BASIS OF BEARINGS IS GRID NORTH BASED ON THE NORTH AMERICAN DATUM 1983 (NAD83).
5. THE APPARENT RIGHT OF WAY LINES DEPICTED ON THIS PLAN ARE BASED ON PLAN REFERENCE 1 LISTED HEREON AND MONUMENTATION FOUND IN THE FIELD, AND CITY OF PORTLAND ENGINEERING STREET NOTES.
6. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE LOCATION. CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION.
7. SEE CCRD BOOK 4000, PAGE 119, DATED APRIL 19, 1977, FROM CITY OF PORTLAND TO PORTLAND WATER DISTRICT FOR TWENTY (20') FOOT WIDE EASEMENT.
8. SEE CCRD BOOK 29644, PAGE 142, DATED FEBRUARY 8, 2012, FROM CITY OF PORTLAND TO CENTRAL MAINE POWER COMPANY AND NORTHERN NEW ENGLAND TELEPHONE OPERATIONS, LLC FOR UNDERGROUND LINE EASEMENT.
9. SEE CCRD BOOK 29357, PAGE 140, DATED JANUARY 27, 2012, FROM CITY OF PORTLAND TO CENTRAL MAINE POWER COMPANY AND NORTHERN NEW ENGLAND TELEPHONE OPERATIONS, LLC FOR UNDERGROUND LINE EASEMENT.

EXISTING CONDITIONS INFORMATION (INCLUDING TOPOGRAPHY AND UTILITIES) WERE OBTAINED FROM A PLAN PREPARED BY NADEAU LAND SURVEYS, 918 BRIGHTON AVENUE, PORTLAND, ME 04102. SURVEY WAS PERFORMED IN MAY 2017.

30' 0 30' 60'

BAR SCALE
1" = 30'
CHECK GRAPHIC SCALE BEFORE USING

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CIVIL PLANS

STATE OF MAINE · DAVID A. SENUS · 10791 · LICENSED PROFESSIONAL ENGINEER

SIGNATURE
10791
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02/09/2018
DATE

	DATE	BY
PROJ. MANAGER	JOEL KITTREDGE	
DESIGN-DETAILED	02-15-18	CMS/JBC
CHECKED-REVIEWED	02-15-18	DAS
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND INTERNATIONAL MARINE TERMINAL
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PORTLAND CUMBERLAND COUNTY

EXISTING CONDITIONS PLAN

SHEET NUMBER
C-02
4 OF 58

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GENERAL PHASING NOTES:

1. THE INTERNATIONAL MARINE TERMINAL IS IDENTIFIED AS A MARINE TRASNSPORTATION SECURITY ACT (MTSA) 105 SITE DEFINED BY HOMELAND SECURITY. WORK BY THE CONTRACTOR IN THE RESTRICTED ZONE WILL BE POSSIBLE BY THE CONTRACTOR ONLY ON A SCHEDULED BASIS AND BY EMPLOYEES WITH PROPER SECURITY CLEARANCE SUCH AS WITH TWIC CARDS (TRANSPORTATION WORKER IDENTIFICATION CREDENTIAL) AND TERMINAL ID'S.
2. THE WORK DEFINED IN THE CONTRACT DOCUMENTS IMPACTS THE RESTRICTED AREAS AND THE PRIMARY TERMINAL ENTRANCE. THE PHASING SEQUENCE SHOWN ACCOMODATES THE FACILTIY OPERATIONS, SECURITY, ANTICIPATED CONSTRUCTION SEQUENCE, AND MINIMIZES THE DURATION OF THE PRIMARY TERMINAL ENTRANCE SHUT DOWN.
3. SCHEDULING OF ALL WORK SHALL BE COORDINATED WITH THE TERMINAL MANAGER, THE PORT AUTHORITY, AND THE RESIDENT. COORDINATION MEETINGS WITH THE TERMINAL MANAGER, THE PORT AUTHORITY, THE RESIDENT, AND THE CONTRACTOR WILL IDENTIFY THE LIMITS OF PROPOSED WORK SCHEDULED TO BE COMPLETED.

PRE-DEMOLITION

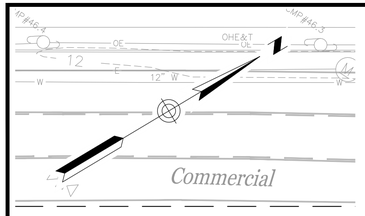
1. THE PRIMARY TERMINAL ENTRANCE, EXISTING SECURITY FENCING AND RESTRICTED AREAS ARE SHOWN IN THE PRE-DEMOLITION PLAN.

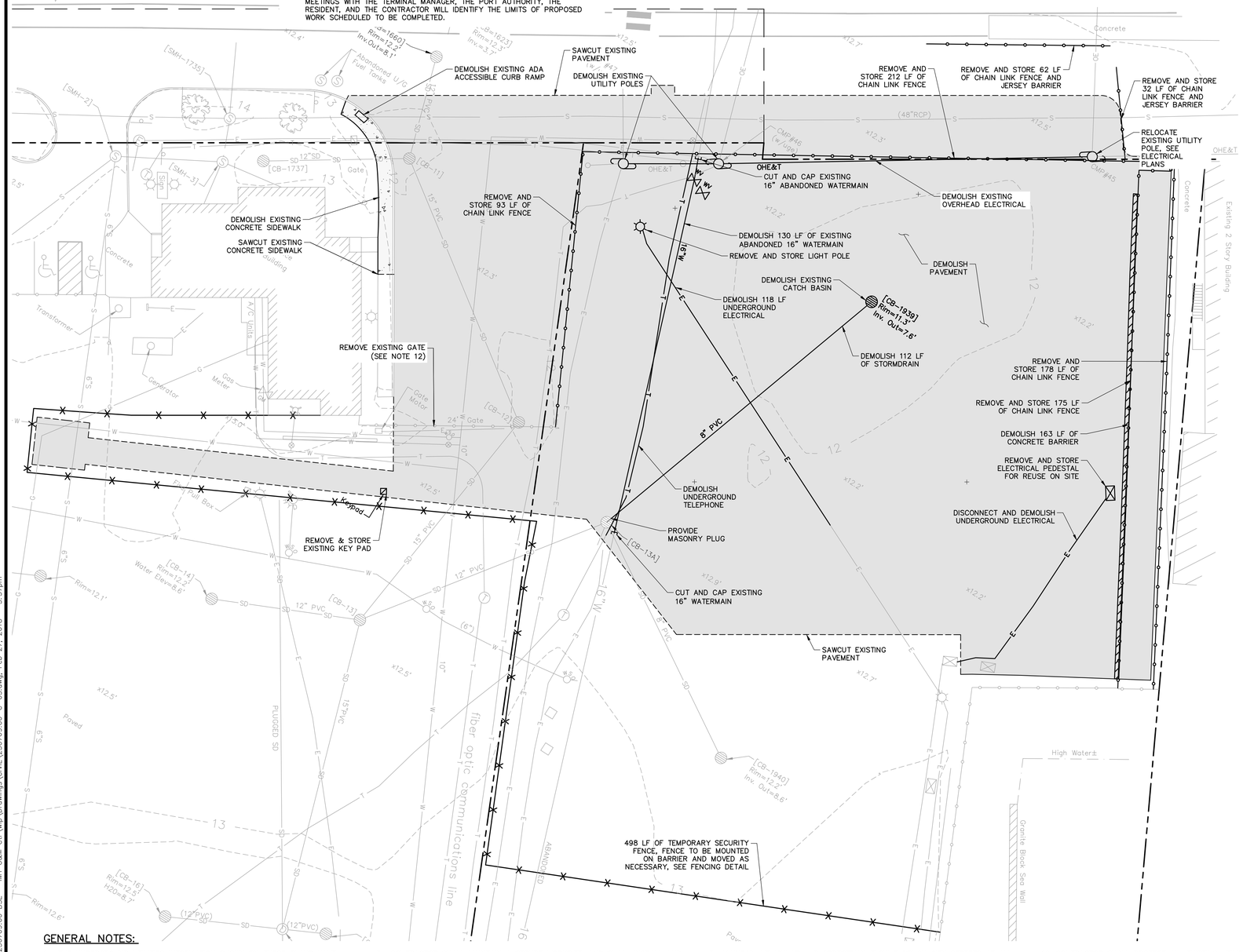
CONSTRUCTION PHASE 1

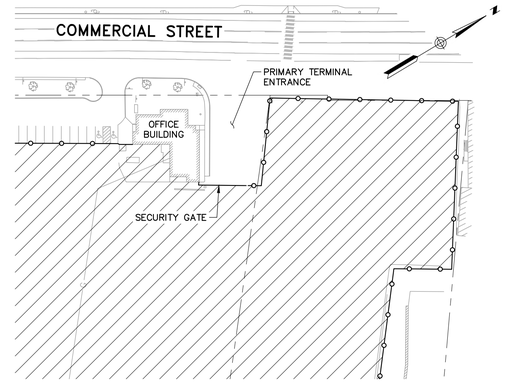
1. THE SECURITY OF THE INTERNATIONAL MARINE TERMINAL SHALL BE MAINTAINED AT ALL TIMES. INSTALL SECURITY FENCE ON TEMPORARY CONCRETE BARRIERS WITHIN THE RESTRICTED AREA AS SHOWN IN THE CONTRACT DRAWINGS AND THE CONSTRUCTION PHASE 1 PLAN PRIOR TO REMOVING THE INDENTIFIED SECTIONS OF EXISTING SECURITY FENCING.
2. THE CONTRACTOR SHALL BE LIMITED TO THE CONSTRUCTION ZONE AND CONTRACTOR STAGING AREA INDENTIFIED EXCEPT DURING SCHEDULED CONSTRUCTION ACTIVITIES WHICH MAY OCCUR IN THE RESTRICTED AREA.

CONSTRUCTION PHASE 2

1. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE THE SHUTDOWN OF PRIMARY TERMINAL ENTRANCE FOUR WEEKS IN ADVANCE WITH THE TERMINAL MANAGER, THE PORT AUTHORITY, AND THE RESIDENT.
2. THE SECURITY OF THE INTERNATIONAL MARINE TERMINAL SHALL BE MAINTAINED AT ALL TIMES. INSTALL SECURITY FENCE ON TEMPORARY CONCRETE BARRIERS WITHIN THE RESTRICTED AREA AS SHOWN IN THE CONSTRUCTION PHASE 2 PLAN PRIOR TO REMOVING THE EXISTING PRIMARY ENTRANCE SECURITY GATE.
3. THE NEW SECURITY GATE, GUARD HOUSE, AND SECURITY FENCING SHALL BE INSTALLED AND OPERATIONAL PRIOR TO THE REMOVAL OF THE SECURITY FENCE ON TEMPORARY CONCRETE BARRIERS.

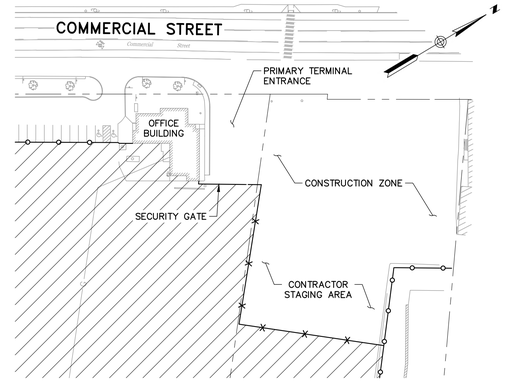






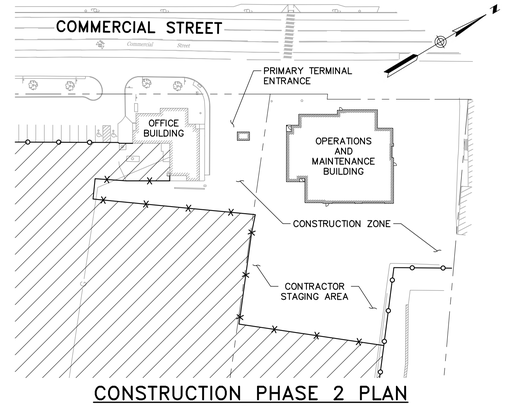
PRE DEMOLITION PLAN

SCALE: N.T.S.



CONSTRUCTION PHASE 1 PLAN

SCALE: N.T.S.



CONSTRUCTION PHASE 2 PLAN

SCALE: N.T.S.

GENERAL NOTES:

1. THE UNDERGROUND UTILITIES INFORMATION SHOWN ON THESE PLANS HAVE BEEN COMPILED BY NADEAU LAND SURVEYORS FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE UTILITY LOCATIONS SHOWN IN PLAN ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION BY THE CONTRACTOR. ALL INVERTS AND PIPE SIZES SHALL BE VERIFIED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK, ALLOWING SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF BURIED UTILITIES. CONTRACTOR SHALL CONTACT "DIG SAFE", TELEPHONE 888-344-7233, PRIOR TO EXCAVATION.
2. CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, IN ACCORDANCE WITH THESE PLANS AND THE LATEST EDITION OF THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL. KEEP ALL STREETS FREE OF DUST, MUD AND DEBRIS. STREETS AND WALKWAYS SHALL BE SWEPT REGULARLY, AND TEMPORARY CONSTRUCTION ENTRANCES SHALL BE UTILIZED DURING CONSTRUCTION.
3. CONTRACTOR SHALL MAINTAIN A SECURE WORKSITE, AND SHALL INSTALL AND MAINTAIN SAFETY AND SECURITY MEASURES, SUCH AS FENCING, BARRIERS, SIGNAGE, AND TRAFFIC CONTROL DEVICES. APPROPRIATE SECURITY AND SAFETY MEASURES SHALL BE IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
4. EXISTING FACILITIES WITHIN THE CITY RIGHT-OF-WAY (I.E. GRANITE CURBING, SIDEWALK BRICKS, TREES, POLES, LIGHT POSTS, CATCH BASINS, SIGNS, PLAY EQUIPMENT, ETC) ARE THE PROPERTY OF THE CITY'S DEPARTMENT OF PUBLIC SERVICES. CONTRACTOR TO COORDINATE REMOVAL/DISPOSAL WITH THE CITY AND OWNER. AT THE DIRECTION OF THE CITY AND OWNER, CONTRACTOR SHALL DELIVER REMOVED FACILITIES TO THE CITY'S MATERIAL STOCKYARD ON OUTER CONGRESS STREET. CONTRACTOR TO DISPOSE OF ANY REMOVED FACILITY AT THE REQUEST OF THE CITY OR OWNER, AT NO ADDITIONAL COST TO THE CONTRACT.
5. MAINTAIN VEHICULAR AND PEDESTRIAN FLOW THROUGH CITY STREETS AT ALL TIMES. COORDINATE ALL SIDEWALK AND LANE CLOSURES WITH THE CITY.
6. ALL LAWN AREAS, WALKWAYS, DRIVEWAYS, FACILITIES, UTILITIES, AND AMENITIES TO REMAIN SHALL BE PROTECTED AND REPAIRED/REPLACED IF DAMAGED BY CONTRACTOR AT NO ADDITIONAL EXPENSE TO OWNER.
7. EXISTING PAVEMENT SHALL BE REMOVED FROM SITE. PAVEMENT SHALL NOT BE MIXED WITH CONCRETE.
8. MATERIAL STORAGE, TEMPORARY FACILITIES, AND LAYDOWN AREAS SHALL BE LOCATED WITHIN THE TEMPORARY CONSTRUCTION FENCING. NO STORAGE OR TEMPORARY FACILITIES MAY BE LOCATED WITHIN THE CITY RIGHT-OF-WAY OR ON ABUTTING PROPERTIES WITHOUT WRITTEN APPROVAL FROM THE OWNER.
9. ITEMS TO BE REMOVED SHALL BE KEPT ON SITE FOR FUTURE REUSE. COORDINATE WITH OWNER FOR STORAGE LOCATION. ITEMS TO BE DEMOLISHED SHALL BE DISPOSED OF OFFSITE.
10. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES TO REMAIN DURING CONSTRUCTION. IF ANY UTILITY IS DAMAGED DURING CONSTRUCTION THE CONTRACTOR SHALL REPLACE AT NO EXPENSE TO THE OWNER.
11. UTILITIES WITHIN THE LIMITS OF THE PROPOSED BUILDING THAT WILL BE DEMOLISHED SHALL BE BACKFILLED WITH TYPE D SUBBASE AND COMPACTED TO 95% MAXIMUM DRY DENSITY.
12. EXISTING SLIDING TRAFFIC GATE AND ALL ASSOCIATED CONTROL AND OPERATORS ARE TO BE REMOVED AND TURNED OVER TO THE OWNER FOR RE-USE AT ANOTHER LOCATION ON SITE. FENCE POSTS ASSOCIATED WITH THE EXISTING GATE THAT ARE SET IN CONCRETE FOUNDATIONS WILL NOT BE RE-USED. CONTRACTOR SHALL CUT POSTS AND REMOVE CONCRETE FOUNDATION TO AT LEAST 2 FEET BELOW FINISH GRADE. CONTRACTOR SHALL COORDINATE THE TIME OF REMOVAL AND LOCATION ON SITE FOR STORAGE OF GATE AND COMPONENTS UNTIL GATE IS RE-INSTALLED BY THE OWNERS VENDER AT THE NEW LOCATION.

CONSTRUCTION PHASING LEGEND

- EXISTING SECURITY FENCING
- SECURITY FENCE ON TEMPORARY CONCRETE BARRIER
- RESTRICTED AREA

20' 0 20' 40'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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STATE OF MAINE · DAVID A. SENUS 10791 · LICENSED PROFESSIONAL ENGINEER

SIGNATURE
10791
P.E. NUMBER
02/09/2018
DATE

	BY	DATE
PROJ. MANAGER	JOEL KITTREDGE	
DESIGN-DETAILED	CMS/JBC	02-15-18
CHECKED-REVIEWED	DAS	02-15-18
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

DEMOLITION PLAN

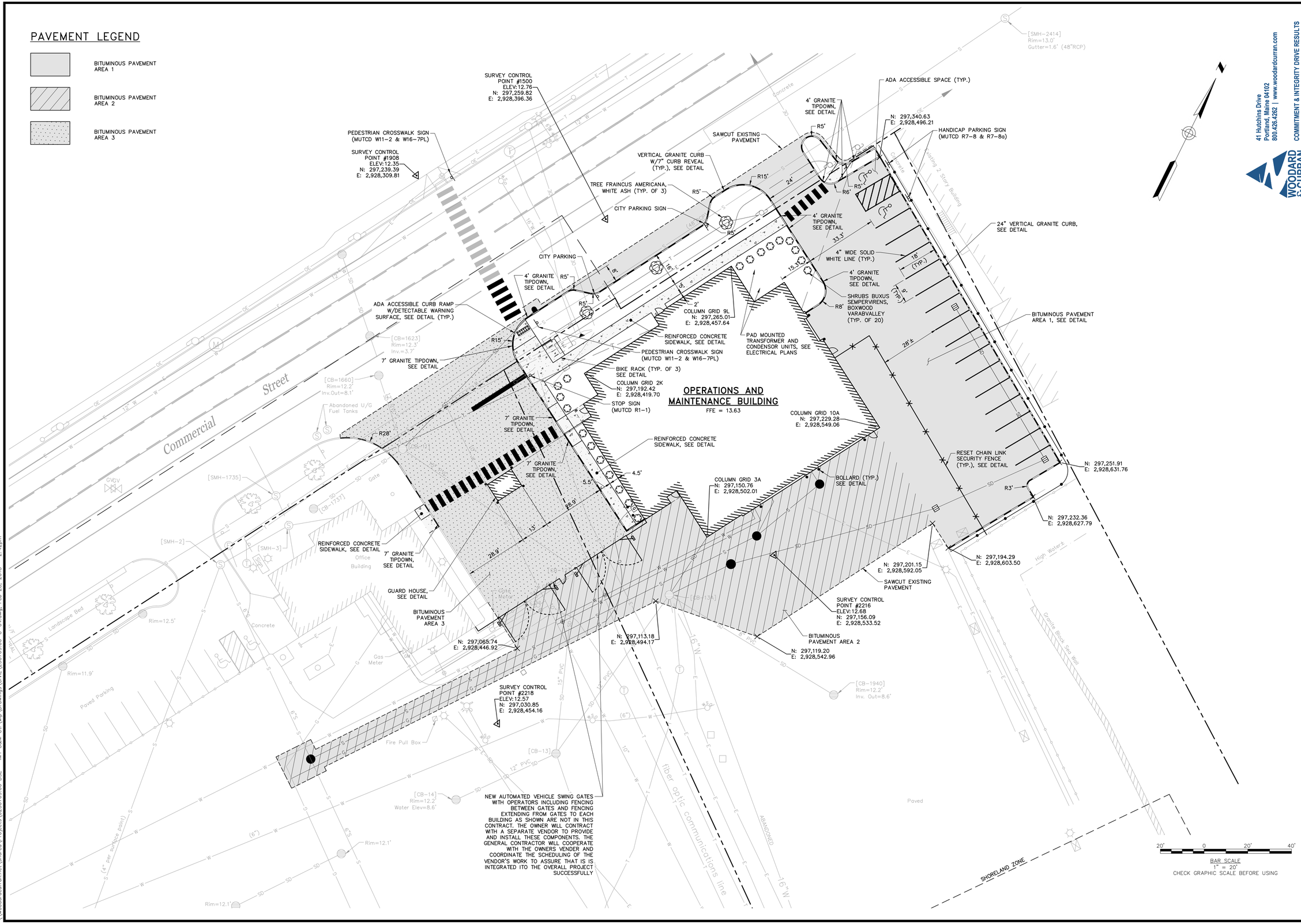
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PAVEMENT LEGEND

- BITUMINOUS PAVEMENT AREA 1
- BITUMINOUS PAVEMENT AREA 2
- BITUMINOUS PAVEMENT AREA 3



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CIVIL PLANS

STATE OF MAINE · DAVID A. SENUS 10791 · REGISTERED PROFESSIONAL ENGINEER

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02/09/2018
DATE

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DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND INTERNATIONAL MARINE TERMINAL
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CUMBERLAND COUNTY
PORTLAND

SITE PLAN

SHEET NUMBER

C-04

6 OF 58

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DAVID A. SENUS 10791 — STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

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DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND — CUMBERLAND COUNTY

GRADING, DRAINAGE, & EROSION CONTROL PLAN

SHEET NUMBER

C-05

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OPERATIONS AND MAINTENANCE BUILDING
FFE = 13.63

Commercial Street

Paved

Paved Parking

Landscape Bed

Concrete

Existing 2 Story Building

Office Building

Gate Motor

Gas Meter

Fire Pull Box

Abandoned U/G Fuel Tanks

GUARD HOUSE, SEE DETAIL

FFE 12.75

SAWCUT EXISTING PAVEMENT, MATCH TO EXISTING GRADE

TEMPORARY CONSTRUCTION ENTRANCE, SEE DETAIL

VERTICAL GRANITE CURB W/7" CURB REVEAL (TYP.), SEE DETAIL

4' GRANITE TIPDOWN, SEE DETAIL

7' GRANITE TIPDOWN, SEE DETAIL

REINFORCED CONCRETE SIDEWALK, SEE DETAIL

VERTICAL GRANITE CURB

CB1 – 4' DIA.
RIM:12.02
INV OUT:8.57 12"SD (S)

EX. CB–11
RIM:12.10
INV IN:6.80 12"PVC EX. (NW)
INV IN:8.15 12"SD NEW (N)
INV OUT:4.30 15"PVC EX. (E)

[CB=1623]
Rim=12.3'
Inv. = 3.7'

12" SD
84 LF
S=0.0050

CORE AND CONNECT 12" SD TO EX. CB

CB4 – 2'x2' TYPE F
RIM:11.72
INV OUT:9.50 12"SD (SE)

SEDIMENTATION BARRIER, SEE DETAIL

12" SD
79 LF
S=0.0051

CB3 – 2'x2' TYPE F
RIM:11.16
INV IN:9.10 12"SD (NW)
INV OUT:9.00 12"SD (SW)

EX. CB–13A
RIM:12.20 (ADJUST TO GRADE)
INV IN:6.00 12"SD NEW (NE)
INV IN:7.10 8"PVC EX. (E)
INV IN:7.50 4"PVC EX. (SE)
INV OUT:5.70 12"PVC EX. (S)

CB2 – 2'x2' TYPE F
RIM:12.31
INV IN:8.73 12"SD (NE)
INV OUT:8.63 12"SD (SW)

8" DIA. ROOF DRAIN

12" SD
53 LF
S=0.0051

12" SD
94 LF
S=0.0038

12" SD
28 LF
S=0.0643

ADJUST EXISTING CB RIM TO GRADE

ADJUST RIM TO EL. 12.50

SAWCUT EXISTING PAVEMENT, MATCH TO EXISTING GRADE

JELLYFISH (JF4–2–1) – 4' DIA.
RIM:13.38
INV IN:8.27 12"SD (NE)
INV OUT:7.77 12"SD (SW)

CORE AND CONNECT 8" ROOF DRAIN TO EX. CB

CORE AND CONNECT 12" SD TO EX. CB

INLET PROTECTION (TYP. AT CB LOCATIONS)

[CB–1940]
Rim=12.2'
Inv. Out=8.6'

SEE UTILITY PLAN FOR SANITARY SEWER DESIGN

[CB–14]
Rim=12.2'
Water Elev=8.6'

RUBBLED SD

Granite Block Sea Wall

High Water±

SHORELAND ZONE

[SMH–2414]
Rim=13.0'
Gutter=1.6' (48"RCP)

[SMH–1735]

[SMH–2]

[SMH–3]

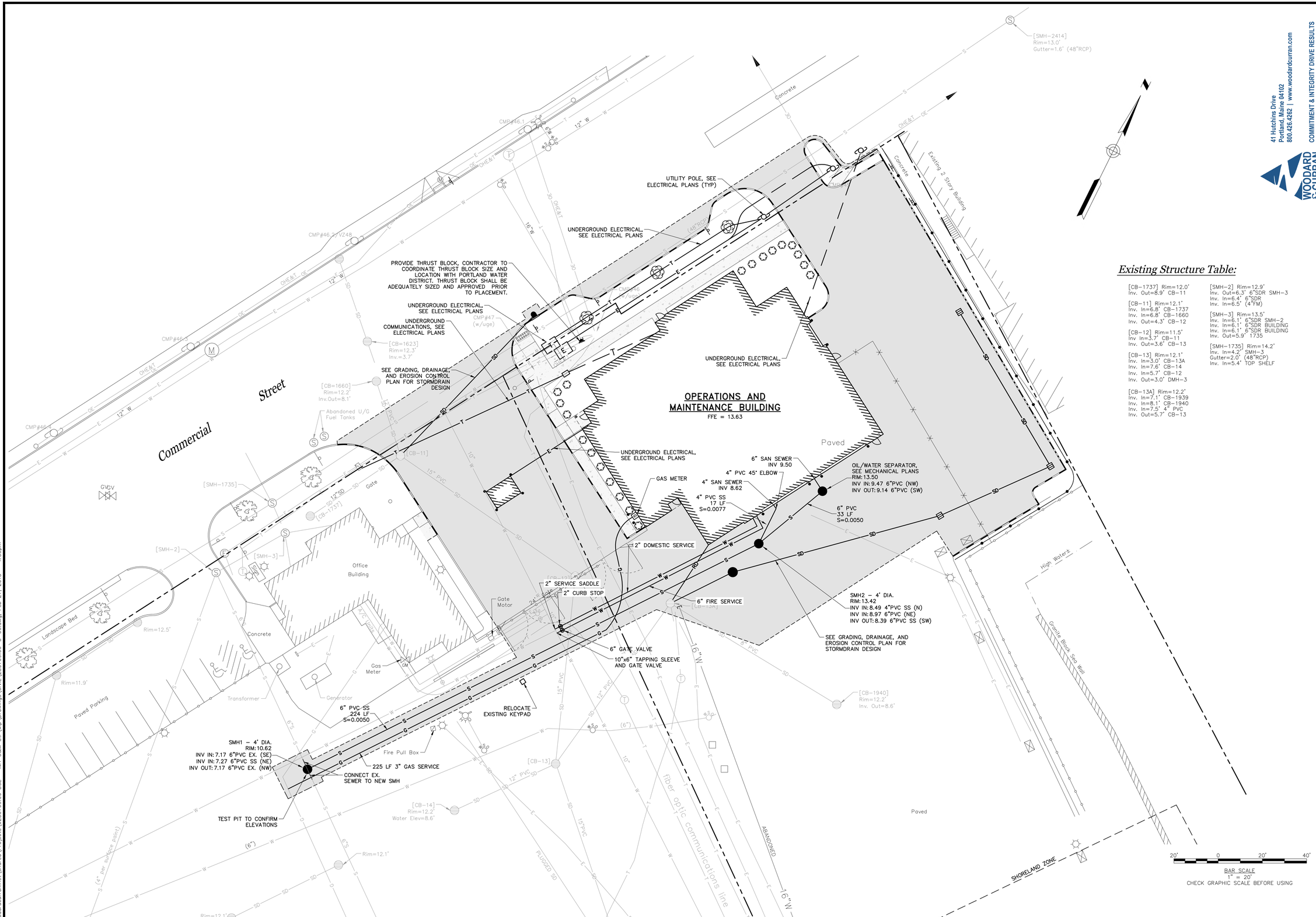
[CB–11]

[CB–12]

[CB–13]

[CB–1737]

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING



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CIVIL PLANS

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PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
CUMBERLAND COUNTY
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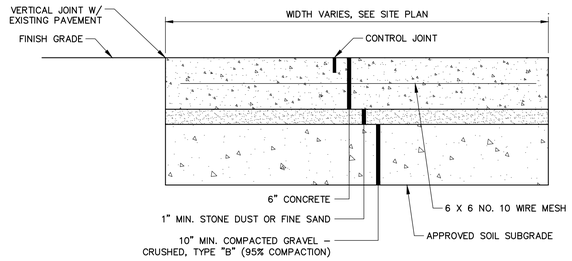
UTILITY PLAN

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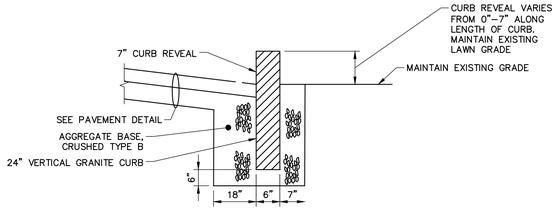
C-06

8 OF 58

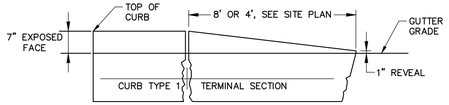
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REINFORCED CONCRETE SIDEWALK
N.T.S.

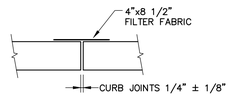


24" VERTICAL GRANITE CURB
N.T.S.

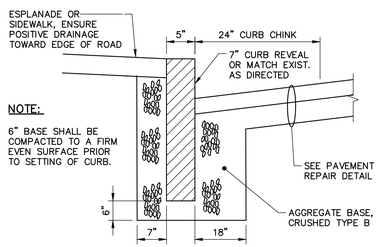


TERMINAL SECTION TYPE "1"

TERMINAL CURB SECTION
N.T.S.



PLAN

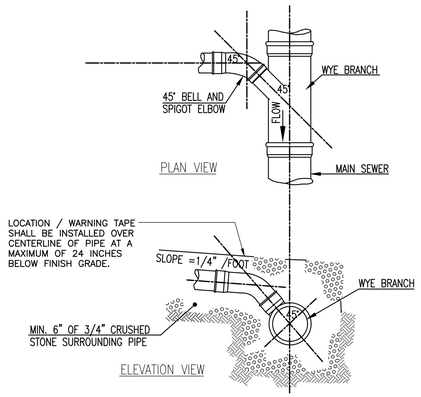


SECTION

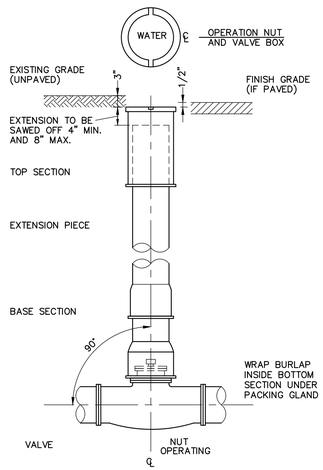
CURB TYPE 1 ON CURVES			
TYPE	RADIUS OF CURVE	LENGTH	STONE IS CUT OR CAST
1	0' TO 60' INCL.	4' MIN.	ARC TO FIT CURVE
	OVER 60' TO 160'	4' TO 6'	STRAIGHT PIECES

TYPICAL NEW AND RESET CURB INSTALLATION
N.T.S.

NOTE: AGGREGATE TYPES PER MDOT SECTION 304.02



TYPICAL SEWER LATERAL WYE CONNECTION DETAILS
N.T.S.



GATE VALVE WITH VALVE BOX
N.T.S.

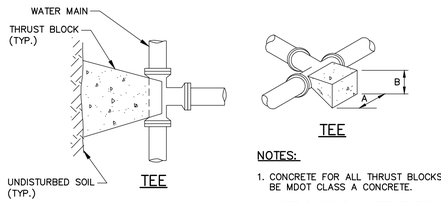
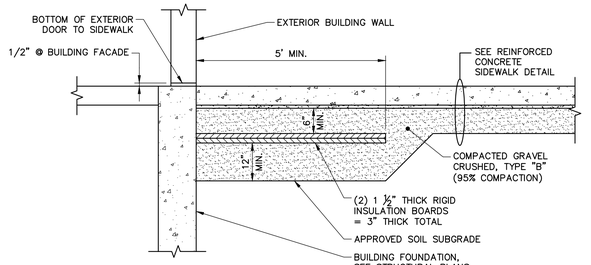


TABLE 1: 4" THRU 10" FITTINGS				
SOIL TYPE	TEES		BENDS	
	A	B	A	B
SOFT CLAY	48"	24"	48"	24"
SAND	24"	24"	24"	24"
GRAVEL	24"	18"	24"	18"

NOTES:
1. CONCRETE FOR ALL THRUST BLOCKS TO BE MDOT CLASS A CONCRETE.
2. WHERE POSSIBLE, CONSTRUCT THRUST BLOCKS AGAINST UNDISTURBED SOIL. WHERE NOT POSSIBLE, PLACE FILL BETWEEN THE THRUST BLOCK AND THE UNDISTURBED SOIL COMPACTED TO 90% STANDARD PROCTOR DENSITY.
3. WRAP FITTINGS WITH POLYETHYLENE PRIOR TO CONSTRUCTING THRUST BLOCKS. NO JOINTS SHALL BE COVERED WITH CONCRETE.
4. THRUST BLOCK DIMENSIONS ARE BASED ON A MAXIMUM WATER MAIN PRESSURE OF 150 PSI.

TYPICAL THRUST BLOCK DETAIL
N.T.S.



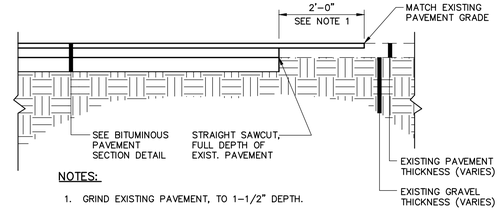
BUILDING TO CONCRETE SIDEWALK TRANSITION DETAIL
N.T.S.

CONCRETE SPECIFICATION:
- MDOT CLASS A CONCRETE

CONTROL JOINT SPECIFICATION:
- SPACING OF JOINTS – 10 FEET ON CENTER ALONG LENGTH OR AS INDICATED ON STRUCTURAL AND ARCHITECTURAL PLANS.
- SAW CUT JOINTS AT 1 1/2" MAX. DEPTH

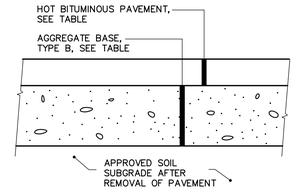
FINISH SPECIFICATION:
- BROOM SWEPT FINISH
- CURE WITH CURE–TO–SPEC MS
- AFTER CONSTRUCTION JOINTS HAVE BEEN FILLED AND SEALED; APPLY "CONSOLIDECK SALTGUARD"

NOTE:
- ALL CONCRETE SHALL BE PLACED BY AN A.C.I. FLATWORK CERTIFIED FINISHER
- GEOFOAM NOT SHOWN FOR CLARITY, SEE FOUNDATION PLANS.



NOTES:
1. GRIND EXISTING PAVEMENT, TO 1–1/2" DEPTH.
2. PROVIDE BITUMINOUS TACK COAT ON VERTICAL AND HORIZONTAL SURFACES PRIOR TO PAVING.
3. DETAIL APPLICABLE TO PAVEMENT BUTT JOINTS AT ROADWAY WORK LIMITS. REFER TO PIPE INSTALLATION DTL. OR PAVED ROAD SECTION DTLS. FOR TRENCH REPAIR REQUIREMENTS.

PAVEMENT BUTT JOINT DETAIL
N.T.S.



BITUMINOUS PAVEMENT
N.T.S.

HOT BITUMINOUS ASPHALT PAVEMENT SECTIONS				
TYPE	ITEM NUMBER	AREA 1	AREA 2	AREA 3
WEARING (12.5MM)	403.2081	1 ½" MIN	1 ½" MIN	1 ½" MIN
INTERMEDIATE (12.5MM)	403.2131	N/A	1 ½" MIN	1 ½" MIN
BASE (19.0MM)	403.2071	2 ½" MIN	6" MIN	3" MIN
AGGREGATE BASE (TYPE B)	304.15	26" MIN	21" MIN	24" MIN

41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS
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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

CIVIL PLANS

STATE OF MAINE · REGISTERED PROFESSIONAL ENGINEER · LICENSED
DAVID A. SENUS
10791
SIGNATURE
10791
P.E. NUMBER
02/09/2018
DATE

PROJ. MANAGER	JOEL KITTREDGE		
DESIGN–DETAILED	02–15–18	CMS/JBC	02–15–18
CHECKED–REVIEWED	02–15–18	DAS	02–15–18
DESIGN2–DETAILED2			
DESIGN3–DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

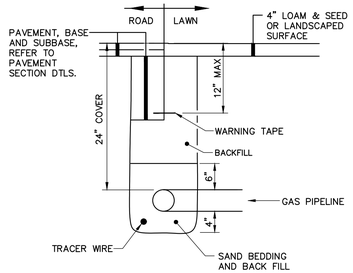
PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
CUMBERLAND COUNTY
PORTLAND

CIVIL DETAILS - 1

SHEET NUMBER

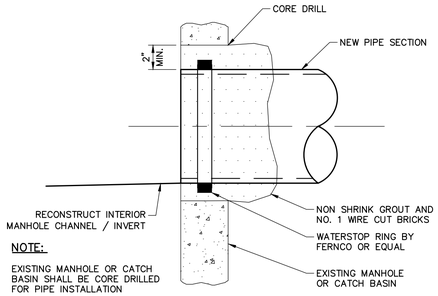
C-07

\\woodardcurran.net\shared\Projects\0230769.00 BSE – IMT O&M Ctr\wip\Drawings\CIVIL\230769.00–C–07 – C–11.dwg, Feb 28, 2018 – 2:24pm



GAS PIPE TRENCH DETAIL

N.T.S.

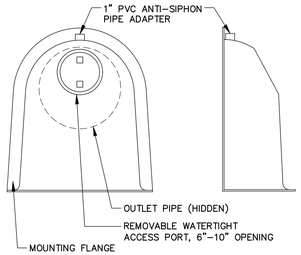


NOTE:

EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION

NEW PIPE TO EXISTING STRUCTURE

N.T.S.

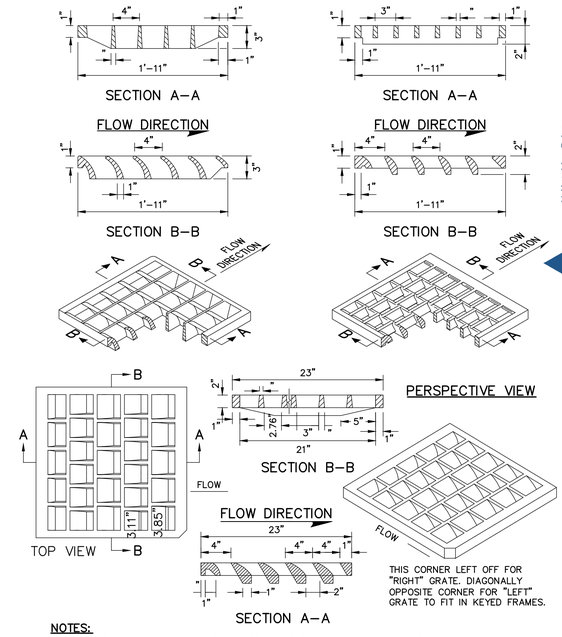


NOTES:

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY BEST MANAGEMENT PRODUCTS, INC. OR PRE-APPROVED EQUAL
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT PIPE AND ELBOW.
4.
5. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION (SNOUT SIZE ALWAYS LARGER THAN PIPE SIZE).
6. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A MINIMUM DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
7. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 12" ACCORDING TO STRUCTURE CONFIGURATION.
8. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL AND PIPE SHALL BE FINISHED FLUSH TO WALL.
9. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER.
10. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT. INSTALLATION KIT SHALL INCLUDE: INSTALLATION INSTRUCTIONS, PVC ANTI-SIPHON VENT PIPE AND ADAPTER, OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING, 3/8" STAINLESS STEEL BOLTS, AND ANCHOR SHIELDS.

SNOUT OIL-WATER-DEBRIS SEPARATOR DETAIL

N.T.S.

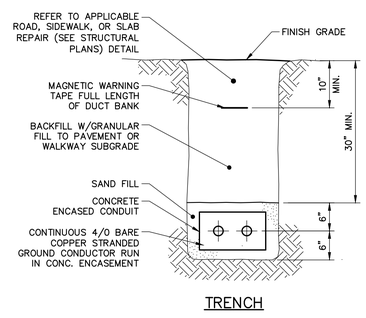


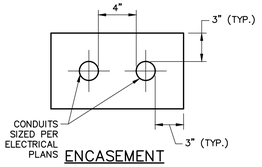
NOTES:

TO BE USED WHERE PARALLEL BAR GRATES WOULD PRESENT A HAZARD TO BICYCLE TRAFFIC. FOR USE ON CATCH BASIN TYPES: A1-C, A2-C, A5-C, B1-C, B2-C, B5-C, F3-C, F4-C, F5-C, F6-C.

"CASCADE-TYPE" GRATES

N.T.S.



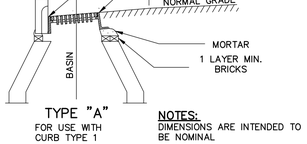


NOTES:

1. ALL CONDUITS, INCLUDING RISER CONDUITS, NEED TO BE SLOPED TO DRAIN INTO MANHOLES OR TRANSFORMER FOUNDATIONS, 3" PER 100'.
2. INSTALL A PULLING LINE WITHIN EACH CONDUIT.
3. CONDUIT SHALL BE SCHEDULE 40 PVC, CONDUIT SWEEPS SHALL BE MIN. 48" RADIUS RIGID GALV. STEEL.

BURIED ELECTRICAL CONDUIT DETAIL

N.T.S.

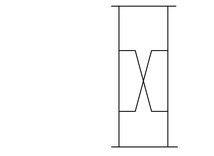


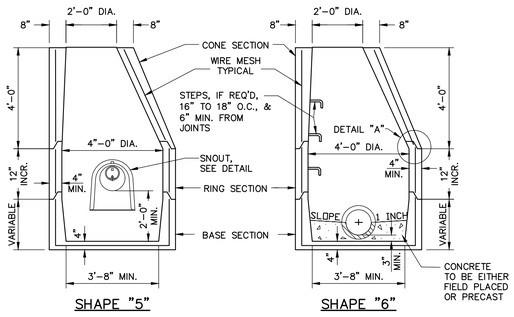
NOTES:

DIMENSIONS ARE INTENDED TO BE NOMINAL

CATCH BASIN TOP INSTALLATION

N.T.S.



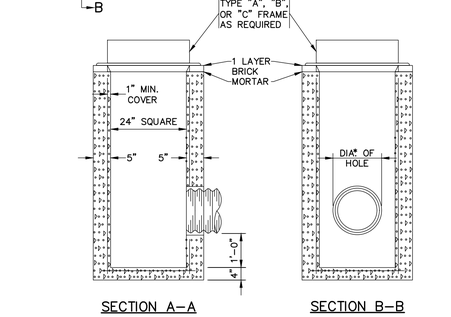


NOTES:

1. DIMENSIONS ARE INTENDED TO BE NOMINAL.
2. ALL ITEMS SHOWN IN DETAIL ARE INCIDENTAL TO CATCH BASIN PAY ITEM.

CATCH BASIN OR MANHOLE

N.T.S.

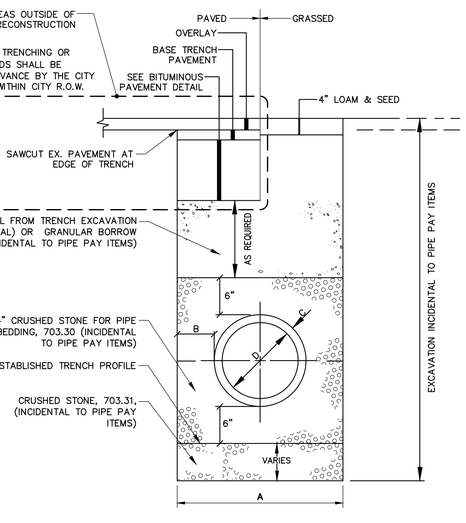


NOTE:

ENTIRE CATCH BASIN WITH EXCEPTION OF LEVELING BRICK, FRAME AND GRATE TO BE PRECAST AS A SINGLE PORTLAND CEMENT CONCRETE UNIT

2' SQUARE AREA DRAIN (MDOT TYPE F)

N.T.S.



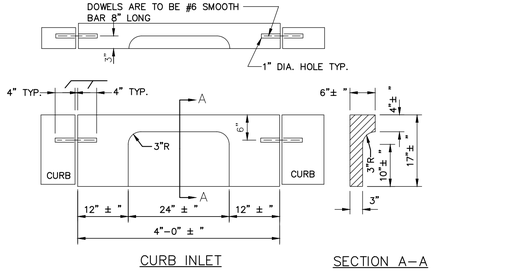
PIPE INSTALLATION DETAIL - NOTES

1. ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE.
2. IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
3. DIMENSION "B" SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE; BUT IN ALL CASES "B" SHALL BE AT LEAST 9".
4. DIMENSION "A" IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES ALL EXCAVATION BEYOND THIS WIDTH SHALL BE CONSIDERED INCIDENTAL TO PIPE PAY ITEMS. DIMENSION "A" SHALL BE BASED ON PIPE DIAMETER, AS SET FORTH IN THE FOLLOWING TABLE.

PIPE DIAMETER, "D" (INCHES)	MAX. TRENCH WIDTH, "A" (FEET)
6 - - - -	4.0
8	4.0
10	4.0
12	4.0
15	4.0
18 - - - -	5.0
21	5.0
24	5.5
27	6.0
30	6.0
36 - - - -	7.0
42	8.0
48	8.0

PIPE INSTALLATION DETAIL

N.T.S.



TYPE 1 GRANITE CURB INLET

N.T.S.

WOODARD & CURRAN
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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202
WIN
021942.02

CIVIL PLANS

STATE OF MAINE
DAVID A. SENUS
10791
REGISTERED PROFESSIONAL ENGINEER

P.E. NUMBER 10791
SIGNATURE
02/09/2018
DATE

PROJ. MANAGER	JOEL KITTREDGE
DESIGN-DETAILED	02-15-18 CMS/ABC
CHECKED-REVIEWED	02-15-18 DAS
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

CIVIL DETAILS - 2

SHEET NUMBER

C-08

10 OF 58

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Tools Needed for Installation

Tape Measure
Marker or Pencil
Masonry Drill Bit
Drill (Hammer drill recommended)
Hammer
Wrench 9/16"
Level
Washers (for leveling if necessary)

Recommended Base Materials:

Solid concrete is the best base material for installation. Ask your Dero Rack representative which anchor is appropriate for your application to ensure the proper anchors are shipped with your rack. Be sure nothing is underneath the base material that could be damaged by drilling.

Installation:

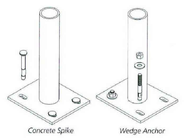
3/8" anchors are shipped with the rack. Place the rack in the desired location. Use a marker or pencil to outline the holes of the flange onto the base material. Drill the holes in accordance with the specifications shipped with the anchors. Make sure the holes are at least 6" away from any cracks in the base material.

Tamper Resistant Fasteners

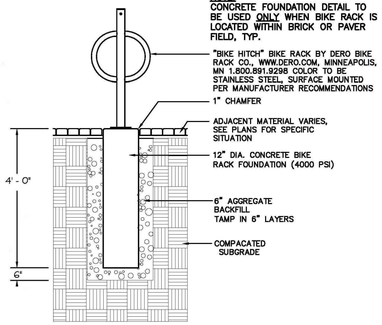
The concrete spike is a permanent anchor. The top of the wedge anchor can also be pounded sideways after installation so that it cannot be removed. Other tamper resistant fasteners are also available for purchase.

When using the special tamper resistant nuts, always set and first tighten the anchors. Once the rack is installed, replace two nuts from the bracket (opposite sides from each other) with the tamper resistant fasteners. DO NOT OVERTIGHTEN the tamper resistant nut.

If you have any questions about installation or other features of the Bike Rack, please call us toll free at 1-800-298-4915



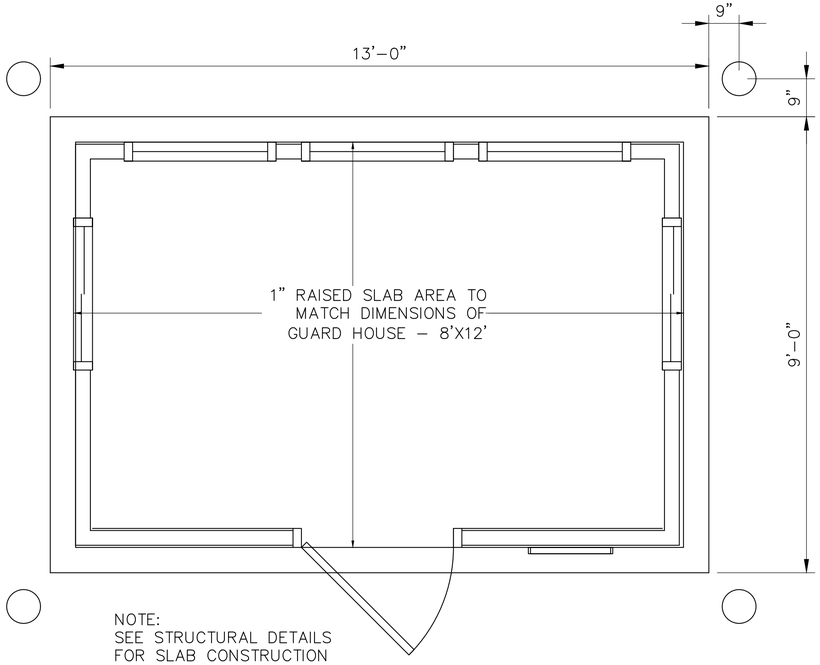




CONCRETE FOUNDATION

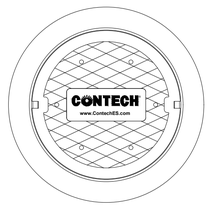
BIKE RACK DETAIL

N.T.S.



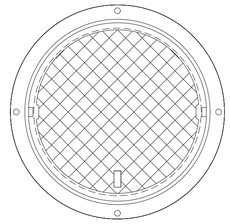
GUARD HOUSE SLAB DETAIL

N.T.S.



FRAME AND COVER

(DIAMETER VARIES)
N.T.S.



HATCH

(36" DIA. CAST INTO SLAB)
N.T.S.

JELLYFISH FILTER GENERAL NOTES:

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' – 1', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS AS DIRECTED BY THE ENGINEER OF RECORD.

JELLYFISH FILTER INSTALLATION NOTES

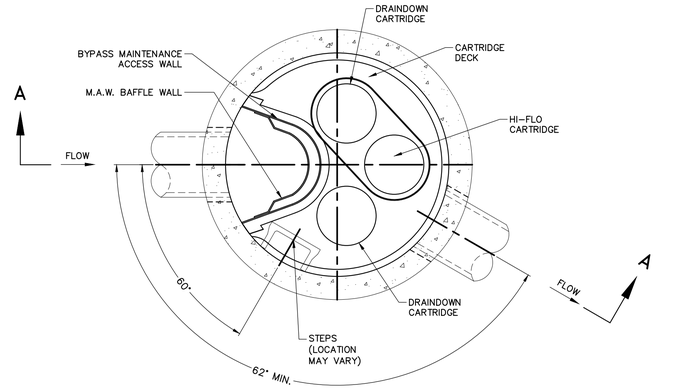
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED)

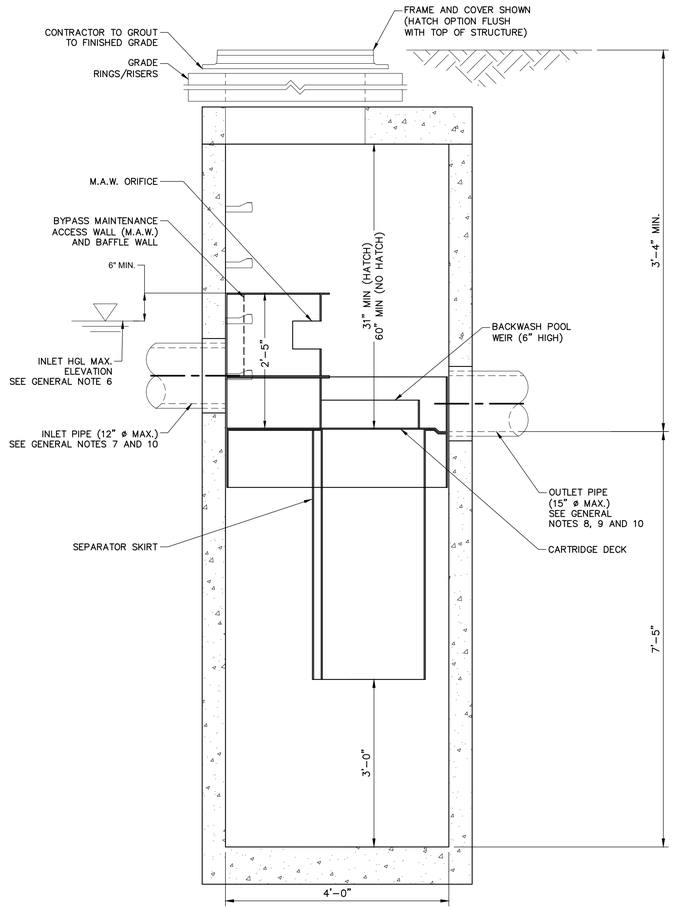
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)

D. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

E. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (866) 740-3318.



PLAN VIEW



SECTION A-A

JELLYFISH (JF4) FILTER DETAIL

N.T.S.

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Portland, Maine 04102
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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

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021942.02

CIVIL PLANS

STATE OF MAINE · DAVID A. SENUS 10791 · REGISTERED PROFESSIONAL ENGINEER

SIGNATURE	
P.E. NUMBER	10791
DATE	02/09/2018

	BY	DATE
PROJ. MANAGER	JOEL KITTREDGE	
DESIGN-DETAILED	CMS/JBC	02-15-18
CHECKED-REVIEWED	DAS	02-15-18
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
CUMBERLAND COUNTY
PORTLAND

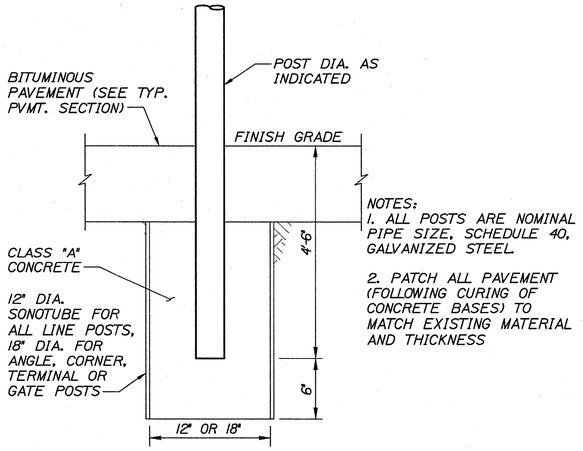
CIVIL DETAILS - 3

SHEET NUMBER

C-09

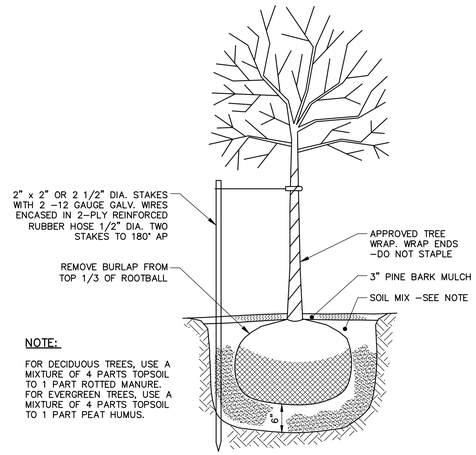
11 OF 58

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FENCE/GATE POST DETAIL

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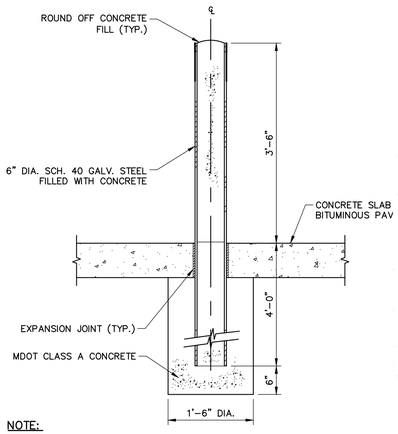


NOTE:

FOR DECIDUOUS TREES, USE A MIXTURE OF 4 PARTS TOPSOIL TO 1 PART ROTTED MANURE. FOR EVERGREEN TREES, USE A MIXTURE OF 4 PARTS TOPSOIL TO 1 PART PEAT HUMUS.

TREE PLANTING DETAIL

N.T.S.

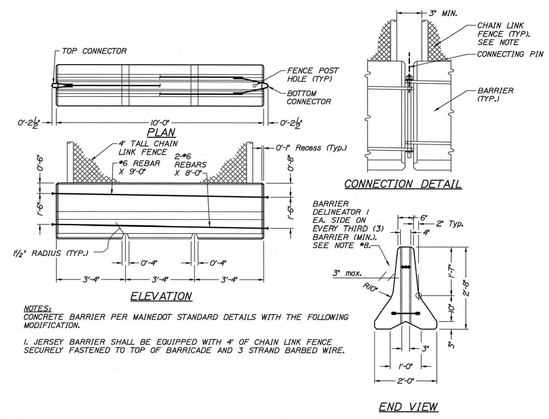


NOTE:

ALL BOLLARDS SHALL BE PAINTED. COLOR SELECTED BY OWNER.

BOLLARD DETAIL

N.T.S.

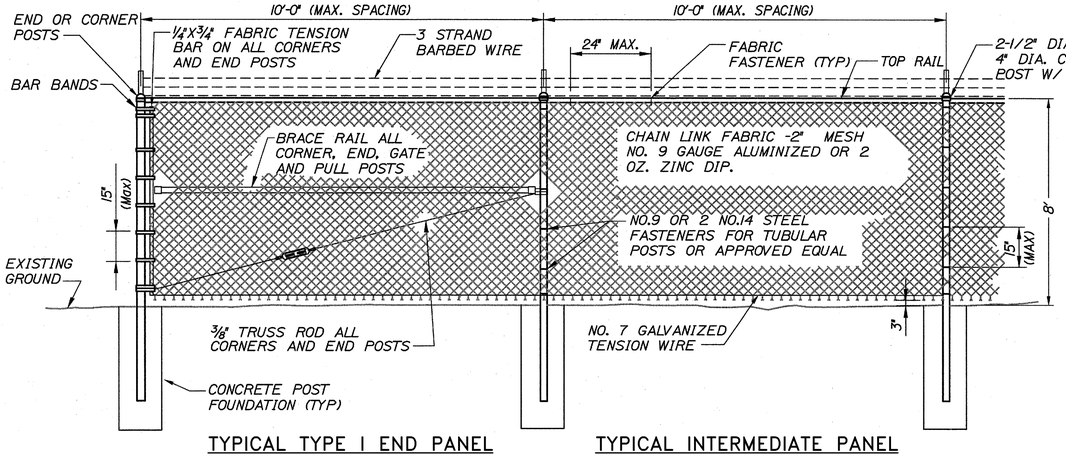


NOTES:
CONCRETE BARRIER PER MAINEDOT STANDARD DETAILS WITH THE FOLLOWING MODIFICATION.

I. JERSEY BARRIER SHALL BE EQUIPPED WITH 4' OF CHAIN LINK FENCE SECURELY FASTENED TO TOP OF BARRICADE AND 3 STRAND BARBED WIRE.

TEMPORARY CONCRETE BARRIER

NTS



TYPICAL TYPE I END PANEL

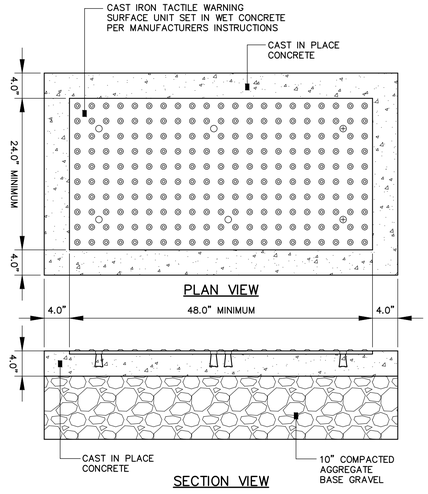
TYPICAL INTERMEDIATE PANEL

TYPICAL CHAIN LINK FENCE DETAIL

N.T.S.

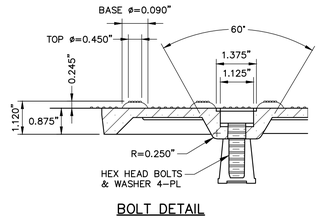
NOTES:

1. TYPE I BRACING WILL BE USED AT CORNER AND END POSTS.
2. CONCRETE FOR POST FOUNDATIONS SHALL BE CLASS "A".
3. ALL POSTS SHALL BE SET IN CONCRETE.
4. CHAIN LINK FENCE SHALL BE INSTALLED WITH BARBS DOWN.
5. ALL COMPONENTS OF CHAIN LINK FENCE SHALL BE HDG STEEL IN ACCORDANCE WITH AASHTO M181.
6. FASTEN STEEL FABRIC FROM EXISTING FENCE TO NEW POST WHERE REQUIRED.



NOTES:

1. CAST IRON TACTILE WARNING SURFACE UNITS SHALL BE PER MDOT'S QUALIFIED PRODUCTS LIST.
2. CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MDOT CLASS A STRUCTURAL CONCRETE, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE CONCRETE SHALL BE SEALED PRIOR TO SETTING PANELS. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A GROOVED EDGE BETWEEN THE TILE AND CONCRETE, ALONG WITH A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
3. TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. TRUNCATED DOME BRICKS AND GRANITE PAVERS ARE NOT ALLOWED.
4. FOR ALL SIDEWALK RAMPS MADE OF CONCRETE OR ASPHALT, BRICK RED COLORED TILES SHALL BE USED. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.



BOLT DETAIL

SIDEWALK RAMP DETECTABLE WARNING

N.T.S.

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CIVIL PLANS

STATE OF MAINE
DAVID A. SENUS
10791
LICENSED PROFESSIONAL ENGINEER

DAVID A. SENUS — SIGNATURE
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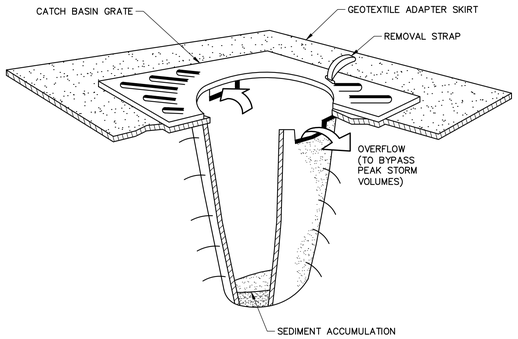
PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND — CUMBERLAND COUNTY

CIVIL DETAILS - 4

SHEET NUMBER

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NOTES:

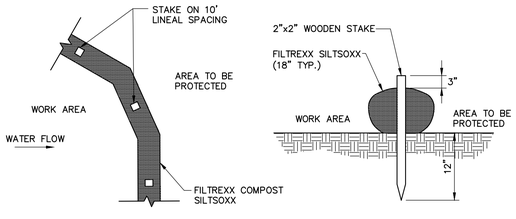
CATCH BASIN PROTECTION TO BE "SILTSACK" (BY ACF ENVIRONMENTAL) OR "STREAM GUARD" (BY FOSS ENVIRONMENTAL SERVICES).

INSERT TO BE EMPTIED IN AN APPROVED MANNER WHEN IT IS 1/2 FULL OF SEDIMENT.

INSPECT INSERT AFTER ALL RAINFALL EVENTS, REPAIR AND MAINTAIN AS REQUIRED.

TEMPORARY INLET PROTECTION

N.T.S.



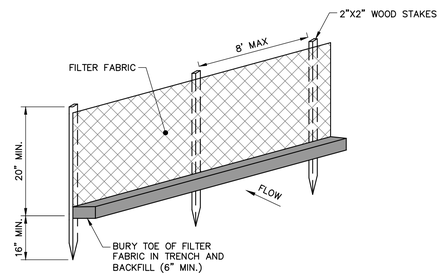
PLAN VIEW SECTION

NOTE:

WHEN STAKING IS NOT POSSIBLE, HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SEDIMENT CONTROL TO HELP STABILIZE DURING RAINFALL/RUNOFF EVENTS.

SEDIMENTATION BARRIER – SILTSOXX CONTRACTOR OPTION

N.T.S.



ISOMETRIC VIEW

NOTES:

1. INSTALL FABRIC ON UPHILL SIDE OF WOOD STAKES.
2. SPACING BETWEEN WOOD STAKES PER MANUFACTURER'S RECOMMENDATION.
3. SILT FENCE WILL NOT BE USED IN DRAINAGE WAYS.
4. MAINTENANCE: INSPECT FOR TEARS IN THE FABRIC OR DAMAGE TO SUPPORTS. REPAIR AS NECESSARY. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES A DEPTH OF SIX–INCHES OR MORE.
5. REMOVAL: WHEN UPSLOPE AREAS ARE STABILIZED, THE STRUCTURE AND ANY ACCUMULATED SEDIMENT WILL BE REMOVED.

SEDIMENTATION BARRIER – SILT FENCE CONTRACTOR OPTION

N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

Temporary Erosion Control

Contractor shall prepare and submit a soil erosion and water pollution control plan to engineer in accordance with section 656.

Measure	Dates For Use	Timing, Activity, and Location
Sedimentation Barrier	ALL	Before soil disturbance, install downhill of areas to be disturbed and around material stockpiles.
Up–slope Diversion	ALL	Before soil disturbance, install uphill of areas to be disturbed and material stockpiles.
Catch Basin Protection	ALL	Before soil or pavement disturbance, install ACF Environmental, Inc. High Flow Siltsack, Siltsaver Inlet Filter. or equal, installed per manufacturer's requirements.
Dust Control	ALL	During dry weather, apply water and calcium chloride to control dust.
Temporary Seeding	April 15 to Oct. 1	Soil stockpiles that are not covered and disturbed areas that will not be disturbed again within 14 days. If grass growth provides less than 95% soil coverage by Nov. 1, apply mulch and anchor with erosion control blanket.
Mulch	April 15 to Sept. 15	On all areas of exposed soil apply 100–150 lbs (2.5 bales) per 1,000 sq ft. by mechanical blower.
Winter Mulch	Sept. 16 to Oct. 31	On all areas of exposed soil apply 150 to 170 lbs. mulch (4 bales) per 1,000 sq. ft. by mechanical blower. Erosion control blanket may be used as a substitute for winter mulch.
	Nov. 1 to April 14	On all areas of exposed soil, apply 150 to 170 lbs. mulch (4 bales) per 1,000 sq. ft. and anchor with netting at the end of each working day. Erosion control blanket may be used as a substitute for winter mulch.
Inspections	Until site is permanently stabilized	Inspect the erosion and sedimentation control measures daily, and maintain and repair as necessary.

Permanent Erosion Control:

Measure	Dates For Use	Timing, Activity, and Location
Pavement – Base Course – Final Course	When no frost is in ground	Install only in areas shown on the plan, shortly after pavement base is brought to final grade. Install near completion of project.
Permanent Seeding	April 15 to Sept. 15	On final grade areas, within 7 days of grade preparation, prepare topsoil, followed by seed and mulch application.
Dormant Seeding	Sept. 16 to April 15	On final grade areas, with prepared topsoil. Apply seed at double the specified rate on bare soil, and follow with an application of winter mulch.
Ground Cover, Trees, Shrubs	April 15 to Nov. 1	Install with final landscaping.
Permanent Mulch	ALL	Install with final landscaping.

Inspections:

Regular inspections of all erosion and sedimentation controls shall be made at least weekly and prior to and following storm events. Minimum inspections shall be made as listed in the table below.

Inspected Item	Look For
Mulched Surfaces	Thin mulch or inadequate application. Wind movement.
Seeded Surfaces	Poor seed germination. Loss of mulch. Development of rivulets.
Sediment Barrier	Sediment build–up to one half the height of the barrier. Undermining of the barrier. Supporting stakes loose, toppled, or unmarked. Breaks in barrier.
Perimeter Diversion	Discharge is to stabilized area. Erosion or breaks in barrier. Supporting stakes loose, toppled or unmarked.
Catch Basin Protection	Sediment build–up and structure blockages. Slow flow/Ponding water. Breaks in fabric or voids in barrier.
Dewatering Filter	Breaks in fabric or supporting structure. Slow flow, indicating high sediment build–up.
Construction Entrance	Sedimentation of roadways. Off–site dust complaints.

EROSION AND SEDIMENTATION CONTROL NOTES

TEMPORARY EROSION CONTROL MEASURES MAY INCLUDE THE USE OF STABILIZED CONSTRUCTION ENTRANCES, HYDRAULIC MULCH, HAY AND STRAW MULCH, EROSION CONTROL BLANKET, TURF REINFORCED MATTING, RIPRAP AND TEMPORARY SEEDING. TEMPORARY SEDIMENT CONTROL MEASURES INCLUDE THE USE OF SILT FENCE, EROSION CONTROL MIX BERMS, PLUNGE POOLS, CHECK DAMS, SEDIMENT TRAPS, CATCHBASIN SEDIMENT COLLECTION BAGS AND GEOTEXTILE FILTER BAGS. PERMANENT MEASURES INCLUDE THE USE OF RIPRAP AT EXPOSED STORMDRAIN AND CULVERT INLETS AND OUTLETS, ARMORED SWALES AND SLOPES AND PERMANENT VEGETATION.

GENERAL

A. THE PROJECT SHALL CONFORM WITH THE STANDARDS OF THE MAINE CONSTRUCTION GENERAL PERMIT, IF APPLICABLE.

B. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPS HANDBOOK PUBLISHED BY THE MAINE DEP UNLESS OTHERWISE NOTED IN THESE PLANS. HTTP://MAINE.GOV/DEP/BLWQ/DOCSTAND/ESCBMPS/

C. ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED BY THE CONTRACTOR.

D. THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES, OR WETLANDS AS A RESULT OF THIS PROJECT.

E. THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE SITE WHENEVER POSSIBLE WHILE ALLOWING PROPER SITE DEVELOPMENT.

F. CONSTRUCTION STAGING SHALL BE CONDUCTED IN A WAY TO MINIMIZE THE POTENTIAL FOR STORMWATER RUN–ON TO DISTURBED AREAS.

G. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR/REPLACEMENT/MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE STABILIZED TO THE SATISFACTION OF THE ABOVE PERSONNEL. DESCRIPTIONS OF PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:

i. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS THAT 90% OF THE DISTURBED AREA IS COVERED WITH REASONABLY THICK UNIFORM STAND OF PERMANENT GRASS SPECIES, FREE FROM SIZABLE THIN OR BARE SPOTS.
ii. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THAT COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE OFF.
iii. FOR MULCHED AREAS, PERMANENT STABILIZATION MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL.
iv. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL–GRADED GRAVEL OR APPROVED GEOTEXTILE. STONE MUST BE SIZED APPROPRIATELY AND IN ACCORDANCE WITH SECTION E–6 OF THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL.
v. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE ASPHALT BINDER COURSE.
vi. FOR OPEN CHANNELS, LEVEL SPREADERS, ENGINEERED BUFFERS OR OTHER DESIGNED STORMWATER CONVEYANCE STRUCTURE, PERMANENT STABILIZATION MEANS THE CHANNELIZED AREA(S) IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH APPROVED RIPRAP, OR WITH OTHER NON–EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE SHALL BE NO EVIDENCE OF SLUMPING, UNDERCUTTING OR DOWNCUTTING OF THE DESIGNED CHANNEL.

H. IF THE AREA WILL REMAIN UNWORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, AND WILL NOT BE BUILT ON, THEN IMMEDIATELY PROVIDE PERMANENT STABILIZATION USING VEGETATION THROUGH PLANTING, SEEDING, SOD OR THROUGH THE USE OF PERMANENT MULCH OR RIPRAP. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS. AMEND AREAS OF DISTURBED, OVERLY–COMPACTED SUBSOIL WITH TOPSOIL OR COMPOST AND LIGHTLY TILL 2–3" OF SOIL AMENDMENTS INTO THE TOP 8" OF SOIL.

I. PERMANENT SEEDING SPECIFICATION: IT IS RECOMMENDED THAT PERMANENT SEEDING BE COMPLETED BETWEEN APRIL 1 AND AUGUST 15 OF EACH YEAR. LATE SEASON SEEDING MAY BE DONE BETWEEN AUGUST 15 AND SEPTEMBER 15. AREAS NOT SEEDED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 1 SHALL BE SEEDED WITH AROOSTOCK WINTER RYE OR MULCHED AT SPECIFIED RATES. SEE WINTER SEEDING AND MULCHING SPECIFICATIONS FOR STABILIZATION AFTER NOVEMBER 1.

i. APPLY TOPSOIL TO A DEPTH OF 6 INCHES. IN COMPACTED AREAS TILL 2–3" OF COMPOST INTO UPPER 8" OF DISTURBED SOIL AND THEN APPLY 6 INCHES OF TOPSOIL.
ii. APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TESTS, APPLY GROUND LIMESTONE AT A RATE OF 33 LBS PER 1000 SQUARE FEET AND GRANULAR, COMMERCIAL–GRADE FERTILIZER 10–10–10 AT A RATE OF 18 LBS PER 1000 SQUARE FEET.
iii. UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2.5 BALES PER 1000 SQUARE FEET AND ANCHOR AS NECESSARY.

J. PROTECT ALL SEEDED AREAS WITH MULCH OR EROSION CONTROL BLANKET IN AREAS OF SHEET OR CONCENTRATED FLOWS. MULCH ALL AREAS SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE. SCHEDULE SEEDING OR SODDING TO AVOID FAILURE DUE TO SUMMER DROUGHT AND FALL FROST. NEWLY SEEDED AREAS SHOULD BE PROTECTED FROM VEHICLE TRAFFIC, PEDESTRIAN TRAFFIC AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE OR SURFACE EROSION IS EVIDENT.

K. DITCH LININGS AND RIPRAP INLET AND OUTLET PROTECTION SHALL BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR INSTALLATION OF THE CULVERT.

L. EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 3:1 OR AS OTHERWISE NOTED, IN THE BASE OF DITCHES AND ANY DISTURBED AREAS WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE (WETLANDS AND WATER RESOURCES). EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL. EROSION CONTROL BLANKET SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

M. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURE UPON STABILIZATION OF PROJECT AREA & COST SHALL BE INCIDENTAL TO CONTRACT.

WINTER CONDITIONS

A. WINTER CONSTRUCTION IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 1. IF AREAS WITHIN THE CONSTRUCTION AREA ARE NOT STABILIZED WITH TEMPORARY OR PERMANENT MEASURES OUTLINED ABOVE BY NOVEMBER 15 THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES THAT ARE SPECIFIC TO WINTER CONDITIONS.

GOOD HOUSEKEEPING AND POLLUTION PREVENTION

A. SPILL PREVENTION CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER RUNOFF AND APPROPRIATE SPILL PREVENTION, CONTAINMENT AND RESPONSE PLANNING AND IMPLEMENTATION.

B. DURING CONSTRUCTION, PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUND OR SURFACE WATERS MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO INFILTRATION AREAS. AN "INFILTRATION AREA" IS ANY ARE OF THE SITE THAT BY DESIGN, OR AS A RESULTS OF SOIL AND TOPOGRAPHY, ACCUMULATES RUNOFF THAT INFILTRATES IN THE SOIL. DIKES, BERMS, SUMPS AND OTHER FORMS OF TEMPORARY SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.

C. LOCATE ALL MATERIAL STOCKPILES WITH CONSIDERATION FOR STORMWATER DRAINAGE PATTERNS AND INFRASTRUCTURE.

D. TAKE ALL REASONABLE MEASURES TO MINIMIZE DUST RESULTING FROM THE PROJECT. OIL MAY NOT BE USED FOR DUST CONTROL.

E. LOCATE ALL LITTER, CONSTRUCTION DEBRIS AND CONSTRUCTION CHEMICALS WITH CONSIDERATION FOR STORMWATER DRAINAGE PATTERNS AND INFRASTRUCTURE.

F. TRENCH OR FOUNDATION DE–WATERING MUST BE SPREAD THROUGH SUFFICIENT NATURAL BUFFERS THAT HAVE CAPACITY TO INFILTRATE THE PUMPED WATER OR SHOULD BE PUMPED TO DESIGNED CONSTRUCTION DEWATERING DEVICES AS DESCRIBED IN THE MAINE EROSION AND SEDIMENT CONTROL BMPS HANDBOOK.

G. SEDIMENTS AND SOIL MATERIALS SHOULD BE SWEPT FROM PAVED SURFACES AT THE END OF EACH WORKDAY OR PRIOR TO RAIN EVENTS, WHENEVER POSSIBLE.

INSPECTION AND MAINTENANCE

A. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT, THE MAINE EROSION AND SEDIMENT CONTROL BMPS HANDBOOK OR ANY MUNICIPAL REQUIREMENTS MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF ADDITIONAL BMPS OR MODIFICATIONS TO BMPS ARE NECESSARY, THE MODIFICATIONS MUST BE IMPLEMENTED WITH 7 CALENDAR DAYS OR PRIOR TO ANY PRECIPITATION EVENT. ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

B. AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT BY THE CONTRACTOR, SUMMARIZING THE SCOPE OF THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO THE OPERATION OF EROSION AND SEDIMENT CONTROL BMPS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE CONSTRUCTION AREA. THE INSPECTION LOG SHOULD BE DELIVERED TO THE PROPERTY OWNER OR RESPONSIBLE CONTRACTING ENTITY UPON COMPLETION OF THE PROJECT.

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2194202

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CIVIL PLANS

STATE OF MAINE · DAVID A. SENUS 10791 · REGISTERED PROFESSIONAL ENGINEER

P.E. NUMBER 10791 — SIGNATURE

02/09/2018 — DATE

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PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
CUMBERLAND COUNTY
PORTLAND

CIVIL DETAILS - 5

SHEET NUMBER

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TEST BORING REPORT

Boring No. HA17-101

Project	Maintenance and Operations Building, International Marine Terminal, Portland, Maine
Client	Becker Structural Engineers, Inc.
Contractor	Northern Test Borings, Inc.

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	HSA	S	--	Rig Make & Model: Diedrich D-50
Inside Diameter (in.)	2.25	1.375	--	Bit Type: Roller Bit
Hammer Weight (lb)	--	140	-	Drill Mud: None
Hammer Fall (in.)	--	30	-	Casing: HSA to 27'; HW to 30'
				Hoist/Hammer: Winch / Automatic Hammer
				PID Make & Model: MiniRAE 2000 10.6 eV

File No.	130189-002
Sheet No.	1 of 2
Start	22 June 2017
Finish	23 June 2017
Driller	M. Nadeau
H&A Rep.	M. Snow
Elevation Datum	11.7 NGVD 29
Location	See Plan

Depth (ft)	Sampler 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	% Fine	% Coarse	% Medium	% Fines	Dilatancy	Toughness	Plasticity	Strength
0				11.4 / 0.3	SM	-BITUMINOUS CONCRETE-										
	16 15 25 26	S1 16	0.2 2.2			Dense brown silty SAND (SM), mps 1.5 in., no odor, dry PID=0 ppm	0	13	11	33	23	20				
						-FILL-										
	10 11 5 7	S2 16	2.2 4.0		SM	Medium dense brown silty SAND (SM), mps 2 in., no odor, dry, contains ash, brick fragments, coal PID=0 ppm	0	13	11	33	23	20				
				7.7 / 4.0												
5	4 4 5 3	S3 14	4.0 6.0		SM	Loose brown to rust-brown to black silty SAND with gravel (SM), mps 1.5 in., no odor, dry, contains coal PID=0 ppm	8	13	6	18	34	21				
						-FILL-										
	4 4 4 2	S4 8	6.0 8.0		SM	Loose dark brown to black silty SAND with gravel (SM), no odor, dry, contains brick chunks, ash, coal PID=0.5 ppm	8	13	6	18	34	21				
	1 1 1 1	S5 NR	8.0 10.0			No Recovery										
				2.7 / 9.0												
10						Note: Water encountered at 10 ft.										
	3 5 3 4	S6 6	10.0 12.0		SM	Loose black silty SAND with gravel (SM), mps 2 in., no odor, wet, contains brick chunks PID=0 ppm	15	10	10	20	30	15				
						-FILL-										
	6 6 10 11	S7 4	12.0 14.0		SM	Medium dense black silty SAND with gravel (SM), mps 2 in., no odor, wet PID=0 ppm	20	10	5	10	40	15				
				-2.3 / 14.0												
15	10 11 11 10	S8 16	14.0 16.0		SM	Medium dense dark gray silty SAND (SM), mps 1.5 in., strong organic odor, wet, contains shells	5	5	20	35	20	15				
						-HARBOR BOTTOM DEPOSIT-										
						Note: Drill action indicates easier penetration at 19 ft.										
20																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
6/23/17	07:00	19.0	30.0	30.0	8.3

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) 32.0
Rock Cored (ft) --
Samples 115
Boring No. HA17-101

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

*Note: Maximum particle size (mps) 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.

TEST BORING REPORT — Boring No. HA17-101 (continued)

File No. 130189-002
Sheet No. 2 of 2

Depth (ft)	Sampler 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	% Fine	% Coarse	% Medium	% Fines	Dilatancy	Toughness	Plasticity	Strength
20	5 5 4 5	S9 8	20.0 22.0		SP-SM	Loose dark gray-brown poorly-graded SAND with silt (SP-SM), mps 0.25 in., slight organic odor, wet, contains shells	5	10	35	40	10					
						-HARBOR BOTTOM DEPOSIT-										
				-13.3 / 25.0												
25	12 14 14 14	S10 4	25.0 27.0		SP-SM	Medium dense brown poorly-graded SAND with silt (SP-SM), mps 1.5 in., no odor, wet	5	5	10	40	30	10				
						Note: Running sands encountered from 27 to 30 ft.										
						-MARINE DEPOSIT- (sand)										
30	5 6 9 9	S11 14	30.0 32.0		SP	Medium dense brown poorly-graded SAND (SP), mps 0.5 in., no odor, wet	5	10	45	35	5					
				-20.3 / 32.0		-BOTTOM OF EXPLORATION 32.0 FT (NO REFUSAL)										

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. HA17-101

TEST BORING REPORT

Boring No. HA17-102

Project	Maintenance and Operations Building, International Marine Terminal, Portland, Maine
Client	Becker Structural Engineers, Inc.
Contractor	Northern Test Borings, Inc.

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	HW	S	--	Rig Make & Model: Diedrich D-50
Inside Diameter (in.)	4.0	1.375	--	Bit Type: Roller Bit
Hammer Weight (lb)	140	140	-	Drill Mud: None
Hammer Fall (in.)	30	30	-	Casing: HSA to 14'; HW to 30'
				Hoist/Hammer: Winch / Automatic Hammer
				PID Make & Model: MiniRAE 2000 10.6 eV

File No.	130189-002
Sheet No.	1 of 2
Start	23 June 2017
Finish	23 June 2017
Driller	M. Nadeau
H&A Rep.	M. Snow
Elevation Datum	12.6 NGVD 29
Location	See Plan

Depth (ft)	Sampler 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	% Fine	% Coarse	% Medium	% Fines	Dilatancy	Toughness	Plasticity	Strength
0				12.3 / 0.3	SM	-BITUMINOUS CONCRETE-										
	12 13 15 9	S1 15	0.5 2.0			Medium dense brown well graded SAND with gravel (SW), mps 1 in., no odor, dry PID=0 ppm	10	15	20	30	20	5				
						-FILL-										
	9 16 12 9	S2 11	2.0 4.0		SP-SM	Medium dense brown to dark brown poorly-graded SAND with silt and gravel (SP-SM), mps 2 in., no odor, dry, contains brick fragments PID=0.2 ppm	21	7	8	29	21	14				
				8.6 / 4.0												
5	9 8 6 11	S3 14	4.0 6.0		SW-SM	Medium dense brown well graded SAND with silt and gravel (SW-SM), mps 1.5 in., no odor, dry to moist PID=0.1 ppm	24	20	10	19	16	11				
						-FILL-										
	10 6 6 10	S4 12	6.0 8.0		SW-SM	Medium dense brown well graded SAND with silt and gravel (SW-SM), mps 1.5 in., no odor, dry to moist PID=0.4 ppm	24	20	10	19	16	11				
	5 6 7 12	S5 16	8.0 10.0		SW-SM	Medium dense brown well graded SAND with silt and gravel (SW-SM), mps 1.5 in., no odor, moist PID=0 ppm	25	15	20	20	10	10				
10																
	5 5 5 7	S6 14	10.0 12.0		SW-SM	Loose brown well graded SAND with silt and gravel (SW-SM), mps 1.5 in., no odor, moist to wet, contains brick fragments PID=0 ppm	25	15	20	20	10	10				
						Note: Water encountered at 11.5 ft.										
	6 6 5 3	S7 13	12.0 14.0		SW-SM	Medium dense brown well graded SAND with silt and gravel (SW-SM), mps 1.5 in., no odor, wet PID=0 ppm	15	20	20	25	10	10				
				-1.4 / 14.0		Note: Switched from augers to HW casing at 14 ft.										
15	5 8 8 8	S8 20	14.0 16.0		SP	Medium dense brown to rust-brown poorly-graded SAND (SP), contains brick fragments	10	10	40	35	5					
				-2.4 / 15.0		-FILL-										
					SW	Medium dense gray-brown well graded SAND (SW), mps 0.75 in., no odor, wet, contains few shells	10	25	35	25	5					
	6 5 5 4	S9 18	16.0 18.0		SW	Loose gray-brown well graded SAND with gravel (SW), mps 1 in., no odor, wet	10	20	20	30	15	5				
						-HARBOR BOTTOM DEPOSIT-										
20																

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) 32.0
Rock Cored (ft) --
Samples 125
Boring No. HA17-102

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

*Note: Maximum particle size (mps) 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.

TEST BORING REPORT — Boring No. HA17-102 (continued)

File No. 130189-002
Sheet No. 2 of 2

Depth (ft)	Sampler 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	% Fine	% Coarse	% Medium	% Fines	Dilatancy	Toughness	Plasticity	Strength
20	3 7 7 6	S10 12	20.0 22.0		SP	Medium dense brown poorly-graded SAND (SP), mps 0.25 in., no odor, wet		15	45	35	5					
						-MARINE DEPOSIT- (Sand)										
				-7.4 / 20.0												
25	4 5 7 8	S11 11	25.0 27.0		SP-SM	Medium dense brown poorly-graded SAND with silt (SP-SM), mps 0.25 in., no odor, wet, occasional silt laminae (0.25 in. thickness)	5	5	45	35	10					
30	6 6 7 8	S12 6	30.0 32.0		SW	Medium dense brown well graded SAND (SW), mps 0.5 in., no odor, wet	5	15	45	30	5					
				-19.4 / 32.0		-BOTTOM OF EXPLORATION 32.0 FT (NO REFUSAL)										

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. HA17-102

TEST BORING REPORT

Boring No. HA17-103

Project	Maintenance and Operations Building, International Marine Terminal, Portland, Maine
Client	Becker Structural Engineers, Inc.
Contractor	Northern Test Borings, Inc.

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	HSA	S	--	Rig Make & Model: Diedrich D-50
Inside Diameter (in.)	2.25	1.375	--	Bit Type: Roller Bit
Hammer Weight (lb)	--	140	-	Drill Mud: None
Hammer Fall (in.)	--	30	-	Casing: HSA to 15'; HW to 30'
				Hoist/Hammer: Winch / Automatic Hammer
				PID Make & Model: MiniRAE 2000 10.6 eV

File No.	130189-002
Sheet No.	1 of 2
Start	22 June 2017
Finish	23 June 2017
Driller	M. Nadeau
H&A Rep.	M. Snow
Elevation Datum	11.9 NGVD 29
Location	See Plan

Depth (ft)	Sampler 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	% Fine	% Coarse	% Medium	% Fines	Dilatancy	Toughness	Plasticity	Strength
0				11.6 / 0.3	SW-SM	-BITUMINOUS CONCRETE-										
	4 3 3 3	S1 10	0.5 2.0			Loose brown well graded SAND with silt and gravel (SW-SM), mps 1.5 in., no odor, dry PID=1.0 ppm	10	10	15	30	25	10				
						-FILL-										
	2 3 4 3	S2 14	2.0 4.0		SM	Loose dark brown silty SAND with gravel (SM), mps 0.75 in., no odor, moist PID=0.5 ppm	15	6	25	34	20					
						Note: Encountered abandoned electrical conduit at approximately 2 ft.										
				7.9 / 4.0												
5	2 1 2 2	S3 6	4.0 6.0		ML	Soft brown clayey SILT (ML), mps 0.42 mm, no odor, moist PID=0.9 ppm					10	90				
						-FILL-										
	2 2 2 5	S4 10	6.0 8.0		OL	Soft brown-gray SILT with sand and organics (OL), mps 2 mm, strong organic odor, wet, contains 3-in. wood piece PID=0 ppm					20	80				
	1 1 20 40	S5 18	8.0 10.0		OL	Very soft brown-gray SILT with sand and organics (OL), mps 2 mm, strong organic odor, wet, few brick fragments PID=0.2 ppm					15	85				
				2.9 / 9.0												
10						-WOOD-										
	60 1 3 7	S6 8	10.0 12.0	1.4 / 10.5	SM	Loose dark gray silty SAND (SM), mps 0.25 in., strong organic odor, wet, with 6-in. wood PID=0.4 ppm			5	35	40	20				
	6 7 10 12	S7 14	12.0 14.0		SP-SM	-FILL- Medium dense dark gray poorly-graded SAND with silt (SP-SM), mps 0.5 in., organic odor, wet, few brick fragments PID=0 ppm		5	10	40	35	10				
				-2.1 / 14.0												
15	8 9 9 8	S8 12	14.0 16.0		SP-SM	Medium dense rust-brown poorly-graded SAND with silt (SP-SM), mps 0.5 in., no odor, wet		10	10	40	30	10				
						-MARINE DEPOSIT- (Sand)										
	6 7 7 6	S9 12	16.0 18.0		SW-SM	Medium dense rust-brown grading to gray-brown well graded SAND with silt (SW-SM), mps 0.5 in., no odor, wet Note: Switched from augers to HW casing at 16 ft.	10	15	40	25	10					
20																

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) 32.0
Rock Cored (ft) --
Samples 125
Boring No. HA17-103

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

*Note: Maximum particle size (mps) 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.

TEST BORING REPORT — Boring No. HA17-103 (continued)

File No. 130189-002
Sheet No. 2 of 2

Depth (ft)	Sampler 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	% Fine	% Coarse	% Medium	% Fines	Dilatancy	Toughness	Plasticity	Strength
20	6 10 12 13	S10 14	20.0 22.0		SW	Medium dense rust-brown well graded SAND (SW), mps 0.5 in., no odor, wet		10	20	35	30	5				
						-MARINE DEPOSIT- (Sand)										
25	7 11 15 15	S11 14	25.0 27.0		SP	Medium dense brown to rust-brown poorly-graded SAND (SP), mps 0.5 in., no odor, wet		10	10	40	35	5				
30	10 14 15 18	S12 12	30.0 32.0		SP	Medium dense brown to rust-brown poorly-graded SAND (SP), mps 0.5 in., no odor, wet		10	10	45	30	5				
				-20.1 / 32.0		-BOTTOM OF EXPLORATION 32.0 FT (NO REFUSAL)										

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. HA17-103

NOTE: SEE DRAWING C-02 FOR TEST BORING LOCATIONS.

HALEY ALDRICH

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN 021942.02 GEOTECHNICAL PLANS

STATE OF MAINE — BRYAN C. STEINERT — No. 12008 — LICENSED PROFESSIONAL ENGINEER

	BY	DATE
PROJECT MANAGER	JOEL KLEDZIK	
DESIGN-DETAIL	JDSB	07-15
CHECKED-REVIEWED		
DESIGN2-DETAIL2		
DESIGN3-DETAIL3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD		

BRYAN C. STEINERT — SIGNATURE — 12008 — P.E. NUMBER — 1/12/2018 — DATE

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

TEST BORING LOGS

SHEET NUMBER
B1
14 OF 58

LEGEND

INDUSTRIAL OCCUPANCY (Special Purpose, Ordinary Hazard)
- Occupant Load = 100 s.f./person = 46 people
- Max. Dead End = 50'
- Common Path Limit = 100'
- Max. Travel Distance to Exit = 400'

BUSINESS OCCUPANCY
- Occupant Load = 100 s.f./person = 37 people
- Max. Dead End = 50'
- Common Path Limit = 100'
- Max. Travel Distance to Exit = 300'

ASSEMBLY OCCUPANCY (≤ 300 people)
- Occupant Load = 7 s.f./person = 165 people
- Max. Dead End = 20'
- Common Path Limit = 20'(over 50 people)
- Max. Travel Distance to Exit = 250'

PRIMARY EXIT PATH

DEAD END LENGTH

MAX. DIAGONAL DISTANCE of AREA SERVED BY MORE THAN 1 EXIT

MAX. TRAVEL DISTANCE TO EXIT PATH

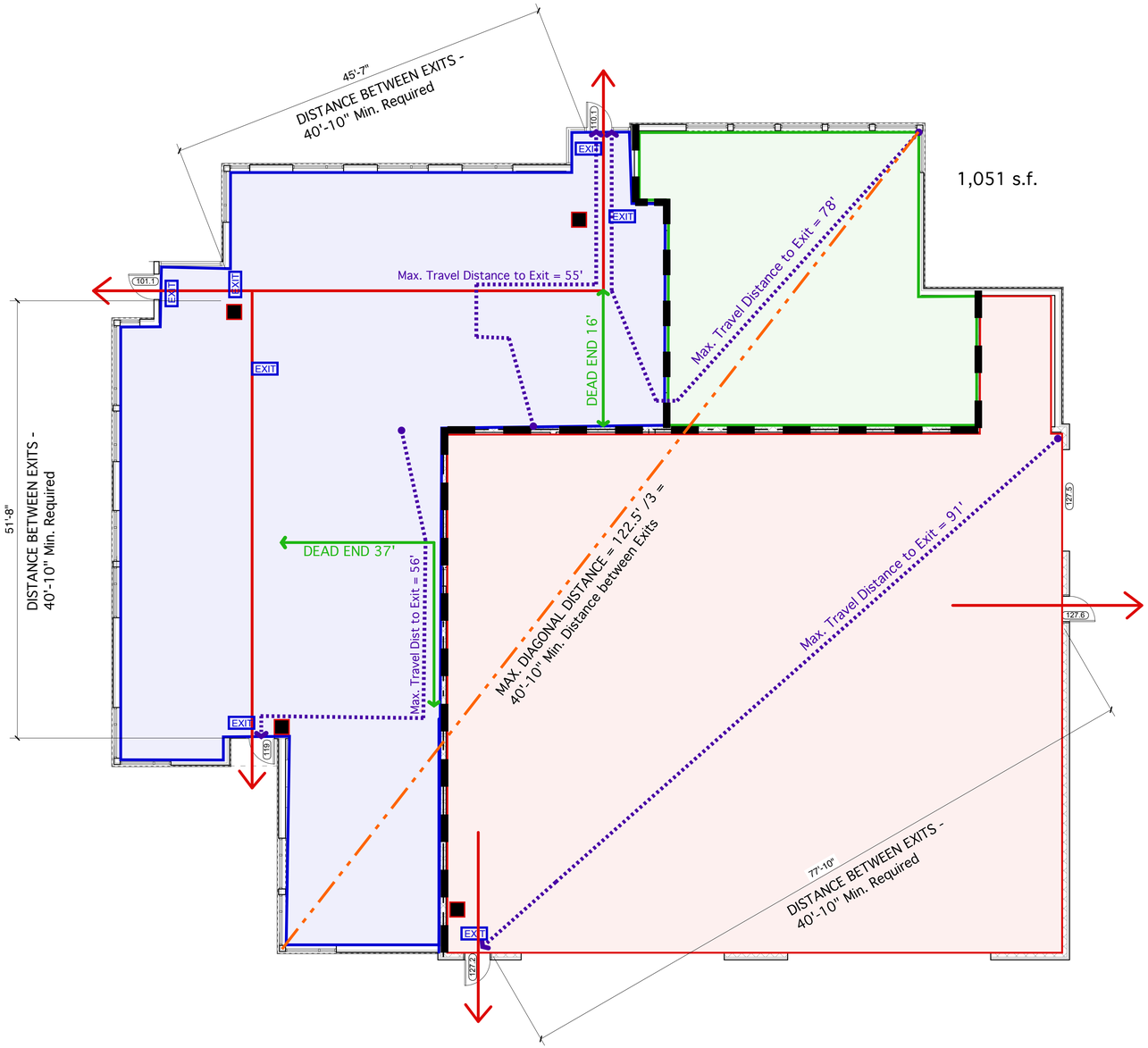
1 HOUR RATED OCCUPANCY SEPARATION

FIRE EXTINGUISHER LOCATION (REQUIRED EVERY 75' & AT STAIRS)

EXIT EXIT SIGN

E.L. EMERGENCY LIGHT

F FIRE ALARM/STROBE



LIFE SAFETY PLAN

1/8" = 1'-0"

Winton Scott Architects
5 mill street | portland, maine 04101 | www.wintonscott.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

REGISTERED ARCHITECT * STATE OF MAINE
WINTON F. SCOTT, JR. No. 793

Winton Scott

SIGNATURE
ME # 793
P.E. NUMBER
2 /16 / 2018
DATE

	DATE	BY
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

PROJ. MNGR. JOEL KITTREDGE

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS CENTER
CUMBERLAND COUNTY
PORTLAND

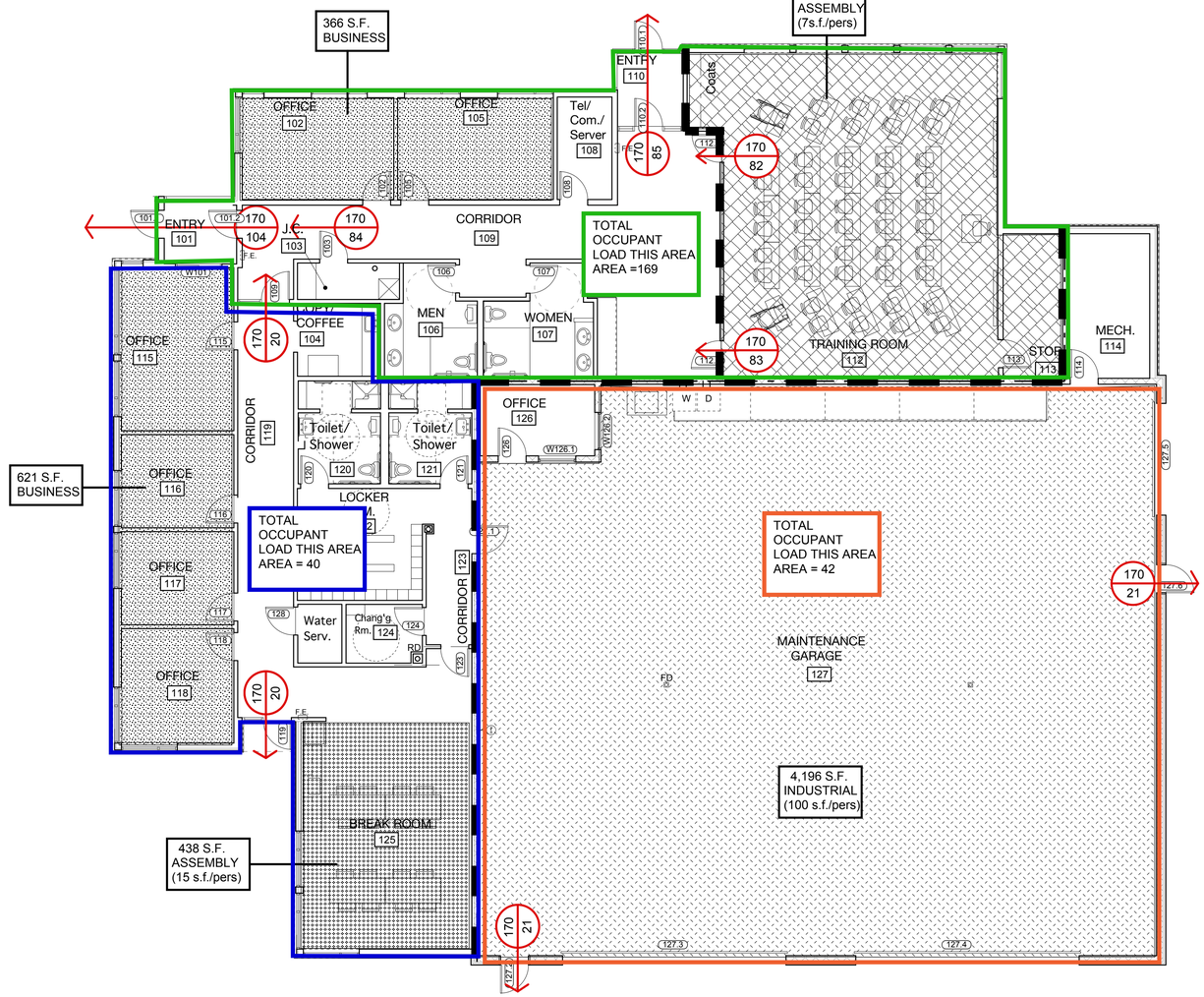
LIFE SAFETY PLAN

SHEET NUMBER

A0.1

OCCUPANCY LEGEND			TOTAL SQ. FT.	OCCUPANT LOAD
	100 GSF/PERSON	B - OFFICES	987	10
	7 GSF/PERSON	A1 - ASSEMBLY: CONFERENCE ROOM	1,156	165
	15 GSF/PERSON	A1 - ASSEMBLY: BREAK ROOM	438	30
	100 GSF/PERSON	I - INDUSTRIAL USE	4,196	42
		TOTAL:		219

170 / 41 — CAPACITY OF EXIT DOOR (34" CLEAR DIVIDED BY .2" = 170 PEOPLE; ACTUAL NUMBER OF PEOPLE EXITING THROUGH DOOR



OCCUPANCY LOADING PLAN

1/8" = 1'-0"

Winton Scott Architects
5 milk street | portland, maine 04101 | www.wintonscott.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN 021942.02

REGISTERED ARCHITECT * WINTON F. SCOTT, JR. No. 793 * STATE OF MAINE

Winton Scott

SIGNATURE

ME # 793 — P.E. NUMBER

2 /16 / 2018 — DATE

	BY	DATE
PROJ. MNGR. JOEL KITTREDGE		
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS CENTER
PORTLAND — CUMBERLAND COUNTY

OCCUPANCY LOAD PLAN

SHEET NUMBER

A0.2

INTERNATIONAL MARINE TERMINAL –MAINTENANCE & OPERATIONS FACILITY
2009 NFPA CODE SUMMARY
07.26.17

Background Information:

Project Team:
Team Leader: Jack Burgess, Becker Structural Engineers
Architect: Steve Weatherhead, Winton Scott Architects
Struct. Engineer: Dan Burne, Becker Structural Engineers
HVAC Engineer: Steve Doel, Bennett Engineering
Elec. Engineer: Larry Bartlett, Bartlett Design
Civil Engineer: Craig Sweet, Woodard & Curran

Project Description: As part of ongoing improvements to the International Marine Terminal to enhance marine freight processing operations, a new 1 story Maintenance & Operations Facility is being proposed to replace existing facilities scheduled for removal to allow further pier improvements.

The building includes a 2 bay vehicle maintenance garage, office space, meeting space, bathrooms, locker room, kitchenette and support spaces.

Square Footage: First Floor: 9,935 S.F.

Use Description: Office / Assembly / Vehicle Maintenance

Occupancy Classification: Separated Mixed Use:
Business Use (B) / Assembly Use (A) ≤ 300 people /
Industrial-General (I)

Sprinkler ,Fire Alarm & Emergency Lighting: Building will be equipped with an approved automatic, supervised sprinkler system per NFPA 13 and fire alarm system per NFPA 72 & City of Portland Standard for Signaling Systems for the Protection of Life and Property, 2010 edition. Emergency Lighting system per NPA 101 and UL 924.

Construction Type: Type II (000)– All structural elements, interior and exterior bearing and non bearing walls of non-combustible construction.

Occupancy Loads:
Business Use @ 100 s.f./person: (Table 7.3.1.2) = **10 people**
Assembly Use @ 7 s.f./person: (Table 7.3.1.2) = **165 people**
Assembly Use @ 15 s.f./person: (Table 7.3.1.2) = **30 people**
Industrial Use @ 300 s.f./person: (Table 7.3.1.2) = **42 people**

Applicable Primary Requirements:

1. General Egress Components / Ratings

Egress Capacity Factors: *Stairs .3"/person for stairways; .2"/person for level components and ramps (Table 7.3.3.1) Minimum clear width of new stairs is 44" for occupant load <2,000 (Table 7.3.3.1)*
Requirement Met. Building has no stairs.

Requirement Met. All doors are 36" width yielding a 34" clear opening. 34"/.2" = 170 people. Business Use has 3 exits, Assembly Use has 2 exits, Industrtial Use has 2 exits.

Travel Distance Limits:

Business Use:
Common Path Limit: 100' for sprinklered bldg. (section 38.2.5.3.1)
Dead-end Corridor: 50' for sprinklered bldg. (section 38.2.5.2.1)
Travel Distance: 300' for sprinklered bldg. (Section 38.2.6.3)

Industrial Use:
Common Path Limit: 100' for sprinklered bldg. (section 38.2.5.3.1)
Dead-end Corridor: 50' for sprinklered bldg. (section 38.2.5.2.1)
Travel Distance: 400' for sprinklered bldg. (Section 38.2.6.3)

Assembly Use:
Common Path Limit: 20' for sprinklered bldg. (section 38.2.5.3.1)
Dead-end Corridor: 20' for sprinklered bldg. (section 38.2.5.2.1)
Travel Distance: 250' for sprinklered bldg. (Section 38.2.6.3)

Requirements Met – See drawings

Remoteness of Exits: *(7.5.1.3.2) Where two exits or exit access doors are required, they shall be located at a distance from one another not less than one half the length of the maximum overall diagonal dimension of the building or area served, measured in a straight line between the nearest edge of the exit doors or exit access doors…..*
(7.5.1.3.3) In buildings protected throughout by an approved supervised sprinkler system… the minimum distance is reduced to 1/3 the maximum overall diagonal dimension.
Requirement Met – Max. diagonal distance = 40'-10". There are three exits provided and the distances between any two meets the minimum separation distance requirement See drawings.

Required Fire Resistance Rating: *(38.3.6.1) Exit access corridors require a fire resistance rating of 1 hour. Exception: (A.38.3.6.1(3)) No rating is required in buildings protected throughout by an approved supervised automatic sprinkler system.* **Requirement Met.**

Occupancy Separation: *A 1 hour separation is required between the Business Use and the Assembly Use. A 2 hour separation is required between the Assembly Use and Industrial use and between the Business Use and the Industrial Use. However, because the building is sprinkled, the 2 hour separations can be reduced to 1 hour.*
Requirement Met – See Plan.

Exit Access Doorways: *(7.2.1.4.2) Doors required to be of the side hinged or pivoted swing type shall swing in the direction of egress travel where serving a room or area with an occupant load of 50 or more…*
Requirement Met.

Portable Fire Extinguishers: *(38.3.5) Portable Fire Extinguishers shall be provided in accordance with 9.7.4.1.*

Section 9.7.4.1. indicates that portable fire extinguishers shall be provided per NFPA 10.
Requirement Met. Portable Fire Extinguishers are provided in accordance with NFPA 10. PFEs are located a within the maximum allowed 75' distance for any location in the building.

INTERNATIONAL MARINE TERMINAL –MAINTENANCE & OPERATIONS FACILITY
2009 IBC CODE SUMMARY

Background Information:

Project Team:
Team Leader: Jack Burgess, Becker Structural Engineers
Architect: Steve Weatherhead, Winton Scott Architects
Struct. Engineer: Dan Burne, Becker Structural Engineers
HVAC Engineer: Steve Doel, Bennett Engineering
Elec. Engineer: Larry Bartlett, Bartlett Design
Civil Engineer: Craig Sweet, Woodard & Curran

Project Description: As part of ongoing improvements to the International Marine Terminal to enhance marine freight processing operations, a new 1 story Maintenance & Operations Facility is being proposed to replace existing facilities scheduled for removal to allow further pier improvements.

The building includes a 2 bay vehicle maintenance garage, office space, meeting space, bathrooms, locker room, kitchenette and support spaces.

Square Footage: First Floor: 9,935 S.F.

Use Description: Office / Assembly / Vehicle Maintenance

Occupancy Classification: Separated Mixed Use:
Business Use (B) / Assembly Use (A3) ≤ 300 people /
Storage-Moderate Hazard S-1

Per Table 508.4, a 1 hour separation is required between Assembly and Business Use and between Assembly and Storage Use (If sprinkled). No rated separation is required between S-1 Storage and Business Use.

Sprinkler & Fire Alarm: & Emergency Lighting: Building will be equipped with an approved automatic, supervised sprinkler system per NFPA 13 and fire alarm system per NFPA 72 & City of Portland Standard for Signaling Systems for the Protection of Life and Property, 2010 edition. Emergency Lighting system per NPA 101 and UL 924.

Construction Type: Type 2B – Construction consists of non-combustible building elements with fire resistance ratings as listed in Table 601. For 2B, no rating required on primary structural elements, exterior and interior bearing or non bearing walls.

Height & Area Requirements: Per Table 503:
Business Use, Type 2B can be up to four stories in height and 23,000 S.F. per floor (Sprinkled) **Requirement Met.**

Storage S-1 Use can be up to 3 stories and 17,500 S.F. per floor (Sprinkled) **Requirement Met.**

Assembly (A3) Use can be up to 2 stories and 9,500 S.F. per floor (Sprinkled) **Requirement Met.**

Occupancy Loads/ Egress Capacity: Load Factors used for each space, total calculated load, and distribution load to exit doors is shown on the Occupant Loading Plan. There are three separate functional areas of the plan: The front office area with training space which has two exits, the back office space and break room which has two exits, and the repair garage that also has two exits.

The Occupancy Load Plan illustrates that sufficient egress capacity is provided at all exit access doors or exit doors leading from the space.
Requirement Met.

Travel Distance Limits:

Business Use:
Common Path Limit: 100' for sprinklered bldg. (section 1014.3)
Dead-end Corridor: 50' for sprinklered bldg. (section 1018.4)
Travel Distance: 300' for sprinklered bldg. (Table 1016.1)

Storage Moderate Hazard Use:
Common Path Limit: 100' for sprinklered bldg. (section 1014.3)
Dead-end Corridor: 50' for sprinklered bldg. (section 1018.4)
Travel Distance: 250' for sprinklered bldg (Table 1016.1)

Assembly Use:
Common Path Limit: 75' for sprinklered bldg. (section 1014.3)
Dead-end Corridor: 20' for sprinklered bldg (Table 1018.4)
Travel Distance: 250' for sprinklered bldg. (Table 1016.1)
Requirement Met.

Remoteness of Exits: Per 1015.2.1, exception (2), Remoteness of exits in portions of the building required to have two exits shall be a minimum of 1/3 the longest diagonal of the area or building apart (if sprinkled). Drawing indicates Max. diagonal and remoteness of exits at areas requiring two exits.
Requirement Met.

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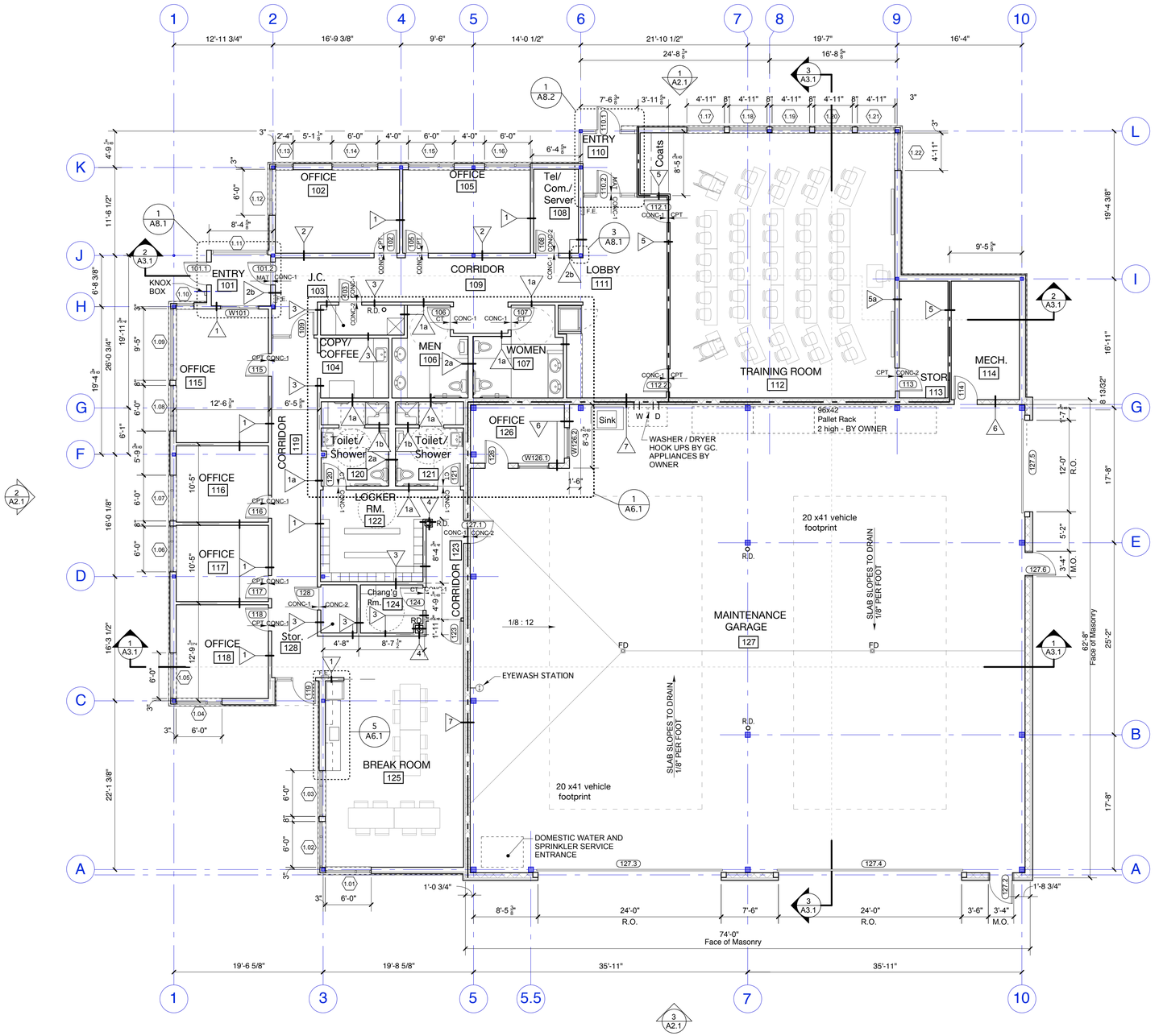
Winton Scott — SIGNATURE
ME # 793 — P.E. NUMBER
2 /16 / 2018 — DATE

	DATE	BY
PROJ. MNGR. JOEL KITTREDGE	-	-
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISION/S 1	-	-
REVISION/S 2	-	-
REVISION/S 3	-	-
REVISION/S 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS CENTER
PORTLAND CUMBERLAND COUNTY

CODE SUMMARY

SHEET NUMBER
A0.3



CONCEPT FLOOR PLAN 9,935 S.F.

1/8" = 1'-0"

LEGEND

- x.x — Indicates window number. Refer to Window Schedule on A10.1. **SEE ALSO BUILDING ELEVATIONS FOR UPPER WINDOWS.**
- x — Indicates partition type. Refer to A.A10 for details.
- xxx.x — Indicates door number. Refer to Door Schedule on A11.1
- F.E. — Indicates Fire Extinguisher. Provide blocking.

  Fire Extinguishers shall be semi-recessed cabinets except in Mechanical Room 120 where it shall be mounted on wall brackets.

  Number and final location of fire extinguishers shall be reviewed and approved by Portland Fire Department before installation.
- Indicates 1-hour fire rated partition
- Indicates built-in cabinets / millwork
- Indicates interior bearing wall
- MAT / CONC-1 — Indicates floor finish transition

CONC-1	Stained & sealed decorative concrete floor
CONC-2	Sealed concrete floor
CPT	Carpet
MAT	Entry Carpet
CT	Ceramic Tile
VCT	Conductive vinyl composition tile

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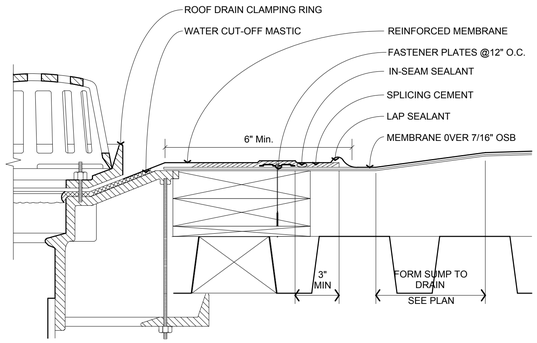
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PROJ. MNGR. JOEL KITTREDGE	-	-
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CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

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BUILDING PLAN

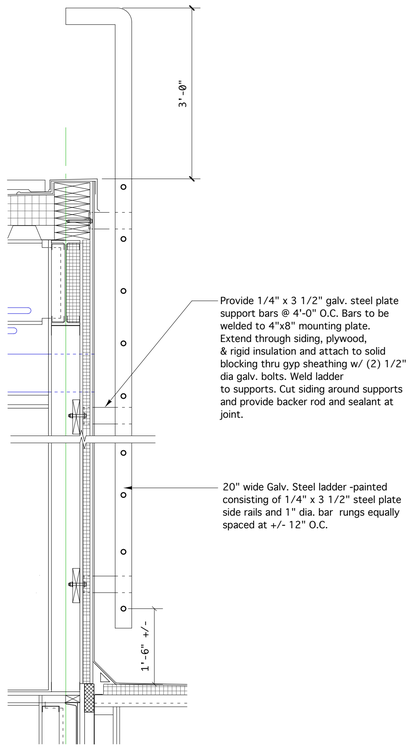
SHEET NUMBER

A1.1



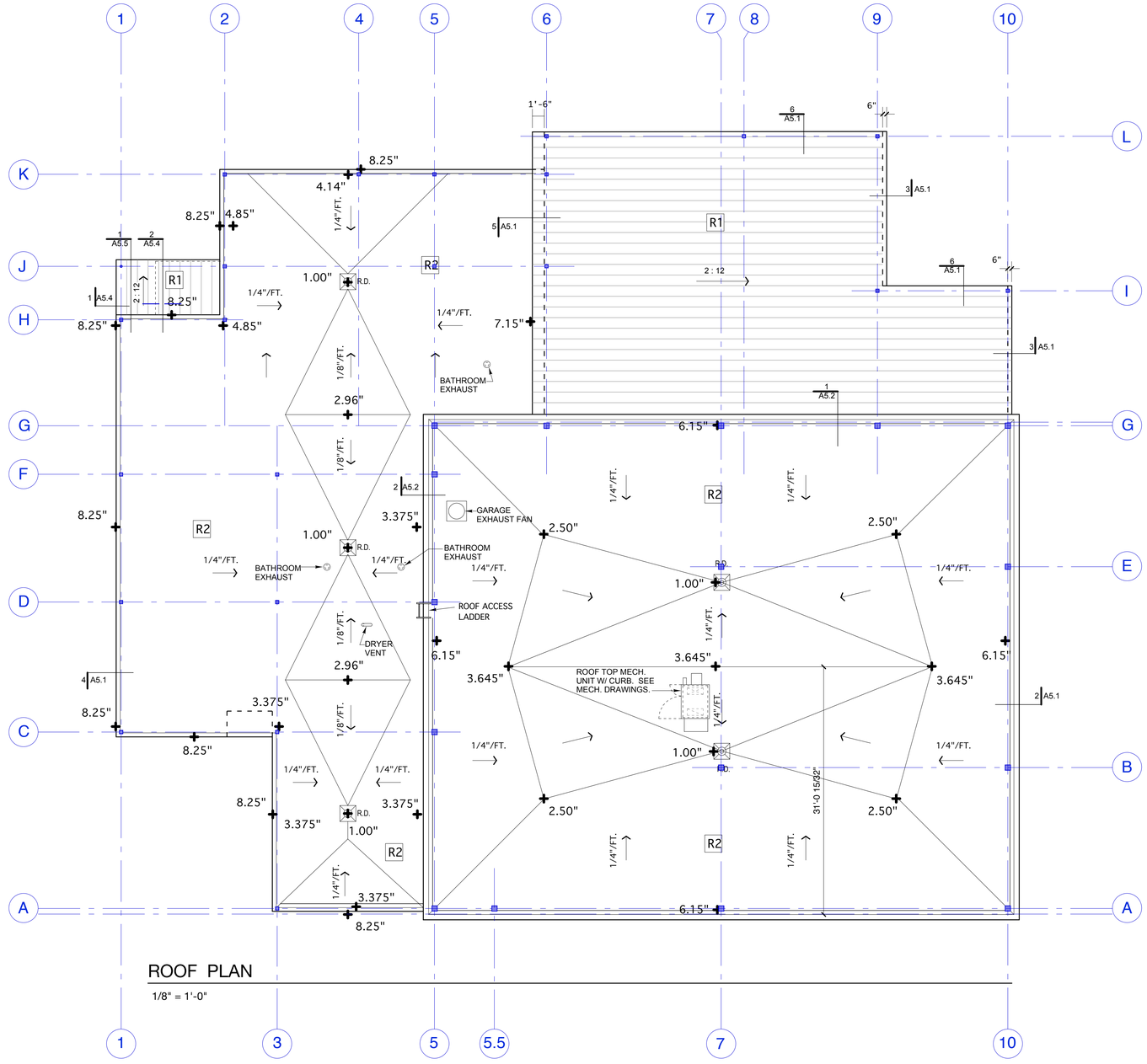
3 ROOF DRAIN SECTION

3" = 1' - 0"



2 SECTION DETAIL AT ROOF ACCESS LADDER

3/4" = 1'-0"



ROOF PLAN

1/8" = 1'-0"

LEGEND

- Direction of slope
- R.D. — Roof drain, see 8/A5.5 typical
- + x.xx" — Depth of insulation measured from top of roof deck, for general reference only.
- R1
  - Pre-finished metal roof covering, zee-lock double lock seamed by Berridge
  - Ice & watershield on entire roof
  - 1/2" Plywood Cover Board
  - 4" Poly Iso Rigid Insulation
  - Metal Deck per Structural
  - Steel Framing per Structural
- R2
  - White EPDM Membrane Roofing
  - 7/16" Cover Board
  - 1" Base Layer Poly Iso Rigid Insulation
  - Tapered Poly Iso Insulation System to achieve slopes to drains as indicated.
  - Metal Deck per Structural
  - Steel Framing Per Structural
- INDICATES LINE OF WALL BELOW

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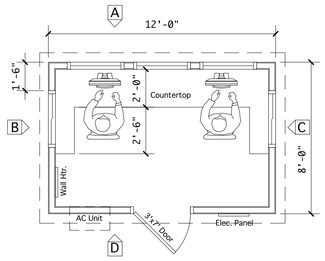
BY	DATE
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CHECKED-REVIEWED	-
DESIGN2-DETAILED2	-
DESIGN3-DETAILED3	-
REVISIONS 1	-
REVISIONS 2	-
REVISIONS 3	-
REVISIONS 4	-
FIELD CHANGES	-

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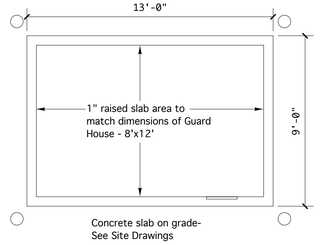
ROOF PLAN

SHEET NUMBER

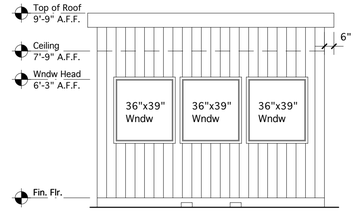
A1.2



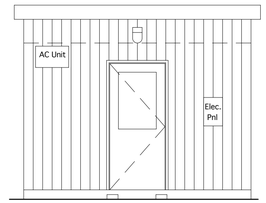
GUARD HOUSE PLAN
1/4" = 1'-0"



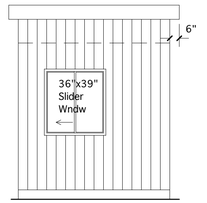
CONCRETE PAD PLAN
1/4" = 1'-0"



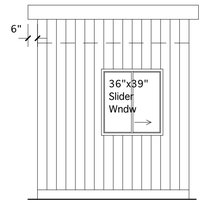
GUARD HOUSE ELEVATION A
1/4" = 1'-0"



GUARD HOUSE ELEVATION D
1/4" = 1'-0"



GUARD HOUSE ELEVATION B
1/4" = 1'-0"

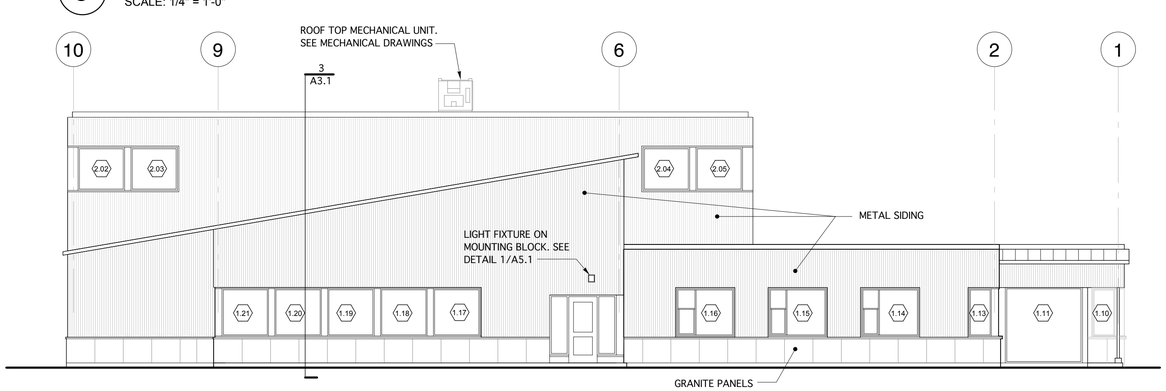


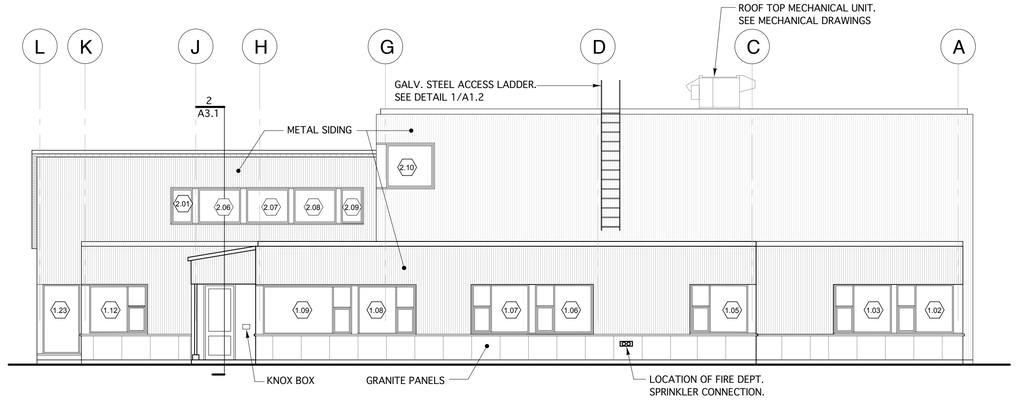
GUARD HOUSE ELEVATION C
1/4" = 1'-0"

GUARD HOUSE DRAWINGS ARE AT 1/4" SCALE

5 GUARD HOUSE DRAWINGS (BY ADD ALTERNATE)

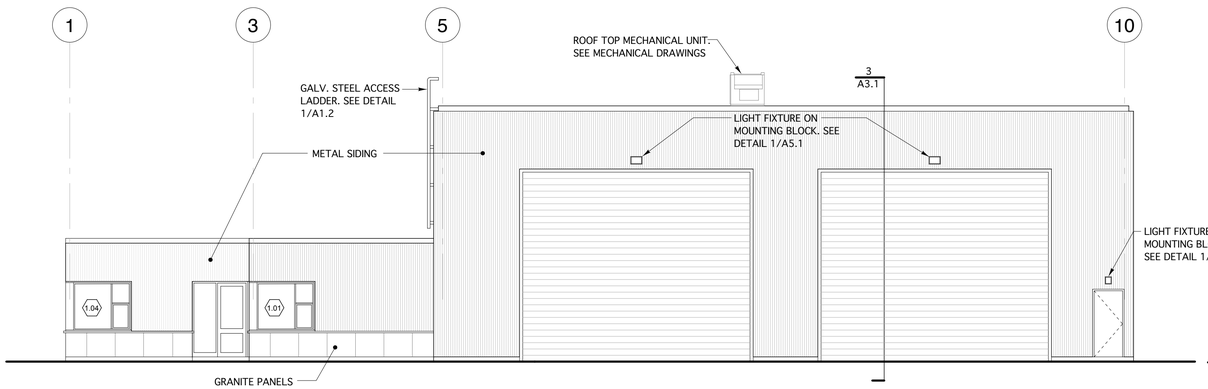
SCALE: 1/4" = 1'-0"





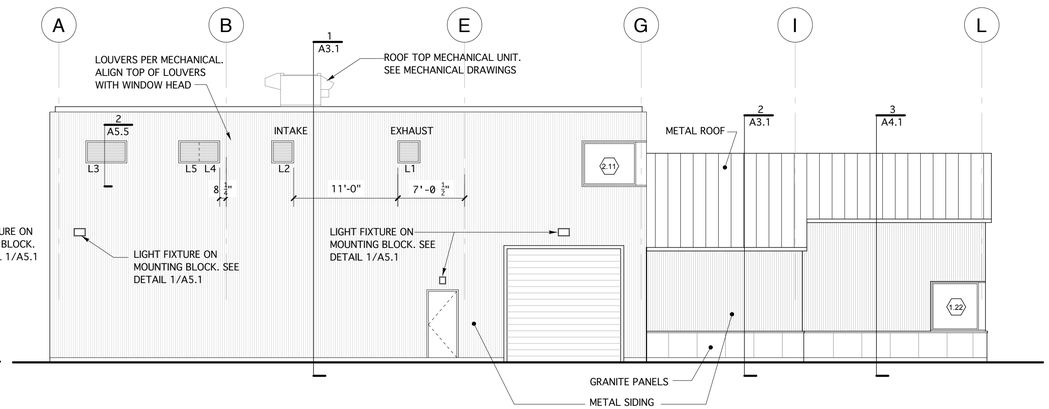
1 NORTH ELEVATION

SCALE: 1/8" = 1'-0"



2 WEST ELEVATION

SCALE: 1/8" = 1'-0"



3 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

4 EAST ELEVATION

SCALE: 1/8" = 1'-0"

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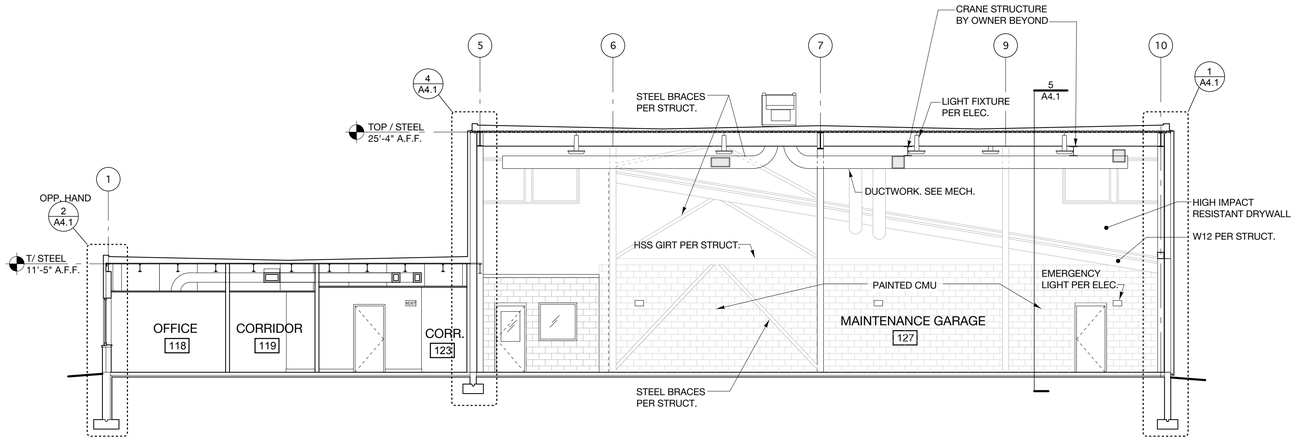
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FIELD CHANGES	-	-

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BUILDING ELEVATIONS

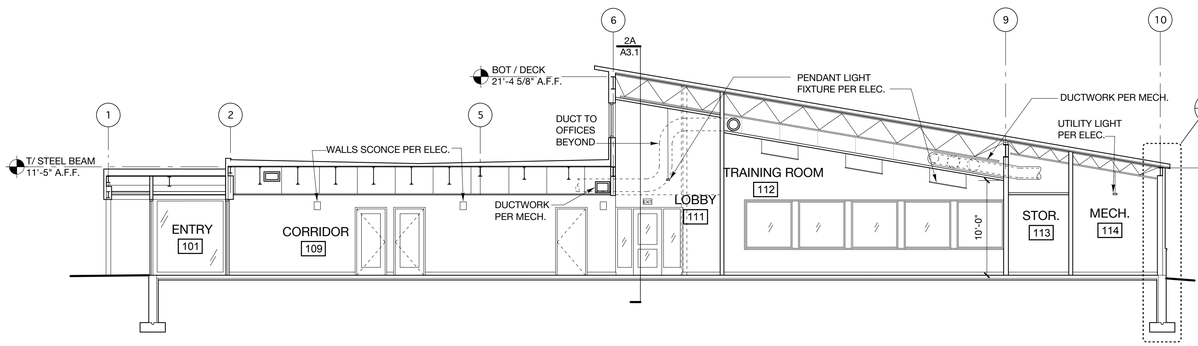
SHEET NUMBER

A2.1



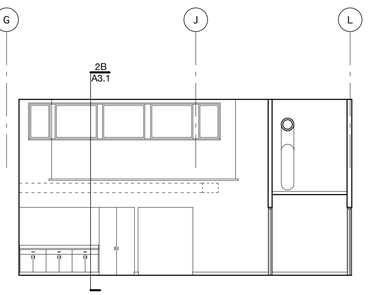
1 BUILDING SECTION

SCALE: 1/8" = 1'-0"



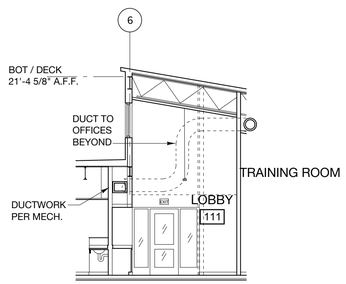
2 BUILDING SECTION

SCALE: 1/8" = 1'-0"



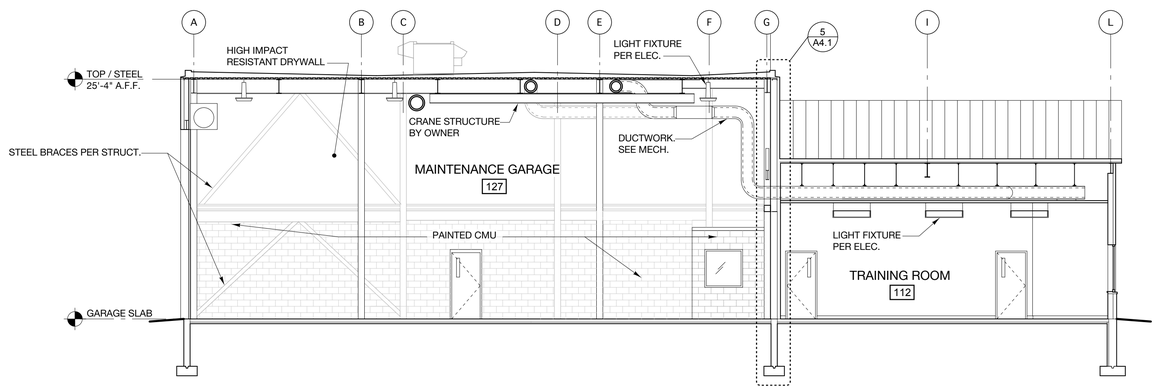
2A LOBBY INTERIOR ELEVATION

SCALE: 1/8" = 1'-0"



2B PARTIAL SECTION AT LOBBY

SCALE: 1/8" = 1'-0"



3 BUILDING SECTION

SCALE: 1/8" = 1'-0"

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REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
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PORTLAND

BUILDING SECTIONS

SHEET NUMBER

A3.1

R1

- PRE-FINISHED METAL ROOF COVERING, ZEE-LOCK DOUBLE LOCK SEAMED BY BERRIDGE
- ICE & WATERSHIELD ON ENTIRE ROOF
- 1/2" PLYWOOD COVER BOARD
- 4" POLY ISO RIGID INSULATION
- METAL DECK PER STRUCTURAL
- STEEL FRAMING PER STRUCTURAL

R2

- WHITE EPDM MEMBRANE ROOFING
- 1/2" PLYWOOD" COVER BOARD
- 2" BASE LAYER POLY ISO RIGID INSULATION
- TAPERED POLY ISO INSULATION SYSTEM TO ACHIEVE SLOPES TO DRAINS AS INDICATED.
- METAL DECK PER STRUCTURAL
- STEEL FRAMING PER STRUCTURAL

W1

- 5/8" PAINTED GWB
- 6" METAL STUDS WITH DENSEPAK CELLULOSE (R3.7 X 3.5" = R12.95)
- 5/8" PLYWOOD SHEATHING
- AIR AND WATER INFILTRATION BARRIER
- 1 1/2" FOIL FACED POLYISO RIGID INSULATION W/ TAPED SEAMS (R7.2) & "ZEE" GIRTS AT 48" O.C. HORIZONTALLY.
- PRE-FINISHED METAL SIDING HR-16 BY

W2

- 5/8" PAINTED GWB
- 6" METAL STUDS WITH DENSEPAK CELLULOSE (R3.7 X 3.5" = R12.95)
- 5/8" PLYWOOD SHEATHING
- AIR AND WATER INFILTRATION BARRIER
- 1 1/2" FOIL FACED POLYISO RIGID INSULATION W/ TAPED SEAMS (R7.2) & "ZEE" GIRTS AT 48" O.C. HORIZONTALLY
- FELT PAPER
- 1/2" SPACE
- 2" THICK GRANITE CLADDING PANELS & GRANITE

W3

- 8" CMU
- AIR AND WATER INFILTRATION BARRIER
- 4" FOIL FACED POLYISO RIGID INSULATION W/ TAPED SEAMS (R7.2) & "ZEE" GIRTS AT 48" O.C. HORIZONTALLY.
- PRE-FINISHED METAL SIDING HR-16 BY BERRIDGE RIBS INSTALLED VERTICALLY

W4

- 5/8" HIGH IMPACT RESISTANT GWB
- 8" METAL STUDS WITH DENSEPAK CELLULOSE
- 5/8" PLYWOOD SHEATHING
- AIR AND WATER INFILTRATION BARRIER
- 4" FOIL FACED POLYISO RIGID INSULATION W/ TAPED SEAMS (R7.2) & "ZEE" GIRTS AT 48" O.C. HORIZONTALLY.
- PRE-FINISHED METAL SIDING HR-16 BY BERRIDGE RIBS INSTALLED VERTICALLY

F1

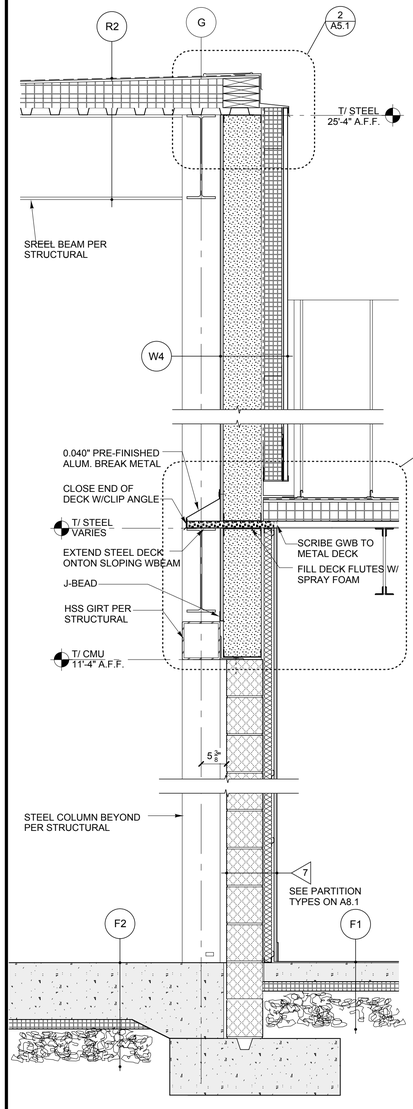
- FLOOR FINISH PER SCHEDULE
- REINFORCED CONCRETE SLAB ON GRADE PER STRUCTURAL
- 2" RIGID INSULATION
- COMPACTED GRAVEL
- STRUCTURAL FILL

F2

- REINFORCED CONCRETE SLAB ON GRADE PER STRUC.
- 2" RIGID INSULATION
- COMPACTED GRAVEL
- STRUCTURAL FIL

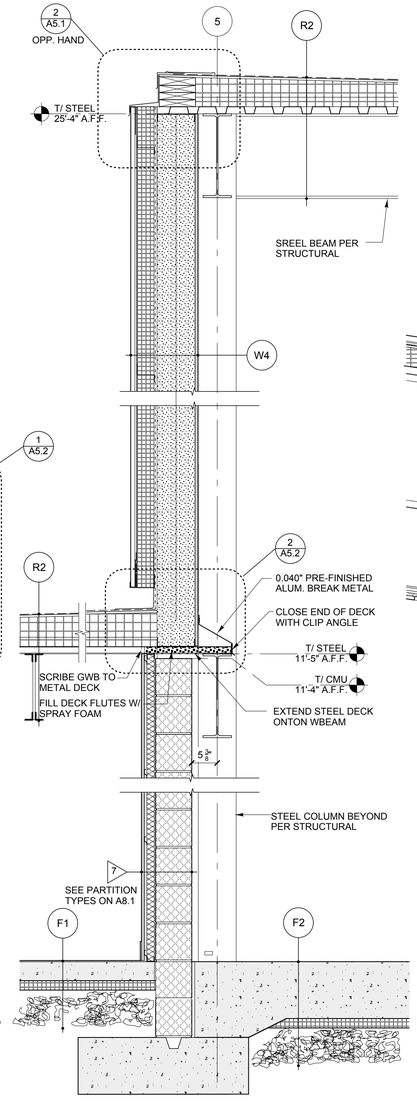
F3 (CORRIDORS)

- STAINED AND SEALED DECORATIVE REINFORCED CONCRETE SLAB ON GRADE PER STRUCTURAL
- 2" RIGID INSULATION
- COMPACTED GRA



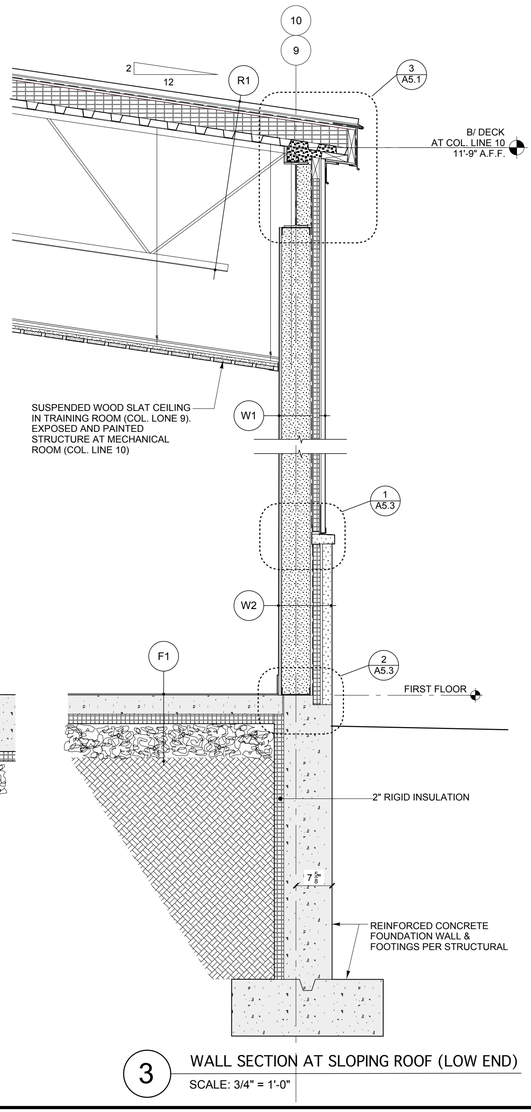
5 WALL SECTION AT COLUMN LINE G

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



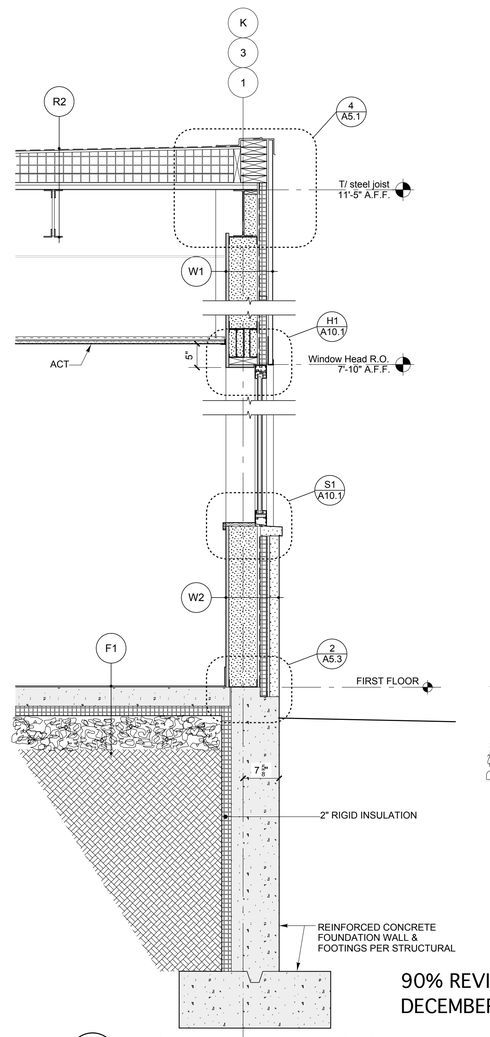
4 WALL SECTION AT COLUMN LINE 5

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



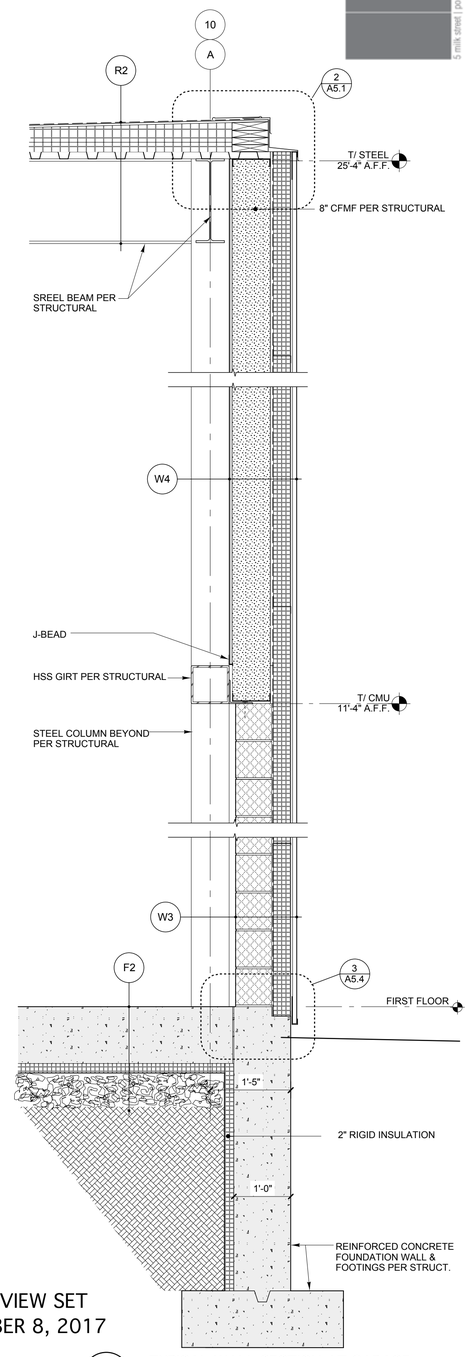
3 WALL SECTION AT SLOPING ROOF (LOW END)

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



2 TYPICAL WALL SECTION AT OFFICES

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



1 TYPICAL WALL SECTION AT GARAGE

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

90% REVIEW SET
DECEMBER 8, 2017

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN 021942.02

REGISTERED ARCHITECT * STATE OF MAINE * WINTON F. SCOTT, JR. No. 793

Winton Scott
SIGNATURE
ME # 793
P.E. NUMBER
2/16/2018
DATE

	DATE	BY
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

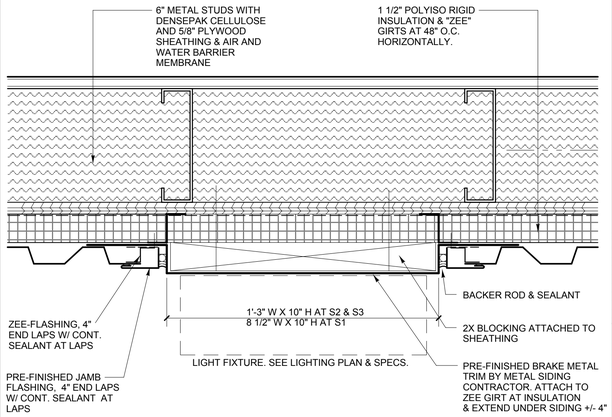
PROJ. MNGR. JOEL KITTREDGE

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PORTLAND

WALL SECTIONS

SHEET NUMBER

A4.1

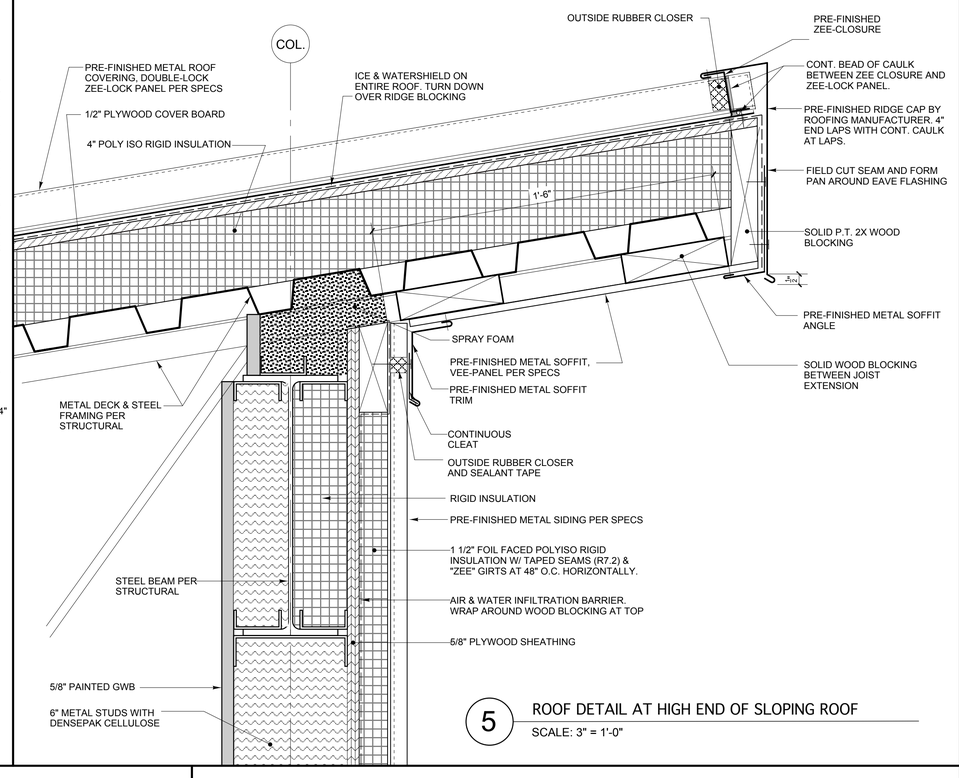


(SIMILAR DETAIL FOR CARD READERS & CAMERAS EXCEPT ADJUST BLOCKING SIZE TO BE +/- 1" LARGER THAN CARD READER BOX)

DETAIL IS SHOWN AT OFFICE WALLS. SIMILAR AT GARAGE WALLS.

1 LIGHT FIXTURE MOUNTING BLOCK DETAIL AT SIDING

SCALE: 3" = 1'-0"

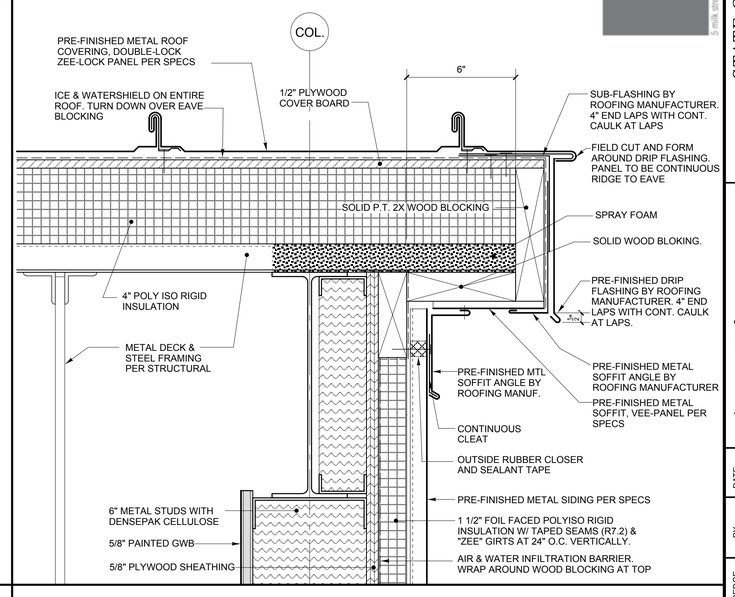


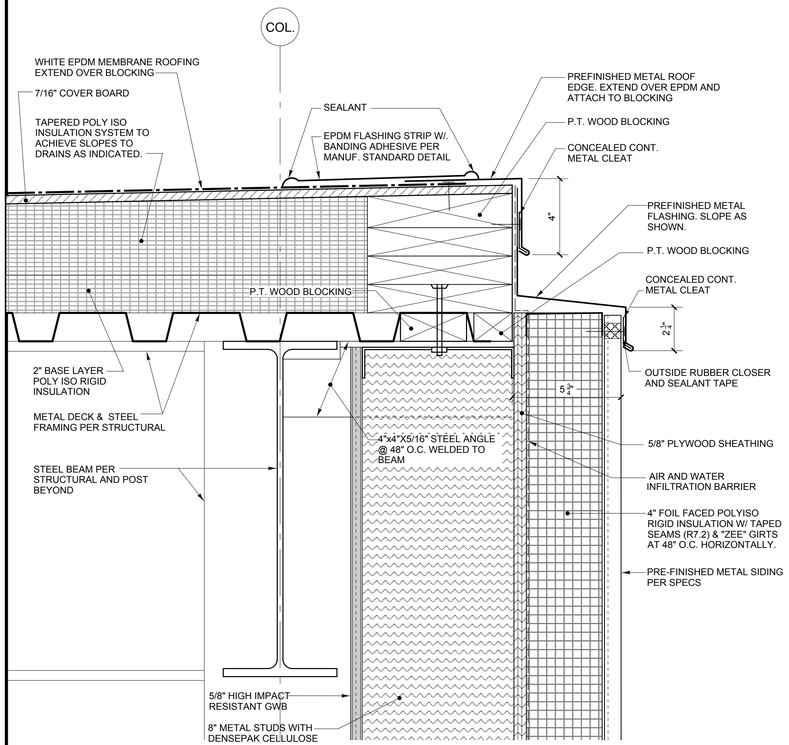
5 ROOF DETAIL AT HIGH END OF SLOPING ROOF

SCALE: 3" = 1'-0"

6 ROOF EDGE DETAIL AT SLOPING ROOF

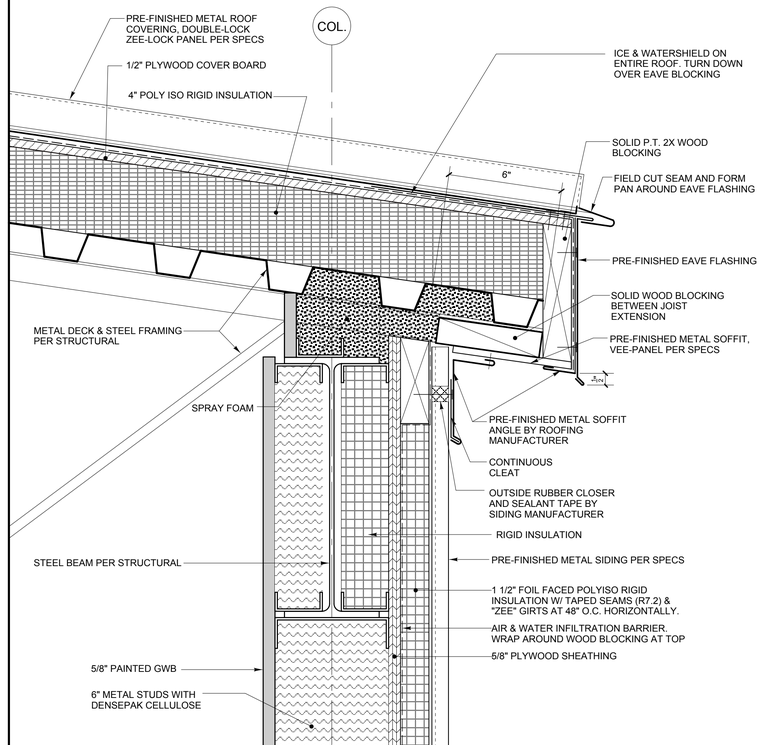
SCALE: 3" = 1'-0"





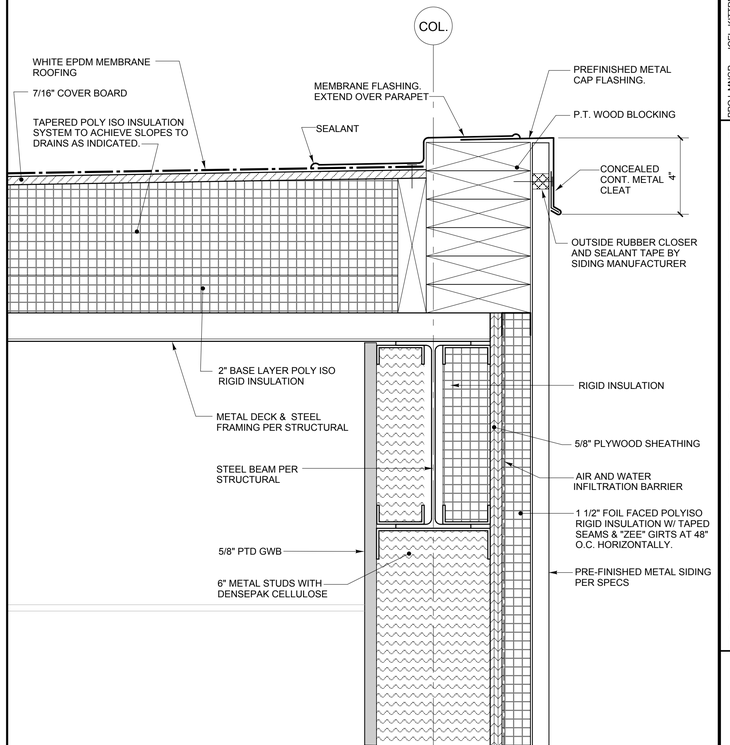
2 ROOF EDGE DETAIL AT GARAGE FLAT ROOF

SCALE: 3" = 1'-0"



3 ROOF DETAIL AT LOW END OF SLOPING ROOF

SCALE: 3" = 1'-0"



4 ROOF EDGE DETAIL AT OFFICE FLAT ROOF

SCALE: 3" = 1'-0"

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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REGISTERED ARCHITECT * MAINE * STATE OF
WINTON F. SCOTT, JR. No. 793

Winton Scott — SIGNATURE
ME # 793 — P.E. NUMBER
2/16/2018 — DATE

	DATE	BY
PROJ. MNGR.	JOEL KITTREDGE	
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
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REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

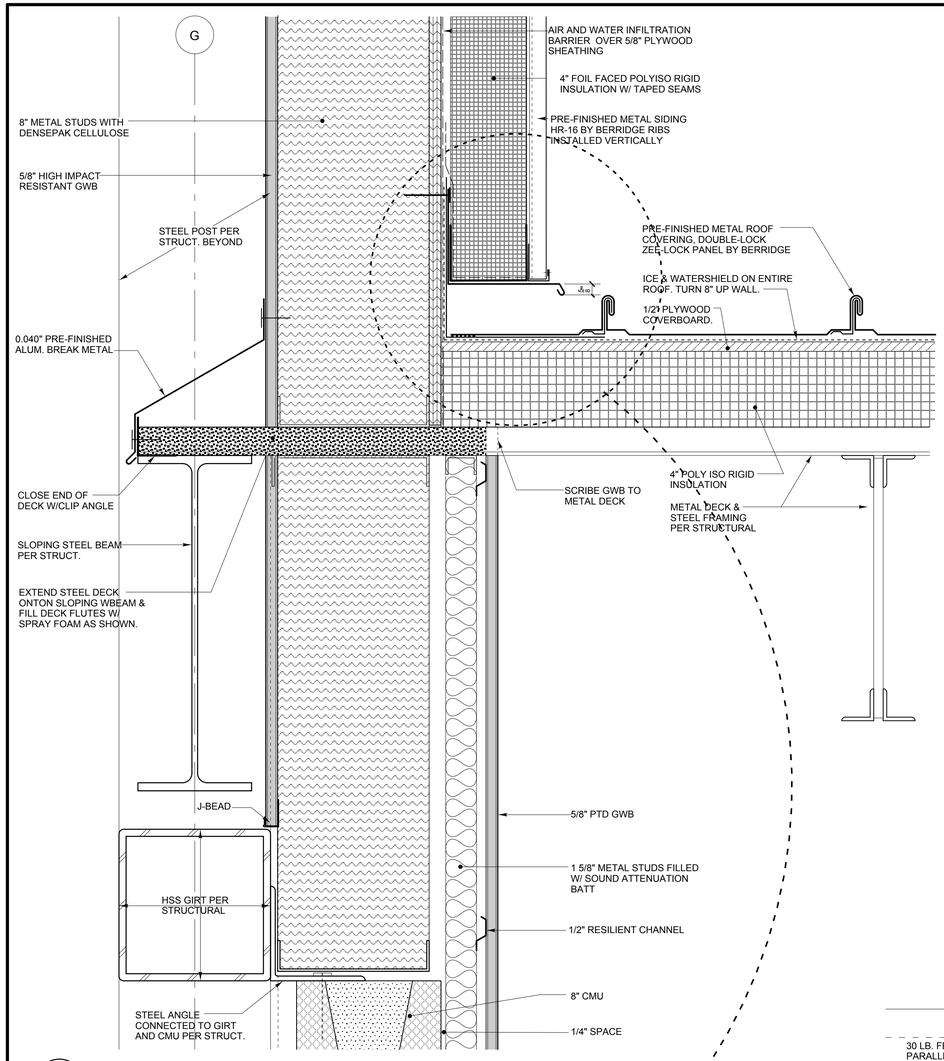
PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS CENTER
CUMBERLAND COUNTY
PORTLAND

EXTERIOR DETAILS

SHEET NUMBER

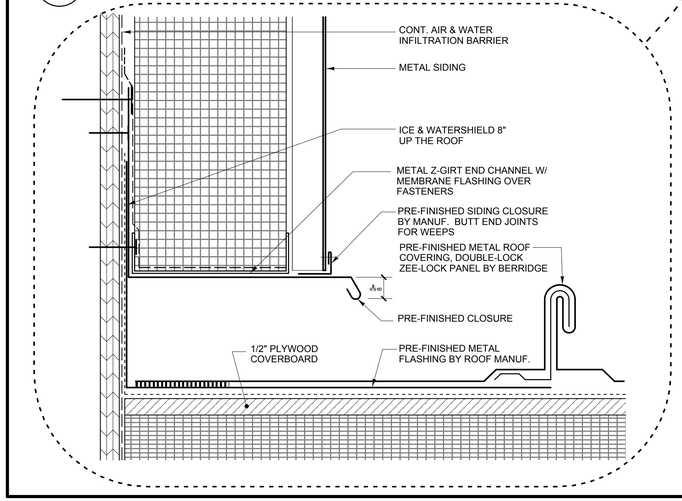
A5.1

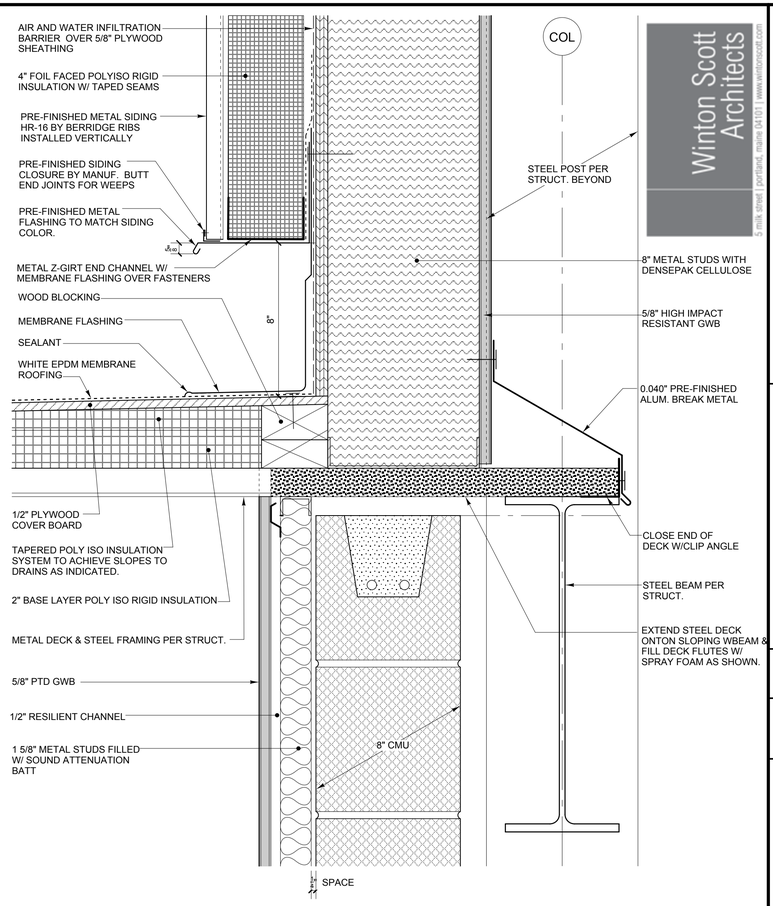
23 OF 58



1 SLOPING ROOF DETAIL AT GARAGE WALL

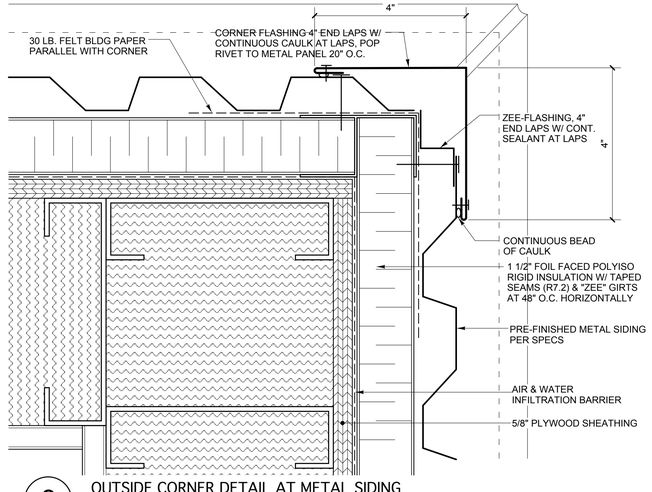
SCALE: 3" = 1'-0"





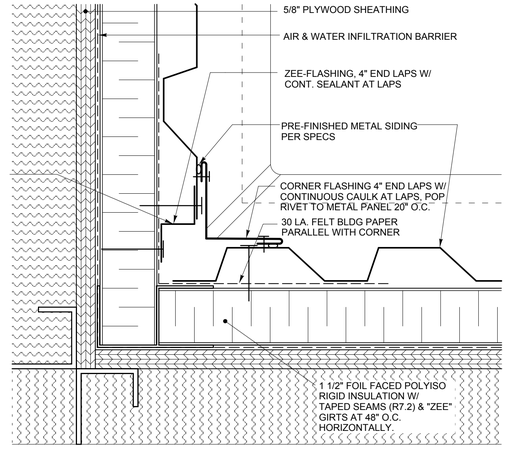
2 FLAT ROOF DETAIL AT GARAGE WALL

SCALE: 3" = 1'-0"



3 OUTSIDE CORNER DETAIL AT METAL SIDING

SCALE: 6" = 1'-0"



4 INSIDE CORNER DETAIL AT METAL SIDING

SCALE: 6" = 1'-0"

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STATE OF MAINE
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Winton Scott — SIGNATURE
ME # 793 — P.E. NUMBER
2/ 16 / 2018 — DATE

	DATE	BY
PROJ. MNGR. JOEL KITTREDGE	-	-
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REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

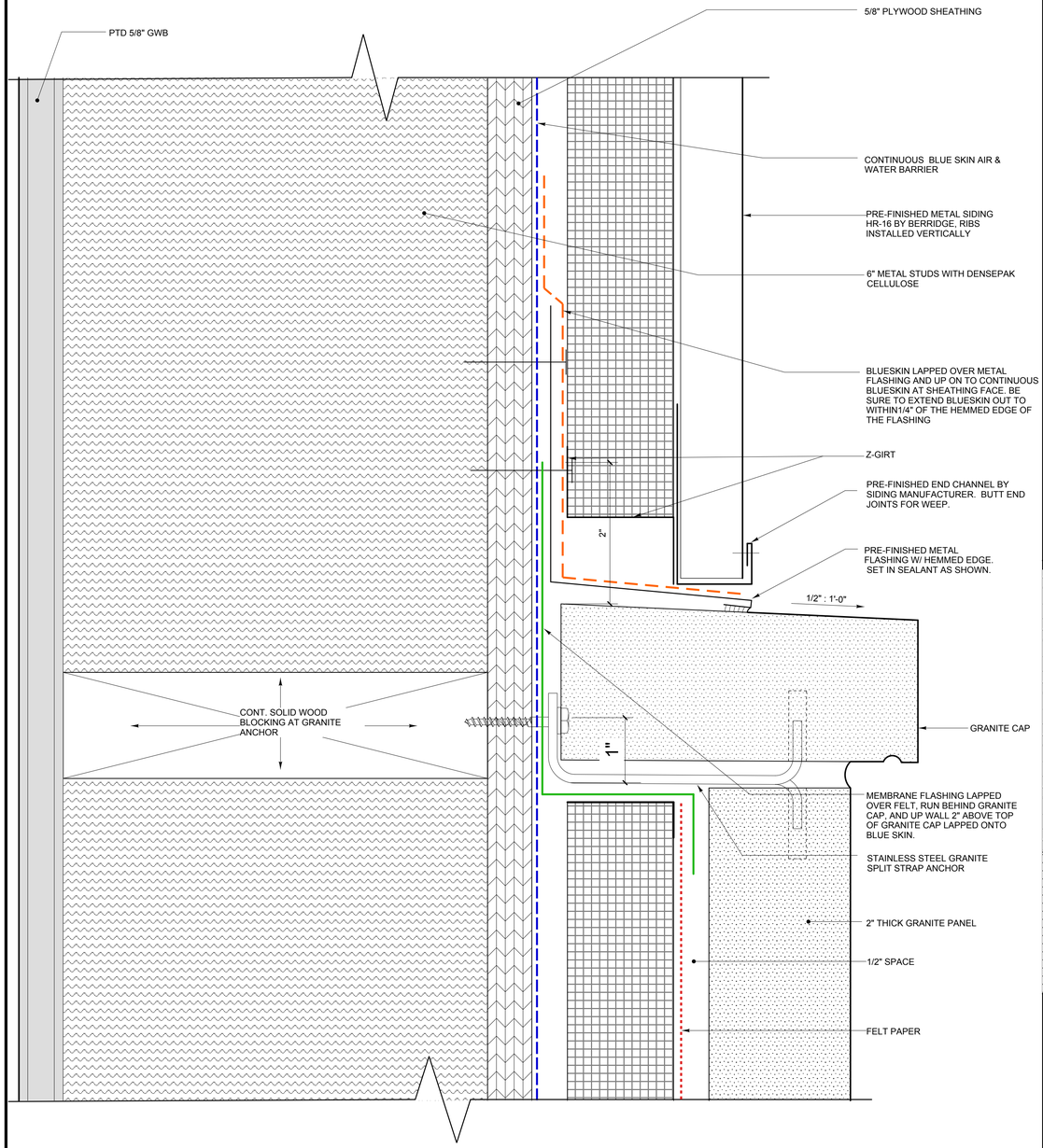
PORTLAND INTERNATIONAL MARINE TERMINAL
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PORTLAND

EXTERIOR DETAILS

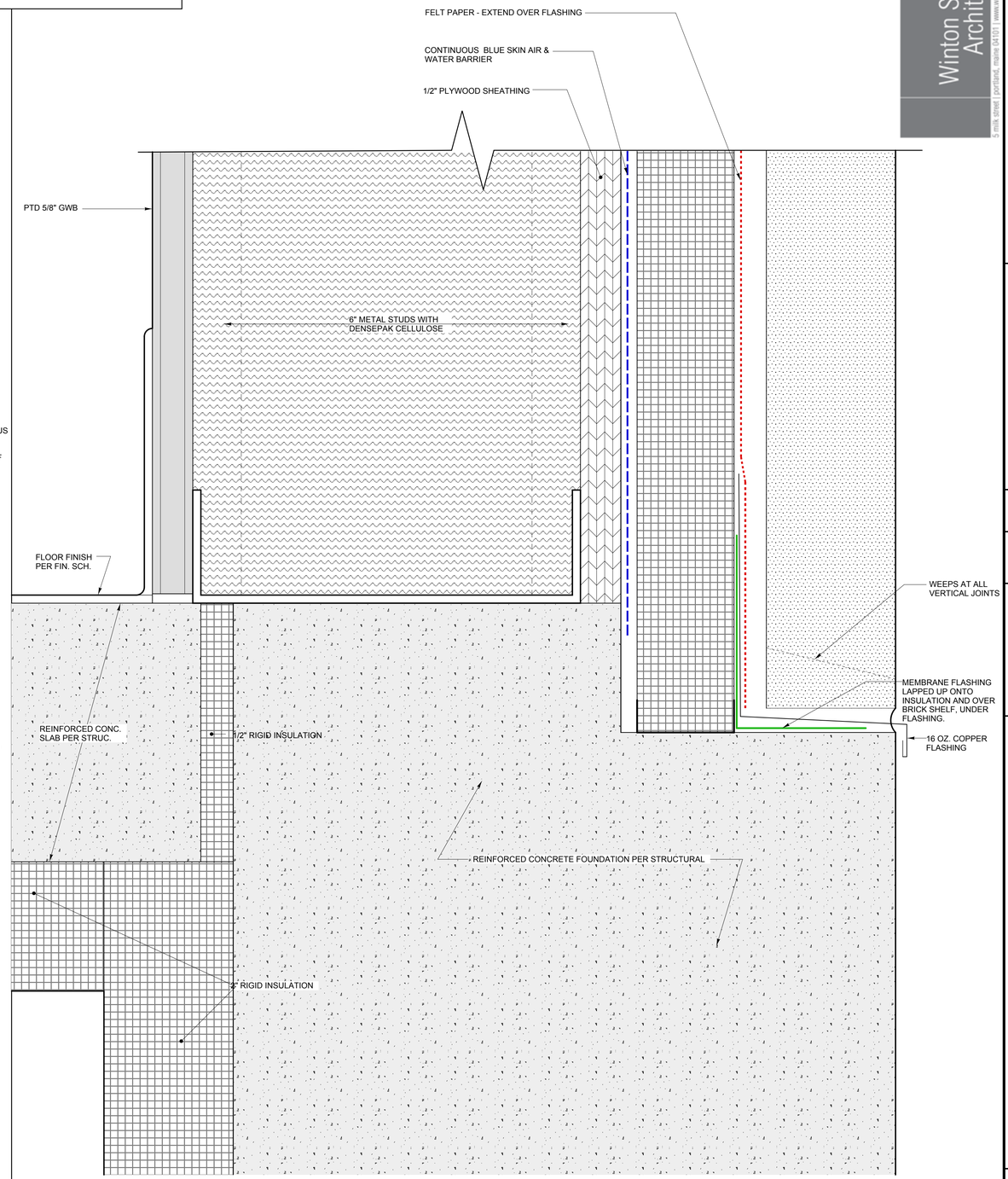
SHEET NUMBER

A5.2

NOTE: MATERIALS ARE SHOWN SPACED OUT FOR CLARITY.



1 METAL SIDING DETAIL AT GRANITE CAP
FULL SCALE



2 WALL SECTION AT BOTTOM OF GRANITE CLADDING
FULL SCALE

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Winton Scott	SIGNATURE
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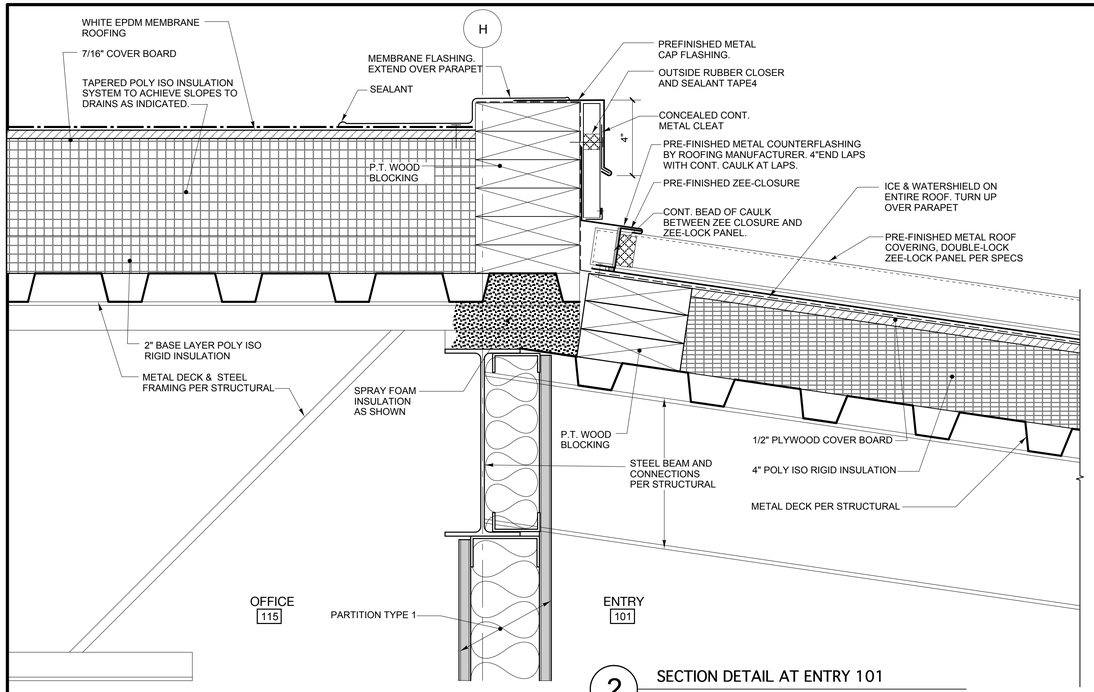
	BY	DATE
PROJ. MNGR. JOEL KITTREDGE	-	-
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
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REVISIONS 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
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PORTLAND CUMBERLAND COUNTY

EXTERIOR DETAILS

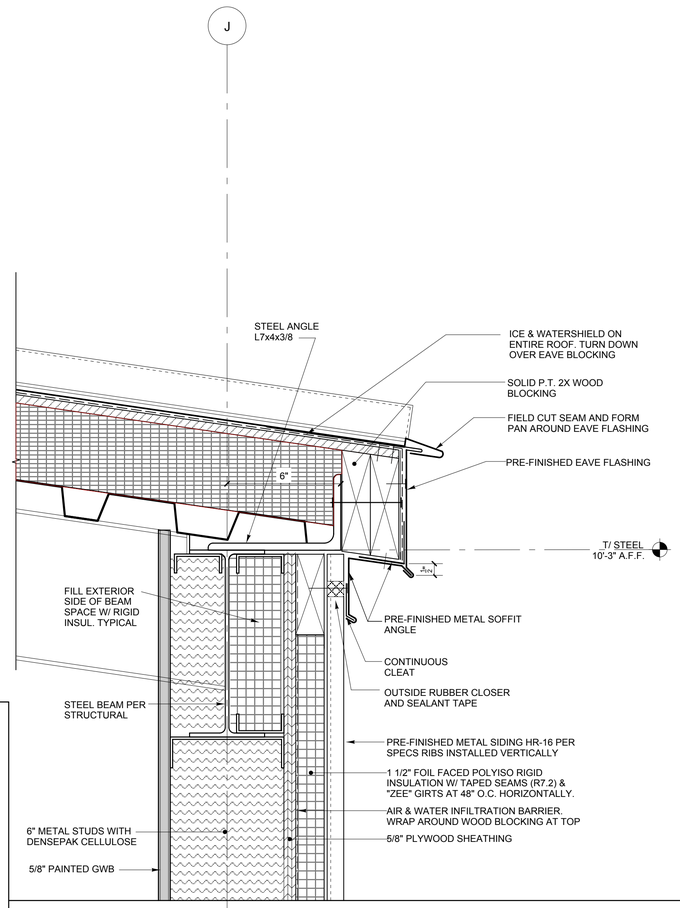
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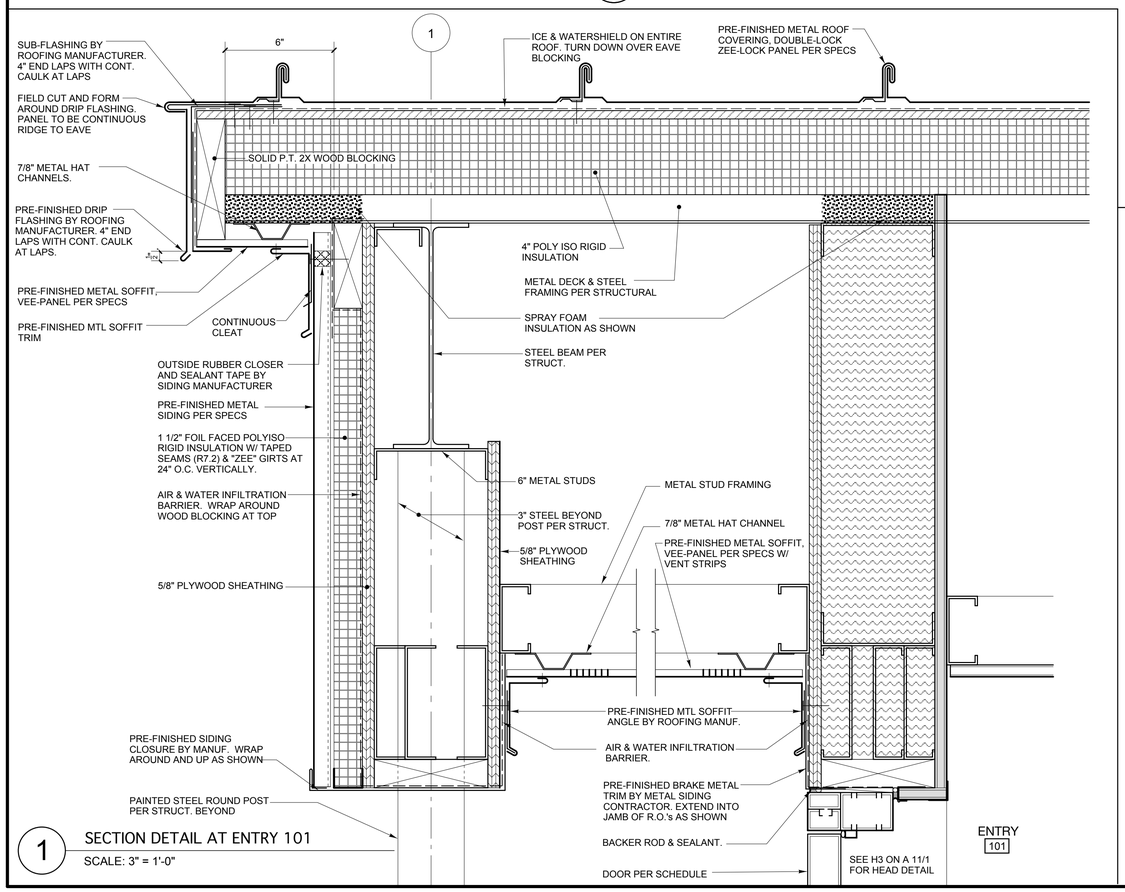
A5.3



2 SECTION DETAIL AT ENTRY 101

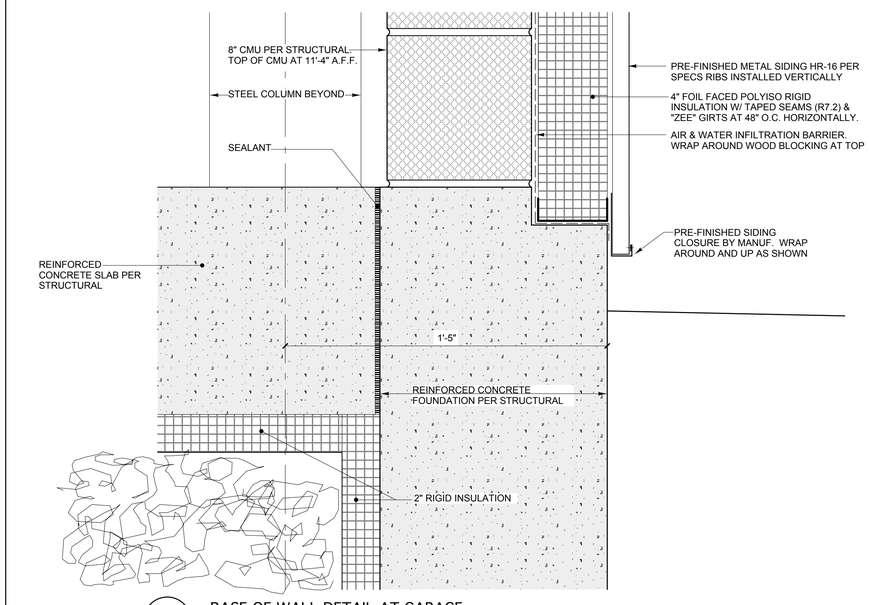
SCALE: 3" = 1'-0"





1 SECTION DETAIL AT ENTRY 101

SCALE: 3" = 1'-0"



3 BASE OF WALL DETAIL AT GARAGE

SCALE: 3" = 1'-0"

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STATE OF MAINE
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Winton Scott

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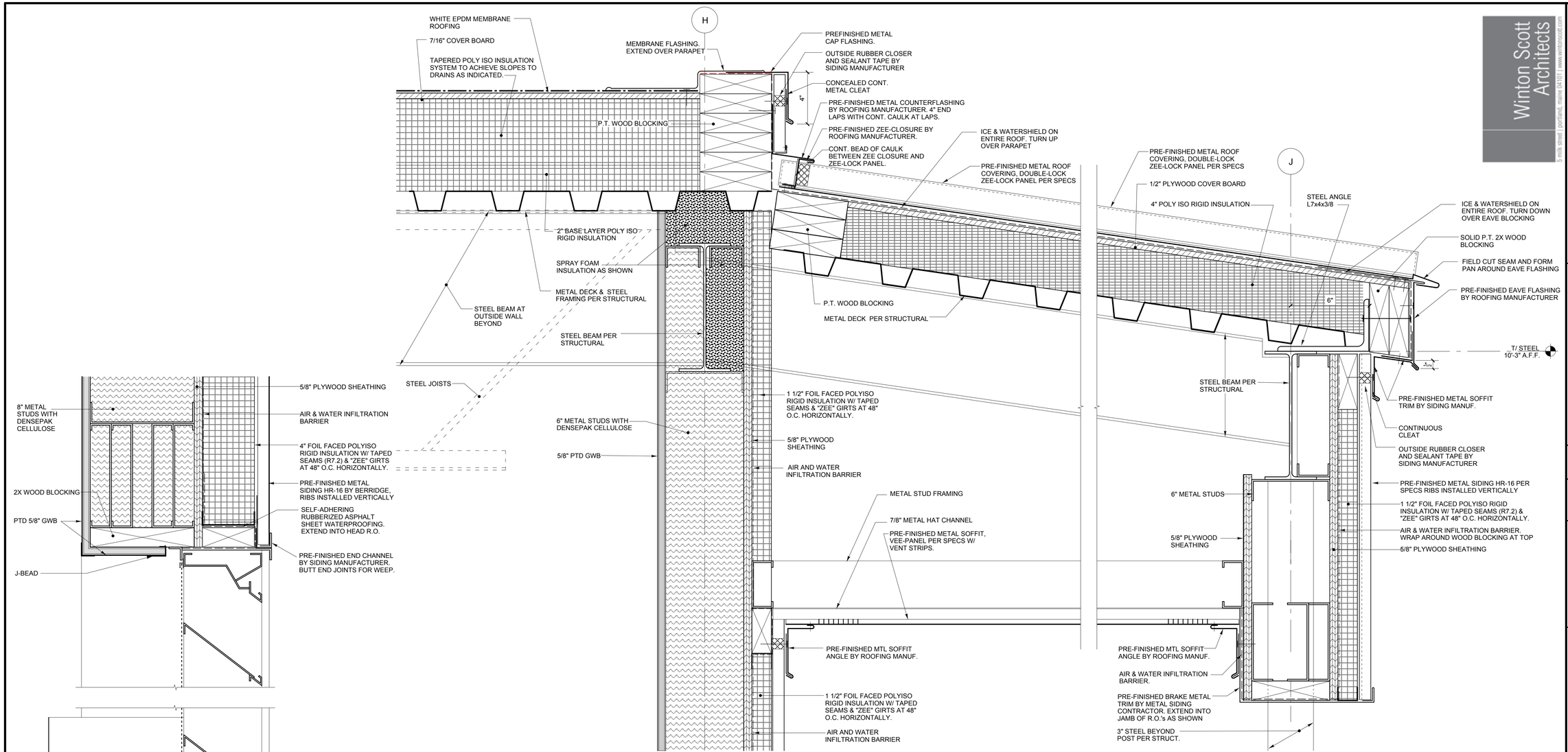
	DATE	BY
PROJ. MNGR. JOEL KITTREDGE	-	-
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
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FIELD CHANGES	-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
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PORTLAND CUMBERLAND COUNTY

EXTERIOR DETAILS

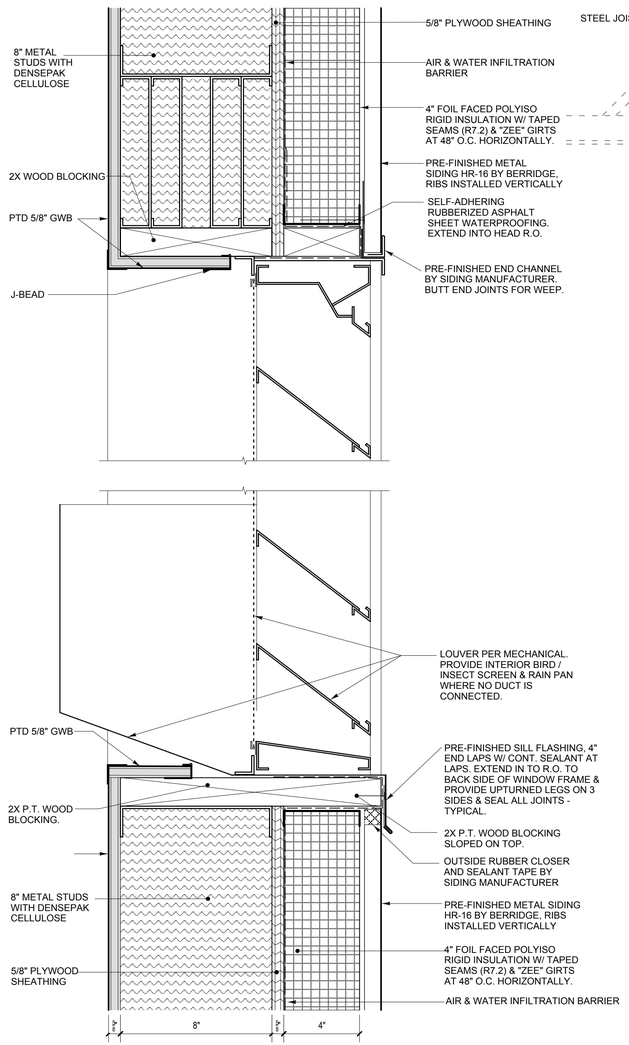
SHEET NUMBER

A5.4



1 SECTION DETAIL AT ENTRY 101

SCALE: 3" = 1'-0"



2 LOUVER DETAIL

SCALE: 3" = 1'-0"

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STATE OF MAINE
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REGISTERED ARCHITECT * WINTON F. SCOTT, JR. No. 793 * STATE OF MAINE

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2/16/2018		
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PROJ. MNGR. JOEL KITTREDGE

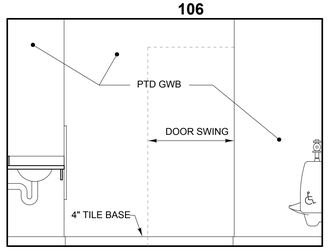
	BY	DATE
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DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
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REVISIONS 3		-
REVISIONS 4		-
FIELD CHANGES		-

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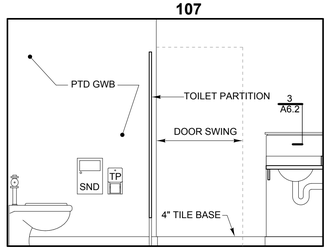
EXTERIOR DETAILS

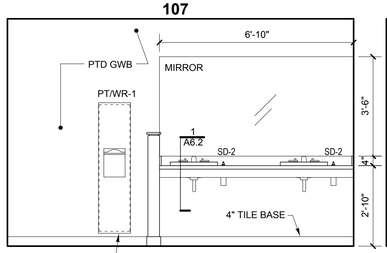
SHEET NUMBER

A5.5

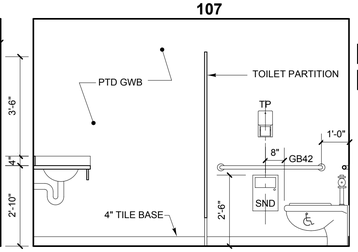


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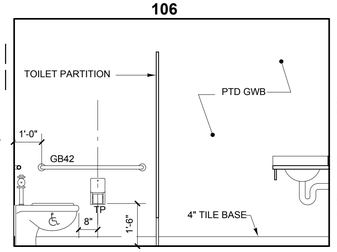


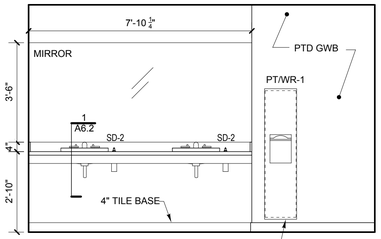


B



C

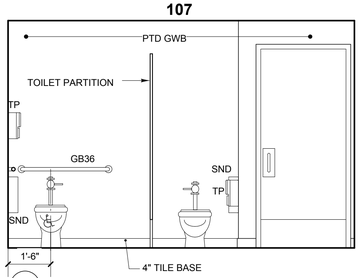




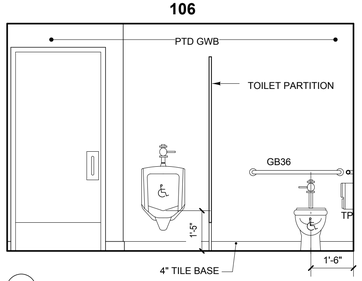
D

2 TOILET ROOM 106 & 107 ELEVATIONS

SCALE: 3/8" = 1'-0"



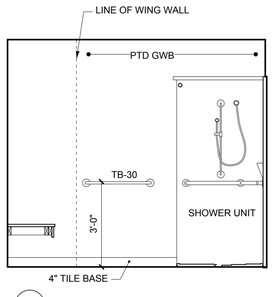
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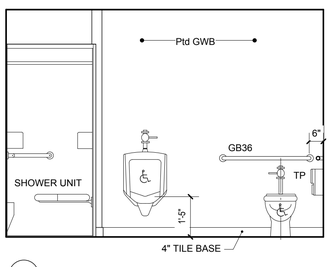
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2 TOILET ROOM 106 & 107 ELEVATIONS

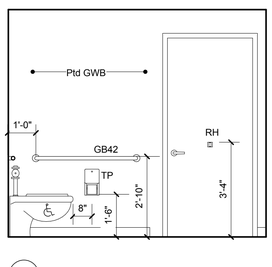
SCALE: 3/8" = 1'-0"



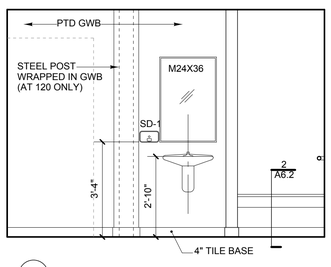
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B



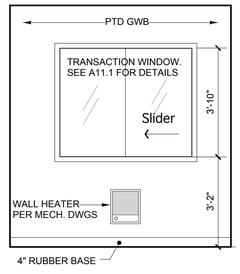
C



D

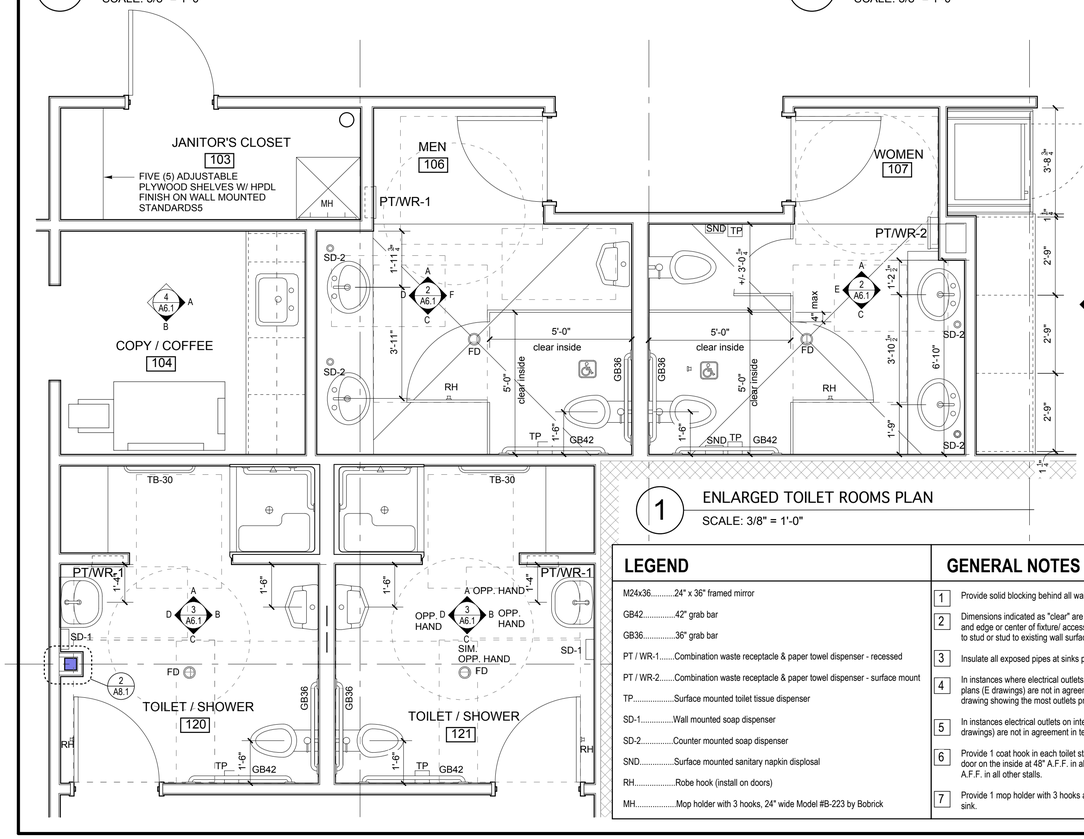
3 SHOWER ROOM 120 & 121 ELEVATIONS

SCALE: 3/8" = 1'-0"



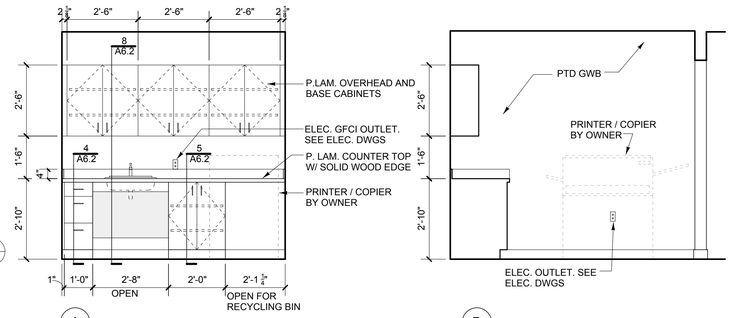
7 ENTRY 101 ELEVATION

SCALE: 3/8" = 1'-0"



1 ENLARGED TOILET ROOMS PLAN

SCALE: 3/8" = 1'-0"

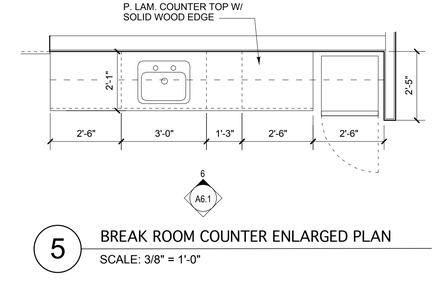


A

B

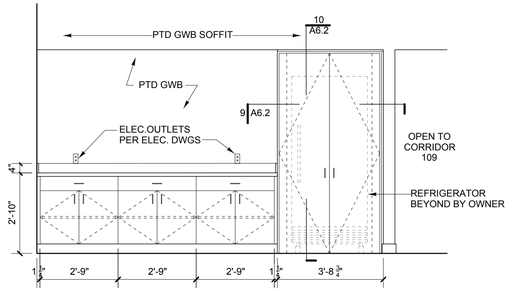
4 COPY / COFFEE ROOM ELEVATIONS

SCALE: 3/8" = 1'-0"



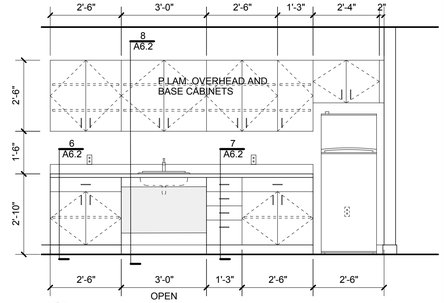
5 BREAK ROOM COUNTER ENLARGED PLAN

SCALE: 3/8" = 1'-0"



8 COUNTER ELEVATION AT LOBBY 111

SCALE: 3/8" = 1'-0"



6 BREAK ROOM COUNTER ELEVATION

SCALE: 3/8" = 1'-0"

LEGEND

M24x36.....24" x 36" framed mirror

GB42.....42" grab bar

GB36.....36" grab bar

PT / WR-1.....Combination waste receptacle & paper towel dispenser - recessed

PT / WR-2.....Combination waste receptacle & paper towel dispenser - surface mount

TP.....Surface mounted toilet tissue dispenser

SD-1.....Wall mounted soap dispenser

SD-2.....Counter mounted soap dispenser

SND.....Surface mounted sanitary napkin displosal

RH.....Robe hook (install on doors)

MH.....Mop holder with 3 hooks, 24" wide Model #B-223 by Bobrick

GENERAL NOTES

1. Provide solid blocking behind all wall mounted accessories.
2. Dimensions indicated as "clear" are to face of finished wall, face of toilet partition, and edge or center of fixture/ accessory. Dimensions indicated as "R.D." are stud to stud or stud to existing wall surface. Contact architect if discrepancies are found.
3. Insulate all exposed pipes at sinks per ADA requirements, typical.
4. In instances where electrical outlets on interior elevations and electrical Power plans (E drawings) are not in agreement in terms of number of outlets, the drawing showing the most outlets prevails.
5. In instances electrical outlets on interior elevations and electrical Power plans (E drawings) are not in agreement in terms of outlet locations, consult architect.
6. Provide 1 coat hook in each toilet stall and in each H.C. toilet. Install hook on the door on the inside at 48" A.F.F. in all accessible stalls and H.C. toilets and at 60" A.F.F. in all other stalls.
7. Provide 1 mop holder with 3 hooks at each Custorial Closet. Install over the mop sink.

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WINTON F. SCOTT, JR. No. 793

Winton Scott
SIGNATURE
ME # 793
P.E. NUMBER
2/16/2018
DATE

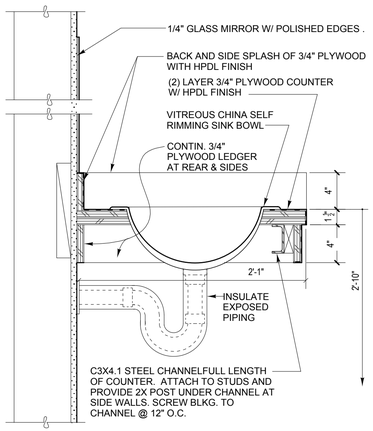
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PROJ. MNGR.	-	JOEL KITTREDGE
DESIGN-DETAILED	-	
CHECKED-REVIEWED	-	
DESIGN2-DETAILED2	-	
DESIGN3-DETAILED3	-	
REVISIONS 1	-	
REVISIONS 2	-	
REVISIONS 3	-	
REVISIONS 4	-	
FIELD CHANGES	-	

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ENLARGED PLANS & INTERIOR ELEVATIONS

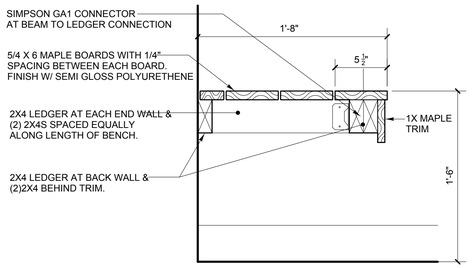
SHEET NUMBER

A6.1



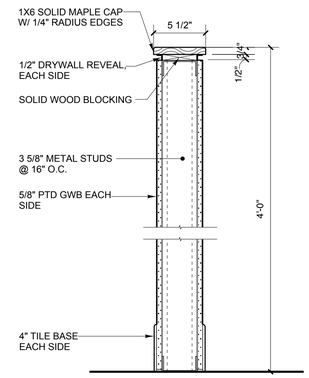
1 LAVATORY COUNTER DETAIL

SCALE: 1 1/2" = 1'-0"



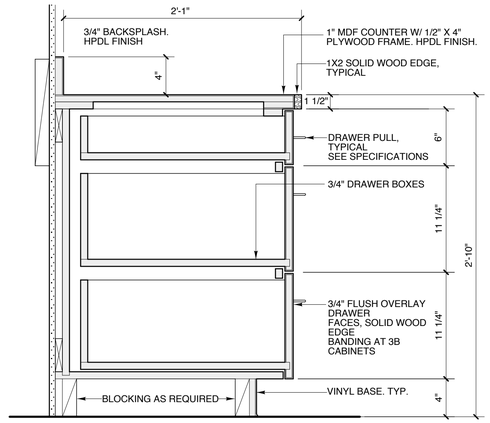
2 SHOWER BENCH DETAIL

SCALE: 1 1/2" = 1'-0"



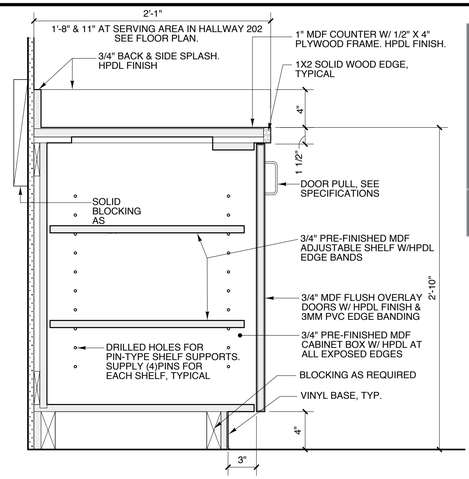
3 KNEE WALL DETAIL

SCALE: 1 1/2" = 1'-0"



4 COPY / COFFEE DRAWER BASE SECTION DETAIL

SCALE: 1 1/2" = 1'-0"



5 COPY / COFFEE BASE CABINET SECTION DETAIL

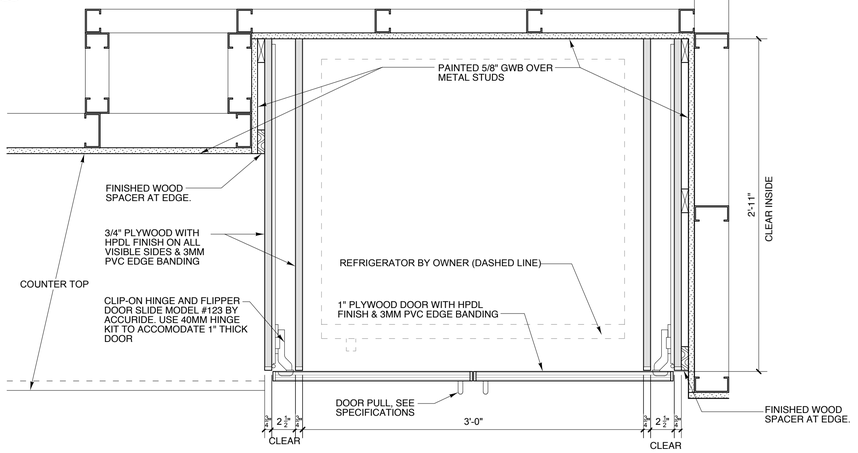
SCALE: 1 1/2" = 1'-0"

6 BREAK ROOM BASE CABINET SECTION DETAIL

SCALE: 1 1/2" = 1'-0"

7 BREAK ROOM DRAWER BASE SECTION DETAIL

SCALE: 1 1/2" = 1'-0"



9 PLAN DETAIL AT REFRIGERATOR CABINET

SCALE: 1 1/2" = 1'-0"

8 SECTION DETAIL AT SINK

SCALE: 1 1/2" = 1'-0"

10 SECTION DETAIL AT REFRIGERATOR CABINET

SCALE: 1 1/2" = 1'-0"

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DESIGN3-DETAILED3	-	-
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REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

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INTERIOR DETAILS

SHEET NUMBER

A6.2

CEILING LEGEND

C1 8'-0" — Indicates ceiling type; Indicates ceiling height from finish floor to underside of ceiling finish

Suspended acoustical ceiling tiles. Use moisture resistant tiles in 120/121.

Suspended wood ceiling, Woodworks Linear by Armstrong with Bioacoustic infill panels.

Painted GWB soffit.

Painted Exposed Structure

Pre-finished Metal Soffit, Vee-panel by Berridge

CEILING TYPES

C1	2'x2' suspended acoustical ceiling tiles. Use moisture resistant tiles in 120/121
C2	Suspended wood ceiling angled to follow roof slope.
C3	Ptd GWB
C4	Ptd GWB soffit.
C5	Prefinished metal soffit.

LIGHT FIXTURES LEGEND

FIXTURES ARE SHOWN FOR COORDINATION PURPOSES ONLY. LAYOUT IS NOT EXTENSIVE. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR MORE DETAILS.

- 1' X 4' RECESSED FLUORESCENT FIXTURE.
- 2' X 2' RECESSED FLUORESCENT FIXTURE.
- RECESSED DOWNLIGHT FIXTURE.
- SURFACE MOUNTED FIXTURE.
- UTILITY PENDANT FIXTURE.
- UTILITY PENDANT FIXTURE.
- ARCHITECTURAL PENDANT FIXTURE.
- ARCHITECTURAL PENDANT FIXTURE.

MECHANICAL LEGEND

EQUIPMENT IS SHOWN FOR COORDINATION PURPOSES ONLY. LAYOUT IS NOT EXTENSIVE. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR MORE DETAILS.

- AIR SUPPLY GRILLE OR EXHAUST REGISTER. SEE MECH.
- AIR RETURN GRILLE OR EXHAUST REGISTER. SEE MECH.
- AIR HANDLER ABOVE CEILING



CONCEPT FLOOR PLAN 9,935 S.F.

1/8" = 1'-0"

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REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

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REFLECTED CEILING PLAN

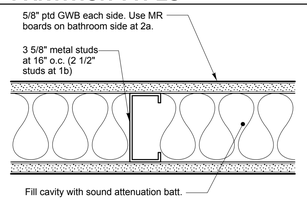
SHEET NUMBER

A7.1

FINISH SCHEDULE

Room Name	Floor	Base	Walls	Ceiling	Remarks
Entry 101	Entry carpet	4" rubber	Ptd GWB	PTD GWB	
Office 102	Carpet	4" rubber	Ptd GWB	ACT	
Janitor's Closet 103	Concrete-2	4" rubber	Ptd GWB	PTD Struct	
Copy / Coffee 104	Concrete-1	4" rubber	Ptd GWB	ACT	
Office 105	Carpet	4" rubber	Ptd GWB	ACT	
Men 106	CT	4" CT	Ptd GWB	MR-ACT	
Women 107	CT	4" CT	Ptd GWB	MR-ACT	
Tel / Com Server 108	Concrete-2	4" rubber	Ptd GWB	ACT	
Corridor 109	Concrete-1	4" rubber	Ptd GWB	SWC	
Entry 110	Entry carpet	4" rubber	Ptd GWB	PTD GWB	
Lobby 111	Concrete-1	4" rubber	Ptd GWB	SWC	
Training Room 112	Carpet	4" wood	Ptd GWB	SWC	
Storage 113	Concrete-2	4" rubber	Ptd GWB	ACT	
Mechanical 114	Concrete-2	4" rubber	Ptd GWB	PTD Struct	
Office 115	Carpet	4" rubber	Ptd GWB	ACT	
Office 116	Carpet	4" rubber	Ptd GWB	ACT	
Office 117	Carpet	4" rubber	Ptd GWB	ACT	
Office 118	Carpet	4" rubber	Ptd GWB	ACT	
Corridor 119	Concrete-1	4" rubber	Ptd GWB	SWC	
Toilet / Shower 120	CT	4" CT	Ptd GWB	MR-ACT	
Toilet / Shower 121	CT	4" CT	Ptd GWB	MR-ACT	
Locker Room 122	Concrete-1	4" rubber	Ptd GWB	ACT	
Corridor 123	Concrete-1	4" rubber	Ptd GWB	ACT	
Changing Room 124	Concrete-1	4" rubber	Ptd GWB	ACT	
Break Room 125	Concrete-1	4" rubber	Ptd GWB	ACT	
Office 126	Concrete-2	no base	PTD CMU	ACT	
Maintenance Garage 127	Concrete-2	no base	CMU	PTD Struct	
Storage 128	Concrete-2	4" rubber	Ptd GWB	PTD Struct	

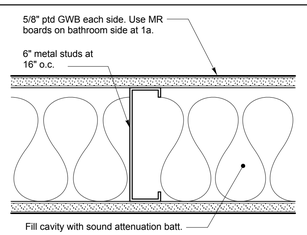
PARTITION TYPES



1 Typical Interior Sound Partition
As Shown. Extend from slab to underside of roof deck

1a Typical Interior Sound Partition at Bathroom
Use 5/8" MR Board on Bathroom side in lieue of GWB.
Extend from slab to underside of roof deck

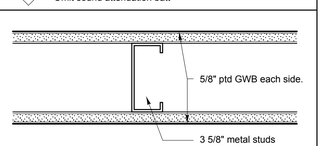
1b Typical Interior Partition at Bathroom
Like 1a - Omit sound attenuation batt.
Extend from slab to 4" above ACT



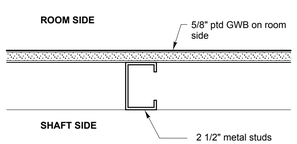
2 Interior Partition
As Shown. Extend from slab to underside of roof deck

2a Typical Interior Partition at Bathroom
Use 5/8" MR Board on Bathroom side in lieue of GWB.
Extend from slab to underside of roof deck

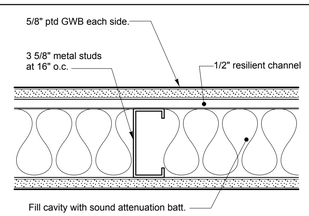
2b Interior Partition
Omit sound attenuation batt



3 Typical Interior Partition
As Shown.

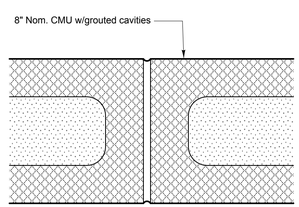


4 Typical Shaft Partition
As Shown.



5 Interior Sound Partition - One Hour Fire Rated UL Des. U419
As Shown. Extend from slab to underside of roof deck

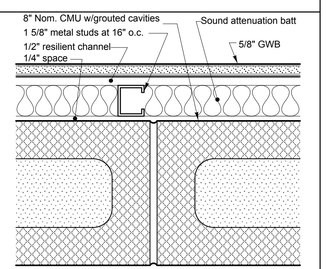
5a Interior Sound Partition -
Use 6" metal studs. Extend from slab to underside of roof deck



6 Garage Partition
As Shown. Extend from slab to underside of roof deck

PARTITION TYPES NOTES

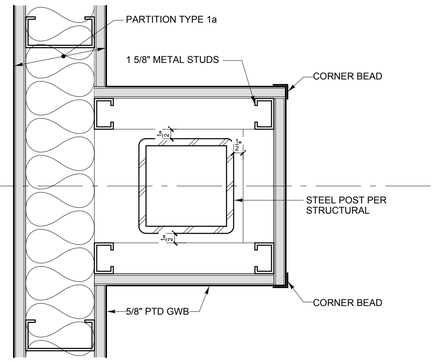
- ALL FIRE RATED PARTITIONS SHALL HAVE FIRE CAULK AT THE TOP OF WALL AND HAVE ACOUSTICAL CAULKING AT THE BOTTOM



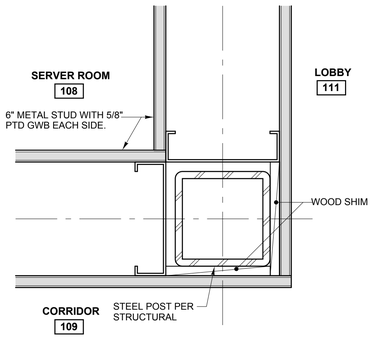
7 Sound Partition - 1 Hour Fire Rated Partition
As Shown. Extend from slab to underside of roof deck

ABBREVIATIONS

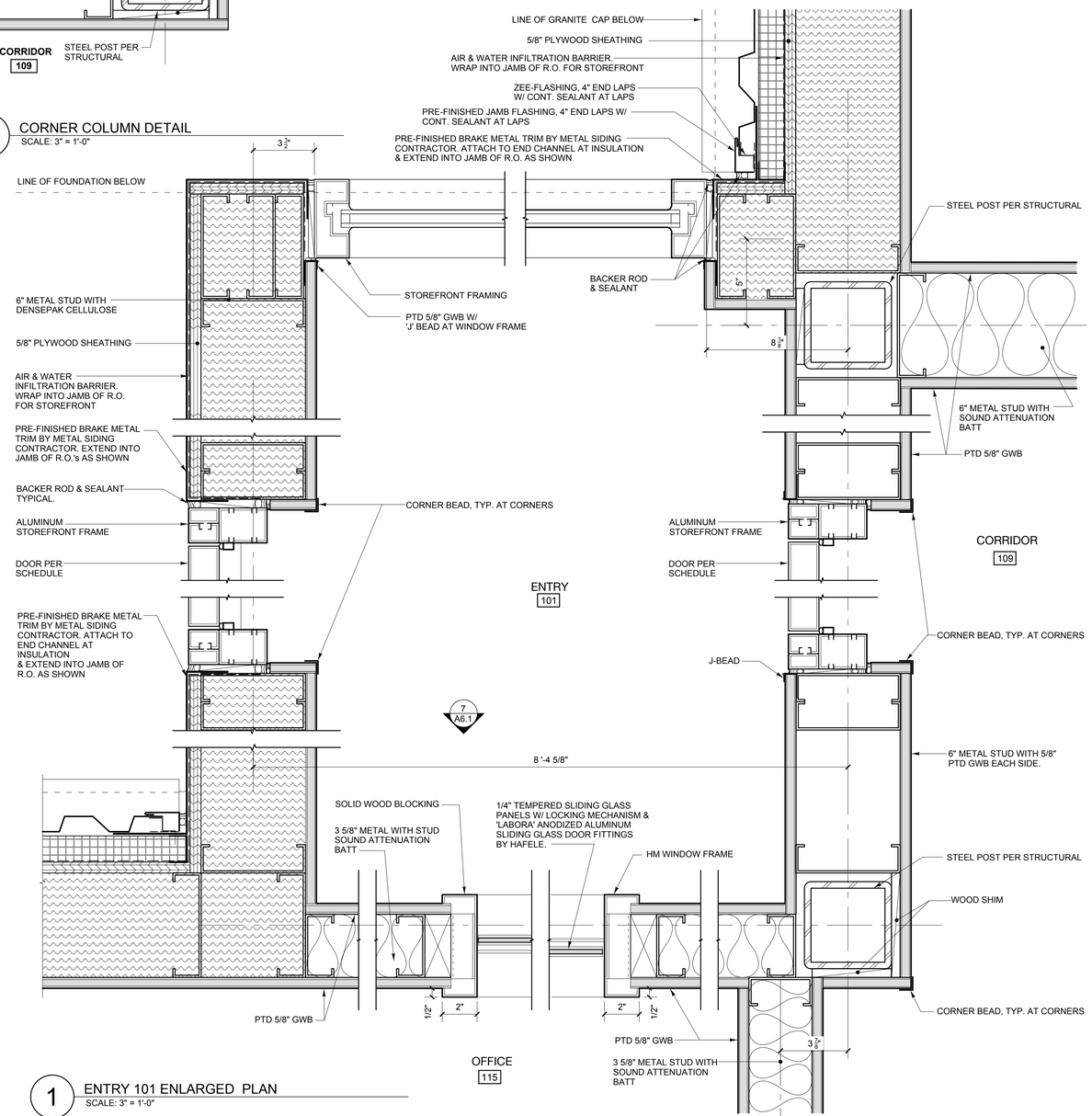
CT	Ceramic Tile
GWB	Gypsum Wall Board
ACT	Acoustical Ceiling Tile
MR-ACT	Moisture Resistant Acoustical Ceiling Tile
SWC	Suspended Wood Ceiling
PTD	Painted
Concrete-1	Stained & sealed decorative concrete floor
Concrete-2	Sealed concrete floor



2 COLUMN WRAPPING DETAIL
SCALE: 3" = 1'-0"



3 CORNER COLUMN DETAIL
SCALE: 3" = 1'-0"



1 ENTRY 101 ENLARGED PLAN
SCALE: 3" = 1'-0"

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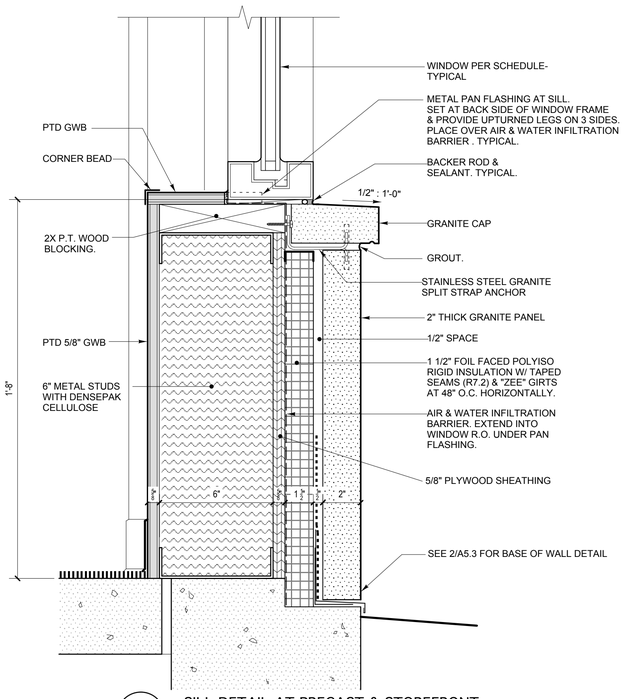
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CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

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PARTITION TYPES, FINISH SCHEDULE & DETAILS

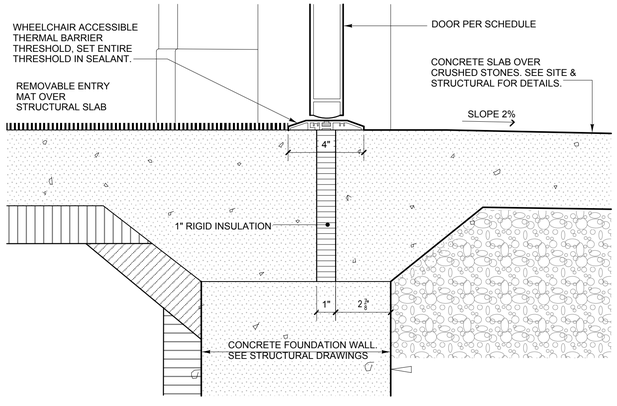
SHEET NUMBER

A8.1



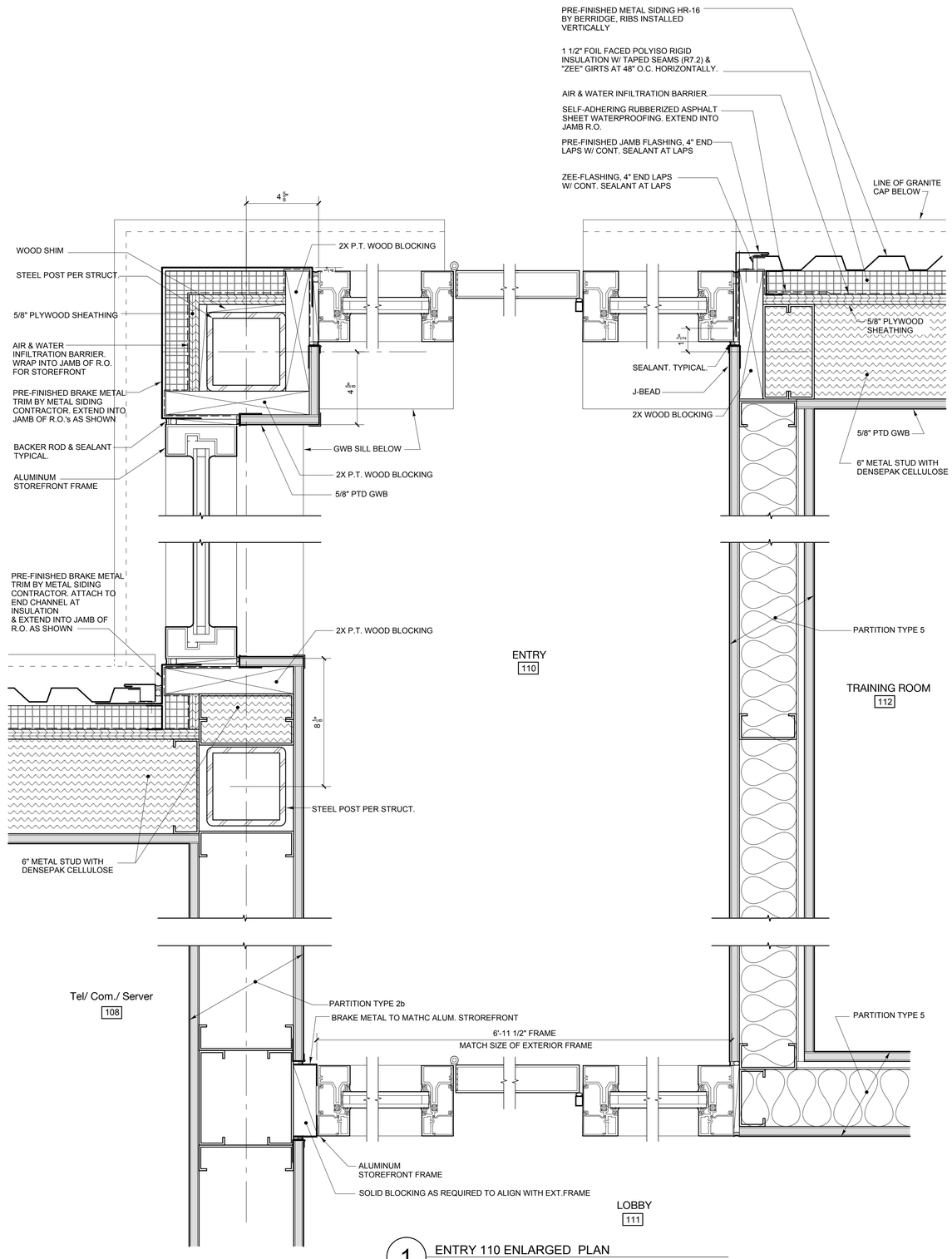
2 SILL DETAIL AT PRECAST & STOREFRONT

SCALE: 3" = 1'-0"



3 SILL DETAIL AT DOOR 110.1

SCALE: 3" = 1'-0"



1 ENTRY 110 ENLARGED PLAN

SCALE: 3" = 1'-0"

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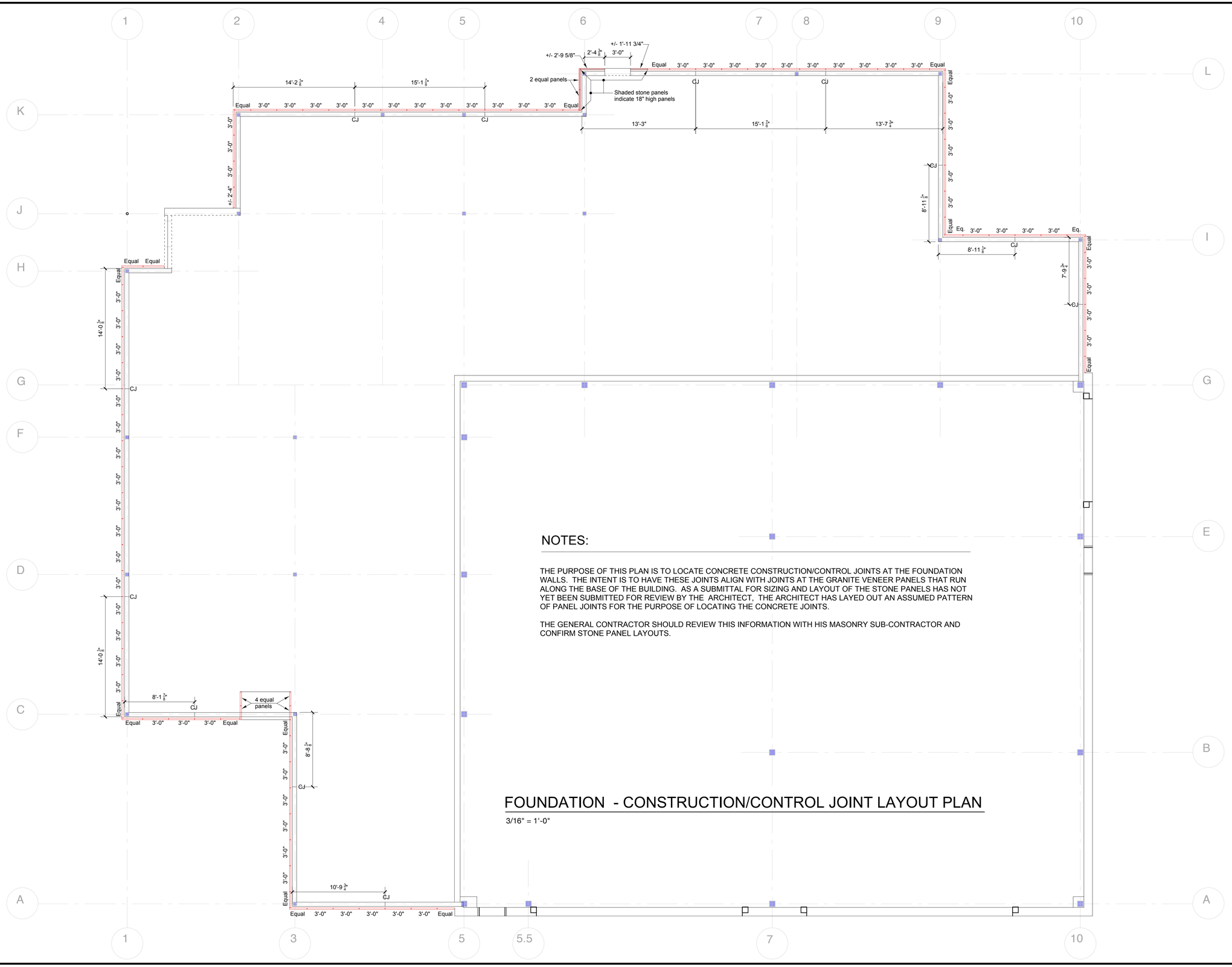
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REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

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WALL DETAILS

SHEET NUMBER

A8.2



NOTES:

THE PURPOSE OF THIS PLAN IS TO LOCATE CONCRETE CONSTRUCTION/CONTROL JOINTS AT THE FOUNDATION WALLS. THE INTENT IS TO HAVE THESE JOINTS ALIGN WITH JOINTS AT THE GRANITE VENEER PANELS THAT RUN ALONG THE BASE OF THE BUILDING. AS A SUBMITTAL FOR SIZING AND LAYOUT OF THE STONE PANELS HAS NOT YET BEEN SUBMITTED FOR REVIEW BY THE ARCHITECT, THE ARCHITECT HAS LAYED OUT AN ASSUMED PATTERN OF PANEL JOINTS FOR THE PURPOSE OF LOCATING THE CONCRETE JOINTS.

THE GENERAL CONTRACTOR SHOULD REVIEW THIS INFORMATION WITH HIS MASONRY SUB-CONTRACTOR AND CONFIRM STONE PANEL LAYOUTS.

FOUNDATION - CONSTRUCTION/CONTROL JOINT LAYOUT PLAN

3/16" = 1'-0"

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FOUNDATION - CONSTRUCTION/
CONTROL JOINT LAYOUT PLAN

SHEET NUMBER

A9.1

WINDOW SCHEDULE

General		Frame		Details			Notes
Window No.	Type	Material	Finish	Head	Jamb	Sill	
FIRST FLOOR - LOW							
1.01	E	ALUM	FF	H1	J1 & J2	S1	
1.02	D	ALUM	FF	H1	J2 & J3	S1	
1.03	D	ALUM	FF	H1	J1 & J3	S1	
1.04	E	ALUM	FF	H1	J1 & J2	S1	
1.05	D	ALUM	FF	H1	J1 & J2	S1	
1.06	D	ALUM	FF	H1	J1 & J3	S1	
1.07	D	ALUM	FF	H1	J1 & J3	S1	
1.08	E	ALUM	FF	H1	J1 & J3	S1	
1.09	C	ALUM	FF	H1	J2 & J3	S1	
1.10	G	ALUM	FF	H1	J1 & J2	S1	
1.11	A	ALUM	FF	H2	SEE 1/A8.1	S3	
1.12	E	ALUM	FF	H1	J1 & J2	S1	
1.13	G	ALUM	FF	H1	J1 & J2	S1	
1.14	D	ALUM	FF	H1	J1	S1	
1.15	D	ALUM	FF	H1	J1	S1	
1.16	D	ALUM	FF	H1	J1	S1	
1.17	F	ALUM	FF	H1	J1 & J3	S1	
1.18	F	ALUM	FF	H1	J3	S1	
1.19	F	ALUM	FF	H1	J3	S1	
1.20	F	ALUM	FF	H1	J3	S1	
1.21	F	ALUM	FF	H1	J2 & J3	S1	
1.22	F	ALUM	FF	H1	J1 & J2	S1	
1.23	B	ALUM	FF	H2	SEE 1/A8.2	2 / A8.2	
FIRST FLOOR - HIGH							
2.01	J	ALUM	FF	H1	J1 / J3	S2	
2.02	H	ALUM	FF	H3	J5 / J6	S4	
2.03	H	ALUM	FF	H3	J4 / J5	S4	
2.04	H	ALUM	FF	H3	J4 / J5	S4	
2.05	H	ALUM	FF	H3	J5 / J6	S4	
2.06	K	ALUM	FF	H1	J3	S2	
2.07	K	ALUM	FF	H1	J3	S2	
2.08	K	ALUM	FF	H1	J3	S2	
2.09	J	ALUM	FF	H1	J1 / J3	S2	
2.10	H	ALUM	FF	H3	J4 / J6	S4	
2.11	H	ALUM	FF	H3	J4 / J6	S4	

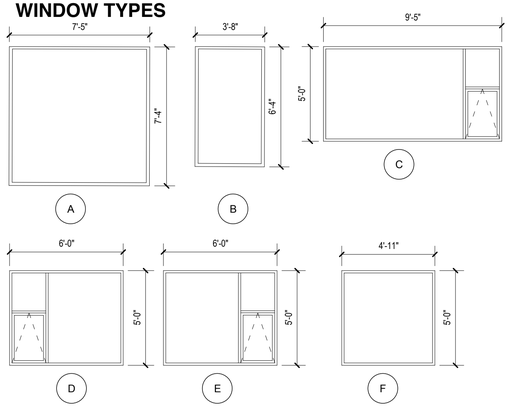
ABBREVIATIONS

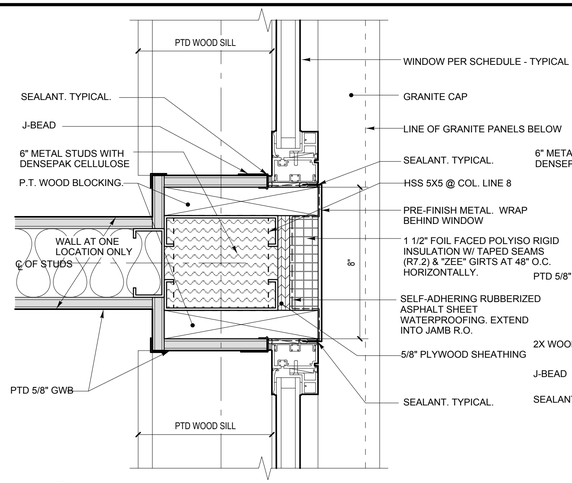
FF	Factory Finish
ALUM.	Aluminum

GENERAL NOTES

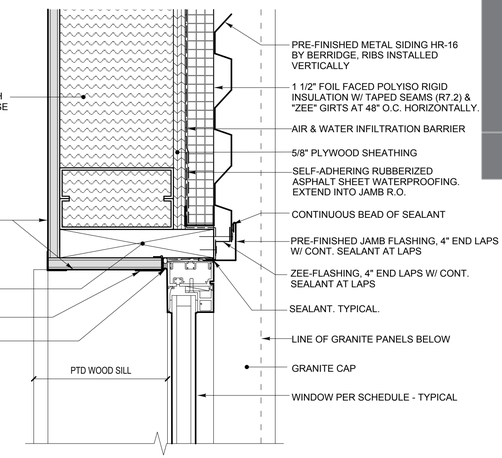
- Refer to floor plans and building elevations for window type location
- Provide tempered glass at any window unit less than 18" above the floor. Also provide tempered glass for glass installed in doors or located within 24" of a door.
- See specifications for glazing types
- Top of window head at first floor shall be 8'-0" A.F.F.

WINDOW TYPES

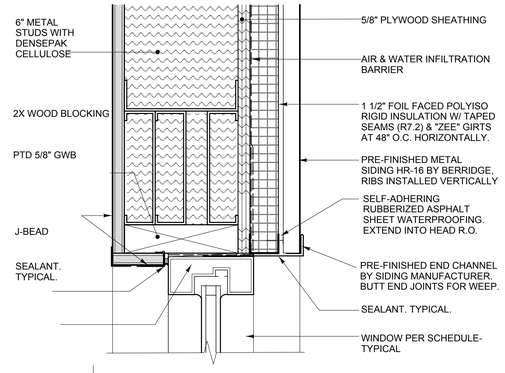




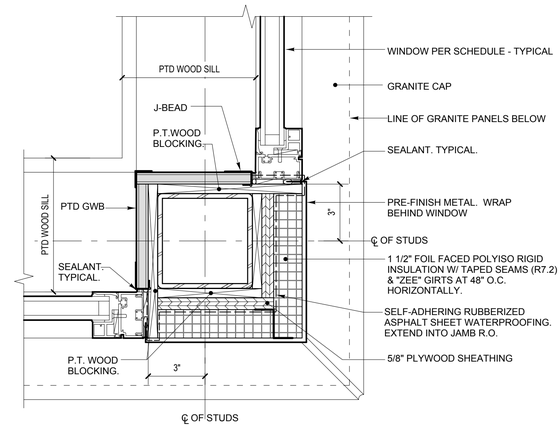
J3 TYPICAL JAMB DETAIL
SCALE: 3" = 1'-0"



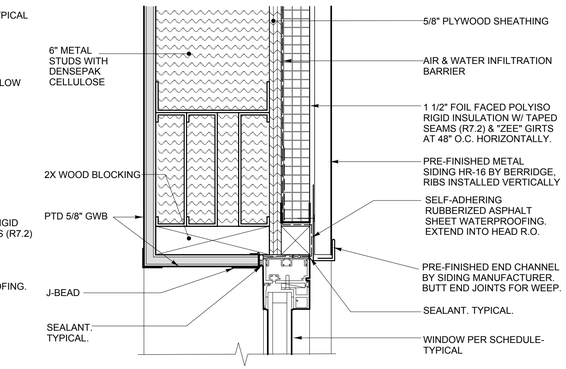
J1 TYPICAL JAMB DETAIL
SCALE: 3" = 1'-0"



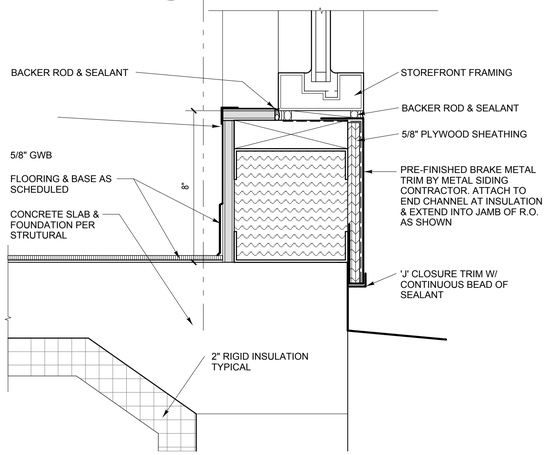
H2 HEAD DETAIL AT STOREFRONT
SCALE: 3" = 1'-0"



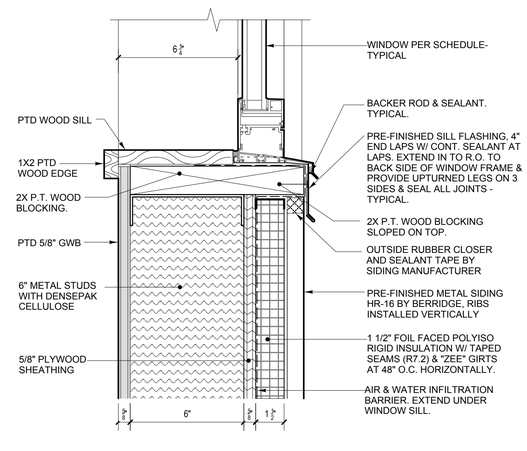
J2 JAMB DETAIL AT CORNER WINDOW
SCALE: 3" = 1'-0"



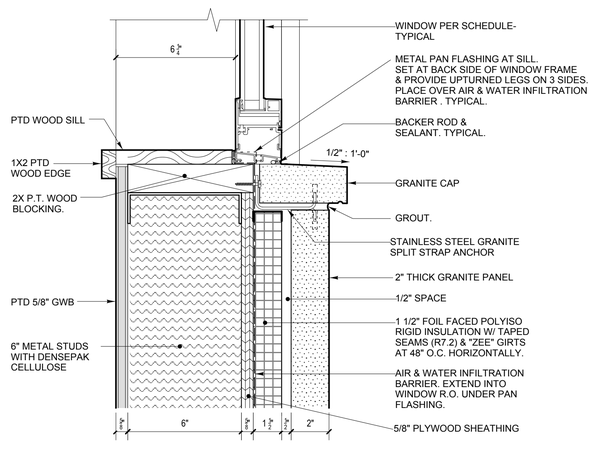
H1 TYPICAL HEAD DETAIL
SCALE: 3" = 1'-0"



S3 SILL DETAIL AT STOREFRONT
SCALE: 3" = 1'-0"



S2 TYPICAL SILL DETAIL AT UPPER WINDOWS
SCALE: 3" = 1'-0"



S1 TYPICAL SILL DETAIL AT PRECAST
SCALE: 3" = 1'-0"

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

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021942.02

REGISTERED ARCHITECT * STATE OF MAINE * WINTON F. SCOTT, JR. No. 793

Winton Scott | SIGNATURE | ME # 793 | P.E. NUMBER | 2/ 16 / 2018 | DATE

	BY	DATE
PROJ. MNGR. JOEL KITTREDGE		
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

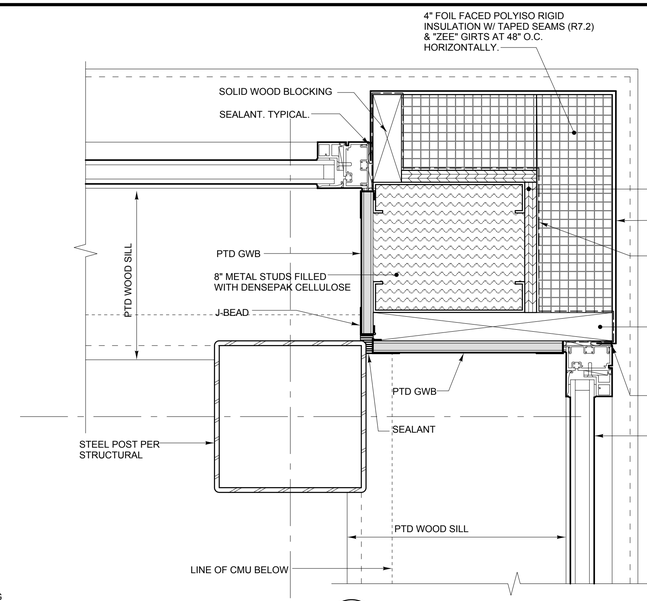
PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS CENTER
PORTLAND CUMBERLAND COUNTY

WINDOW SCHEDULE & DETAILS

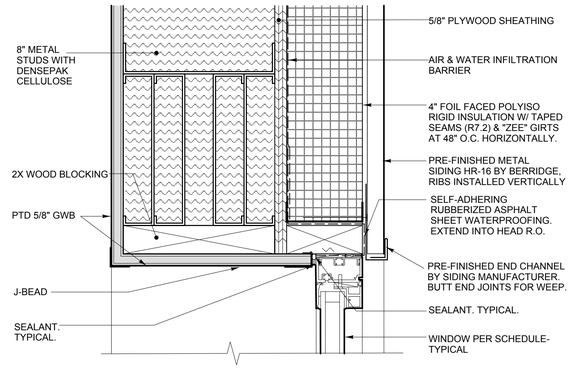
SHEET NUMBER

A10.1

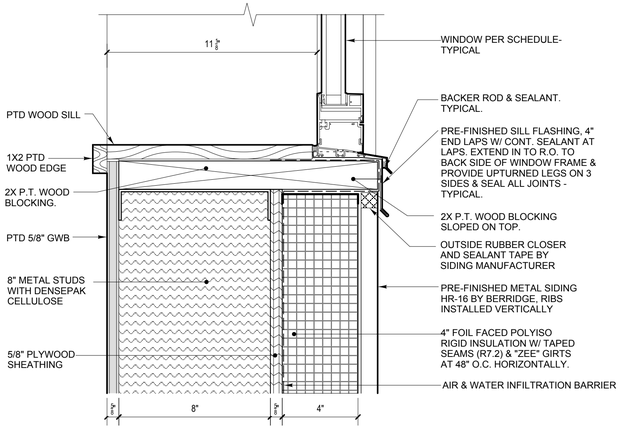
34 OF 58



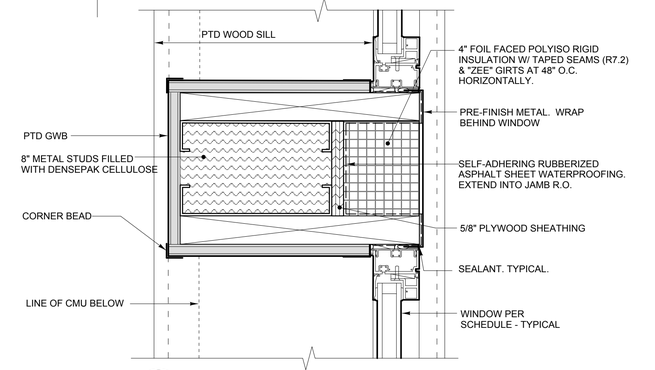
J6 JAMB DETAIL AT GARAGE CORNER WINDOWS
SCALE: 3" = 1'-0"



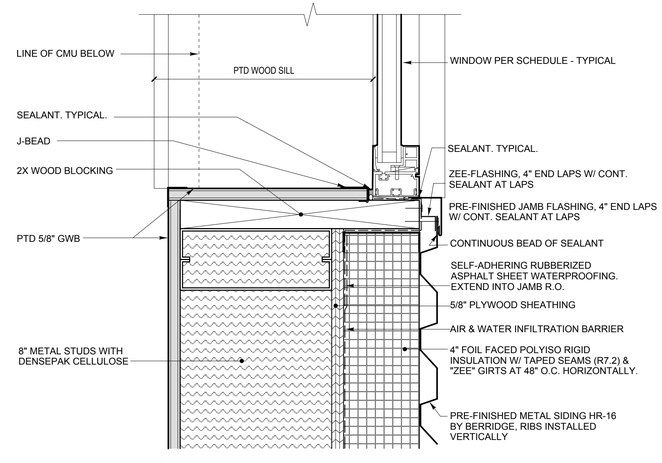
H3 TYPICAL HEAD DETAIL
SCALE: 3" = 1'-0"



S4 TYPICAL SILL DETAIL AT UPPER WINDOWS
SCALE: 3" = 1'-0"



J5 TYPICAL JAMB DETAIL AT GARAGE WINDOWS
SCALE: 3" = 1'-0"



J4 TYPICAL JAMB DETAIL AT GARAGE WINDOWS
SCALE: 3" = 1'-0"

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Winton Scott
SIGNATURE
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	DATE	BY
PROJ. MNGR. JOEL KITTREDGE	-	-
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REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS CENTER
PORTLAND CUMBERLAND COUNTY

WINDOW DETAILS

SHEET NUMBER

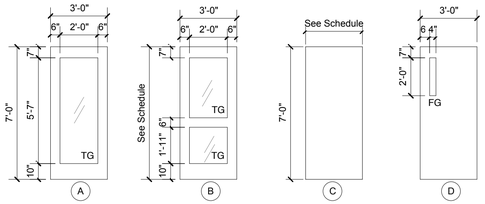
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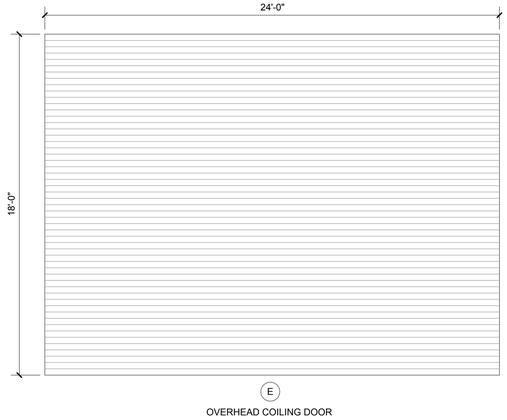
DOOR & FRAME SCHEDULE

General			Door			Frame			Details					
Door No.	Size (W x H)	Thickness	Material	Finish	Type	Material	Finish	Type	Head	Jamb	Threshold	Hardware	Label	Remarks
101.1	3'-0" X 7'-10"	1 3/4"	AL	F.F.	B	AL	F.F.	F1	H3	1/A8.1	T3	HW2A	--	Card access equipped door hardware
101.2	3'-0" X 7'-10"	1 3/4"	AL	F.F.	B	AL	F.F.	F1	H2	J2	T2	HW1	--	
102	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	A	HM	Ptd	F1	H1	J1	T1	HW3	--	Card access equipped door hardware
103	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H1	J1	--	HW4B	--	
105	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	A	HM	Ptd	F1	H1	J1	T1	HW3	--	Card access equipped door hardware
106	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H1	J1	T4	HW7	--	
107	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H1	J1	T4	HW7	--	
108	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H1	J1	--	HW4A	--	Card access equipped door hardware
109	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	A	HM	Ptd	F5	H7	J7	--	HW3	--	
110.1	3'-0" X 7'-10"	1 3/4"	AL	F.F.	B	AL	F.F.	F2	H8	1 / A8.2	3 / A8.2	HW2A	--	Card access equipped door hardware
110.2	3'-0" X 7'-10"	1 3/4"	AL	F.F.	B	AL	F.F.	F3	H2	1 / A8.2	T2	HW1	--	
112.1	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	D	HM	Ptd	F1	H5	J5	T1	HW6	45 min	
112.2	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	D	HM	Ptd	F1	H5	J5	T1	HW6	45 min	
113	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H6	J6	T1	HW4A	--	Card access equipped door hardware
114	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F4	H4	J4	--	HW4B	--	
115	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	A	HM	Ptd	F1	H1	J1	T1	HW3		Card access equipped door hardware
116	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	A	HM	Ptd	F1	H1	J1	T1	HW3	--	Card access equipped door hardware
117	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	A	HM	Ptd	F1	H1	J1	T1	HW3	--	Card access equipped door hardware
118	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	A	HM	Ptd	F1	H1	J1	T1	HW3	--	Card access equipped door hardware
119	3'-0" X 7'-10"	1 3/4"	AL	F.F.	B	AL	F.F.	F5	H8	J14	T3	HW3	--	Card access equipped door hardware
120	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H1	J1	T4	HW5	--	
121	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H1	J1	T4	HW5	--	
123	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H1	J1	--	HW6	--	Card access equipped door hardware
124	3'-0" X 7'-0"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H1	J1	T4	HW5	--	
126	3'-0" X 7'-0"	1 3/4"	INSUL MTL	PTD	G	HM	Ptd	F4	H4	J4	--	HW3	--	
127.1	3'-0" X 7'-0"	1 3/4"	INSUL MTL	PTD	D	HM	Ptd	F4	H12	J12	--	HW2B	45 min.	
127.2	3'-0" X 7'-0"	1 3/4"	INSUL MTL	PTD	C	HM	Ptd	F4	H13	J13	T5	HW2B	--	Card access equipped door hardware
127.3	24'-0" X 20'-0"	3/4"	INSUL MTL	F.F.	E	--	--	--	H9	J9	T9	--	--	Card access equipped door hardware
127.4	24'-0" X 20'-0"	3/4"	INSUL MTL	F.F.	E	--	--	--	H9	J9	T9	--	--	Card access equipped door hardware
127.5	12'-0" X 12'-0"	3/4"	INSUL MTL	F.F.	E	--	--	--	H9	J9	T9	--	--	Card access equipped door hardware
127.6	3'-0" X 7'-0"	1 3/4"	INSUL MTL	PTD	C	HM	Ptd	F4	H13	J13	T5	HW2B	--	Card access equipped door hardware
128	3'-0" X 7'-10"	1 3/4"	SCWD	Clr. F.	C	HM	Ptd	F1	H1	J1	--	HW4B	--	Card access equipped door hardware

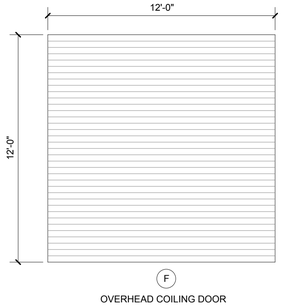
DOOR TYPES

1/4" = 1'-0"





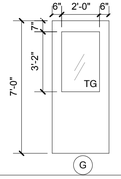
OVERHEAD COILING DOOR



OVERHEAD COILING DOOR

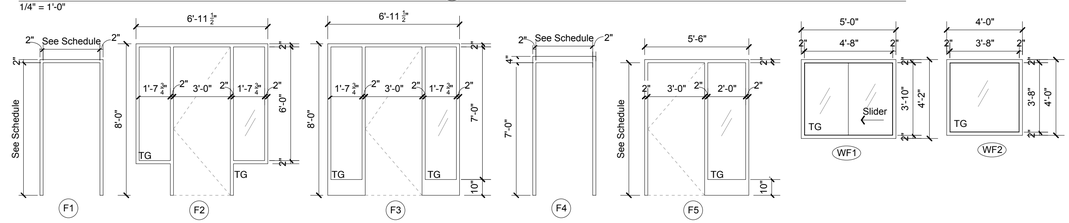
ABBREVIATIONS

SCWD	Solid Core wood door
Clr. F.	Clear Finish
F.F.	Factory Finish
HM	Hollow Metal
GHM	Galvanized Hollow Metal
Ptd.	Painted
HW	Hardware Set
TG	Tempered Glass
FG	Fire Glass
SP	Spandrel Glass



FRAME TYPES

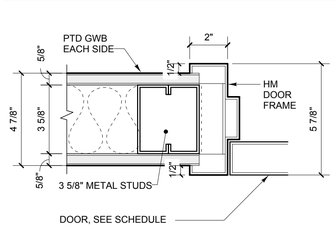
1/4" = 1'-0"



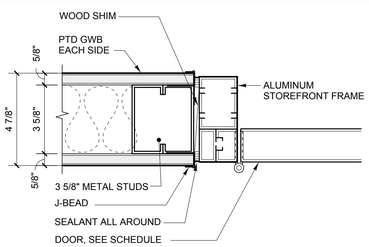
INTERIOR WINDOW FRAME SCHEDULE

General	Frame			Details			
Window No.	Material	Finish	Type	Head	Jamb	Sill	Remarks
W101	HM	PTD	WF1	H10	J10	S10	
W126.1	HM	PTD	WF2	H11	J11	S11	
W126.2	HM	PTD	WF2	H11	J11	S11	

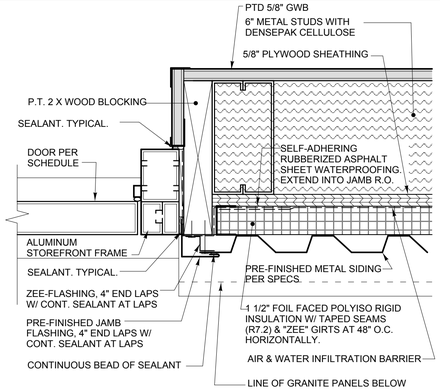
DOOR DETAILS



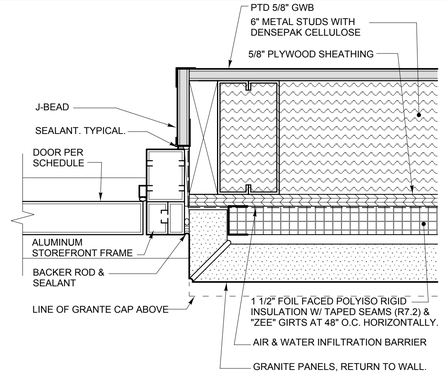
J1 H1 JAMB DETAIL / HEAD SIMILAR
SCALE: 3" = 1'-0"



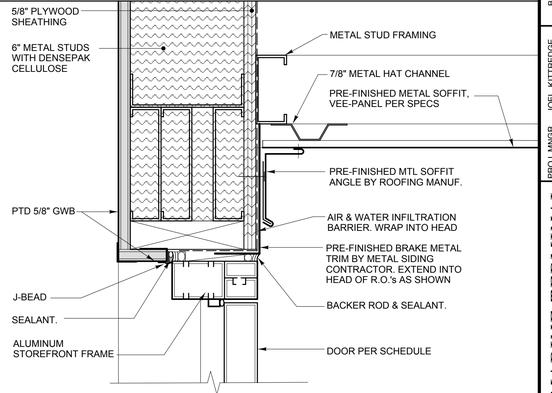
J2 H2 JAMB DETAIL / HEAD SIMILAR
SCALE: 3" = 1'-0"



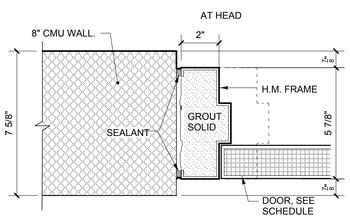
J3 JAMB DETAIL AT METAL SIDING
SCALE: 3" = 1'-0"



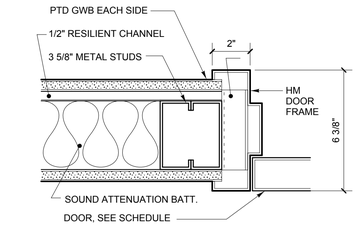
J3 JAMB DETAIL AT GRANITE PANEL
SCALE: 3" = 1'-0"



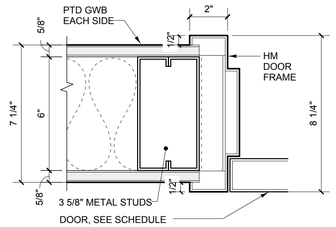
H3 HEAD DETAIL AT STOREFRONT
SCALE: 3" = 1'-0"



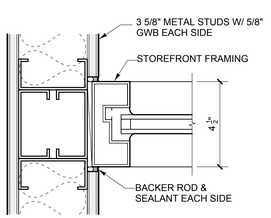
J4 H4 JAMB DETAIL / HEAD DETAIL SIMILAR
SCALE: 3" = 1'-0"



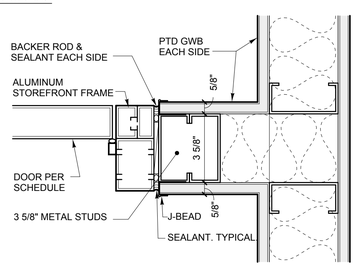
J5 H5 JAMB DETAIL / HEAD DETAIL SIMILAR
SCALE: 3" = 1'-0"

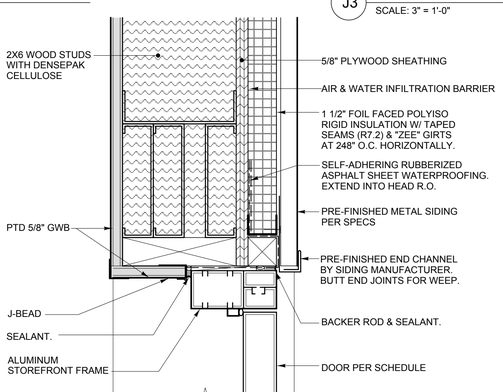


J6 H6 JAMB DETAIL / HEAD SIMILAR
SCALE: 3" = 1'-0"

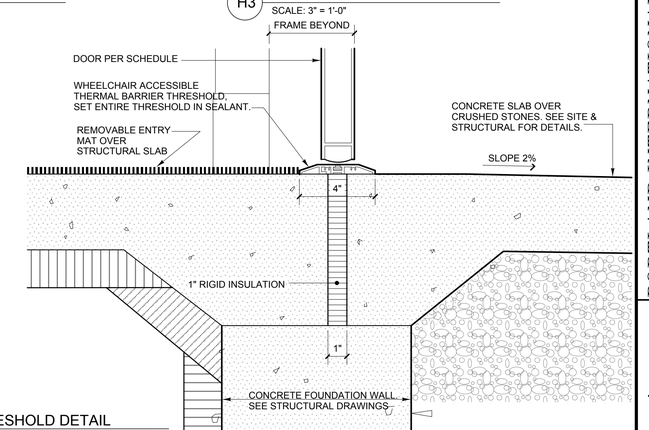


J7 H7 JAMB DETAIL / HEAD SIMILAR
SCALE: 3" = 1'-0"





H8 HEAD DETAIL AT STOREFRONT
SCALE: 3" = 1'-0"



T3 THRESHOLD DETAIL
SCALE: 3" = 1'-0"

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REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

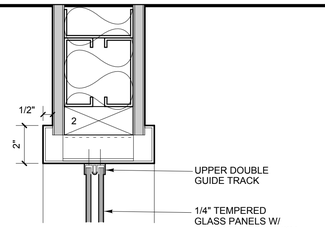
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PORTLAND

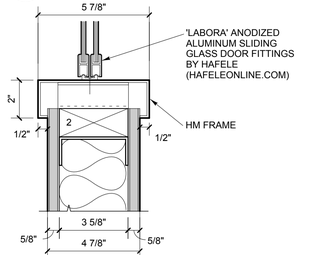
DOOR SCHEDULE & DETAILS

SHEET NUMBER

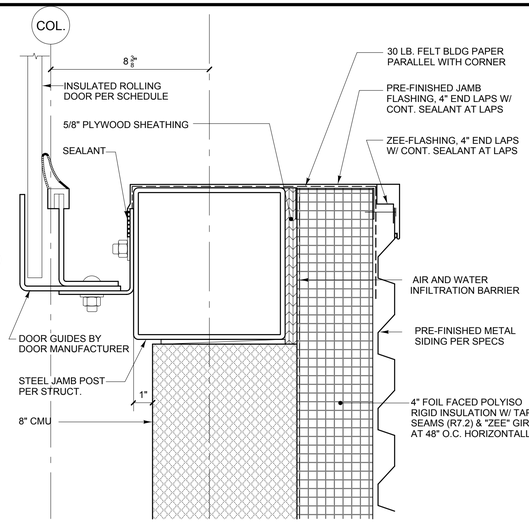
A11.1



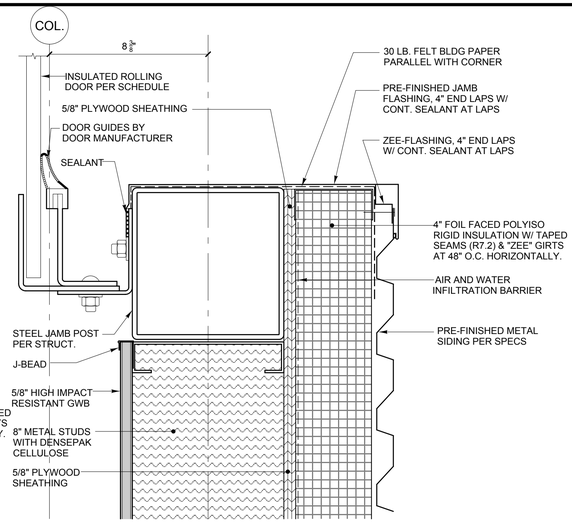
H10 J10 HEAD DTL AT SLIDING WINDOW (JAMD SIM.)
SCALE: 3" = 1'-0"



S10 SILL DETAIL AT SLIDING WINDOW
SCALE: 3" = 1'-0"

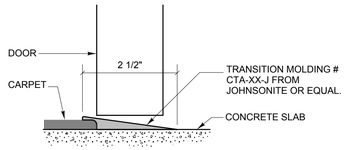


AT CMU BELOW

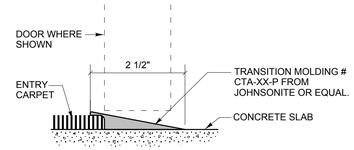


AT METAL STUDS ABOVE

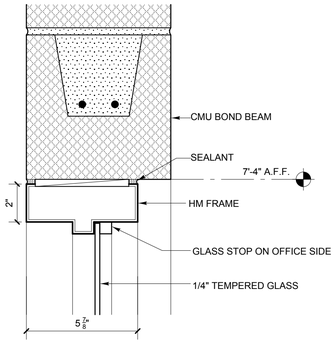
J9 JAMB DETAIL AT OVERHEAD DOOR
SCALE: 3" = 1'-0"



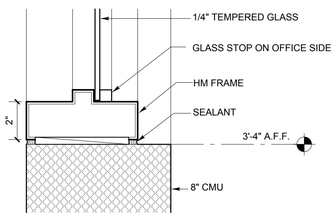
T1 TRANSITION FROM CARPET TO CONC.
SCALE: 6" = 1'-0"



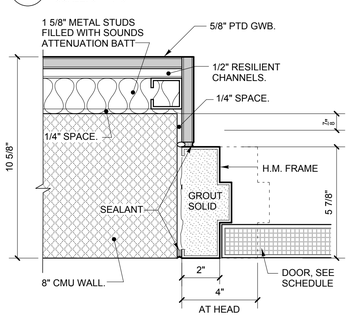
T2 TRANSITION FROM ENTRY CARPET TO CONC.
SCALE: 6" = 1'-0"



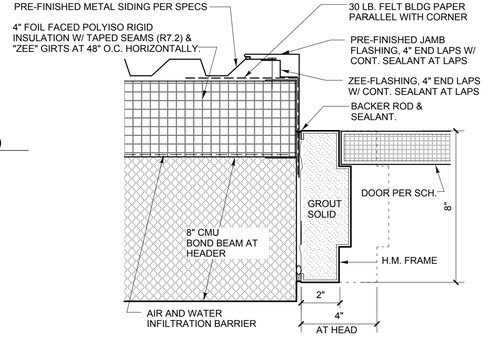
H11 J11 HEAD DTL AT INT. WINDOW (JAMD SIM.)
SCALE: 3" = 1'-0"



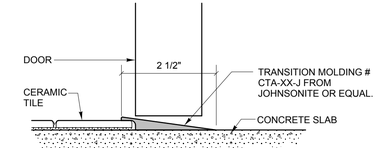
S11 SILL DETAIL AT INTERIOR WINDOW
SCALE: 3" = 1'-0"



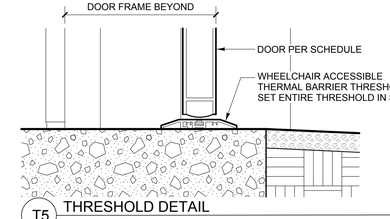
J12 H12 JAMB DETAIL / HEAD DETAIL SIMILAR
SCALE: 3" = 1'-0"



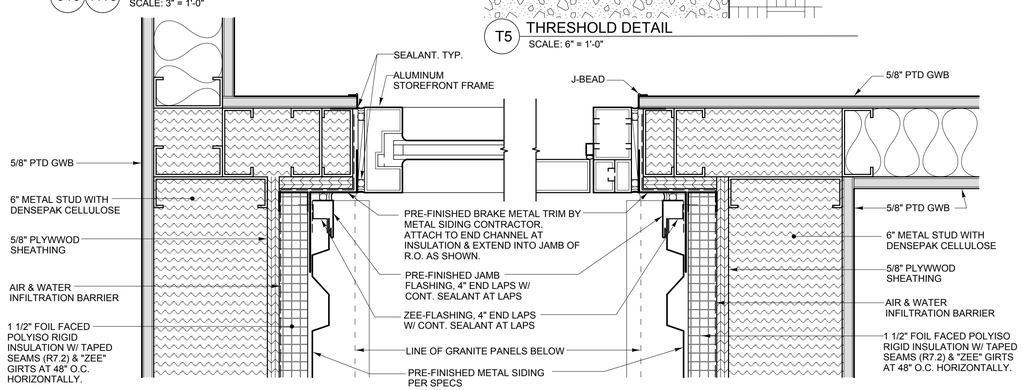
J13 H13 JAMB DETAIL / HEAD DETAIL SIMILAR
SCALE: 3" = 1'-0"



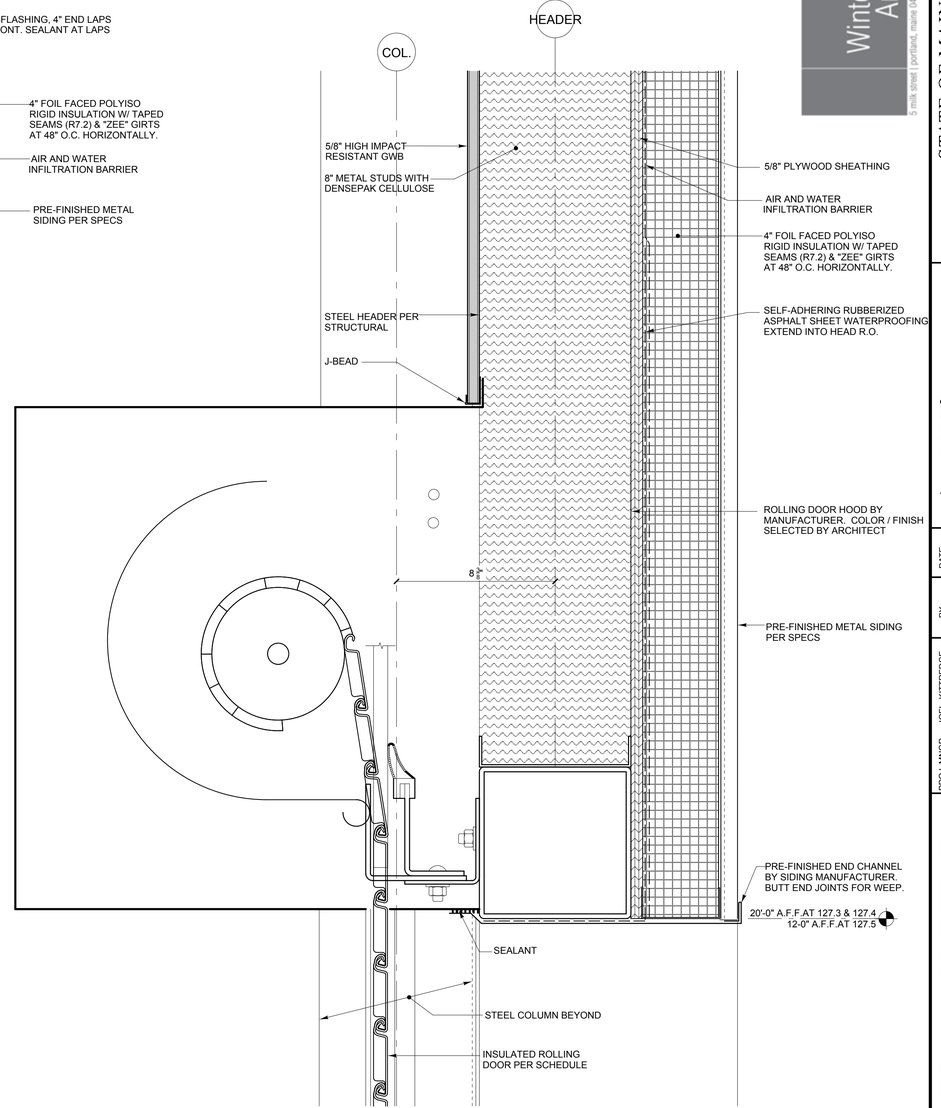
T4 TRANSITION FROM CONC. TO CERAMIC TILE
SCALE: 6" = 1'-0"



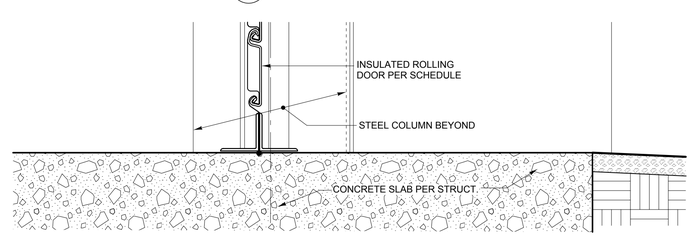
T5 THRESHOLD DETAIL
SCALE: 6" = 1'-0"



J14 JAMB DETAIL
SCALE: 3" = 1'-0"



H9 HEAD DETAIL AT OVERHEAD DOOR
SCALE: 3" = 1'-0"



T9 THRESHOLD DETAIL AT OVERHEAD DOOR
SCALE: 3" = 1'-0"

Winton Scott Architects
5 mark street | portland, maine 04101 | www.wintonscott.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

REGISTERED ARCHITECT * WINTON F. SCOTT, JR. No. 793 * STATE OF MAINE

Winton Scott
SIGNATURE
ME # 793
P.E. NUMBER
2/ 16 / 2018
DATE

	DATE	BY
PROJ. MNGR.		JOEL KITTREDGE
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

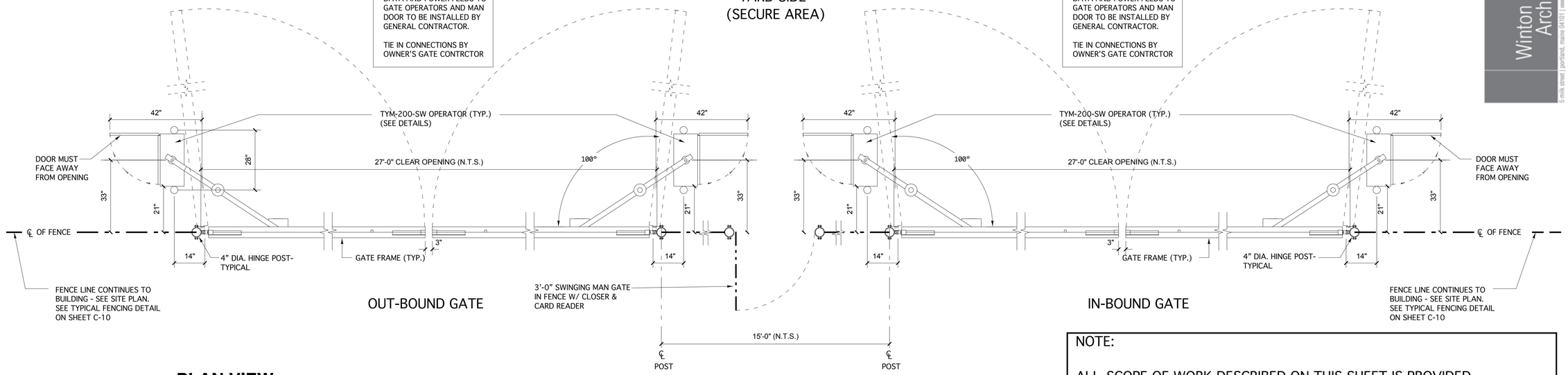
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MAINTENANCE & OPERATIONS CENTER
CUMBERLAND COUNTY
PORTLAND

DOOR DETAILS

SHEET NUMBER

A11.2

37 OF 58

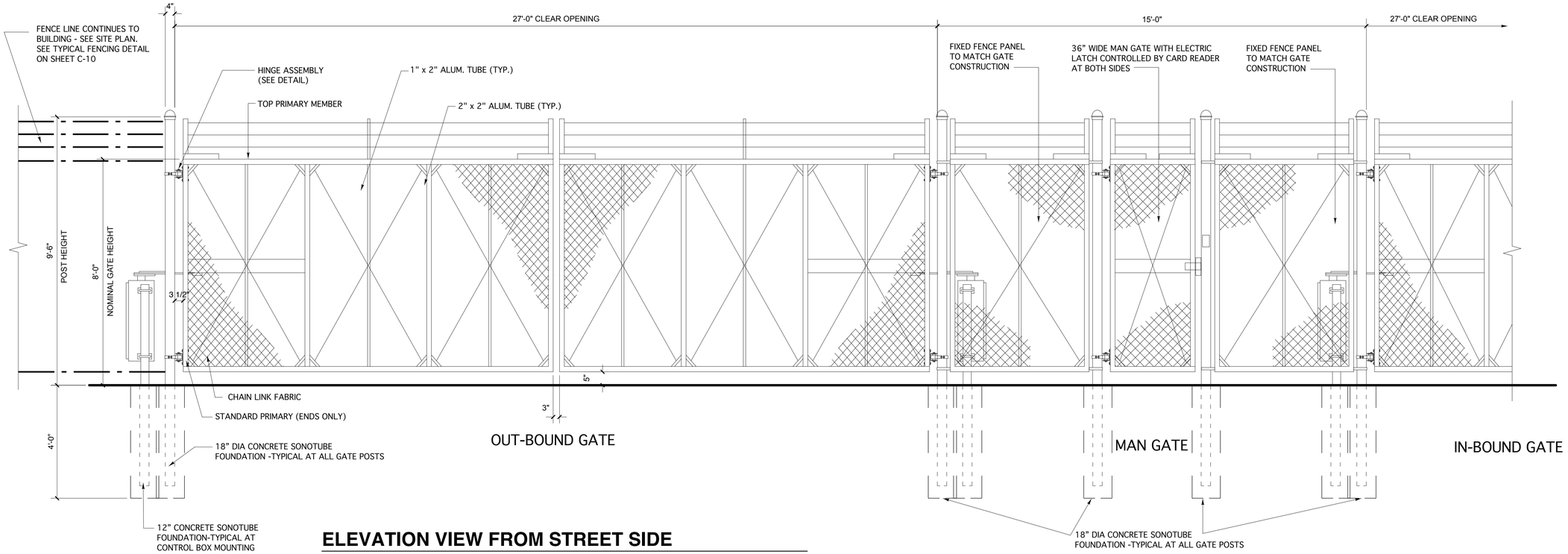


PLAN VIEW

1/2" = 1'-0"

NOTE:

ALL SCOPE OF WORK DESCRIBED ON THIS SHEET IS PROVIDED FOR INFORMATION ONLY AND IS NOT IN CONTRACT. THE OWNER INTENDS TO HIRE A SEPARATE CONTRACTOR TO PROVIDE AND INSTALL THIS WORK. THE GENERAL CONTRACTOR SHALL COOPERATE WITH AND COORDIANTE WITH THE OWNER'S CONTRACTOR TO ASSURE THE WORK IS INTEGRATED INTO THE OVERALL SCHEDULE AND SEQUENCE OF WORK



ELEVATION VIEW FROM STREET SIDE

1/2" = 1'-0"

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

REGISTERED ARCHITECT * MAINE * STATE OF
WINTON F. SCOTT, JR. No. 793

	DATE	BY
SIGNATURE		
ME # 793 P.E. NUMBER		
2 /16 / 2018 DATE		

PROJ. MNGR. JOEL KITTREDGE

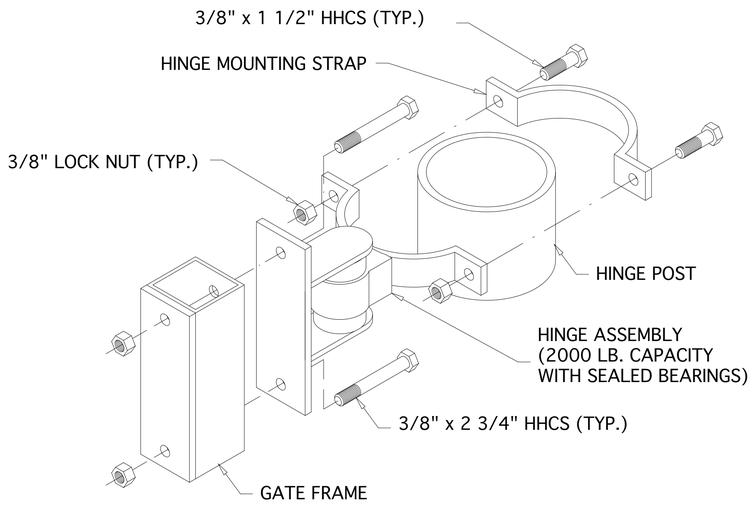
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CHECKED-REVIEWED	-
DESIGN2-DETAILED2	-
DESIGN3-DETAILED3	-
REVISIONS 1	-
REVISIONS 2	-
REVISIONS 3	-
REVISIONS 4	-
FIELD CHANGES	-

PORTLAND INTERNATIONAL MARINE TERMINAL
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PORTLAND

VEHICLE GATE DETAILS I

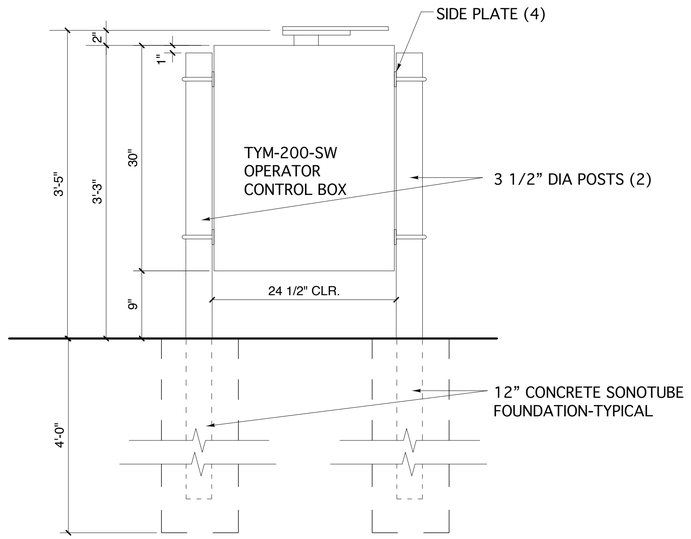
SHEET NUMBER

A11.3



TYPICAL GATE HINGE ASSEMBLY

NOT TO SCALE



TYPICAL OPERATOR CONTROL BOX MOUNT

NOT TO SCALE

NOTE:

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

REGISTERED ARCHITECT * WINTON F. SCOTT, JR. No. 793 * STATE OF MAINE

Winton Scott

SIGNATURE
ME # 793
P.E. NUMBER
2/16/2018
DATE

	BY	DATE
PROJ. MNGR. JOEL KITTREDGE		
DESIGN-DETAILED	-	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS CENTER
PORTLAND CUMBERLAND COUNTY

VEHICLE GATE DETAILS II

SHEET NUMBER

A11.4

GENERAL NOTES

1. THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
3. ALL DIMENSIONS, EXISTING CONDITIONS, AND AS-BUILT CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE ONLY AFTER THE STRUCTURAL WORK CONTAINED IN THE S- DRAWINGS IS COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
5. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS AS DETERMINED BY THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER RESERVES THE RIGHT TO INTERPRET DETAILS TO ADDRESS OTHER PROJECT CONDITIONS.
6. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK, INCLUDING DESCRIPTION OF SHORING, AND CONSTRUCTION METHODS AND SEQUENCING WHERE APPLICABLE. NO PERFORMANCE OF THE WORK INCLUDING, BUT NOT LIMITED TO, DEMOLITION OF EXISTING STRUCTURE, OR FABRICATION OR ERECTION OF NEW STRUCTURAL ELEMENTS, SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ARCHITECT AND ENGINEER. FOR SHOP DRAWINGS AND SUBMITTALS REQUIRED, REFERENCE THE PROJECT SPECIFICATION.
7. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.
8. IN ACCORDANCE WITH THE MAINE UNIFORM BUILDING AND ENERGY CODE/INTERNATIONAL BUILDING CODE (2009 EDITION, SECTION 1704.1), A STATEMENT OF SPECIAL INSPECTIONS IS REQUIRED AS A CONDITION FOR PERMIT ISSUANCE BY THE LOCAL CODE OFFICIAL. THIS STATEMENT SHALL INCLUDE A COMPLETE LIST OF MATERIALS AND WORK REQUIRING SPECIAL INSPECTIONS, THE INSPECTIONS TO BE PERFORMED AND A LIST OF THE INDIVIDUALS, APPROVED AGENCIES AND FIRMS INTENDED TO BE RETAINED FOR CONDUCTING SUCH INSPECTIONS.
9. REFERENCE THE PROJECT SPECIFICATIONS FOR ALL TESTING REQUIREMENTS.

DESIGN LOADS

1. BUILDING CODE:
   MAINE UNIFORM BUILDING AND ENERGY CODE
   INTERNATIONAL BUILDING CODE, 2009 EDITION
   ASCE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
2. DESIGN FLOOR LIVE LOADS:
   ALL INTERIOR SPACES, U.N.O: 100 PSF
   GARAGE SPACES: 200 PSF & WHEEL LOADS
3. DESIGN ROOF SNOW LOAD:
   GROUND SNOW LOAD (Pg): 60 PSF
   SNOW EXPOSURE FACTOR (Ce): 1.0
   SNOW LOAD IMPORTANCE FACTOR (Is): 1.0
   SNOW LOAD THERMAL FACTOR (Ct): 1.1
   FLAT ROOF SNOW LOAD (Pf): 46.2 PSF + DRIFT
4. DESIGN WIND LOAD:
   BASIC WIND SPEED: 100 MPH
   WIND LOAD IMPORTANCE FACTOR (Iw): 1.0
   WIND EXPOSURE: C
   INTERNAL PRESSURE COEFFICIENT: ±0.18
   COMPONENTS & CLADDING PER ASCE 7-05
5. DESIGN SEISMIC LOADS:
   EQUIVALENT LATERAL FORCE PROCEDURE
   SEISMIC OCCUPANCY CATEGORY: II
   SEISMIC IMPORTANCE FACTOR (Ie): 1.0
   MAPPED SPECTRAL RESPONSE ACCELERATIONS:
      Ss: 0.314
      S1: 0.077
   SEISMIC SITE CLASS: D
   SPECTRAL RESPONSE COEFFICIENTS:
      Sds: 0.324
      Sd1: 0.123
   SEISMIC DESIGN CATEGORY: B
   BASIC STRUCTURAL SYSTEM: BUILDING FRAME SYSTEM
   BASIC SEISMIC FORCE RESISTING SYSTEM: STRUCTURAL STEEL SYSTEMS
      NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE (R=3)
   RESPONSE MODIFICATION FACTOR (R): 3.0
   SEISMIC RESPONSE COEFFICIENT (Cs): 0.108

FOUNDATION NOTES (SOIL SUPPORTED)

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH A REPORT ENTITLED "GEOTECHNICAL DESIGN REPORT, PROPOSED MAINTENANCE AND OPERATIONS BUILDING, MAINEDOT WIN 021942.02, INTERNATIONAL MARINE TERMINAL, COMMERCIAL STREET, PORTLAND, MAINE BY HALEY & ALDRICH, INC, DATED AUGUST 20, 2017." THE RECOMMENDATIONS OF THE REPORT ARE PART OF THIS WORK.
2. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NEW COMPACTED GRANULAR FILL EXTENDING TO UNDISTURBED NATIVE SOIL PER THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. REFER TO THIS REPORT AND GEOTECHNICAL NOTES THIS DRAWING FOR SPECIFIC BEARING RECOMMENDATIONS.
3. ALLOWABLE BEARING CAPACITY 1,500 PSF
4. EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 4.5 FEET BELOW THE FINAL EXTERIOR GRADE FOR PROTECTION AGAINST FROST.
5. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL SUBGRADES HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
6. REFERENCE THE MAINE DOT STANDARD SPECIFICATIONS FOR ALL EXCAVATION, BACKFILL, COMPACTION, CONSTRUCTION DEWATERING AND PERMANENT DRAINAGE REQUIREMENTS.
7. SOILS EXPOSED AT THE BASE OF ALL FOUNDATION EXCAVATIONS SHALL BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHALL BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS SHALL BE ADEQUATELY PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. GROUNDWATER SHOULD BE ANTICIPATED FOR EXCAVATIONS AND APPROPRIATE DEWATERING MEASURES SHALL BE EMPLOYED.
8. EXCAVATIONS FOR BUILDING CONSTRUCTION SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS. BRACED EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE. DO NOT UNDERMINE EXISTING FOUNDATIONS OF ANY ADJACENT STRUCTURES.

CONCRETE NOTES

1. CONCRETE WORK SHALL CONFORM TO "ACI MANUAL OF CONCRETE PRACTICE", LATEST EDITION. THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848-3800.
2. CONCRETE FOUNDATIONS SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,500 PSI. CONCRETE SLABS SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,500 PSI, U.N.O. EXTERIOR SLAB-ON-GRADE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 5,000 PSI. ADDITIONAL CONCRETE MIX PERFORMANCE DATA INCLUDING AIR CONTENT, WATER-CEMENT RATIO, AGGREGATE SIZE, SLUMP, ETC. HAS BEEN INCLUDED IN THE PROJECT SPECIFICATIONS. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
4. PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH EXTERIOR CONCRETE, OR SLABS.
5. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST EDITION.
6. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.
7. MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:
   A. SURFACES CAST AGAINST AND PERMANENTLY IN CONTACT WITH EARTH, 3.0"
   B. FORMED SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER
      #5 BARS, 5/8" DIAMETER WIRE AND SMALLER, 1.5"
      #6 THROUGH #11 BARS, 2.0"
   C. SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER
      WALLS, SLABS, JOISTS #11 BARS AND SMALLER, 1.0"
      BEAMS, GIRDERS, AND COLUMNS; ALL REINFORCEMENT, 1.5"
9. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT NECESSARY SPLICES OR HOOKED BARS AT DISCONTINUOUS ENDS. PROVIDE TENSION LAP SPLICES PER THE SCHEDULE DRAWING S2.1, FOR ALL REINFORCING UNLESS OTHERWISE SHOWN ON PLAN.
10. WELDING OF REINFORCEMENT IS NOT PERMITTED
11. FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENING AS SHOWN ON THE CONTRACT DOCUMENTS TYPICAL DETAILS. NO PENETRATIONS SHALL BE MADE THROUGH FOOTINGS WITHOUT WRITTEN PERMISSION FROM ENGINEER.
12. CONSTRUCTION JOINTS SHOWN ON DRAWINGS ARE MANDATORY. OMISSIONS, ADDITIONS, OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SUBMITTAL OF A WRITTEN REQUEST TOGETHER WITH DRAWINGS OF THE PROPOSED JOINT LOCATIONS FOR APPROVAL OF THE STRUCTURAL ENGINEER. WHERE CONSTRUCTION JOINTS ARE NOT SHOWN, OR WHEN ALTERNATE LOCATIONS ARE PROPOSED, DRAWINGS SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS AND CONCRETE PLACING SEQUENCE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO PREPARATION OF THE REINFORCEMENT SHOP DRAWINGS. CONCRETE SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS EXCEPT WHERE SHOWN OR NOTED. VERTICAL CONSTRUCTION JOINTS AND STOPS IN CONCRETE BEAMS/ GRADE BEAMS SHALL BE MADE AT MIDSPAN OR AT POINTS OF MINIMUM SHEAR, UNLESS NOTED OTHERWISE.
13. SPACING OF CONSTRUCTION JOINTS, UNLESS NOTED OTHERWISE SHALL BE AS FOLLOWS:
   A. FOOTINGS AND WALLS
      MAX LENGTH 40'-0" OR 15'-0" FROM ANY CORNER**
   B. SLABS ON GRADE
      SEE FOUNDATION PLAN

** EXCEED ONLY WHERE INTERMEDIATE CONTRACTION JOINTS ARE PROVIDED. MINIMUM OF 72 HOURS SHALL ELAPSE BETWEEN ADJACENT CONCRETE PLACEMENTS.

14. ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554, GRADE 36 KSI WELDABLE STEEL, UNLESS NOTED OTHERWISE ON DRAWINGS. ANCHOR RODS THAT ARE TO BE IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED.
15. ALL GROUT BENEATH BASE PLATES & BEARING PLATES SHALL BE "5-STAR" 5000-PSI NON-SHRINK GROUT BY U.S. GROUT CORP.
16. SLAB THICKNESSES INDICATED ON THE DRAWINGS ARE MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR STRUCTURE DEFLECTION, SUBGRADE FLUCTUATIONS, AND TO OBTAIN THE SPECIFIED SLAB ELEVATION AT THE FLATNESS AND LEVELNESS INDICATED.
17. INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF COMPLETION AT LEAST 24 HOURS PRIOR TO THE SCHEDULED COMPLETION OF THE INSTALLATION OF REINFORCEMENT.
18. ALL ITEMS TO BE EMBEDDED INTO CONCRETE SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE. PROVIDE ADDITIONAL REINFORCEMENT AND/OR TEMPLATES AS REQUIRED TO ENSURE THE CORRECT POSITIONS OF EMBEDMENTS. "WET SETTING" OF EMBEDMENTS INTO CONCRETE IS STRICTLY PROHIBITED. EMBEDMENTS INCLUDE, BUT NOT BY LIMITATION, REINFORCEMENT, REINFORCING DOWELS, EMBEDDED PLATES, ANCHOR RODS, ANCHOR INSERTS, SLEEVES, LOAD TRANSFER PLATES, DIAMOND DOWELS, AND SHELF BULK HEADS.

GEOTECHNICAL NOTES:

1. SUBSURFACE CONDITIONS ENCOUNTERED IN TEST BORINGS DRILLED AT THE SITE ARE SUMMARIZED IN THE REPORT ENTITLED "GEOTECHNICAL DESIGN REPORT, PROPOSED MAINTENANCE AND OPERATIONS BUILDING, MAINEDOT WIN 021942.02, INTERNATIONAL MARINE TERMINAL, COMMERCIAL STREET, PORTLAND, MAINE," PREPARED BY HALEY & ALDRICH, INC. FOR BECKER STRUCTURAL ENGINEERS, INC. DATED 20 AUGUST 2017. THE GEOTECHNICAL DESIGN REPORT IS AVAILABLE UPON REQUEST. PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL REVIEW AND UNDERSTAND THE INFORMATION REFERENCED THEREIN. THE SUBSURFACE INFORMATION IS MADE AVAILABLE TO THE CONTRACTOR FOR INFORMATION ON FACTUAL DATA ONLY AND SHALL NOT BE INTERPRETED AS A WARRANTY OF SUBSURFACE CONDITIONS WHETHER INTERPRETED FROM WRITTEN TEXT, BORING LOGS OR OTHER DATA.
2. ALL EXCAVATION, FILLING AND CONCRETING OF SLABS/FOOTINGS SHALL BE PERFORMED IN-THE-DRY. THE CONTRACTOR SHALL CONDUCT DEWATERING ACTIVITIES AS NEEDED TO COMPLETE THE WORK. IF DEWATERING IS NEEDED, THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN DOCUMENTING MEANS/METHODS AND PROPOSED EQUIPMENT TO THE GEOTECHNICAL ENGINEER FOR REVIEW PRIOR TO THE START OF EXCAVATION ACTIVITIES.

NEW FOOTING SUBGRADE PREPARATION

3. NEW SPREAD FOOTINGS HAVE BEEN DESIGNED BASED ON A MAXIMUM ALLOWABLE BEARING PRESSURE OF 1,500 POUNDS PER SQUARE FOOT (PSF) TO BEAR ON A MINIMUM OF 2 FT OF COMPACTED GRANULAR FILL AS APPROVED IN THE FIELD BY THE GEOTECHNICAL ENGINEER. BASED ON THE SUBSURFACE CONDITIONS ENCOUNTERED IN THE TEST BORINGS, IT IS ANTICIPATED THAT MAN-PLACED FILL SOILS WILL BE PRESENT AT THE DESIGN FOOTING BEARING LEVEL AT ALL FOOTING LOCATIONS.
4. THE CONTRACTOR SHALL REMOVE DEBRIS, TOPSOIL AND ORGANIC MATERIAL, IF FOUND WITHIN THE IN-SITU FILL SOILS, FROM WITHIN THE ZONE OF INFLUENCE (ZOI) OF THE NEW FOOTINGS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER. THE ZOI IS DEFINED AS THE AREA BELOW NEW FOOTINGS AND BELOW IMAGINARY LINES THAT EXTEND 2 FT LATERALLY BEYOND THE FOOTING OUTER BOTTOM EDGES AND DOWN ON A ONE HORIZONTAL TO ONE VERTICAL (1H:1V) SLOPE TO THE TOP OF ACCEPTABLE BEARING SOILS AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD. IF OVER-EXCAVATION IS REQUIRED, THE CONTRACTOR SHALL USE COMPACTED GRANULAR FILL TO BACKFILL WITHIN THE FOOTING ZOI UP TO THE DESIGN FOOTING BEARING LEVELS SHOWN ON THE DRAWINGS.
5. THE CONTRACTOR SHALL PROOFROLL NEW FOOTING SUBGRADE SURFACES UNTIL FIRM WITH A SMOOTH DRUM VIBRATORY ROLLER OR PLATE COMPACTOR PRIOR TO FILL OR FOOTING CONCRETE PLACEMENT TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER AFTER THE REMOVAL OF DEBRIS, TOPSOIL AND ORGANIC MATTER (IF PRESENT).
6. THE GEOTECHNICAL ENGINEER WILL BE ON SITE TO INSPECT, DOCUMENT AND APPROVE THE CONDITION OF BEARING SURFACES FOR THE NEW FOOTINGS PRIOR TO PLACEMENT OF CGF/FOOTING CONCRETE, AND TO CONFIRM THAT CGF (IF NEEDED) HAS BEEN PLACED AND COMPACTED WITHIN FOOTING ZOI IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OUTLINED BELOW.

NEW FLOOR SLAB SUBGRADE PREPARATION

7. IN AREAS WHERE THE GROUND FLOOR SLAB WILL BE CONSTRUCTED AS SHOWN ON THE DRAWINGS, THE SLABS SHALL BEAR ON A MINIMUM 12-IN. OR 24-IN. THICK LAYER OF COMPACTED GRANULAR FILL. THE COMPACTED GRANULAR FILL SHALL BE PLACED ON UNEXCAVATED, IN-SITU, MAN-PLACED FILL, OR ADDITIONAL LIFTS OF COMPACTED GRANULAR FILL. ALL SURFICIAL TOPSOIL, DEBRIS, AND ORGANIC SOILS (IF ENCOUNTERED) SHALL BE OVER-EXCAVATED AND REPLACED PRIOR TO COMPACTED GRANULAR FILL PLACEMENT TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
8. THE CONTRACTOR SHALL PROOFROLL NEW SLAB SUBGRADE SURFACES UNTIL FIRM WITH A SMOOTH DRUM VIBRATORY ROLLER OR PLATE COMPACTOR PRIOR TO FILL OR CONCRETE PLACEMENT TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER AFTER THE REMOVAL OF DEBRIS, TOPSOIL AND ORGANIC MATTER (IF PRESENT).
9. THE GEOTECHNICAL ENGINEER WILL BE ON SITE TO INSPECT, DOCUMENT AND APPROVE THE CONDITION OF BEARING SURFACES FOR THE NEW SLABS PRIOR TO PLACEMENT OF CGF/SLAB CONCRETE, AND TO CONFIRM THAT CGF HAS BEEN PLACED AND COMPACTED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OUTLINED BELOW.

MATERIALS INFORMATION

10. COMPACTED GRANULAR FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12 IN. IN LOOSE MEASURE AND COMPACTED USING SELF-PROPELLED VIBRATORY EQUIPMENT. IN CONFINED AREAS, THE MAXIMUM LOOSE LAYER SHALL BE REDUCED TO 9 IN., AND COMPACTION PERFORMED USING HAND-GUIDED EQUIPMENT. LIFTS OF COMPACTED GRANULAR FILL SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENTAGE OF THE SOIL'S MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D1557 (MODIFIED PROCTOR TESTING).
11. COMPACTED GRANULAR FILL SHALL CONFORM TO THE REQUIREMENTS OF SECTION 703.06 AGGREGATE FOR BASE AND SUBBASE TYPE D. PAYMENT WILL BE MADE UNDER ITEM 304.10, AGGREGATE SUBBASE COURSE.
12. THE CONTRACTOR SHALL SUBMIT SAMPLES OF COMPACTED GRANULAR FILL ALONG WITH THE RESULTS OF GRAIN SIZE AND MODIFIED PROCTOR TESTS TO THE GEOTECHNICAL ENGINEER FOR REVIEW PRIOR TO THE START OF EXCAVATION ACTIVITIES.

CMU LINTEL SCHEDULE

CLEAR SPAN	WIDTH	DEPTH	REINF
< 6'-0"	8"	8"	2#5 CONT
6'-0" - 8'-0"	8"	16"	2#5 CONT

NOTE: SEE ARCH DWGS FOR LINTEL LOCATIONS.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN FABRICATIONS, AND ERECTION OF STRUCTURAL STEEL" LATEST EDITION, AND THE "CODE OF STANDARD PRACTICE", LATEST EDITION.
2. STRUCTURAL STEEL: STEEL PLATES, SHAPES, AND BARS, CONFORM TO ASTM A36 UNLESS NOTED OTHER WISE (U.N.O.). STRUCTURAL STEEL SHAPES DESIGNATED ON THE DRAWINGS FOR WIDE-FLANGE SECTIONS: ASTM A992 (ASTM A572 GRADE 50 WITH SPECIAL REQUIREMENTS PER AISC TECHNICAL BULLETIN #3 DATED MARCH, 1997)
3. STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B46 KSI.
4. CONNECTION DESIGN FOR THIS PROJECT IS THE RESPONSIBILITY OF THE FABRICATOR. CONNECTION CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR THIS PROJECT. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
5. FIELD CONNECTIONS SHALL BE BOLTED USING ASTM A325N HIGH STRENGTH BOLTS (U.N.O.) EXCEPT WHERE SLIP CRITICAL CONNECTIONS ARE REQUIRED AND NOTED BY A325 (SC) ON THE DRAWINGS. PROVIDE SLIP CRITICAL (SC) CONNECTIONS AT ALL MOMENT CONNECTIONS, BRACED FRAMES, RELIEVING ANGLES AND AS OTHERWISE NOTED. USE A490 BOLTS WHERE INDICATED.
6. WHERE WELDING IS INDICATED, ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION. ELECTRODES SHALL CONFORM TO AWS A5.1 E70XX SERIES WITH PROPER ROD TO PRODUCE OPTIMUM WELD (LOW HYDROGEN)
7. SEE CONCRETE NOTES AND DRAWINGS FOR ANCHOR BOLT INFORMATION, TYP.
8. PROVIDE 3/8" MINIMUM STIFFENER PLATES EACH SIDE OF BEAM WEB AT BEAMS FRAMING OVER COLUMNS AND AT BEAMS SUPPORTING COLUMNS ABOVE.
9. PROVIDE 1/4" THICK LEVELING PLATE UNDER ALL COLUMN BASE PLATES UNLESS OTHERWISE NOTED. LEVELING PLATES SHALL BE SET AND GROUTED PRIOR TO ERECTING COLUMNS.
10. PROVIDE ALL MISCELLANEOUS ANGLES, PLATES, ANCHOR BLOTS ETC., SHOWN ON ARCHITECTURAL DRAWINGS FOR SUPPORT OF BLOCKING, PARAPETS, FINISHES, ETC. COORDINATE WITH MISCELLANEOUS METAL FABRICATOR TO ENSURE COMPLETE COVERAGE OF ALL ITEMS.

OPEN WEB STEEL JOISTS NOTES

1. DESIGN, DETAIL, FABRICATE AND ERECT STEEL JOISTS IN ACCORDANCE WITH THE LATEST EDITION OF STANDARD SPECIFICATIONS OF THE STEEL JOIST INSTITUTE (SJI)
2. HANGERS FOR DUCTS, PIPES, UNITS, ETC., MUST BE ATTACHED TO JOISTS AT PANEL POINTS ONLY. EXCEPT WHERE DESIGNATED ON "SP" JOISTS, IN NO CASE SHALL ANY SINGLE POINT LOAD EXCEED 300 LBS.
3. PROVIDE BRIDGING AND BRIDGING ANCHORAGE IN ACCORDANCE WITH SJI SPECIFICATIONS. PROVIDE ADDITIONAL BRIDGING FOR UPLIFT FOR ROOF JOINTS WHERE REQUIRED BY SJI SPECIFICATIONS.

METAL DECK

1. THE METAL ROOF AND FLOOR DECK SHALL BE FORMED OF STEEL SHEETS CONFORMING TO THE FOLLOWING STANDARDS:
   A. ROOF DECKING: ASTM A653, STRUCTURAL QUALITY, GRADE 33 OR HIGHER
2. ROOF DECK SHALL BE AS NOTED ON THE DRAWINGS (OR EQUIVALENT).
3. FOR DECK ATTACHMENTS, PENETRATIONS AND ACCESSORIES REFER TO SPECIFICATIONS.

MASONRY NOTES

1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1-LATEST.
2. ALL CONCRETE MASONRY UNITS WALL BE ASTM C90 GRADE N, TYPE I STANDARD WEIGHT BLOCKS INCLUDING STRETCHERS AND CORNER BLOCKS. MINIMUM PRISM STRENGTH OF BLOCK SHALL BE F'M = 1500 PSI IN 28 DAYS.
3. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C270, TYPE M OR S
4. GROUT SHALL CONFORM TO ASTM-C476
5. REINFORCING FOR BOND BEAMS, LINTEL BLOCKS AND VERTICAL WALL REINFORCING SHALL BE BILLET STEEL CONFORMING TO ASTM A615, GRADE 60
6. HORIZONTAL JOINT REINFORCING SHALL BE DUR-O-WAL TRUSS DESIGN, STANDARD CLASS MILL GALVANIZED WITH 3/16" DIAMETER SIDE RODS AND 9 GAUGE CROSS TIES, U.N.O. REINFORCING SHALL BE PLACED IN MASONRY WALLS AT EVERY SECOND BLOCK COURSE.
7. CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS OTHERWISE NOTED. PROVIDE FULL MORTAR COVERAGE ON ALL WEBS AND FACE SHELLS. PROVIDE CORNER BLOCKS AND END BLOCKS TO FINISH ALL 90 DEGREE CORNERS AND WALL OPENINGS.
8. PROVIDE LINTELS AT WALL PENETRATIONS AS SHOWN IN THE LINTEL SCHEDULE.
9. STANDARD LAP LENGTH OF GRADE 60 MASONRY REINFORCING BARS SHALL BE 48 BAR DIAMETERS FOR BARS #5 AND SMALLER, AND 80 BAR DIAMETERS FOR BARS #6 AND #7. G.C. OPTION TO PROVIDE MECHANICAL SPLICES RATED FOR 125% THE BAR YIELD STRENGTH. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCEMENT.
10. CELLS TO BE GROUTED SHALL BE 2-CELL BLOCK. ALIGN CELLS TO MAINTAIN A CLEAR UNOBSTRUCTED, CONTINUOUS VERTICAL CHASE. CELLS MUST BE KEPT CLEAN OF PROTRUSIONS OR FINS OF MORTAR. FILL CELLS OF MASONRY UNITS AND WALL CAVITIES WHERE INDICATED WITH 2500 PSI GROUT. MAXIMUM GROUT LIFT WITHOUT CLEAN-OUTS SHALL BE 4'-0". HIGH LIFT GROUTING SHALL CONFORM TO CODE REQUIREMENTS WITH A MINIMUM CEMENT CONTENT OF 8 SACKS PER CUBIC YARD. SUPPORT ALL VERTICAL BARS IN CENTER OF GROUTED CELLS WITH VERTICAL BAR POSITIONER.
11. FIELD PENETRATIONS THROUGH BLOCK WALLS SHALL NOT BE MADE THROUGH BOND BEAMS, LINTELS OR GROUTED CELLS.

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WIN 021942.02 STRUCTURAL PLANS

STATE OF MAINE · DANIEL S. BURNETT · No. 10910 · REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
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02/16/2018
DATE

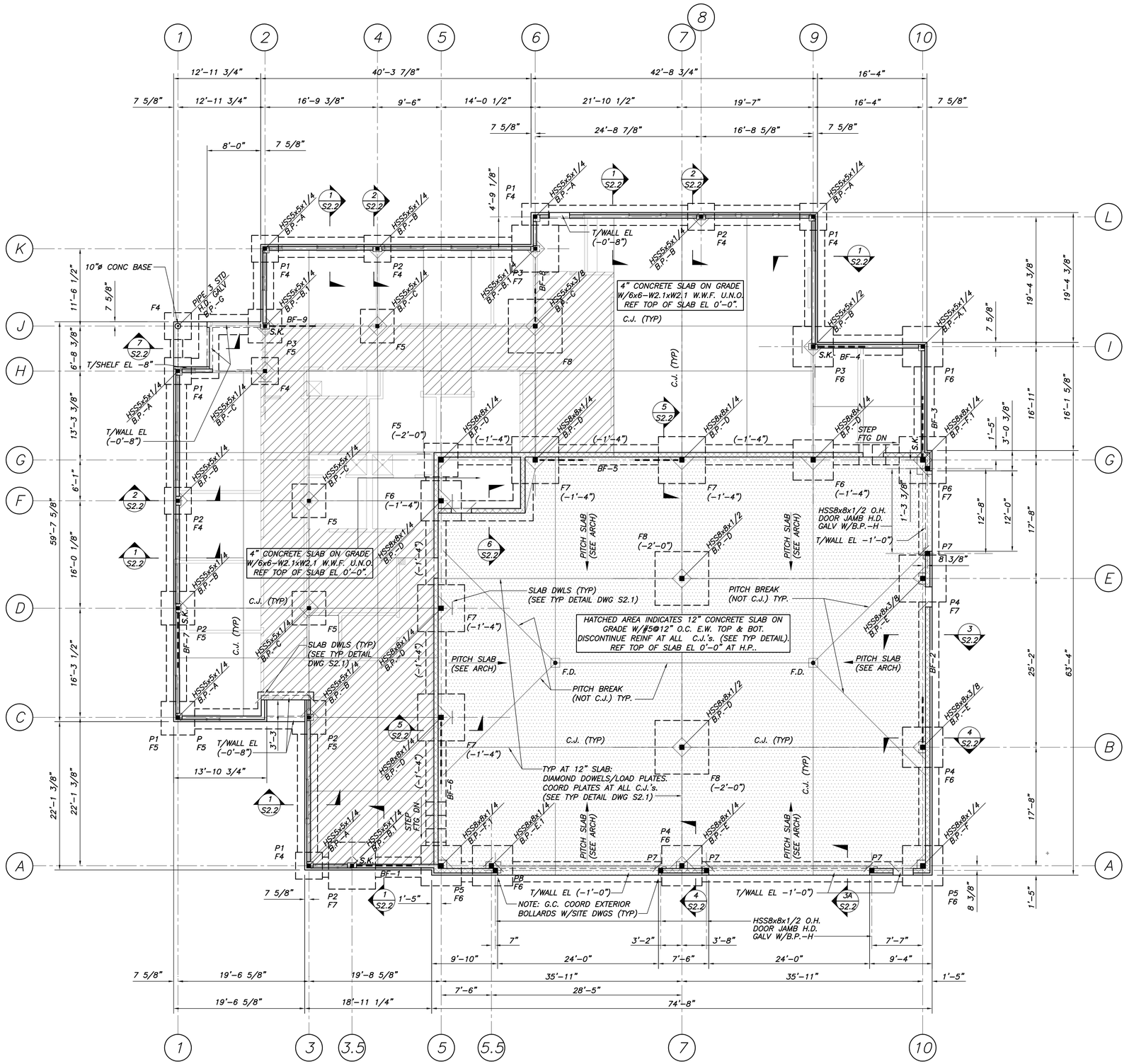
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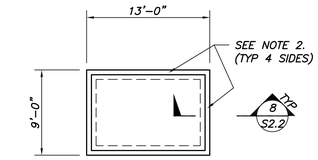
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REVISIONS 2: -
REVISIONS 3: -
REVISIONS 4: -
FIELD CHANGES: -

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PORTLAND CUMBERLAND COUNTY

GENERAL NOTES

SHEET NUMBER
S1.0

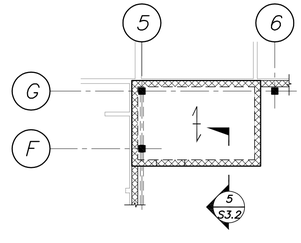




GUARD HOUSE SLAB PLAN

1/8"=1'-0"

NOTES:
1. COORD SITE LOCATION W/CIVIL/SITE PLANS.
2. 1" RAISED T/SLAB TO MATCH GUARD HOUSE FOOTPRINT (8'x12').



PLATFORM SLAB PLAN

1/8"=1'-0"

NOTES:
1. ⟷ INDICATES SPAN DIRECTION OF 2 1/2" CONCRETE ON 1.5VL20 COMPOSITE DECK (4" TOTAL) W/6x6-W2.1xW2.1 W.W.F.
2. TOP OF SLAB EL 10'-4".

FOOTING SCHEDULE		
MARK	SIZE	REINF
F4	4'-0"x4'-0"x1'-0"	4#5 E.W.B.
F5	5'-0"x5'-0"x1'-0"	5#5 E.W.B.
F6	6'-0"x6'-0"x1'-6"	6#6 E.W.B.
F7	7'-0"x7'-0"x1'-6"	7#6 E.W.B.
F8	8'-0"x8'-0"x1'-9"	8#6 E.W.B.

FOUNDATION PLAN

1/8"=1'-0"

NOTES:
1. TOP OF WALL EL 0'-0" U.N.O.
2. TOP OF SHELF EL -0'-1 1/2" U.N.O.
3. Fx INDICATES CONCRETE FOOTING. SEE SCHEDULE FOR SIZE & REINF.
4. TOP OF INTERIOR FOOTING EL (-1'-0") U.N.O.
5. TOP OF EXTERIOR FOOTING EL (-4'-0") U.N.O.
6. Px INDICATES REINF CONCRETE PIER. SEE PIER DETAILS DWG S2.2.
7. TOP OF PIER EL {-0'-8"} AT OFFICE, AND {-1'-0"} AT GARAGE U.N.O.
8. BOND OUT TOP OF FDN WALL AS REQD AT DIAG BRACES.
9. BP-x INDICATES COLUMN BASE PLATE. SEE DWG S3.3 FOR BASE PLATE DETAILS.
10. C.J. INDICATES SLAB CONTRACTION/CONSTRUCTION JOINT. SEE TYP DETAILS DWG S2.1 FOR ADDL INFO.
11. BF-1, BF-2, ETC INDICATES BRACED FRAME. SEE BRACED FRAME ELEVATIONS DWG S1.3.
12. S.K. INDICATES SHEAR KEY IN CONC PIER OR FOOTING. SEE TYP DETAIL DWG S3.3 FOR ADDL INFO.
13. ▨ INDICATES APPROX AREA OF SLAB TO BE POLISHED CONCRETE. G.C. COORD EXTENTS W/ARCH DWGS AND REFERENCE PROJECT SPECIFICATIONS.
14. F.D. INDICATES FLOOR DRAIN. G.C. COORD LOCATIONS & SLOPE REQMNTS W/ARCH & MEP DWGS.
15. REFER TO DWG S1.0 FOR FOUNDATION C.J. NOTES. AT STONE VENEER, COORDINATE FOUNDATION C.J. LOCATIONS WITH ARCHITECTURAL DWG A9.1.

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STRUCTURAL PLANS

STATE OF MAINE — DANIEL S. BURGESS — No. 10910 — REGISTERED PROFESSIONAL ENGINEER

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PROJ. MANAGER JOEL KITREDGE
DESIGN BY/MTD
CHECKED BY/MTD
DESIGN 2 BY/TD
DESIGN 2 BY/TD
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

PORTLAND INTERNATIONAL MARINE TERMINAL
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CUMBERLAND COUNTY
PORTLAND

FOUNDATION PLAN

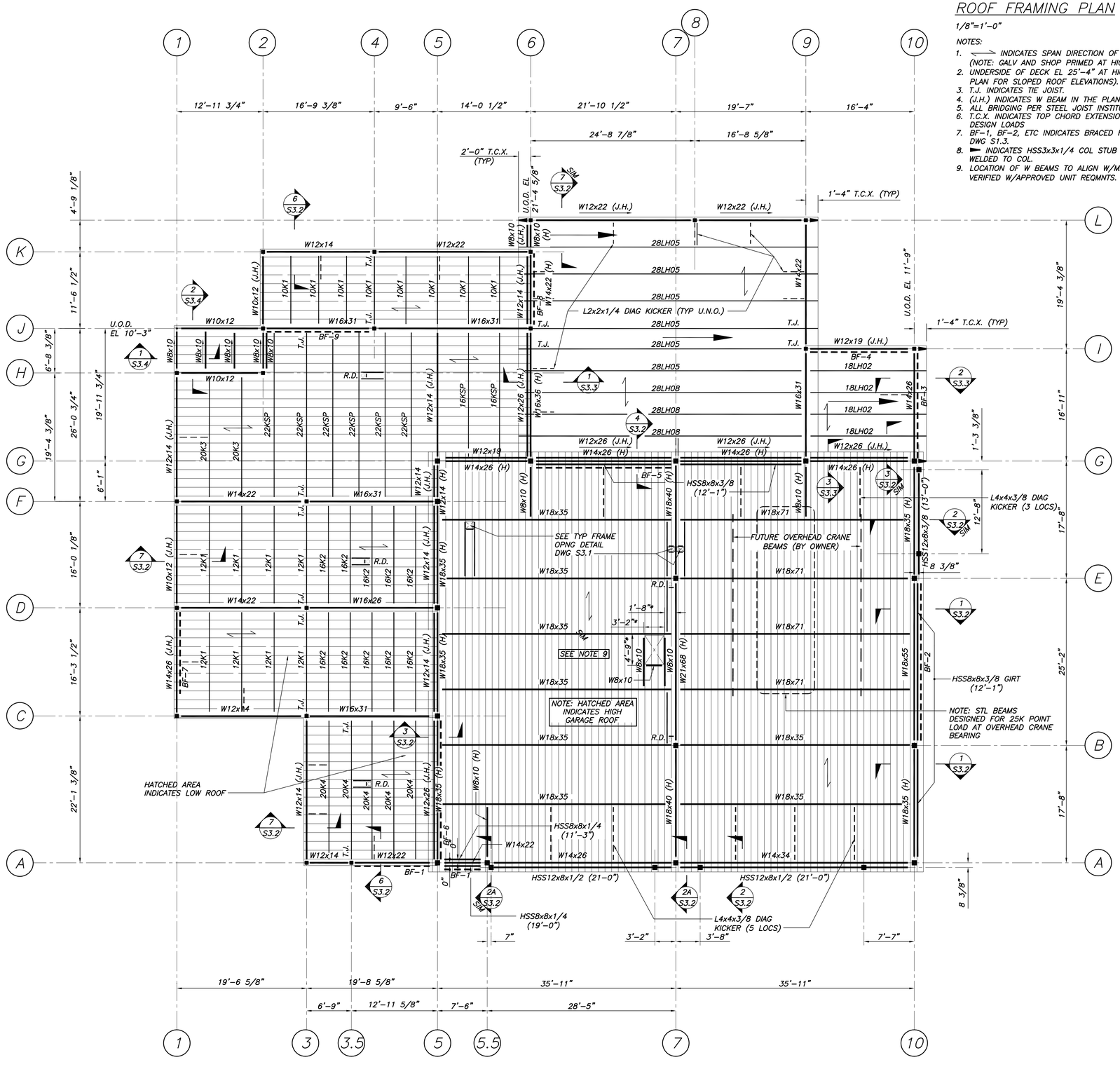
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ROOF FRAMING PLAN

1/8"=1'-0"

NOTES:

1. ⟷ INDICATES SPAN DIRECTION OF 1.5B18 GALV ROOF DECK (3 SPAN MIN). (NOTE: GALV AND SHOP PRIMED AT HIGH ROOF).
2. UNDERSIDE OF DECK EL 25'-4" AT HIGH ROOF & 11'-5" AT LOW ROOF. (SEE PLAN FOR SLOPED ROOF ELEVATIONS).
3. T.J. INDICATES TIE JOIST.
4. (J.H.) INDICATES W BEAM IN THE PLANE OF THE JOIST.
5. ALL BRIDGING PER STEEL JOIST INSTITUTE SPECIFICATIONS.
6. T.C.X. INDICATES TOP CHORD EXTENSION. JOIST DESIGNER SEE DWG S3.3 FOR DESIGN LOADS
7. BF-1, BF-2, ETC INDICATES BRACED FRAME. SEE BRACED FRAME ELEVATIONS DWG S1.3.
8. ⟜ INDICATES HSS3x3x1/4 COL STUB W/1/4" CLOSURE PLATE, FULLY SHOP WELDED TO COL.
9. LOCATION OF W BEAMS TO ALIGN W/MECH UNIT CURBS. * INDICATES DIMS TO BE VERIFIED W/APPROVED UNIT REQMNTS.



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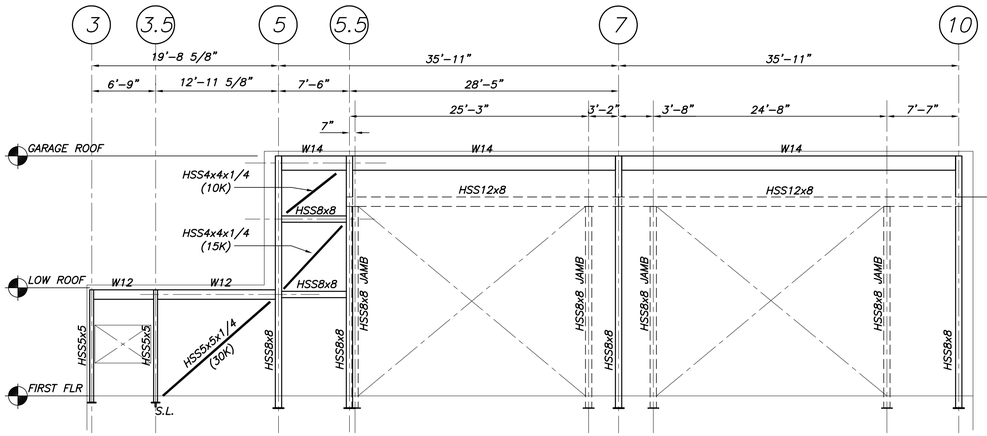
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ROOF FRAMING PLAN

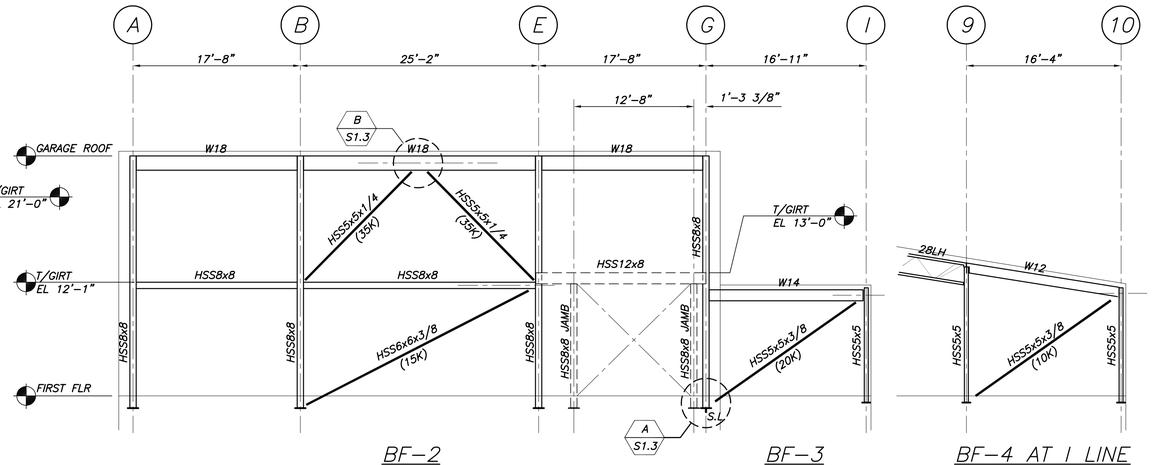
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BF–1

FRAMING ELEVATION AT A LINE

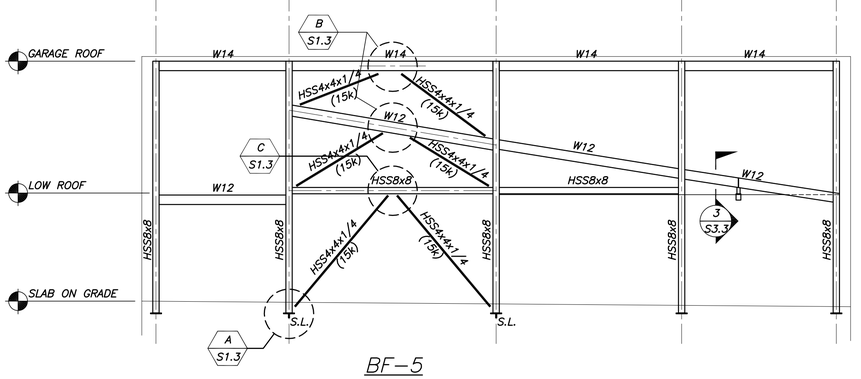


BF–2

BF–3

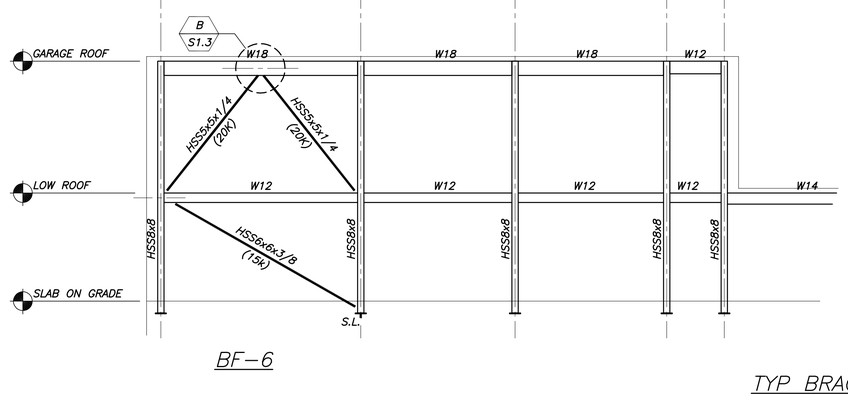
FRAMING ELEVATION AT 10 LINE

BF–4 AT I LINE



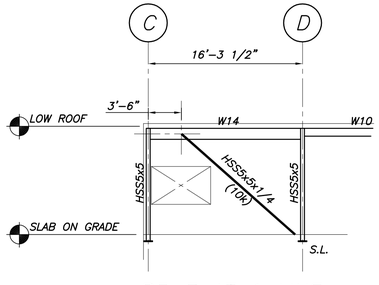
BF–5

FRAMING ELEVATION AT G LINE

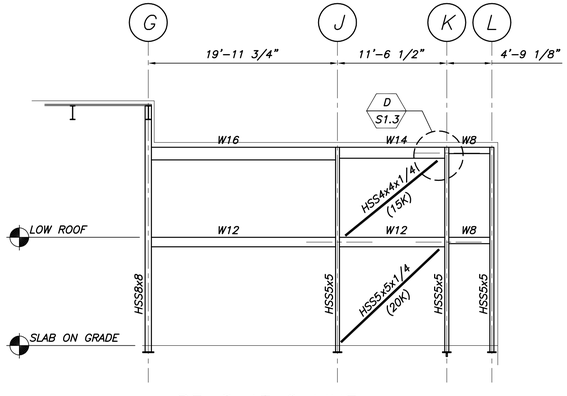


BF–6

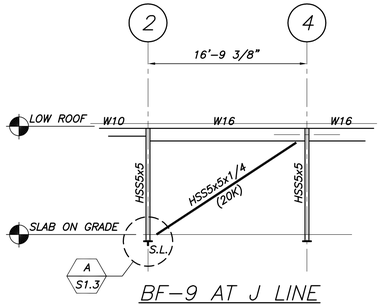
FRAMING ELEVATION AT 5 LINE



BF–7 AT 1 LINE



BF–8 AT 6 LINE



BF–9 AT J LINE

TYP BRACED FRAME ELEVATIONS

BRACED FRAME NOTES:

1. LOADS INDICATED ON BRACED FRAME AND MOMENT FRAME ELEVATIONS ARE FACTORED LOADS AND MAY ACT IN TENSION OR COMPRESSION U.N.O.
2. LOADS INDICATED HAVE BEEN GENERATED USING R=3. CONNECTIONS DO NOT REQUIRE ADDITIONAL OVERSTRENGTH FACTORS.
3. CONNECTION DESIGN CALCULATIONS SHALL BE SUBMITTED FOR REVIEW PER SPECIFICATIONS AND SHALL BE STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF MAINE AND SHALL INCLUDE THE FOLLOWING:
   A. GEOMETRY NECESSARY FOR UNIFORM FORCE METHOD CALCULATIONS.
   B. ALL APPLICABLE FAILURE MODE CHECKS.
4. BRACED FRAME CONNECTIONS SHALL BE DESIGNED TO NOT INDUCE MOMENT INTO BEAMS AND COLUMNS.
5. PROVIDE ANGLE BRACE AT ALL DIAGONAL CONNECTIONS LOCATED WITHIN SPAN OF BEAM.
6. S.L. INDICATES SHEAR LUG. FOR ADDL INFO, SEE SECTIONS & DETAILS, DWG S3.3.

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STRUCTURAL PLANS

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APP	2/16/18
DSB	2/16/18

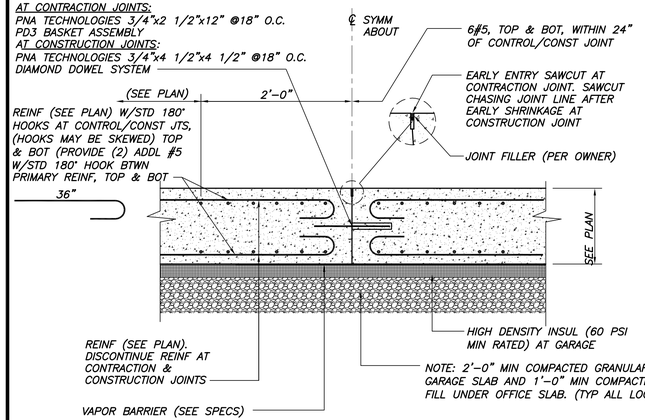
PROJ. MANAGER JOEL KITTREDGE
DESIGNED/PLAYED -
CHECKED/REVIEWED ATS
DESIGN DETAILED ATS
DESIGN DETAILED2 -
REVISIONS 1 -
REVISIONS 2 -
REVISIONS 3 -
REVISIONS 4 -
FIELD CHANGES -

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
CUMBERLAND COUNTY
PORTLAND

BRACED FRAME ELEVATIONS

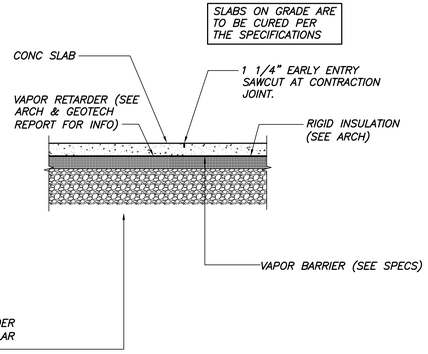
SHEET NUMBER

S1.3



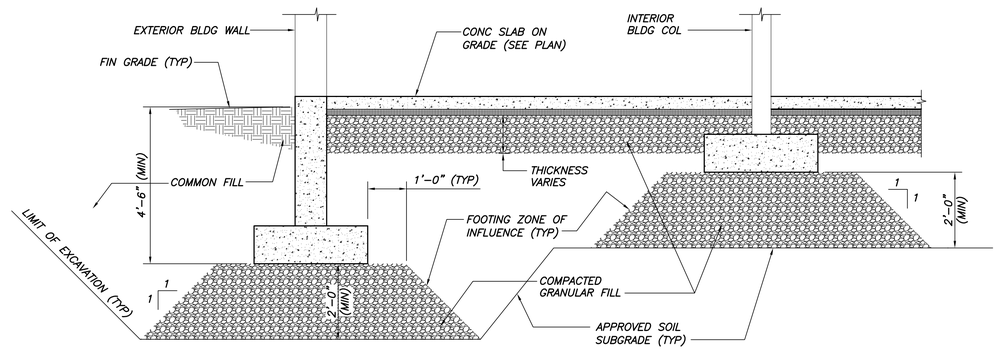
TYP SLAB ON GRADE CONTRACTION & CONSTRUCTION JOINT DETAIL AT GARAGE

N.T.S.



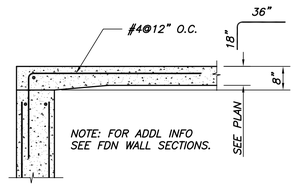
TYP SLAB ON GRADE DETAIL

N.T.S.



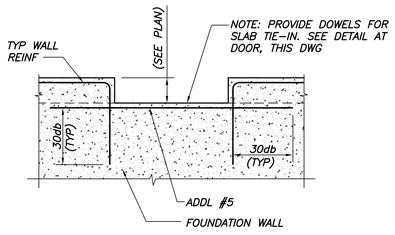
TYPICAL FOUNDATION SCHEMATIC

N.T.S.



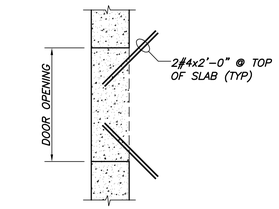
TYP SLAB DETAIL AT DOOR

N.T.S.



TYP WALL DEPRESSION DETAIL AT DOOR

N.T.S.



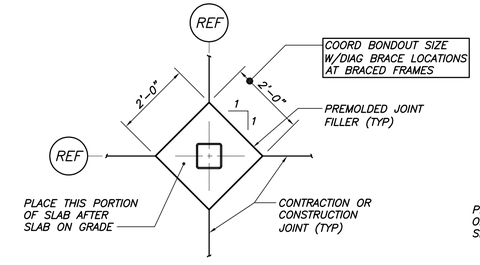
NOTE: ALSO PROVIDE 2#4x24" (TOP) IN SLAB @ INSIDE RE-ENTRANT CORNERS (SEE PLAN)

TYP SLAB CORNER DETAIL @ DOOR

N.T.S.

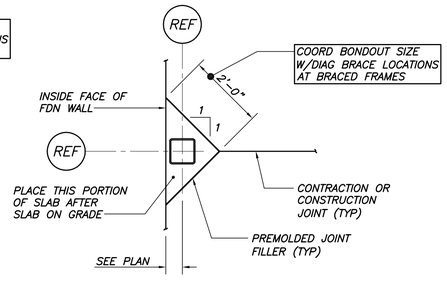
REBAR LAP SPLICE TABLE

BAR SIZE	LAP LENGTH	
	3,000, 3,500 PSI	5,000 PSI
#3	30"	24"
#4	36"	32"
#5	48"	42"
#6	56"	48"
#7	81"	72"
#8	93"	80"



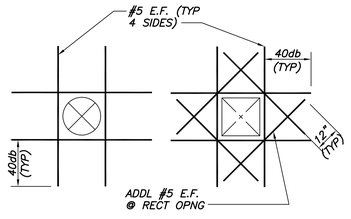
TYP INT COLUMN ISOLATION JOINT DETAIL

N.T.S.



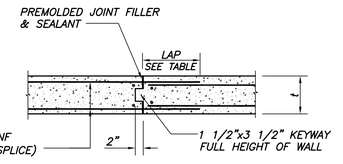
TYP EXT COLUMN ISOLATION JOINT DETAIL

N.T.S.



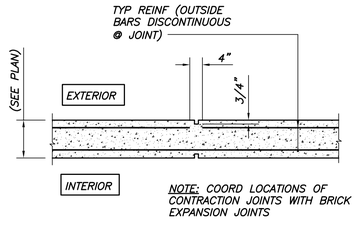
TYP OPENING IN WALL OR SLAB

N.T.S.



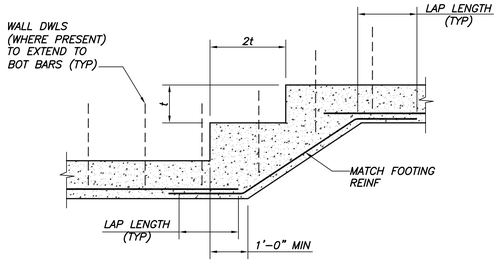
TYP CONSTRUCTION JOINT IN WALL

N.T.S. t = WALL THICKNESS



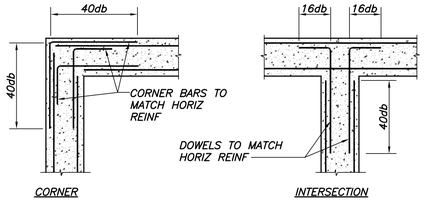
TYP CONTRACTION JOINT IN WALL

N.T.S.



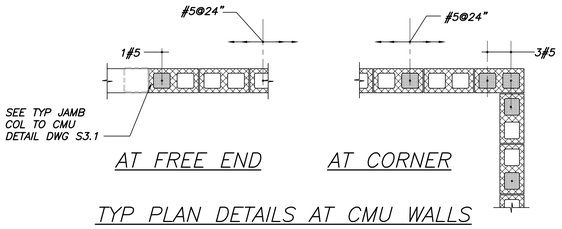
TYP STEP FOOTING DETAIL

N.T.S. t = FOOTING THICKNESS



TYP WALL REINF DETAILS

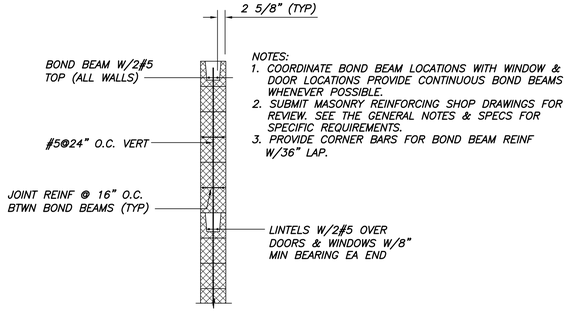
N.T.S.



TYP PLAN DETAILS AT CMU WALLS

N.T.S.

NOTES:
1. PROVIDE HORIZ REINF @16" O.C., U.N.O.
2. ALL REINFORCED CELLS ARE TO BE GROUTED.
3. LAP BARS AT SPLICES MIN. 48 BAR DIAMETERS.



NOTES:
1. COORDINATE BOND BEAM LOCATIONS WITH WINDOW & DOOR LOCATIONS PROVIDE CONTINUOUS BOND BEAMS WHENEVER POSSIBLE.
2. SUBMIT MASONRY REINFORCING SHOP DRAWINGS FOR REVIEW. SEE THE GENERAL NOTES & SPECS FOR SPECIFIC REQUIREMENTS.
3. PROVIDE CORNER BARS FOR BOND BEAM REINF W/36" LAP.

CMU WALL SECTION

N.T.S.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN 021942.02

STRUCTURAL PLANS

STATE OF MAINE · DANIEL S. BECKER · No. 10910 · REGISTERED PROFESSIONAL ENGINEER

	BY	DATE
PROJ. MANAGER JOEL KITTREDGE		
DESIGNED/DETAILED	APP	2/16/18
CHECKED/REVIEWED	DSB	2/16/18
DESIGNED/DETAILED2		
DESIGNED/DETAILED3		
REVISIONS 1	ATS	
REVISIONS 2	ATS	
REVISIONS 2		
MINOR CHANGES		

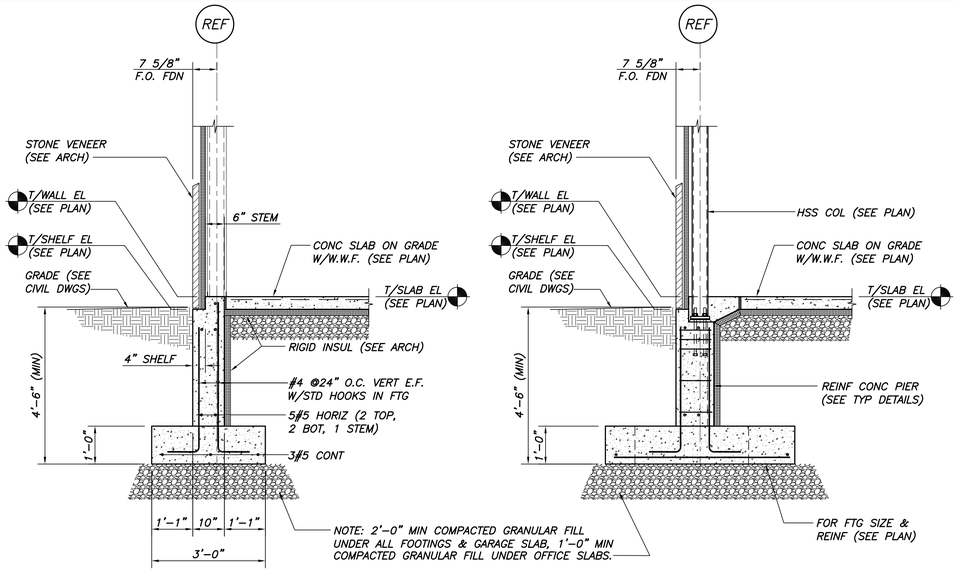
SIGNATURE
10910
P.E. NUMBER
02/16/2018
DATE

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

TYPICAL CONCRETE SECTIONS & DETAILS

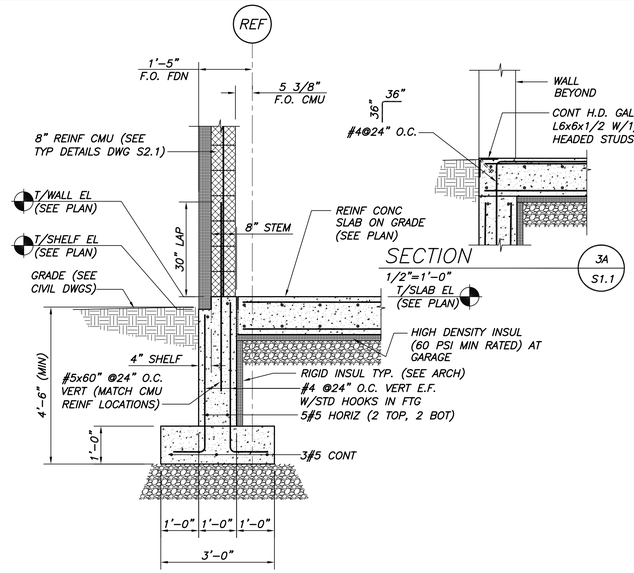
SHEET NUMBER

S2.1



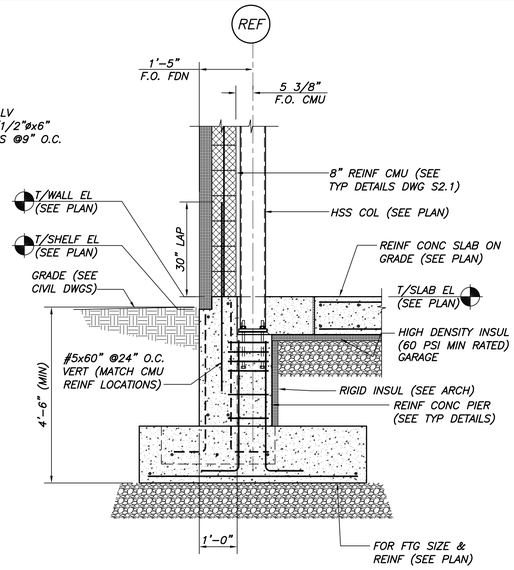
SECTION 1/2"=1'-0" 1 S1.1

SECTION 1/2"=1'-0" 2 S1.1

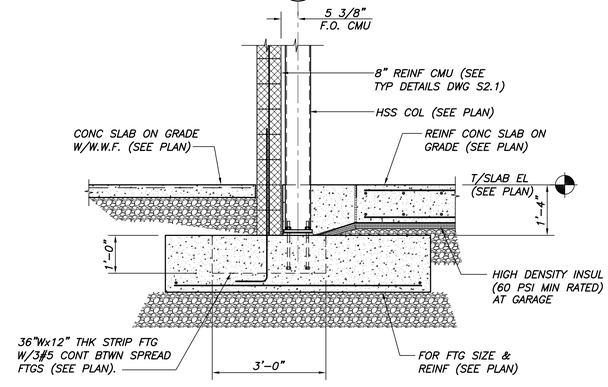


SECTION 1/2"=1'-0" 3 S1.1

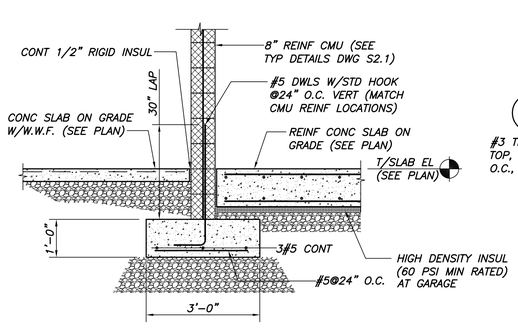
SECTION 1/2"=1'-0" 3A S1.1



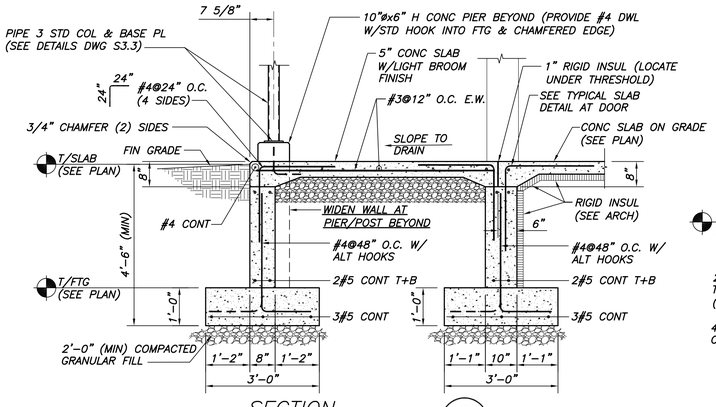
SECTION 1/2"=1'-0" 4 S1.1



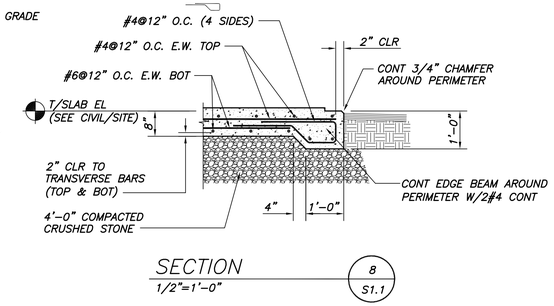
SECTION 1/2"=1'-0" 5 S1.1



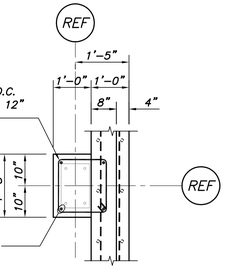
SECTION 1/2"=1'-0" 6 S1.1



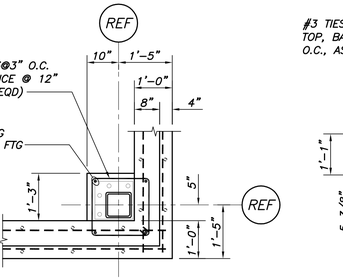
SECTION 1/2"=1'-0" 7 S1.1



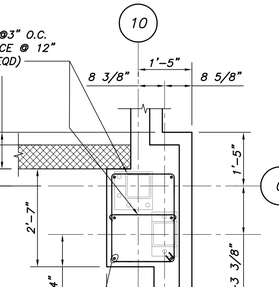
SECTION 1/2"=1'-0" 8 S1.1



P1



P2



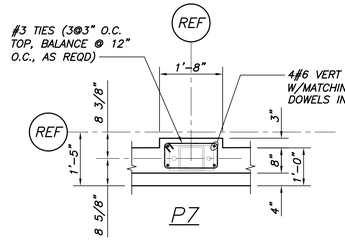
P3

P4

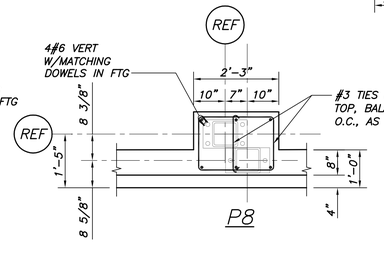
P5

PIER DETAILS
1/2"=1'-0"

P6



P7



P8

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN 021942.02

STRUCTURAL PLANS

STATE OF MAINE DANIEL S. BECKER No. 10910 REGISTERED PROFESSIONAL ENGINEER

DATE	BY	
2/16/18	APP	DESIGN DETAILED
2/16/18	DSB	CHECKED REVIEWED
	ATS	DESIGN DETAILED
	ATS	DESIGN DETAILED
		REVISIONS 1
		REVISIONS 2
		REVISIONS 3
		REVISIONS 4
		MISC CHANGES

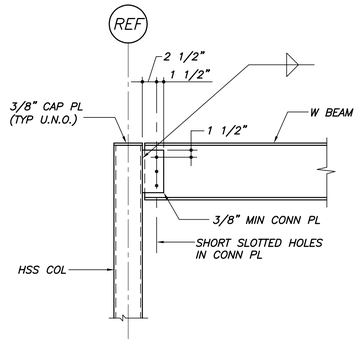
PROJ. MANAGER JOEL K ITTREDGE

SIGNATURE
10910 P.E. NUMBER
02/16/2018 DATE

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

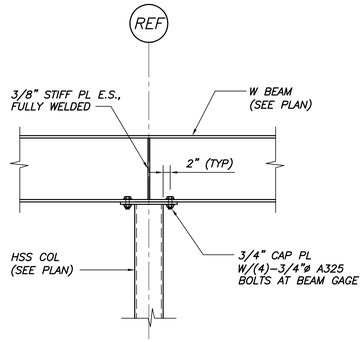
FOUNDATION SECTIONS & DETAILS

SHEET NUMBER
S2.2



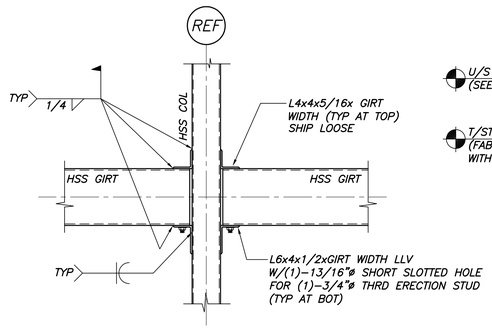
TYP BEAM TO HSS COL CONN U.N.O.

N.T.S.



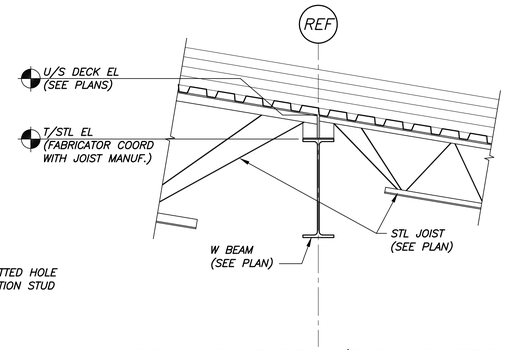
TYP BEAM BEARING ON STEEL COLUMN

N.T.S. (NOTE: INVERT DETAIL AT TRANSFER BEAMS)



TYP HSS GIRT TO HSS COL DETAIL U.N.O.

N.T.S.



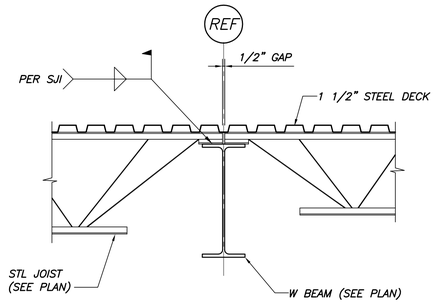
UNDERSIDE OF DECK/TOP OF STEEL ELEVATIONS AT SLOPING ROOFS

1. TOP OF STEEL ELEVATION OF SUPPORTING BEAMS IS UNKNOWN AND DEPENDENT ON SEAT DETAIL BY SELECTED JOIST MANUFACTURER. STRUCTURAL STEEL FABRICATOR TO COORDINATE ALL STEEL FABRICATION AT SLOPED STEEL WITH JOIST MANUFACTURER AND OFFSET STEEL ACCORDINGLY.

SIMPLE SHEAR BEAM CONN. SCHEDULE			
BEAM SIZE	DESIGN REACTION	MINIMUM NO BOLTS 1 SIDED CONNECTION	MINIMUM NO BOLTS 2 SIDED CONNECTION
W8	10k	2	2
W10	10k	2	2
W12	15k	3	2
W14	20k	3	2
W16	25	4	3
W18	30k	5	3
W18x71	45k	5	3
W21	45k	5	4

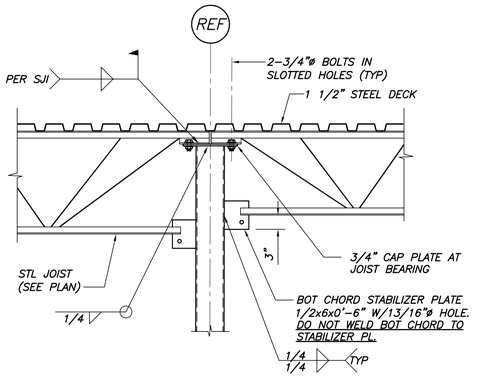
SIMPLE SHEAR CONNECTIONS NOTES:

1. SIMPLE SHEAR CONNECTIONS SHALL BE SELECTED FROM THE AISC "MANUAL OF STEEL CONSTRUCTION, THIRTEENTH EDITION" USING THE ABOVE REFERENCED REACTIONS AND CRITERIA. REACTIONS INDICATED ARE UNFACTORED (SERVICE LEVEL LOADS). MORE BOLTS THAN REFERENCED IN THE "MINIMUM" SECTIONS ABOVE MAY BE REQUIRED FOR LOAD REQUIREMENTS.
2. CONNECTIONS ARE SUBJECT TO REVIEW ON THE STEEL SHOP DRAWINGS.
3. ALL BOLTS SHALL BE A325 OR A490 FOR SIMPLE SHEAR CONNECTIONS, MIN 3/4"ø. MINIMUM WELD SIZE SHALL BE 5/16". MINIMUM MATERIAL SIZE FOR PLATES OR ANGLES SHALL BE 3/8"
4. ONE SIDED CONNECTIONS INCLUDE SINGLE PLATES AND SINGLE ANGLE CONNECTIONS.
5. TWO SIDED CONNECTIONS INCLUDE DOUBLE ANGLE AND END PLATE CONNECTIONS.



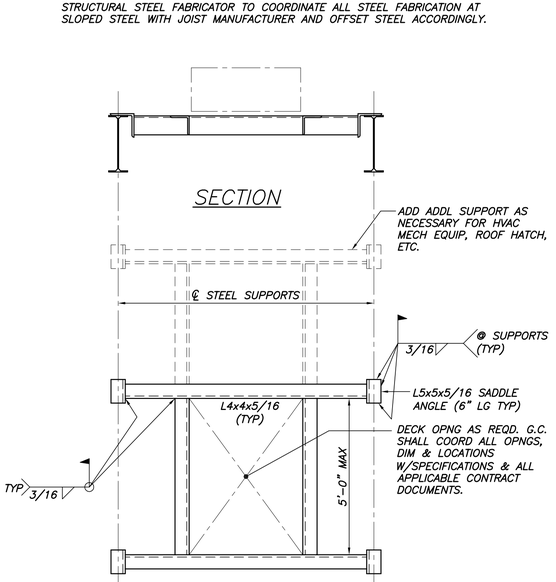
TYP STL JOIST BEARING DETAIL AT W BEAM

N.T.S.



TYP TIE JOIST DETAIL AT ROOF

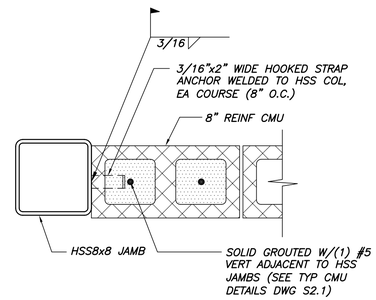
N.T.S.



PLAN OF TYP OPENING IN FRAME AT ROOF & FLOOR DECK

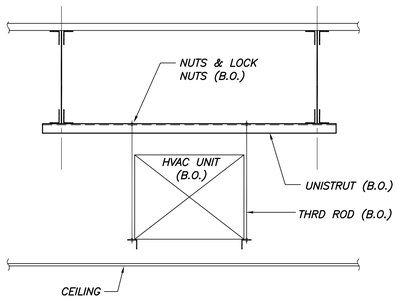
N.T.S.

NOTE:
1. DETAIL TYPICAL AT ROOF LEVELS TO INCLUDE DRAINS, EXHAUST FANS AND OTHER MECH AND HVAC EQUIP IF OPENING IS LARGER THAN 12"ø OR CUTS MORE THAN (2) ROOF DECK RIBS. FOR OPENINGS LESS THAN 12"ø OR GREATER THAN 3"ø, REINF OPNG W/16GA MIN PL. MIN PL LENGTH SHALL BE 'D"+4". EXTEND AS REQD FOR 2" MIN BRG ON DECK RIB. NOTE: DETAIL OF FRAME ALSO APPLIES BELOW ROOFTOP EQUIP WITHOUT DECK PENETRATION.



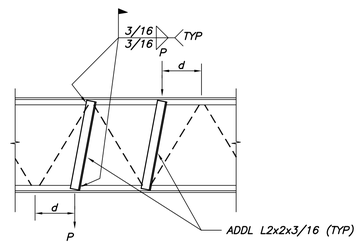
TYP HSS JAMB COL TO CMU CONN

N.T.S.



TYP SUPPORT DETAIL @ HANGING EQUIP

N.T.S.



TYP JOIST REINF DETAIL

N.T.S.

1. FOR CONCENTRATED LOADS LOCATED A DISTANCE "d", 4" OR MORE FROM PANEL POINT, PROVIDE ADDITIONAL WEB MEMBERS AS SHOWN.
2. P = 150# MAX LOAD.

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STRUCTURAL PLANS

STATE OF MAINE — DANIEL S. BECKER — No. 10910 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
10910
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	DATE	BY
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REVISIONS 2		
REVISIONS 3		
FINAL CHANGES		

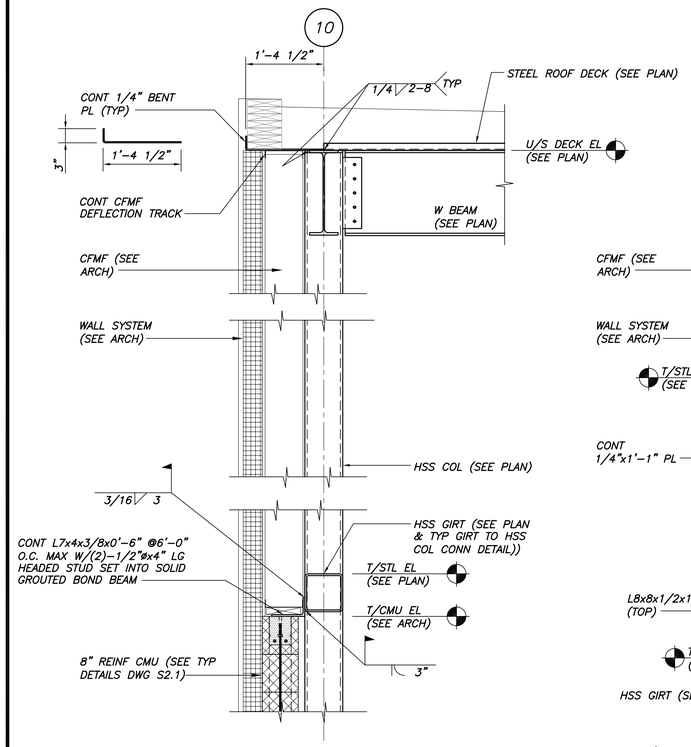
PROJ. MANAGER: JOEL KITTREDGE
DESIGNED: ATS
DETAILED: ATS

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

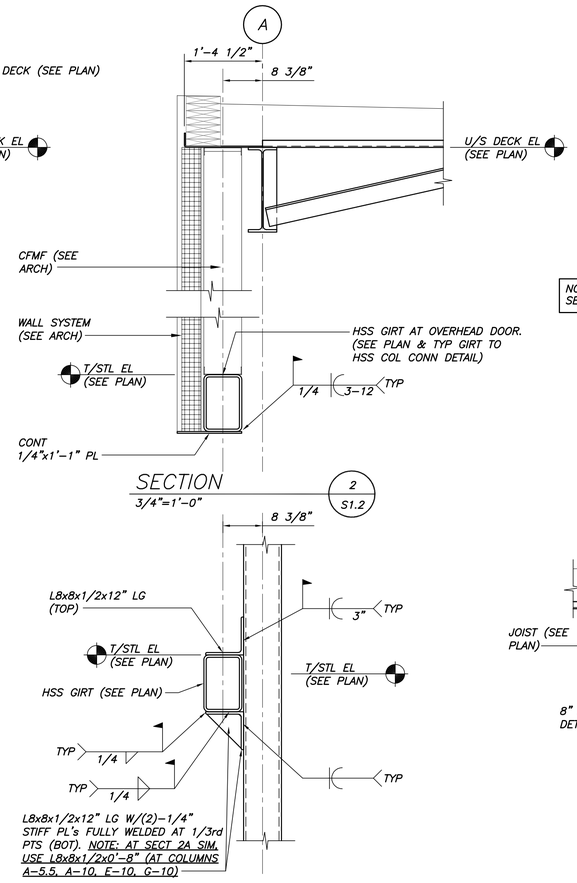
FRAMING SECTIONS & DETAILS

SHEET NUMBER

S3.1

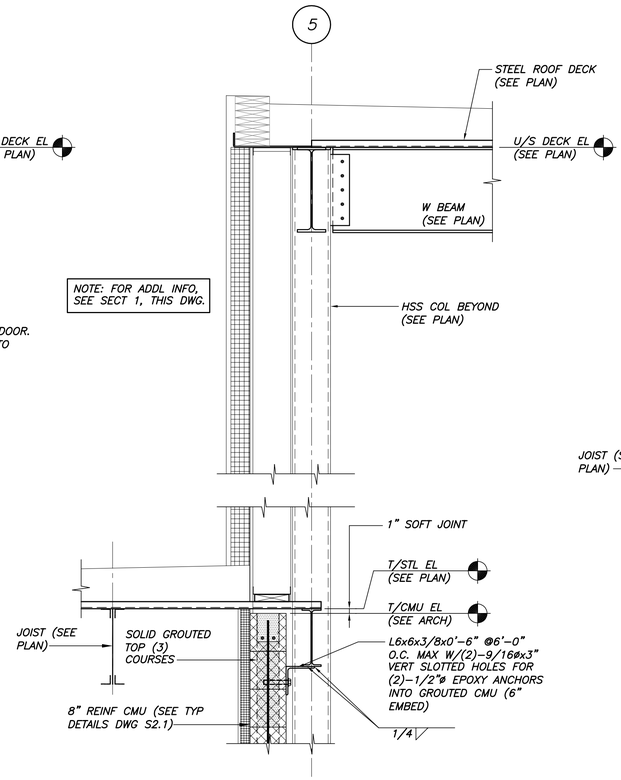


SECTION 1 / 3/4"=1'-0" / S1.2

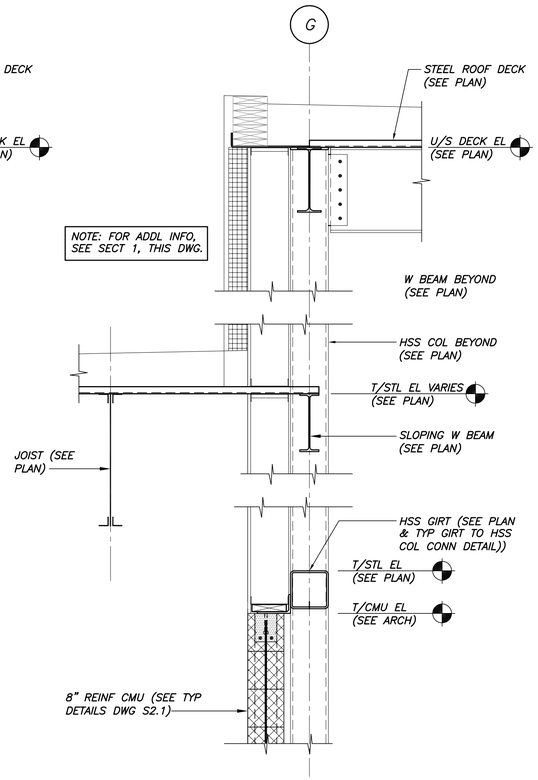


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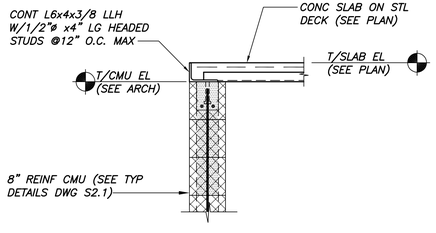
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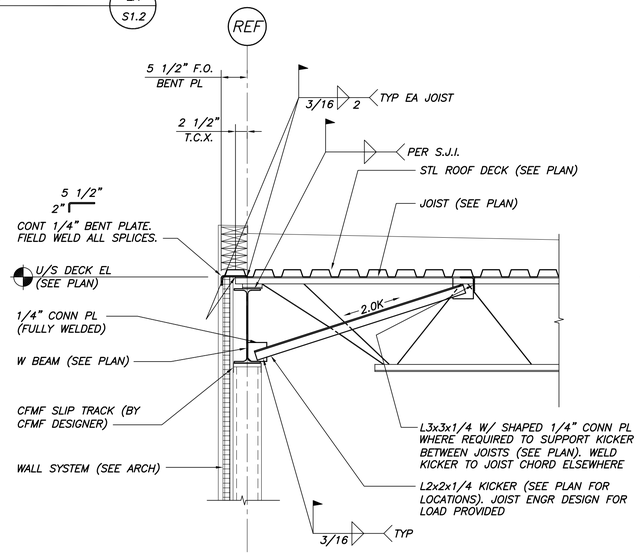
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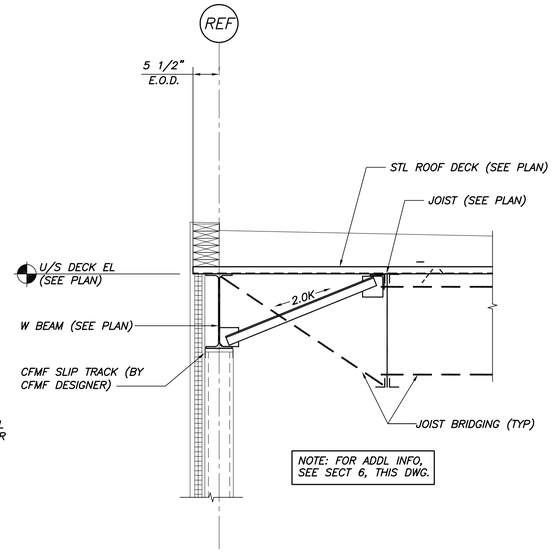
SECTION 4 / 3/4"=1'-0" / S1.2



SECTION 5 / 3/4"=1'-0" / S1.1



SECTION 6 / 3/4"=1'-0" / S1.2



SECTION 7 / 3/4"=1'-0" / S1.2

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75 York Street, Portland, Maine 04101
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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN 021942.02 STRUCTURAL PLANS

STATE OF MAINE DANIEL S. BECKER No. 10910 REGISTERED PROFESSIONAL ENGINEER

	DATE	BY
DESIGNED/DETAILED	2/16/18	APP
CHECKED/REVIEWED	2/16/18	DSB
DESIGNED/DETAILED2		
DESIGNED/DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 2		
FINAL CHANGES		

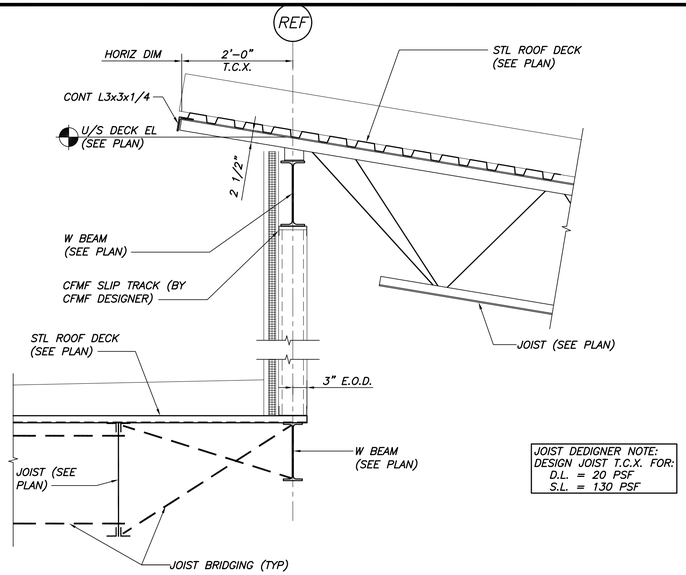
SIGNATURE
10910 P.E. NUMBER
02/16/2018 DATE

PROJ. MANAGER JOEL KITTREDGE

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

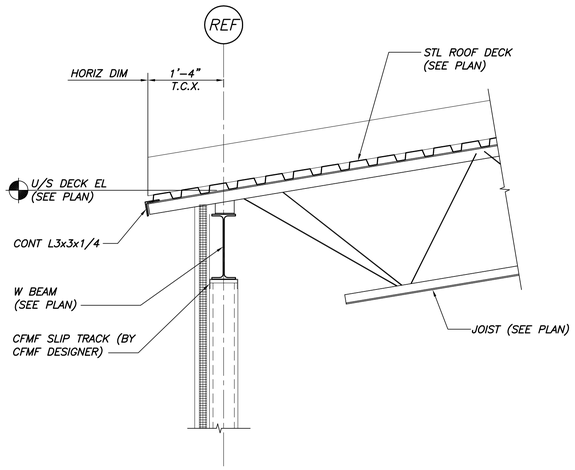
FRAMING SECTIONS & DETAILS

SHEET NUMBER
S3.2

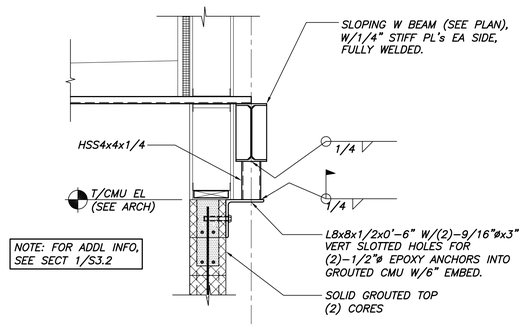


SECTION 1 S1.2
3/4"=1'-0"

JOIST DEDIGNER NOTE:
DESIGN JOIST T.C.X. FOR:
D.L. = 20 PSF
S.L. = 130 PSF

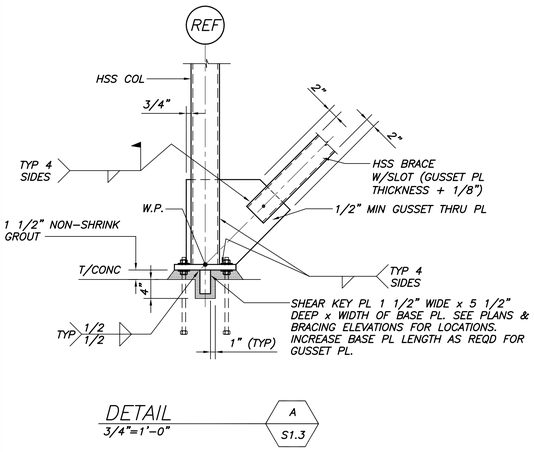


SECTION 2 S1.2
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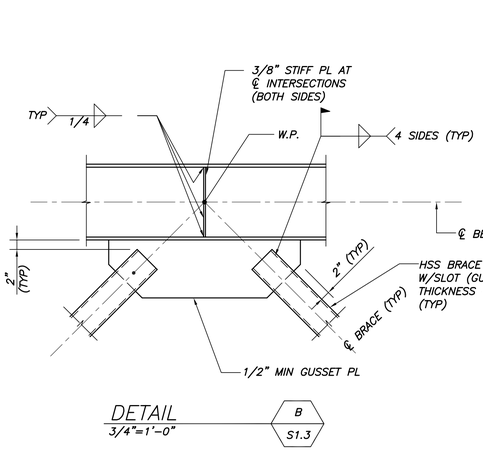


NOTE: FOR ADDL INFO, SEE SECT 1/S3.2

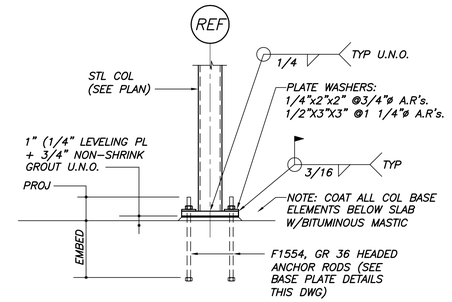
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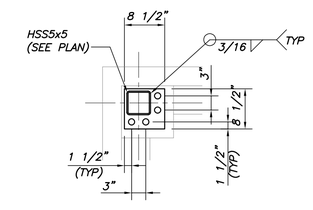
DETAIL A
3/4"=1'-0"
S1.3



DETAIL B
3/4"=1'-0"
S1.3

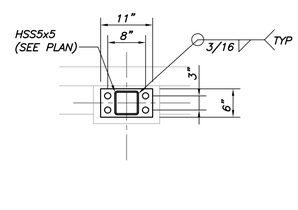


TYP COL BASE DETAIL U.N.O.
N.T.S.



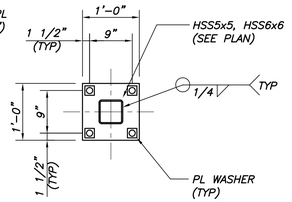
PL 1x8 1/2x0'-8 1/2" W/(4)-1 5/16"ø HOLES FOR (4)-3/4"ø14" LG F1554 GR 36 ANCHOR RODS W/9" EMBED & 5" PROJ. NOTE: 33" EMBED AT BP-A.1

BP-A
BP-A.1



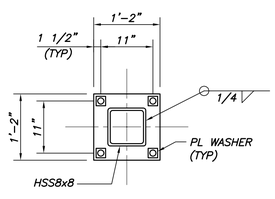
PL 1x6x0'-11" W/(4)-1 5/16"Ø HOLES FOR (4)-3/4"Øx14" LG F1554 GR 36 ANCHOR RODS W/9" EMBED & 5" PROJ. NOTE: 33" EMBED AT BP-B.1

BP-B
BP-B.1



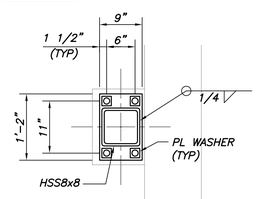
PL 3/4x11x0'-11" W/(4)-1 5/16"ø HOLES FOR (4)-3/4"ø14" LG F1554 GR 36 ANCHOR RODS W/9" EMBED & 5" PROJ

BP-C



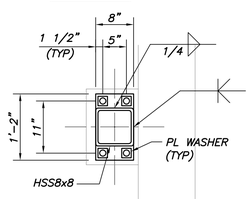
PL 1x14x1'-2" W/(4)-1 5/16"ø HOLES FOR (4)-3/4øx18" LG F1554 GR 36 ANCHOR RODS W/12" EMBED & 6" PROJ. NOTE: 33" EMBED AT BP-D.1

BP-D
BP-D.1



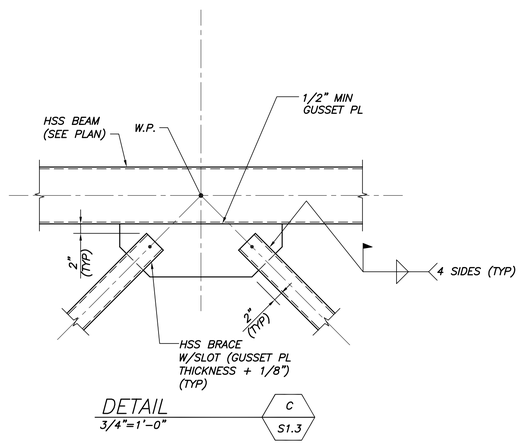
PL 1x9x1'-2" W/(4)-1 5/16"ø HOLES FOR (4)-3/4øx18" LG F1554 GR 36 ANCHOR RODS W/12" EMBED & 6" PROJ.

BP-E

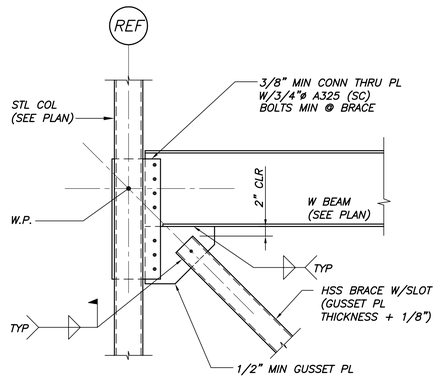


PL 1x8x1'-2" W/(4)-1 5/16"ø HOLES FOR (4)-3/4øx18" LG F1554 GR 36 ANCHOR RODS W/33" EMBED & 6" PROJ.

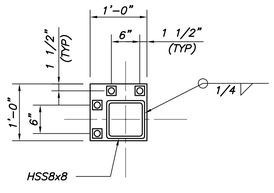
BP-E.1



DETAIL C
3/4"=1'-0"
S1.3

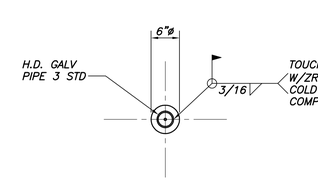


DETAIL D
3/4"=1'-0"
S1.3



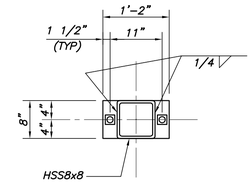
PL 1x12x1'-0" W/(4)-1 5/16"ø HOLES FOR (4)-3/4øx24" LG F1554 GR 36 ANCHOR RODS W/18" EMBED & 6" PROJ. NOTE: 33" EMBED AT BP-F.1

BP-F
BP-F.1



PL 3/8"x6"ø W/1 1/16"ø HOLE AT CTR FOR 3/4ø H.D. GALV EPOXY ANCHOR W/4" PROJ & 6" MIN EMBED. SET PL ON MIN GROUT REQD FOR UNIFORM BEARING.

BP-G



PL 1/2x8x1'-2" W/(2)-1 5/16"ø HOLES FOR (42)-3/4øx14" LG F1554 GR 36 ANCHOR RODS W/9" EMBED & 5" PROJ.

BP-H

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

STRUCTURAL PLANS

STATE OF MAINE DANIEL S. BECKER No. 10910 REGISTERED PROFESSIONAL ENGINEER

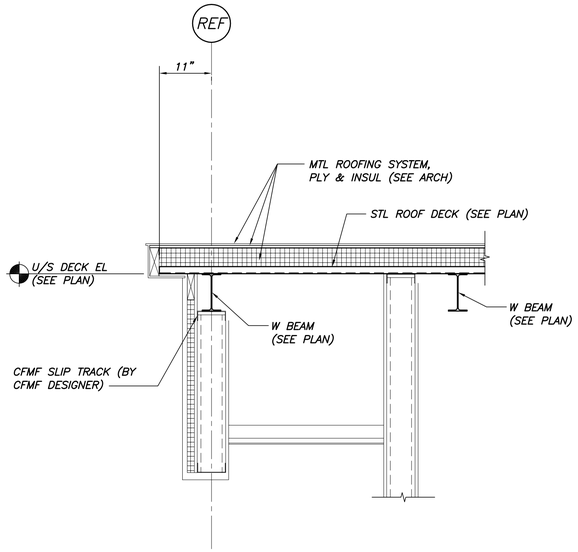
SIGNATURE	
P.E. NUMBER	10910
DATE	02/16/2018

	BY	DATE
PROJ. MANAGER	JOEL KITTREDGE	
DESIGN-DETAILED	APP	2/16/18
CHECKED-REVIEWED	DSB	2/16/18
DESIGN2-DETAILED2	ATS	
DESIGN3-DETAILED3	ATS	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
MISC CHANGES		

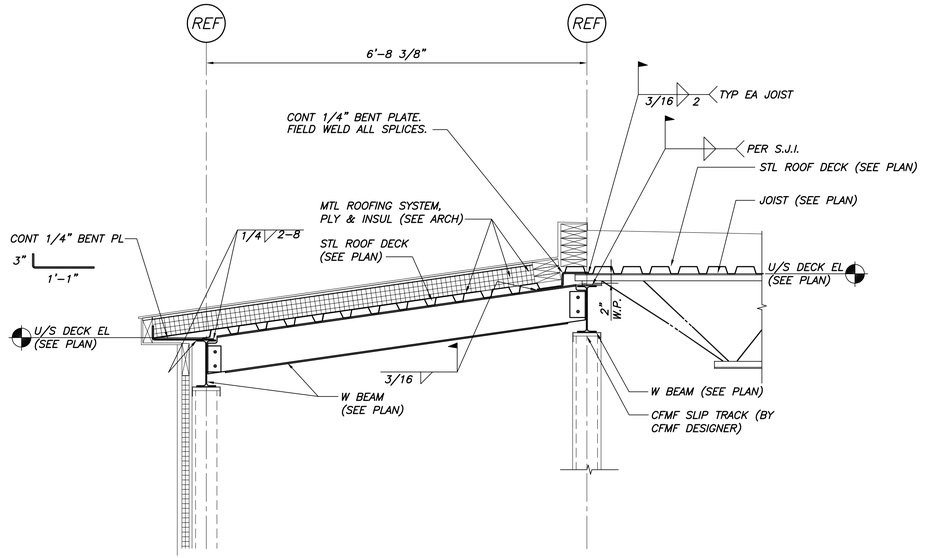
PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

FRAMING SECTIONS & DETAILS

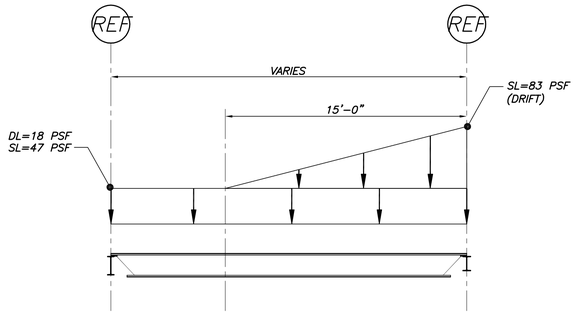
SHEET NUMBER
S3.3



SECTION 1 / S1.2
3/4"=1'-0"



SECTION 2 / S1.2
3/4"=1'-0"



KSP JOIST LOAD DIAGRAMS

3/16"=1'-0"

NOTES:

1. DL INDICATES DEAD LOAD AND SL INDICATES SNOW LOAD. ALL LOADS INDICATED ON THESE DIAGRAMS ARE UNFACTORED.
2. DEAD LOADS SHOWN DO NOT INCLUDE SELF-WEIGHT OF JOIST.
3. JOIST SUPPLIER TO DESIGN JOISTS TO SUPPORT INDICATED LOADS SHOWN ABOVE AND SUBMIT CALCULATIONS FOR REVIEW. CALCULATIONS TO PREPARED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MAINE.
4. DESIGN ROOF LOADS U.N.O.:
   DL: 18 PSF + JOIST SELF-WEIGHT
   SL: 47 PSF (BALANCED). UNBALANCED LOADS PER ASCE 7-05 SHALL BE CONSIDERED.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

STRUCTURAL PLANS

STATE OF MAINE · DANIELS · No. 10910 · REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
10910
P.E. NUMBER
02/16/2018
DATE

	BY	DATE
PROJ. MANAGER JOEL KITTREDGE		
DESIGNED/DETAILED	APP	2/16/18
CHECKED/REVIEWED	DSB	2/16/18
DESIGNED/DETAILED2		
DESIGNED/DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTANANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

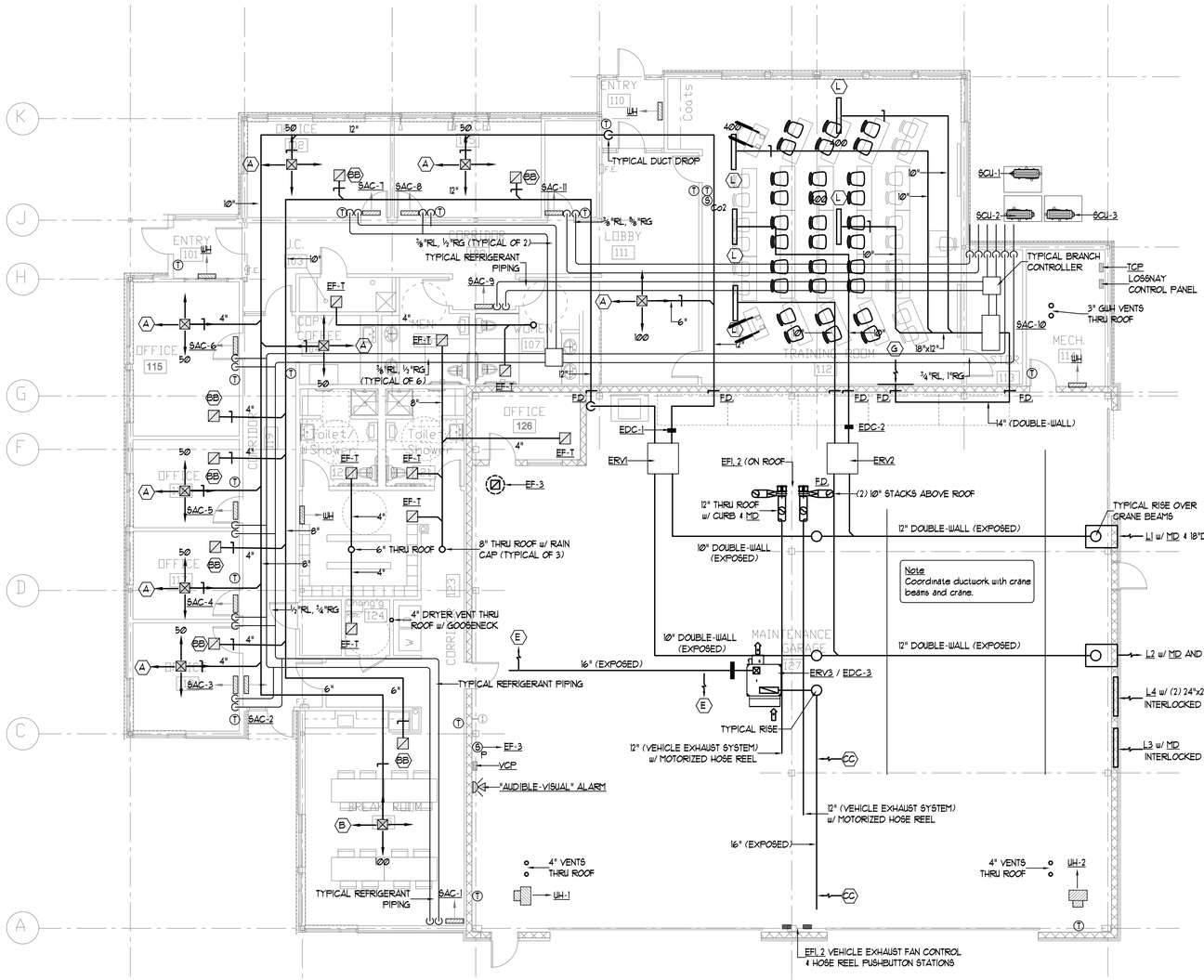
FRAMING SECTIONS & DETAILS

SHEET NUMBER

S3.4

BENNETT ENGINEERING
MECHANICAL • ELECTRICAL
(207) 865-9475

General Mechanical Notes
1. Exhaust fan duct terminations thru the roof shall be Van Packer Model DCR Double Cone Rain Cap, or equal, with flashing boot, stainless steel construction.
2. 90 degree elbows shall be mitered with single thickness turning vanes or radiused with a ¢ radius = 1.5 x the duct width.
3. Exhaust stacks at EF-1 and 2 shall extend to 8'-0" above the roof deck (to the top of the stackhead) with an 18"H. roof curb. The fans shall have a "No-Loss Stackhead" by US Duct, or equal, to prevent water from coming down the stack. Stack construction shall be Type 316 SS, welded. Fans shall be set on 12"H. galvanized steel equipment rails by Greenheck or Kees.
4. Refrigerant pipe sizes listed are estimated and shall be verified with the heat pump equipment manufacturer.



LINEAR BAR GRILLE PERFORMANCE SCHEDULE

TAG	SIZE (INCHES)	AIRFLOW (CFM)	SP LOSS (IN.W.G.)	THROW (FEET)	NC	FRAME STYLE	PATTERN	BASIS OF DESIGN PRICE		
								FASTENING	SPACING	SERIES
⟨E⟩	30x4	300	0.03	20	25	1" FLANGE	15°	SCREWS	1/2"	LBPH 26C
⟨G⟩	36x8	1000	0.04	25	20	1" FLANGE	15°	SCREWS	1/2"	LBPH 26C
⟨K⟩	48x8	1250	0.04	-	20	1" FLANGE	15°	SCREWS	1/2"	LBPH 26C

LINEAR SLOT DIFFUSER PERFORMANCE SCHEDULE

TAG	SIZE (INCHES)	AIRFLOW (CFM)	SP LOSS (IN.W.G.)	THROW (FEET)	NC	FRAME STYLE	PATTERN	BASIS OF DESIGN PRICE		
								NO. OF SLOTS	SLOT WIDTH	MODEL
⟨J⟩	48	250	0.05	10-30	30	T-BAR	ADJ.	2	1"	SDS100
⟨L⟩	48	400	0.05	7-22	30	T-BAR	ADJ.	4	1"	SDS100 / SDR100

Note Provide insulated boot plenums. Coordinate border style with ceiling construction.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2194202
WIN 021942.02

STATE OF MAINE · DAVID A. SPENCER · No. 13807 · LICENSED PROFESSIONAL ENGINEER

SIGNATURE	
P.E. NUMBER	13807
DATE	02/16/18

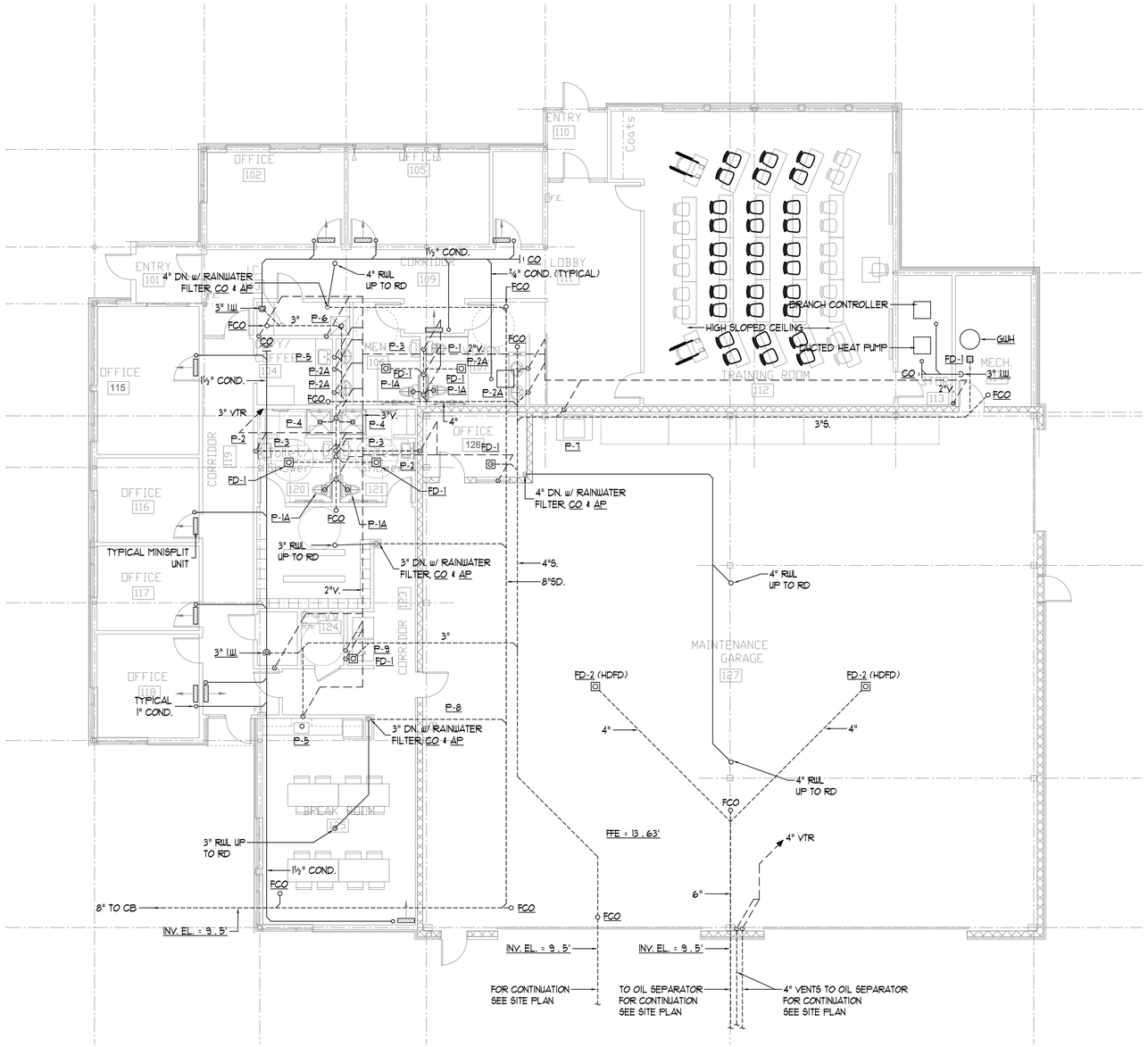
	DATE	BY
	01/11/18	SPD
	01/11/18	SPD
	- -	- -

	JOEL KITTREDGE
PROJ. MANAGER	
DESIGN-DETAILED	SPD
CHECKED-REVIEWED	SPD
DESIGN2-DETAILED2	- -
DESIGN3-DETAILED3	- -
REVISIONS 1	- -
REVISIONS 2	- -
REVISIONS 3	- -
REVISIONS 4	- -
FIELD CHANGES	- -

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS BUILDING
CUMBERLAND COUNTY
PORTLAND

MECHANICAL

SHEET NUMBER
M1



SANITARY PIPING FLOOR PLAN

SCALE: 1/8" = 1'-0"

BENNETT ENGINEERING
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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

STATE OF MAINE — STEPHEN P. DUNN — No. 13807 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE
3807
P.E. NUMBER
02/16/18
DATE

	BY	DATE
PROJ. MANAGER	JOEL KITTREDGE	
DESIGN-DETAILED	SPD	01/11/18
CHECKED-REVIEWED	SPD	01/11/18
DESIGN2-DETAILED2	- -	- -
DESIGN3-DETAILED3	- -	- -
REVISIONS 1	- -	- -
REVISIONS 2	- -	- -
REVISIONS 3	- -	- -
REVISIONS 4	- -	- -
FIELD CHANGES	- -	- -

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS BUILDING
PORTLAND
CUMBERLAND COUNTY

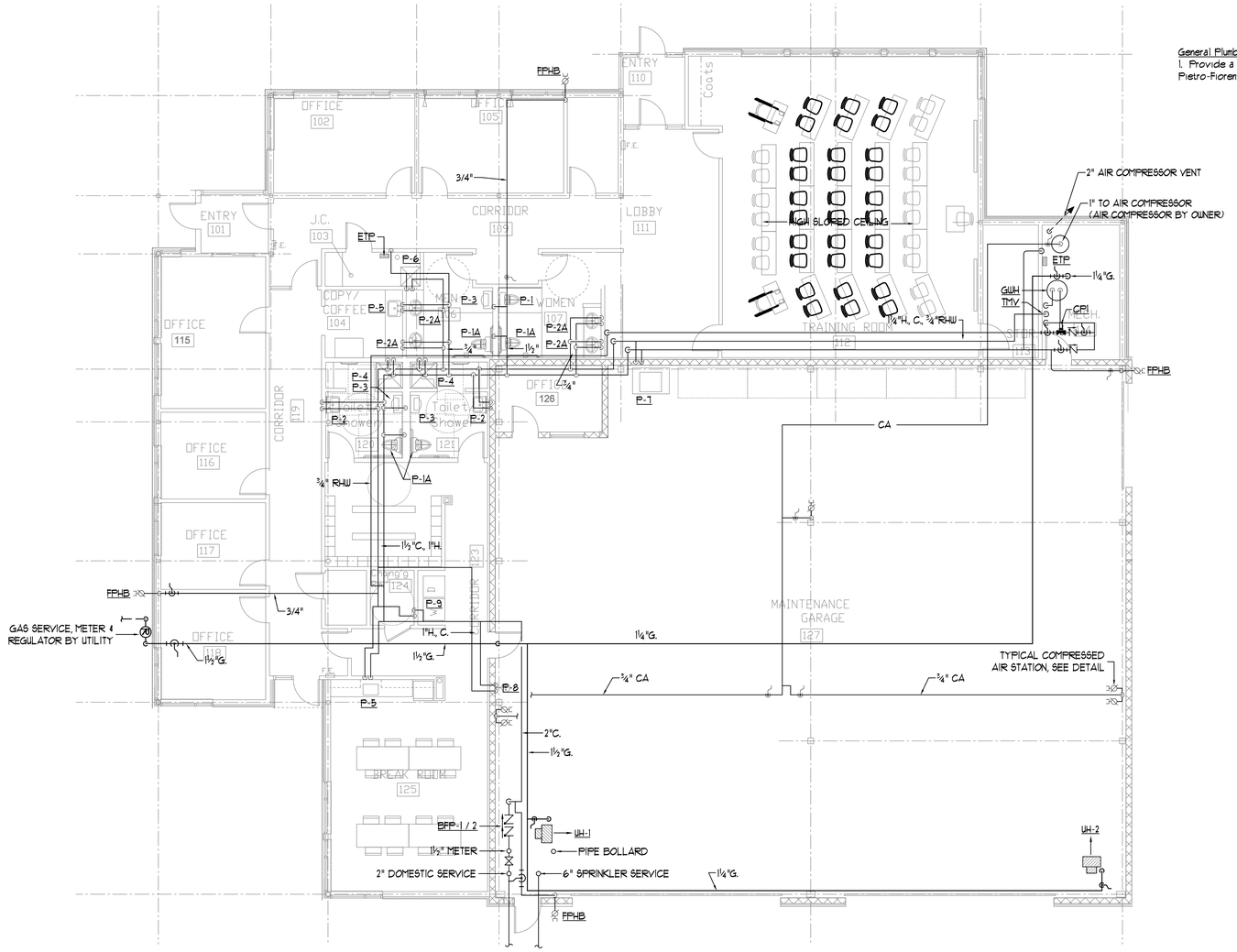
DRAINAGE PIPING PLAN

SHEET NUMBER

M2

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General Plumbing Notes.
1. Provide a gas pressure regulator at each gas appliance. Regulators shall be Maxitrol, Pietro-Fiorentini or Itron with vent limiter or vent to atmosphere per Code.



DOMESTIC PIPING FLOOR PLAN

SCALE: 1/8" = 1'-0"

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

WIN
021942.02

STATE OF MAINE — STEPHEN P. DUDLEY — No. 13807 — LICENSED PROFESSIONAL ENGINEER

	SIGNATURE
	3807
	P.E. NUMBER
	02/16/18
	DATE

	DATE	BY
PROJ. MANAGER	JOEL KITTREDGE	
DESIGN-DETAILED	01/11/18	SPD
CHECKED-REVIEWED	01/11/18	SPD
DESIGN3-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS BUILDING
PORTLAND — CUMBERLAND COUNTY

DOMESTIC PIPING PLAN

SHEET NUMBER

M3

ERV PERFORMANCE SCHEDULE

TAG	AIRFLOW (CFM)	E.S.P. (in. w.g.)	MCA / MOCP	VOLTAGE	EFFECTIVENESS (WINTER)	OPER. WEIGHT (LBS)	BASIS OF DESIGN Mitsubishi "Lossnay"		
							FILTERS	DUCT CONN.	MODEL
ERV1	600	0.3	3.6 / 15	208/1	61%	132	WASHABLE	10"	LGH-F600RXS-E
ERV2	400	0.3	3.1 / 15	208/1	74%	119	WASHABLE	10"	LGH-F470RXS-E
ERV3	See the Appendix in the Specifications for performance information.								

Notes Provide a PZ-60DR Lossnay Controller for Mitsubishi units.

FAN PERFORMANCE SCHEDULE

TAG	AIRFLOW (CFM)	T.S.P. (IN.W.G)	NOISE (SONES)	RPM	DRIVE	ELECTRICAL REQUIREMENTS					BASIS OF DESIGN = (P) Panasonic, (G) Greenheck, (V) Ventaire		
						HP	BHP	WATTS	AMPS	V/PH/HZ	SERVICE	ARRANGEMENT	MODEL
EF-T	50 / 110	0.25	0.4	-	DIRECT	-	-	11.0	0.2	120/1/60	TOILETS / JANITOR	CEILING	FV-05-11VKL1
EF1, 2	1,200	6.0	-	-	-	3.0	-	-	-	208/3/60	VEHICLE EXHAUST	UTILITY	(V) JRW80TF-3-3
EF3	6,000	0.25	24	1135	BELT	2.0	1.75	-	-	208/3/60	REPAIR GARAGE EXHAUST	UPBLAST	CUBE-200-20

Notes EF-T shall come with motion sensors and be multi-speed with time delay and multi-speed plug n' play modules. See Plans for quantities.

Notes Furnish each fan-light unit with gravity operated backdraft damper and two (2) 7W. LED lamps.

PLUMBING FIXTURE CONNECTION SCHEDULE

TAG	DESCRIPTION	SAN	VENT	CW	HW
P-1	FLOOR MOUNTED FV WATER CLOSET	3"	2"	1"	-
P-1A	ADA FLOOR MOUNTED FV WATER CLOSET	3"	2"	1"	-
P-2	WALL MOUNTED LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"
P-2A	ADA COUNTER LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"
P-3	URINAL	2"	1 1/2"	3/4"	-
P-4	SHOWER	2"FD	1 1/2"	1/2"	1/2"
P-5	SINGLE BOWL KITCHEN SINK	1 1/2"	1 1/2"	1/2"	1/2"
P-6	MOP BASIN	3"	2"	1/2"	1/2"
P-7	S.S. STEEL UTILITY SINK	1 1/2"	1 1/2"	1/2"	1/2"
P-8	EMERGENCY EYE / FACE WASH	1 1/2"	1 1/2"	1/2"	1/2"
P-9	WASHING MACHINE CONNECTION	2"	1 1/2"	1/2"	1/2"
FD-1	FLOOR DRAIN (w/ TRAP PRIMER)	3"	2"	-	-
FD-2	HEAVY DUTY FLOOR DRAIN w/ TRAP PRIMER	4"	2"	-	-
HB	HOSE BIBB	-	-	3/4"	-
FPHB	FREEZE PROOF HOSE BIBB	-	-	3/4"	-
IW.	INDIRECT WASTE	3"	2"	-	-

MINIMUM SIZE OF BELOW SLAB SANITARY & VENT PIPING SHALL BE 2".
PROVIDE TRAP PRIMERS ON FLOOR DRAINS, CONNECT TO NEAREST ETP.
UNITS SCHEDULED MAY REPRESENT MULTIPLE UNITS, COORDINATE WITH DRAWINGS.

SPLIT-SYSTEM HEAT PUMP PERFORMANCE SCHEDULE

* - AT ARI CONDITIONS OF 85°F AMBIENT/65°F INDOOR WB

TAG	TOTAL COOLING (MBH)*	AIRFLOW (CFM)	HEATING CAPACITY (BTUH@5F.)	COND. DRAIN (IN)	EER (BTUH/ WATT)	SOUND RATING (DB)	WEIGHT (LBS)	REFRIGERANT PIPE SIZE (IN)		ELECTRICAL REQUIREMENTS			BASIS OF DESIGN MITSUBISHI "Hyperheat H2i"		
								LIQUID	GAS	MCA	MAX FUSE	V/PH/HZ	SERVICE	ARRANGEMENT	MODEL
SAC1	12.0	300	13.6	3/4"	13.8	40	62	3/8	5/8	1.0	15.0	208/1/60	HEATING / COOLING	WALL	M9Z-FH12NA-U1
SAC2-8	6.0	250	8.7	3/4"	13.8	40	50	3/8	5/8	1.0	15.0	208/1/60	HEATING / COOLING	WALL	M9Z-FH06NA-U1
SAC9	15.0	350	18.0	3/4"	13.8	40	62	3/8	5/8	1.0	15.0	208/1/60	HEATING / COOLING	WALL	M9Z-FH18NA-U1
SAC10	36.0	1150	40.0	3/4"	13.8	40	62	3/8	5/8	1.0	15.0	208/1/60	HEATING / COOLING	DUCTED	PEAD-A36AA
SAC11	12.0	300	-	3/4"	13.8	40	62	3/8	5/8	1.0	15.0	208/1/60	COOLING	WALL	FKA-A12HA

Notes
1. All data based on medium speed operation. Provide condensate overflow safety switches and pumps. Provide 24"H. stands, "Quick-Sling", or equal. Units shall provide 80% of their rated heating performance at -13F. outside ambient.
2. Provide a PAC-UKPRC001-CN-1 BMS interface and connect to the BAS system. Provide "BlueFin" corrosion resistant coating.

AIR DEVICE PERFORMANCE SCHEDULE

TAG	PANEL SIZE(IN)	NECK SIZE(IN)	AIRFLOW (CFM)	SP.LOSS (IN.W.G.)	THROW(L)	THROW(S)	Nc	BASIS OF DESIGN PRICE		
								DUCT CONN/(IN)	PATTERN	MODEL
A	-	6x6	150	0.05	-	-	25	SEE DWGS	SEE DWGS	AMX-3AL
B	-	9x9	300	0.05	-	-	25	SEE DWGS	SEE DWGS	AMX-3AL
C	-	12x12	400	0.05	-	-	25	SEE DWGS	SEE DWGS	AMX-3AL
D	-	15x15	700	0.05	-	-	25	SEE DWGS	SEE DWGS	AMX-3AL
E	-	24x12	1000	0.05	-	-	25	SEE DWGS	SEE DWGS	AHCD2
AA	-	8x8	100	0.05	-	-	30	SEE DWGS	1/2", 45°	60DAL
BB	-	12x12	400	0.05	-	-	30	SEE DWGS	1/2", 45°	60DAL
CC	-	16x16	600	0.05	-	-	30	SEE DWGS	1/2", 45°	60DAL
DD	-	22x22	1200	0.05	-	-	30	SEE DWGS	1/2", 45°	60DAL
EE	-	8x8	75	0.05	-	-	30	SEE DWGS	-	-

SPLIT-SYSTEM OUTDOOR UNIT PERFORMANCE SCHEDULE

* - AT ARI CONDITIONS OF 95°F AMBIENT / 67°F INDOOR WB
+ - AT 45°F. SATURATED SUCTION TEMPERATURE

TAG	TOTAL COOLING (MBH)*	TOTAL HEATING (MBH @ 5F.)	EER	MINIMUM AMBIENT TEMP.(°F)	FOOTPRINT DIMENSION (INCHES)	OPERATING WEIGHT (LBS)	ELECTRICAL REQUIREMENTS			BASIS OF DESIGN MITSUBISHI "Hyperheat H2i"			
							MCA	MOP	V/PH/HZ	REFRIGERANT	SOUND (BEL)	SERVICE	MODEL
SCU-1 / 2	48.0	54.0	13.1	-	37x13	276	42	50	208/1/60	R-410A	-	SAC-1-8 / 9, 10	MXZ-8C48NAHZ
SCU-3	12.0	-	13.1	0	37x13	90	11	28	208/1/60	R-410A	-	SAC-11	PUY-A12NHA6(-BS)

Note Provide SCU-3 with wind baffles and 0F. low ambient controls.

LOUVER PERFORMANCE SCHEDULE

TAG	AIR FLOW (CFM)	SP LOSS (IN. WG)	AIR VEL. (FPM)	SIZE (INCHES) (WxH)	FREE AREA (SQ. FT.)	DRAINABLE (Y) OR (N)	BLADE ANGLE & FRAME DEPTH	BASIS OF DESIGN RUSKIN		
								SERVICE	MODEL	VISIBLE MULLION
L1, 2	1000	.05	-	24x24	2.0	Y	35°, 6"	ERV1, 2 INTAKE / EXHAUST	ELF6375DX	N
L3	4500	.05	-	48x24	4.5	Y	35°, 6"	EF3 INTAKE	ELF6375DX	N
L4	2400	.05	-	48x24	4.5	Y	35°, 6"	EF1, 2 INTAKE	ELF6375DX	N

Note Provide Kynar 500 finish with color selection by Architect.

GAS WATER HEATER PERFORMANCE SCHEDULE

TAG	STORAGE (GALS)	INPUT (MBH)	UPD (FT.W.G)	RECOVERY 100°F RISE (GPH) *	WORKING PRESSURE (PSIG)	INPUT CW TEMP (DEG F)	OUTLET HW TEMP (DEG F)	ELECTRICAL REQUIREMENTS			BASIS OF DESIGN A.O. SMITH		
								AMPS	WATTS	V/PH/HZ	SERVICE	FUEL	MODEL
GWH	60	120	-	138	1600	40.0	140.0	5	-	120/1/60	BUILDING DHW	NATURAL GAS	BTH120(A)

GWH SHALL BE PROVIDED WITH CONDENSATE NEUTRALIZATION KIT, ASME CODE CONSTRUCTION

GAS UNIT HEATER PERFORMANCE SCHEDULE

HEATING PERFORMANCE BASED ON NATURAL GAS

TAG	OUTPUT (MBH)	FLOW RATE (GPM)	SOUND (dbA)	AIRFLOW (CFM)	THROW	MTG. HT.	ELECTRICAL REQUIREMENTS			BASIS OF DESIGN REZNOR		
							HP	RPM	V/PH/HZ	SERVICE	ARRANGEMENT	MODEL
UH1, 2	99.6	-	55	1345	30'	12'-0"	1/4	1050	120/1/60	REPAIR GARAGE	HORIZONTAL	UDAP 175

PUMP PERFORMANCE SCHEDULE

TAG	FLOW RATE (GPM)	HEAD (FT.W.G)	IMPEL. SIZE	RPM	EFF %	ELECTRICAL REQUIREMENTS					BASIS OF DESIGN TACO		
						HP	BHP	VFD / ECM	AMPS	V/PH/HZ	SERVICE	ARRANGEMENT	MODEL
CP1*	5	6	-	3250	-	1/8	-	-	1.2	120/1/60	DOMESTIC RHW	IN-LINE	006B

* All bronze or stainless steel construction.

ELECTRIC WALL HEATER PERFORMANCE SCHEDULE

TAG	OUTPUT (KW)	FLOW RATE (GPM)	W.P.D (FT.W.G)	AIRFLOW (CFM)	ROWS	MTG. HT.	ELECTRICAL REQUIREMENTS			BASIS OF DESIGN QMark		
							HP	AMPS	V/PH/HZ	SERVICE	ARRANGEMENT	MODEL
-	-	-	-	-	-	-	-	-	-	-	-	-
WH	2.0	-	-	65	-	8"	-	9.6	208/1/60	VARIOUS	WALL-MOUNTED	CWH208D5AG

TEMPERATURE MIXING VALVE PERFORMANCE SCHEDULE

TAG	FLOW RATE (GPM)	INLET CONNECTION (INCHES)	OUTLET CONNECTION (INCHES)	W.P.D (PSIG)	SET POINT (DEGREES F)	PROVIDE SPARE CARTRIDGE (Y) OR (N)	BASIS OF DESIGN LEONARD "ECO-MIX"		
							SERVICE	ARRANGEMENT	MODEL
TMV	20	3/4	3/4	10	115	N	DOMESTIC HW	INLINE	LV-931A-LF-BDT
-	-	-	-	-	-	-	-	-	-

BFP PERFORMANCE SCHEDULE

* - BODY STYLE DESIGNATIONS REFERENCED ARE AS FOLLOWS, (DC) = DOUBLE CHECK, (DDC) = DOUBLE DETECTION CHECK, (DCA) = DOUBLE CHECK WITH ATMOSPHERIC VENT, (RPZ) = DOUBLE CHECK W/ REDUCED PRESSURE ZONE RELIEF VALVE.

TAG	SIZE	FLOW RATE (GPM)	W.P.D (PSI)	MAX. WORK'G. TEMPERATURE (DEGREES F)	MAX. WORK'G. PRESSURE (PSI)	TESTABLE (Y) OR (N)	BASIS OF DESIGN APOLLO VALVE		
							BODY STYLE*	SERVICE	MODEL
BFP1	1½"	50.0	11.0	180	175	Y	RPZ	WATER ENTRANCE	RPLF4A
-	-	-	-	-	-	-	-	-	-

MECHANICAL AND PLUMBING SYMBOLS AND ABBREVIATIONS LEGEND

NOTE - USE SYMBOLS AND ABBREVIATIONS AS APPLICABLE FOR THIS MECHANICAL DRAWING SET. SOME SYMBOLS AND ABBREVIATIONS IN THIS LEGEND MAY NOT APPLY.

SYMBOL	DESCRIPTION
CA	COMPRESSED AIR PIPING (CA)
C	CONDENSATE DRAIN PIPING (C)
CWR	CHILLED WATER RETURN PIPING (CWR)
CWS	CHILLED WATER SUPPLY PIPING (CWS)
FOR	FUEL OIL RETURN PIPING (FOR)
FOS	FUEL OIL SUPPLY PIPING (FOS)
G	GAS PIPING (G)
HWR	HOT WATER RETURN PIPING (HWR)
HWS	HOT WATER SUPPLY PIPING (HWS)
RL	REFRIGERANT LIQUID PIPING (RL)
RG	REFRIGERANT GAS PIPING (RG)
SAN	SANITARY PIPING BELOW FLOOR (SAN)
SAN	SANITARY PIPING ABOVE FLOOR (SAN)
	SANITARY VENT PIPING
RWL	RAINWATER LEADER ABOVE SLAB (RWL)
CW	COLD WATER PIPING (CW)
HW	HOT WATER PIPING (HW)
RHW	RECIRCULATED HOT WATER PIPING (RHW)
	PIPE CAP
	DIRECTION OF FLUID FLOW
	ELBOW UP
	ELBOW DOWN
	PIPE TEE UP
	PIPE TEE DOWN
	PIPE REDUCER
	PIPE WITH GUIDE
	PIPE WITH ANCHOR
	BUTTERFLY VALVE
	OS & Y GATE VALVE
	BACKFLOW PREVENTER (BFP)
	CHECK VALVE
	BALANCING VALVE (ADJUSTABLE)
	AUTOMATIC FLOW CONTROL VALVE
	RELIEF VALVE (RV)

SYMBOL	DESCRIPTION
	BALL VALVE
	BALL VALVE
	3/4" BALL VALVE WITH 3/4" HOSE END
	GATE VALVE
	PRESSURE REDUCING VALVE
	FUSIBLE VALVE
	STRAINER W/BLOWDOWN BALL VALVE
	2-WAY CONTROL VALVE
	SOLENOID VALVE
	3-WAY CONTROL VALVE
	3-WAY CONTROL VALVE (TOP VIEW)
	2 BUTTERFLY VALVES W/SINGLE ACTUATOR
	BUTTERFLY VALVE W/ACTUATOR
	TRIPLE-DUTY VALVE
	UNION
	PIPE FLANGE
	PUMP WITH FLANGES
	BASE MOUNTED PUMP
	CARTRIDGE TYPE INLINE PUMP
	VERTICAL INLINE PUMP
FC	FLEXIBLE PIPE CONNECTION (FC)
	PITCH DOWN
	PETCOCK
	FLOW METER
	PRESSURE GAGE WITH GAGE COCK
	THERMOMETER IN WELL
	WATER FLOW SWITCH
	PRESSURE SWITCH OR SENSOR
	IMMERSION TEMPERATURE SENSOR
	DUCT MOUNTED SMOKE DETECTOR
	ROOM TEMPERATURE SENSOR
	THERMOSTAT OR SENSOR ON WALL

SYMBOL	DESCRIPTION
	TSTAT OR SENSOR W/ TAMPERPROOF GUARD
	MANUAL AIR VENT
	NOTE TAG (NUMBER)
A 250	AIR DEVICE TAG (LETTER) WITH CFM
20	ROOM NUMBER
	TURNING VANES
	DUCT W/MANUAL DAMPER
	DUCT W/FLEXIBLE CONNECTION (FC)
	LAGGED DUCT
	DUCT W/ACOUSTIC LINING
	DUCT W/SQUARE-TO-ROUND TRANSITION
	FLEXIBLE DUCT
MOD	MOTOR OPERATED DAMPER
	AIRFLOW OUT
	AIRFLOW IN
ϕ	DIAMETER OR FLAT OVAL
	FIRE DAMPER
	ROUND OR FLAT OVAL DUCT DOWN
	ROUND OR FLAT OVAL DUCT UP
	SUPPLY DIFFUSER
	RETURN GRILLE
	STEAM TRAP
	WATER HAMMER ARRESTOR
AAV	AUTOMATIC AIR VENT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU-#	AIR HANDLING UNIT TAG
AMS	AIRFLOW MONITORING STATION
AMPS	AMPERES
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
AS-#	AIR SEPARATOR TAG
ATC	AUTOMATIC TEMPERATURE CONTROL

ABBREVIATION	DESCRIPTION
B-#	BOILER TAG
BD-#	BYPASS DAMPER TAG
BFP-#	BACKFLOW PREVENTER TAG
BHP	BRAKE HORSEPOWER
BTUH	BRITISH THERMAL UNITS PER HOUR
CBD	COUNTER BALANCED DAMPER
CC-#	COOLING COIL TAG
CFM	CUBIC FEET PER MINUTE
CHLR-#	CHILLER TAG
CO	CLEANOUT
CUH-#	CABINET UNIT HEATER TAG
CP-#	CIRCULATING PUMP TAG
CT-#	COOLING TOWER TAG
Cv	VALVE COEFFICIENT
CW	COLD WATER
CHWS/R	CHILLED WATER SUPPLY AND RETURN
DB	DRY BULB
dB RE	DECIBELS RELATIVE TO
DC	DOUBLE CHECK
DCA	DOUBLE CHECK ATMOSPHERIC
DEG F	DEGREES FAHRENHEIT
DIA	DIAMETER
DW	DOWN IN WALL
DN	DOWN
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB
EDC-#	ELECTRIC DUCT COIL TAG
EER	ENERGY EFFICIENCY RATIO
EF-#	EXHAUST FAN TAG
EFF	EFFICIENCY
EG-#	EXHAUST GRILLE TAG
ER-#	EXHAUST REGISTER TAG
ESP	EXTERNAL STATIC PRESSURE
ET-#	EXPANSION TANK TAG

ABBREVIATION	DESCRIPTION
EWB	ENTERING WET BULB
EWH-#	ELECTRIC WATER HEATER TAG
EWT	ENTERING WATER TEMPERATURE
EXG	EXISTING
EXH	EXHAUST
FC	FLEXIBLE CONNECTION
FCO	FLOOR CLEANOUT
FD	FIRE DAMPER
FD-#	FLOOR DRAIN TAG
FLA	FULL LOAD AMPS
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FPHB	FROST PROOF HOSE BIBB
FPM	FEET PER MINUTE
FS-#	FLOOR SINK TAG
FT	FEET
FTR-#	FINTUBE RADIATION TAG
GA.	GAGE
GAL	GALLONS
GFUH-#	GAS FIRED WATER HEATER TAG
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GUH-#	GAS UNIT HEATER TAG
HC-#	HEATING COIL TAG
HP	HORSEPOWER
HRV-#	HEAT RECOVERY VENTILATOR TAG
HW	HOT WATER
HWS/R	HOT WATER SUPPLY AND RETURN
I-B-R	INSTITUTE OF BOILER AND RADIATOR MANUFACTURERS
IFWH-#	INDIRECT FIRED WATER HEATER TAG
IN.	INCHES
IV-#	INTAKE VENT TAG
L-#	LOUVER TAG
LAT	LEAVING AIR TEMPERATURE

ABBREVIATION	DESCRIPTION
LB	POUNDS
LD-#	LINEAR DIFFUSER TAG
LTHWS/R	LOW TEMPERATURE HOT WATER
LRA	LOCKED ROTOR AMPS
LWCO	LOW WATER CUTOUT
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	THOUSANDS OF BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM
NC	NOISE CRITERION
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
O.D.	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
OFRWL	OVERFLOW RAINWATER LEADER
OFWH-#	OIL FIRED WATER HEATER TAG
OFRD	OVERFLOW ROOF DRAIN
OPD	OVERCURRENT PROTECTIVE DEVICE
P-#	PLUMBING FIXTURE TAG
PENETN	PENETRATION
PF-#	PADDLE FAN TAG
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAGE
PVC	POLYVINYL CHLORIDE (PIPE)
RA	RETURN AIR
RD	ROOF DRAIN
RL	REFRIGERANT LIQUID PIPING
RG	REFRIGERANT GAS PIPING
RHW	RECIRCULATED HOT WATER
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
RPS	REVOLUTIONS PER SECOND

ABBREVIATION	DESCRIPTION
RPZ	REDUCED PRESSURE ZONE
RR-#	RETURN REGISTER TAG
RTU	ROOM TEMPERATURE SENSOR
RV	RELIEF VALVE
RWL	RAINWATER LEADER
SA	SUPPLY AIR
SAN	SANITARY (DRAIN & WASTE)
SD	SMOKE DAMPER
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SF	SUPPLY FAN
SP	STATIC PRESSURE
SP-#	SUMP PUMP TAG
SR-#	SUPPLY REGISTER TAG
SQFT	SQUARE FEET
ΔT	TEMPERATURE DIFFERENTIAL
TEMP.	TEMPERATURE
TCP	TEMPERATURE CONTROL PANEL
TMV-#	THERMOSTATIC MIXING VALVE TAG
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UH-#	UNIT HEATER TAG
U.N.O.	UNLESS NOTED OTHERWISE
VAV-#	VARIABLE AIR VOLUME BOX TAG
VB	VACUUM BREAKER
VFD	VARIABLE FREQUENCY INVERTER DRIVE
VTR	VENT THRU ROOF
V/PH/HZ	VOLTS/PHASES/HERTZ
WB	WET BULB
WCO	WALL CLEANOUT
WG	WATER GAGE
WPD	WATER PRESSURE DROP
WSA	WIRE SIZING AMPS
WTD	WATER TEMPERATURE DROP
W/	WITH
ZD-#	ZONE DAMPER TAG

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2194202

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STATE OF MAINE · JOEL KITTREDGE · No. 13607 · REGISTERED PROFESSIONAL ENGINEER

	SIGNATURE	P.E. NUMBER	DATE
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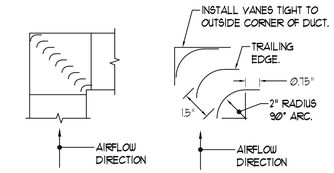
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PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS BUILDING
PORTLAND
CUMBERLAND COUNTY

SCHEDULES & LEGEND

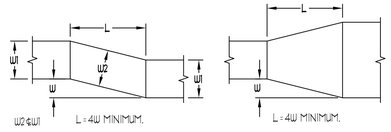
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M4



RECT. ELBOW W/TURNING VANES

NTS NOTE: INSTALL VANE EDGES TO ROJECT TANGENTS PARALLEL TO DUCT SIDES.

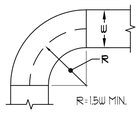


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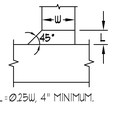
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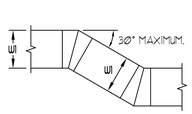
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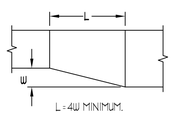
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NTS



OFFSET TYPE 2 (MITERED)

NTS

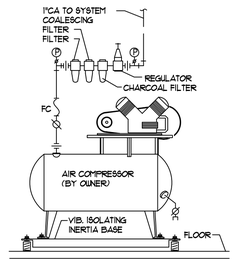


ECCENTRIC TRANSITION

NTS

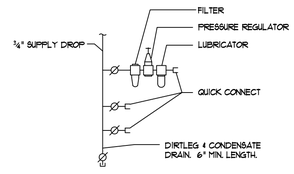
LOW PRESSURE DUCT CONSTRUCTION DETAILS - TYPICAL

NTS



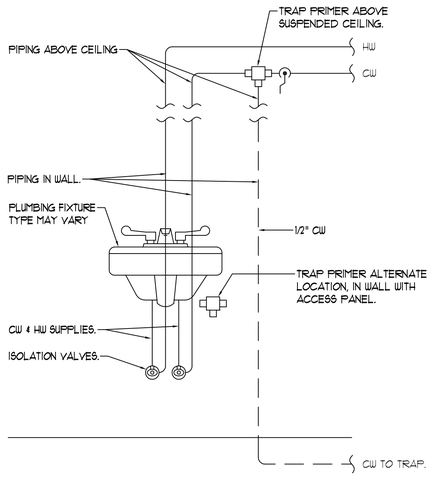
COMPRESSOR PIPING DETAIL

NTS



COMPRESSED AIR PIPING TYPICAL DROP DETAIL

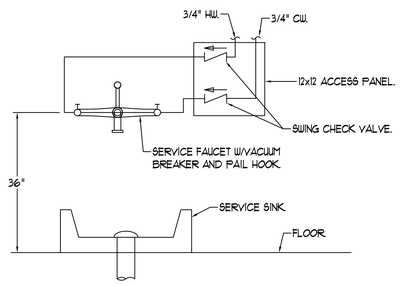
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TRAP PRIMER CONNECTION DETAIL

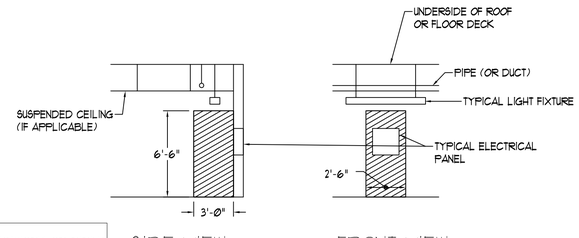
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NOTE - ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS, CONNECT TO NEAREST FIXTURE.



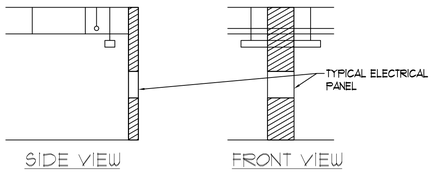
MOP BASIN INSTALLATION DETAIL

NTS



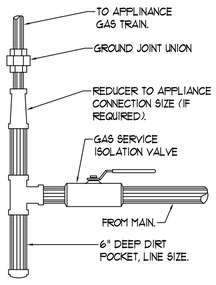
NOTE
NO DUCTWORK OR PIPING IS PERMITTED IN THE HATCHED AREAS.

SEE NEC SECTIONS 110.26 AND 408.18 (2014 EDITION)



CLEARANCES AT ELECTRICAL PANELS

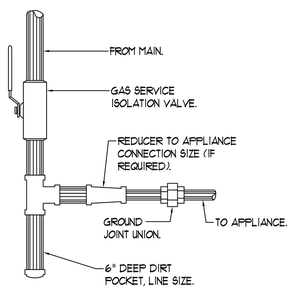
NTS



UPFEED GAS PIPING CONNECTION DETAIL

NTS

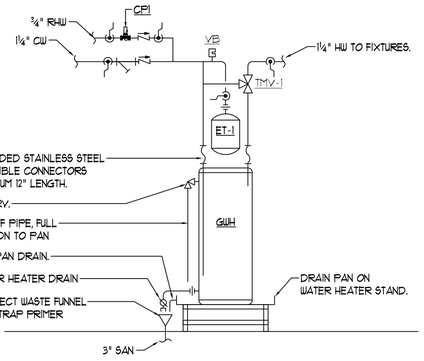
NOTE APPLIANCES WITH REGULATORS LOCATE PIPING SHOWN HEREIN UPSTREAM OF THE APPLIANCE REGULATOR. PROVIDE A TEST PLUG DOWNSTREAM OF THE APPLIANCE REGULATOR.



DOWNFEED GAS PIPING CONNECTION DETAIL

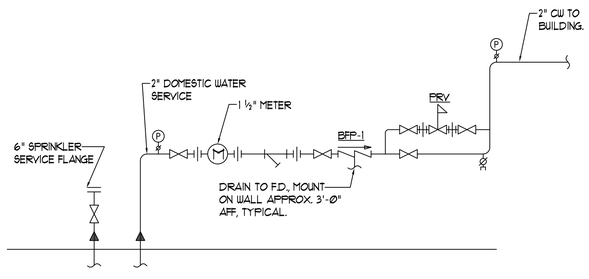
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NOTE APPLIANCES WITH REGULATORS LOCATE PIPING SHOWN HEREIN UPSTREAM OF THE APPLIANCE REGULATOR. PROVIDE A TEST PLUG DOWNSTREAM OF THE APPLIANCE REGULATOR.



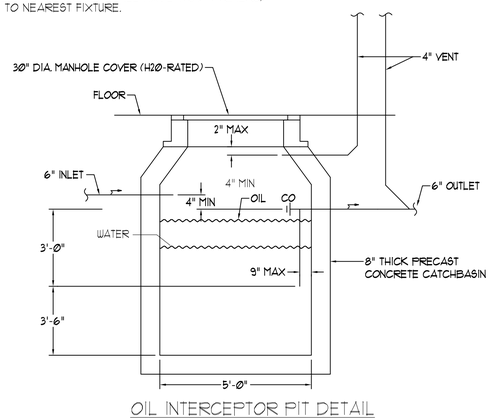
WATER HEATER PIPING SYSTEM SCHEMATIC

NTS



WATER ENTRANCE DETAIL

NTS



OIL INTERCEPTOR PIT DETAIL

NTS

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STATE OF MAINE
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STATE OF MAINE · STEPHEN D. DUBE · No. 13807 · REGISTERED PROFESSIONAL ENGINEER

	SIGNATURE	P.E. NUMBER	DATE
		3807	02/16/18

PROJ. MANAGER	JOEL KITTREDGE
DESIGN-DETAILED	SPD
CHECKED-REVIEWED	SPD
DESIGN2-DETAILED2	-
DESIGN3-DETAILED3	-
REVISIONS 1	-
REVISIONS 2	-
REVISIONS 3	-
REVISIONS 4	-
FIELD CHANGES	-

DATE	BY
01/11/18	SPD
01/11/18	SPD
-	-
-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
MAINTENANCE & OPERATIONS BUILDING
PORTLAND CUMBERLAND COUNTY

MECHANICAL DETAILS

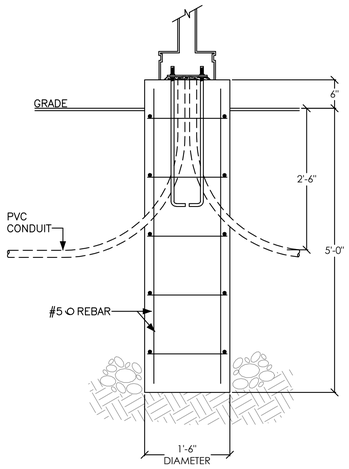
SHEET NUMBER

M5

ELECTRICAL SYMBOLS

SYMBOL	DESCRIPTION
	125V, 20A, DUPLEX GROUNDED RECEPTACLE GFI = Ground Fault Interrupt AC = 6" Above Counter or Sink WP = Weatherproof
	QUAD RECEPTACLE
50A	250V, SINGLE GROUNDED RECEPTACLE Indicates Ampere Rating
WN	SIMPLEX DATA NETWORK OUTLET WN - Indicates Wireless Network Outlet
	DUPLEX DATA NETWORK OUTLET
FB1	RECESSED FLOOR BOX (Contents May Vary, See Plan for Details)
TV	CABLE TELEVISION OUTLET
J	JUNCTION BOX
	ELECTRICAL PANELBOARD (See Plan for Details and Mounting)
HC	HANDICAP DOOR OPERATOR
DH	DOOR HOLDER
30cd *	FIRE ALARM AUDIO/VISUAL INDICATOR Indicates Visual Only, No Horn Candela Rating
F	FIRE ALARM PULL STATION
H	FIRE ALARM HEAT DETECTOR
S D	FIRE ALARM SMOKE DETECTOR Indicates Duct Mounted
K	FIRE ALARM KNOX BOX
TS	FIRE ALARM TAMPER SWITCH
FS	FIRE ALARM FLOW SWITCH
M	CLG MTD LIGHTING CONTROL MOTION SENSOR
* M	CLG MTD INTRUSION DETECTION MOTION SENSOR
* CR	DOOR ENTRY CARD READER
* REX	REQUEST TO EXIT DOOR ENTRY DEVICE
* DC	DOOR ENTRY CONTACT
*	CEILING MOUNTED SURVEILLANCE CAMERA
* BG	CEILING MOUNTED BREAK-GLASS SENSOR
P1 3	HOMERUN TO PANELBOARD Indicates No. of Wires, Excluding Ground Circuit No. Panelboard Designation
S	LIGHT SWITCH
D	DIMMER

* ITEM PROVIDED UNDER SEPARATE OWNER'S CONTRACT BY GALAXY INTEGRATED TECHNOLOGIES

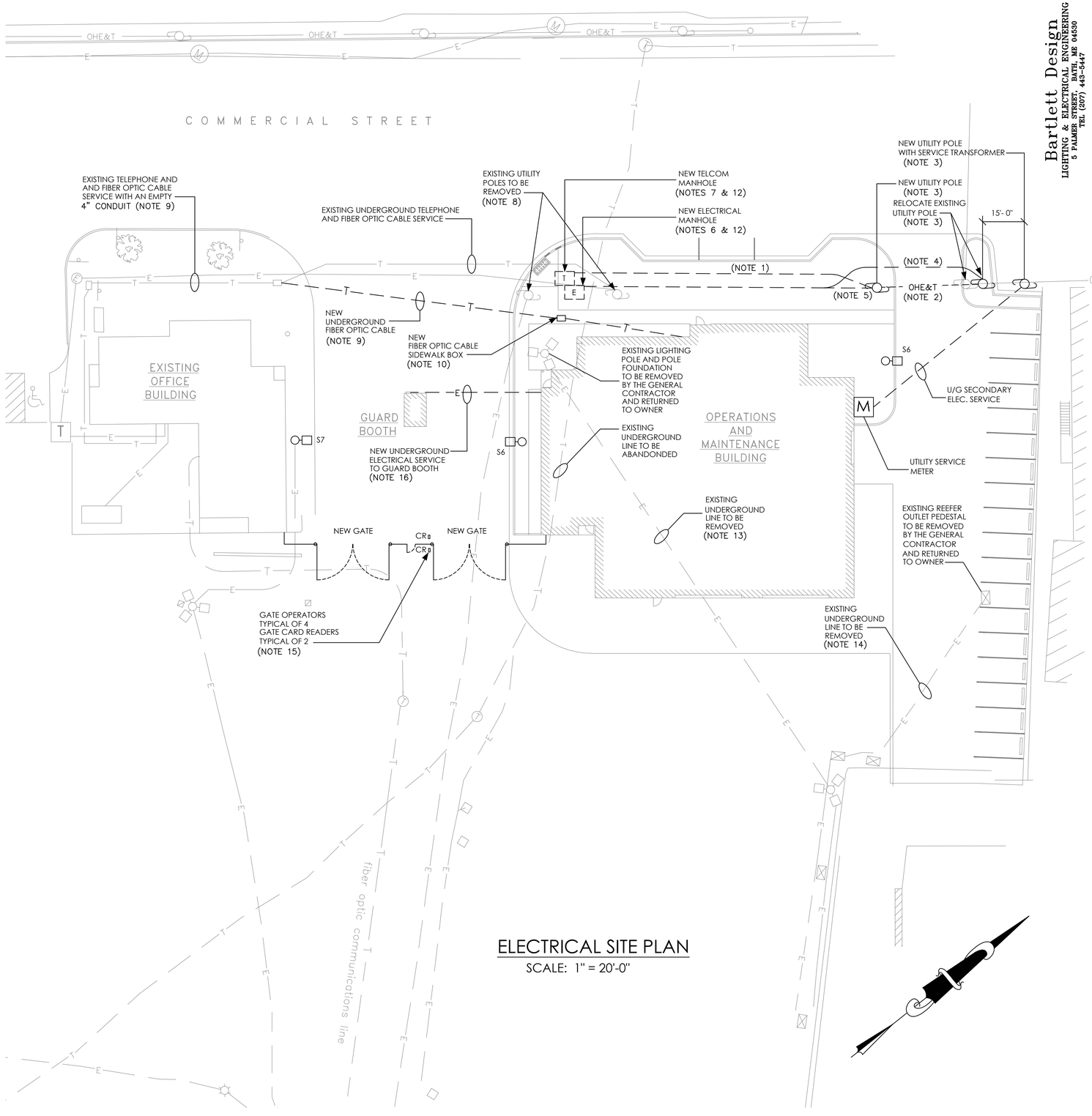


TYPE S6 LIGHT POLE FOUNDATION BASE DETAIL

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

SITE PLAN NOTES

1. WHERE INDICATED ON THE PLAN, ARRANGE WITH FAIRPOINT AND OXFORD NETWORKS TO EXTEND THE EXISTING OVERHEAD TELEPHONE AND FIBER OPTIC SERVICES UNDERGROUND FROM A NEW UTILITY POLE TO A NEW TELCOM MANHOLE. PROVIDE A 4" PVC CONDUIT FOR EACH SERVICE EXTENSION (SEE NOTE 7). ALSO PROVIDE ONE 4" SPARE PVC CONDUIT.
2. WHERE INDICATED ON THE PLAN, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY, FAIRPOINT, AND OXFORD NETWORKS TO EXTEND NEW OVERHEAD UTILITIES BETWEEN THE RELOCATED EXISTING UTILITY POLE AND A NEW UTILITY POLE.
3. WHERE INDICATED ON THE PLAN, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO PROVIDE NEW UTILITY POLES AND TO RELOCATE AN EXISTING UTILITY POLE.
4. WHERE INDICATED ON THE PLAN, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO PROVIDE NEW UNDERGROUND PRIMARY SERVICE EXTENSION TO SERVE THE EXISTING TRANSFORMER LOCATED AT THE PIER (SEE NOTE 6). PROVIDE TWO 5" PVC CONDUITS.
5. WHERE INDICATED ON THE PLAN, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO PROVIDE NEW UNDERGROUND PRIMARY SERVICE EXTENSION TO SERVE THE EXISTING TRANSFORMER LOCATED AT THE ADMINISTRATION BUILDING (SEE NOTE 6). PROVIDE TWO 5" PVC CONDUITS.
6. WHERE INDICATED ON THE PLAN, PROVIDE A NEW ELECTRICAL MANHOLE. ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO MAKE CONNECTIONS WITHIN THE MANHOLE TO JOIN THE NEW SERVICE EXTENSION PRIMARY CABLES TO THE EXISTING SERVICE CABLES THAT SERVE THE EXISTING TRANSFORMER AT THE PIER. AND THE EXISTING TRANSFORMER AT THE ADMINISTRATION BUILDING. PROVIDE 5" PVC CONDUITS AS REQUIRED BETWEEN THE NEW ELECTRICAL MANHOLE AND THE EXISTING UTILITY POLE BEING REMOVED. THE EXISTING UNDERGROUND CONDUITS ARE CONCRETE ENCASED AND WILL REQUIRE CUTTING THE CONCRETE TO FACILITATE THE CONNECTION.
7. WHERE INDICATED ON THE PLAN, PROVIDE A NEW TELCOM MANHOLE. ARRANGE WITH FAIRPOINT AND OXFORD NETWORKS TO MAKE CONNECTIONS WITHIN THE MANHOLE TO JOIN THE NEW SERVICE EXTENSION TELEPHONE AND FIBER OPTIC CABLES TO THE EXISTING SERVICE CABLES THAT SERVE THE ADMINISTRATION BUILDING. PROVIDE 4" PVC CONDUITS AS REQUIRED BETWEEN THE NEW TELCOM MANHOLE AND THE EXISTING UTILITY POLE BEING REMOVED. THE EXISTING UNDERGROUND CONDUITS ARE CONCRETE ENCASED AND WILL REQUIRE CUTTING THE CONCRETE TO FACILITATE THE CONNECTION.
8. WHERE INDICATED ON THE PLAN, ARRANGE WITH THE CENTRAL MAINE POWER COMPANY TO REMOVE EXISTING UTILITY POLES.
9. WHERE INDICATED ON THE PLAN, PROVIDE A NEW FIBER OPTIC CABLE TO BE INSTALLED IN AN EXISTING UNDERGROUND 4" CONDUIT THAT PRESENTLY RUNS FROM THE IT ROOM IN THE ADMINISTRATION BUILDING TO AN IN-GOUND SIDEWALK BOX ADJACENT TO COMMERCIAL STREET. EXTEND THE FIBER OPTIC CABLE CONTINUOUSLY FROM THE EXISTING PULL BOX IN A NEW 4" UNDERGROUND CONDUIT TO ROOM 108 IN THE MAINTENANCE AND OPERATIONS BUILDING THROUGH A NEW IN-GROUND SIDEWALK BOX (SEE NOTE 10). THE CABLE WILL BE CONNECTED BY THE OWNER'S TECHNOLOGY CONTRACTOR GALAXY INTEGRATED TECHNOLOGIES TO EXISTING EQUIPMENT IN THE IT ROOM. IN THE EXISTING ADMINISTRATION BUILDING AND TO NEW EQUIPMENT IN THE MAINTENANCE AND OPERATIONS BUILDING. LEAVE 20 FEET OF SLACK CABLE AT EACH CABLE END.
10. WHERE INDICATED ON THE PLAN, PROVIDE A NEW IN-GROUND SIDEWALK BOX TO FACILITATE THE INSTALLATION OF A NEW FIBER OPTIC CABLE. LOCATE THE BOX TO MAKE A CONNECTION TOTHE EXISTING UNDERGROUND EMPTY 4" CONDUIT FROM THE EXISTING ADMINISTRATION BUILDING. PROVIDE A NEW UNDERGROUND 4" PVC CONDUIT FROM THE SIDEWALK BOX TO ROOM 108 IN THE MAINTENANCE AND OPERATIONS BUILDING.
11. CIRCUIT THE NEW TYPE S6 EXTERIOR POLE LIGHTS TO PANEL P1 #58 WITH 2#10, 1#12G, IN A 1" UNDERGROUND CONDUIT.
12. COORDINATE THE EXACT LOCATION OF THE NEW MANHOLES AND ASSOCIATED UNDERGROUND UTILITY LINES WITH THEPROJECT REPRESENTATIVE IN ADVANCE OF EXCAVATION.
13. WHERE INDICATED ON THE PLAN, DISCONNECT AND REMOVE THE EXISTING WIRING THAT PRESENTLY SERVES THE HIIGH-MAST LIGHT POLE TO BE REMOVED. ALSO REMOVE THE EXISTING UNDERGROUND CONDUIT.
14. WHERE INDICATED ON THE PLAN, DISCONNECT AND REMOVE THE EXISTING WIRING THAT PRESENTLY SERVES THE REEFER OUTLET PEDESTAL TO BE REMOVED. ALSO REMOVE THE EXISTING UNDERGROUND CONDUIT.
15. CIRCUIT THE NEW GATE OPERATORS TO PANEL P1 #26 AND #28 WITH 2#10, 1#12G, IN A 1" UNDERGROUND CONDUIT TO EACH OPERATOR. ALSO PROVIDE A 4-PAIR CAT6 CABLE IN A 1" UNDERGROUND CONDUIT TO EACH CARD READER.
16. PROVIDE A NEW UNDERGROUND FEEDER TO THE GUARD BOOTH PANEL CONNECTED TO PANEL MDP #5 WITH 4#2, 1#8G, IN A 2-1/2" CONDUIT. ALSO PROVIDE A 4-PAIR CAT6 CABLE IN A 1" UNDERGROUND CONDUIT TO THE GUARD BOOTH.



ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

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STATE OF MAINE · LAWRENCE E. BARTLETT No. 7928 · LICENSED PROFESSIONAL ENGINEER

Lawrence E. Bartlett
SIGNATURE
7928
P.E. NUMBER
02/16/18
DATE

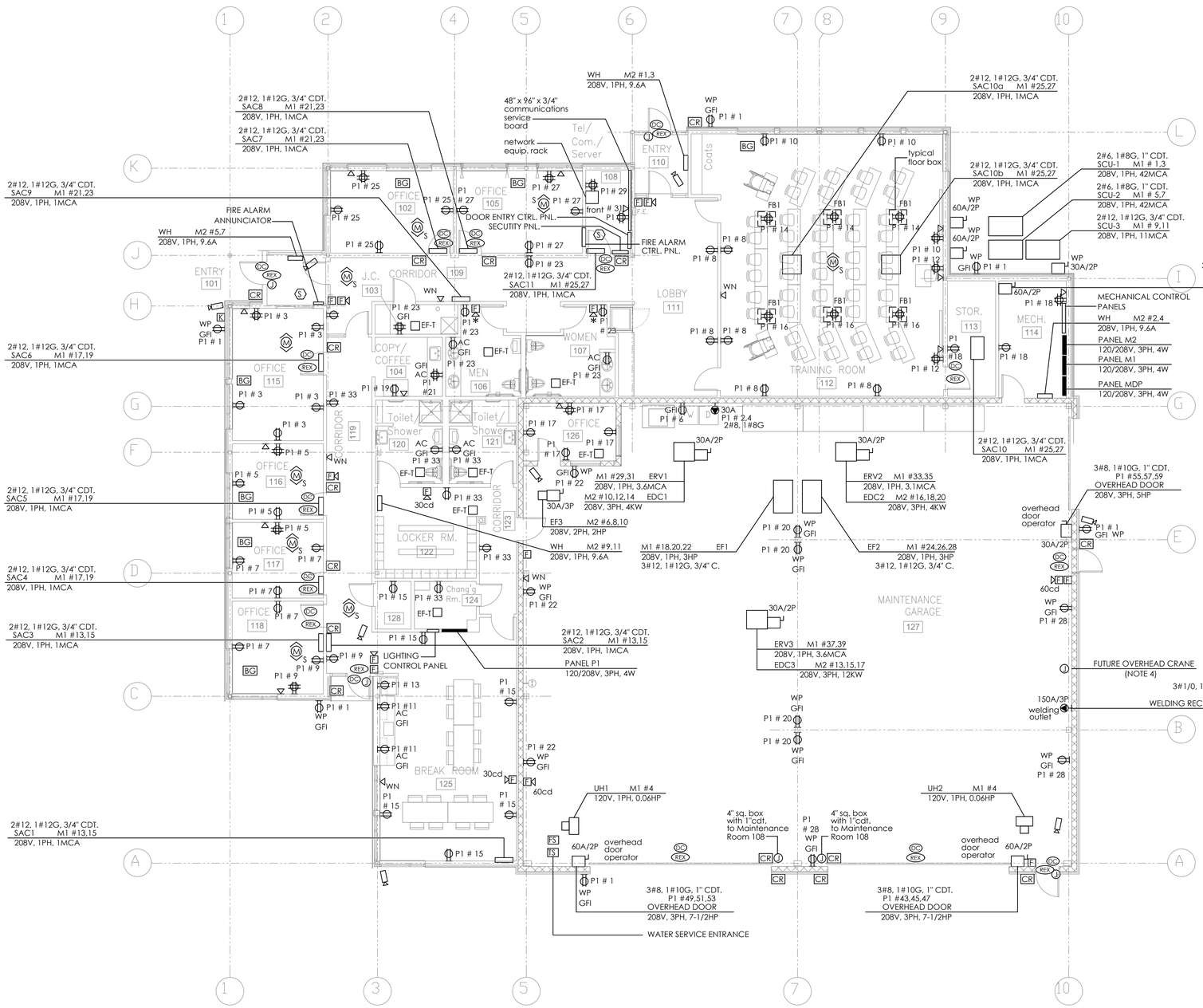
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CHECKED-REVIEWED	02-16-18	LEB
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DESIGN5-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

PORTLAND INTERNATIONAL MARINE TERMINAL
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PORTLAND

ELECTRICAL SITE PLAN

SHEET NUMBER

E1.0



POWER PLAN
SCALE: 1/8" = 1'-0"

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STATE OF MAINE
LAWRENCE E. BARTLETT
No. 7928
LICENSED
PROFESSIONAL ENGINEER

	BY	DATE
Lawrence E. B		
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7928	LEB	02-16-18
P.E. NUMBER	LEB	02-26-18
-	LEB	-
-		-
-		-
02/26/18		-
DATE		-

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CHECKED-REVIEWED	LEB	
DESIGNED-DETAILED2	LEB	
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FIELD CHANGES	-	

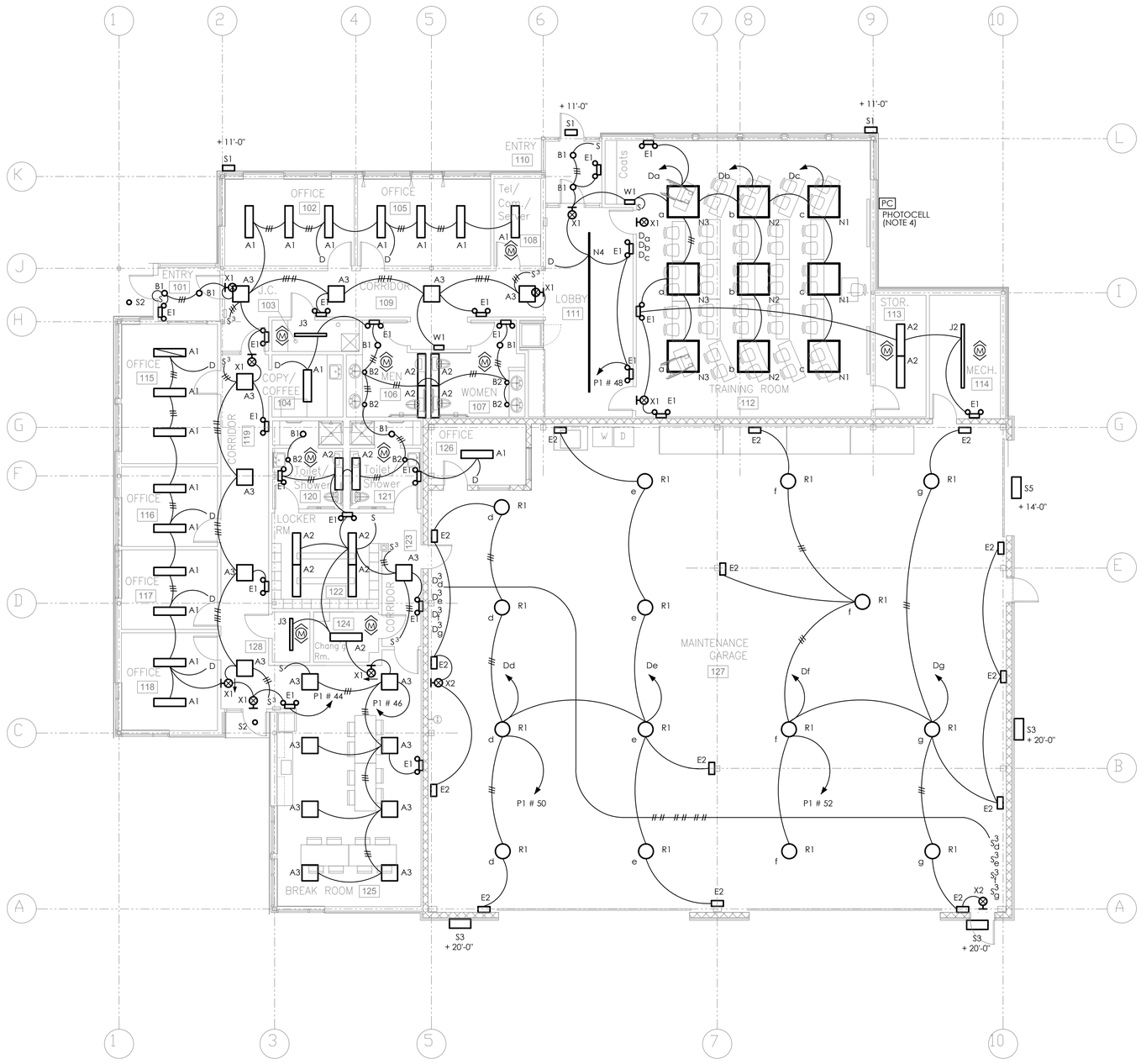
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PORTLAND CUMBERLAND COUNTY

POWER PLAN

SHEET NUMBER

E1.1

56 OF 58



LIGHTING PLAN
SCALE: 1/8" = 1'-0"

NOTES:
1. COORDINATE EXACT LOCATIONS OF CEILING LIGHTS WITH ARCHITECTURAL REFLECTED CEILING PLANS.
2. CIRCUIT TYPES S1, S3, AND S4 BUILDING MOUNTED EXTERIOR LIGHTS TO PANEL P1 #56.
3. SEE SHEET E1.1 FOR LOCATIONS OF ELECTRICAL PANELBOARDS.
4. PROVIDE A PHOTOCELL TO BE INSTALLED WHERE INDICATED AT A HEIGHT OF 10'-0" ABOVE GRADE. WIRE THE PHOTOCELL TO THE LIGHTING CONTROL PANEL IN MECHANICAL ROOM 114.

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DATE

	DATE	BY
	01-12-18	LEB
	02-16-18	LEB
	02-26-18	LEB
	- -	-
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	- -	-
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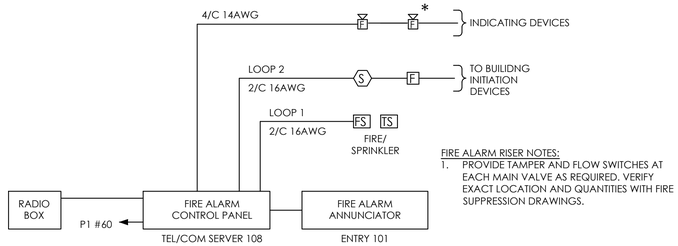
PROJ. MNGR. JOEL KITTREDGE

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CHECKED-REVIEWED	LEB
DESIGN2-DETAILED2	LEB
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REVISIONS 1	-
REVISIONS 2	-
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FIELD CHANGES	-

PORTLAND INTERNATIONAL MARINE TERMINAL
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PORTLAND

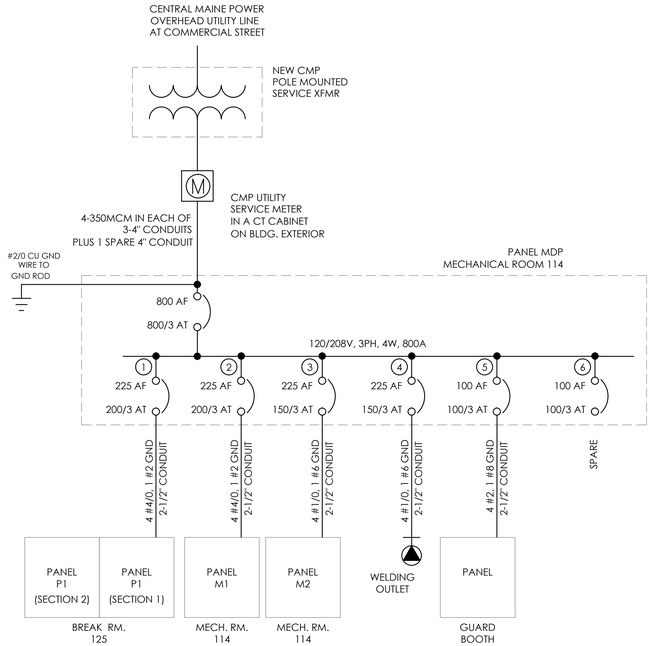
LIGHTING PLAN

SHEET NUMBER
E1.2



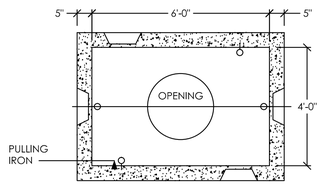
FIRE ALARM RISER NOTES:
1. PROVIDE TAMPER AND FLOW SWITCHES AT EACH MAIN VALVE AS REQUIRED. VERIFY EXACT LOCATION AND QUANTITIES WITH FIRE SUPPRESSION DRAWINGS.

FIRE ALARM RISER DIAGRAM
NO SCALE

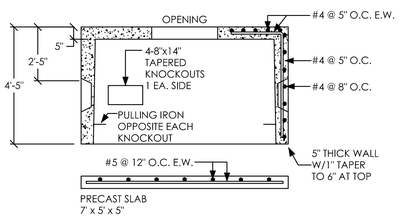


ELECTRICAL SINGLE LINE DIAGRAM
NO SCALE

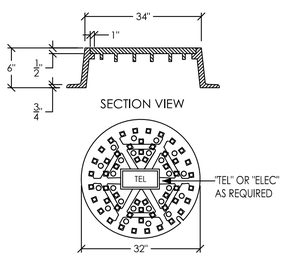
MANHOLE DETAIL NOTES:
1. CONCRETE: 4,000 PSI @ 28DAYS.
2. USE 32IN COVER AND FRAME MARKED TEL AS REQUIRED. MINIMUM ONE COURSE BRICK TO GRADE.
3. MOUNTINGS FOR CABLE RACKS ETC, CAST IN WALL BY FUTURE PLANS OR FIELD LOCATED.
4. SPLICE BOX SHALL BE SET ON A SUITABLE GRAVEL BASE.
5. REINFORCING: GRADE 60 REBAR:
   -REINFORCING PLACED IN CENTER IF CONCRETE SLAB, WALLS, & ROOF.
   -#4 @ 5IN O.C. VERTICAL IN WALLS, CANTILEVERED OVER TOP OF OPENING
   -#4 @ 8IN O.C. HORIZONTALLY IN WALLS
   -4 PIECES #4 SURROUNDING OPENING
   -#4 @ 5IN O.C. EACH WAY ON TOP
6. MANHOLE FRAMES AND COVERS ARE TO BE MACHINED TO A SMOOTH FIT AND SHALL BE OF GRAY CAST IRON.
7. COVER SHALL HAVE DIAMOND TOP SURFACE.



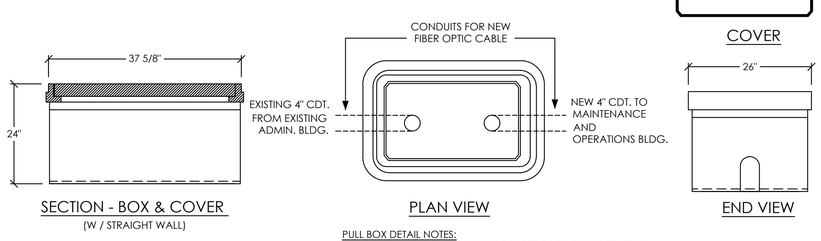
PLAN VIEW



SECTION VIEW



MANHOLE DETAIL
NO SCALE



PULL BOX DETAIL NOTES:
1. BOXES AND COVERS SHALL BE RATED FOR VEHICLE TRAFFIC.
2. PROVIDE 8" GRAVEL BASE MINIMUM UNDER ALL BOXES.
3. LOCATE BOX TO INTERCEPT EXISTING UNDERGROUND 4" CONDUIT FROM EXISTING ADMINISTRATION BUILDING.

IN-GROUND BOX DETAIL
NO SCALE

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REVISIONS 3	--	--
REVISIONS 4	--	--
FIELD CHANGES	--	--

PORTLAND INTERNATIONAL MARINE TERMINAL
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CUMBERLAND COUNTY
PORTLAND

ELECTRICAL DETAILS

SHEET NUMBER

E1.3