

# PATIENT CARE CLINIC

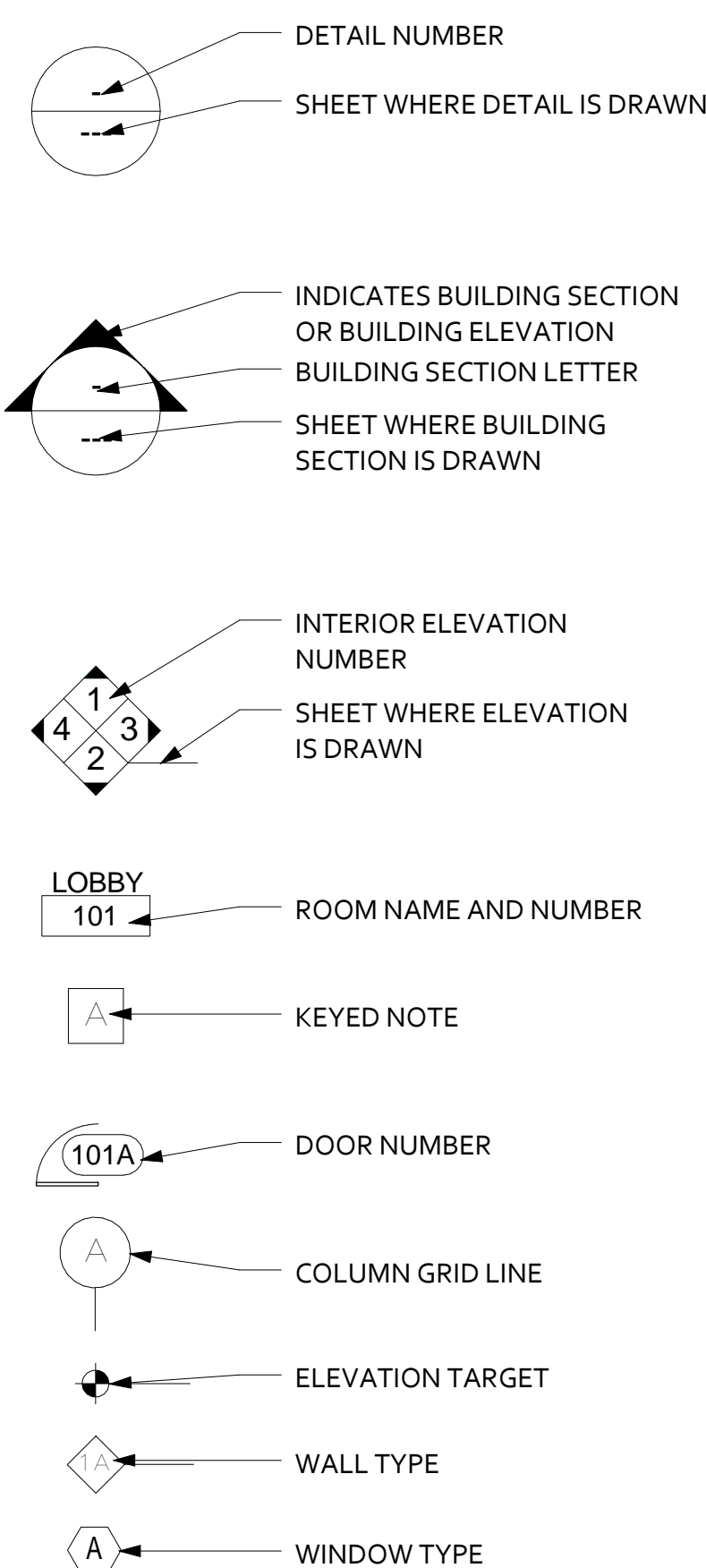
## UNIVERSITY OF NEW ENGLAND

### PORTLAND MAINE

#### LIST OF DRAWINGS

T1.00 TITLE SHEET		ARCHITECTURAL		MECHANICAL & PLUMBING		ELECTRICAL	
T1.01	EGRESS PLANS/ CODE REVIEW	A1.00	BASEMENT FLOOR PLAN	F1.00	LEGEND AND SCHEDULES	E0.01	ELECT. LEGEND, NOTES & SCHED
T1.02	EGRESS PLANS/ CODE REVIEW	A1.01	1ST FLOOR PLAN	F1.01	BASEMENT FLOOR PLAN	E1.01	BASEMENT PLAN
T1.03	WALL TYPES	A1.02	2ND FLOOR PLAN	F1.02	FIRST FLOOR PLAN	E1.02	1ST FLOOR PLAN
C100	EXISTING CONDITIONS	A1.03	ROOF PLAN	F1.03	SECOND FLOOR PLAN	E1.03	SECOND FLOOR PLAN
C-101	SITE PLAN	A2.00	EAST ELEVATION	F2.00	SPECIFICATIONS	E1.04	ROOF PLAN
C-102	GRADING AND DRAINAGE	A2.01	WEST ELEVATION	H0.01	LEGEND AND SCHEDULES	E2.01	POWER ONE-LINE DIAGRAM
C-103	UTILITY PLAN	A2.02	N & S ELEVATIONS	H1.00	HVAC - BASEMENT FLOOR PLAN	E2.02	PANELBOARD SCHED.
C-104	LANDSCAPE PLAN	A3.00	BUILDING SECTIONS	H1.01	HVAC - 1ST FLOOR PLAN	E2.03	PANELBOARD SCHED.
C-300	EROSION CONTROL AND SITE DETAILS	A3.01	WALL SECTIONS	H1.02	HVAC - 2ND FLOOR PLAN	FA0.01	FIRE ALARM, LEGEND, NOTES & ONE-LINE
C-301	SITE DETAILS	A3.02	WALL SECTIONS	H1.03	HVAC - ROOF PLAN	FA1.01	BASEMENT FIRE ALARM PLAN
C-302	SITE DETAILS	A3.03	WALL SECTIONS	H2.00	HVAC - SCHEDULES	FA1.02	1ST FLOOR FIRE ALARM PLAN
S1.0	GENERAL NOTES	A3.04	WALL SECTIONS	P1.00	LEGEND AND SCHEDULES	FA1.03	2ND FLOOR FIRE ALARM PLAN
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S1.2	FIRST FLOOR FOUNDATION	A3.06	ELEVATOR SECTIONS	P1.02	FIRST FLOOR PLAN		
S1.3	2ND FLOOR FRAMING	A3.07	STAIR A FLOOR PLANS	P1.03	SECOND FLOOR PLAN		
S1.4	ROOF FRAMING	A4.00	STAIR A SECTION	P1.04	ROOF PLAN		
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A7.00	ALEXANDER PLANS						
A7.01	ALEXANDER DETAILS						

#### LEGEND



#### GENERAL NOTES

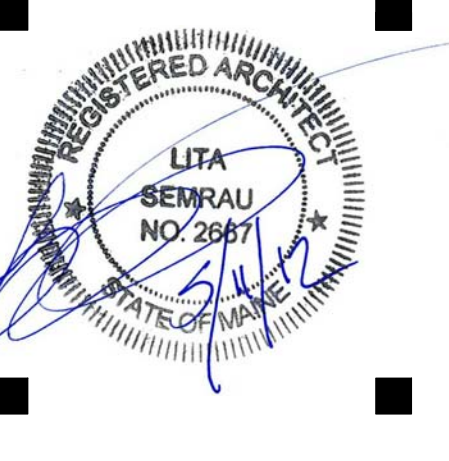
- ALL MATERIALS, COMPONENTS, AND WORK ARE NEW AND SHALL BE PROVIDED IN THIS CONTRACT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
- ALL WORK INCLUDED IN THIS CONTRACT SHALL CONFORM TO ALL STATE, NATIONAL AND OTHER CODES AND ORDINANCES WHICH APPLY TO THIS PROJECT.
- IT IS THE INTENT AND MEANING OF THESE DRAWINGS THAT THE CONTRACTOR AND EACH SUBCONTRACTOR PROVIDE ALL LABOR, MATERIALS, TRANSPORTATION, SUPPLIES, EQUIPMENT, ETC. TO OBTAIN A COMPLETE JOB TO INDUSTRY STANDARD IN A PROFESSIONAL WORKMANLIKE MANNER.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCY(IES) IMMEDIATELY TO THE ARCHITECT. AT THE END OF EACH WORKING DAY, THE CONSTRUCTION SITE SHALL BE LEFT IN A NEAT AND CLEAN MANNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS WHICH ARE REQUIRED FOR THE SATISFACTORY COMPLETION OF THE WORK AND FOR PAYING ALL FEES, HOOK UP CHARGES, ETC. (STATE FIRE MARSHAL PERMIT BY OWNER.)
- THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE OWNER FOR THE SEQUENCE AND TIMING OF OPERATIONS PRIOR TO COMMENCING WORK. AREAS FOR STAGING ETC. MUST BE APPROVED BY THE OWNER.
- THE CONTRACTOR SHALL DISPOSE OF AND /OR RECYCLE ANY CONSTRUCTION DEBRIS FROM THE PROJECT SITE AS REQUIRED BY THE STATE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING DISPOSAL PERMITS WHICH ARE REQUIRED. CONSTRUCTION DEBRIS FROM THE PROJECT SITE SHALL BE DISPOSED OF IN A STATE APPROVED LANDFILL.
- ROOM NUMBERS ON THE DRAWING ARE FOR COORDINATION PURPOSES AND DO NOT NECESSARILY CORRESPOND TO ACTUAL ROOM NUMBERS.
- DUTY OF COOPERATION: RELEASE OF THESE PLANS CONTEMPLATES FURTHER COOPERATION AMONG THE OWNER, THE CONTRACTOR, THE ARCHITECT AND HIS CONSULTANTS. DESIGN AND CONSTRUCTION ARE COMPLEX. ALTHOUGH THE ARCHITECT AND HIS CONSULTANTS HAVE PERFORMED THEIR SERVICES WITH DUE CARE AND DILIGENCE, THEY CANNOT GUARANTEE PERFECTION. COMMUNICATION IS IMPERFECT, AND EVERY CONTINGENCY CANNOT BE ANTICIPATED. ANY AMBIGUITY OR DISCREPANCY DISCOVERED BY THE USE OF THESE PLANS SHALL BE REPORTED IMMEDIATELY TO THE OWNER. FAILURE TO NOTIFY THE OWNER COMPOUNDS MISUNDERSTANDING AND MAY INCREASE CONSTRUCTION COSTS. A FAILURE TO COOPERATE BY A SIMPLE NOTICE TO THE OWNER SHALL RELIEVE THE OWNER AND THE ARCHITECT FROM RESPONSIBILITY FROM ALL COSTS.
- THESE DRAWINGS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE GENERAL CONTRACTOR SHALL PROVIDE FOR THE SAFETY, CARE OF UTILITIES AND ADJACENT PROPERTIES DURING CONSTRUCTION, AND SHALL COMPLY WITH STATE AND FEDERAL SAFETY REGULATIONS.
- ALL MATERIALS AND WORK SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FROM THE DATE OF FINAL PAYMENT.
- ALL DOORS SHOULD HAVE ADA COMPLIANT LEVER HANDLES.
- SIGNAGE BY OWNER AND TO MEET ALL ADA REQUIREMENTS INCLUDING THE ONES INDICATED ON ADA BLOCK UNLESS NOTED OTHERWISE.
- ALL KNOWN HAZARDOUS MATERIALS REMOVALS REQUIRED FOR THE SAFE IMPLEMENT OF THIS PROJECT HAVE BEEN REMOVED PRIOR TO THIS CONTRACT. IF ADDITIONAL SUSPECT MATERIALS ARE UNCOVERED DURING DEMOLITION, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IMMEDIATELY OR TESTING AND /OR REMOVAL. ANY ASBESTOS REMOVAL NECESSARY FOR THE SAFE IMPLEMENTATION OF THIS PROJECT SHALL BE CONTRACTED DIRECTLY BY THE OWNER. IF NECESSARY, THE CONTRACTOR SHALL COORDINATE WITH THESE EFFORTS IF ENCOUNTERED.

#### TYPICAL ABBREVIATIONS

&	AND	ELEC	ELECTRIC
ANG	ANGLE	ELEV	ELEVATION
@	AT	EMP	EMPLOYEE
ADA	AMERICAN DISABILITIES ACT	ENCL	ENCLOSE
ADJ	ADJUST OR ADJACENT	ENT	ENTRY or ENTRANCE
AFF	ABOVE FINISH FLOOR	EQ	EQUAL
ALUM	ALUMINUM	EQUIP	EQUIPMENT
ARCH	ARCHITECT OR ARCHITECTURAL	EWC	ELECTRIC WATER COOLER
AVG	AVERAGE	EXH	EXHAUST
BD	BOARD	EXIST	EXISTING
BLDG	BUILDING	EXP	EXPANSION
BLKG	BLOCKING	EXT	EXTERIOR
BM	BEAM	FBO	FURNISHED BY OWNER
BO	BOTTOM OF	FDN	FOUNDATION
CL	CENTER LINE	FF	FINISH FLOOR
CAB	CABINET	FFE	FINISH FLOOR ELEVATION
CLG	CEILING	FIN	FINISH
CLR	CLEAR	FIXT	FIXTURE
CMU	CONCRETE MASONRY UNIT	FLG	FLOORING
CNTR	COUNTER	FLR	FLOOR
COL	COLUMN	FLUOR	FLUORESCENT
CONC	CONCRETE	FT	FOOT or FEET
CONT	CONTINUOUS	GA	GAUGE
COORD	COORDINATE	GALV	GALVANIZED
COR	CORNER	GC	GENERAL CONTRACTOR
CPT	CARPET	GL	GLASS
CW	COLD WATER	GWB	GYPSUM WALL BOARD
DBL	DOUBLE	HGT	HEIGHT
DEG	DEGREE	HM	HOLLOW METAL
DHW	DOMESTIC HOT WATER	HORIZ	HORIZONTAL
DIA	DIAMETER	HR	HOUR
DIM	DIMENSION	HVAC	HEATING, VENTILATION & AIR CONDITION
DN	DOWN	IBC	INSTALLED BY CONTRACTOR
DR	DOOR	IN	INCHES
DS	DOWN SPOUT	INSUL	INSULATION
DW	DISH WASHER	INT	INTERIOR
DWG	DRAWING	JT	JOINT
E	EAST	LAM	LAMINATED
EA	EACH	LB	POUNDS
EJ	EXPANSION JOINT	LF	LINEAR FEET
LL	LIVE LOAD	RO	ROUGH OPENING
LWC	LIGHT WEIGHT CONCRETE	RM	ROOM
MAX	MAXIMUM	RTU	ROOF TOP UNIT
MECH	MECHANICAL	S	SOUTH
MFG	MANUFACTURE	SAT	SUSPENDED ACOUSTICAL TILE
MH	MAN HOLE	SCHED	SCHEDULE
MIL	MILLIMETER	SD	STORM DRAIN
MIN	MINIMUM	SECT	SECTION
MSB	MAIN SWITCH BOARD	SF	SQUARE FEET
MTD	MOUNTED	SIM	SIMILAR
MTL	METAL	SP	SHELL PACKAGE
MW	MICROWAVE	SPEC	SPECIFICATIONS
N	NORTH	SS	STAINLESS STEEL
N/A	NOT APPLICABLE	SQ	SQUARE
NAT	NATURAL	STD	STANDARD
NIC	NOT IN CONTRACT	STL	STEEL
#	NUMBER	STRUC	STRUCTURAL
NTS	NOT TO SCALE	SUSP	SUSPENDED
OC	ON CENTER	SYMM	SYMMETRICAL
OH	OVER HEAD	T	THERMOSTAT
PAR	PARALLEL	T & B	TOP AND BOTTOM
P/C	PRECAST CONCRETE	TEL	TELEPHONE
PERF	PERFORATED	TGL	TEMPERED GLASS
PERP	PERPENDICULAR	THICK	THICKNESS
PL	PLATE	TI	TENANT IMPROVEMENTS
P-LAM	PLASTIC LAMINATE	T.O.	TOP OF
PLAS	PLASTER	TOJ	TOP OF JOIST
PLBG	PLUMBING	TOS	TOP OF STEEL
PLYWD	PLYWOOD	TYP	TYPICAL
PSI	POUNDS PER SQUARE INCH	UL	UNDERWRITERS LABORATORIES, INC
PT	PRESSURE TREATED	UNO	UNLESS NOTED OTHERWISE
PTD	PAINT	VB	VINYL BASE
QTY	QUANTITY	VCT	VINYL COMPOSITE TILE
R	RISER or RADIUS	VERT	VERTICAL
RAD	RADIUS	VIF	VERIFY IN FIELD
RCP	REFLECTED CEILING PLAN	W	WIDE or WEST
RD	ROOF DRAIN	WD	WOOD
REF	REFRIGERATOR	WC	WATER COOLER
REINF	REINFORCED	W/	WITH
REQD	REQUIRED	W/O	WITHOUT
		X	EXISTING



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REVISIONS		
No.	Description	Date

**PERMIT SET**

**UNIVERSITY OF NEW ENGLAND**  
PORTLAND, MAINE

**PATIENT CARE CENTER**  
EXTERIOR SHELL

**TITLE SHEET**

Project Number **12502**  
Date **05.10.12**  
Drawn by **JAP/MAC/JTC**  
Checked by **LAS**

**T1.00**  
Scale **As indicated**

5/11/2012 3:37:55 PM



**Code Review – NFPA 2009**

Please note: This code review was performed in conjunction with a preliminary tenant fit-out. Some of the items below may not apply to the Building Shell. See sheet T1.02 for preliminary tenant fit-out layout.

**Chapter 6 – Classification of Occupancy and Hazard of Contents**

**Section 6.1.2.1** – The Simulation classroom and lab, on the first level has an occupant load of 54 people and is thereby defined as Assembly.  
**Section 6.1.11.1** – Per the commentary, the remainder of this building (except for mechanical and storage areas) is defined as a Business occupancy.  
**Section 6.1.14.2.3** – Due to the Simulation classroom having an Occupant Load of over 50 people, it is required to be separated by a 1-hour rated assembly per Table 6.1.14.4.1(b).

**Chapter 7 – Means of Egress**

**Section 7.1.3.1** – Corridors used as exit access are required to be 1-hour rated per this section. However, per subsection (2) of this section, they are not required to be rated per Section 38.3.6(3).  
**Section 7.1.3.2.1** – The two exits that serve this building are required to be 1-hour rated (connecting three stories or less).  
**Section 7.1.3.2.2** – The exit enclosures provide continuous protected path of travel to an exit discharge.  
**Section 7.2.1.2.4** – Door openings in the Means of Egress shall be 36" wide (32" min. clear width). Also, per Section 7.3.3 (Table 7.3.3.1), the door components shall provide for 0.2 inches per occupant (345 total load / 173 per floor / 87 per exit door):  $87 \text{ people} \times .2" = 17.4"$  (use 32" clear min.).  
 Note: Door hardware will adhere to all code requirements and is described in the specifications.  
**Section 7.2.2.1.2(B)** – Due to the occupant loads being greater than 50, the minimum stair widths are 44" per Table 7.2.2.2.1.2(B) for occupant loads less than 2,000 people.  
 Note: Maximum risers shall be 7", minimum tread depths are 11", and there will be less than 12'-0" between landings (per Table 7.2.2.1.1(a)).  
**Section 7.2.2.3.2.4** – Landings shall be 48" wide (in the direction of travel).  
**Section 7.2.2.4.1.1** – Handrails will be provided on both sides of the stairs and conform to Section 7.2.2.4.4.  
**Section 7.2.2.4.5.2** – Guards shall be 42" high and conform to Section 7.2.2.4.5.3.  
**Section 7.2.2.5.1.1** – Stairs shall be enclosed as required (also see Section 7.1.3.2).  
**Section 7.2.2.5.2.2** – Construction of the stair enclosures shall extend to the roof line.  
**Section 7.2.2.5.4.2** – Signage for the lower level, showing the direction to the level of exit discharge will comply with this section.  
**Section 7.2.5** – Exterior ramps shall comply with all dimensional requirements of this section.  
**Section 7.2.12.2** – An area of refuge is provided in one of the stairwells (also see Section 7.5.4.4).  
**Section 7.2.13** – This section does not apply since the elevators in this building are not considered means of egress.

**Section 7.3.1.2** – The occupant load is as follows (per Table 7.3.1.2):

- Basement Level: 2,423 s.f. / 500 s.f. per person = 5 persons
- First Level:
  - Business Use: 11,965 s.f. / 100 s.f. per person = 120 persons
  - Utility/Storage Use: 1,463 s.f. / 500 s.f. per person = 3 persons
  - Assembly Use: 2,431 s.f. (designed for 54 persons) = 54 persons
- Second Level:
  - Business Use: 15,679 s.f. / 100 s.f. per person = 157 persons
  - Utility/Storage Use: 160 s.f. / 500 s.f. per person = 1 person
- Total Occupant Load: 340 persons

**Section 7.3.3.1** – The egress capacity shall be 3" per occupant for the stairs. Each stair to serve a maximum of 79 persons (158 total occupant load on the second floor, divided by 2). Therefore, 79 persons x 3" per person = 23.7" (use minimum width of 44" per Section 7.2.2.2.1.2(B)).

**Section 7.4.1.1** – There are two means of egress provided from the first level and second level (2 means of egress are required).  
 Section 7.4.1.1(1) – There is a single exit out of the basement level per 38.2.4.3.

**Section 7.5.1.3.3** – The diagonal distance of the building is 205'. Because the building is sprinkled, the minimum distance between exits shall be 68'-4". The actual distance between exits is 159'-0" on the First Level and 161'-4" on the Second Level.

**Section 7.5.4.1.1** – Only one accessible means of egress from the second floor is provided. This exit stairwell is accessible from all areas of the second floor within the allowable travel distance per Section 38.2.6.1 (300').

**Section 7.5.4.4** – The exit stair that is used as an accessible means of egress is provided with an area of refuge, and is compliant with Section 7.2.12.3.

**Section 7.7.1** – Both stairwells terminate directly to the exterior.  
 Note: Per Section 7.7.2, the discharge from the second floor is permitted to go through areas on the first floor (50% of occupants and 50% of exits). Exit is through an open lobby space and the building is sprinkled (Sections 7.7.2.3 and 7.7.2.4).

**Section 7.12.1(a)** – The common path of travel out of the Mechanical basement is less than 100' (actual distance, including within the exit, is 98'-5").

**Section 7.12.2** – The Mechanical basement is allowed to have one exit.

**Chapter 8 – Features of Fire Protection**

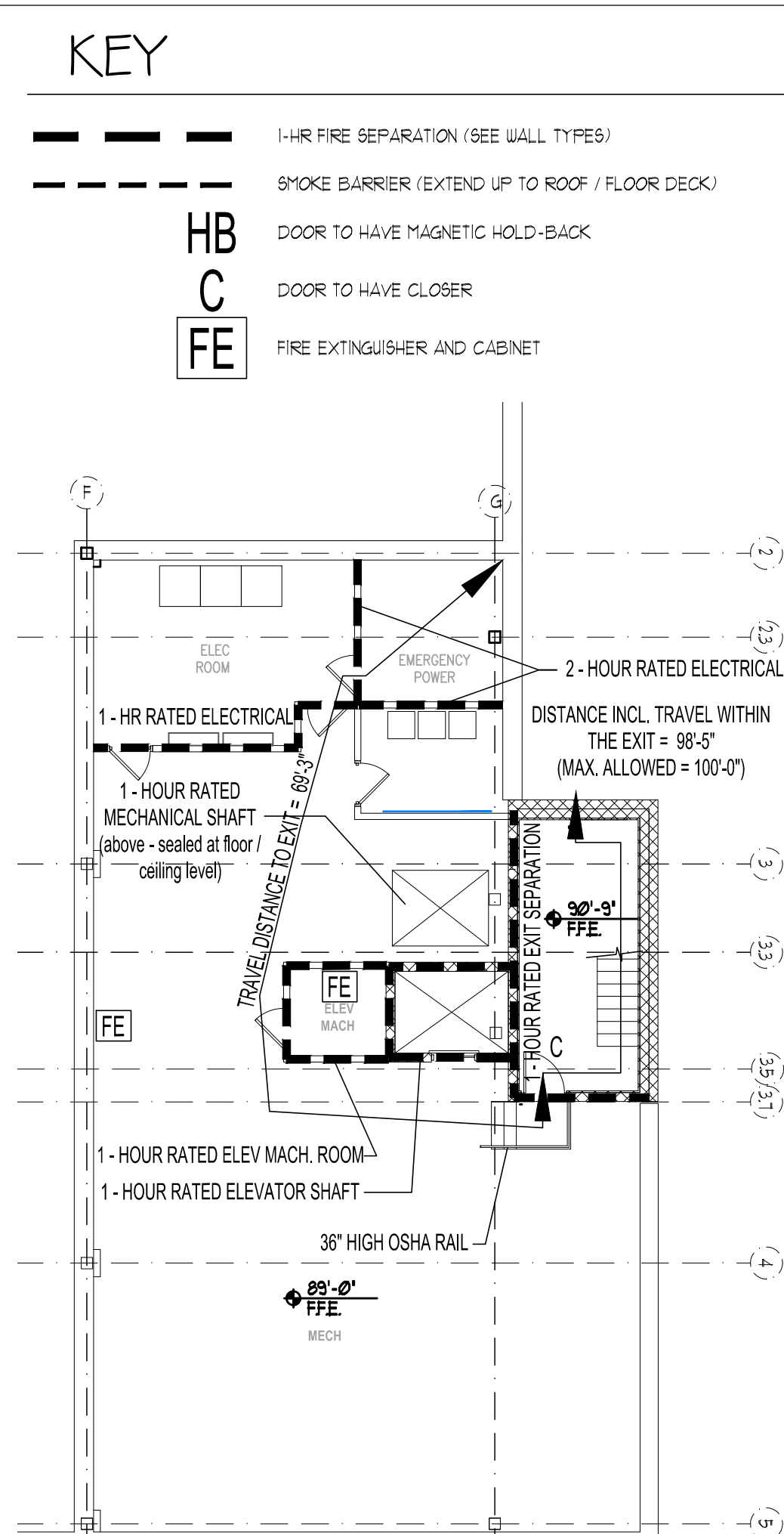
**Section 8.3.4** – Opening protectives in fire resistant rated assemblies shall comply with Section 8.3.4.2.

**Section 8.5** – The smoke barriers that enclose the Communicating Space (see Section 8.6.6) shall comply with this section.

**Section 8.6.5(2)** – The fire resistant rating of floor opening enclosures (shafts) shall be 1-hour as they are connecting less than four stories.

**Section 8.6.6** – At the North entrance to the building, a Communicating Space is located. This space is not prohibited by Chapter 38 of this code, and will be compliant with this Section.

- The communicating space connects two stories.
- The lowest floor area of the connecting space is a street floor (and the level of exit discharge).
- The floor area is open and unobstructed.
- Per subsection (a), the building is sprinkled and therefore the communicating space is required to be separated by smoke barriers (not 1-hour rated walls).
- The hazards within the space are ordinary hazards.
- The occupant load of the entire communicating floor area is: 2,167 sf on the 1<sup>st</sup> floor + 1,539 sf on the 2<sup>nd</sup> floor = 3706 sf / 100 sf per person (Business) = 38 persons. All of the 38 occupants can exit out of the stair at once as the stair has the required egress capacity. Persons on the second floor communicating space can egress by entering the stair and then going directly outside. Persons on the first floor communicating space can egress through the front door, or if they have to, into the stair and directly out.
- Each occupant of the communicating space has access to the exit without having to go back through the communicating space (see note 6 above).
- Each occupant not in the communicating space has access to an exit without entering the communicating space. All of the occupants not in the communicating space have access to the other exit. From the furthest point (not in the communicating space) to that exit is 185' (the maximum travel distance to an exit is 300' per Section 38.2.6.1).



**1 LOWER LEVEL EGRESS PLAN**  
 SCALE: 3/32" = 1'-0"

**Section 8.6.10.1** – Draftstopping of concealed spaces are as follows:  
 (1) Walls and partitions at each floor level, top floor ceiling level, and level of roof support.  
 (2) The unoccupied space formed by the sloped roof at 3,000 s.f. (maximum).  
 (3) Concealed spaces between the ceiling and the floor above at 1,000 s.f. maximum, and the concealed space between the second floor ceiling and roof at 3,000 s.f. maximum.

**Chapter 9 – Building Service and Fire Protection Equipment**

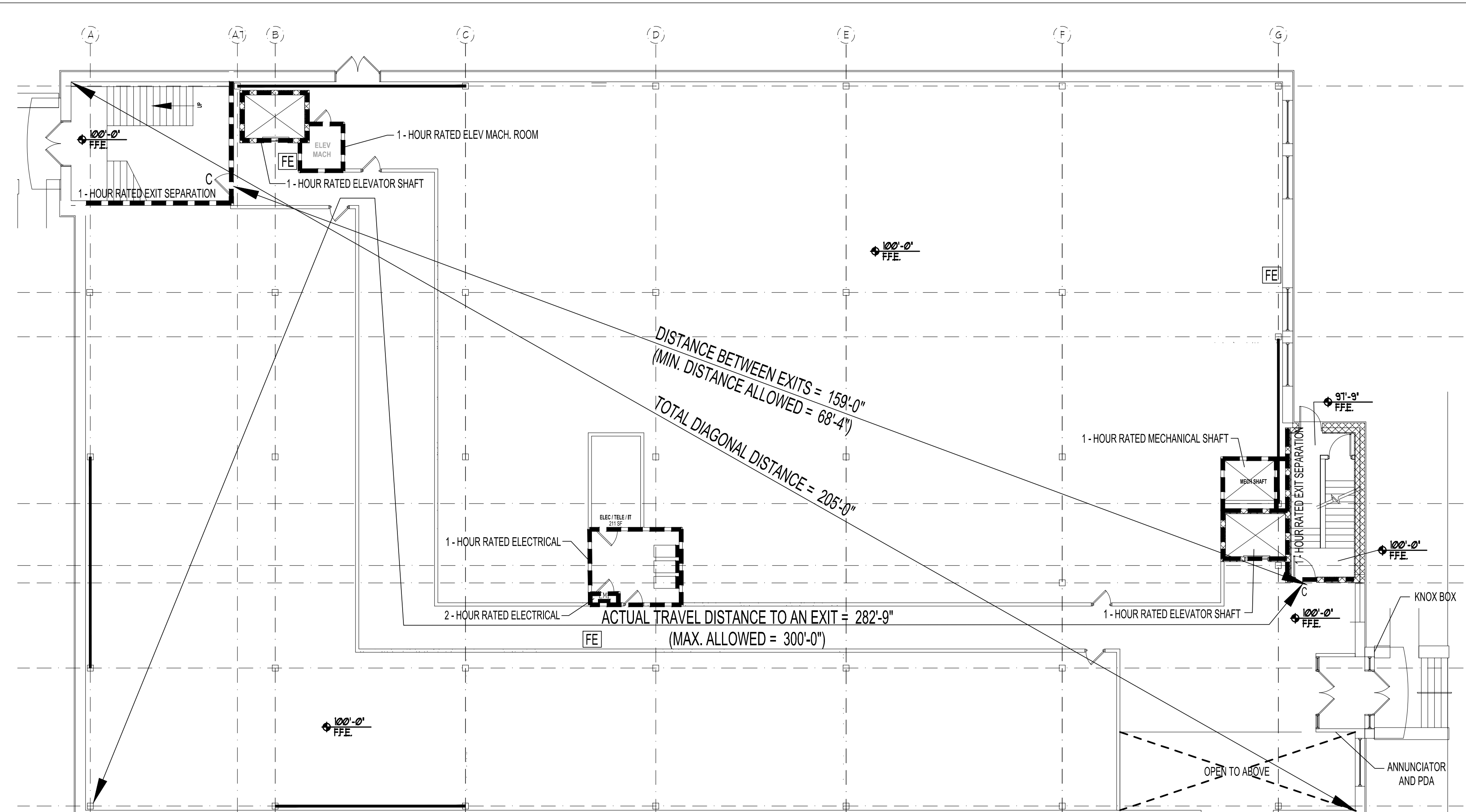
**Section 9.4** – The elevators shall comply with this section and the requirements of ASME A17.1.  
**Section 9.4.5** – The elevators do not have travel distances that exceed 50' above the level of exit discharge or 30' below the level of exit discharge. Therefore, the independent ventilation requirements for the machine rooms are not required (per this code, also see Mechanical).  
**Section 9.6** – The Fire Detection and alarm systems shall be installed in this building and comply with this section.  
**Section 9.7** – The automatic sprinkler system shall be installed in this building and comply with this section.  
**Section 9.7.4** – It is anticipated that three fire extinguishers will be installed on each floor of the building. All fire extinguishers shall comply with this section of the code and with NFPA 10.

**Chapter 10 – Interior Finish, Contents and Furnishings**

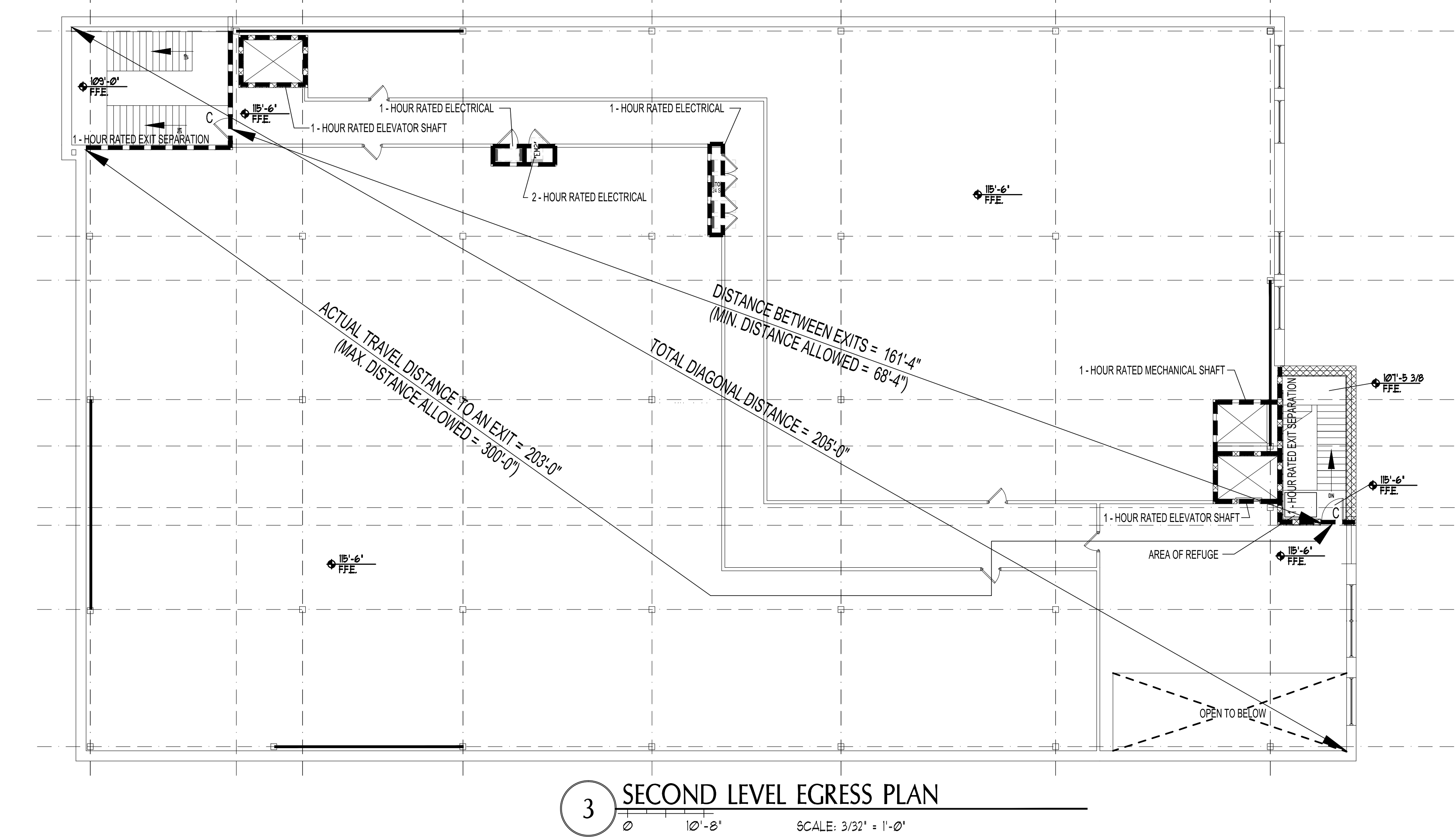
**Section 10.2.8** – Automatic sprinklers will be installed in this building. Class A, B, and C finishes will be installed accordingly and comply with this section of the code.

**Chapter 38 – New Business Occupancies**

**Section 38.2.3.2** – The clear width of all corridors and passageways serving occupant loads over 50 persons shall be greater than 44" in width.  
**Section 38.2.4.3** – A single exit will be provided out of the basement level.  
**Section 38.2.5.2.1** – Dead-end corridors shall not exceed 50' (building is sprinkled).  
**Section 38.2.5.3.1** – Common path of travel shall not exceed 100' (building is sprinkled).  
**Section 38.2.6.1** – The travel distance to an exit shall not exceed 300' (building is sprinkled).  
**Section 38.2.9.1** – Emergency lighting shall be provided (building has more than 50 occupants above the level of discharge).  
**Section 38.3.1.1** – Vertical openings (except for the Communicating Space per Section 8.6.6) shall be protected as required by Section 8.6.  
**Section 38.3.1.2** – The basement floor area does not have unprotected openings to the floor above.  
**Section 38.3.4.1(2)** – This building will have more than 50 occupants above the level of exit discharge and will be required to install a fire alarm system that is compliant with this code.  
**Section 38.3.5** – Fire extinguishers shall be installed (also see Section 9.7.4).  
**Section 38.3.6.1(3)** – This building is fully sprinkled and is not required to have fire-rated corridors.  
**Section 38.7.1** – This building will have an occupant load greater than 100 above the level of exit discharge and will be required to have scheduled fire drills in accordance with Section 4.7 of this code.  
**Section 38.7.2** – Fire extinguishers will be installed in this building and periodic training for designated employees is required.

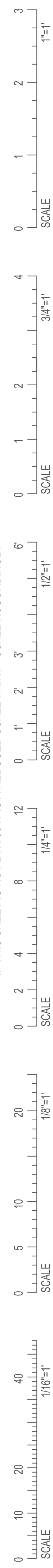


**2 FIRST LEVEL EGRESS PLAN**  
 SCALE: 3/32" = 1'-0"

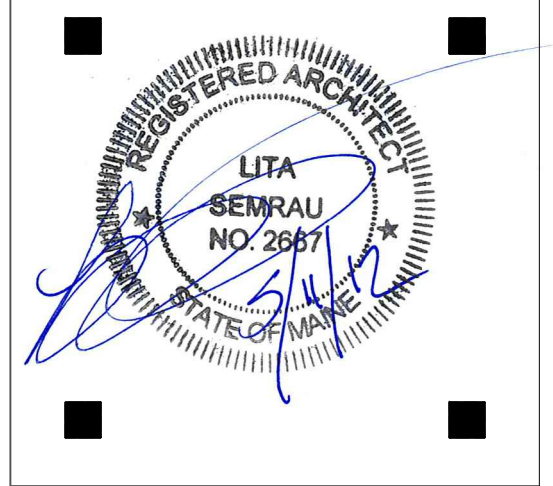


**3 SECOND LEVEL EGRESS PLAN**  
 SCALE: 3/32" = 1'-0"

IF THIS SHEET IS NOT 24 X 36 IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY



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REVISIONS		
No.	Description	Date

**PERMIT SET**

**UNIVERSITY OF NEW ENGLAND**  
 PORTLAND, MAINE  
**PATIENT CARE CENTER**  
 EXTERIOR SHELL  
**EGRESS PLANS**

Project Number: 12502  
 Date: May 11, 2012  
 Drawn by: JAP/MAC/JTC  
 Checked by: LAS

**T1.01**



**Code Review – IBC 2009**

Please note: This code review was performed in conjunction with a preliminary tenant fit-out. Some of the items may not apply to the Building Shell. See sheet T1.02 for preliminary tenant fit-out layout.

**Chapter 3 – Use and Occupancy Classification**

**Section 303.1** – The Simulation space on the first level has an occupant load of 54 and is classified as Assembly (A-3).

**Section 301.1** – The main classification of this University building to be Business (B).

**Chapter 4 – Special Detailed Requirements Based on Use and Occupancy**

**Section 404.1.1** – The opening between floors located in the northeast corner of the building is defined as an "atrium", and connects two floors.

**Section 404.3** – An automatic sprinkler system shall be installed throughout the building.

**Section 404.4** – A fire alarm system shall be installed (not required per 907.2.14 due to the atrium connecting two stories only – however, it is required by NFPA).

**Section 404.5** – A smoke control system is not required due to the atrium connecting two stories only.

**Section 404.6 (B)** – The atrium space is not required to be separated as a maximum of three stories are allowed to be connected to the atrium space (building has two stories connected). Note: A smoke control system is not required per 404.5.

**Section 404.8** – Interior finishes of the atrium space shall not be less than Class B.

**Section 404.9** – The travel distance to an exit within the atrium space shall not exceed 200 feet.

**Chapter 5 – General Building Heights and Areas**

**Table 503** – Per this table (assuming Type 5B construction), this building is allowed 40' in height, and two stories of 9,000 square feet each.

**Section 504.2** – Due to the automatic sprinkler, this building can be increased to 60' in height and three stories.

**Section 506.1** – Per the area increases outlined in Section 506.2 and 506.3, this building is allowed stories of 30,870 square feet each.

$A = 9,000 + (9,000 \times (387.75/567 - .25 \times 1)) + (9,000 \times 2)$   
 $A = 30,870$  square feet

**Section 506.4.1** – Total building area to be 61,740 square feet maximum (actual area = 35,973 square feet).

**Section 508.1** – The Simulation classroom on the first floor exceeds 50 persons and is classified as Assembly. Therefore, the building is evaluated as Mixed Use. Also refer to Section 508.2.1 and 508.4.

**Section 508.2.1** – The Simulation classroom on the first floor cannot be considered an accessory occupancy. The first floor has an area of 17,047 s.f. and the Simulation classroom has an area of 3,121 s.f., which is greater than the 10% allowed. Therefore, the space is required to be separated per Table 508.4.

**Table 508.4** – The Assembly area (Simulation classroom) located on the first floor is required to be separated from the remainder of the building with a 1-hour rated assembly (sprinkled building).

**Chapter 6 – Types of Construction**

**Table 601** – For purposes of determining area, and height limitations, it is assumed this building will be Type 5 (B) construction.

**Table 602** – The fire separation distance of all exterior walls is greater than 10 feet. Therefore, there is no fire resistance rating required in this Table.

**Chapter 7 – Fire and Smoke Protection Features**

**Table 705.8** – The minimum fire separation distance is 20 feet (west side). Therefore, there is no limit to the amount of wall openings (unprotected, sprinkled).

**Section 705.8.2** – The second floor windows on the west side are required to be protected openings (per 705.8.6). Per the exception in this section, the building will be fully sprinkled and the exterior openings shall be protected with water curtains by the sprinkler system.

**Section 705.8.6** – The second floor window openings on the west side are within 15' vertically of the adjacent building and are required to be protected (see section 705.8.2).

**Section 705.8.5** – Openings in exterior walls shall be separated by 36" minimum between floors (Figure 705.8.5(1)).

**Section 705.11 (1)** – A parapet is not required on the exterior walls due to the absence of a required fire rating (see Table 602).

**Section 708.4** – Shaft enclosures shall have a fire-resistance rating of not less than 1-hour (connecting less than 4 stories).

**Section 708.14.1** – Enclosed elevator lobbies are not required as the elevators do not connect more than 3 stories.

**Section 709.1(4)** – Corridor walls are not required to be separated (see Section 1018.1).

**Section 711.1** – Smoke partitions are not required by this code. However, they are required for the "communicating space" as described in the NFPA 2009 code. Refer to the Code Review for the NFPA 2009 code.

**Section 717.4.3** – Draftstopping shall be installed in the sloped roof areas to limit square footage to 3,000 square feet. (Note: A sprinkler system may be installed in the attic areas to eliminate the draftstopping).

**Chapter 9 – Fire Protection Systems**

**Section 903** – A sprinkler system is not required by Table 903.2. However, a sprinkler system will be installed in this building and comply with all the provisions of this chapter in the code.

**Section 906** – Portable fire extinguishers shall be installed on each floor of this building. Refer to the Egress plans for exact locations. Refer to the specifications for type and size of extinguishers.

**Section 907** – A Fire Alarm System is required by Table 907.2 (Business occupancy with more than 100 occupants on the second level), and will comply with all the provisions of this chapter in the code.

**Chapter 10 – Means of Egress**

**Section 1003.2** – The ceiling height in the Means of Egress shall not be less than 7'-6" (except for the allowable projections in Section 1003.3.1).

**Section 1003.3.1** – The stair located at the southwest corner of the building protrudes below the ceiling height. A barrier shall be provided as shown in Figure 1003.3.1(2) to maintain headroom at 80".

**Section 1004** – The Occupant Load (per Table 1004.1.1 and section 1004.7) is as follows:

Mechanical Space (Basement): 2,412 s.f. / 300 s.f. = 9 persons  
 Simulation Classroom (1<sup>st</sup> floor): 54 persons (actual number of stations and instructors)  
 Business area (1<sup>st</sup> floor): 13,103 s.f. / 100 s.f. = 132 persons  
 Business area (2<sup>nd</sup> floor): 16,253 s.f. / 100 s.f. = 163 persons

Total Occupant Load = 304 persons

**Section 1004.3** – The Simulation classroom shall have the occupant load posted as required.

**Section 1004.5** – Egress convergence occurs at the north exit (basement access). The exit is sized to accommodate the added occupant load.

**Section 1004.7** – The Simulation classroom is defined as an Assembly occupancy (54 persons) based on the actual number of stations and instructors.

**Section 1005.1** – The minimum width of the stairways from the second floor:

163 persons x .3 inches = 48.9 inches  
 48.9 inches / 2 = 24.45 inches

(Note: Per Section 1009.1, the minimum width is 44 inches)

The minimum width of the stairway out of the basement:

9 persons x .3 inches = 2.7 inches

(Note: Per Section 1009.1, the minimum width is 36 inches)

**Section 1007.1** – Two exits are required by Section 1015.1 and 1021.1, therefore two Accessible Means of Egress are required.

**Section 1007.2.1** – Since this building is under four stories, an elevator is not required to be an Accessible Means of Egress.

**Section 1007.3(2) and (3)** – The 48" width of the stairway is not required due to the sprinkler system. The area of refuge is not required due to the sprinkler system.

**Section 1007.8** – Two-way communication systems shall be provided at the elevator landings on the second floor.

**Section 1008.1.1** – All doors within the means of egress shall be 36" doors with a clear width of 32" minimum.

**Section 1008.1.6** – Landings (or floors) on each side of the doors shall have a minimum length of 44" and a width at least as wide as the stairway.

**Section 1008.1.7** – All thresholds shall be ADA compliant.

**Section 1008.1.8** – The space between the doors in the airlock at the northeast entrance shall be 7'-0" (48" + 36" door width).

**Section 1008.1.9.1** – All door hardware shall be compliant with this section.

**Section 1009.1** – The stairways from the second floor shall be 44" wide. The stairway from the basement floor shall be 36" (exception #1).

**Section 1009.2** – The headroom at all stairways shall be 80" minimum (see also Section 1003.3.1).

**Section 1009.4.2** – All stairs shall have a maximum stair riser of 7" and a minimum tread depth of 11".

**Section 1009.4.4** – The stair risers and treads shall not exceed 3/8" in uniformity.

**Section 1009.7** – The vertical rise between landings does not exceed 12'-0".

**Section 1009.12** – Stairways shall have handrails on both sides of the stair.

**Section 1009.13** – Since this building does not exceed 3 stories in height, a stairway to the roof is not required (a fixed roof access ladder is provided).

**Section 1009.13.2** – The roof hatch is not located within 10 feet of any roof edge.

**Section 1009.14** – The elevator equipment is located on the basement level and on the first floor. The roof does not contain any elevator equipment.

**Section 1010.2** – Exterior ramps shall not exceed 1:12 slope in the direction of travel.

**Section 1010.4** – Exterior ramps shall not exceed 30" in vertical rise between landings.

**Section 1010.5.1** – There are no Means of Egress ramps. The width between handrails shall be 36".

**Section 1010.6.3** – The exterior ramps are part of the accessible route and shall have landing lengths of 60".

**Section 1010.8** – Exterior ramps shall have handrails on both sides of the ramp.

**Section 1010.10** – Guardrails shall be provided as required (also see Section 1013).

**Section 1011.1** – Exit sign locations are shown on the Electrical plans (also refer to the Specifications).

**Section 1012.1** – Handrails shall be installed on both sides of the stairways and exterior ramps.

**Section 1012.2** – The handrail height (as measured by this section) shall be 34".

**Section 1013.1** – Guards shall be installed at the stairways and exterior ramps that are more than 30" above the adjacent grade or floor. In addition, there are 42" high guards around the floor opening located at the northeast corner of the building (Communicating space per NFPA / Atrium space per IBC). The exterior loading dock is not required to have a guard as the change in elevation is less than 30".

**Section 1013.1.1** – The glass guardrails shall comply with this section and section 2407.

**Section 1013.2** – Guards shall be 42" high.

**Section 1013.3** – The opening limitations in the guards shall comply with this section.

**Section 1014.2** – One of the Means of Egress out of the Simulation classroom is through an intervening space. However, per Exception #1, the adjoining space is necessary to the main space.

**Section 1014.2.4.3** – On the first floor, there is a suite (no patient sleeping rooms) of rooms, and the travel distance does not exceed 100' (actual travel distance = 85'-10" feet).

**Section 1014.3(1)** – The Common Path of Travel shall not exceed 100' (building is sprinkled).

**Section 1015.1** – Two exits are required out of the building. In addition, per Table 1015.1, two exits are required out of the Simulation classroom on the first floor (Occupant load is 54 persons in the Simulation classroom).

**Section 1015.1.1** – Three exits are not required as the Occupant Load for the building does not exceed 500 persons.

**Section 1015.2.1(2)** – The overall diagonal of the building is 205'. The exits are required to be a minimum of 1/3 of the overall diagonal distance apart (68'-4"). See Egress Plan for location of exits.

**Section 1016.1** – Per Table 1016.1, the Exit Access Travel Distance shall not exceed 300' for the Business areas (building is sprinkled) and 250' for the Assembly area on the first floor (Simulation classroom).

**Section 1017.2** – Aisle widths shall be 36" minimum.

**Section 1018.1** – Per Table 1018.1, due to the sprinkler system in the building, the corridors are not required to be fire rated.

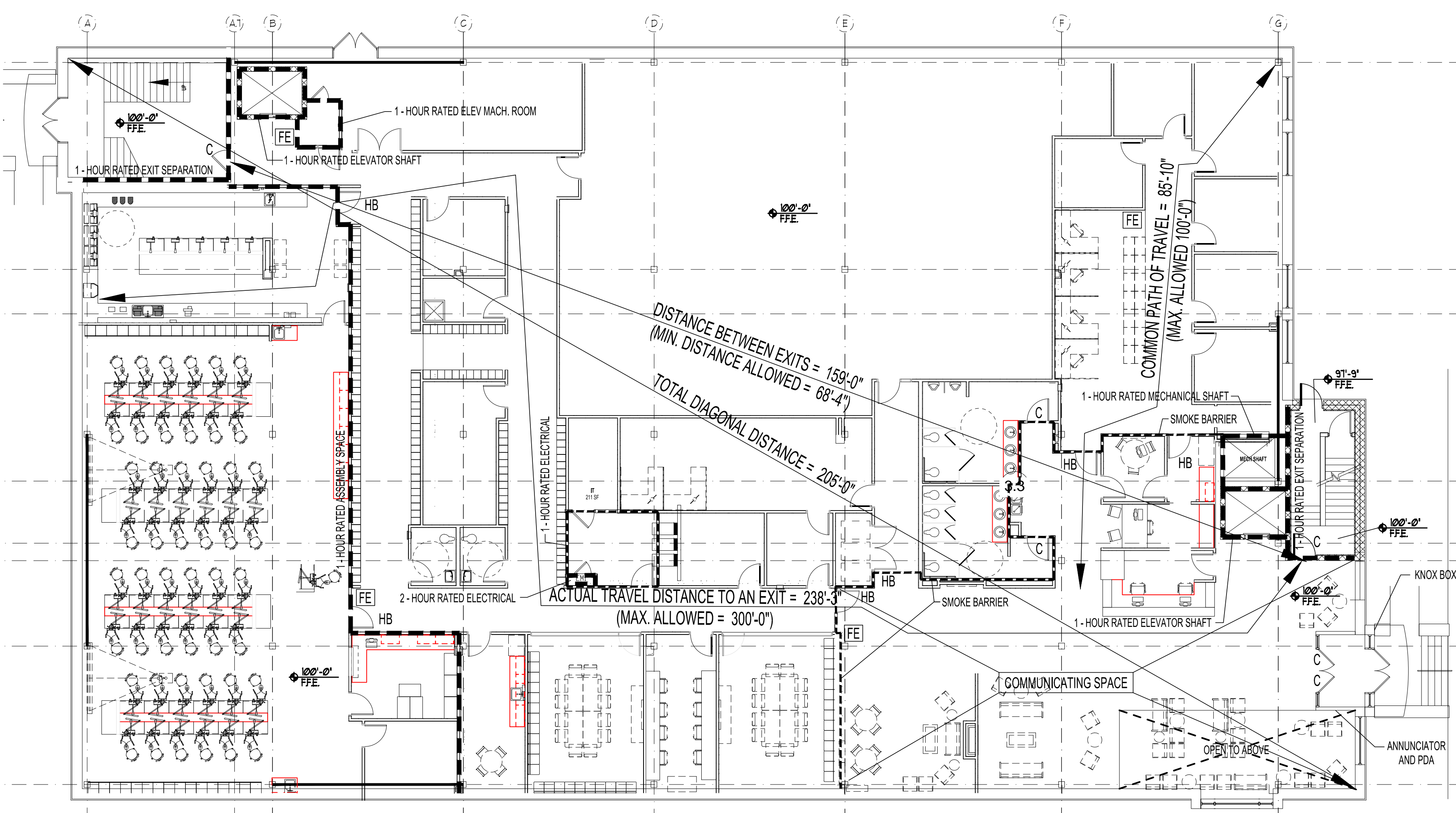
**Section 1018.2** – The minimum corridor width shall be 44".

**Section 1018.4(2)** – Dead end corridors shall not exceed 50".

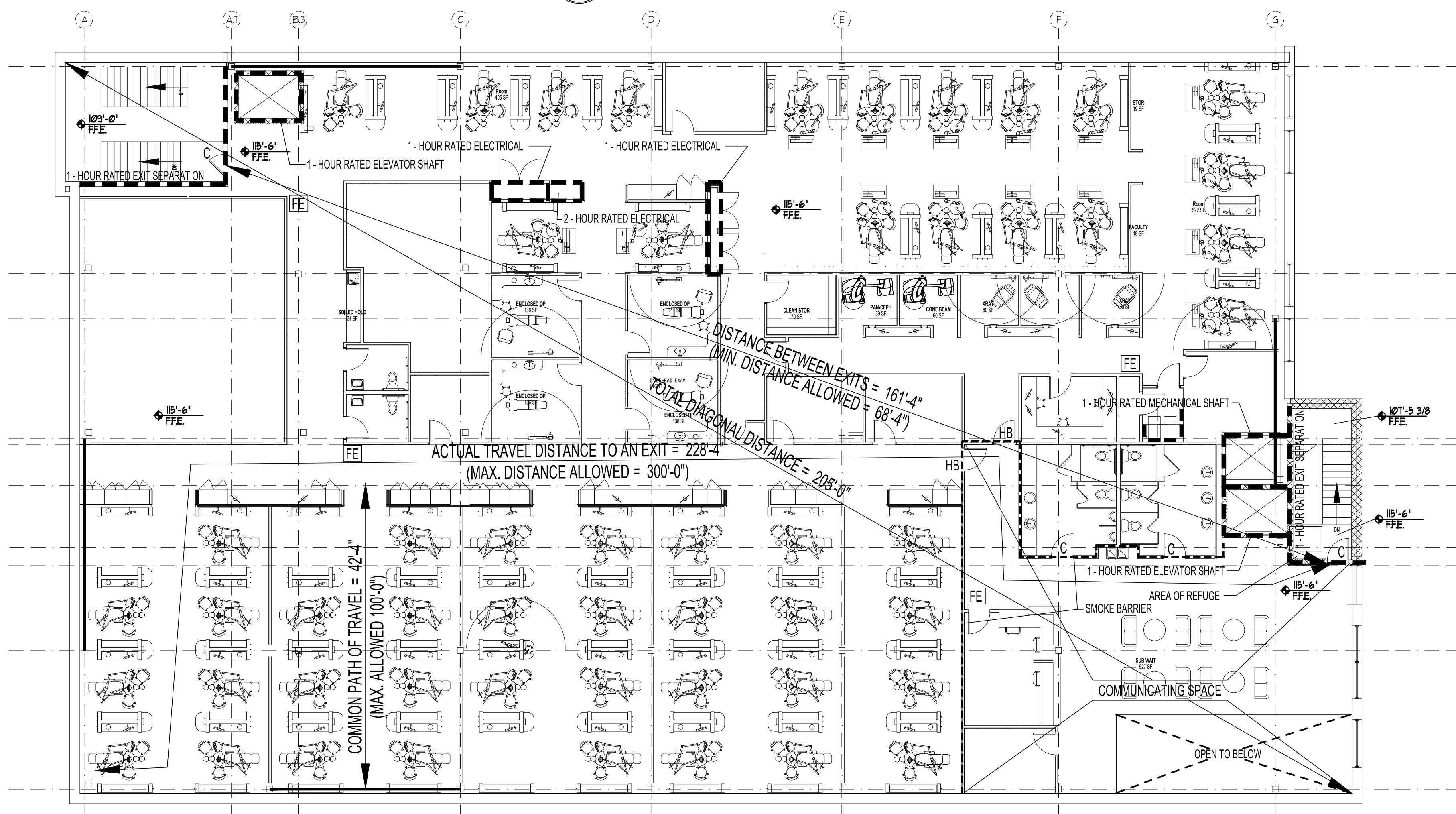
**Section 1021.1** – Per Table 1021.1, the Occupant Load for the building does not exceed 500 persons per floor and is therefore required to have two exits from each floor.

**Section 1021.2** – Per Table 1021.2, the Basement level is allowed to have one exit (less than 49 occupants and a travel distance less than 100').

**Section 1022.1** – Both interior exit stairways are separated with a fire-resistance rating of 1-hour (less than 4 stories) and lead directly to the exterior.

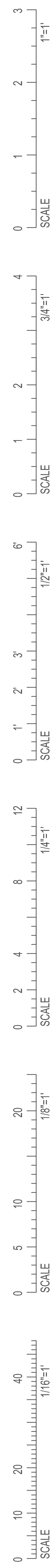


**1 FIRST LEVEL EGRESS PLAN (Prelim Tenant Fit-Out)**



**2 SECOND LEVEL EGRESS PLAN (Prelim Tenant Fit-Out)**

IF THIS SHEET IS NOT 24 X 36 IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY



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 experience design

**BECKER**

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 Inc.

**E.D.E. INC.**  
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 207-449-4275

Site Design Associates  
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 207-449-4275

REVISIONS		
No.	Description	Date

**PERMIT SET**

**UNIVERSITY OF NEW ENGLAND**  
 PORTLAND, MAINE  
**PATIENT CARE CENTER**  
 EXTERIOR SHELL  
**EGRESS PLANS**

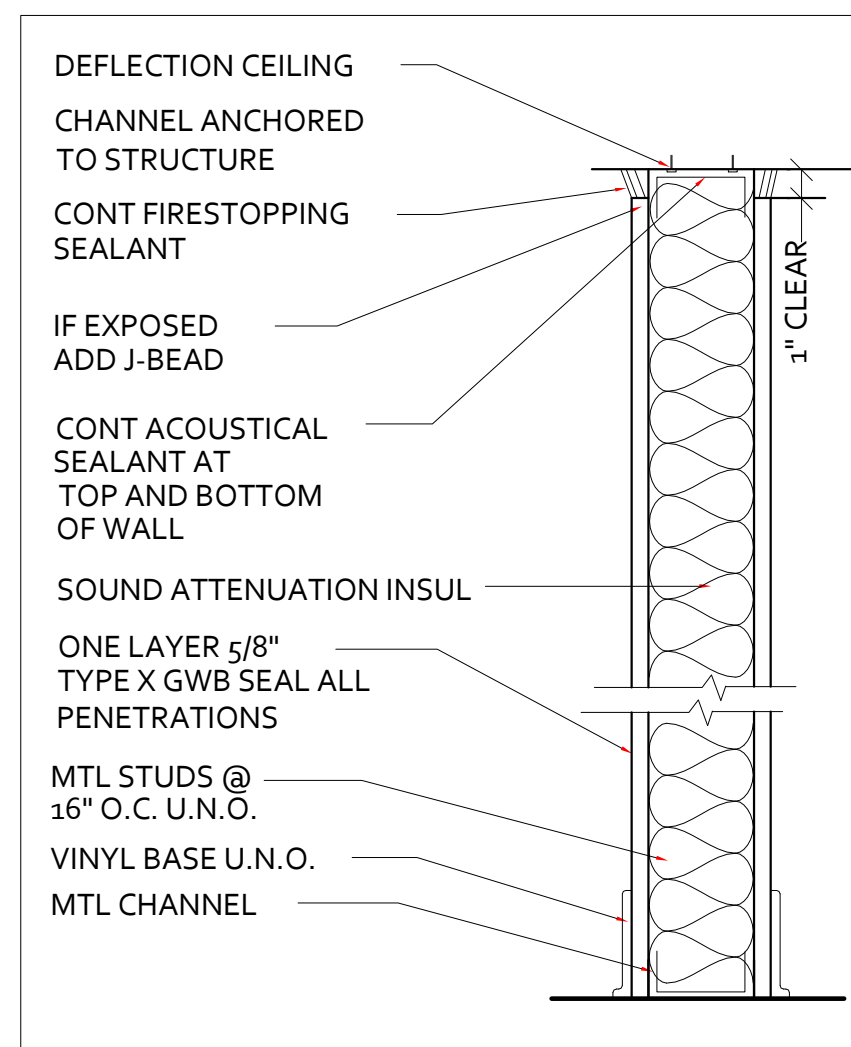
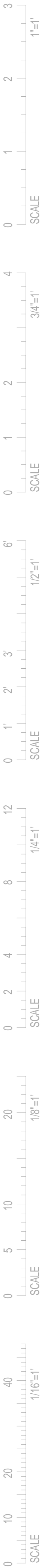
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 Date **May 11, 2012**  
 Drawn by **JAP/MAC/JTC**  
 Checked by **LAS**

**T1.02**

Scale

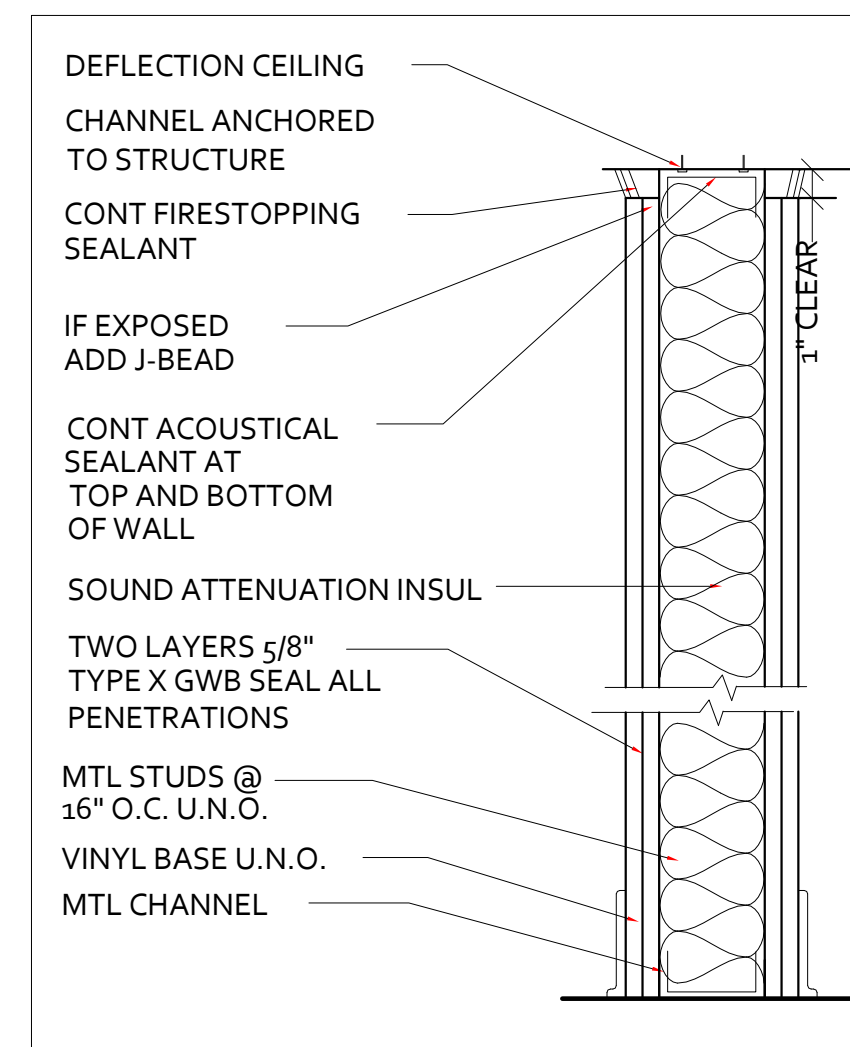


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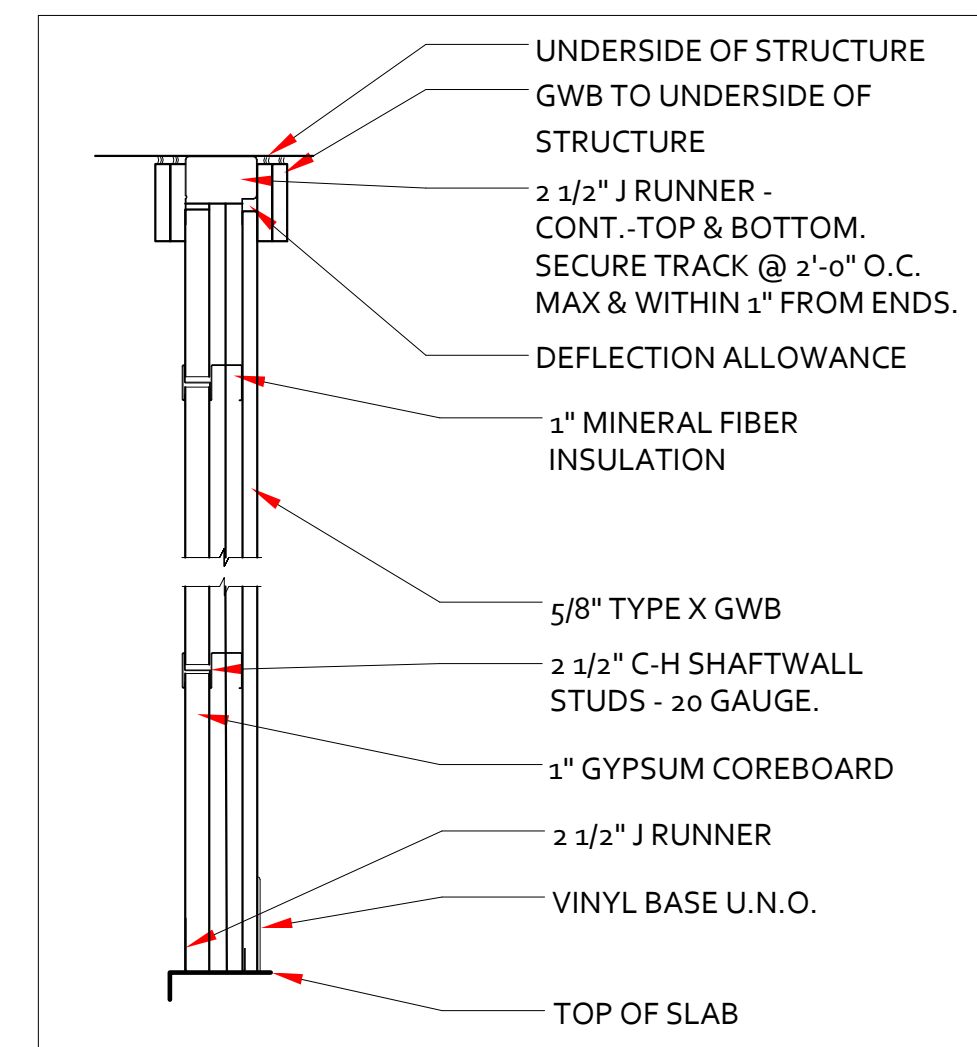


- 3 5/8" METAL STUD-FULL HGT  
ONE HOUR RATED UL U495 1A
- 7 5/8" METAL STUD-FULL HGT  
ONE HOUR RATED UL U495 1B
- 3 5/8" METAL STUD-FULL HGT  
NOT RATED AA
- 3 5/8" METAL STUD-FULL HGT  
PROVIDE SEALANT BETWEEN GWB AND  
CEILING STRUCTURE SB

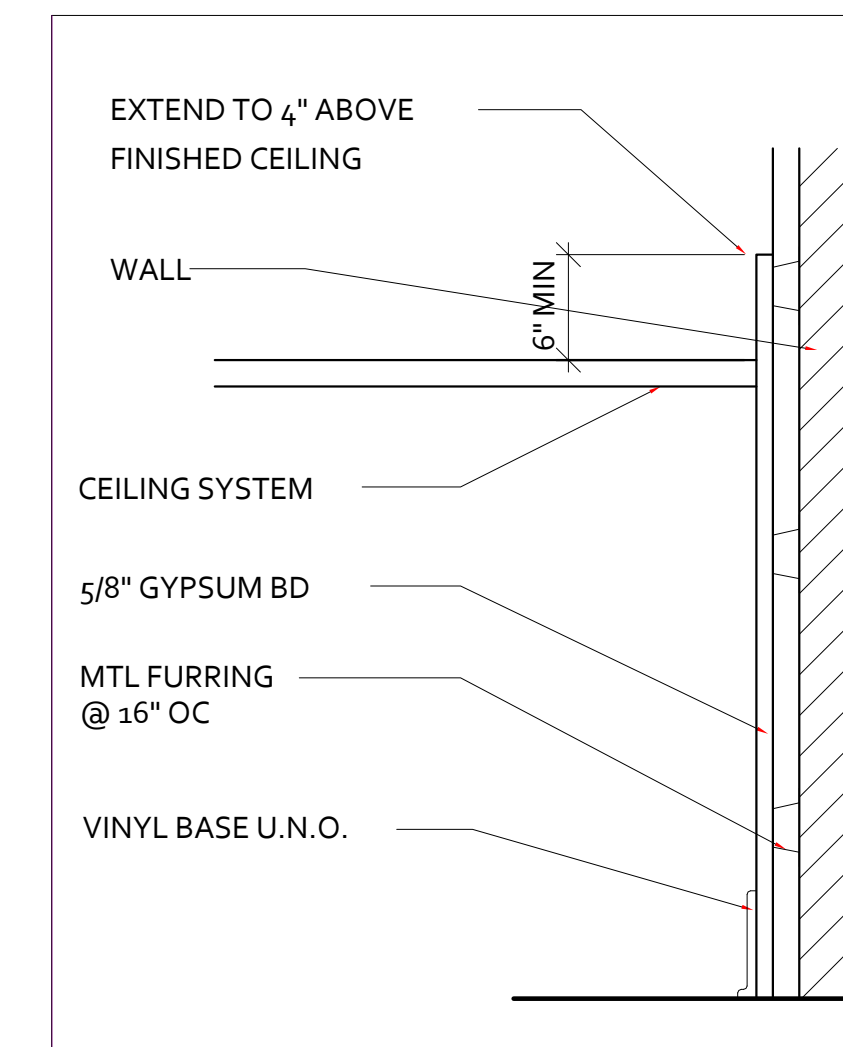
1 WALL TYPES  
1/2" = 1'-0"



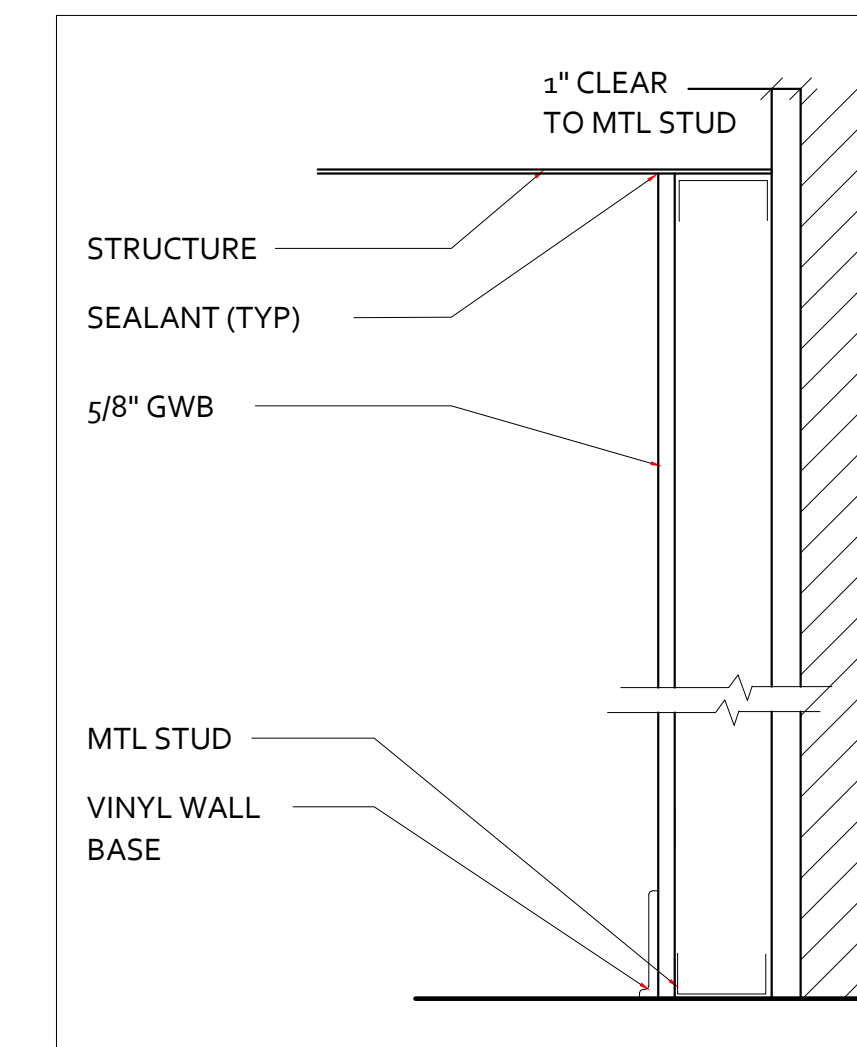
- 3 5/8" METAL STUD-FULL HGT  
TWO HOUR RATED UL U411 2A



- 2 1/2" SHAFT WALL  
1 HOUR RATED UL# U469 WALL ASSEMBLY 1S
- 2 1/2" SHAFT WALL WITH (2) LAYERS  
5/8" TYPE X GWB  
2 HOUR RATED UL# U438 WALL ASSEMBLY 2S



- FURRED WALL W/ 1" MTL STUD FA

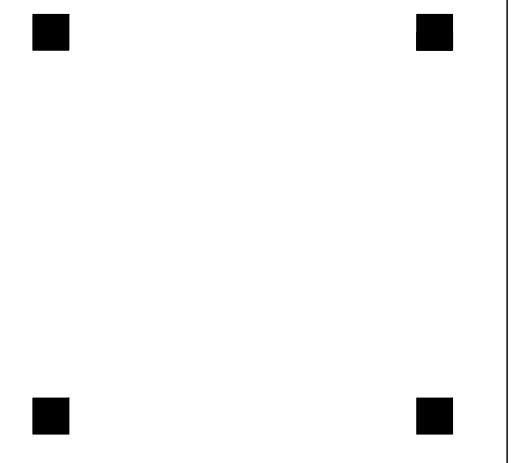


- FURRED WALL W/ 3/8" MTL STUD  
W/ 5/8" GWB (NO INSULATION) NA



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207-449-4275

REVISIONS

No.	Description	Date

PERMIT SET

**UNIVERSITY OF  
NEW ENGLAND  
PORTLAND, MAINE**

**PATIENT CARE  
CENTER  
EXTERIOR SHELL**

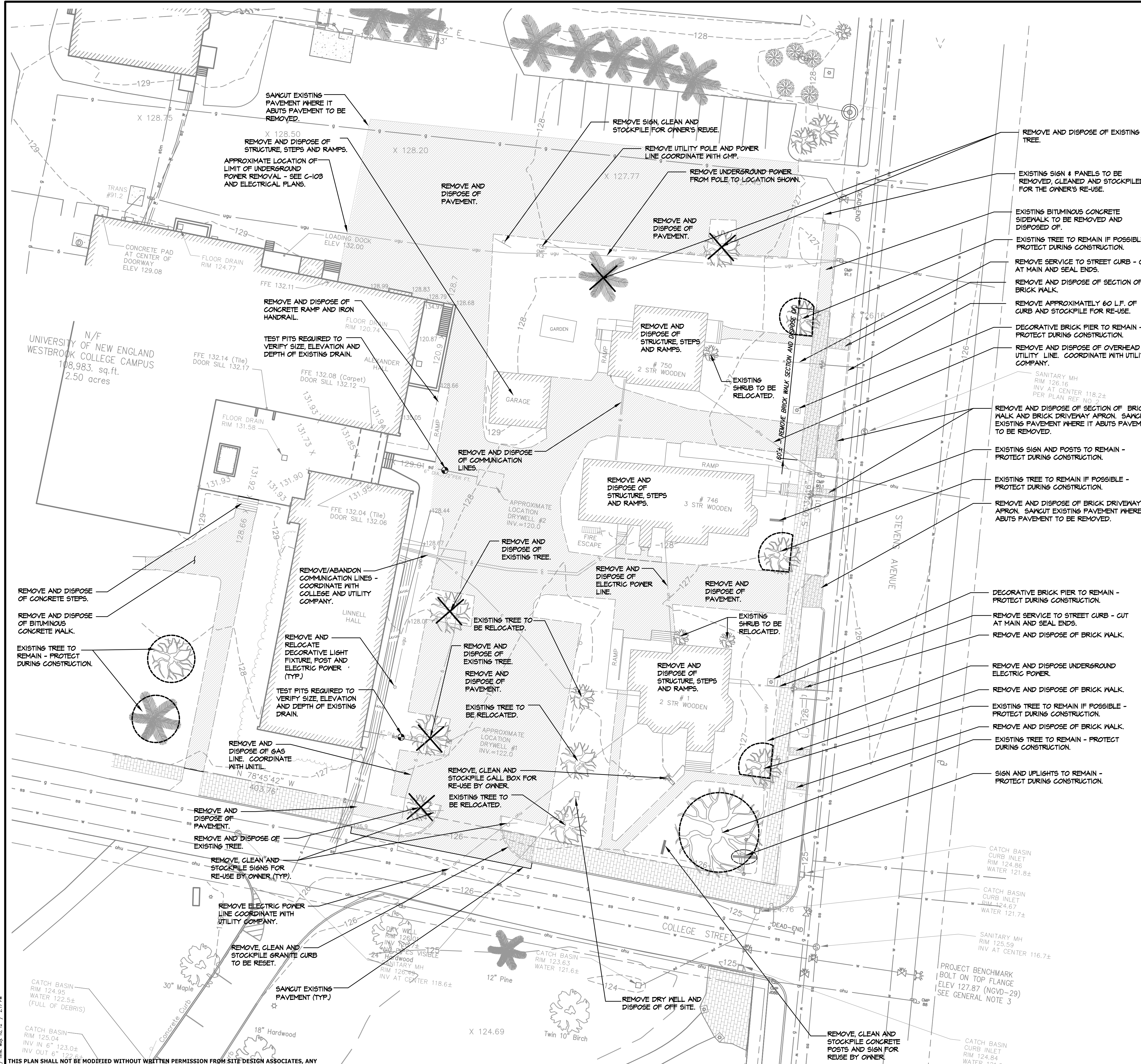
**WALL TYPES**

Project Number	12502
Date	05.10.12
Drawn by	Author
Checked by	Checker

**T1.03**

Scale 1/2" = 1'-0"





- GENERAL PROJECT NOTES:**
- PRIOR TO THE START OF ANY EXCAVATION FOR THE PROJECT, BOTH ON-SITE AND OFF-SITE, THE CONTRACTOR SHALL NOTIFY DISSAFE AND BE PROVIDED WITH A DISSAFE NUMBER INDICATING THAT ALL EXISTING UTILITIES HAVE BEEN LOCATED AND CLEARLY MARKED.
  - CONTRACTOR SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL DRAWINGS AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS OF ALL PERMITS AND APPROVALS AND CONDUCT THE WORK IN ACCORDANCE WITH THESE PERMITS AND APPROVALS. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL ADDITIONAL PERMITS, STREET OPENINGS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK.
  - ANY DISCREPANCIES BETWEEN DRAWINGS AND SITE CONDITIONS AS WELL AS MANUFACTURER'S RECOMMENDATIONS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND RESOLUTION PRIOR TO CONSTRUCTION.
  - WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ADJUSTED, ABANDONED AND/OR CAPPED OR DEMOLISHED, AS REQUIRED.
  - CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL MEANS, METHODS AND TECHNIQUES EMPLOYED TO PERFORM WORK SHOWN ON THESE PLANS.
  - CONTRACTOR SHALL REFER TO DRAWINGS C-100 THRU C-104, C-300 THRU C-303, ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
  - THE CONTRACTOR SHALL LIMIT THE CONSTRUCTION ACTIVITY TO THE WORK SHOWN ON THE PLANS, UNLESS OTHERWISE AUTHORIZED BY THE OWNER'S REPRESENTATIVE.

- EXISTING CONDITIONS AND DEMOLITION NOTES:**
- THE CONTRACTOR SHALL NOTIFY DISSAFE PRIOR TO ANY DEMOLITION AND CONSTRUCTION ACTIVITIES.
  - THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, AND REPAIR EXISTING UTILITIES AS REQUIRED TO COMPLETE THE WORK.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
  - ANY EXISTING PROPERTY DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO MATCH ITS ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO CHARGE TO THE OWNER OR ENGINEER.
  - THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, UTILITIES, LANDSCAPE AND PAVEMENT ON THE SITE WITHIN THE AREAS DESIGNATED FOR DEMOLITION UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE, BUT ARE NOT LIMITED TO BUILDING STRUCTURES, FOUNDATIONS, PAVEMENT, CURBS, LIGHT POLES & BASES, UTILITIES SUCH AS, BUT NOT LIMITED TO: WATER, SEWER, ELECTRIC, GAS, COMMUNICATION, CONCRETE PADS, STAIRS, RETAINING WALLS, DRAINAGE STRUCTURES, SIGNAGE, TREES AND LANDSCAPING.
  - ALL MATERIALS DESIGNATED FOR REMOVAL/DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS, ORDINANCES AND CODES.
  - PAVEMENT REMOVAL LIMITS ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR SHALL VERIFY FULL LIMITS OF PAVEMENT PRIOR TO BIDDING.
  - THE CONTRACTOR SHALL COORDINATE THE REMOVAL, RELOCATION AND DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
  - THE CONTRACTOR SHALL VERIFY THAT ABATEMENT OF THE EXISTING BUILDING AREAS TO BE DEMOLISHED HAS BEEN COMPLETED PRIOR TO DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS AND TECHNIQUES TO COMPLETE THE BUILDING DEMOLITION.
  - TREES TO REMAIN WITHIN THE LIMITS OF WORK SHALL BE TAGGED PRIOR TO CONSTRUCTION BY THE LANDSCAPE ARCHITECT AND PROTECTED BY THE CONTRACTOR. TREES TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR AND REPLACED BY A TREE OF EQUAL SIZE OR DOLLAR VALUE.
  - ALL MATERIALS DESIGNATED FOR STOCKPILING OR RELOCATION SHALL BE CLEANED, STOCKPILED AND PROTECTED IN AN AREA APPROVED BY THE OWNER'S REPRESENTATIVE UNTIL RELOCATION TAKES PLACE.
  - SANICUT AND REMOVE PAVEMENT ONE FOOT OFF PROPOSED EDGE OF PAVEMENT OR CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT TO REMAIN.
  - SCREENED IMAGES REPRESENT EXISTING CONDITIONS.

**LEGEND:**

EXISTING	PROPOSED
⊙	STORM DRAIN MANHOLE
□	STORM DRAIN CATCH BASIN
—	STORM DRAIN LINE
—	STORM DRAIN CULVERT
—	UNDERDRAIN
—	ROOF DRAIN
⊙	SANITARY SEWER MANHOLE
—	SANITARY CLEAN OUT
—	SANITARY SEWER LINE
—	WATERLINE
—	HYDRANT
—	WATER LINE GATE VALVE
—	WATER LINE SHUT-OFF VALVE
—	COMMUNICATION LINE
—	ELECTRIC LINE
—	ELECTRIC MANHOLE
—	ELECTRIC BOX
—	ELECTRIC TRANSFORMER
—	GAS LINE
—	TREE
—	LIGHT POLE
—	BOLLARD LIGHT
—	TELEPHONE LINE
—	TELEPHONE MANHOLE
—	UTILITY POLE
—	BUILDING
—	EDGE OF PAVEMENT
—	GRANITE CURB
—	SIGN
—	PROPERTY LINE
—	RIGHT OF WAY LINE
—	EMERGENCY CALL BOX
+	SPOT ELEVATION
—	INDEX CONTOUR
—	CONTOUR

**DEMOLITION LEGEND:**

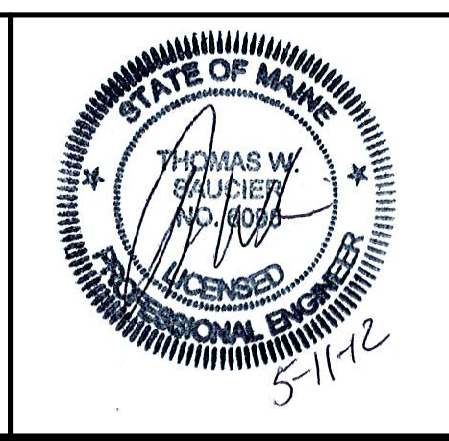
⊙	EXISTING TREE TO BE PROTECTED
□	PAVEMENT TO BE REMOVED
⊗	EXISTING TREE TO BE REMOVED

**GRAPHIC SCALE**  
 ( IN FEET )  
 1 inch = 20 ft.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES. ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
C	5/11/12	ISSUED FOR BUILDING PERMIT									
B	4/17/12	SUBMITTED TO THE CITY OF PORTLAND FOR LEVEL 3 REVIEW									
A	4/13/12	ISSUED FOR DESIGN DEVELOPMENT									

REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.



**Site Design Associates**  
 Consulting Engineering & Land Planning

23 Whitney Way, Topsham, Maine 04086 Tel: (207) 449-4275

CLIENT: **PORT CITY ARCHITECTURE**  
 65 NEWBURY STREET, PORTLAND, MAINE 04101

DESIGN: DEPT.  
 DRAWN: DEPT.  
 CHKD: TWS

PROJECT: **PATIENT CARE CENTER**  
 UNIVERSITY OF NEW ENGLAND  
 STEVENS AVENUE, PORTLAND, MAINE

**EXISTING CONDITIONS & DEMOLITION PLAN**

DATE: JAN. 2012  
 SCALE: 1" = 20'

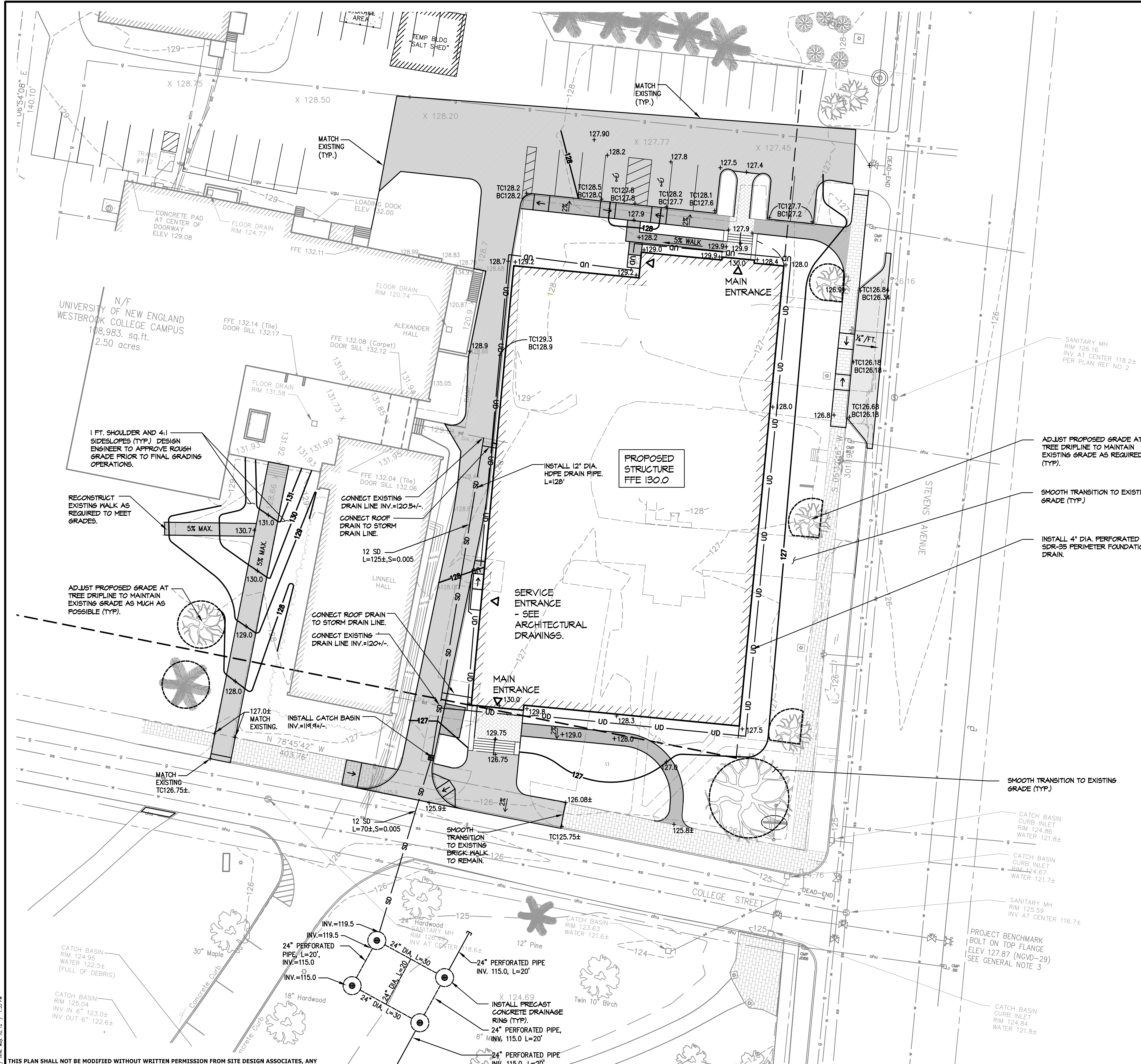
PROJ. NO.  
 DWG. NO.

REV. —  
 C-100









- GRADING & DRAINAGE NOTES:**
- PRIOR TO THE START OF ANY EXCAVATION FOR THE PROJECT BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DIGSAFE AND BE PROVIDED WITH A DIGSAFE NUMBER INDICATING THAT ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED.
  - CONTRACTOR SHALL VERIFY EXISTING GRADES AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
  - CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES AND PLANTING BEDS.
  - CONTRACTOR TO ADJUST EXISTING AND PROPOSED UTILITY ELEMENT MEANT TO BE FLUSH WITH GRADE (CLEAN-OUTS, UTILITY MANHOLES, CATCH BASINS, INLETS, ETC) THAT ARE AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT.
  - WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
  - CONTRACTOR SHALL PROVIDE A FINISHED PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS.
  - BITUMINOUS CONCRETE ELEVATIONS AT CATCH BASINS TO BE 1/4 INCH ABOVE RIM ELEVATION SHOWN FOR CATCH BASINS.
  - ALL WALKS SHALL PITCH TO DRAIN WITH A MAXIMUM CROSS SLOPE OF 2%.
  - OWNER'S REPRESENTATIVE SHALL APPROVE LAYOUT OF ALL DRAINAGE STRUCTURES PRIOR TO INSTALLATION.
  - ALL DRAINAGE PIPE NOT CALLED OUT ON THE DRAWINGS SHALL BE SMOOTH INTERIOR, CORRUGATED EXTERIOR, HDPE, N-12 AS MANUFACTURED BY ADS.
  - THE CONTRACTOR SHALL INSTALL CATCH BASIN INLET PROTECTION AT ALL CATCH BASIN INLETS WITHIN THE DISTURBED AREA AND BE RESPONSIBLE FOR TAKING ALL NECESSARY EROSION CONTROL MEASURES. SEE SHEET C-300.
  - ALL UNSUITABLE AND UNUSED MATERIALS WHICH CAN NOT BE DISPOSED OF ON SITE SHALL BE REMOVED AND DISPOSED OF OFF SITE BY THE CONTRACTOR IN ACCORDANCE WITH ALL STATE AND LOCAL LAWS.
  - SEE SHEET C-300 FOR EROSION CONTROL NOTES, SEQUENCE AND DETAILS.
  - REFER TO DRAWINGS C-100 THRU C-104 AND C-300 THRU 303 AND THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
  - ELEVATION 130 CIVIL PLANS = ELEVATION 100 ARCHITECTURAL PLANS.

**LEGEND:**

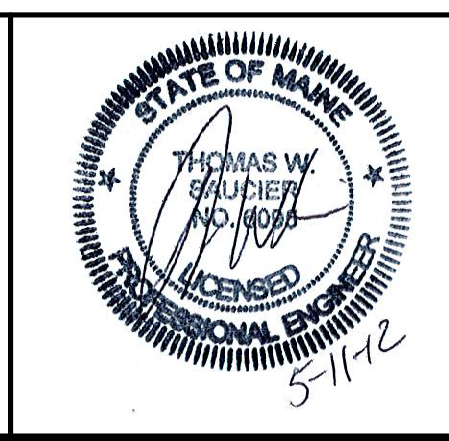
EXISTING	PROPOSED
	STORM DRAIN MANHOLE
	STORM DRAIN CATCH BASIN
	STORM DRAIN LINE
	STORM DRAIN CULVERT
	UNDERDRAIN
	ROOF DRAIN
	SANITARY SEWER MANHOLE
	SANITARY CLEAN OUT
	SANITARY SEWER LINE
	WATERLINE
	HYDRANT
	WATER LINE GATE VALVE
	WATER LINE SHUT-OFF VALVE
	COMMUNICATION LINE
	ELECTRIC LINE
	ELECTRIC MANHOLE
	ELECTRIC BOX
	ELECTRIC TRANSFORMER
	GAS LINE
	TREE
	LIGHT POLE
	BOLLARD LIGHT
	TELEPHONE LINE
	TELEPHONE MANHOLE
	UTILITY POLE
	BUILDING
	EDGE OF PAVEMENT
	GRANITE CURB
	SIGN
	PROPERTY LINE
	RIGHT OF WAY LINE
	EMERGENCY CALL BOX
	SPOT ELEVATION
	INDEX CONTOUR
	CONTOUR

**GRAPHIC SCALE**  
 1 inch = 20 ft.

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A	4/13/12	ISSUED FOR DESIGN DEVELOPMENT									

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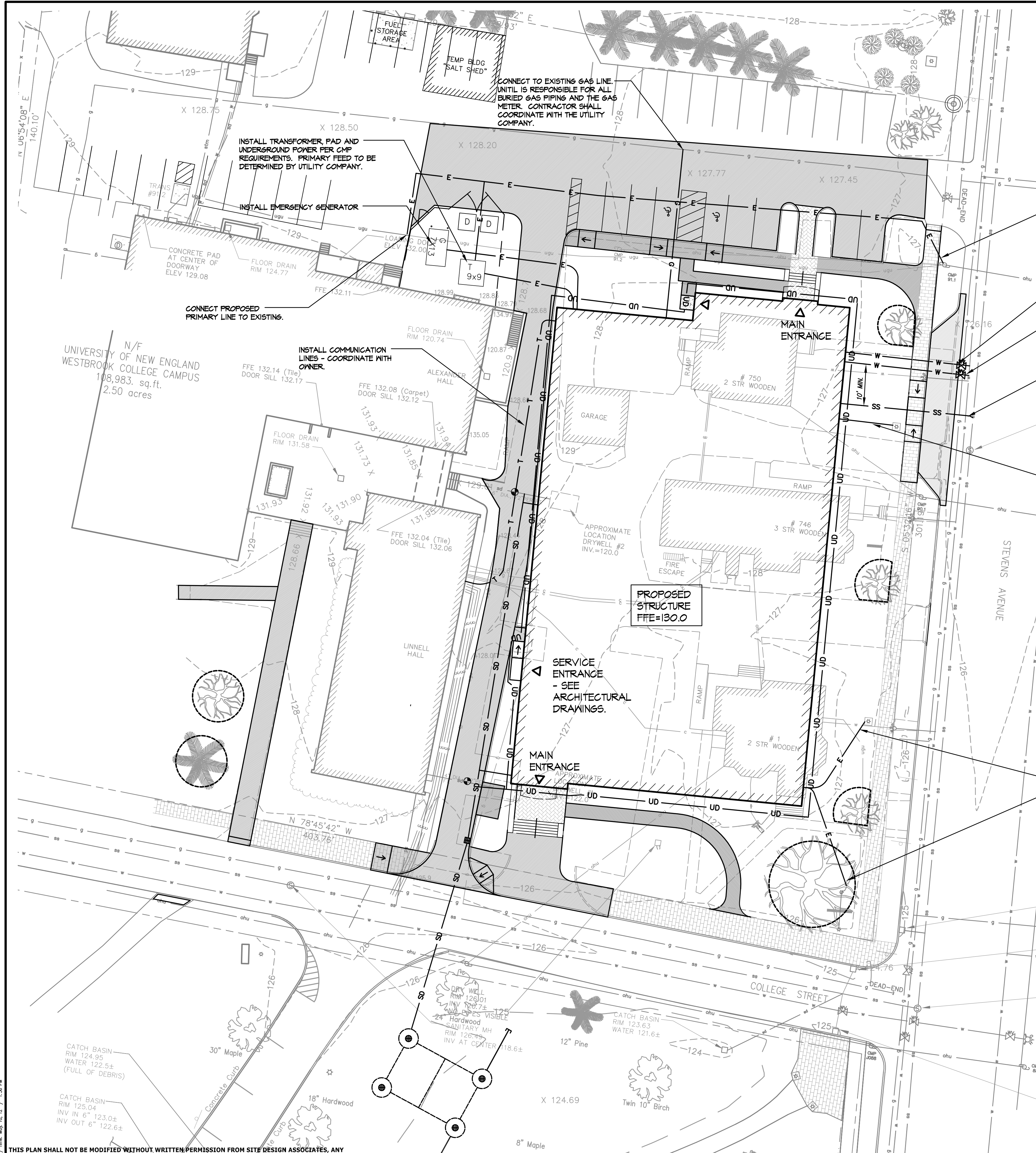


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 CLIENT: **PORT CITY ARCHITECTURE**  
 65 NEWBURY STREET, PORTLAND, MAINE 04101

DESIGN: DEPT.	PROJECT:
DESIGN: DEPT.	<b>PATIENT CARE CENTER</b>
DRAWN: DEPT.	UNIVERSITY OF NEW ENGLAND
CHKD: TWS	STEVENS AVENUE, PORTLAND, MAINE
DATE: JAN. 2012	<b>GRADING, DRAINAGE &amp; EROSION CONTROL PLAN</b>
SCALE: 1"= 20'	PROJ. NO.
	DWG. NO.
	REV. C

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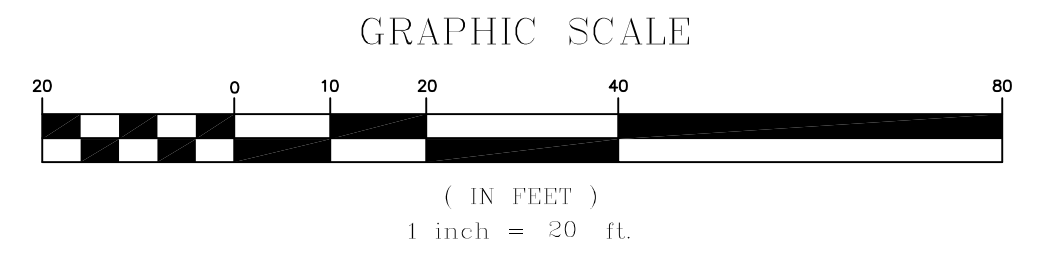


**UTILITY NOTES:**

1. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF NEW UTILITIES WITH THE APPROPRIATE UTILITY COMPANY.
2. THE CONTRACTOR SHALL VERIFY ACTUAL FIELD LOCATION OF UTILITIES PRIOR TO CONSTRUCTION.
3. ALL UTILITY WORK SHALL BE IN CONFORMANCE WITH THE CITY OF PORTLAND AND INDIVIDUAL UTILITY COMPANY STANDARDS RESPECTIVELY.
4. ALL WATER SERVICE SHALL BE COORDINATED WITH THE PORTLAND WATER DISTRICT. CONSTRUCTION MATERIALS, TESTING AND CHLORINATION SHALL BE IN ACCORDANCE WITH DISTRICT STANDARDS. WATER VALVES TO BE LEFT OPEN.
5. CONTRACTOR SHALL EXCAVATE TEST PITS AT ALL POINTS WHERE PROPOSED UTILITIES ARE TO CROSS EXISTING UTILITIES. THIS INFORMATION SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
6. CONTRACTOR SHALL PROVIDE CONDUIT OF SUITABLE SIZE WITH FULL LINES FOR ALL UNDERGROUND WIRING. SEE ELECTRICAL DRAWINGS FOR CONDUIT REQUIREMENTS.
7. LIGHT POLE BASES TO BE LOCATED 36" MIN. FROM EDGE OF WALKS, DRIVES AND PARKING AREAS. LIGHT POLES SHOWN ON THIS PLAN FOR LOCATION ONLY REFER TO ELECTRICAL DRAWINGS FOR ALL OTHER LIGHTING AND ELECTRICAL INFORMATION.
8. ALL MANHOLES AND CATCH BASINS SHALL BE PROVIDED WITH FLEXIBLE BOOT CONNECTIONS FOR PIPES.
9. PROPOSED CONNECTIONS INTO EXISTING MANHOLES AND CATCH BASINS SHALL BE CORE DRILLED AND A FLEXIBLE BOOT INSTALLED WITH A PRESS WEDGE SYSTEM FOR WATER TIGHTNESS.
10. PIPE MATERIAL FOR 4" AND 6" WATER LINES SHALL BE CLASS 52 DOUBLE CEMENT LINED DUCTILE IRON.
11. MINIMUM COVER OVER WATER LINE SHALL BE 5'-6".
12. GAS LINE SHALL BE INSTALLED PER UTILITY COMPANY (UNITIL) STANDARDS.
13. PIPE MATERIAL FOR SANITARY SEWER SHALL BE SDR-35PVC.
14. WHERE THERE IS LESS THAN 6'-6" COVER OVER SEWER LINES, PLACE 2 LAYERS OF 2" THICK RIGID INSULATION OVER PIPE FOR FULL WIDTH OF TRENCH. INSULATION JOINTS SHALL BE STAGGERED.
15. THE OWNER SHALL SUBMIT AS-BUILT RECORD DRAWINGS TO THE CITY FOR ANY UTILITY SERVICE THAT IS UPGRADED OR REPLACED DURING CONSTRUCTION.
16. REFER TO DRAWING C-102 FOR STORM DRAIN INFORMATION.
17. CONTRACTOR SHALL REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR EXACT LOCATION, CONFIGURATION, AND DETAILS OF UTILITIES AND WHERE THEY ENTER THE BUILDING.
18. CONTRACTOR SHALL REFER TO C-100 THRU C-104, C-300 THRU C-302, ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
19. ELEVATION 130 CIVIL PLANS = ELEVATION 100 ARCHITECTURAL PLANS.

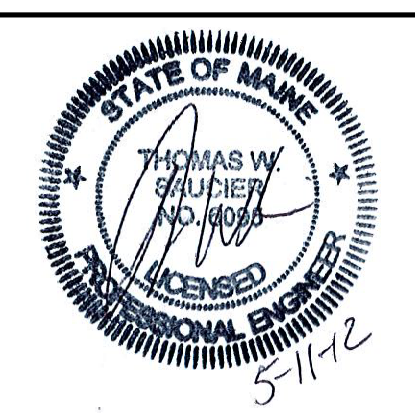
**LEGEND:**

EXISTING	PROPOSED
⊙	STORM DRAIN MANHOLE
□	STORM DRAIN CATCH BASIN
—	STORM DRAIN LINE
—	STORM DRAIN CULVERT
—	UNDERDRAIN
—	ROOF DRAIN
⊙	SANITARY SEWER MANHOLE
○	SANITARY CLEAN OUT
—	SANITARY SEWER LINE
—	WATERLINE
—	HYDRANT
—	WATER LINE GATE VALVE
—	WATER LINE SHUT-OFF VALVE
—	COMMUNICATION LINE
—	ELECTRIC LINE
⊙	ELECTRIC MANHOLE
⊙	ELECTRIC BOX
⊙	ELECTRIC TRANSFORMER
—	GAS LINE
★	TREE
—	LIGHT POLE
—	BOLLARD LIGHT
—	TELEPHONE LINE
⊙	TELEPHONE MANHOLE
—	UTILITY POLE
—	BUILDING
—	EDGE OF PAVEMENT
—	GRANITE CURB
—	SIGN
—	PROPERTY LINE
—	RIGHT OF WAY LINE
—	EMERGENCY CALL BOX
+135.05	SPOT ELEVATION
—128	INDEX CONTOUR
—128	CONTOUR



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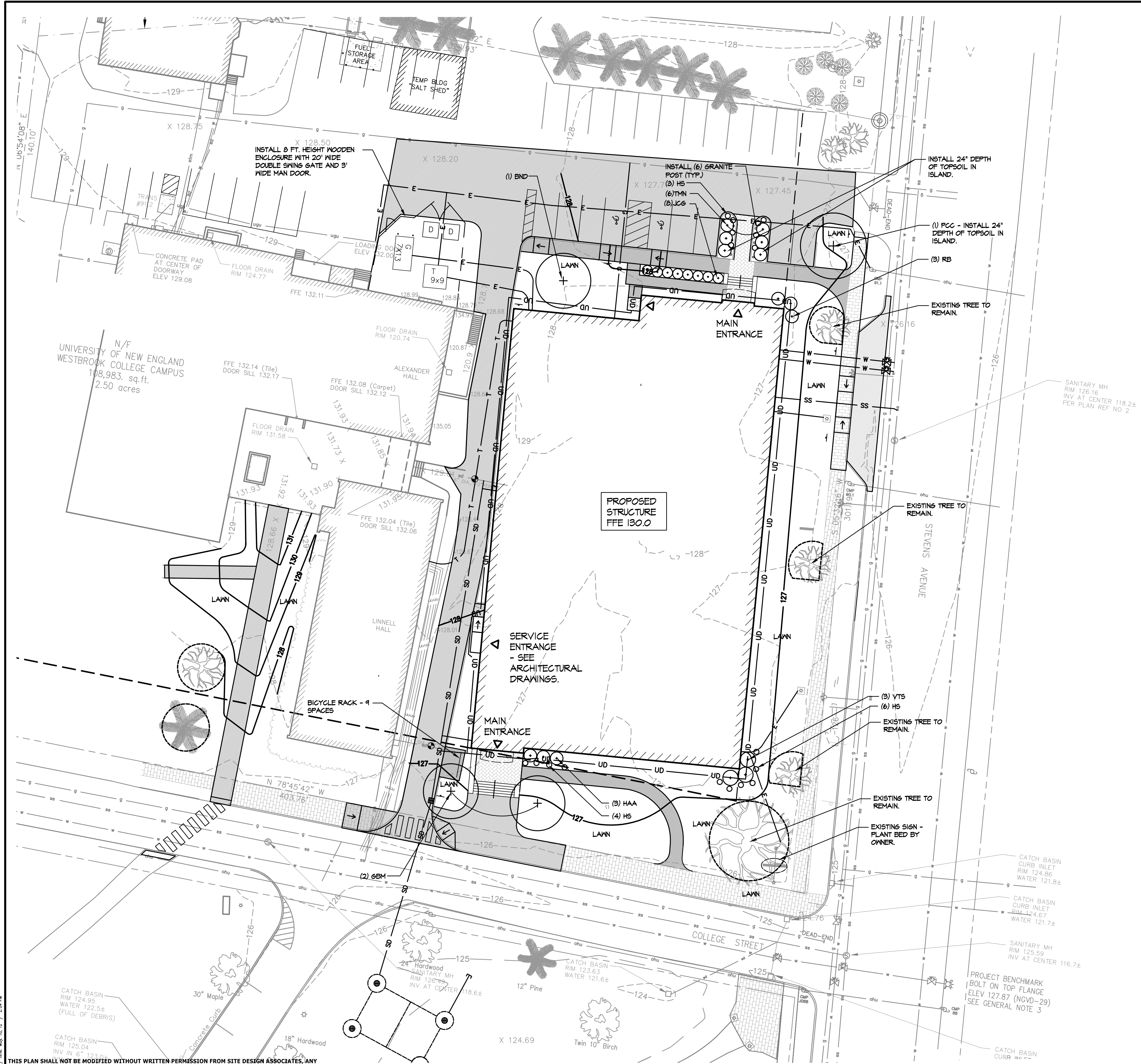


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DESIGN: DEPT.	PROJECT:	<b>PATIENT CARE CENTER</b> UNIVERSITY OF NEW ENGLAND STEVENS AVENUE, PORTLAND, MAINE
DRAWN: DEPT.		
CHKD: TWS		
DATE: JAN. 2012	PROJ. NO.	
SCALE: 1" = 20'	DWG. NO.	<b>C-103</b>

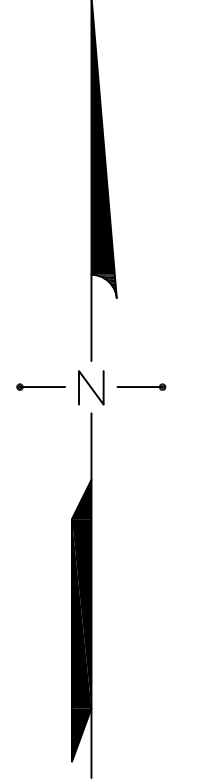
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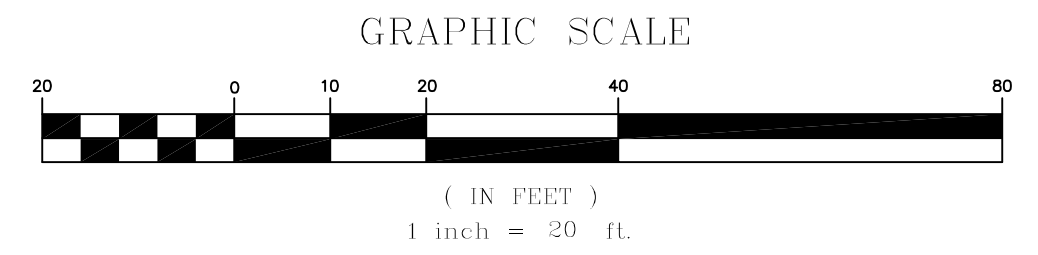
**LANDSCAPE NOTES:**

- CONTRACTOR SHALL VERIFY ALL TREE REMOVALS WITH LANDSCAPE ARCHITECT PRIOR TO START OF CONSTRUCTION. ANY TREES MARKED TO REMAIN THAT ARE DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED WITH TREES EQUALING THE SPECIES AND CALIPER LOST.
- LANDSCAPE CONTRACTOR IS ENCOURAGED TO PROVIDE THE LANDSCAPE ARCHITECT WITH CONCERNS AND/OR SUGGESTIONS WITH REGARDS TO PROPOSED PLANT MATERIAL SELECTION PRIOR TO PLACING A PURCHASE ORDER.
- THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE ALL PLANTINGS SHOWN GRAPHICALLY ON THIS DRAWING. CLARIFY ANY DISCREPANCIES WITH THE LANDSCAPE ARCHITECT PRIOR TO PRICING ANY PLANT MATERIAL.
- ALL PLANT MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S "AMERICAN STANDARD OF NURSERY STOCK".
- ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE AT THE SITE. PLANTS WHICH ARE REJECTED SHALL BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- ALL TREES AND SHRUBS TO BE BALLED IN BURLAP OR CONTAINERIZED.
- MULCH FOR PLANTED AREAS TO BE AGED SPRUCE AND FIR BARK, PARTIALLY DECOMPOSED, DARK BROWN IN COLOR AND FREE OF WOOD CHIPS THICKER THAN 1/4 INCH.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS, STRUCTURES AND PLANTING BEDS.
- NO PLANTS SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING AND BEFORE CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- ALL SHRUB GROUPINGS SHALL BE INCORPORATED INTO BEDS. WHERE MULCHED PLANT BED ADJUTS LAWN, CONTRACTOR SHALL PROVIDE A TURF CUT EDGE.
- ALL TREES ALONG WALK AND PARKING AREAS SHALL BEGIN BRANCHING AT 6' HT. MIN.
- ALL PLANT MATERIAL OR REPRESENTATIVE SAMPLES SHALL BE LEGIBLY TAGGED WITH PROPER COMMON AND BOTANICAL NAMES. TAGS SHALL REMAIN ON THE PLANTS UNTIL FINAL ACCEPTANCE.
- CONTRACTOR SHALL LOAMEX DISTURBED AREAS AS FOLLOWS:  
- LAWN AREAS 6" DEPTH OF TOPSOIL
- SEED MIXTURES FOR AREAS TO BE SEEDED SHALL BE AS FOLLOWS:  
- LAWN AREAS SHALL BE SEEDED WITH: SEED TYPE % BY WEIGHT CREEPING RED FESCUE (MIN. 2 VARIETIES) 55%, KENTUCKY BLUEGRASS (MIN. 2 VARIETIES) 30%, PERENNIAL RYE GRASS 15%. SEED AT A RATE OF 4 LBS PER 1000 SQ.FT.
- CONTRACTOR SHALL BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND WILL CONTINUE UNTIL FINAL ACCEPTANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS AND METHODS OF WATERING AND MAINTENANCE.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF FINAL ACCEPTANCE.
- SCREENED IMAGES SHOW EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND OR CAPPED OR DEMOLISHED AS REQUIRED.
- SEE DRAWINGS C-100 THRU C-104 AND C-300 THRU C-302 FOR ADDITIONAL INFORMATION.
- ELEVATION 130 CIVIL PLANS = ELEVATION 100 ARCHITECTURAL PLANS.



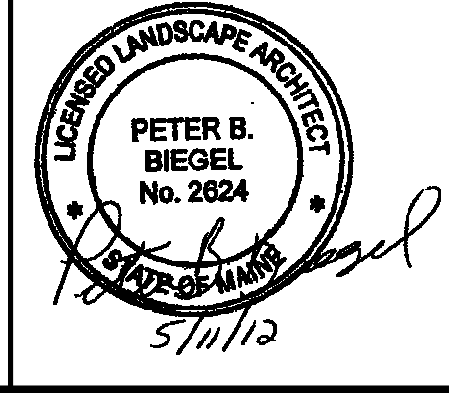
**PLANT LIST:**

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY	SIZE	COMMENTS
<b>TREES</b>					
BND	BETULA NIGRA 'DURAHEAT'	DURAHEAT RIVER BIRCH	1	12' HT.	CLUMP, B4B
GBM	GINKO BILOBA MAGYAR	MAGYAR GINKO	2	3' CAL.	B4B
PCC	PYRUS CALLERIANA 'CLEVELAND'	CLEVELAND FLOWERING PEAR	1	3' CAL.	B4B
<b>SHRUBS, GROUNDCOVERS &amp; HERBACEOUS MATERIALS</b>					
HAA	HYDRANSEA ARBORESCENS 'ANNABELLE'	ANNABELLE HYDRANSEA	3	36" HT.	FULL # BUSHY
HS	HEMEROCALLIS STELLA D'ORO	STELLA D'ORO DAYLILLY	18	1 GAL.	FULL # BUSHY
JCS	JUNIPERUS CHINENSIS 'CASINO GOLD'	CASINO GOLD CHINESE JUNIPER	8	24" HT.	FULL # BUSHY
RB	RHODODENDRON BOULE DE NEIGE	BOULE DE NEIGE RHODODENDRON	3	36" HT.	FULL # BUSHY
TMS	TAXUS X MEDIA 'NIGRA'	DARK SPREADING YEW	6	30" HT.	FULL # BUSHY
VTS	VIBURNUM P. TOMENTOSUM 'SHASTA'	SHASTA DOUBLEFILE VIBURNUM	3	40" HT.	FULL # BUSHY



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DESIGN: DEPT.  
DRAWN: DEPT.  
CHKD: TWS  
DATE: JAN. 2012  
SCALE: 1" = 20'

PROJECT: **PATIENT CARE CENTER**  
UNIVERSITY OF NEW ENGLAND  
STEVENS AVENUE, PORTLAND, MAINE  
**LANDSCAPE PLAN**  
PROJ. NO. \_\_\_\_\_  
DWG. NO. **C-104**  
REV. \_\_\_\_\_



**EROSION AND SEDIMENTATION CONTROL NOTES & DETAILS**

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES INCLUDE THE USE OF STABILIZED CONSTRUCTION ENTRANCE, SEDIMENT BARRIER, EROSION CONTROL MIX, STONE CHECK DAMS, HAY BALE BARRIERS, CATCH BASIN INLET BARRIERS, CATCH BASIN SEDIMENT COLLECTION BAGS, EROSION CONTROL BLANKET, AND TEMPORARY SEEDING AND MULCHING AS REQUIRED. PERMANENT MEASURES INCLUDE THE USE OF RIP RAP AT EXPOSED STORM DRAIN AND CULVERT INLETS AND OUTLETS, RIP RAPPED SLOPES, AND PERMANENT VEGETATION.

**A. GENERAL**

- IT IS ANTICIPATED THAT CONSTRUCTION WILL BEGIN AS SOON AS POSSIBLE FOLLOWING RECEIPT OF NECESSARY PERMITS.
- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPs, PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION.
- ANY ADDITIONAL EROSION AND SEDIMENTATION CONTROL DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERSONNEL AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED BY THE CONTRACTOR.
- 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.
- 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 ACCEPTABLE PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:
  - A. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% RESTORED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
  - B. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
  - C. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
  - D. 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 TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY.
  - E. PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.
  - F. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIP RAP, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN CUTTING OF THE CHANNEL.

**B. EROSION AND SEDIMENTATION CONTROL MEASURES**

- PRIOR TO THE BEGINNING OF CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE AND TEMPORARY SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. IT IS THE INTENT THAT SEDIMENT BARRIERS BE INSTALLED DOWN GRADIENT OF ALL DISTURBED AREAS OF THE SITE. SEDIMENT BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS WILL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE SEDIMENT BARRIERS. THIS SEDIMENT WILL BE SPREAD AND STABILIZED IN AREAS OF THE SITE NOT SUBJECT TO EROSION. SEDIMENT BARRIERS SHALL BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, THEY WILL BE REPLACED WITH A TEMPORARY CRUSHED STONE CHECK DAM.
  - ALL CATCH BASINS, NEW OR EXISTING, THAT MAY RECEIVE RUNOFF FROM DISTURBED AREAS MUST BE PROTECTED DURING CONSTRUCTION. INSPECT & CLEAN OUT AS NECESSARY. LEGALLY DISPOSE OF SEDIMENT & REMOVE FLOATABLES WITH OIL ABSORBENT PADS AS APPLICABLE.
  - REMOVAL OF SOD, TREES, BUSHES AND OTHER VEGETATION AND SOIL DISTURBANCE WILL BE KEPT TO A MINIMUM WHILE ALLOWING PROPER SITE DEVELOPMENT.
  - GRUBBINGS AND ANY UNUSABLE TOPSOIL SHALL BE STRIPPED AND REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN AN APPROVED MANNER.
  - ANY SUITABLE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR REUSE IN FINAL GRADING. TOPSOIL WILL BE STOCKPILED IN A MANNER SUCH THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DRAINAGE WILL RESULT. IF A STOCKPILE IS NECESSARY, THE SIDE SLOPES OF THE TOPSOIL STOCKPILE WILL NOT EXCEED 2:1. TOPSOIL STOCKPILES WILL BE TEMPORARILY SEEDED WITH AROOSTOOK RYE, ANNUAL OR PERENNIAL RYE GRASS (DEPENDENT ON DATE SEEDING) WITHIN 7 DAYS OF FORMATION, OR TEMPORARILY MULCHED IF SEEDING CANNOT BE DONE WITHIN THE RECOMMENDED SEEDING DATES.
  - TEMPORARY DIVERSION BERMS AND DRAINAGE SWALES SHALL BE CONSTRUCTED AS NECESSARY.
  - TEMPORARY STABILIZATION SHALL BE CONDUCTED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOILS, PRIOR TO ANY RAIN EVENT, AND PRIOR TO ANY WORK SHUT DOWN DISTURBANCE MORE THAN ONE DAY. TEMPORARY STABILIZATION INCLUDES SEED, MULCH, OR OTHER NON-ERODABLE COVER. AREAS WITHIN 75 FEET OF WETLANDS SHALL BE TEMPORARILY STABILIZED WITHIN 48 HOURS OR PRIOR TO RAIN EVENT.
  - APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
  - TEMPORARY SEEDING SPECIFICATIONS. WHERE THE SEEDBED HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 4 INCHES BEFORE APPLYING FERTILIZER, LIME, AND SEED. APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET) AND 10-10-10 (N-P205-K20) FERTILIZER AT A RATE OF 600 LBS. PER ACRE (138 LB. PER 1,000 SQUARE FEET). UNIFORMLY APPLY SEED AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
- RECOMMENDED TEMPORARY SEEDING DATES AND APPLICATION RATES ARE AS FOLLOWS:
- AROSTOOK RYE: RECOMMENDED SEEDING DATES: 8/15 - 10/1  
APPLICATION RATE: 112 LBS./ACRE
- ANNUAL RYE GRASS: RECOMMENDED SEEDING DATES: 4/1 - 7/1  
APPLICATION RATE: 40 LBS./ACRE
- PERENNIAL RYE GRASS: RECOMMENDED SEEDING DATES: 8/15 - 9/15  
APPLICATION RATE: 40 LBS./ACRE

- IF THE AREA WILL REMAIN UNCOVERED 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 SUBSOIL WITH TOP SOIL OR OTHER ORGANIC AMENDMENTS, PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY EROSION CONTROL BLANKETS, AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT.

- PERMANENT SEEDING SPECIFICATION. IF A LANDSCAPE PLAN HAS BEEN PREPARED FOR THE PROJECT, SOIL PREPARATION AND SEEDING OF THAT PLAN SHALL SUPERSEDE THESE GENERAL PERMANENT SEEDING SPECIFICATIONS. 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 SEEDDED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 1 SHALL BE SEEDDED WITH AROOSTOOK RYE OR MULCHED AT RATES PREVIOUSLY SPECIFIED. SEE WINTER CONDITIONS NOTES FOR SEEDING STABILIZATION AFTER NOVEMBER 1.
  - A. APPLY TOPSOIL TO A MINIMUM DEPTH OF 6 INCHES. MIX TOPSOIL WITH THE SUBSOIL TO A MINIMUM DEPTH OF 2 INCHES.
  - B. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TESTS, APPLY COMBINED LIMESTONE AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET) AND GRANULAR, COMMERCIAL-GRADE, 10-10-10 (N-P205-K20) FERTILIZER AT A RATE OF 800 LBS. PER ACRE (184 LBS. PER 1,000 SQUARE FEET).
  - C. UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
  - D. THE SEED MIXTURE FOR LAWN AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
    - 45 % CREEPING RED FESCUE
    - 45 % KENTUCKY BLUEGRASS
    - 10 % PERENNIAL RYE GRASS
 SEEDING RATE PER 1000 SQ.FT. = 3.5 LBS. MIN.
  - E. THE SEED MIXTURE FOR WET AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
    - 80 % REED CANARY GRASS
    - 20 % RED TOP
 SEEDING RATE PER 1000 SQ.FT. = 0.57 LBS. MIN.
  - F. THE SEED MIXTURE FOR WET AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
    - 80 % REED CANARY GRASS
    - 20 % RED TOP
 SEEDING RATE PER 1000 SQ.FT. = 0.60 LBS. MIN.

- MULCH ALL AREAS SEEDDED SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE.
- DITCH LININGS, STONE CHECK DAMS, AND RIPRAP INLET AND OUTLET PROTECTION SHALL BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR INSTALLATION OF CULVERT.
- RIPRAP REQUIRED AT CULVERTS AND STORM DRAIN INLETS AND OUTLETS SHALL CONSIST OF FIELD STONE OR ROUGH UNWEAR QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. STONES SHALL WEIGH FROM 10 LBS. TO 200 LBS. AND 50% OF THE STONES BY VOLUME SHALL EXCEED A UNIT WEIGHT OF APPROXIMATELY 50 LBS.
- EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 3:1, IN THE BASE OF DITCHES NOT OTHERWISE PROTECTED, AND ANY DISTURBED AREAS WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE (E.G. WETLANDS AND WATER BODIES). EROSION CONTROL BLANKET SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

- C. WINTER CONDITIONS**
- "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF AREAS WITHIN THE CONSTRUCTION ACTIVITY 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. NO MORE THAN ONE ACRE OF THE SITE MAY BE WITHOUT STABILIZATION AT ONE TIME. SLOPE STABILIZATION AND DISTURBED AREA STABILIZATION DURING WINTER CONDITIONS SHOULD BE ADDRESSED IN ACCORDANCE WITH SECTION A-3 OF THE MAINE EROSION AND SEDIMENT CONTROL BMPs, MARCH 2003.
  - AREAS WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.
  - HAY MULCH SHALL BE APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.
  - AFTER NOVEMBER 1 OR THE FIRST KILLING FROST FOR THE REGION AND BEFORE SNOW FALL, ALL EXPOSED AND DISTURBED AREAS NOT TO UNDERGO FURTHER DISTURBANCE ARE TO HAVE DORMANT SEEDING. THE DORMANT SEEDING METHOD: PREPARE THE SEEDBED, LIME AND FERTILIZE. APPLY THE SELECTED PERMANENT SEED MIXTURE AT THREE TIMES THE REGULAR SEEDING RATE, AND MULCH AND ANCHOR. DORMANT SEEDINGS NEED TO BE ANCHORED EXTREMELY WELL ON SLOPES, DITCH BASES AND AREAS OF CONCENTRATED FLOWS. DORMANT SEEDING REQUIRES INSPECTION AND RESEEDING AS NEEDED IN THE SPRING. ALL AREAS WHERE COVER IS INADEQUATE MUST BE IMMEDIATELY RESEEDED AND MULCHED AS SOON AS POSSIBLE.

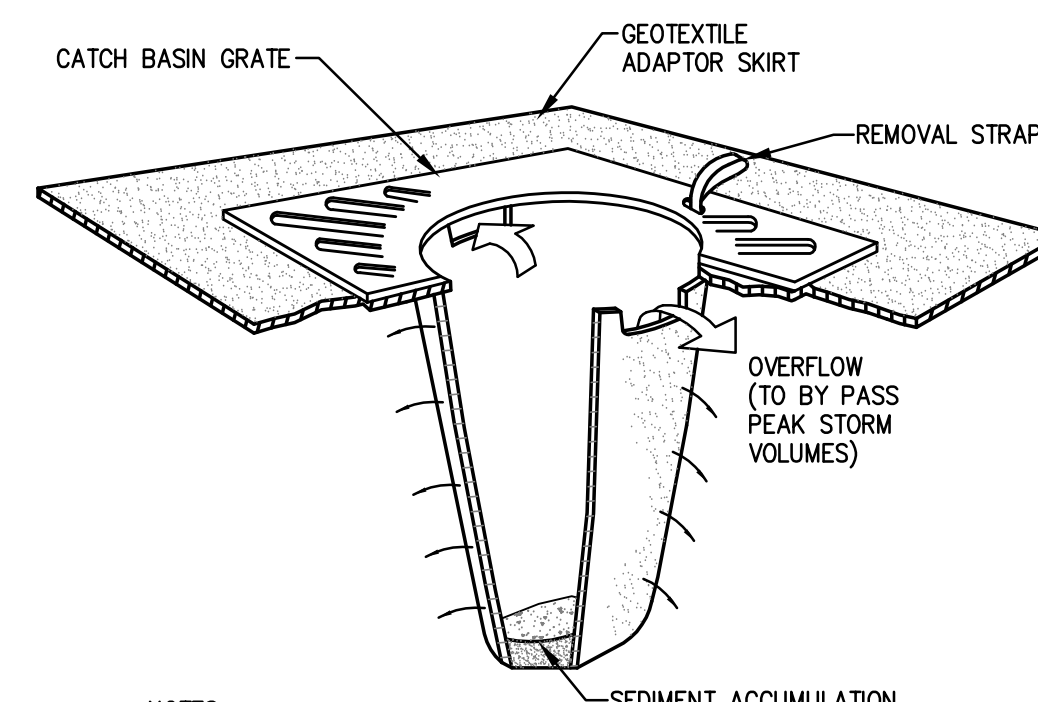
- ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY SEPTEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE SLOPES.

- D. HOUSEKEEPING**
- 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, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
  - GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SLUMPS, AND OTHER FORMS OF 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.
  - FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.

- DEBRIS AND OTHER MATERIAL LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER, MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- TRENCH OR FOUNDATION DE-WATERING. TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE PONDED WATER EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOTE AREAS THAT ARE SPECIFICALLY DESIGNATED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE. LIKE A COFFER DAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE.

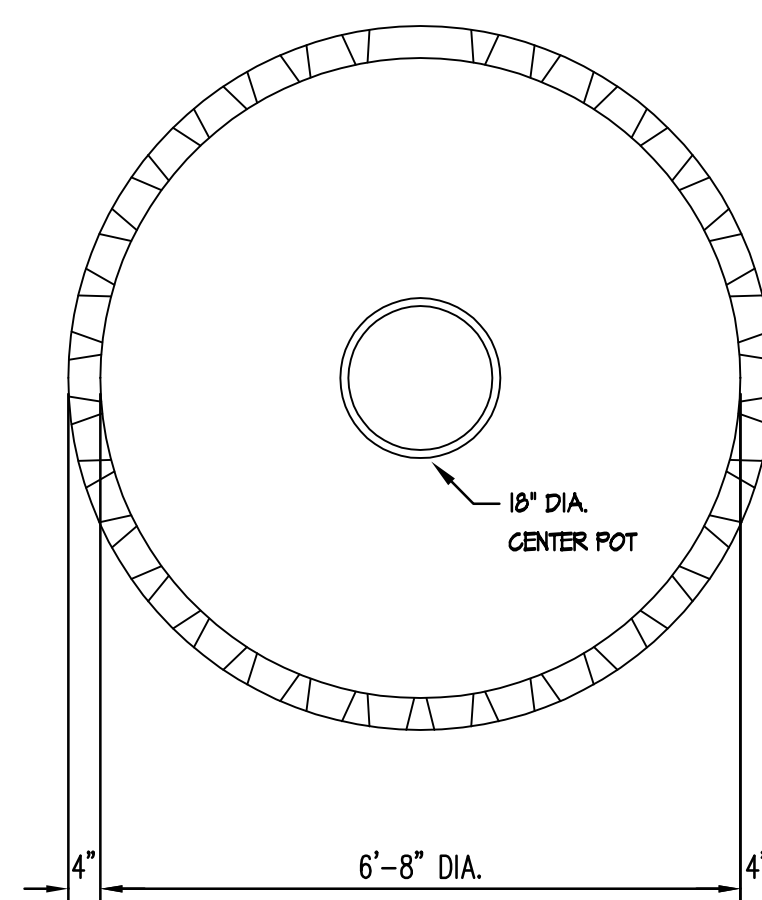
**E. INSPECTION AND MAINTENANCE**

- INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORMWATER CONTROL MEASURES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE A WEEK AS WELL AS BEFORE AND AFTER STORM EVENTS, PRIOR TO COMPLETION OF PERMANENT STABILIZATION. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT AND ANY DEP OR MUNICIPAL COMPANION DOCUMENTS, MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF BEST MANAGEMENT PRACTICES BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
- AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME AND QUALIFICATIONS OF THE PERSON PERFORMING THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE: BMPs THAT NEED TO BE MAINTAINED, LOCATION(S) OF BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED THAT DID NOT EXIST AT THE TIME OF THE INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.
- IT IS RECOMMENDED THAT THE OWNER RETAIN THE SERVICES OF THE DESIGN ENGINEER FOR SITE INSPECTIONS IN COMPLIANCE WITH MAINE DEP STORMWATER RULES, CHAPTER 500.



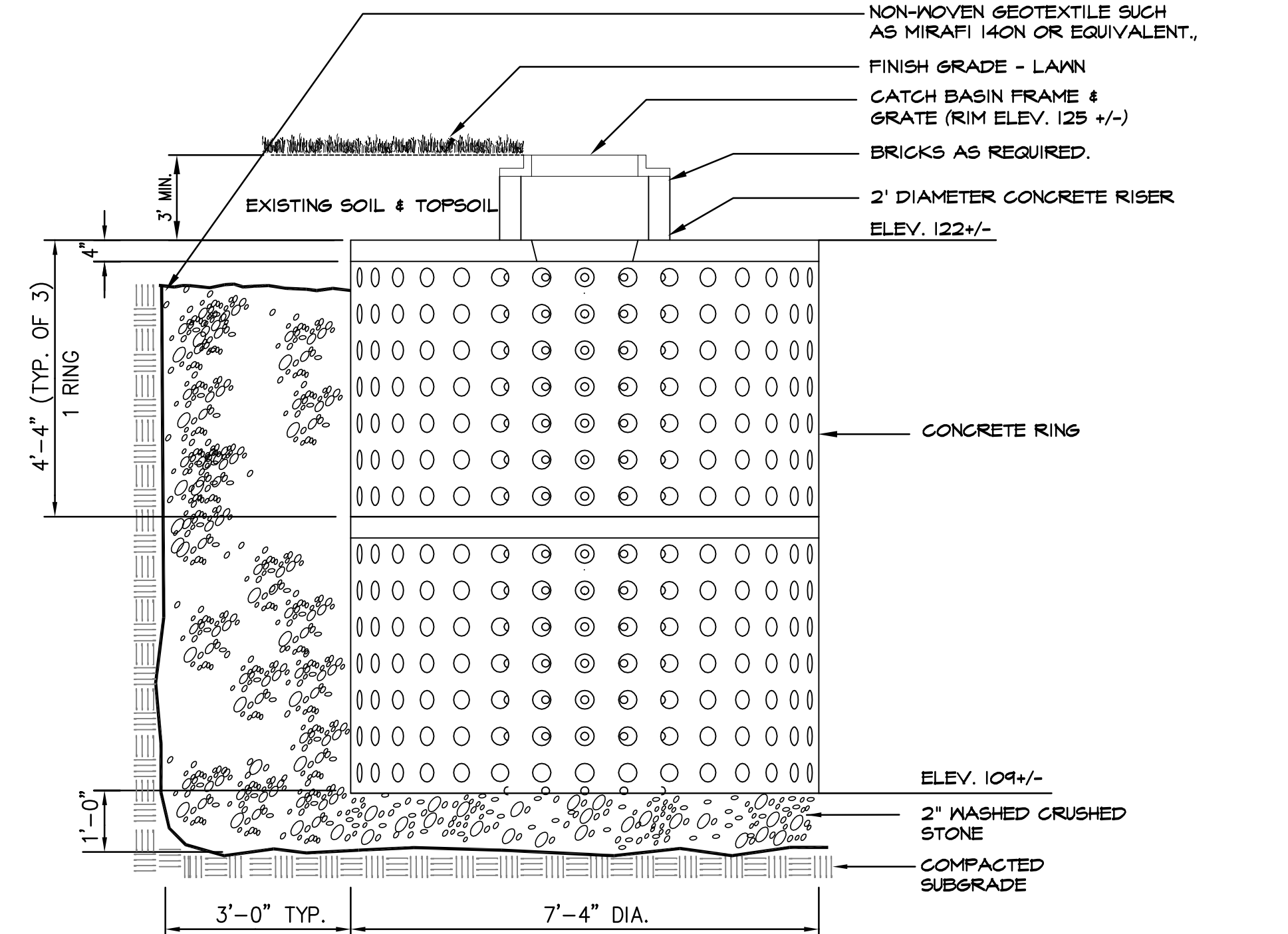
- NOTES**
- CATCH BASIN PROTECTION TO BE "SILTSTACK" (BY ACF ENVIRONMENTAL) OR "STREAM GUARD" (BY FOSS ENVIRONMENTAL SERVICES). INSERT TO BE EMPTIED IN AN APPROVED MANNER WHEN IT IS 1/2 FULL OF SEDIMENT.
  - INSPECT INSERT AFTER ALL RAINFALL EVENTS, REPAIR AND MAINTAIN AS REQUIRED.

**1 TEMPORARY INLET PROTECTION**  
SCALE: N.T.S.

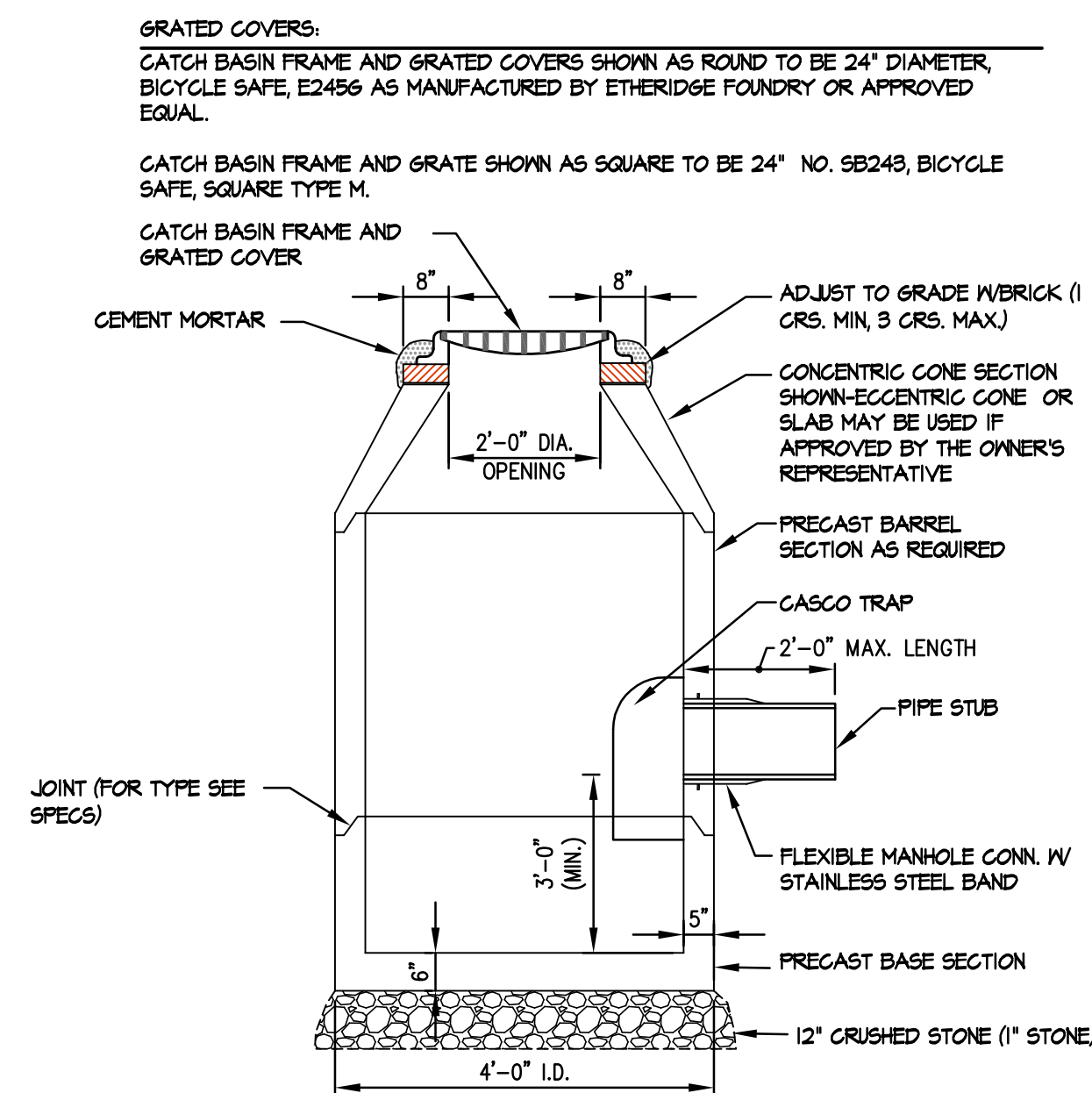


- NOTES**
- CONCRETE: 4000 PSI AFTER 28 DAYS.
  - REINFORCING: RING - 6 X 6/10 X 10 W/M.
  - RINGS MAY BE STACKED ONE ON TOP OF ANOTHER FOR MORE CAPACITY.
  - DRAINAGE RING TO BE AS MANUFACTURED BY OLD CASTLE OF AUBURN, MAINE, (800) 482-7417.

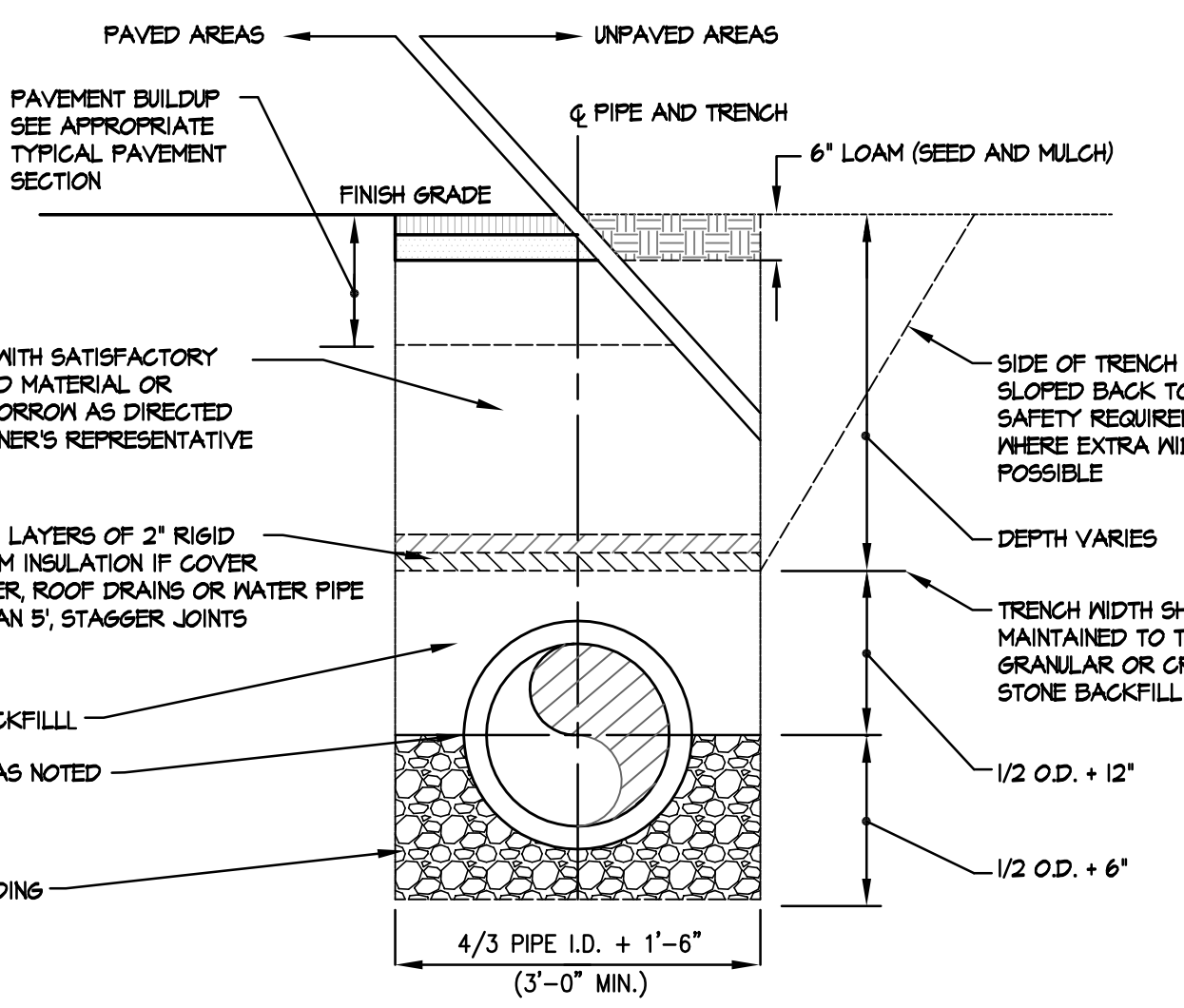
ITEM NO.
4620 DRAINAGE RING
4625 REGULAR COVER 4" THICK
4626 HEAVY DUTY COVER 8" THICK
DRAINAGE RING WEIGHT: 4,086 lbs.



**3 PRECAST CONCRETE DRAINAGE RING**  
SCALE: N.T.S.



**2 CATCH BASIN**  
SCALE: N.T.S.



**TRENCH BACKFILL SCHEDULE**

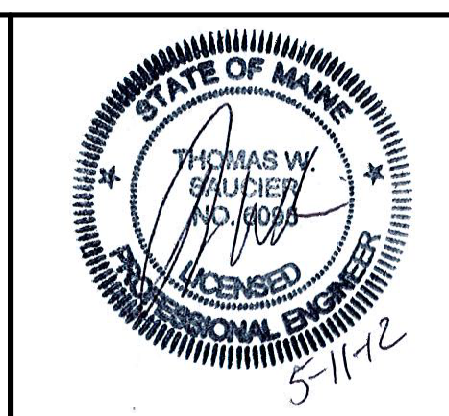
PIPE MATERIAL	PIPE BEDDING	INITIAL BACKFILL	BACKFILL
HDPE	3/4\"/>		

\*\*\* EXCAVATED MATERIAL MUST BE REVIEWED AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.  
GRANULAR MATERIAL TO BE SAND OR GRAVEL.

**4 TYPICAL TRENCH SECTION**  
SCALE: N.T.S.

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REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
C	5/11/12	ISSUED FOR BUILDING PERMIT									
B	4/17/12	SUBMITTED TO THE CITY OF PORTLAND FOR LEVEL 3 REVIEW									
A	4/13/12	ISSUED FOR DESIGN DEVELOPMENT									

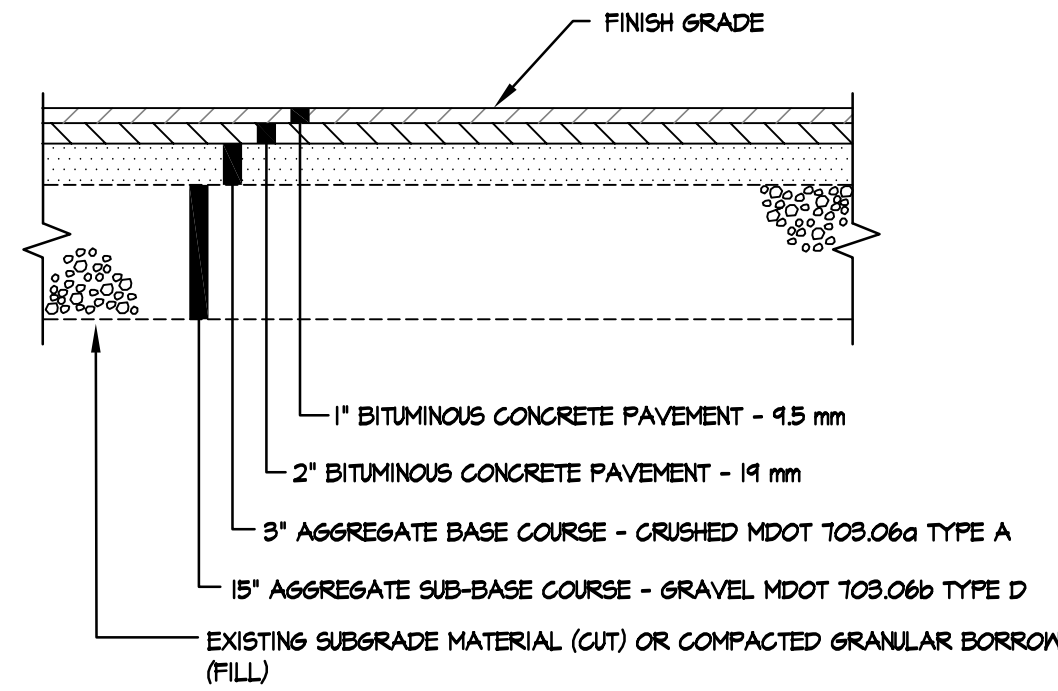


**Site Design Associates**  
Consulting Engineering & Land Planning  
23 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4275  
CLIENT: **PORT CITY ARCHITECTURE**  
65 NEWBURY STREET, PORTLAND, MAINE 04101

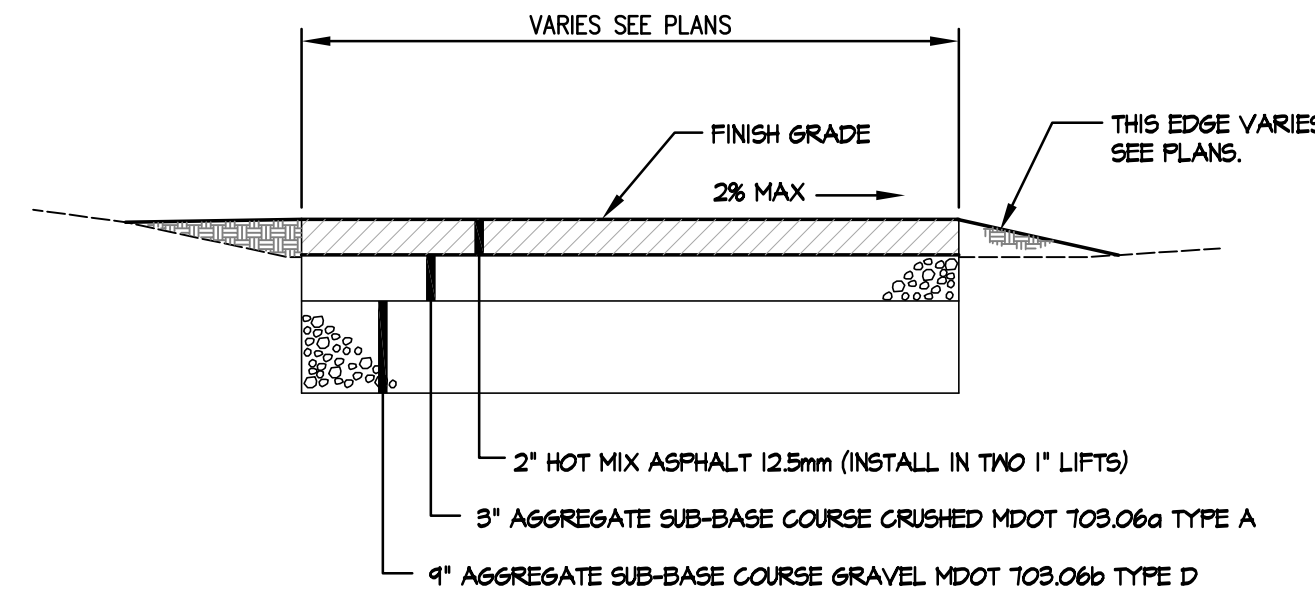
DESIGN: DEPT.	PROJECT: <b>PATIENT CARE CENTER</b> UNIVERSITY OF NEW ENGLAND STEVENS AVENUE, PORTLAND, MAINE
DRAWN: DEPT.	<b>EROSION AND SEDIMENTATION CONTROL NOTES AND SITE DETAILS</b>
CHKD: TWS	
DATE: JAN. 2012	PROJ. NO.
SCALE: AS NOTED	DWG. NO.
	REV. <b>C</b>



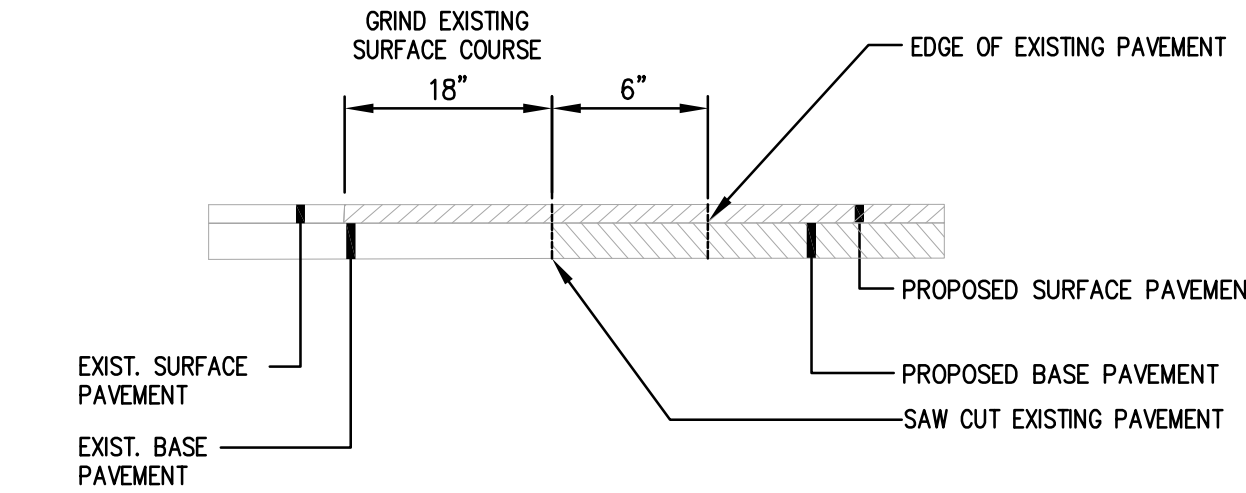
- NOTES:
- ADDITIONAL SUBBASE GRAVEL AND/OR GEOTEXTILES MAY BE REQUIRED DURING CONSTRUCTION IF SOIL CONDITIONS WARRANT.
  - BUILD-UP RECOMMENDATION IS PRELIMINARY REFER TO GEOTECHNICAL REPORT.



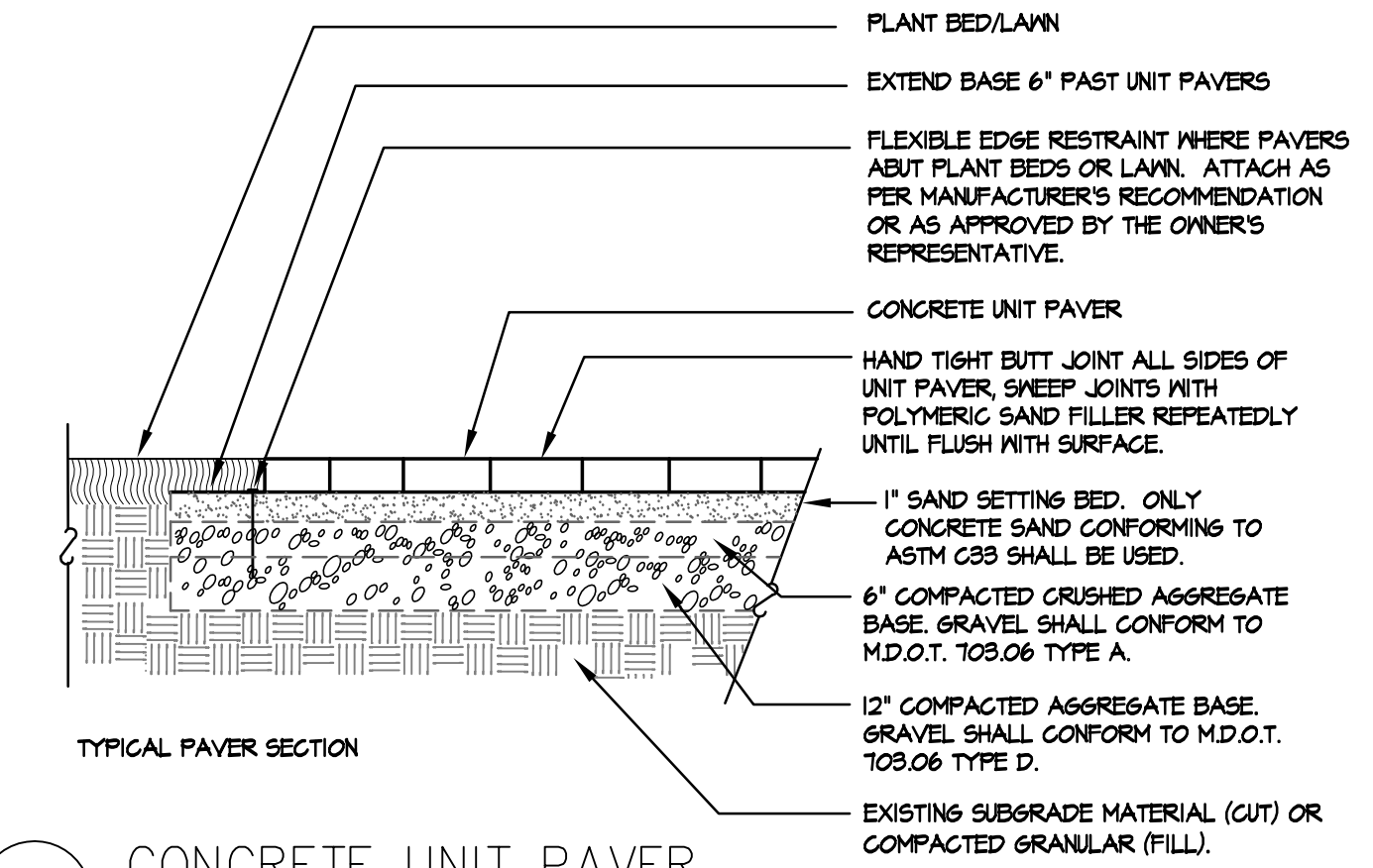
1 PARKING AREAS, SERVICE DRIVE & DROP OFF BUILD-UP



2 WALKWAY BUILD UP - BITUMINOUS CONCRETE (ALEXANDER AND LINNELL PLAZA)

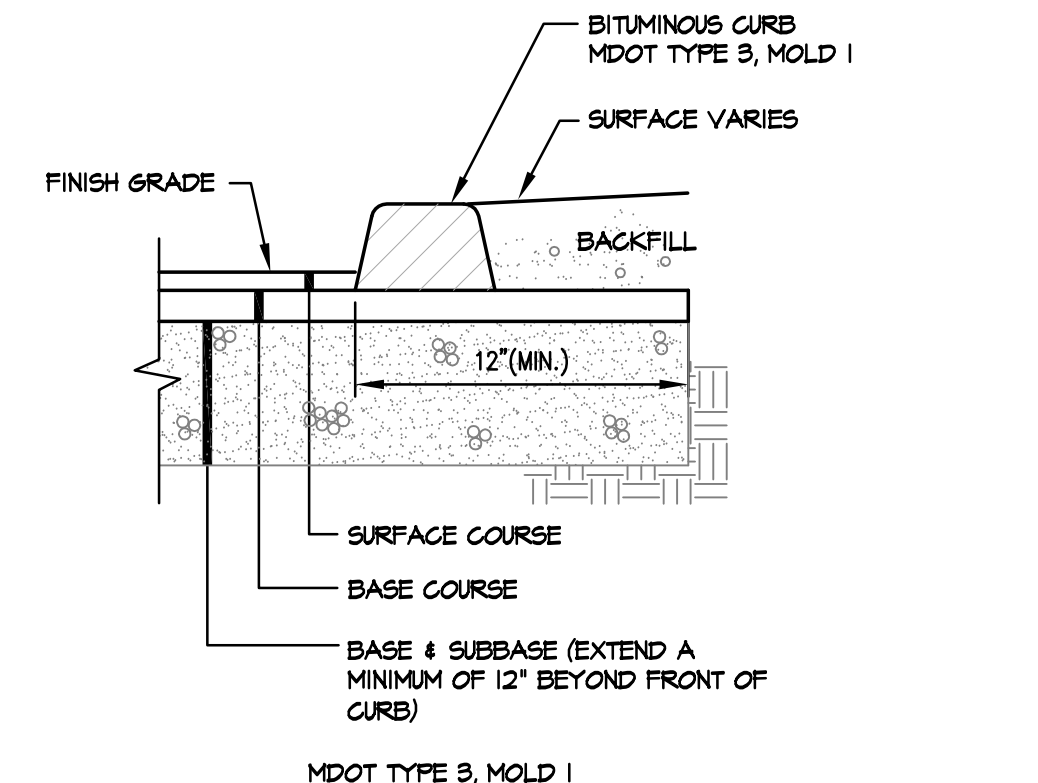


3 HMA PAVEMENT BUTT JOINT  
SCALE: N.T.S.

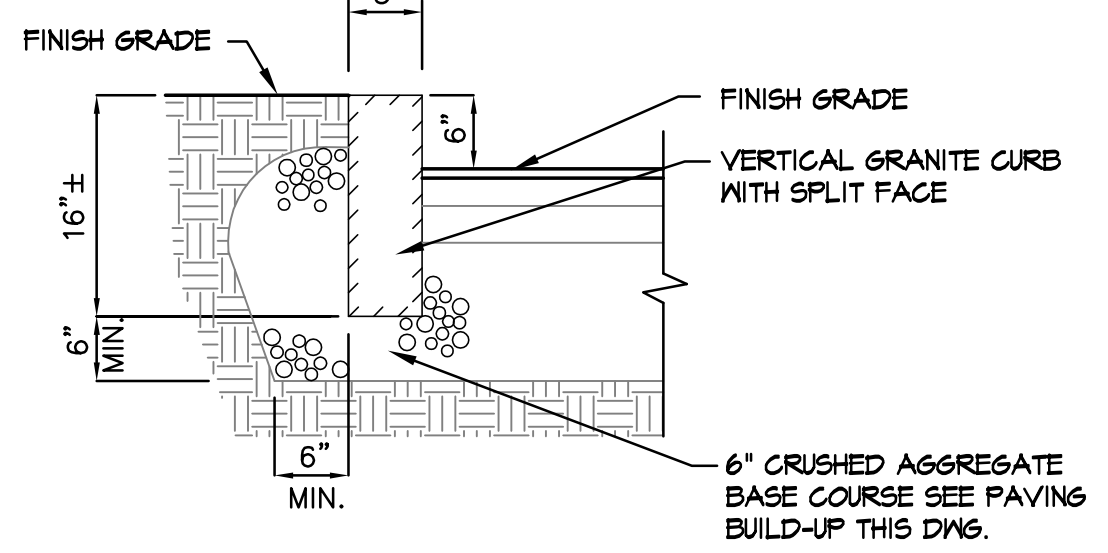


4 CONCRETE UNIT PAVER  
SCALE: N.T.S.

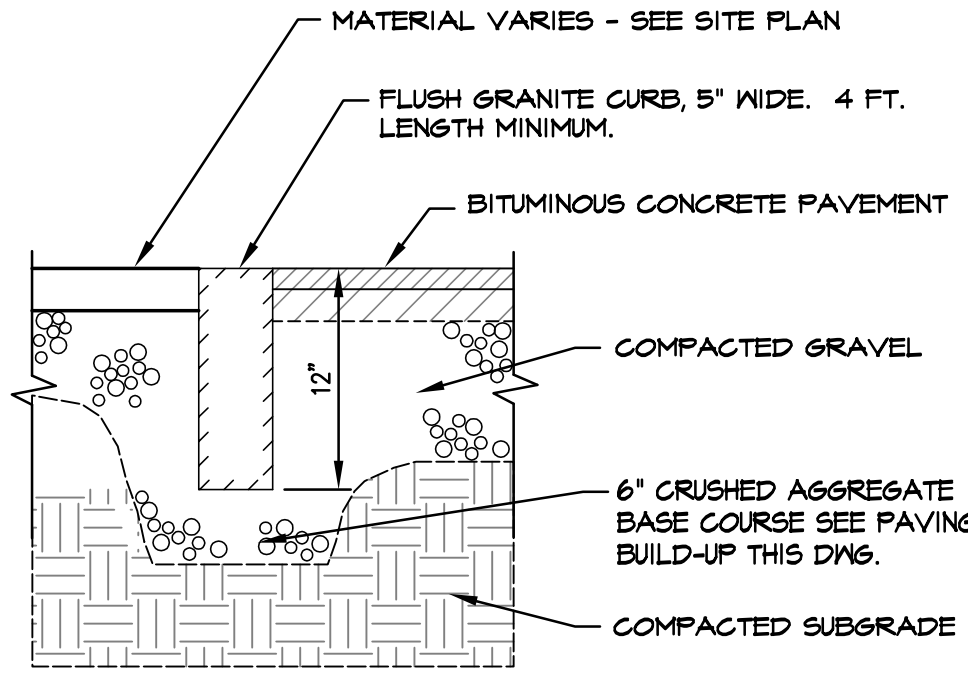
- NOTES:
- NO STRAIGHT CURB STONES SHALL BE USED ON RADII. SUBMIT SHOP DRAWINGS TO THE OWNER'S REPRESENTATIVE OF CURB STONE LENGTHS TO BE USED.
  - MINIMUM LENGTH OF STRAIGHT CURB STONES SHALL BE 4'.
  - MAXIMUM LENGTH OF STRAIGHT CURB STONES SHALL BE 8'.
  - JOINTS BETWEEN CURB STONES SHALL BE NO LESS THAN 1/8" AND NO GREATER THAN 3/8". PLACE FILTER FABRIC IN THE BACK PORTION OF THE JOINT TO PREVENT BACKFILL MATERIAL INFILTRATION.
  - CONTRACTOR TO ADJUST CURB REVEAL AT HANDICAP TIP DOWNS TO MEET 12:1 MAX. GRADE.



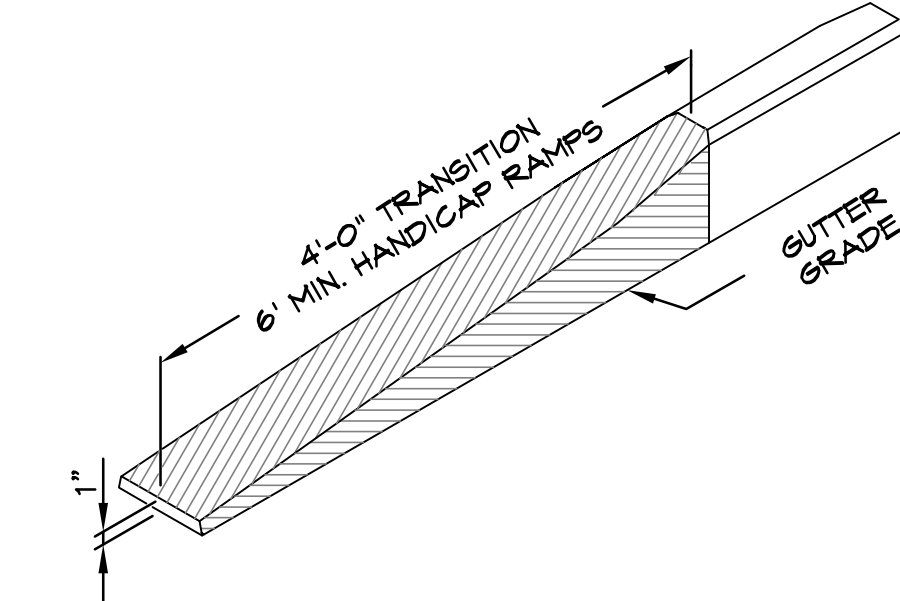
5 BITUMINOUS CURB (ADJACENT TO SIDEWALK)  
SCALE: N.T.S.



6 VERTICAL GRANITE CURB (RESET & NEW)  
SCALE: N.T.S.

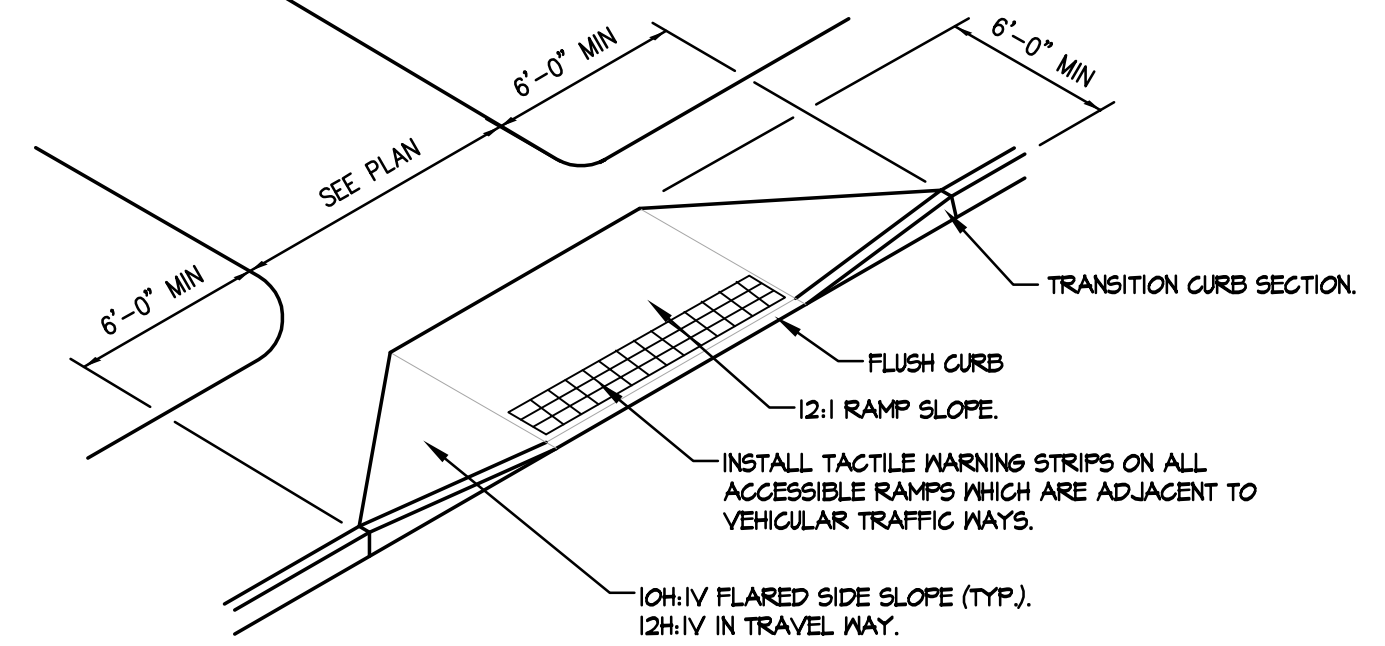


7 GRANITE CURB - FLUSH  
SCALE: N.T.S.

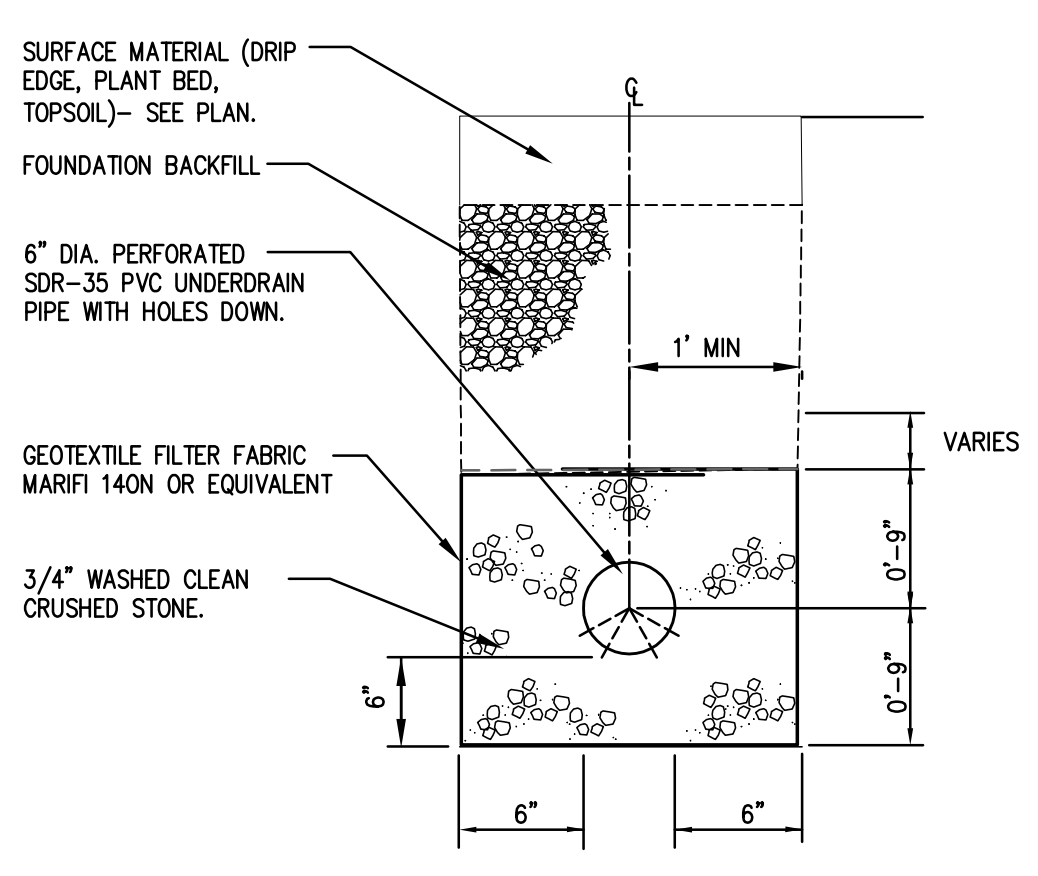
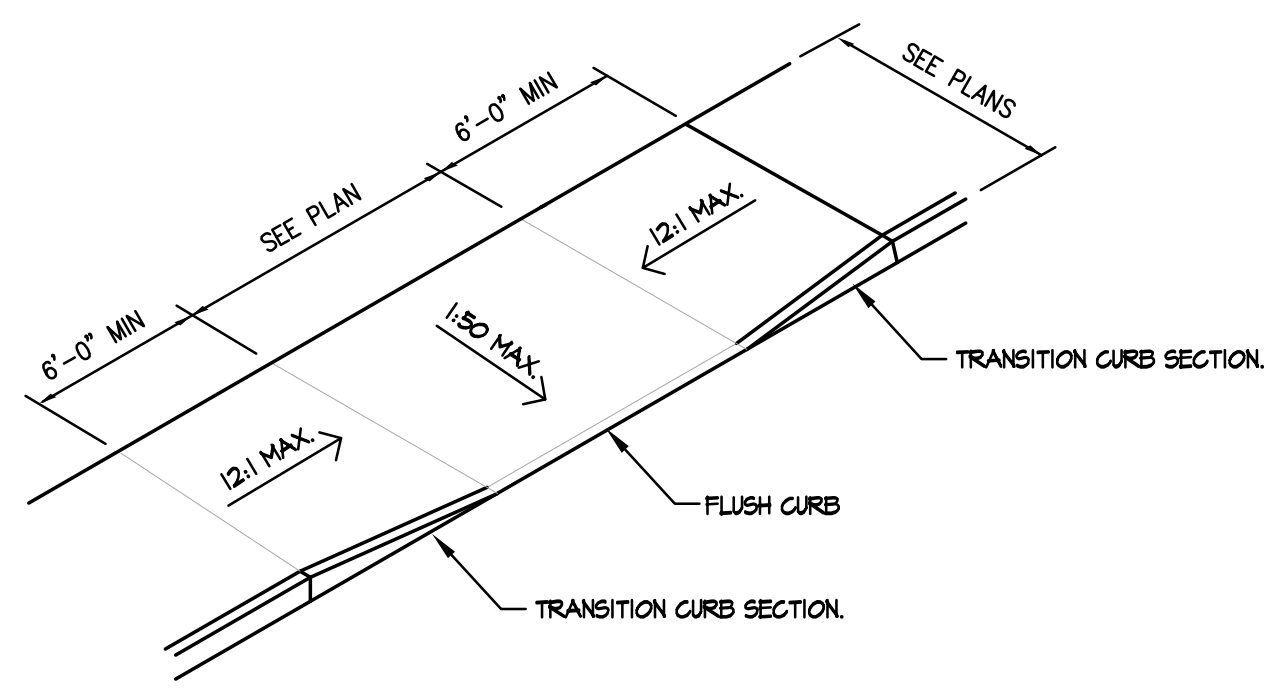
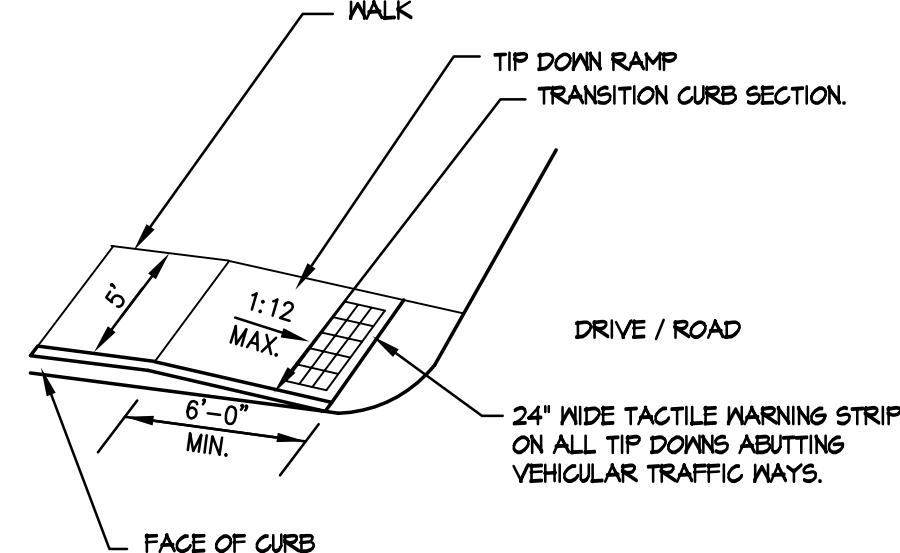


8 TRANSITION CURB  
SCALE: N.T.S.

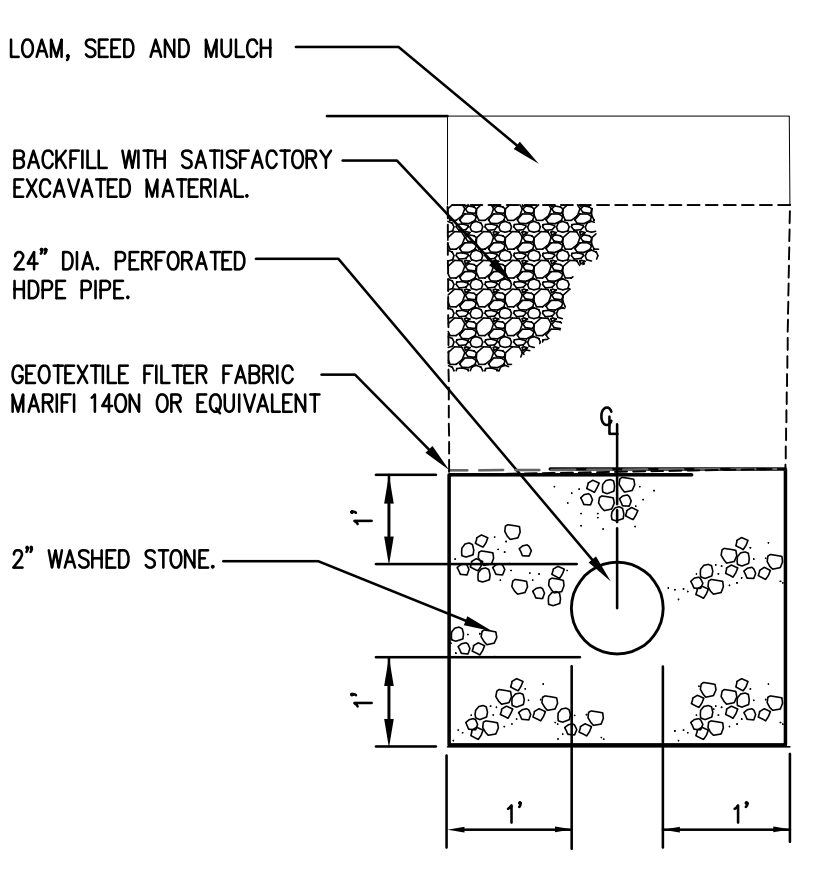
- NOTES:
- DIMENSIONS SHOWN AT EDGE OF ROAD ARE FIXED.
  - RAMP CROSS SECTION TO BE THE SAME AS ADJACENT SIDEWALK; I.E. DEPTH OF SURFACE AND FOUNDATION.
  - DIMENSIONS ARE SUBJECT TO CHANGE IN FIELD. ALL SLOPES AND DIMENSIONS TO COMPLY WITH A.D.A. REQUIREMENTS.
  - 24" WIDE DETECTABLE WARNING STRIP TO BE CONSTRUCTED FROM ADA COMPLIANT PRECAST CONCRETE UNIT PAVERS (RED IN COLOR) SUCH AS THE HOLLANDSTONE AS MANUFACTURED BY GENEST CONCRETE OF SANFORD AND WINDHAM, MAINE OR APPROVED EQUIVALENT. PROVIDE PRODUCT INFORMATION TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASING AND INSTALLATION.



9 ACCESSIBLE CURB CUT RAMPS  
SCALE: N.T.S.



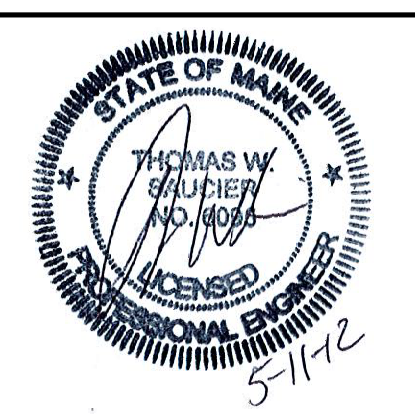
10 FOUNDATION PERIMETER DRAIN  
SCALE: N.T.S.



11 DRAINAGE RING PIPE  
SCALE: N.T.S.

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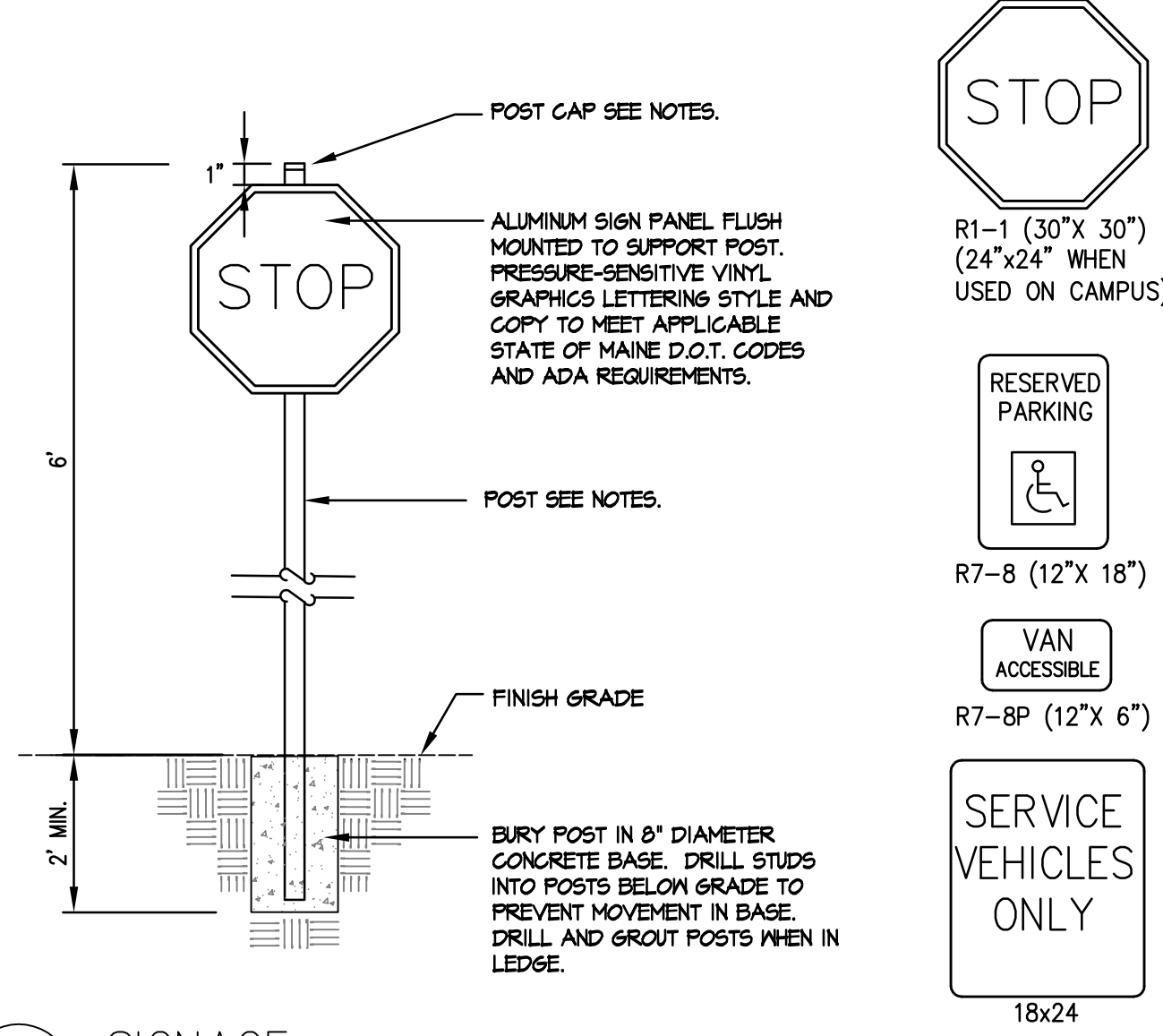
DESIGN: DEPT.  
DRAWN: DEPT.  
CHKD: TWS  
DATE: JAN. 2012  
SCALE: AS NOTED

PROJECT: **PATIENT CARE CENTER**  
UNIVERSITY OF NEW ENGLAND  
STEVENS AVENUE, PORTLAND, MAINE  
**SITE DETAILS**  
PROJ. NO.  
DWG. NO. **C-301**  
REV. **C**



**NOTES:**

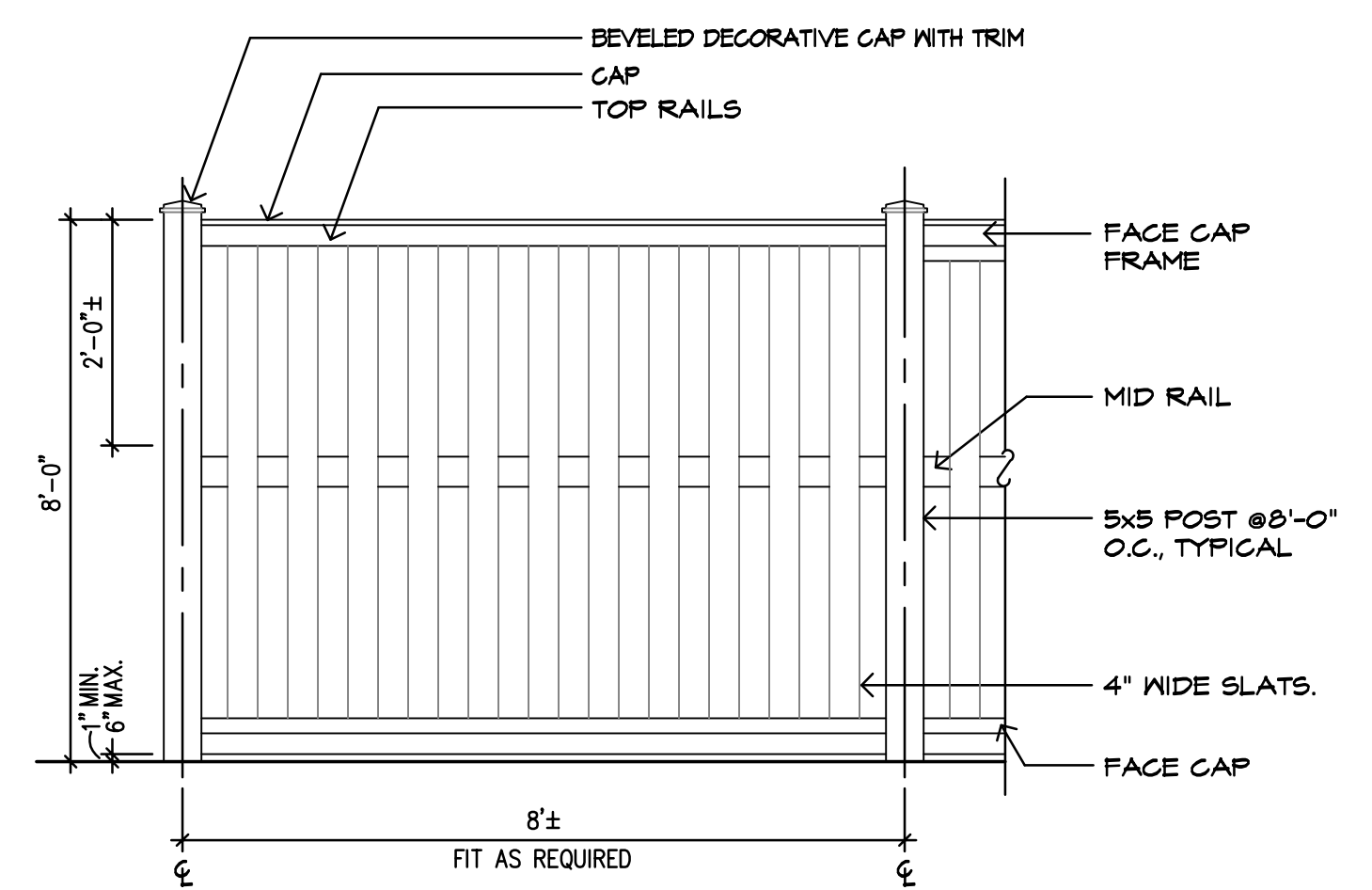
1. PROVIDE SHOP DRAWINGS OF ALL SIGNS TO THE OWNER FOR APPROVAL PRIOR TO PURCHASING.
2. OWNER TO APPROVE ALL SIGN LOCATIONS IN THE FIELD PRIOR TO INSTALLATION.
3. CONTRACTOR TO REVIEW SIGN LOCATIONS FOR CONFLICTS WITH UNDERGROUND UTILITIES AND UNDERDRAIN PRIOR TO INSTALLING POSTS.
4. ALL SIGNAGE TO COMPLY WITH ALL ADA, FEDERAL & LOCAL CODES AND MUTCD STANDARDS.
5. SIGN POSTS - FOR POSTS WITH INDIVIDUAL SIGNS, POSTS TO BE 2"x2"x8' POWDERED ALUMINUM, 0.06" THICKNESS SQUARE PLASTIC CAP IN TOP AS MANUFACTURED BY NEPCO OF PROVIDENCE RHODE ISLAND. FOR POSTS WITH MULTIPLE SIGNS, POST TO BE 2" DIAMETER SCHEDULE 40 GALVANIZED STEEL, 8' LONG WITH CONICAL GALVANIZED STEEL CAP.
6. POSTS TO BE PAINTED WITH 2 COATS OF PAINT, COLOR TO BE PANTONE 214. GALVANIZED POSTS MUST BE CLEANED, PROTRUSIONS REMOVED, AND SURFACE ROUGHED PRIOR TO PAINTING.



**1** SIGNAGE  
SCALE: N.T.S.

**NOTE:**

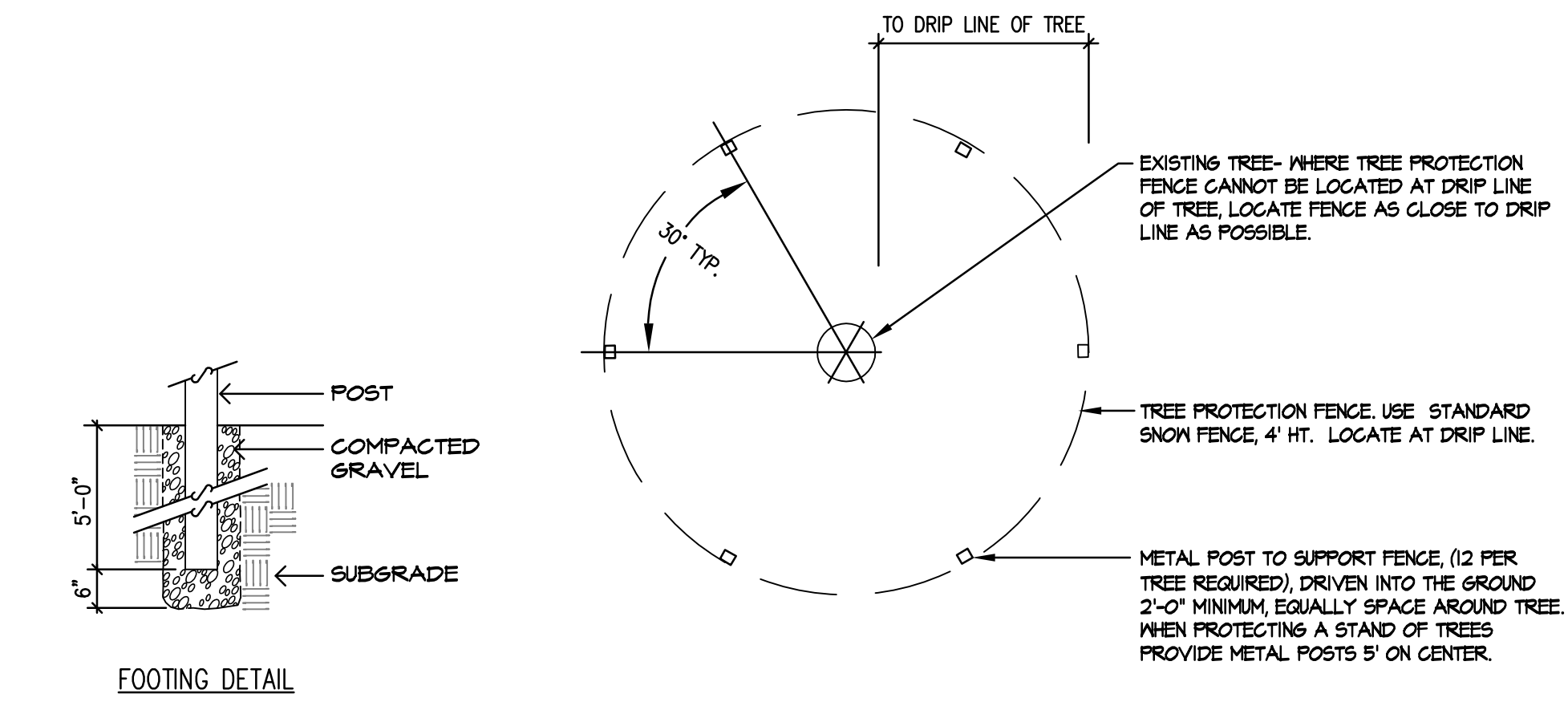
1. FENCE TO BE NORTHERN WHITE CEDAR. CONTRACTOR SHALL APPLY 2 COATS OF CABOT COMPANY'S EXTERIOR CLEAR WOOD SEALER / PRESERVATIVE.
2. PROVIDE HEAVY DUTY HARDWARE FOR DOUBLE SWING GATE.
3. PROVIDE FENCE AND GATE SHOP DRAWING FOR OWNER'S REPRESENTATIVE'S APPROVAL.



**2** WOODEN SHADOWBOX FENCE MECHANICAL PAD ENCLOSURE  
SCALE: N.T.S.

**NOTES:**

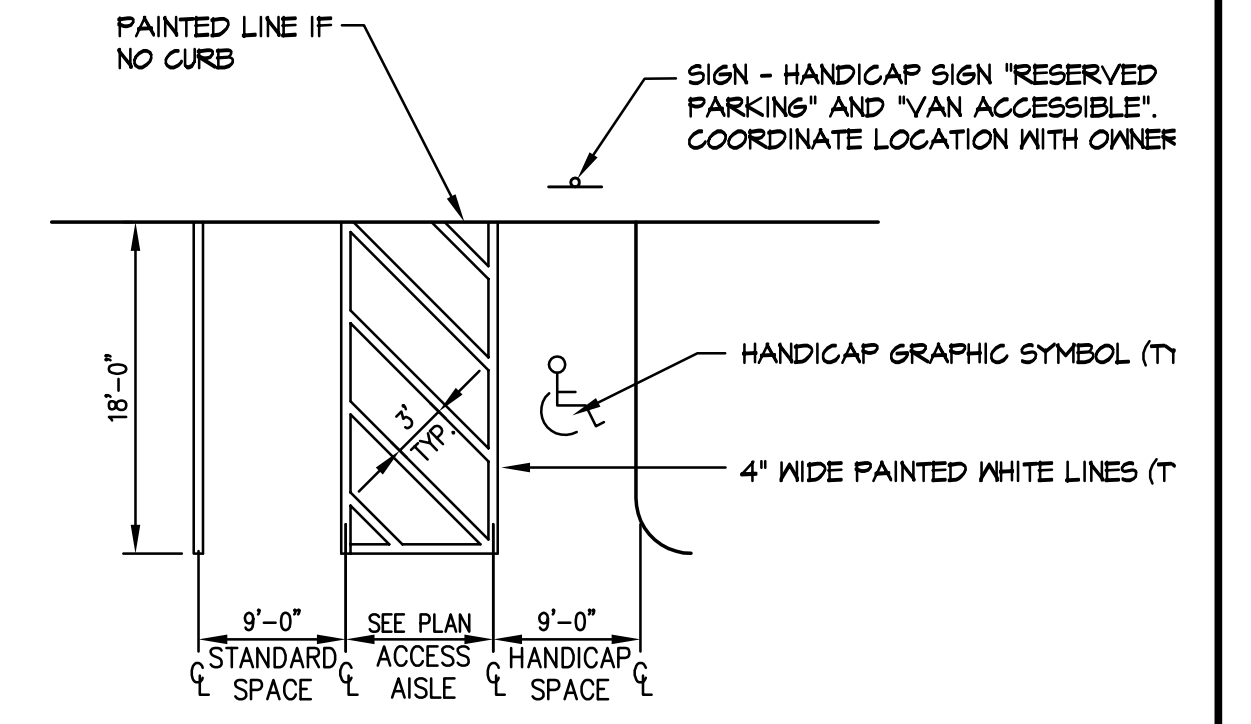
1. ALL DEAD AND DISEASED LIMBS SHALL BE PRUNED PRIOR TO BEGINNING CONSTRUCTION. ALL PRUNING AND TREE PROTECTION SHALL BE DONE BY A MAINE LICENSED ARBORIST SUCH AS BARTLETT TREE (889-3340).
2. A DEEP SOIL INJECTION OF FERTILIZER AND MYCORRHIZA SHALL BE GIVEN UNDER THE TREE CANOPY TO PROMOTE ROOT GROWTH. INJECTION AMOUNTS AND TIMING SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
3. NO EQUIPMENT SHALL BE PARKED OR STORED UNDER THE EXISTING TREE CANOPY.
4. IN AREAS WHERE THE PROPOSED EXCAVATION WILL IMPACT THE EXISTING TREE ROOTS THE ROOTS SHALL BE PRUNED BY A LICENSED ARBORIST.



**3** EXISTING TREE PROTECTION PLAN  
SCALE: N.T.S.

**NOTES:**

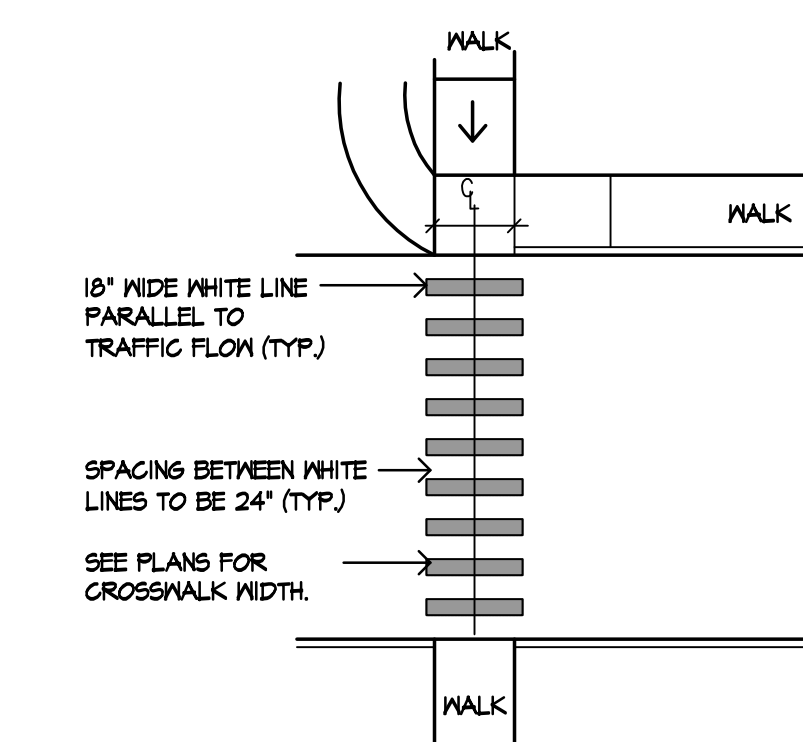
1. SYMBOLS AND PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
2. ALL PAINT SHALL BE LEAD FREE, FAST DRYING, 100% ACRYLIC WATERBORNE TRAFFIC PAINT WITH SILICA SAND FOR SKID RESISTANCE, MEETING THE REQUIREMENTS OF TT-P-1952E TYPE I & II. PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER.



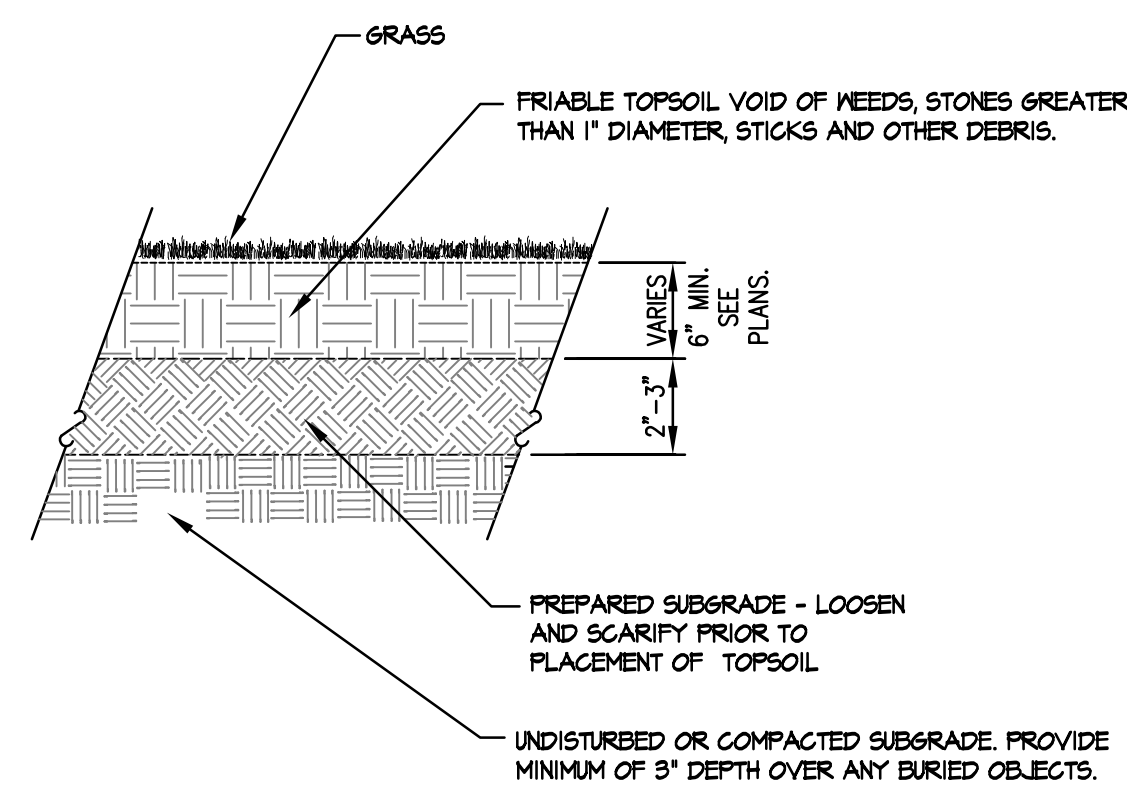
**4** HANDICAP PARKING SPACE LAYOUT  
SCALE: N.T.S.

**NOTES:**

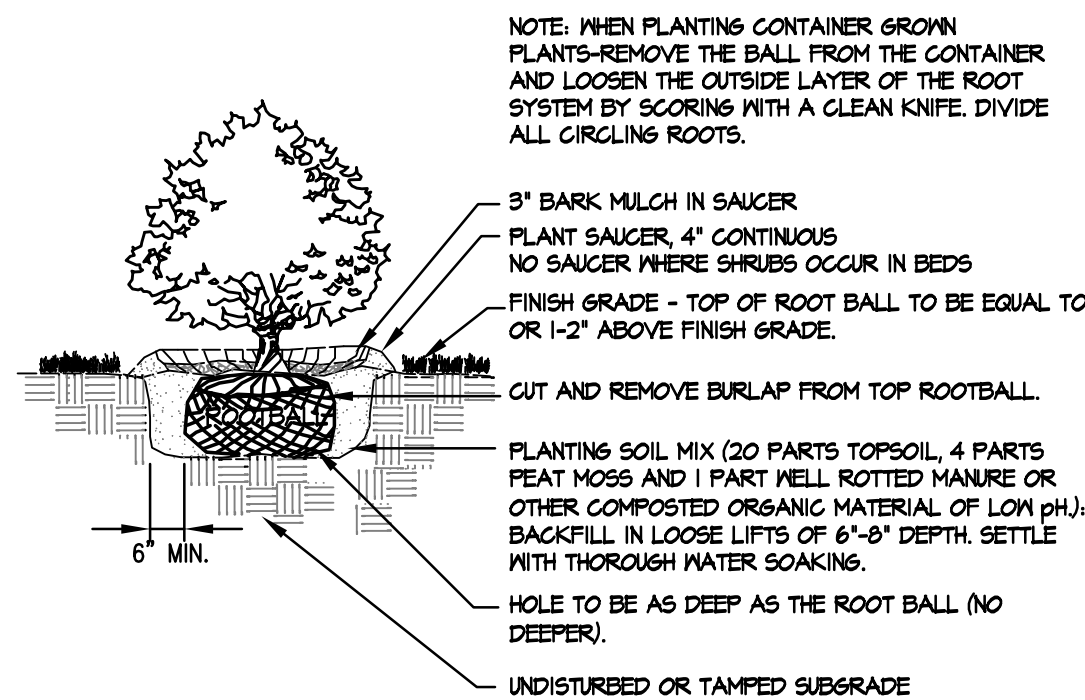
1. CROSSWALKS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND ALL LOCAL CODES AND MUTCD STANDARDS.
2. ALL PAINT SHALL BE LEAD FREE, FAST DRYING, 100% ACRYLIC WATERBORNE TRAFFIC PAINT WITH SILICA SAND FOR SKID RESISTANCE, MEETING THE REQUIREMENTS OF TT-P-1952E TYPE I & II. PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER.
3. OWNER TO APPROVE THE LAYOUT OF CROSSWALKS PRIOR TO PAINTING.



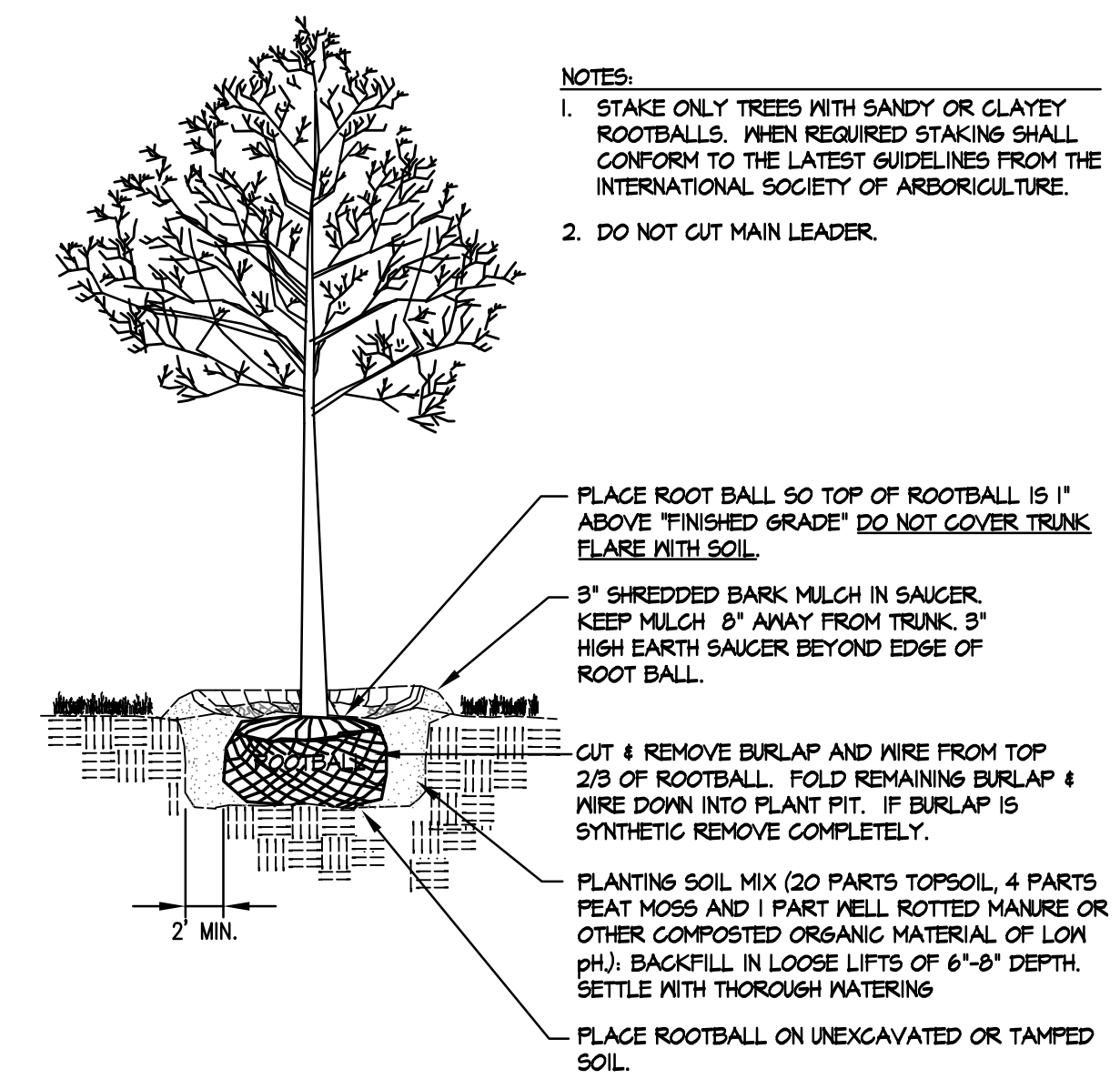
**5** PAINTED CROSSWALK  
SCALE: N.T.S.



**6** LAWN INSTALLATION (SEED OR SOD)  
SCALE: N.T.S.



**7** SHRUB PLANTING DETAIL  
SCALE: N.T.S.



**8** DECIDUOUS TREE PLANTING  
SCALE: N.T.S.

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**PETER B. BIEGEL**  
No. 2824  
STATE OF MAINE  
LANDSCAPE ARCHITECT

**Site Design Associates**  
Consulting Engineering & Land Planning

23 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4275

CLIENT: **PORT CITY ARCHITECTURE**  
65 NEWBURY STREET, PORTLAND, MAINE 04101

DESIGN: DEPT. PROJECT: **PATIENT CARE CENTER**  
UNIVERSITY OF NEW ENGLAND  
STEVENS AVENUE, PORTLAND, MAINE

DRAWN: DEPT. **SITE DETAILS**

CHKD: TWS

DATE: JAN. 2012 PROJ. NO. \_\_\_\_\_ REV. \_\_\_\_\_

SCALE: AS NOTED DWG. NO. \_\_\_\_\_

**C-302**











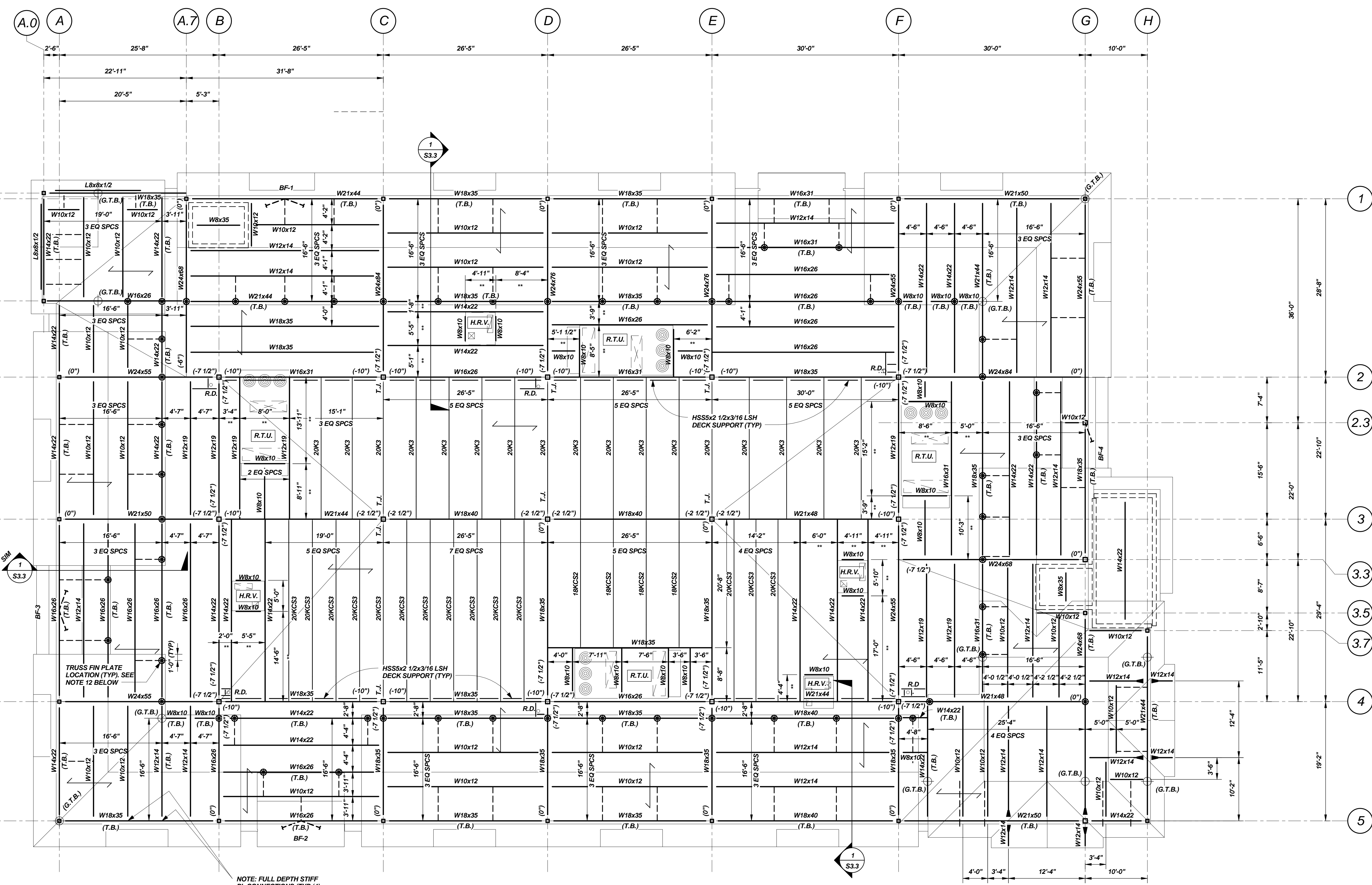
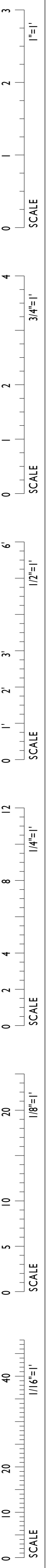








IF THIS SHEET IS NOT 24 X 36 IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY



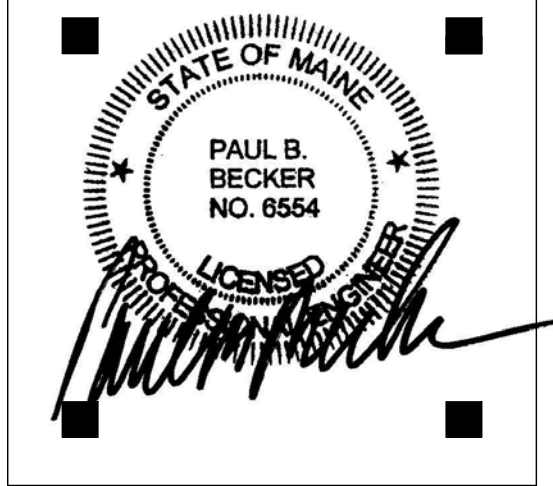
NOTE: FULL DEPTH STIFF PL CONNECTIONS (TYP (4) CORNERS).

**ROOF FRAMING PLAN**  
1/8"=1'-0"

- NOTES:**
1. TOP OF STEEL EL.: 130'-0", U.N.O. BY (-XX")
  2. ——— INDICATES SPAN DIRECTION OF 1/2", TYPE B, 18 GA ROOF DECK, (2) SPAN MIN.
  3. PROVIDE ALL JOIST BRIDGING PER STEEL JOIST INSTITUTE SPECIFICATIONS.
  4. - - - - - INDICATES VERTICAL BRACING. SEE DWG S1.5 FOR ADDL. INFO.
  5. ——— INDICATES MOMENT CONNECTION.
  6. [Symbol] INDICATES MECH UNIT. ROOF DECK CONTINUOUS UNDER UNITS EXCEPT AT DUCT OPENINGS. SEE TYP ROOF DECK OPENING DETAIL. ROOF FRAMES MAY BE REQUIRED AT ROOF DRAINS. (SEE ARCH/MECH FOR LOCS). SEE CRITERIA IN TYP ROOF DECK OPENING DETAIL.
  7. \*\* INDICATES DIMENSION TO BE COORDINATED WITH MEP REQUIREMENTS.
  8. T.J. INDICATES TIE JOIST.
  9. R.D. INDICATES ROOF DRAIN-COORD WITH ARCH & PLUMBING.
  10. (T.B.) INDICATES OVERFRAME TRUSS BEARING BEAM. SEE SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.
  11. (G.T.B.) INDICATES DESIGNED LOCATION OF OVERFRAME GIRDER TRUSS BEARING LOCATIONS.
  12. [Symbol] INDICATES TRUSS FIN PLATE LOCATION, 1'-0" FROM END OF EACH RUN, AT EACH GIRDER, & TYPICALLY 1/3RD PTS OF BAY, (10'-0" O.C. MAX.) SEE SECTION 1/S3.3.



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ENGINEERS ARCHITECTS
  - Vincent A. Dilorio Inc.**
  - EDE, INC.**  
ELECTRICAL DESIGN ENGINEERS
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REVISIONS		
No.	Description	Date

**UNIVERSITY OF NEW ENGLAND**  
PORTLAND, MAINE  
**PATIENT CARE CENTER**  
EXTERIOR SHELL

**ROOF FRAMING**

Project Number 2750  
Date 05/10/12  
Drawn by APP  
Checked by DSB

**S1.4**

Scale As indicated





























































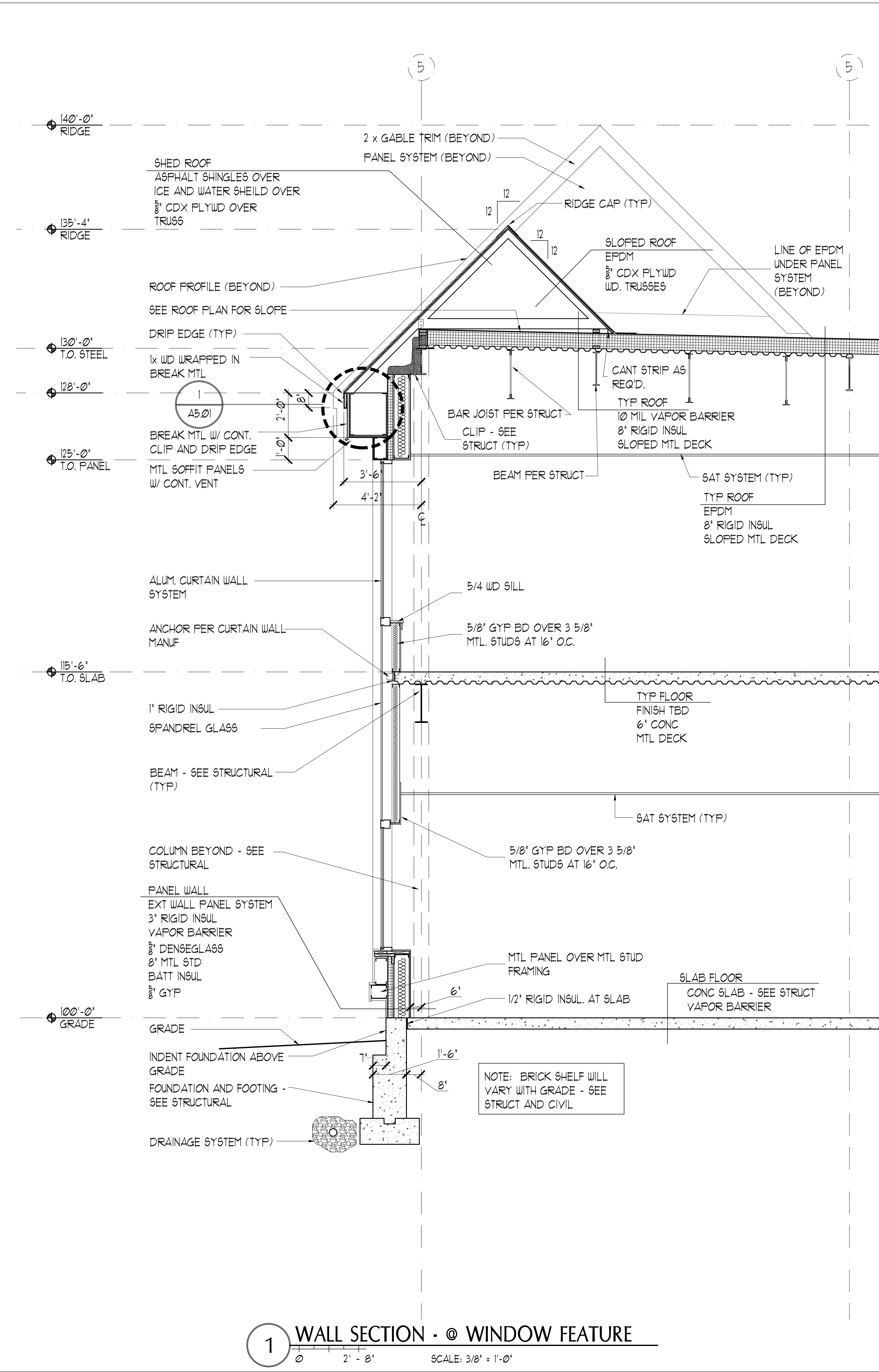
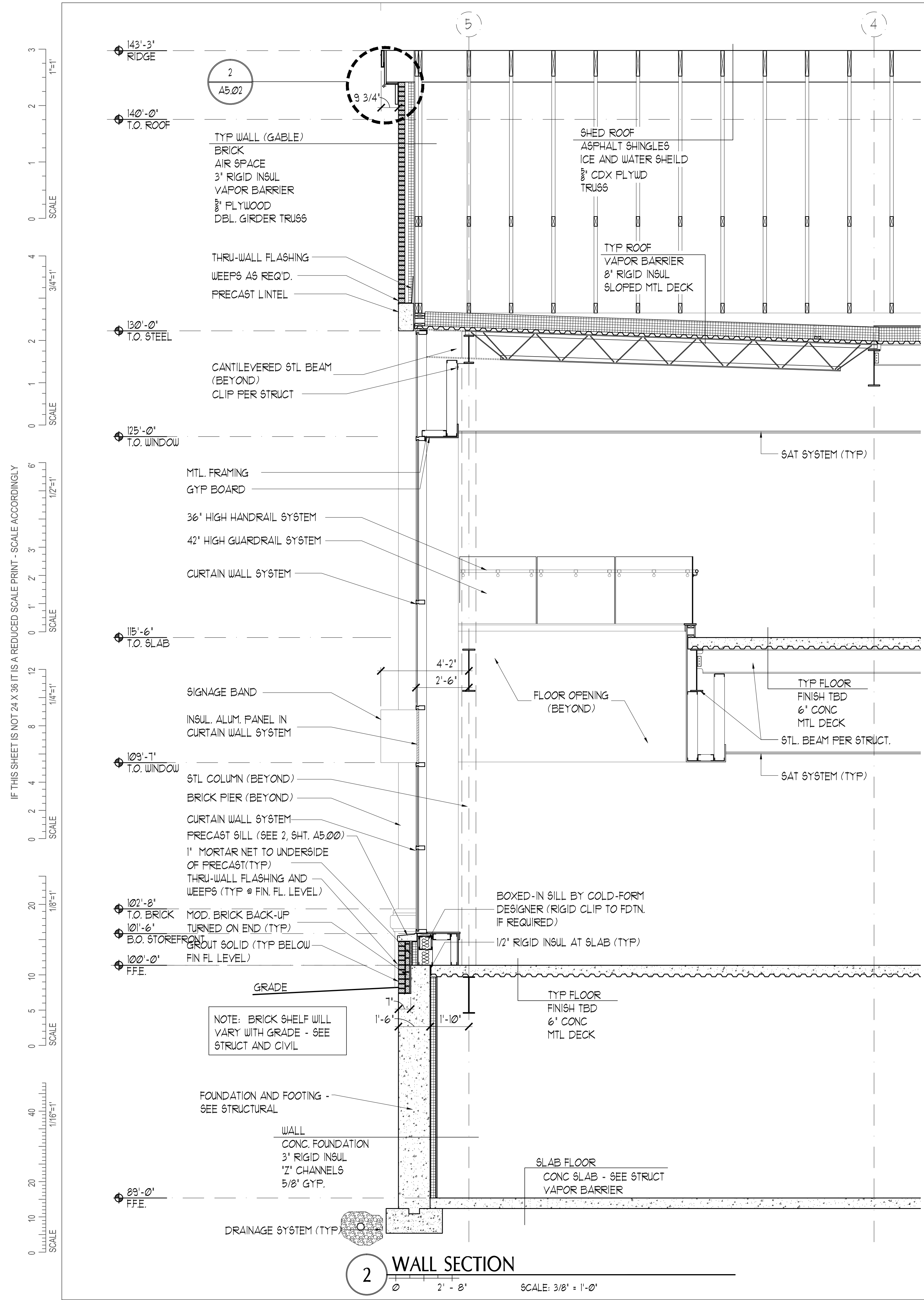












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REVISIONS

No.	Description	Date

**PERMIT SET**

**UNIVERSITY OF NEW ENGLAND**  
PORTLAND, MAINE  
**PATIENT CARE CENTER**  
EXTERIOR SHELL  
**BUILDING SECTIONS**

Project Number 12502  
Date May 11, 2012  
Drawn by JAP/MAC/JTC  
Checked by LAS

**A3.04**

Scale



































































SECTION 15300 - FIRE PROTECTION  
PART 1 - GENERAL

- 1.01 RELATED DOCUMENTS
A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND OTHER DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.
1.02 WORK INCLUDED
A. CODE COMPLIANCE, RESEARCH, DESIGN, COORDINATION, AND INSTALLATION OF A COMPLETE AND FUNCTIONAL HYDRAULICALLY CALCULATED SPRINKLER SYSTEM AND COMBINED RISER STANDPIPE SYSTEM THAT MEETS THE APPROVAL, AND IS IN ACCORDANCE WITH THE REQUIREMENTS OF FACTORY MUTUAL (FM), NFPA 101 - LIFE SAFETY CODE, OWNER STANDARDS, NFPA FIRE PROTECTION STANDARDS, UNDERWRITERS LABORATORY (UL), LOCAL AND STATE REGULATION, AND THESE SPECIFICATIONS.
B. THIS IS A PERFORMANCE SPECIFICATION. IT REQUIRES PERFORMANCE OF DESIGN WORK, PREPARATION AND SUBMISSION OF DRAWINGS, PROCUREMENT OF APPROVALS, AND PROVISION OF COMPLETE FUNCTIONAL SYSTEM OF AUTOMATIC SPRINKLERS AND/OR STANDPIPES. AS A RESULT, THIS SECTION SERVES DUAL PURPOSE OF PROVIDING SPECIFICATIONS AND INDICATING DESIGN CRITERIA FOR CONTRACTOR'S USE AND GUIDANCE IN DESIGNING SYSTEMS AND PREPARING SPRINKLER DRAWINGS FOR APPROVAL. SHOP DRAWINGS AND CALCULATIONS PREPARED AND SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL FIRE DEPARTMENT AND THE OWNER'S INSURANCE UNDERWRITER.
PERMITS AND APPROVALS OF THE FIRE PROTECTION SYSTEM.
C. FIELD ACCEPTANCE TESTING AND CERTIFICATION.
D. COORDINATION DRAWINGS.
E. SUBMITTAL DRAWINGS AND WORKING PLANS SHALL BE PREPARED UTILIZING A COMPUTER GENERATED SYSTEM COMPATIBLE WITH OWNERS' AUTOCAD DRAWING SYSTEM. AS-BUILTS AT COMPLETION OF PROJECT.
1.03 RELATED SECTIONS
A. EXAMINE DRAWINGS AND CRITERIA SHEETS AND OTHER SECTIONS OF THE SPECIFICATIONS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING FOR REQUIREMENTS WHICH AFFECT WORK UNDER THIS SECTION WHETHER OR NOT SUCH WORK IS SPECIFICALLY MENTIONED IN THIS SECTION. COORDINATE ALL WORK WITH THAT OF ALL OTHER TRADES AFFECTING OR AFFECTED BY WORK IN THIS SECTION.
1. ELECTRICAL
2. HVAC
1.04 REFERENCES
A. APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND TRADE STANDARD PUBLICATIONS SHALL APPLY TO THE WORK OF THIS SECTION, AND ARE HEREBY INCORPORATED INTO, AND MADE A PART OF THE CONTRACT DOCUMENTS.
B. MATERIAL STANDARDS SHALL BE AS SPECIFIED OR DETAILED HEREINAFTER AND AS FOLLOWS:
1. NFPA STANDARDS NOS. 13 AND NFPA 101, LIFE SAFETY CODE.
2. FACTORY MUTUAL.
3. UNDERWRITERS' LABORATORIES.
4. STATE BUILDING CODE
5. STATE FIRE MARSHAL
6. OWNER STANDARDS
1.05 SUBMITTALS
A. REFER TO GENERAL CONDITIONS FOR ADDITIONAL REQUIREMENTS.
B. SUBMITTALS - THE FOLLOWING DOCUMENTS SHALL BE PROVIDED:
1. COMPLETE HYDRAULIC CALCULATIONS AND WORKING PLANS IN ACCORDANCE WITH NFPA-13.
2. COMPLETE STAMPED AND COORDINATED SHOP DRAWINGS
3. PIPE AND FITTINGS
4. SPRINKLER HEADS
5. ESCUTCHEONS
6. HANGERS AND SEISMIC RESTRAINTS
C. SUBMITTALS DATA SHALL BE IN BOUND SETS AND BE SUBMITTED AT ONE TIME. TRANSMIT TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL. DO NOT PROCEED WITH ANY WORK WITHOUT FINAL APPROVED SUBMITTAL DATA BEARING APPROVAL STAMPS, INCLUDING THE OWNER'S REPRESENTATIVE AND THE LOCAL OR STATE FIRE MARSHAL. BE RESPONSIBLE FOR ANY DELAYS CAUSED BY NOT FOLLOWING THE ABOVE PROCEDURE AND/OR NOT COMPLETING THE DESIGN PORTION OF THE WORK IN A TIMELY MANNER.
1.06 DESIGN CRITERIA
A. THE HYDRAULIC CALCULATIONS SHALL INCLUDE THE HYDRAULICALLY MOST REMOTE AREA. HYDRAULIC CALCULATIONS SHALL SHOW THE REMOTE AREAS BEING SUPPLIED SOLELY FROM THE HYDRAULICALLY MOST REMOTE COMBINATION RISER.
B. VELOCITY SHALL NOT EXCEED 20 FPS.
C. ALL CALCULATIONS SHALL ASSUME 10 PSI DEGRADATION IN STATIC AND REGIONAL PRESSURES IN THE HYDRANT FLOW TEST RESULTS.
D. REFER TO PLANS FOR DESIGN CRITERIA.
1.07 WORKING PLANS
A. PREPARE WORKING PLANS ACCORDING TO THE REQUIREMENTS OF NFPA STANDARD 13. WORKING PLANS AND HYDRAULIC CALCULATIONS SHALL BE PREPARED BY A NICET-CERTIFIED LEVEL III OR IV AUTOMATIC SPRINKLER SYSTEM ENGINEERING TECHNICIAN AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN MAINE. WORKING PLANS SHALL BE PROVIDED IN ADDITION TO THE REQUIREMENTS FOR COORDINATION DRAWINGS. COORDINATION DRAWINGS WILL NOT BE ACCEPTED IN LIEU OF WORKING PLANS.
B. DEVIATION FROM THE APPROVED PLANS WILL REQUIRE RE-APPROVAL BY THE REVIEWING AUTHORITIES.
C. SUBMIT WORKING PLANS AND HYDRAULIC CALCULATIONS TO THE OWNER'S REPRESENTATIVE. PLANS SUBMITTED WITHOUT REVIEW STAMPS OR HYDRAULIC CALCULATIONS WILL BE RETURNED WITHOUT REVIEW. HYDRAULIC CALCULATIONS SUBMITTED WITHOUT WORKING PLANS WILL BE RETURNED WITHOUT REVIEW.
D. SUBMITTAL DRAWINGS AND WORKING PLANS SHALL BE PREPARED UTILIZING A COMPUTER GENERATED SYSTEM.

PART 2 - PRODUCTS

- 2.01 ACCEPTABLE PRODUCTS
A. MATERIALS AND EQUIPMENT PROVIDED UNDER THIS SECTION TO MAKE A COMPLETE INSTALLATION SHALL BE U.L. LISTED AND/OR FM-APPROVED AND IN COMPLIANCE WITH NFPA STANDARDS.
2.02 PIPING, FITTINGS, AND JOINTS
A. PIPING SHALL MEET APPLICABLE ANSI OR ASTM STANDARDS REQUIREMENTS AND SHALL HAVE MANUFACTURER'S NAME AND STANDARD MARKED ON EACH LENGTH. JOINTS SHALL MEET APPLICABLE ANSI AND ASTM STANDARDS REQUIREMENTS. WHERE ANSI AND ASTM STANDARD DOES NOT EXIST, JOINTS AND FITTINGS SHALL BEAR UL LISTING SYMBOL.
B. PIPING FOR SPRINKLER SYSTEMS AND STANDPIPE SYSTEMS 2-1/2" IN SIZE AND LARGER MAY BE SCHEDULE 10 BLACK STEEL CONFORMING TO ASTM 135. PIPING FOR SPRINKLERS 2" AND SMALLER IN SIZE SHALL BE SCHEDULE 40 BLACK STEEL CONFORMING TO ASTM A53.
C. PIPING FOR USE WITH HOLE-CUT FITTINGS SHALL HAVE MACHINE CUT HOLES PER MANUFACTURER REQUIREMENTS AT PREDETERMINED POSITIONS, ON THE CENTERLINE OF THE PIPE, OF A SIZE TO RECEIVE THE HOUSING LOCATING COLLAR. HOLE CUTTING MACHINE SHALL BE SUPPLIED BY THE FITTING MANUFACTURER.
D. PIPING FOR USE WITH GROOVED END FITTINGS SHALL BE ROLL GROOVED WITHOUT METAL REMOVAL OR AS PER MANUFACTURE REQUIREMENTS.
E. FITTINGS FOR GROOVED END STEEL PIPE SHALL BE CAST OF DUCTILE IRON CONFORMING TO ASTM A-536 OR FORGED STEEL CONFORMING TO ASTM A-234 (A-106, GR. B), WITH GROOVED OR SHOULDERED ENDS FOR DIRECT CONNECTION INTO GROOVED PIPING SYSTEMS WITH STEEL PIPE AND SHALL BE U.L. LISTED AND FM APPROVED, RATED FOR A MINIMUM 500 PSI MAXIMUM WORKING PRESSURE (MWP) AND SHALL BE OF ONE MANUFACTURE VICTAULIC, GRUVOLOK OR CENTRAL.
F. BRANCH OUTLET FITTINGS SHALL BE U.L. LISTED AND FM APPROVED, AND RATED FOR 500 PSI (MWP) ON PIPING 3" AND LARGER, AND 300 PSI (MWP) ON PIPING UNDER 3" IN SIZE AND SHALL BE OF ONE MANUFACTURE VICTAULIC, GRUVOLOK OR CENTRAL.
1. MECHANICAL TEE BRANCH, HOLE-CUT TYPE CONNECTIONS, WITH LOCATING COLLAR ENGAGING INTO HOLE, WITH STANDARD PRESSURE RESPONSIVE GASKETS AND BLACK NUTS AND BOLTS SIMILAR TO VICTAULIC STYLE 920/920N OR
2. OUTLET COUPLINGS, CONSTRUCTION AS HEREINAFTER SPECIFIED FOR COUPLINGS, WITH OUTLETS GROOVED OR THREADED OUTLET ENDS WITH STANDARD PRESSURE RESPONSIVE GASKETS AND BLACK BOLTS AND NUTS SIMILAR TO VICTAULIC STYLE 72.
3. NO STRAP, SNAP AND OR ONE BOLT OUTLET FITTINGS WILL BE PERMITTED.
G. STANDARD BLACK CAST IRON SCREWED FITTINGS SHALL BE USED ON PIPING 2" AND SMALLER AND MAY BE USED ON LARGER SIZES.
H. ALL GROOVED COUPLINGS, FITTINGS AND MECHANICAL TEE BRANCH FITTINGS SHALL BE VICTAULIC, GRUVOLOK OR CENTRAL.

FIRE PROTECTION SPECIFICATIONS

- I. ALL PIPE, FITTINGS, VALVES, DEVICES AND ASSOCIATED APPURTENANCES SHALL BE RATED FOR PRESSURES THAT MAY BE DEVELOPED.
J. BUSHINGS SHALL NOT BE PERMITTED WHERE FITTINGS OF REQUIRED SIZES ARE MANUFACTURED. CARE SHALL BE TAKEN IN THE DESIGN OF THIS WORK TO AVOID PIPING ARRANGEMENTS THAT WOULD REQUIRE BUSHINGS.
K. UNLESS SPECIFIED OTHERWISE HEREIN, ALL FITTINGS SHALL BE IN ACCORDANCE WITH NFPA STANDARDS AND SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER. ALL FITTINGS ARE TO BE UL LISTED AND FMG APPROVED.
L. ALL CLOSE AND SHOULDER NIPPLES SHALL BE OF CORRESPONDING MATERIALS AS THE PIPE AND SHALL BE EXTRA HEAVY PATTERN.
2.03 SPRINKLER HEADS
A. ALL SPRINKLER HEADS SHALL BE LISTED BY U.L. AND APPROVED BY FMG. ALL SPRINKLERS SHALL BE OF SINGLE MANUFACTURER. HEADS SHALL BE AS MANUFACTURED BY RELIABLE.
B. SPRINKLER HEADS SHALL BE FURNISHED AND INSTALLED TO CONFORM WITH MANUFACTURER'S LISTING.
C. ALL SPRINKLERS SHALL BE COORDINATED WITH A FINAL REFLECTED CEILING PLAN TO ARRIVE AT A SUITABLE PATTERN CONSISTENT WITH PROPER SPRINKLER PROTECTION.
D. SPRINKLERS SHALL BE LOCATED IN CENTER OF TILES.
E. SPARE HEADS: PROVIDE 20-GAUGE STEEL SPRINKLER HEAD CABINETS WITH RED ENAMEL FINISH. FURNISH THE QUANTITIES OF SPARE SPRINKLER HEADS FOR EACH TYPE INSTALLED AS REQUIRED BY NFPA STANDARD 13. FURNISH SPRINKLER WRENCH FOR EACH HEAD TYPE INSTALLED. MOUNT IN MECHANICAL ROOM OR FIRE PUMP ROOM.
2.04 PIPE HANGERS AND SUPPORTS
A. ACCEPTABLE PRODUCTS: HANGER MATERIALS SHALL MATCH PIPE MATERIAL AS REQUIRED FOR DIELECTRIC ISOLATION. ALL SUPPORT SYSTEMS SHALL BE U.L. LISTED AND FMG APPROVED AND SHALL MEET ASTM B633, SC1 AND SC3.
B. SUPPORT ALL PIPING INCLUDED IN THE WORK OF THIS SECTION WITH HANGERS AND RODS ATTACHED TO THE BUILDING STRUCTURE. HANG PIPING IN COMPLIANCE WITH NFPA STANDARDS AND THE REQUIREMENTS OF THIS SECTION. ATTACH BEAM CLAMPS BEFORE APPLICATION OF SPRAY FIRE-PROOFING.
C. PIPING 2-1/2" AND SMALLER: CARBON STEEL, ADJUSTABLE SWWEL.
D. PIPING 3" AND LARGER: CARBON STEEL, ADJUSTABLE, CLEVIS.
E. HANGER ATTACHMENTS
1. BEAM CLAMPS: CARBON STEEL HANGER WITH LOCK NUT AND RETAINING STRAP OR APPROVED EQUAL.
2. EXPANSION SHELLES: HILTI HDI OR APPROVED EQUAL.
3. INSERTS: MALLEABLE IRON CASE OF GALVANIZED STEEL SHELL AND EXPANDER PLUG FOR THREADED CONNECTION WITH LATERAL ADJUSTMENT, TOP SLOT FOR REINFORCING RODS, LUGS FOR ATTACHING TO FORMS; SIZE INSERTS TO SUIT THREADED HANGER RODS. HILTI HKD OR APPROVED EQUAL.
F. SPACE HANGERS AND SUPPORTS FOR HORIZONTAL STEEL SPRINKLER PIPING ACCORDING TO THE FOLLOWING SCHEDULE:
PIPE SIZE: \_\_\_\_\_ MAXIMUM HANGER SPACING:
1. 1-1/4" AND SMALLER 8'-0"
2. 1-1/2" TO 3" 10'-0"
G. HANGER RODS: MILD STEEL THREADED BOTH ENDS, THREADED ONE END, OR CONTINUOUS THREADED. PROVIDE HANGER RODS SIZED ACCORDING TO THE FOLLOWING SCHEDULE:
PIPE SIZE: \_\_\_\_\_ MINIMUM ROD DIAMETER:
1. 4" AND SMALLER 3/8"
H. HANG STANDPIPE AND SPRINKLER PIPING TO SUPPORT THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 POUNDS AT THE HANGER.
I. HANG HORIZONTAL FIRE LINE PIPING TO SUPPORT THE WEIGHT OF FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 POUNDS AT THE HANGER.
J. PROVIDE STEEL ANGLE SUPPORTS ATTACHED TO THE BUILDING STRUCTURE TO SUPPORT PIPING BELOW DUCTWORK.
K. RISER CLAMPS: CARBON STEEL RISER CLAMP, BLACK OR GALVANIZED FINISH.
L. FLOOR SUPPORTS: SCHEDULE 40 BLACK STEEL ADJUSTABLE PIPE SADDLE, LOCK NUT, NIPPLE, FLOOR FLANGE, AND CONCRETE PIER OR STEEL SUPPORT.
M. ALL VERTICAL DROPS AND RUN-OUT PIPES SHALL BE SUPPORTED BY SPLIT RING EXTENSION TYPE HANGERS.

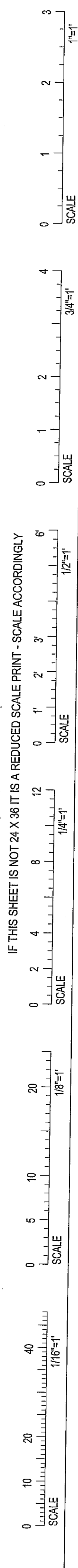
- 2.05 PIPE SLEEVES, PLATES AND ESCUTCHEONS, FIRESTOPPING AND SMOKEPROOFING
A. WHERE PIPES PASS THROUGH ALL WALLS OR FLOORS, THE FIRE PROTECTION SUBCONTRACTOR SHALL PROVIDE AND SET INDIVIDUAL SLEEVES FOR EACH PIPE AND ALL OTHER WORK UNDER HIS CHARGE. SLEEVES SHALL BE OF SUFFICIENT SIZE TO PROVIDE 2" MINIMUM AIR SPACE AROUND THE PIPE, OR INSULATION ON COVERED LINES PASSING THROUGH IT. ALL OPENINGS SHALL BE SEALED, SMOKEPROOFED AND MADE TIGHT AS OUTLINED IN ITEMS BELOW. THIS SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE EXACT LOCATION OF SLEEVES PROVIDED UNDER THIS CONTRACT AND SHALL COORDINATE ALL REQUIREMENTS FOR PIPING SLEEVES. IN THE EVENT THAT FAILURE TO DO SO REQUIRES CUTTING AND PATCHING, IT SHALL BE DONE AT THIS SUBCONTRACTOR'S EXPENSE.
B. THIS CONTRACTOR, FOR WORK UNDER HIS CHARGE, SHALL DETERMINE THE DIAMETER OF EACH INDIVIDUAL WALL OPENING OR SLEEVE BEFORE ORDERING, FABRICATING OR INSTALLING.
C. SLEEVES PASSING THROUGH LIGHTPROOF OR SOUNDPROOF WALLS AND FLOORS AND THROUGH FIREWALLS SHALL BE SEALED AND MADE TIGHT USING ONLY APPROVED MATERIALS AND METHODS.
D. SLEEVES AND WALL OPENINGS SHALL NOT BE USED IN ANY PORTIONS OF THE BUILDING WHERE THEIR USE WOULD IMPAIR THE STRENGTH OR CONSTRUCTION FEATURES OF THE BUILDING. THIS CONTRACTOR SHALL IMMEDIATELY BRING TO THE ARCHITECT'S ATTENTION ANY SITUATION WHICH MAY PROMOTE THIS CONDITION.
E. PROVIDE CHROME PLATED BRASS ESCUTCHEONS WITH SET SCREW FOR EXPOSED PIPING IN ALL AREAS. IN MECHANICAL ROOMS USE PLAIN BRASS OR CAST IRON ESCUTCHEONS SUITABLE FOR PAINTING. ALL ESCUTCHEONS SHALL BE SIZED TO FIT THE BARE PIPE OR INSULATION IN A SNUG AND NEAT MANNER. THEY SHALL BE OF SUFFICIENT SIZE TO COVER SLEEVE OPENINGS FOR THE PIPES AND OF SUFFICIENT DEPTH TO COVER SLEEVES PROJECTING ABOVE FLOORS. ESCUTCHEONS SHALL BE AS MANUFACTURED BY BEATON & CALDWELL, DEARBORN BRASS, OR GRINNELL. ALL ESCUTCHEONS SHALL BE OF 1-PIECE CONSTRUCTION.
F. PIPE SLEEVES SHALL BE MADE OF GALVANIZED SCHEDULE 40 PIPE, 20 GAUGE GALVANIZED STEEL OR 16 GAUGE GALVANIZED STEEL AS FOLLOWS:
1. SLEEVES PASSING THROUGH FIRE OR SMOKE RATED DRYWALL CONSTRUCTION SHALL BE 16 GAUGE GALVANIZED STEEL
2. SLEEVES PASSING THROUGH MASONRY OR CONCRETE CONSTRUCTION SHALL BE SCHEDULE 40 PIPE.
3. SLEEVES THROUGH NON-FIRE OR SMOKE RATED DRYWALL CONSTRUCTION SHALL BE 20 GAUGE GALVANIZED STEEL
G. SLEEVES SHALL BE SET AS FOLLOWS:
1. SET SLEEVES TO BE FLUSH WITH EACH SIDE OF FINISHED WALL.
H. THIS CONTRACTOR SHALL FIRESTOP AND/OR SMOKESTOP THE SPACE BETWEEN THE SLEEVES PROVIDED UNDER THIS CONTRACT AS FOLLOWS:
1. THROUGH-PENETRATION FIRESTOPPING IN FIRE RATED CONSTRUCTION
a. SYSTEMS OR DEVICES LISTED IN THE UL CATEGORIES XHCR AND XHXL MAY BE USED, PROVIDING THAT THEY CONFORM TO THE CONSTRUCTION TYPE, PENETRANT TYPE, ANNUAL SPACE REQUIREMENTS AND FIRE RATING INVOLVED IN EACH SEPARATE INSTANCE, AND THAT THE SYSTEM BE SYMMETRICAL FOR WALL APPLICATIONS. SYSTEMS OR DEVICES MUST BE ASBESTOS-FREE.
b. ADDITIONAL REQUIREMENTS: SYSTEMS MUST WITHSTAND THE PASSAGE OF COLD SMOKE EITHER AS AN INHERENT PROPERTY OF THE SYSTEM, OR BY THE USE OF A SEPARATE PRODUCT INCLUDED AS A PART OF THE UL SYSTEM OR DEVICE.
c. ACCEPTABLE MANUFACTURERS AND PRODUCTS
1) THOSE LISTED IN THE UL FIRE RESISTANCE DIRECTORY FOR THE UL SYSTEM INVOLVED, INCLUDING 3M, DOW CORNING, BIOFIRE SHIELD OR APPROVED EQUAL.
2) ALL PRODUCTS MUST BE FROM A SINGLE MANUFACTURER.
2. SMOKESTOPPING AT SMOKE PARTITIONS
a. ANY SYSTEM COMPLYING WITH THE REQUIREMENTS FOR THROUGH PENETRATION FIRESTOPPING IN FIRE RATED CONSTRUCTION, AS SPECIFIED IN ITEM H1, IS ACCEPTABLE, PROVIDED THAT THE SYSTEM PROVIDES THE REQUIRED SMOKE SEAL.
3. ACCESSORIES
a. FILL, VOID OR CAVITY MATERIALS: AS CLASSIFIED UNDER THE UL CATEGORY XH#W.
b. FORMING MATERIALS: AS CLASSIFIED UNDER UL CATEGORY XH#U IN THE FIRE RESISTANCE DIRECTORY.
4. THE MATERIALS, INSTALLATION PROCEDURES, CLEAN-UP, SAFETY PRECAUTIONS AND REQUIREMENTS SHALL BE IN ACCORDANCE WITH MANUFACTURERS PUBLISHED INFORMATION.

- 2.06 EARTHQUAKE PROTECTION AND SEISMIC RESTRAINTS
A. THE FIRE PROTECTION SUBCONTRACTOR SHALL PROVIDE ALL NECESSARY DESIGN AND MATERIALS FOR SEISMIC RESTRAINT AND PROTECTION OF PIPING AND DEVICES AGAINST DAMAGE WHERE SUBJECT TO EARTHQUAKE AS REQUIRED FOR THE ENTIRE FIRE PROTECTION SYSTEM WITHIN THE BUILDING. ALL ISOLATION AND SEISMIC DEVICES SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER. PRODUCTS OF OTHER MANUFACTURERS ARE ACCEPTABLE PROVIDED THEIR SYSTEMS STRICTLY COMPLY WITH THIS SECTION OF THE SPECIFICATIONS. PROVIDE ISOLATION MATERIALS AND SEISMIC RESTRAINTS COMPLETE AND AS MANUFACTURED BY MASON INDUSTRIES, TOLCO OR APPROVED EQUAL.
1. THE WORK UNDER THIS SECTION SHALL INCLUDE THE DESIGN, FURNISHING AND INSTALLATION OF ALL RESTRAINT DEVICES AND SYSTEMS AS MAY BE REQUIRED FOR THE FIRE PROTECTION SYSTEM INCLUDING, BUT NOT NECESSARILY LIMITED TO, THE FOLLOWING:
2. ALL FIRE PROTECTION SYSTEM PIPING AS REQUIRED.
3. PIPING PENETRATIONS THROUGH FLOORS AND WALLS.
4. SLEEVES WITH CLEARANCES AROUND THE OUTSIDE, AS RECOMMENDED.
5. CERTIFICATION OF SEISMIC RESTRAINT DESIGNS.
6. SIX (6) ELBOW SWING JOINTS AT ALL BUILDING SEISMIC SEPARATIONS AS REQUIRED BY NFPA #13.
A. SUBMIT TEN (10) COPIES OF DESCRIPTIVE DATA FOR ALL PRODUCTS AND MATERIALS, INCLUDING THE FOLLOWING:
1. CATALOG CUTS AND DATA SHEETS FOR THE SPECIFIC ISOLATORS, RESTRAINTS AND ALL OTHER ITEMS TO BE UTILIZED.
2. DETAILS OF METHODS OF SLEEVING, FIRE PROTECTION, SMOKEPROOFING AND ISOLATION FOR PIPES PENETRATING WALLS AND SLABS.
3. SPECIFIC DETAILS OF SEISMIC RESTRAINTS AND ANCHORS, INCLUDING NUMBER, SIZE AND LOCATIONS FOR EACH PIECE OF EQUIPMENT.
4. CALCULATIONS TO SUPPORT SEISMIC RESTRAINT DESIGNS.
5. ALL CALCULATIONS, DETAILS AND OTHER SUBMITTAL MATERIALS SHALL BE SEALED AND SIGNED BY A STRUCTURAL OR CIVIL ENGINEER REGISTERED IN THE STATE AND QUALIFIED TO PERFORM SEISMIC DESIGN CALCULATIONS.
6. A SEISMIC DESIGN LIABILITY INSURANCE CERTIFICATE THAT MUST ACCOMPANY ALL SUBMITTALS.
C. CODE AND STANDARD REQUIREMENTS SHALL INCLUDE, BUT NOT BE LIMITED TO:
1. APPLICABLE BOCA-NBC WITH ANY ADDITIONAL STATE OR LOCAL REQUIREMENTS.
2. NFPA 13
3. ALL STATE AND LOCAL CODES.
D. MANUFACTURERS WORKING IN THIS SECTION MUST PROVIDE A SEISMIC DESIGN LIABILITY INSURANCE CERTIFICATE AND CERTIFY THEIR ABILITY TO PROVIDE ENGINEERING AND DESIGN AS REQUIRED BY THIS SECTION. THIS CERTIFICATE SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO ANY SUBMITTALS.

PART 3 - EXECUTION

- 3.01 HYDRAULICALLY CALCULATED SPRINKLER SYSTEM
A. THE CONTRACTOR SHALL PROVIDE A HYDRAULICALLY DESIGNED SYSTEM IN COMPLETE ACCORDANCE WITH AND AS DEFINED IN APPLICABLE NATIONAL FIRE PROTECTION STANDARDS.
B. VERIFICATION OF HYDRAULIC INFORMATION
1. THE FIRE PROTECTION CONTRACTOR MUST OBTAIN CURRENT FLOW TEST RESULTS OR PERFORM FLOW TEST IN ACCORDANCE WITH NFPA 20.
C. ACCOMPANYING SPRINKLER SHOP DRAWINGS SUBMITTED TO THE ARCHITECT SHALL BEAR ALL SPRINKLER SYSTEM REQUIREMENTS, WATER SUPPLY DATA, GRAPH AND WORK SHEETS ALL AS DEFINED BY NFPA. THE HYDRAULIC GRAPH SHALL INCLUDE THE FOLLOWING INFORMATION:
1. HYDRANT FLOW TEST CURVE
2. ADJUST FLOW TEST FOR FRICTION AND ELEVATION AT NEW WET TAP CONNECTION.
3. SYSTEM FRICTION LOSS CURVE FOR SPRINKLER SYSTEM WITH INSIDE HOSE STREAM.
4. AVAILABLE OUTSIDE HOSE STREAM FLOW.
5. FIRE PUMP DISCHARGE CURVE.
D. ALL CALCULATIONS SHALL ASSUME A 10 PSI DEGRADATION IN STATIC AND RESIDUAL PRESSURES IN THE HYDRANT FLOW TEST RESULTS.
E. VELOCITY SHALL NOT EXCEED 20 FPS.
F. IN ADDITION TO THE ABOVE NOTED REQUIREMENTS, THE HYDRAULIC CALCULATIONS SHALL INCLUDE:
1. THE HYDRAULICALLY MOST REMOTE AREA FOR EACH HAZARD CLASSIFICATION/DENSITY REQUIREMENTS AS NOTED ON THE CONTRACT DOCUMENTS.
2. IF COMBINATION RISERS ARE SHOWN INTERCONNECTED WITH SPRINKLER PIPING, HYDRAULIC CALCULATIONS SHALL SHOW THE REMOTE AREA BEING SUPPLIED SOLELY FROM THE HYDRAULICALLY MOST REMOTE COMBINATION RISER.
3. ADDITIONAL HYDRAULIC CALCULATIONS SHALL BE SUBMITTED, WHEN REQUESTED, WHICH DEMONSTRATE THAT THE CONTRACTOR'S SELECTED REMOTE AREAS, INDEED THE HYDRAULICALLY MOST DEMANDING AS WELL AS REMOTE.
4. IF NEW WORK IS TO BE CONNECTED TO EXISTING PIPING THE FIRE PROTECTION CONTRACTOR SHALL VERIFY THAT THE EXISTING PIPING CAN SUPPORT DEMANDS GENERATED BY THE HYDRAULIC CALCULATIONS.
3.02 SHUTDOWNS
A. THE CONTRACTOR SHALL WORK WITH THE OWNER IN MAINTAINING INTEGRITY OF ALL FIRE PROTECTION SYSTEMS IN ADJACENT BUILDINGS AS WELL AS AREAS OUTSIDE OF THIS CONTRACT. COORDINATE AND MINIMIZE ANY AND ALL SHUTDOWNS OF THE FIRE PROTECTION SYSTEM AS FOLLOWS:
1. GIVE PROPER NOTICE TO OWNER WHEN MAKING SHUTDOWNS AND PAY ANY FEES REQUIRED.
2. PERFORM ANY DUTIES REQUIRED BY OWNER WHEN MAKING A SHUT DOWN.
3. FILL OUT A SHUTDOWN NOTICE FORM ANSWERING ALL ITEMS REQUEST SUCH AS TIME AND LOCATION OF SHUTDOWN, SYSTEMS AFFECTED, AREAS AFFECTED, ETC. WHEN REQUESTING A SHUTDOWN.
4. PROVIDE FIRE WATCH AS REQUIRED DURING A SHUTDOWN.
5. DURATION OF SHUTDOWNS SHALL BE KEPT TO A MINIMUM.
6. IN NO CASE SHALL THE FIRE PROTECTION SYSTEM BE SHUT DOWN DURING OFF HOURS OF WORK DAY WITHOUT A FIRE WATCH.
7. SYSTEM SHALL BE RETURNED TO NORMAL OPERATING CONDITIONS AT END OF WORK DAY.
3.03 CONNECTIONS TO EXISTING SYSTEMS
A. MODIFY THE SYSTEM AS REQUIRED. REMOVE EXISTING SPRINKLER MAINS AND BRANCHES TO ACCOMMODATE NEW PIPING AND OFFSETS TO PIPING AND ADDITIONAL HEADS. THE SPRINKLER SYSTEM SHALL BE FED FROM THE EXISTING RISER OR MAIN AS INDICATED ON THE PLANS.
B. THIS CONTRACTOR SHALL PAY ALL COSTS ASSOCIATED WITH ALARM SHUTDOWNS OF EXISTING SYSTEMS NECESSARY FOR NEW CONNECTIONS.
C. REFER TO "SHUTDOWNS" SECTION OF THIS SPECIFICATION.
D. EXISTING VALVES, FLOW SWITCHES AND TAMPER SWITCHES SHALL REMAIN, BUT SHALL BE CHECKED FOR PROPER OPERATION AND CONDITION AND SHALL BE PROTECTED BY THE CONTRACTOR. DAMAGE TO THESE ITEMS OCCURRING AFTER CHECKING FOR PROPER OPERATION AND CONDITION SHALL BE MADE GOOD BY THE CONTRACTOR AT HIS OWN EXPENSE WITH NEW IDENTICAL MATERIALS. PROVIDE TEMPORARY CAPS AS REQUIRED DURING SYSTEM MODIFICATION TO MAINTAIN SPRINKLER PROTECTION.
3.04 AS BUILTS
A. THE FIRE PROTECTION SUBCONTRACTOR SHALL MAINTAIN CURRENT AT THE SITE A SET OF HIS DRAWINGS ON WHICH HE SHALL ACCURATELY SHOW THE ACTUAL INSTALLATION OF ALL WORK PROVIDED UNDER HIS CONTRACT INDICATING ANY VARIATION FROM THE CONTRACT DRAWINGS, IN ACCORDANCE WITH THE GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS. CHANGES WHETHER RESULTING FROM FORMAL CHANGE ORDERS OR OTHER INSTRUCTIONS ISSUED BY THE ARCHITECT SHALL BE RECORDED, INCLUDE CHANGES IN SIZES, LOCATION AND DIMENSIONS OF PIPING, EQUIPMENT, ETC.
B. UTILIZING THE COORDINATION DRAWINGS DESCRIBED HEREIN BEFORE, THE FIRE PROTECTION SUBCONTRACTOR SHALL MODIFY/CORRECT/EDIT THE FIRE PROTECTION WORK ON THE ABOVE CAD COORDINATION DRAWINGS, TO OBTAIN A "CAD" SET OF RECORD DRAWINGS. PROVIDE (2) BLACKLINE PRINTS AND (2) COPIES OF RECORD DRAWINGS CAD FILES.
C. A MARKED-UP AND COLORED-UP SET OF PRINTS ON-SITE WILL BE USED AS A GUIDE FOR DETERMINING THE PROGRESS OF THE WORK INSTALLED. THEY SHALL BE INSPECTED PERIODICALLY BY THE ARCHITECT AND OWNER'S REPRESENTATIVES AND THEY SHALL BE CORRECTED IF FOUND EITHER INACCURATE OR INCOMPLETE. THIS PROCEDURE IS MANDATORY.
D. COORDINATION DRAWINGS ARE FOR THE CONTRACTOR'S, ARCHITECT'S, AND OWNER'S USE DURING CONSTRUCTION AND SHALL NOT BE CONSTRUED AS REPLACING ANY SHOP DRAWINGS. THE CAD COORDINATION DRAWINGS, WHEN CORRECTED FOR ACTUAL "AS-BUILT" CONDITIONS, WILL BE REVIEWED BY THE ARCHITECT, CORRECTED AND WILL BE USED TO FORMULATE THE RECORD DRAWINGS TO BE SUBMITTED TO THE OWNER FOR HIS USE.
E. THE FIRE PROTECTION SUBCONTRACTOR SHALL SUBMIT A SET OF CAD FILES ON DISC MARKED "AS-BUILTS". ALL COSTS ASSOCIATED WITH THE PRODUCTION AND REPRODUCTION OF THE CAD FILES SHALL BE INCLUDED UNDER THE FIRE PROTECTION BID FOR WORK UNDER THE FIRE PROTECTION CONTRACTS.
3.05 CLEANUP
A. AFTER COMPLETION OF THE WORK, ALL TOOLS AND OTHER EQUIPMENT SHALL BE REMOVED FROM THE BUILDING. ALL EXCESS MATERIALS SHALL BE REMOVED AND THE BUILDING LEFT BROOM CLEAN. ALL CABINETS, VALVES, AND EQUIPMENT SHALL BE CLEANED AND POLISHED.
B. THIS CONTRACTOR SHALL CLEAN, PATCH AND REPAIR ANY MATERIAL AND FINISH OF THE BUILDING OR ITS CONTENTS DAMAGED DURING THE EXECUTION OF THIS CONTRACT.

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REVISIONS table with columns for No., Description, and Date.

UNIVERSITY OF NEW ENGLAND
PORTLAND, MAINE
PATIENT CARE CENTER
EXTERIOR SHELL
SPECIFICATIONS
Project Number 12502
Date May 13, 2012
Drawn by CCSV
Checked by SPQ
F2.00
Scale NTS























































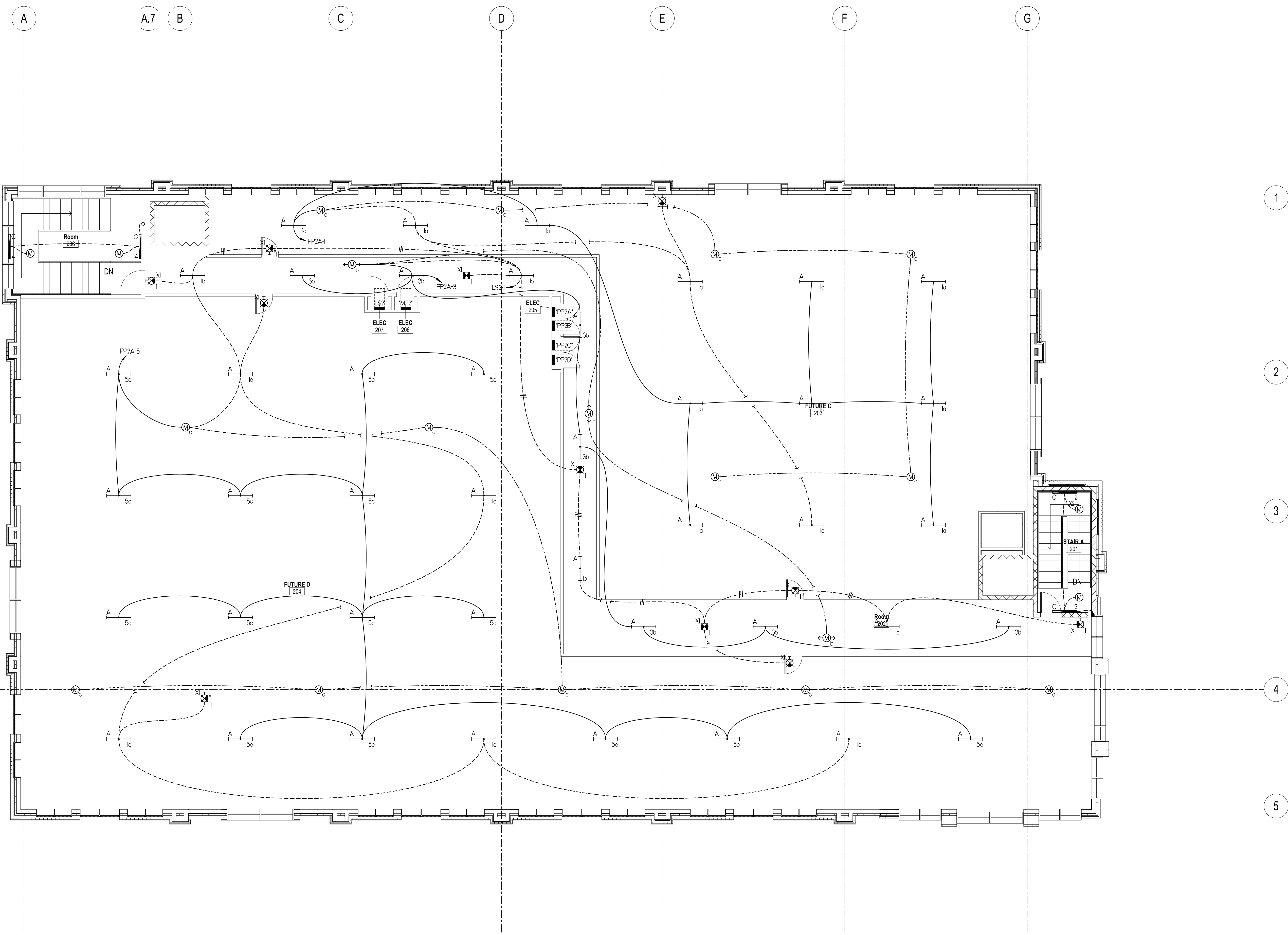




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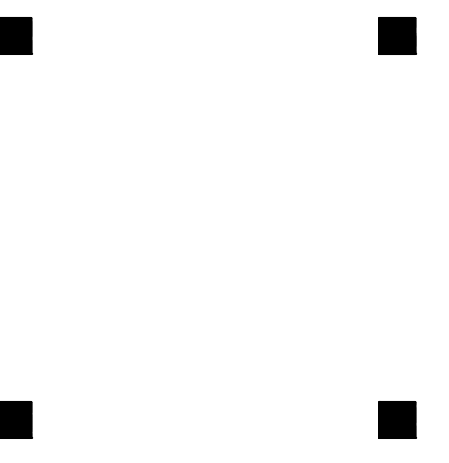
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SCALE 1/4"=1'  
SCALE 1/8"=1'

SCALE 1/8"=1'-0"



**PORT CITY ARCHITECTURE**

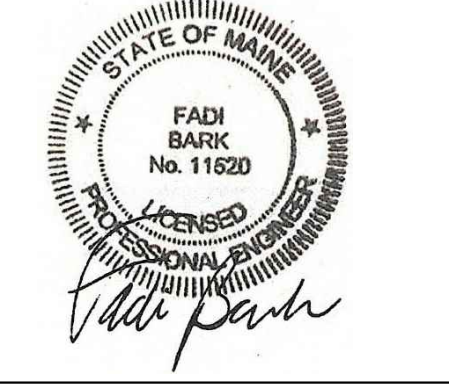
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CONSULTANTS



Site Design Associates  
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207-449-4275



REVISIONS

No.	Description	Date

DESIGN DOCUMENT

**UNIVERSITY OF NEW ENGLAND**  
PORTLAND, MAINE  
**PATIENT CARE CENTER**  
EXTERIOR SHELL

**SECOND FLOOR ELECTRICAL PLAN**

Project Number 12502  
Date 04.13.12  
Drawn by JMS  
Checked by VAD JR

**E1.03**

Scale 1/8"=1'-0"



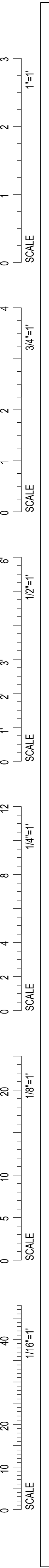








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LOCATION MOUNTING	BASEMENT ELECTRIC ROOM SURFACE		PANEL RATING	PPBA 100A		VOLTAGE 120/208V, 3Ø-4W		TYPE OF MAIN 100A M.L.O.		42 POLE
	DESCRIPTION			VOLTAMPS		DESCRIPTION		VOLTAMPS		
	ØA	ØB	ØC	FRAME	TRIP	ØA	ØB	ØC	FRAME	TRIP
IT ROOM RECEPTACLES	1500	-	-	20	1	2	1	20	-	1200
SPARE	-	-	-	20	1	3	4	1	20	-
SPARE	-	-	-	20	1	5	6	1	20	-
SPARE	-	-	-	20	1	7	8	1	20	-
SPARE	-	-	-	20	1	9	10	1	20	-
SPARE	-	-	-	20	1	11	12	1	20	-
SPARE	-	-	-	20	1	13	14	1	20	-
SPARE	-	-	-	20	1	15	16	1	20	-
SPARE	-	-	-	20	1	17	18	1	20	-
SPARE	-	-	-	20	1	19	20	1	20	-
SPARE	-	-	-	20	1	21	22	1	20	-
SPARE	-	-	-	20	1	23	24	1	20	-
SPARE	-	-	-	20	1	25	26	1	20	-
SPARE	-	-	-	20	1	27	28	1	20	-
SPARE	-	-	-	20	1	29	30	1	20	-
SPARE	-	-	-	20	1	31	32	1	20	-
SPARE	-	-	-	20	1	33	34	1	20	-
SPARE	-	-	-	20	1	35	36	1	20	-
SPARE	-	-	-	20	1	37	38	1	20	-
SPARE	-	-	-	20	1	39	40	1	20	-
SPARE	-	-	-	20	1	41	42	1	20	-

LOCATION MOUNTING	FIRST FLOOR ELECTRIC ROOM SURFACE		PANEL RATING	PP1A 225A		VOLTAGE 120/208V, 3Ø-4W		TYPE OF MAIN 225A M.L.O.		42 POLE
	DESCRIPTION			VOLTAMPS		DESCRIPTION		VOLTAMPS		
	ØA	ØB	ØC	FRAME	TRIP	ØA	ØB	ØC	FRAME	TRIP
LIGHTING	500	-	-	20	1	2	1	20	-	1500
LIGHTING	-	300	-	20	1	3	4	1	20	-
LIGHTING	-	-	300	20	1	5	6	1	20	-
SPARE	-	-	-	20	1	7	8	1	20	-
SPARE	-	-	-	20	1	9	10	1	20	-
SPARE	-	-	-	20	1	11	12	1	20	-
SPARE	-	-	-	20	1	13	14	1	20	-
SPARE	-	-	-	20	1	15	16	1	20	-
SPARE	-	-	-	20	1	17	18	1	20	-
SPARE	-	-	-	20	1	19	20	1	20	-
SPARE	-	-	-	20	1	21	22	1	20	-
SPARE	-	-	-	20	1	23	24	1	20	-
SPARE	-	-	-	20	1	25	26	1	20	-
SPARE	-	-	-	20	1	27	28	1	20	-
SPARE	-	-	-	20	1	29	30	1	20	-
SPARE	-	-	-	20	1	31	32	1	20	-
SPARE	-	-	-	20	1	33	34	1	20	-
SPARE	-	-	-	20	1	35	36	1	20	-
SPARE	-	-	-	20	1	37	38	1	20	-
SPARE	-	-	-	20	1	39	40	1	20	-
SPARE	-	-	-	20	1	41	42	1	20	-

LOCATION MOUNTING	FIRST FLOOR ELECTRIC ROOM SURFACE		PANEL RATING	PP1B 225A		VOLTAGE 120/208V, 3Ø-4W		TYPE OF MAIN 225A M.L.O.		42 POLE
	DESCRIPTION			VOLTAMPS		DESCRIPTION		VOLTAMPS		
	ØA	ØB	ØC	FRAME	TRIP	ØA	ØB	ØC	FRAME	TRIP
SPARE	-	-	-	20	1	2	1	20	-	-
SPARE	-	-	-	20	1	3	4	1	20	-
SPARE	-	-	-	20	1	5	6	1	20	-
SPARE	-	-	-	20	1	7	8	1	20	-
SPARE	-	-	-	20	1	9	10	1	20	-
SPARE	-	-	-	20	1	11	12	1	20	-
SPARE	-	-	-	20	1	13	14	1	20	-
SPARE	-	-	-	20	1	15	16	1	20	-
SPARE	-	-	-	20	1	17	18	1	20	-
SPARE	-	-	-	20	1	19	20	1	20	-
SPARE	-	-	-	20	1	21	22	1	20	-
SPARE	-	-	-	20	1	23	24	1	20	-
SPARE	-	-	-	20	1	25	26	1	20	-
SPARE	-	-	-	20	1	27	28	1	20	-
SPARE	-	-	-	20	1	29	30	1	20	-
SPARE	-	-	-	20	1	31	32	1	20	-
SPARE	-	-	-	20	1	33	34	1	20	-
SPARE	-	-	-	20	1	35	36	1	20	-
SPARE	-	-	-	20	1	37	38	1	20	-
SPARE	-	-	-	20	1	39	40	1	20	-
SPARE	-	-	-	20	1	41	42	1	20	-

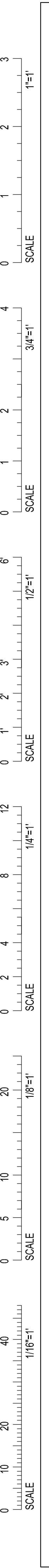
LOCATION MOUNTING	FIRST FLOOR ELECTRIC ROOM SURFACE		PANEL RATING	PP1C 225A		VOLTAGE 120/208V, 3Ø-4W		TYPE OF MAIN 225A M.L.O.		42 POLE
	DESCRIPTION			VOLTAMPS		DESCRIPTION		VOLTAMPS		
	ØA	ØB	ØC	FRAME	TRIP	ØA	ØB	ØC	FRAME	TRIP
SPARE	-	-	-	20	1	2	1	20	-	-
SPARE	-	-	-	20	1	3	4	1	20	-
SPARE	-	-	-	20	1	5	6	1	20	-
SPARE	-	-	-	20	1	7	8	1	20	-
SPARE	-	-	-	20	1	9	10	1	20	-
SPARE	-	-	-	20	1	11	12	1	20	-
SPARE	-	-	-	20	1	13	14	1	20	-
SPARE	-	-	-	20	1	15	16	1	20	-
SPARE	-	-	-	20	1	17	18	1	20	-
SPARE	-	-	-	20	1	19	20	1	20	-
SPARE	-	-	-	20	1	21	22	1	20	-
SPARE	-	-	-	20	1	23	24	1	20	-
SPARE	-	-	-	20	1	25	26	1	20	-
SPARE	-	-	-	20	1	27	28	1	20	-
SPARE	-	-	-	20	1	29	30	1	20	-
SPARE	-	-	-	20	1	31	32	1	20	-
SPARE	-	-	-	20	1	33	34	1	20	-
SPARE	-	-	-	20	1	35	36	1	20	-
SPARE	-	-	-	20	1	37	38	1	20	-
SPARE	-	-	-	20	1	39	40	1	20	-
SPARE	-	-	-	20	1	41	42	1	20	-

LOCATION MOUNTING	SECOND FLOOR ELECTRIC ROOM SURFACE		PANEL RATING	PP2A 225A		VOLTAGE 120/208V, 3Ø-4W		TYPE OF MAIN 225A M.C.B.		42 POLE
	DESCRIPTION			VOLTAMPS		DESCRIPTION		VOLTAMPS		
	ØA	ØB	ØC	FRAME	TRIP	ØA	ØB	ØC	FRAME	TRIP
LIGHTING	-	-	-	20	1	2	1	20	-	-
LIGHTING	-	-	-	20	1	3	4	1	20	-
LIGHTING	-	-	-	20	1	5	6	1	20	-
SPARE	-	-	-	20	1	7	8	1	20	-
SPARE	-	-	-	20	1	9	10	1	20	-
SPARE	-	-	-	20	1	11	12	1	20	-
SPARE	-	-	-	20	1	13	14	1	20	-
SPARE	-	-	-	20	1	15	16	1	20	-
SPARE	-	-	-	20	1	17	18	1	20	-
SPARE	-	-	-	20	1	19	20	1	20	-
SPARE	-	-	-	20	1	21	22	1	20	-
SPARE	-	-	-	20	1	23	24	1	20	-
SPARE	-	-	-	20	1	25	26	1	20	-
SPARE	-	-	-	20	1	27	28	1	20	-
SPARE	-	-	-	20	1	29	30	1	20	-
SPARE	-	-	-	20	1	31	32	1	20	-
SPARE	-	-	-	20	1	33	34	1	20	-
SPARE	-	-	-	20	1	35	36	1	20	-
SPARE	-	-	-	20	1	37	38	1	20	-
SPARE	-	-	-	20	1	39	40	1	20	-
SPARE	-	-	-	20	1	41	42	1	20	-

LOCATION MOUNTING	SECOND FLOOR ELECTRIC ROOM SURFACE		PANEL RATING	PP2B 225A		VOLTAGE 120/208V, 3Ø-4W		TYPE OF MAIN 225A M.C.B.		42 POLE
	DESCRIPTION			VOLTAMPS		DESCRIPTION		VOLTAMPS		
	ØA	ØB	ØC	FRAME	TRIP	ØA	ØB	ØC	FRAME	TRIP
SPARE	-	-	-	20	1	2	1	20	-	-
SPARE	-	-	-	20	1	3	4	1	20	-
SPARE	-	-	-	20	1	5	6	1	20	-
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SPARE	-	-	-	20	1	11	12	1	20	-
SPARE	-	-	-	20	1	13	14	1	20	-
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SPARE	-	-	-	20	1	27	28	1	20	-
SPARE	-	-	-	20	1	29	30	1	20	-
SPARE	-	-	-	20	1	31	32	1	20	-
SPARE	-	-	-	20	1	33	34	1	20	



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LOCATION		PANEL			VOLTAGE									
MOUNTING		RATING			TYPE OF MAIN									
BASEMENT EMERG. CLOSET SURFACE		LSB 400A			120/208V, 3Ø-4W 42 POLE									
DESCRIPTION	VOLTAMPS			FRAME	TRIP	POLES	CKTS	POLES	TRIP	FRAME	VOLTAMPS			DESCRIPTION
	ØA	ØB	ØC								ØA	ØB	ØC	
EMERGENCY LIGHTING	300			-	20	1	1	2	1	20	-	-	-	SPARE
ELEVATOR MACHINE ROOM LIGHTING	500			-	20	1	3	4	1	20	-	-	-	SPARE
SPARE				-	20	1	5	6	1	20	-	-	-	SPARE
SPARE				-	20	1	7	8	1	20	-	-	-	SPARE
SPARE				-	20	1	9	10	1	20	-	-	-	SPARE
SPARE				-	20	1	11	12	1	20	-	-	-	SPARE
SPARE				-	20	1	13	14	1	20	-	-	-	SPARE
SPARE				-	20	1	15	16	1	20	-	-	-	SPARE
SPARE				-	20	1	17	18	1	20	-	-	-	SPARE
SPARE				-	20	1	19	20	1	20	-	-	-	SPARE
SPARE				-	20	1	21	22	1	20	-	-	-	SPARE
SPARE				-	20	1	23	24	1	20	-	-	-	SPARE
SPARE				-	20	1	25	26	1	20	-	-	-	SPARE
SPARE				-	20	1	27	28	1	20	-	-	-	SPARE
SPARE				-	20	1	29	30	1	20	-	-	-	SPARE
SPARE				-	20	1	31	32	3	200	-	600		PANEL 'LS1'
SPARE				-	20	1	33	34	-	-	-	600		
SPARE				-	20	1	35	36	-	-	-	1500		
SPARE				-	20	1	37	38	3	200	-	250		PANEL 'LS2'
SPARE				-	20	1	39	40	-	-	-	250		
SPARE				-	20	1	41	42	-	-	-	250		

LOCATION		PANEL			VOLTAGE									
MOUNTING		RATING			TYPE OF MAIN									
FIRST FLOOR EMERG. CLOSET SURFACE		LS1 200A			120/208V, 3Ø-4W 42 POLE									
DESCRIPTION	VOLTAMPS			FRAME	TRIP	POLES	CKTS	POLES	TRIP	FRAME	VOLTAMPS			DESCRIPTION
	ØA	ØB	ØC								ØA	ØB	ØC	
EMERGENCY LIGHTING	450			-	20	1	1	2	1	20	-	500		STAIR LIGHTING
SPARE				-	20	1	3	4	1	20	-	500		STAIR LIGHTING
SPARE				-	20	1	5	6	1	20	-	500		EXTERIOR EGRESS LIGHTING
ELEVATOR MACHINE ROOM LIGHTING	500			-	20	1	7	8	1	20	-	500		FIRE ALARM CONTROL PANEL
SPARE				-	20	1	9	10	1	20	-	500		BIDIRECTIONAL AMPLIFIER
SPARE				-	20	1	11	12	1	20	-	500		N.A.C. BOOSTER
SPARE				-	20	1	13	14	1	20	-	-		SPARE
SPARE				-	20	1	15	16	1	20	-	-		SPARE
SPARE				-	20	1	17	18	1	20	-	-		SPARE
SPARE				-	20	1	19	20	1	20	-	-		SPARE
SPARE				-	20	1	21	22	1	20	-	-		SPARE
SPARE				-	20	1	23	24	1	20	-	-		SPARE
SPARE				-	20	1	25	26	1	20	-	-		SPARE
SPARE				-	20	1	27	28	1	20	-	-		SPARE
SPARE				-	20	1	29	30	1	20	-	-		SPARE
SPARE				-	20	1	31	32	1	20	-	-		SPARE
SPARE				-	20	1	33	34	1	20	-	-		SPARE
SPARE				-	20	1	35	36	1	20	-	-		SPARE
SPARE				-	20	1	37	38	1	20	-	-		SPARE
SPARE				-	20	1	39	40	1	20	-	-		SPARE
SPARE				-	20	1	41	42	1	20	-	-		SPARE

LOCATION		PANEL			VOLTAGE									
MOUNTING		RATING			TYPE OF MAIN									
SECOND FLOOR EMERG. CLOSET SURFACE		LS2 200A			120/208V, 3Ø-4W 42 POLE									
DESCRIPTION	VOLTAMPS			FRAME	TRIP	POLES	CKTS	POLES	TRIP	FRAME	VOLTAMPS			DESCRIPTION
	ØA	ØB	ØC								ØA	ØB	ØC	
EMERGENCY LIGHTING	450			-	20	1	1	2	1	20	-	500		N.A.C. BOOSTER
SPARE				-	20	1	3	4	1	20	-	-		SPARE
SPARE				-	20	1	5	6	1	20	-	-		SPARE
SPARE				-	20	1	7	8	1	20	-	-		SPARE
SPARE				-	20	1	9	10	1	20	-	-		SPARE
SPARE				-	20	1	11	12	1	20	-	-		SPARE
SPARE				-	20	1	13	14	1	20	-	-		SPARE
SPARE				-	20	1	15	16	1	20	-	-		SPARE
SPARE				-	20	1	17	18	1	20	-	-		SPARE
SPARE				-	20	1	19	20	1	20	-	-		SPARE
SPARE				-	20	1	21	22	1	20	-	-		SPARE
SPARE				-	20	1	23	24	1	20	-	-		SPARE
SPARE				-	20	1	25	26	1	20	-	-		SPARE
SPARE				-	20	1	27	28	1	20	-	-		SPARE
SPARE				-	20	1	29	30	1	20	-	-		SPARE
SPARE				-	20	1	31	32	1	20	-	-		SPARE
SPARE				-	20	1	33	34	1	20	-	-		SPARE
SPARE				-	20	1	35	36	1	20	-	-		SPARE
SPARE				-	20	1	37	38	1	20	-	-		SPARE
SPARE				-	20	1	39	40	1	20	-	-		SPARE
SPARE				-	20	1	41	42	1	20	-	-		SPARE

LOCATION		PANEL			VOLTAGE									
MOUNTING		RATING			TYPE OF MAIN									
MAIN ELECTRIC ROOM SURFACE		MPB 200A			120/208V, 3Ø-4W 42 POLE									
DESCRIPTION	VOLTAMPS			FRAME	TRIP	POLES	CKTS	POLES	TRIP	FRAME	VOLTAMPS			DESCRIPTION
	ØA	ØB	ØC								ØA	ØB	ØC	
HP-11	200			-	20	2	1	2	1	20	-	600		EF-1
SPARE				-	20	2	3	4	1	20	-	-		SPARE
HP-21		200		-	20	2	5	6	1	20	-	-		SPARE
SPARE	200			-	20	2	7	8	3	50	-	4000		ELECTOR PUMPS
SPARE				-	20	1	9	10	-	-	-	4000		
SPARE				-	20	1	11	12	-	-	-	4000		
SPARE				-	20	1	13	14	1	20	-	-		SPARE
SPARE				-	20	1	15	16	1	20	-	-		SPARE
SPARE				-	20	1	17	18	1	20	-	-		SPARE
SPARE				-	20	1	19	20	1	20	-	-		SPARE
SPARE				-	20	1	21	22	1	20	-	-		SPARE
SPARE				-	20	1	23	24	1	20	-	-		SPARE
SPARE				-	20	1	25	26	1	20	-	-		SPARE
SPARE				-	20	1	27	28	1	20	-	-		SPARE
SPARE				-	20	1	29	30	1	20	-	-		SPARE
SPARE				-	20	1	31	32	1	20	-	-		SPARE
SPARE				-	20	1	33	34	1	20	-	-		SPARE
SPARE				-	20	1	35	36	1	20	-	-		SPARE
SPARE				-	20	1	37	38	3	800	-	60K		PANEL 'MP2'
SPARE				-	20	1	39	40	-	-	-	60K		
SPARE				-	20	1	41	42	-	-	-	60K		

LOCATION		PANEL			VOLTAGE									
MOUNTING		RATING			TYPE OF MAIN									
MAIN ELECTRIC ROOM SURFACE		MP2 800A			120/208V, 3Ø-4W 42 POLE									
DESCRIPTION	VOLTAMPS			FRAME	TRIP	POLES	CKTS	POLES	TRIP	FRAME	VOLTAMPS			DESCRIPTION
	ØA	ØB	ØC								ØA	ØB	ØC	
RTU-1	15.6K			-	150	3	1	2	3	30	-	2500		HRV-1
SPARE		15.6K		-	-	-	3	4	-	-	-	2500		
RTU-2	15.6K			-	150	3	7	8	3	30	-	2500		HRV-2
SPARE		15.6K		-	-	-	9	10	-	-	-	2500		
RTU-3	15.6K			-	150	3	13	14	3	30	-	2500		HRV-3
SPARE		15.6K		-	-	-	15	16	-	-	-	2500		
RTU-4	15.6K			-	150	3	17	18	-	-	-	2500		HRV-4
SPARE		15.6K		-	-	-	21	22	-	-	-	2500		
HP-11	1650			-	20	2	25	26	1	20	-	600		ROOFTOP RECEPTACLES
HP-12		1650		-	20	2	27	28	1	20	-	600		ROOFTOP RECEPTACLES
HP-22			1650	-	20	2	29	30	1	20	-	-		SPARE

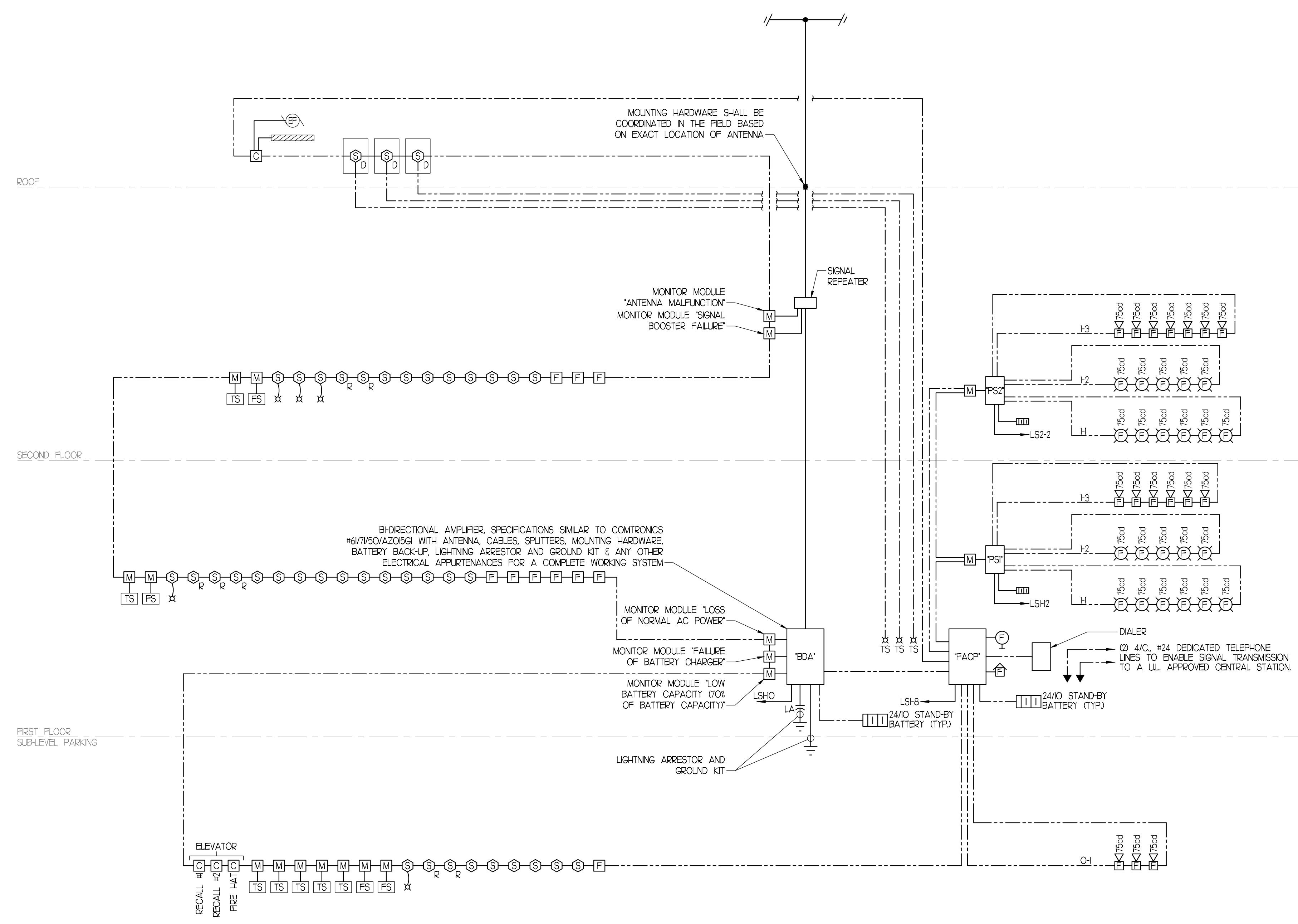


FIRE ALARM LEGEND

- 75cd FIRE ALARM SYSTEM ADA TYPE 75db/75cd HORN STROBE UNIT WALL MOUNTED 80" ABOVE FINISHED FLOOR OR 6' BELOW FINISHED CEILING WHICHEVER IS LOWER
5cd FIRE ALARM SYSTEM ADA TYPE 5cd STROBE ONLY UNIT, WALL MOUNTED 80" ABOVE FINISHED FLOOR OR 6' BELOW FINISHED CEILING WHICHEVER IS LOWER
75db/75cd FIRE ALARM SYSTEM ADA TYPE CEILING MOUNTED 75db/75cd HORN STROBE UNIT.
F MANUAL PULL STATION, MOUNTED 48" ABOVE FINISHED FLOOR
S CEILING MOUNTED PHOTOELECTRIC, SYSTEM TYPE SMOKE DETECTOR
SR CEILING MOUNTED PHOTOELECTRIC, SYSTEM TYPE SMOKE DETECTOR, FOR ELEVATOR RECALL, ELEVATOR SHALL PERFORM RECALL UPON INITIATION OF RESPECTIVE DEVICE
SD DUCT MOUNTED SMOKE DETECTOR, UPON ACTIVATION, THE RESPECTIVE AIR HANDLING UNIT, AND ASSOCIATED SMOKE AND FIRE DAMPERS SHALL BE DE-ACTIVATED
AD AUTOMATIC HEAT DETECTOR 135 DEGREES FIXED TEMPERATURE WITH ZONE ADDRESSABLE MODULE
CO CEILING MOUNTED PHOTOELECTRIC, SYSTEM CARBON MONOXIDE (CO) DETECTOR
FACP FIRE ALARM SYSTEM MASTER BOX
FAA FIRE ALARM CONTROL PANEL 'FACP'
FAA FIRE ALARM ANNUCIATOR 'FAA'
BA FIRE ALARM BI-DIRECTIONAL AMPLIFIER 'BA'
FB FIRE ALARM WEATHERPROOF BEACON
FS FIRE PROTECTION SYSTEM FLOW SWITCH, FURNISHED AND INSTALLED BY THE SPRINKLER CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.
TS FIRE PROTECTION SYSTEM TAMPER SWITCH, FURNISHED AND INSTALLED BY THE SPRINKLER CONTRACTOR.
PS FIRE PROTECTION SYSTEM PRESSURE SWITCH, FURNISHED AND INSTALLED BY THE SPRINKLER CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.
X REMOTE INDICATOR
X TS REMOTE INDICATOR W/ TEST STATION
M ADDRESSABLE MONITOR MODULE
C CONTROL MODULE
K KNOX BOX
PS 24/60 HOUR BATTERY
PS AUXILIARY POWER SUPPLY 6 AMPS / 24 VOLTS WITH 4 NOTIFICATIONS CIRCUITS, NOTIFIER CAT. NO. POPS-2456 WITH BATTERY BACK-UP AND INTEGRAL CHARGER
PFLP POWER LIMITED FIRE ALARM CABLE TYPE 'PFLP'

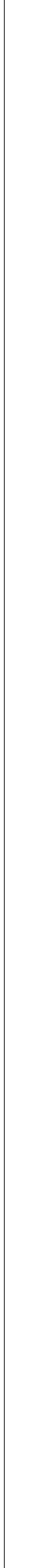
FIRE ALARM NOTES:

- 1. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE ANALOG/ ADDRESSABLE MICRO-PROCESSOR BASED, FIRE ALARM SYSTEM AS INDICATED AND AS SPECIFIED. ALL FIRE ALARM CIRCUIT WIRING SHALL BE POWER LIMITED FIRE ALARM CABLE, AUDIO/VISUAL CIRCUITS SHALL BE 24V POWER LIMITED FIRE ALARM CABLE, AS MENTIONED ABOVE. CIRCUITS SHALL BE ARRANGED CLASS 'A'.
2. ELECTRICAL CONTRACTOR SHALL UTILIZE ALARM VERIFICATION AS A STANDARD FEATURE FOR ALL ADDRESSABLE SMOKE DETECTORS.
3. THE CONTRACTOR, BEFORE INSTALLATION OR PROCUREMENT OF EQUIPMENT, SHALL SUBMIT A SHOP DRAWING OF ALL THE DEVICES BEING SUPPLIED FOR THIS PROJECT. THE SHOP DRAWING SHALL INCLUDE, AS PART OF THE SUBMITTAL PACKAGE, A ONE-LINE DIAGRAM INDICATING HOW THE SYSTEM WILL OPERATE.
4. ALL PULL AND JUNCTION BOXES AS WELL AS 6' OF ANY CONDUIT ENTERING OR LEAVING ANY PULL OR JUNCTION BOX SHALL BE PAINTED RED.
5. FIRE ALARM SYSTEM SHALL BE MANUFACTURED BY NOTIFIER.
6. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT AND CABLE AS REQUIRED BY ELEVATOR INSTALLER TO FACILITATE ELEVATOR RECALL UPON ACTIVATION OF FIRE ALARM SYSTEM.
7. UPON ACTIVATION OF AIR HANDLING UNIT DUCT SMOKE DETECTOR THE RESPECTIVE UNIT AND ASSOCIATED SMOKE AND FIRE DAMPERS SHALL BE DE-ACTIVATED.
8. UPON ACTIVATION OF ANY OF THE ELEVATOR LOBBY SMOKE DETECTORS OR ELEVATOR CONTROL MODULES, THE ELEVATORS SHALL DROP TO THE MAIN FLOOR. IF THE MAIN FLOOR IS IN AN ALARM CONDITION, THE ELEVATOR SHALL SEEK AN ALTERNATE FLOOR NOT IN ALARM. THE ELEVATORS SHALL BE PROGRAMMED TO SEARCH FOR A FLOOR NOT IN ALARM.
9. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR A SET OF AS-BUILT DRAWINGS OF THE FIRE ALARM SYSTEM. AS-BUILT DRAWINGS SHALL INDICATE THE LOCATION OF THE CONTROL PANEL. ALL FIRE ALARM DEVICES AND WIRING INSTALLED. AS-BUILT DRAWINGS SHALL BE TURNED OVER TO THE OWNER'S PROJECT REPRESENTATIVE.
10. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING THE FIRE ALARM SYSTEM MASTERBOX TO THE CITY LOOP USING ISMA 19-6, 2 PAIR #6 SOLID CONDUCTORS FOR UNDERGROUND SERVICE OR ISMA 20-4, 2 PAIR #6 SOLID CONDUCTORS FOR AERIAL SERVICE.
11. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING THE FIRE ALARM SYSTEM COMMUNICATOR TO AN UL APPROVED CENTRAL STATION USING 4/C #24 CAT3 CABLES.
12. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN ANNUNCIATOR THAT INDICATES ALL ADDRESSABLE DEVICES TO BE INSTALLED AT THE MAIN ENTRANCE.
13. THE FIRE ALARM SYSTEM SHALL BE IN ACCORDANCE WITH NFPA 72. ANY CHANGES TO THE SYSTEM DESIGN SHALL BE PRE-APPROVED BY THE LOCAL FIRE DEPARTMENT AND VINCENT A. DIORIO INC.
14. FIRE ALARM RISER DIAGRAM IS ONLY DIAGRAMMATIC. REFER TO FIRE ALARM PLANS FOR EXACT NUMBER OF DEVICES
15. ALL AUDIO/VISUAL DEVICES SHALL BE SYNCHRONIZED CODE 3, TEMPORAL PATTERN.



FIRE ALARM ONE-LINE DIAGRAM NOT TO SCALE

IF THIS SHEET IS NOT 24 X 36 IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY



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REVISIONS table with columns for No., Description, and Date.

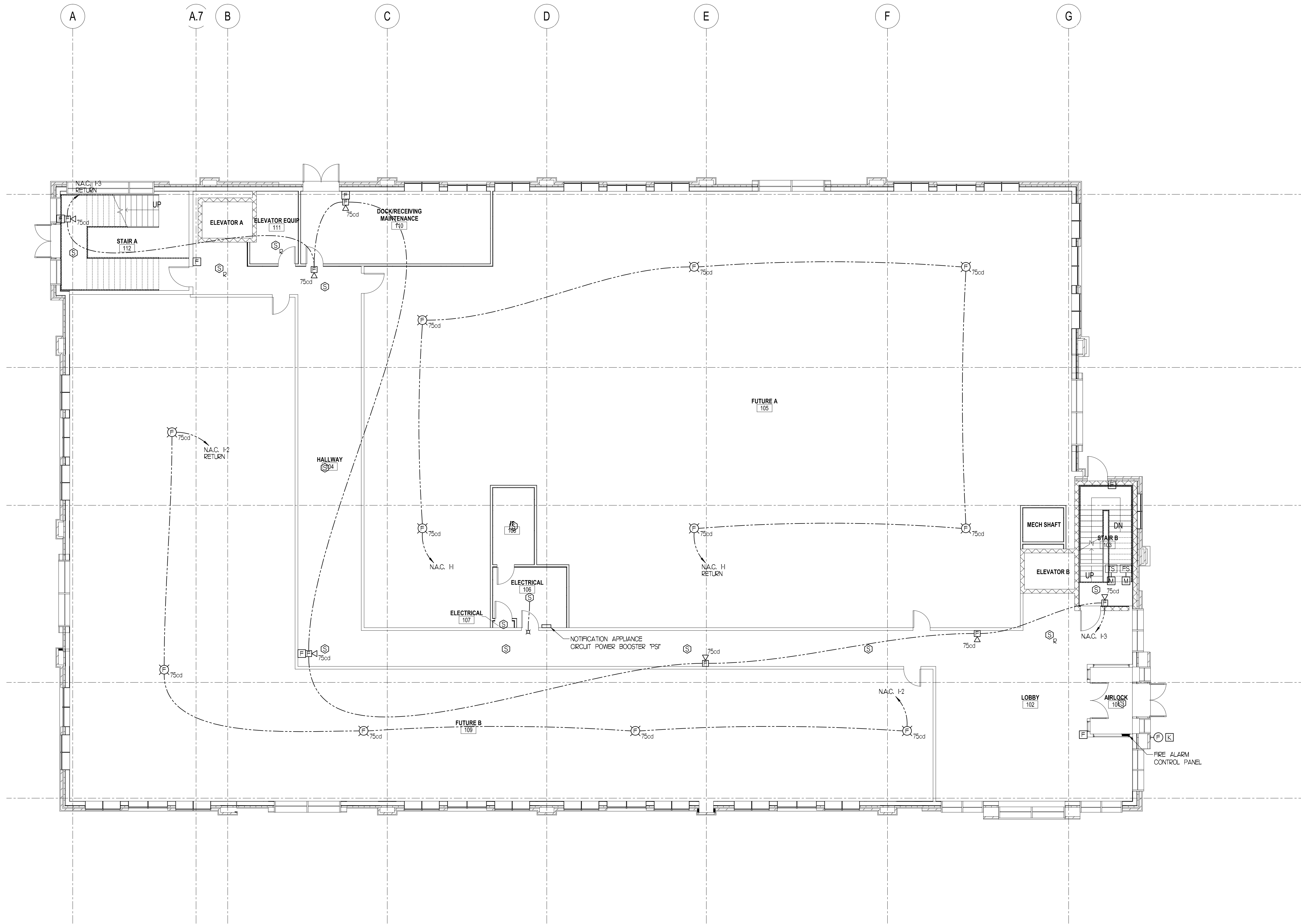
DESIGN DOCUMENT
UNIVERSITY OF NEW ENGLAND
PORTLAND, MAINE
PATIENT CARE CENTER
EXTERIOR SHELL
FIRE ALARM LEGEND, NOTES & ONE-LINE
Project Number 12502
Date 04.13.12
Drawn by JMS
Checked by VAD JR
FA0.01
Scale NOT TO SCALE







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CONSULTANTS

**Kahler Slater**  
 experience design



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REVISIONS

No.	Description	Date

DESIGN DOCUMENT

UNIVERSITY OF  
 NEW ENGLAND  
 PORTLAND, MAINE  
**PATIENT CARE  
 CENTER**  
 EXTERIOR SHELL

**FIRST FLOOR FIRE  
 ALARM PLAN**

Project Number 12502  
 Date 04.13.12  
 Drawn by JMS  
 Checked by VAD JR

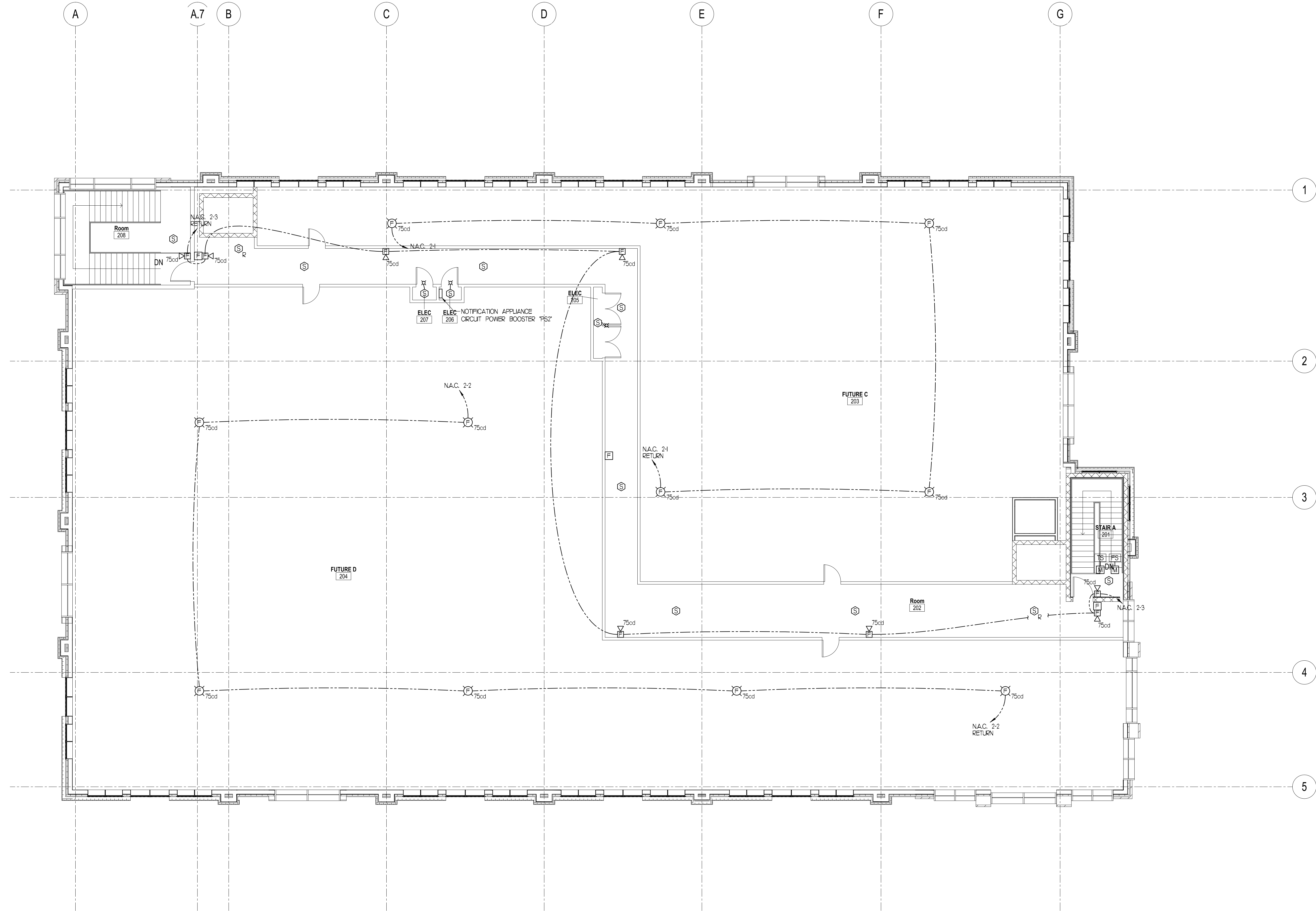
**FA1.02**

Scale 1/8"=1'-0"



IF THIS SHEET IS NOT 24 X 36 IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY

SCALE 1"=1'  
SCALE 3/4"=1'  
SCALE 1/2"=1'  
SCALE 1/4"=1'  
SCALE 1/8"=1'



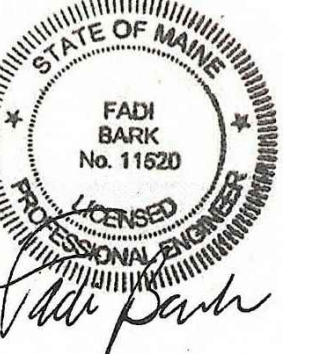
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REVISIONS		
No.	Description	Date

DESIGN DOCUMENT

**UNIVERSITY OF NEW ENGLAND**  
 PORTLAND, MAINE  
**PATIENT CARE CENTER**  
 EXTERIOR SHELL

**SECOND FLOOR FIRE ALARM PLAN**

Project Number **12502**  
 Date **04.13.12**  
 Drawn by **JMS**  
 Checked by **VAD JR**

**FA1.03**  
 Scale **1/8"=1'-0"**