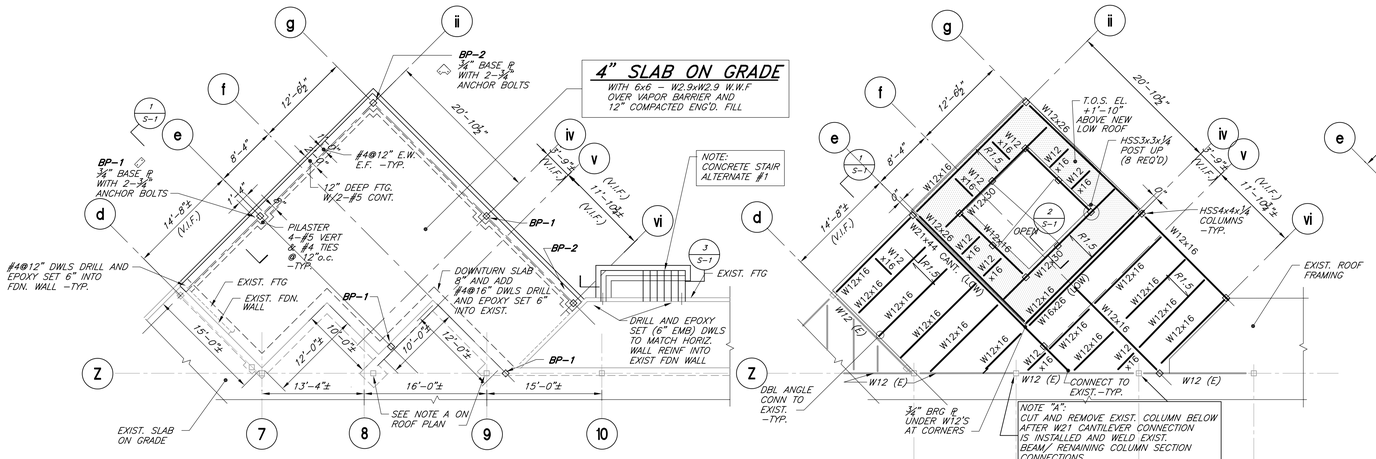
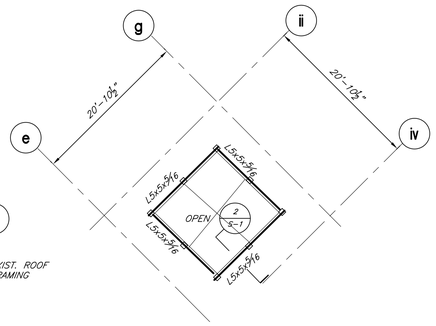


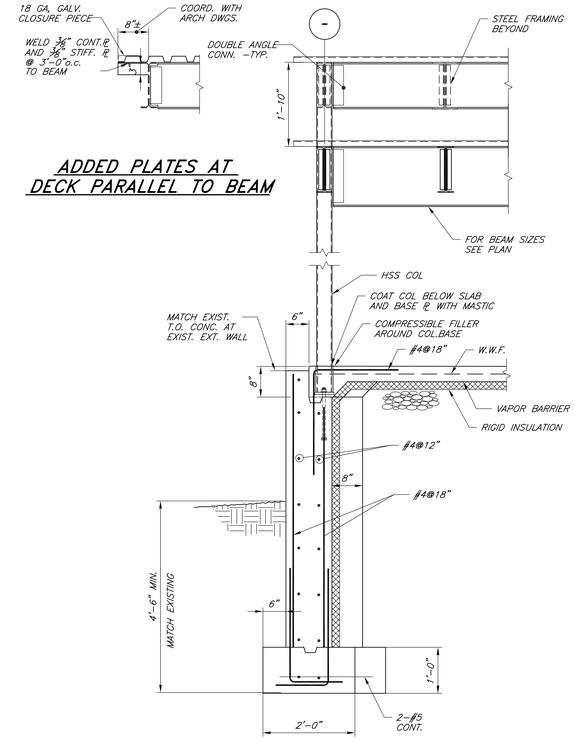
FOUNDATION PLAN
1/8"=1'-0"

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

R1.5 INDICATES 1½" TYPE B, 20 GA, GALV METAL ROOF DECK

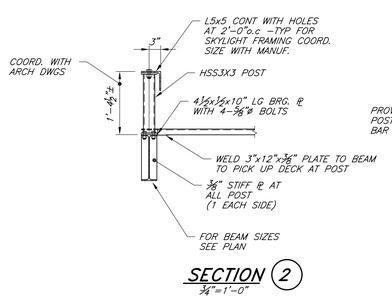


SKYLIGHT SUPPORT FRAMING
1/8"=1'-0"

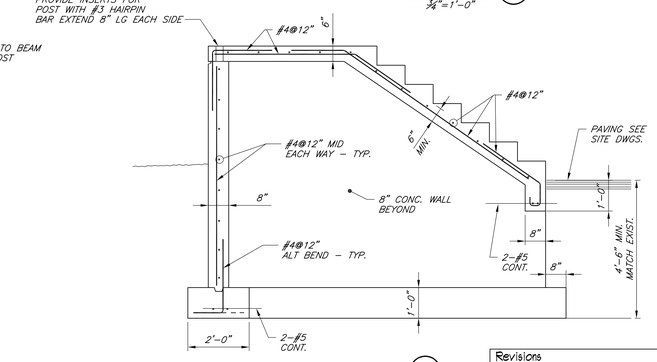


ADDED PLATES AT DECK PARALLEL TO BEAM

SECTION (1)
¾"=1'-0"



SECTION (2)
¾"=1'-0"



SECTION (3)
½"=1'-0"

NOTES
(UNLESS OTHERWISE NOTED ON DRAWINGS

GENERAL

G1. STRUCTURAL WORK SHALL CONFORM TO REQUIREMENTS OF "THE INTERNATIONAL BUILDING CODE 2003"

G2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND SHOP DRAWINGS.

G3. EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

G4. SHOP DRAWINGS FOR REINFORCING STEEL, STRUCTURAL STEEL, AND METAL DECK, SHALL BE SUBMITTED TO THE ARCHITECT AND A STAMPED APPROVAL RECEIVED BEFORE FABRICATION CAN PROCEED. FABRICATION AND ERECTION SHALL BE MADE FROM APPROVED SHOP DRAWINGS ONLY.

G5. NOTES AND DETAILS SHOWN ON ANY DRAWINGS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED.

G6. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.

STRUCTURAL LOADS

L1. BUILDING CLASSIFICATION – TABLE 1604.5 — CATEGORY II

L2. DEAD LOADS
A. WEIGHT OF BUILDING MATERIALS — PARA. 1606.1

L3. ROOF SNOW LOADS

A. GROUND SNOW LOAD – FIG. 1608.2	P(g) = 60 PSF
B. FLAT ROOF SNOW LOAD	P(f) = 42 PSF
C. SNOW EXPOSURE FACTOR – TABLE 1608.3.1	C(E) = 1.0
D. SNOW IMPORTANCE FACTOR – TABLE 1604.5	I(s) = 1.0
E. THERMAL FACTOR – TABLE 1608.3.2	C(T) = 1.0
F. SNOW DRIFT AND SLIDING SNOW	PARA. 1608.7 TO 1608.9

L4. FLOOR LIVE LOADS
A. OPEN PLAN AREAS — 100 PSF

FOUNDATION

F1. THE BOTTOM SURFACE OF ALL SPREAD FOOTINGS SHALL REST ON UNDISTURBED MATERIAL OR COMPACTED STRUCTURAL FILL, WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 2.0 TONS PER SQUARE FOOT.

F2. THE ESTIMATED ELEVATION OF BOTTOM OF EACH FOOTING IS INDICATED THUS [0'–0"] ON PLAN. BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'–6" BELOW FINISH GRADE.

F3. NO FOOTING SHALL BE PLACED UNDER WATER OR ON FROZEN SUBGRADE. PROTECT IN–PLACE FOUNDATIONS AND SLABS FROM FROST PENETRATION UNTIL PROJECT IS COMPLETED.

F4. PROVIDE 6" MINIMUM COMPACTED DRAINAGE FILL AND A 15 MIL. POLYETHYLENE VAPOR BARRIER UNDER INTERIOR SLABS ON GRADE UNLESS OTHERWISE NOTED.

F5. NO BACKFILL SHALL BE PLACED AGAINST FOUNDATION WALLS RETAINING EARTH UNTIL PERMANENT FLOOR SYSTEM IS IN PLACE AND OF FULL DESIGN STRENGTH UNLESS OTHERWISE NOTED.

CONCRETE

C1. CONCRETE WORK SHALL CONFORM TO ACI STANDARD 318 – 08 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

C2. CONCRETE SHALL BE CONTROLLED CONCRETE (PROPORTIONED, MIXED AND PLACED IN PRESENCE OF APPROVED TESTING AGENCY).

C3. CONCRETE MINIMUM 28 DAY STRENGTH, UNLESS OTHERWISE NOTED, SHALL CONFORM TO FOLLOWING

A. FOOTINGS, PIERS, FOUNDATION WALLS:	3,000 PSI (NORMAL WEIGHT)
B. SLABS ON GRADE:	3,000 PSI (NORMAL WEIGHT)
C. EXTERIOR STAIRS:	4,000 PSI (NORMAL WEIGHT)

C4. CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WITH A NOMINAL DENSITY OF 145 PCF.

C5. REINFORCING BARS SHALL CONFORM TO ASTM A 615 GRADE 60, AND SHALL BE DEFORMED. LAP ALL CONTINUOUS BARS A MINIMUM OF 40 DIAMETERS UNLESS OTHERWISE NOTED. PROVIDE MATCHING CORNER AND INTERSECTION WALL BARS.

C6. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 IN FLAT SHEETS. LAP ONE AND ONE–HALF SQUARES AT ALL JOINTS AND TIE AT 3'–0" o.c.

CONCRETE CONTINUED

C7. CLEAR CONCRETE PROTECTION FOR REINFORCING:

A. FOOTINGS:	3"
B. FOUNDATION WALLS:	1½"
C. SLABS ON GRADE:	1" FROM TOP

C8. NO BARS SHALL BE CUT OR OMITTED IN THE FIELD BECAUSE OF SLEEVES, DUCT OPENINGS OR RECESSES. BARS MAY BE MOVED ASIDE WITHOUT CHANGE IN LEVEL, WITH THE APPROVAL OF THE ARCHITECT.

C9. NO CHASES, RECESSES, OPENINGS OR SLEEVES SHALL BE INSTALLED IN CONCRETE WITHOUT APPROVAL OF THE ARCHITECT.

C10. KEYS SHALL BE A MINIMUM OF 2" X 4" WITH BEVELED SIDES.

C11. DOWELS AND ANCHOR RODS SHALL BE SET BY TEMPLATE.

C12. HORIZONTAL CONSTRUCTION JOINTS SHALL BE AS INDICATED ON THE DRAWINGS. VERTICAL CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ARCHITECT. CONSTRUCTION JOINTS SHALL BE FORMED WITH A STANDARD KEY AND ALL REINFORCING EXTENDED A MINIMUM OF 40 DIAMETERS UNLESS OTHERWISE NOTED.

C13. FLOOR SLABS SHALL BE POURED TO THE REQUIRED ELEVATION. SLAB THICKNESSES INDICATED ARE MINIMUM.

C14. DETAILS NOT SHOWN ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL.

STRUCTURAL STEEL

S1. STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE NOTED:

A. SHAPES	ASTM A 992, GRADE 50	Fy = 50 KSI
B. PLATES	ASTM A 36	Fy = 36 KSI
C. TUBES	ASTM A 500, GRADE B	Fy = 46 KSI
D. PIPES	ASTM A 53, GRADE B OR ASTM A 501	Fy = 35 KSI Fy = 36 KSI

S2. SHOP CONNECTIONS SHALL BE WELDED TO CONFORM TO ASTM A 233, E70 SERIES OR BOLTED TO CONFORM TO ASTM A 325.

S3. UNLESS OTHERWISE NOTED, FIELD CONNECTIONS SHALL BE BOLTED TO CONFORM TO ASTM A 325, TYPE N BOLTS,

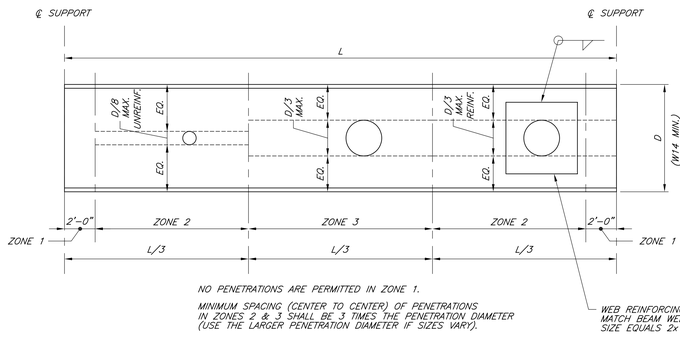
S4. PROVIDE ⅜" DIAMETER ANCHOR RODS AT COLUMNS AS INDICATED ON THE DRAWINGS. RODS SHALL CONFORM TO ASTM F1554, UNLESS OTHERWISE NOTED. ANCHOR RODS SHALL BE HEADED TYPE.

METAL DECK

D1. METAL ROOF DECK SHALL BE MADE FROM STEEL CONFORMING TO ASTM A611, GRADE A (Fy=33 KSI) AND BE GALVANIZED IN ACCORDANCE WITH ASTM A653, G60. DECK TYPE DEPTH AND GAUGE SHALL BE AS NOTED ON THE DRAWINGS.

D2. METAL ROOF DECK SHALL BE ATTACHED TO THE SUPPORTING STRUCTURE (MINIMUM REQUIREMENTS) AS FOLLOWS:

A.	PANEL ENDS AND END LAPS	5/8"ø PUDDLE WELD AT EACH RIB.
B.	INTERMEDIATE SUPPORTS	36/4"ø PUDDLE WELD AT EACH RIB.
C.	LONGITUDINAL EDGES OF MARGINAL SUPPORTS:	36/4"ø PUDDLE WELDS AT 12" o.c. MAX.
D.	SIDE LAPS FOR ADJACENT UNITS	#12 SCREWS AT 24" o.c. MAX.



NO PENETRATIONS ARE PERMITTED IN ZONE 1.

MINIMUM SPACING (CENTER TO CENTER) OF PENETRATIONS IN ZONES 2 & 3 SHALL BE 3 TIMES THE PENETRATION DIAMETER (USE THE LARGER PENETRATION DIAMETER IF SIZES VARY).

NOTES:
1. THE NUMBER, SIZES, AND LOCATIONS OF OPENINGS REQUIRED THROUGH STEEL BEAMS AND GIRDERS SHALL BE DETERMINED BY THE GENERAL CONTRACTOR AND SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR ENGINEER'S REVIEW. REFER TO ALL THE DRAWINGS IN THE SET. FIELD CUTTING OPENINGS IS NOT PERMITTED . FIELD DRILLING OPENINGS OR PLASMA CUTTING MAY BE PERMITTED WITH THE SPECIFIC APPROVAL OF THE STRUCTURAL ENGINEER.
2. ALL OPENINGS ARE TO BE SHOWN ON THE SHOP DRAWINGS AND SUBMITTED TO THE ENGINEERS FOR REVIEW PRIOR TO FABRICATION SINCE IN SOME CASES MODIFICATIONS MAY BE REQUIRED.

WEB REINFORCING @; MATCH BEAM WEB THICKNESS SIZE EQUALS 2x HOLE SIZE

SMALL BEAM PENETRATIONS

LOOSE LINTEL SCHEDULE
(BY MISC. METAL)

MASONRY OPENING	LINTEL SIZE	MIN. BEARING AT EACH END
UP TO 3'–0"	L3½ x 3½ x 5/16	8"
3'–1" TO 4'–6"	L4 x 3½ x 5/16 (4" LEG VERT)	8"
4'–7" TO 6'–0"	L5 x 3½ x 5/16 (5" LEG VERT.)	8"
6'–1" TO 8'–3"	L6 x 3½ x 5/16 (6" LEG VERT.)	8"

NOTES:
1. PROVIDE LINTELS OVER ALL OPENINGS (INCLUDING M.E.P. OPENINGS) EXCEPT WHERE LINTEL BLOCKS ARE PROVIDED.
2. PROVIDE ONE ANGLE FOR EACH 4" OF WALL THICKNESS. FOR 6" WALLS, PROVIDE A TEE OR BUILT–UP SECTION WITH PROPERTIES EQUAL TO OR GREATER THAN 1.50 TIMES THE ANGLE PROPERTIES FOR A 4" WALL THICKNESS.
3. ALL EXTERIOR LINTELS SHALL BE GALVANIZED BY THE HOT DIP PROCESS.

Revisions	No.	Date

Project:

THE SAM L. COHEN REHAB. CENTER AT THE CEDARS
ALTERATIONS & ADDITION
PORTLAND, MAINE

Drawing Title

STRUCTURAL PLANS AND DETAILS

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