

GENERAL NOTES

- THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- ALL DIMENSIONS, EXISTING CONDITIONS, AND AS-BUILT CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE ONLY AFTER THE STRUCTURAL WORK CONTAINED IN THE S- DRAWINGS IS COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS AS DETERMINED BY THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER RESERVES THE RIGHT TO INTERPRET DETAILS TO ADDRESS OTHER PROJECT CONDITIONS.
- PROVIDE AND INSTALL NECESSARY MATERIAL TO CONNECT ELEVATOR SUPPORT BEAMS AND GUIDE RAILS. LOCATION AND SIZE OF MEMBERS AND ANY INSERTS REQUIRED SHALL BE DETERMINED BY THE ELEVATOR MANUFACTURER.
- THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK, INCLUDING DESCRIPTION OF SHORING, AND CONSTRUCTION METHODS AND SEQUENCING WHERE APPLICABLE. NO PERFORMANCE OF THE WORK INCLUDING, BUT NOT LIMITED TO, DEMOLITION OF EXISTING STRUCTURE, OR FABRICATION OR ERECTION OF NEW STRUCTURAL ELEMENTS, SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ARCHITECT AND ENGINEER. FOR SHOP DRAWINGS AND SUBMITTALS REQUIRED, REFER TO THE PROJECT SPECIFICATIONS.
- ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.
- IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (2006 EDITION, SECTION 1704.1), A STATEMENT OF SPECIAL INSPECTIONS IS REQUIRED AS A CONDITION FOR PERMIT ISSUANCE BY THE LOCAL CODE OFFICIAL. THIS STATEMENT SHALL INCLUDE A COMPLETE LIST OF MATERIALS AND WORK REQUIRING SPECIAL INSPECTIONS, THE INSPECTIONS TO BE PERFORMED AND A LIST OF THE INDIVIDUALS, APPROVED AGENCIES AND FIRMS INTENDED TO BE RETAINED FOR CONDUCTING SUCH INSPECTIONS.
- REFERENCE THE PROJECT SPECIFICATIONS FOR ALL TESTING REQUIREMENTS.

DESIGN LOADS

- BUILDING CODE:**
INTERNATIONAL BUILDING CODE, 2006 EDITION
ASCE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS
AND OTHER STRUCTURES.
- DESIGN FLOOR LIVE LOADS (REDUCTIONS ARE UTILIZED PER CODE CRITERIA)**

RESIDENTIAL: 40 PSF
CORRIDORS ABOVE FIRST FLOOR: 100 PSF
PUBLIC ROOMS: 100 PSF
STAIRS: 100 PSF
RETAIL: 100 PSF
- DESIGN ROOF SNOW LOAD:**
GROUND SNOW LOAD (Pg): 60 PSF
SNOW EXPOSURE FACTOR (Ce): 1.0
SNOW LOAD IMPORTANCE FACTOR (Is): 1.0
SNOW LOAD THERMAL FACTOR (Ct): 1.1
FLAT ROOF SNOW LOAD (Pf): 46 PSF + DRIFT
- DESIGN WIND LOAD:**
BASIC WIND SPEED: 100 MPH
WIND LOAD IMPORTANCE FACTOR (Iw): 1.0
WIND EXPOSURE: C
INTERNAL PRESSURE COEFFICIENT: ±0.18
COMPONENTS & CLADDING LOADS PER ASCE 7-05
- DESIGN SEISMIC LOADS:**
EQUIVALENT LATERAL FORCE PROCEDURE
OCCUPANCY CATEGORY: II PER IBC TABLE 1604.5
SEISMIC IMPORTANCE FACTOR (Ie): 1.00
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
Ss: 0.315
S1: 0.077
SEISMIC SITE CLASS: E
SPECTRAL RESPONSE COEFFICIENTS:
Sds: 0.481
Sd1: 0.180
SEISMIC DESIGN CATEGORY: C
BASIC STRUCTURAL SYSTEM: BUILDING FRAME SYSTEM - (AT FIRST FLOOR)
BASIC SEISMIC FORCE RESISTING SYSTEM: BEARING WALL SYSTEM (ABOVE FIRST FLOOR)
STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE (AT FIRST FLOOR).
LIGHT-FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE (ABOVE FIRST FLOOR).
RESPONSE MODIFICATION FACTOR (R): X: 6.0/3.0 (WOOD S.W./STRUCTURAL STEEL)
Y: 6.0/3.0 (WOOD S.W./STRUCTURAL STEEL)
SEISMIC RESPONSE COEFFICIENT (Cs), X: 0.074/0.143
Y: 0.074/0.143

FOUNDATION NOTES

- FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH A REPORT ENTITLED "GEOTECHNICAL ENGINEERING SERVICES, PROPOSED HOUSING, MARGINAL WAY, PORTLAND, MAINE" PREPARED BY S.W. COLE ENGINEERING, INC., DATED SEPTEMBER 7, 2006. THE RECOMMENDATIONS OF THE REPORTS ARE PART OF THIS WORK. REFER TO THE REPORTS FOR SPECIFIC RECOMMENDATIONS.
- PILE SUPPORTED FOUNDATION NOTES:**
1. DESIGN BUILD PERFORMANCE DESIGN: THE PILE DESIGN FOR THIS PROJECT IS TO BE DESIGNED BY THE PILE SUBCONTRACTOR. PILE SUBMITTAL SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE. PILE NET ALLOWABLE AXIAL CAPACITY 140 KIPS (70 TON) AFTER CONSIDERING PILE DOWN DRAG FROM SITE SOIL SUBSIDENCE. A MINIMUM FACTOR OF SAFETY OF 2.0 SHALL BE USED WITH ULTIMATE CAPACITY.
2. CONTRACTOR SHALL SUBMIT PROPOSED PILE HAMMER AND ENERGY REQUIREMENTS FOR REVIEW BY THE GEOTECHNICAL ENGINEER. DRIVING SHALL BE MONITORED BY A QUALIFIED GEOTECHNICAL ENGINEER TO ENSURE DRIVING CRITERIA IS REACHED.
3. ALL PILES SHALL BE DRIVEN USING POINTS TO LIMIT PILE DAMAGE AND PREVENT TIP KICK OUT DURING DRIVING WHEN REQUIRED BY DESIGN BUILT SYSTEM.
4. PILE LENGTHS SHALL BE ESTIMATED BASED ON BORING INFORMATION PROVIDED IN THE GEOTECHNICAL ENGINEERING REPORT.
5. CONTRACTOR SHALL VERIFY UTILITY LOCATIONS, AND COORDINATE WITH OWNER'S REPRESENTATIVE FOR PILE LOCATIONS, UTILITY LOCATIONS, BUILDING LOCATIONS, AND ANY INTERFERENCE ENCOUNTERED.
6. PILE SPLICES (IF APPLICABLE) SHALL BE DESIGNED AND CONSTRUCTED TO MAINTAIN ALIGNMENT AND POSITION OF PILE SECTIONS AND SHALL DEVELOP THE FULL CAPACITY OF THE PILE IN COMPRESSION, TENSION, BENDING AND SHEAR. WELDED PILE SPLICES SHALL BE FULL PENETRATION WELDS WITH E70XX ELECTRODES.
7. THE PROJECT SPECIFICATIONS REQUIRE THE CONTRACTOR TO SUBMIT INFORMATION ON HIS PROPOSED PILE DRIVING SYSTEM FOR REVIEW BY THE GEOTECHNICAL ENGINEER PRIOR TO EQUIPMENT MOBILIZATION. THE SYSTEM SHOULD BE CAPABLE OF INSTALLING THE PILES TO THE SPECIFIED MINIMUM ULTIMATE GEOTECHNICAL CAPACITY WITHOUT EXCEEDING THE ALLOWABLE DRIVING STRESSES. THE REVIEW WILL INCLUDE A WAVE EQUATION ANALYSIS OF THE PROPOSED DRIVING SYSTEM.
8. IBC REQUIRES PILE LOAD TESTING FOR THIS PROJECT. REFERENCE THE PROJECT SPECIFICATIONS FOR LOAD TESTING REQUIREMENTS.
9. BOTTOMS OF EXTERIOR PILE CAPS SHOULD BE FOUNDED AT LEAST 4.5 FT. BELOW ADJACENT FINISHED GROUND SURFACE FOR FROST PROTECTION AND UNDERLAIN WITH CRUSHED STONE. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
10. PILE CAP SUBGRADE SOILS SHOULD NOT BE ALLOWED TO FREEZE. THE FILL SOILS AT THE SITE ARE CONSIDERED MODERATELY TO SLIGHTLY FROST-SUSCEPTIBLE. FREEZING OF SUBGRADE SOILS BENEATH PILE CAPS MAY RESULT IN FROST HEAVING OR LATERAL WEDGING. THE CONTRACTOR SHOULD MAKE EVERY EFFORT TO PREVENT FREEZING OF SUBGRADE SOILS.
11. PILES SHALL BE DRIVEN IN THE LOCATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING TOLERANCES: DEVIATION OF THE LOCATION OF THE TOP OF A PILE FROM THAT SHOWN ON PLANS SHALL NOT EXCEED 3 INCHES. PILES SHALL BE DRIVEN WITH A MAXIMUM DEVIATION FROM VERTICAL OF 2 INCHES IN 10 FEET OF PILE LENGTH.
12. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL SUBGRADES HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
13. REFERENCE THE GEOTECHNICAL REPORTS FOR ALL EXCAVATION, BACKFILL, COMPACTION, CONSTRUCTION DEWATERING AND PERMANENT DRAINAGE REQUIREMENTS.
14. SOILS EXPOSED AT THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS AND SHOULD BE ADEQUATELY PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. GROUNDWATER SHOULD BE ANTICIPATED FOR EXCAVATIONS AND APPROPRIATE DEWATERING MEASURES SHALL BE EMPLOYED.
15. EXCAVATIONS FOR BUILDING CONSTRUCTION SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS. BRACED EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE. DO NOT UNDERMINE EXISTING FOUNDATIONS OF ANY ADJACENT STRUCTURES. REFER TO THE GEOTECHNICAL REPORTS FOR ADDITIONAL AND/OR MORE SPECIFIC REQUIREMENTS.

METAL DECK

- THE FLOOR DECK SHALL BE FORMED OF STEEL SHEETS CONFORMING TO ASTM STANDARD A611.
- FLOOR DECK SHALL BE AS NOTED ON THE DRAWINGS (OR EQUIVALENT).
- FOR DECK ATTACHMENTS, PENETRATIONS AND ACCESSORIES, REFER TO SPECIFICATIONS.

LINTELS

- THE FOLLOWING LINTELS SHALL BE USED FOR MASONRY OPENINGS:

MASONRY OPENING	LINTEL SIZE
UP TO 3'-0"	L 3 1/2 x 3 1/2 x 5/16
3'-1" TO 4'-6"	L 4 x 3 1/2 x 5/16 (LLV)
4'-7" TO 6'-0"	L 5 x 3 1/2 x 5/16 (LLV)
6'-1" TO 8'-0"	L 6 x 3 1/2 x 5/16 (LLV)

- PROVIDE ONE ANGLE FOR EACH 4" WALL THICKNESS. FOR 6" WALL THICKNESS, PROVIDE WT OR BUILT-UP SECTION WITH PROPERTIES EQUAL TO OR GREATER THAN 1 1/2 TIMES THE ANGLE PROPERTIES FOR A 4" WALL THICKNESS.
- PROVIDE 8" OF BEARING AT EACH END OF ALL LINTELS.
- ALL EXTERIOR LINTELS SHALL BE HOT-DIPPED GALVANIZED.

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

NOTE: SEE ARCH DWGS FOR LINTEL TYPE, NUMBER & LOCATIONS.

CONCRETE NOTES

- CONCRETE WORK SHALL CONFORM TO "ACI MANUAL OF CONCRETE PRACTICE", LATEST EDITION. THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848-3700. www.concrete.org.
- 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 5,000 PSI. ADDITIONAL CONCRETE MIX PERFORMANCE DATA INCLUDING AIR CONTENT, WATER-CEMENT RATIO, AIR CONTENT, AGGREGATE SIZE, SLUMP, ETC. HAS BEEN INCLUDED IN THE PROJECT SPECIFICATIONS. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH EXTERIOR CONCRETE, OR SLABS.
- 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.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.
- FIBER REINFORCEMENT SHALL BE TYPE III SYNTHETIC VIRGIN HOMOPOLYMER POLYPROPYLENE FIBERS CONFORMING TO ASTM C1116.
- 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"
- REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT NECESSARY SPLICES OR HOOKED BARS AT DISCONTINUOUS ENDS. PROVIDE TENSION LAP SPLICES PER THE SCHEDULE ON DRAWING 52.2, FOR ALL REINFORCING UNLESS OTHERWISE INDICATED OR SHOWN ON PLAN.
- WELDING OF REINFORCEMENT IS NOT PERMITTED.
- FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENING AS SHOWN ON THE CONTRACT DOCUMENTS TYPICAL DETAILS.
- DRAWINGS SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS AND CONCRETE PLACING SEQUENCE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO PREPARATION OF THE REINFORCEMENT SHOP DRAWINGS. CONCRETE SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS EXCEPT WHERE SHOWN OR NOTED. VERTICAL CONSTRUCTION JOINTS AND STOPS IN CONCRETE BEAMS/GRADE BEAMS SHALL BE MADE AT MIDSPAN OR AT POINTS OF MINIMUM SHEAR, UNLESS NOTED OTHERWISE.
- SPACING OF CONSTRUCTION JOINTS, UNLESS NOTED OTHERWISE SHALL BE AS FOLLOWS:
A) FOOTINGS AND WALLS MAX LENGTH 40'-0" NOR 15'-0" FROM ANY CORNER*
B) SLABS ON GRADE SEE FOUNDATION PLAN
- EXCEED ONLY WHERE INTERMEDIATE CONSTRUCTION JOINTS ARE PROVIDED. MINIMUM OF 72 HOURS SHALL ELAPSE BETWEEN ADJACENT CONCRETE PLACEMENTS.
- ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554, GRADE 36 KSI WELDABLE STEEL UNLESS NOTED OTHERWISE ON DRAWINGS. ANCHOR RODS THAT ARE TO BE IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED.
- ALL GROUT BENEATH BASE PLATES & BEARING PLATES SHALL BE "5-STAR" 5000-PSI NON-SHRINK GROUT BY U.S. GROUT CORP.
- SLAB THICKNESSES INDICATED ON THE DRAWINGS ARE MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR STRUCTURE DEFLECTION, SUBGRADE FLUCTUATIONS, AND TO OBTAIN THE SPECIFIED SLAB ELEVATION AT THE FLATNESS AND LEVELNESS INDICATED.

STRUCTURAL STEEL NOTES

- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN FABRICATION, AND ERECTION OF STRUCTURAL STEEL" 9TH EDITION, AND THE "CODE OF STANDARD PRACTICE, LATEST EDITION.
- STRUCTURAL STEEL: STEEL PLATES, SHAPES, AND BARS, CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE (U.N.O.). STRUCTURAL STEEL SHAPES DESIGNATED ON THE DRAWINGS FOR WIDE-FLANGE SECTIONS: ASTM A992.
- STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B46 KSI.
- CONNECTION DESIGN FOR THIS PROJECT IS THE RESPONSIBILITY OF THE FABRICATOR. CONNECTION CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR THIS PROJECT. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- FIELD CONNECTIONS SHALL BE BOLTED USING ASTM A325N HIGH STRENGTH BOLTS (U.N.O.) EXCEPT WHERE SLIP CRITICAL CONNECTIONS ARE REQUIRED AND NOTED BY A325 (SC) ON THE DRAWINGS. PROVIDE SLIP CRITICAL (SC) CONNECTIONS AT ALL MOMENT CONNECTIONS, BRACED FRAMES, RELIEVING ANGLES AND AS OTHERWISE NOTED. USE A490 BOLTS WHERE INDICATED.
- WHERE WELDING IS INDICATED, ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION. ELECTRODES SHALL BE CONFORM TO AWS A5.1 E70XX SERIES WITH PROPER ROD TO PRODUCE OPTIMUM WELD (LOW HYDROGEN).
- SEE CONCRETE NOTES AND DRAWINGS FOR ANCHOR BOLT INFORMATION, TYP.
- PROVIDE 3/8" MINIMUM STIFFENER PLATES EACH SIDE OF BEAM WEB AT BEAMS FRAMING OVER COLUMNS AND AT BEAMS SUPPORTING COLUMNS ABOVE.
- PROVIDE 1/4" THICK LEVELING PLATE UNDER ALL COLUMN BASE PLATES UNLESS OTHERWISE NOTED. LEVELING PLATES SHALL BE SET AND GROUTED PRIOR TO ERECTING COLUMNS.
- PROVIDE ALL MISCELLANEOUS ANGLES, PLATES, ANCHORS, BOLTS, ETC., SHOWN ON ARCHITECTURAL DRAWINGS FOR SUPPORT OF BLOCKING, PARAPETS, FINISHES, ETC. COORDINATE WITH MISCELLANEOUS METAL FABRICATOR TO ENSURE COMPLETE COVERAGE OF ALL ITEMS.
- PROVIDE L 4 x 4 x 1/4 SLAB SUPPORT ANGLE AS REQUIRED AT COLUMNS WHERE STRUCTURAL MEMBERS DO NOT FRAME IN AT ALL FOUR SIDES.

TIMBER NOTES

- 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) 2001 EDITION.
- INDIVIDUAL TIMBER FRAMING MEMBERS SHALL BE VISUALLY GRADED. MINIMUM GRADE NO1/NO2 SPRUCE-PINE-FIR KILN DRIED TO 19% MAXIMUM MOISTURE CONTENT UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- ENGINEERED WOOD PRODUCTS SHALL BE AS SPECIFIED ON THE DRAWINGS. REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES. MANUFACTURER AND PRODUCT SHALL BE:
TRUS-JOIST: I-JOIST (TJI), PARALLAM (PSL), MICROLAM (LVL), TIMBERSTRAND (LSL)
JAGER ENGINEERED WOOD PRODUCTS: I-JOIST (JSI)
- PRESSURE TREATED LUMBER SHALL BE USED FOR SILL MEMBERS, EXTERIOR EXPOSURE, OR WHERE SHOWN ON THE DRAWINGS. TIMBER SHALL BE SOUTHERN YELLOW PINE TREATED WITH CCA OR ACQ TO 0.4 #/CF IN ACCORDANCE WITH AWPA C-18. ACZA IS STRICTLY PROHIBITED.
- ALL ROOF AND WALL SHEATHING SHALL BE APA PERFORMANCE-RATED. SHEATHING SHALL BE AS FOLLOWS, U.N.O.:
A. ROOFS: 5/8" THICK NAILED W/8d NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
B. WALLS: 15/32" THICK NAILED W/8d NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
- FLOOR SHEATHING SHALL BE 3/4", APA RATED TONGUE AND GROOVE PANELS. GLUE AND NAIL TO FLOOR FRAMING WITH 8d RING SHANK NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
- ALL BUILT-UP BEAMS AND COLUMNS SHALL BE NAILED AS FOLLOWS (FASTENING IN EACH PLY):
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. SEE DETAILS.
COLUMNS:
2-10d NAILS AT 6" O.C.
- FASTENING NOT SPECIFIED SHALL CONFORM WITH IBC TABLE 2304.9.1. NAIL FASTENERS SHALL MEET THE REQUIREMENTS OF ASTM F1667. UNLESS NOTED OTHERWISE, NAILS REFERENCED ON DRAWINGS ARE TO BE COMMON NAILS WITH DIMENSIONS AS FOLLOWS:
6d: 2" LONG BY 0.113" DIAMETER SHANK WITH 0.266" DIAMETER HEAD
8d: 2 1/2" LONG BY 0.131" DIAMETER SHANK WITH 0.281" DIAMETER HEAD
10d: 3" LONG BY 0.148" DIAMETER SHANK WITH 0.312" DIAMETER HEAD
12d: 3 1/4" LONG BY 0.148" DIAMETER SHANK WITH 0.148" DIAMETER HEAD
16d: 3 1/2" LONG BY 0.162" DIAMETER SHANK WITH 0.162" DIAMETER HEAD
- ALL TIMBER CONNECTION HARDWARE (JOIST HANGERS, POST BASES, SHEARWALL HOLDOWNS, ETC) SHALL BE AS INDICATED ON THE DRAWINGS AND MANUFACTURED BY SIMPSON STRONG-TIE. ALL CONNECTION HARDWARE SHALL BE HOT-DIPPED GALVANIZED G-90 (U.N.O.). CONNECTION HARDWARE USED IN CONJUNCTION WITH PRESERVATIVE TREATMENT SHALL BE GALVANIZED G185 (ZMAX.) USE FASTENERS & HANGERS OF SAME MATERIAL & COATING. REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES.
- FASTENERS USED IN CONJUNCTION WITH PT LUMBER, BUT NOT AT TIMBER CONNECTION HARDWARE REFERENCED IN NOTE 10, SHALL BE POST HOT DIPPED GALVANIZED (ASTM A153).

WOOD TRUSS NOTES:

GENERAL

- TRUSSES SHALL BE DESIGNED, FABRICATED, ERECTED, AND BRACED IN ACCORDANCE WITH WTCA/TPI BCSI 1-03 BOOKLET AS NOTED IN THE NOTES AND SPECIFICATIONS AND ALL OTHER APPLICABLE CODES.
- ERECTION AND TEMPORARY BRACING SHALL CONFORM TO WTCA/TPI BCSI 1-03

DESIGN

- SEE ROOF FRAMING PLAN FOR TRUSS ORIENTATION AND LOCATIONS.
- SEE DWG S4.3 AND ARCHITECTURAL DWGS FOR TRUSS PROFILES AND DIMENSIONS.
- TEMPORARY BRACING SHALL BE LEFT IN PLACE AND SERVE AS PART OF THE PERMANENT BRACING SYSTEM.
- PERMANENT CONTINUOUS LATERAL BRACING, INDICATED BY THE TRUSS DESIGNER, WILL BE REVIEWED DURING THE SHOP DRAWING PHASE. DIAGONAL STRUTS AND CONNECTIONS INDICATED ON SHOP DRAWINGS SHALL BE APPLIED UNLESS NOTIFIED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD.
- TRUSS DESIGNER SHALL DESIGN TRUSS TO MINIMIZE CONTINUOUS LATERAL BRACING REQUIRED TO BE INSTALLED IN THE FIELD.
- TRUSS DESIGNER SHALL PROVIDE ALL CONNECTION DESIGN FOR TRUSS TO TRUSS CONNECTIONS.

SUBMITTALS

- 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. (ALTERNATIVE: LOCATION OF BRACING SHALL BE INDICATED ON THE TRUSSES BY EITHER A TAG OR A PAINT MARK.)
- TRUSS DESIGN DRAWINGS/CALCULATIONS STAMPED BY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MAINE.
- TRUSS DESIGN DRAWINGS SHALL INCLUDE THE FOLLOWING:
A. SLOPE, SPAN, AND SPACING.
B. LOCATION 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 TO ENABLE THE BUILDING DESIGNER TO REVIEW THE SIZE, CONNECTIONS, AND ANCHORAGE OF PERMANENT CONTINUOUS LATERAL BRACING.
G. REQUIRED PERMANENT TRUSS BEARING LOCATIONS.

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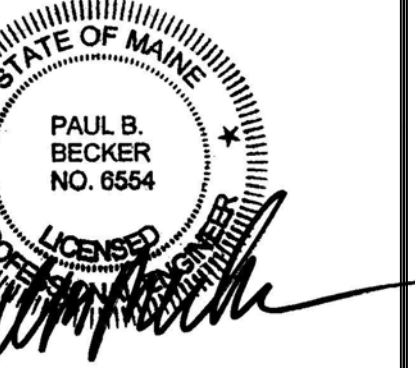
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BAYSIDE VILLAGE - A STUDENT HOUSING COMPLEX

120 MARGINAL WAY
PORTLAND, MAINE



Project No: 2006-425BSV

Drawing Title:
GENERAL NOTES

Scale: NOTED
Date: 09/06/2007
Revisions:

- △ 09/14/2007
- △
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