

GENERAL NOTES

- 1. THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS...
2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS...
3. ALL DIMENSIONS, EXISTING CONDITIONS, AND AS-BUILT CONDITIONS MUST BE VERIFIED IN THE FIELD...
4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE ONLY AFTER THE STRUCTURAL WORK CONTAINED IN THE S- DRAWINGS IS COMPLETED...
5. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS...
6. PROVIDE AND INSTALL NECESSARY MATERIAL TO CONNECT ELEVATOR SUPPORT BEAMS AND GUIDE RAILS...
7. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK...
8. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED...
9. IN ACCORDANCE WITH THE MAINE UNIFORM BUILDING AND ENERGY CODE...
10. REFERENCE THE PROJECT SPECIFICATIONS FOR ALL TESTING REQUIREMENTS.

DESIGN LOADS

- 1. BUILDING CODE: MAINE UNIFORM BUILDING AND ENERGY CODE INTERNATIONAL BUILDING CODE, 2009 EDITION...
2. DESIGN FLOOR LIVE LOADS: OFFICES: 50 PSF + 15 PSF PARTITION ALLOWANCE...
3. DESIGN ROOF SNOW LOAD: GROUND SNOW LOAD (Pg): 60 PSF...
4. DESIGN WIND LOAD: BASIC WIND SPEED: 100 MPH...
5. DESIGN SEISMIC LOADS (NEW BUILDING & NEW ELEMENTS WITHIN EXISTING BUILDING): EQUIVALENT LATERAL FORCE PROCEDURE...

EXISTING BUILDING

- 1. EXISTING CHAPEL TO BE REMOVED AND RE-BUILT IN KIND.
2. EXISTING BUILDING HAS BEEN EVALUATED USING THE "PRESCRIPTIVE METHOD" PER CHAPTER 3 OF IBC.
3. EXISTING BASIC STRUCTURAL SYSTEM: BEARING WALL SYSTEM
4. EXISTING SEISMIC FORCE RESISTING SYSTEM: ORDINARY PLAIN MASONRY SHEARWALLS.
5. NEW MASONRY STAIR & ELEVATOR SHAFT WITHIN EXISTING BUILDING HAS BEEN DESIGNED & DETAILED AS AN ORDINARY REINF MASONRY SHEARWALLS AND SERVE AS A VOLUNTARY IMPROVEMENT TO THE EXISTING LATERAL SYSTEM.
6. EXISTING LATERAL FORCE RESISTING ELEMENTS IMPACTED BY RENOVATION HAVE EITHER BEEN IMPACTED TO A LEVEL BELOW IBC ALLOWED THRESHOLDS OR HAVE BEEN DEMONSTRATED TO HAVE SUFFICIENT CAPACITY TO RESIST SEISMIC FORCES PER ASCE 41.

FOUNDATION NOTES (SOIL SUPPORTED)

- 1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH A REPORT ENTITLED "GEOTECHNICAL INVESTIGATION, PROPOSED RENOVATIONS ALUMNI HALL, COLLEGE AVENUE, PORTLAND, MAINE", PREPARED BY SUMMIT GEOTECHNICAL SERVICES, DATED 02/19/2015.
2. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE UNDISTURBED NATIVE SOILS AND/OR NEW COMPACTED STRUCTURAL FILL...
3. ALLOWABLE BEARING CAPACITY 4,000 PSF
4. EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 4.0 FEET BELOW THE FINAL EXTERIOR GRADE FOR PROTECTION AGAINST FROST.
5. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL UPGRADES HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
6. REFERENCE THE GEOTECHNICAL REPORT FOR ALL EXCAVATION, BACKFILL, COMPACTION, CONSTRUCTION DEWATERING AND PERMANENT DRAINAGE REQUIREMENTS.
7. SOILS EXPOSED AT THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION...
8. EXCAVATIONS FOR BUILDING CONSTRUCTION SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS.

CONCRETE NOTES

- 1. CONCRETE WORK SHALL CONFORM TO "ACI MANUAL OF CONCRETE PRACTICE", LATEST EDITION.
2. ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI, U.N.O. EXTERIOR SLAB-ON-GRADE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI.
3. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
4. PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH EXTERIOR CONCRETE, OR SLABS.
5. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST EDITION.
6. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.
7. FIBER REINFORCEMENT SHALL BE TYPE III SYNTHETIC VIRGIN HOMOPOLYMER POLYPROPYLENE FIBERS CONFORMING TO ASTM C1116.
8. MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:
A.SURFACES CAST AGAINST AND PERMANENTLY IN CONTACT WITH EARTH, 3.0"
B.FORMED SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER #5 BARS, 5/8" DIAMETER WIRE AND SMALLER, 1.5" #6 THROUGH #11 BARS, 2.0"
C.SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER WALLS, SLABS, JOISTS #11 BARS AND SMALLER, 1.0" BEAMS, GIRDERS, AND COLUMNS; ALL REINFORCEMENT, 1.5"
9. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT NECESSARY SPLICES OR HOOKED BARS AT DISCONTINUOUS ENDS.
10. WELDING OF REINFORCEMENT IS NOT PERMITTED
11. FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENING AS SHOWN ON THE CONTRACT DOCUMENTS TYPICAL DETAILS.
12. CONSTRUCTION JOINTS SHOWN ON DRAWINGS ARE MANDATORY.
13. SLAB THICKNESSES INDICATED ON THE DRAWINGS ARE MINIMUMS.
14. ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554, GRADE 36 KSI WELDABLE STEEL.
15. ALL GROUT BENEATH BASE PLATES & BEARING PLATES SHALL BE "5-STAR" 5000-PSI NON-SHRINK GROUT BY U.S. GROUT CORP.

STRUCTURAL STEEL NOTES

- 1. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN FABRICATIONS, AND ERECTION OF STRUCTURAL STEEL" LATEST EDITION, AND THE "CODE OF STANDARD PRACTICE", LATEST EDITION.
2. STRUCTURAL STEEL: STEEL PLATES, SHAPES, AND BARS, CONFORM TO ASTM A36 UNLESS NOTED OTHER WISE (U.N.O.).
3. STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B46 KSI.
4. FIELD CONNECTIONS SHALL BE BOLTED USING ASTM A325N HIGH STRENGTH BOLTS (U.N.O.) EXCEPT WHERE SLIP CRITICAL CONNECTIONS ARE REQUIRED.
5. WHERE WELDING IS INDICATED, ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION.
6. SEE CONCRETE NOTES AND DRAWINGS FOR ANCHOR BOLT INFORMATION, TYP.
7. PROVIDE 3/8" MINIMUM STIFFENER PLATES EACH SIDE OF BEAM WEB AT BEAMS FRAMING OVER COLUMNS AND AT BEAMS SUPPORTING COLUMNS ABOVE.
8. PROVIDE 1/4" THICK LEVELING PLATE UNDER ALL COLUMN BASE PLATES UNLESS OTHERWISE NOTED.
9. PROVIDE ALL MISCELLANEOUS ANGLES, PLATES, ANCHOR BLOTS ETC., SHOWN ON ARCHITECTURAL DRAWINGS FOR SUPPORT OF BLOCKING, PARAPETS, FINISHES, ETC.

MASONRY NOTES

- 1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1-LATEST.
2. ALL CONCRETE MASONRY UNITS SHALL BE ASTM C90 GRADE N, TYPE I STANDARD WEIGHT BLOCKS INCLUDING STRETCHERS AND CORNER BLOCKS.
3. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C270, TYPE M OR S
4. GROUT SHALL CONFORM TO ASTM-C476
5. REINFORCING FOR BOND BEAMS, LINTEL BLOCKS AND VERTICAL WALL REINFORCING SHALL BE BILLET STEEL CONFORMING TO ASTM A615, GRADE 60
6. HORIZONTAL JOINT REINFORCING SHALL BE DUR-O-WAL TRUSS DESIGN, STANDARD CLASS MILL GALVANIZED WITH 3/16" DIAMETER SIDE RODS AND 9 GAUGE CROSS TIES.
7. CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS OTHERWISE NOTED.
8. PROVIDE LINTELS AT WALL PENETRATIONS AS SHOWN IN THE LINTEL SCHEDULE.
9. STANDARD LAP LENGTH OF GRADE 60 MASONRY REINFORCING BARS SHALL BE 48 BAR DIAMETERS FOR BARS #5 AND SMALLER.
10. CELLS TO BE GROUTED SHALL BE 2-CELL BLOCK.
11. FIELD PENETRATIONS THROUGH BLOCK WALLS SHALL NOT BE MADE THROUGH BOND BEAMS, LINTELS OR GROUTED CELLS.

METAL DECK

- 1. THE METAL FLOOR DECK SHALL BE FORMED OF STEEL SHEETS CONFORMING TO THE FOLLOWING STANDARDS:
A. FLOOR DECKING: ASTM A1008, GRADE C, D OR ASTM A653, STRUCTURAL QUALITY, GRADE 40 OR HIGHER
2. FLOOR DECK SHALL BE AS NOTED ON THE DRAWINGS (OR EQUIVALENT).
3. FOR DECK ATTACHMENTS, PENETRATIONS AND ACCESSORIES REFER TO SPECIFICATIONS.

WOOD TRUSS NOTES

GENERAL

- 1. TRUSSES SHALL BE DESIGNED, FABRICATED, ERECTED, AND BRACED IN ACCORDANCE WITH LATEST EDITION OF THE WTCA/TPI BCSI 1 BOOKLET AS NOTED IN THE NOTES AND SPECIFICATIONS AND ALL OTHER APPLICABLE CODES.
2. ERECTION AND TEMPORARY BRACING SHALL CONFORM TO WTCA/TPI BCSI 1-LATEST EDITION.

DESIGN

- 1. SEE ROOF FRAMING PLAN FOR TRUSS ORIENTATION AND LOCATIONS
2. SEE ARCHITECT FOR ALL TRUSS PROFILES AND DIMENSIONS.
3. TEMPORARY BRACING SHALL BE LEFT IN PLACE AND SERVE AS PART OF THE PERMANENT BRACING SYSTEM.
4. PERMANENT CONTINUOUS LATERAL BRACING, INDICATED BY THE TRUSS DESIGNER, WILL BE REVIEWED DURING THE SHOP DRAWING PHASE.
5. TRUSS DESIGNER SHALL DESIGN TRUSS TO MINIMIZE CONTINUOUS LATERAL BRACING REQUIRED TO BE INSTALLED IN THE FIELD.
6. TRUSS DESIGNER SHALL PROVIDE ALL CONNECTION DESIGN FOR TRUSS TO TRUSS CONNECTIONS.
7. PROVIDE GABLE END TRUSSES WITH VERTICALS AT 16" O.C.
8. ALL TRUSSES SHALL BE DESIGNED FOR UNBALANCED LOADS.

SUBMITTALS

- 1. TRUSS MANUFACTURER SHALL SUBMIT A TRUSS PLACEMENT DRAWING INDICATING THE FOLLOWING:
A.SLOPE
B.SPAN
C.SPACING
D.TRUSS NUMBER THAT CORRESPONDS TO TRUSS DESIGN DRAWING.
E.LOCATION OF PERMANENT LATERAL BRACING.
2. TRUSS DESIGN DRAWINGS/CALCULATIONS STAMPED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MAINE.
3. TRUSS DESIGN DRAWINGS SHALL INCLUDE THE FOLLOWING:
A.SLOPE, SPAN, AND SPACING.
B.LOCATIONS OF ALL JOINTS.
C.REQUIRED BEARING WIDTHS.
D.CHORD AND WEB MEMBER SIZE, GRADE, AND SPECIES.
E.CALCULATED HORIZONTAL DEFLECTION AND VERTICAL DEFLECTION.
F.MAXIMUM AXIAL AND COMPRESSION FORCES IN EA OF THE TRUSS MEMBERS.
G.REQUIRED PERMANENT TRUSS BEARING LOCATIONS.

TIMBER NOTES

- 1. ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH THE AITC TIMBER CONSTRUCTION MANUAL - LATEST EDITION, AND THE AF & PA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS) LATEST EDITION.
2. INDIVIDUAL TIMBER FRAMING MEMBERS SHALL BE VISUALLY GRADED.
3. ENGINEERED WOOD PRODUCTS SHALL BE AS SPECIFIED ON THE DRAWINGS.
4. PRESSURE TREATED LUMBER SHALL BE USED FOR SILL MEMBERS, EXTERIOR EXPOSURE, OR WHERE SHOWN ON THE DRAWINGS.
5. ALL ROOF AND WALL SHEATHING SHALL BE APA PERFORMANCE-RATED.
6. FLOOR SHEATHING SHALL BE 3/4" APA RATED TONGUE AND GROOVE PANELS.
7. ALL BUILT-UP BEAMS AND COLUMNS SHALL BE NAILED AS FOLLOWS.
UNIFORMLY LOADED BEAMS:
BEAM DEPTH <16" - 2 ROWS OF 16d NAILS AT 12" O.C., STAGGERED
BEAM DEPTH >=16" - 3 ROWS OF 16d NAILS AT 12" O.C. STAGGERED
NOTE: SIDE LOADED BEAMS REQUIRE ADDITIONAL FASTENING.
COLUMNS:
2-10d NAILS AT 6" O.C.
8. FASTENING NOT SPECIFIED SHALL CONFORM WITH IBC 2009 TABLE 2304.9.1. NAIL FASTENERS SHALL MEET THE REQUIREMENTS OF ASTM F1667.

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GENERAL NOTES
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