GENERAL NOTES

NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO DRAWING NOTES.

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, EQUIPMENT, SITE AND SHOP DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF CHASES, INSERTS, SLEEVES, DEPRESSIONS AND OTHER DETAILS NOT SHOWN ON THE STRUCTURAL DRAWINGS.

ALL DIMENSIONS, ELEVATIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. THE CONTRACTOR SHALL DETERMINE ALL NECESSARY DIMENSIONS, ELEVATIONS AND CONDITIONS REQUIRED FOR THE FABRICATION AND ERECTION OF THE BUILDING'S COMPONENTS PRIOR TO THE SUBMISSION OF SHOP DRAWINGS. ALL SHOP DRAWINGS SHALL ACCURATELY REFLECT THE GENERAL CONTRACTOR'S VERIFICATION OF FIELD CONDITIONS.

SHOP DRAWINGS SHALL BE ORIGINAL DRAWINGS PREPARED BY THE GENERAL CONTRACTOR OR A SUBCONTRACTOR. REPRODUCTION OF ANY STRUCTURAL DRAWING FOR USE AS A SHOP DRAWING IS NOT ACCEPTABLE.

THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS SOLELY THE GENERAL CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCING TO ENSURE THE THE SAFETY OF THE BUILDING AND IT'S COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS AND/OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE GENERAL CONTRACTOR AFTER COMPLETION OF THE BUILDING.

SECTIONS AND DETAILS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL AND USED IN SIMILAR CONDITIONS.

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL FOLLOW ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

DESIGN CRITERIA

BUILDING CODE: 2009 INTERNATIONAL BUILDING CODE

DESIGN LOADS:

LIVE LOADS	
MEZZANINE, 2ND AND 3RD FLOORS	100 PSF
STAIRS AND LANDINGS	100 PSF
SNOW LOAD	
GROUND SNOW LOAD, Pg	60 PSF
SNOW EXPOSURE FACTOR, Ce	1.0
SNOW LOAD IMPORTANCE FACTOR, Is	1.0
THERMAL FACTOR, Ct	1.0
FLAT ROOF SNOW LOAD, Pf	42 PSF
WIND LOAD	
BASIC WIND SPEED (3 SEC GUST), V3s	90 MPH
WIND IMPORTANCE FACTOR, Iw	1.0
BUILDING CATEGORY	I
EXPOSURE CATEGORY	B
EARTHQUAKE DESIGN DATA	
SEISMIC IMPORTANCE FACTOR, Ie	1.0
MAPPED SPECTRAL RESPONSE ACCELERATIONS	
0.2 SEC PERIOD, Ss	0.323
1 SEC PERIOD, S1	0.078
SITE CLASS	D
SPECTRAL RESPONSE COEFFICIENTS	
0.2 PERIOD 5% DAMPED, Sds	0.401
1 SEC PERIOD 5% DAMPED, Sd1	0.182
SEISMIC DESIGN CATEGORY	C
BASIC SESIMIC-FORCE-RESISTING SYSTEM	CONCENTRICALLY BRACED FRAMES AND ORDINARY MOMENT FRAMES
DESIGN BASE SHEAR	22.7 KIPS
SEISMIC RESPONSE COEFFICIENT, Cs	0.123
DEFLECTION AMPLIFICATION FACTOR, Cd	3.25
RESPONSE MODIFICATION COEFFICIENT, R	3.25
SYSTEM OVERSTRENGTH FACTOR, Ω	3.0
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE

MATERIAL PROPERTIES

CONCRETE:

ALL WORK SHALL BE IN CONFORMANCE WITH ACI 318

REINFORCING ASTM A615, GRADE 60

FIBER REINFORCING ASTM C1116, TYPE III

PROPORTION DESIGN MIXES TO PROVIDE CONCRETE WITH THE FOLLOWING PROPERTIES:

INTERIOR SLAB-ON-GRADE AND ELEVATED SLABS ON METAL DECK:
- STRENGTH: 4000 PSI @28 DAYS, 3/4" AGGR.
- MAX. W/C RATIO: 0.48
- ENTRAINED AIR: NON-AIR-ENTRAINED
- SLUMP: 3"±1"

FOOTINGS AND FROST WALLS:
- STRENGTH: 3000 PSI @28 DAYS, 3/4" AGGR.
- MAX. W/C RATIO: 0.58
- ENTRAINED AIR: 6% ± 1%
- SLUMP: 3"±1"

EXTERIOR FLATWORK INCLUDING ENTRANCE SLABS, AND SIDEWALKS:
- STRENGTH: 4000 PSI @28 DAYS, 3/4" AGGR.
- MAX. W/C RATIO: 0.48
- ENTRAINED AIR: 7% ± 1%
- SLUMP: 3"±1"
- DCI -S CORROSION INHIBITOR BY GRACE CONSTRUCTION PRODUCTS OR RHEOCRETE CNI CORROSION INHIBITOR BY MASTER BUILDERS. 3 1/2 GAL/CY. ADDED AT BATCH PLANT.

STRUCTURAL STEEL

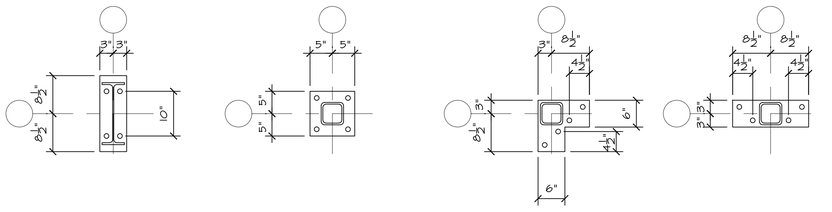
WIDE FLANGE SHAPES ASTM	A992, GRADE 50
OTHER STRUCTURAL SHAPES	ASTM A36
HSS SHAPES	ASTM A500, GRADE B, Fy 46 KSI
COLUMN ANCHOR RODS	ASTM F1554, GRADE 36
HIGH-STRENGTH THREADED FASTENERS	ASTM A325

COLUMN SCHEDULE

COLUMN MARK	SIZE	BOT. OF BASE PL ELEV.	BASE PL TYPE	TOP OF COLUMN ELEV.	notes
A.1-1 C-1	WI4x26	99'-5"	A	135'-0"	
A-3 C-3	HSS5x5x0.25	99'-5"	B	134'-8 1/8"	
A-4 C-4	HSS5x5x0.25	99'-5"	B	134'-4 1/4"	
A-5 C-5	HSS5x5x0.25	99'-5"	B	134'-0 1/4"	
A-6 B-6	HSS5x5x0.125	100'-5"	C	133'-9 1/8"	
B-7	HSS5x5x0.125	100'-5"	C	133'-8 3/8"	
C-7	HSS5x5x0.125	100'-5"	D	133'-8 31/8"	
D-1	HSS5x5x0.125	100'-5"	D	135'-0"	
D-2	HSS5x5x0.125	100'-5"	D	134'-10 3/8"	COLUMN INTERRUPTED AT EACH LEVEL FOR CANTILEVERED BEAM
D-3	WI4x26	100'-5"	A	134'-8 1/8"	
D-4	WI4x26	100'-5"	A	134'-4 1/4"	
D-5	HSS5x5x0.25	100'-5"	D	132'-11 7/8"	COLUMN INTERRUPTED AT EACH LEVEL FOR CANTILEVERED BEAM
D-7	HSS5x5x0.125	100'-5"	C	133'-8 3/8"	COLUMN INTERRUPTED AT EACH LEVEL FOR CANTILEVERED BEAM

FOOTING SCHEDULE

MARK	SIZE	REINFORCING
F1	2'-6" x 2'-6" x 1'-0"	(4) #5 E.W. BOT.
F2	3'-3" x 3'-3" x 1'-0"	(5) #5 E.W. BOT.
F3	3'-9" x 3'-9" x 1'-0"	(5) #5 E.W. BOT.
F4	4'-0" x 4'-0" x 1'-0"	(6) #5 E.W. BOT.



TYPE A
3/4"=1'-0"

THICKNESS = 3/4"

TYPE B
3/4"=1'-0"

THICKNESS = 3/4"

TYPE C
3/4"=1'-0"

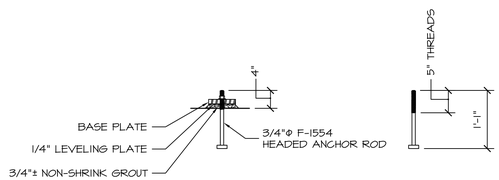
THICKNESS = 5/8"

TYPE D
3/4"=1'-0"

THICKNESS = 5/8"

TYPE A BASE PLATE DETAILS
3/4"=1'-0"

HOLE DIA = 1 1/16"
HOLE EDGE DIST = 1 1/2" U.N.O.



TYPICAL ANCHOR ROD DETAILS
3/4"=1'-0"

STATE OF MAINE · DAVID TETREAULT · 4940 · REGISTERED PROFESSIONAL ENGINEER

Prepared For:

Consulting Engineer:
STRUCTURAL DESIGN CONSULTING
18 Scenic Road
Unit 7
Laconia, NH
03249
Tel 207.232.2964

Architect:
ARCHETYPE Architects
48 Union Wharf Portland, Maine 04101
(207) 772-6022 Fax (207) 772-4056

Project:
84 OAK STREET GARAGE
Portland, Maine

Revisions:
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Scale: As Noted

Date: 28 FEB 2018

GENERAL NOTES AND SCHEDULES

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