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 Apr 25, 2006, 1:28pm  
 PROJECTS\_ARCHITECTS

**GENERAL NOTES**

- THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT 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 3-DRAWINGS IS COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE 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.
- 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. SUBMIT ONE COPY AND ONE SET OF COPIES WILL BE REVIEWED AND SEPA WILL BE RETURNED. FOR SHOP DRAWINGS AND SUBMITTALS REQUIRED, REFERENCE 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 (2003 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, 2003 EDITION  
ASCE 7-02 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
- DESIGN FLOOR LIVE LOADS:**  
LIVE LOADS ARE ASSUMED TO BE LESS THAN OR EQUAL TO HISTORIC USE. AREAS OUTSIDE OF CORRIDORS AND STAIRS ARE LIMITED TO 20 PSF ALLOWABLE LIVE LOAD.  
POTENTIAL USES:  
OFFICES: 50 PSF + 20 PSF PARTITION ALLOWANCE  
PRIVATE ROOMS AND CORRIDORS SERVING THEM: 40 PSF  
LOBBIES AND FIRST FLOOR CORRIDORS: 100 PSF  
STAIRS: 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): 1.00  
WIND EXPOSURE: C  
INTERNAL PRESSURE COEFFICIENT: ±0.18  
COMPONENTS & CLADDING LOADS PER ASCE 7-02
- DESIGN SEISMIC LOADS:**  
BUILDING SEISMIC SYSTEM IS EXISTING BEARING WALL / ORDINARY PLAIN MASONRY SHEAR WALLS. CHANGE OF OCCUPANCY WILL NOT RESULT IN STRUCTURE BEING RECLASSIFIED TO A HIGHER SEISMIC USE GROUP. STRUCTURE IS NOT REQUIRED TO BE SEISMICALLY UPGRADED.

**FOUNDATION NOTES (SOIL SUPPORTED)**

- FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE UNDISTURBED NATIVE SOILS AND/OR NEW COMPACTED STRUCTURAL FILL EXTENDING TO UNDISTURBED NATIVE SOIL.
- PRESUMPTIVE BEARING CAPACITY 3000 PSF.
- EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 4.5 FEET BELOW THE FINAL EXTERIOR GRADE FOR PROTECTION AGAINST FROST.
- ALL PAVEMENT, EXISTING FOUNDATIONS AND UNCONTROLLED GRANULAR FILL SHALL BE REMOVED FROM THE AREA OF THE PLANNED FOUNDATION TO AT LEAST 4 FEET BEYOND THE FOOTING LIMIT.
- COMPACTED STRUCTURAL FILL SHALL BE USED TO BACKFILL TO THE DESIGN FOOTING SUBGRADE AND BENEATH ALL SLABS ON GRADE. STRUCTURAL FILL SHALL BE A CLEAN SAND-GRAVEL MIXTURE MEETING THE FOLLOWING GRADATION:  

SCREEN OR SIEVE SIZE	PERCENT PASSING
6 INCH	100
3 INCH	90-100
1/4 INCH	25-90
NO. 40	0-30
NO. 200	0-5
- STRUCTURAL FILL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST. COMPACT ADJACENT TO FOUNDATION WALLS SUPPORTING UNBALANCED FILL (RETAINING WALLS) TO 94 TO 96 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557. HAND OPERATED EQUIPMENT SHALL BE USED FOR COMPACTION WITHIN 8 FEET OF NEW FOUNDATION WALL.
- NO BACKFILL SHALL BE PLACED AGAINST FOUNDATION WALLS RETAINING EARTH, UNLESS WALLS ARE ADEQUATELY BRACED TO PREVENT MOVEMENT OR STRUCTURAL DAMAGE.
- PROVIDE PVC DRAINPIPE AROUND THE PERIMETER OF THE STRUCTURE. LOCATE AT THE BOTTOM OF THE FOUNDATION WALLS AND PROVIDE POSITIVE GRAVITY FLOW TO PROPERLY DESIGNED OUTLET. REFER TO SITE DRAWINGS FOR ADDITIONAL INFORMATION.
- SOILS EXPOSED AT THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHALL BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHALL BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS SHALL BE ADEQUATELY PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. GROUNDWATER SHALL BE ANTICIPATED FOR EXCAVATIONS AND APPROPRIATE DEWATERING MEASURES SHALL BE EMPLOYED.
- SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY IN ACCORDANCE WITH OSHA REQUIREMENTS. PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA GUIDELINES. BRACED EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE.

**CONCRETE NOTES**

- CONCRETE WORK SHALL CONFORM TO "ACI MANUAL OF CONCRETE PRACTICE", LATEST EDITION. THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848-3800.
- 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. 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"  
# 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 THIS DRAWING, FOR ALL REINFORCING UNLESS OTHERWISE 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.
- CONSTRUCTION JOINTS SHOWN ON DRAWINGS ARE MANDATORY. OMISSIONS, ADDITIONS, OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SUBMITTAL OF A WRITTEN REQUEST TOGETHER WITH DRAWINGS OF THE PROPOSED JOINT LOCATIONS FOR APPROVAL OF THE STRUCTURAL ENGINEER. WHERE CONSTRUCTION JOINTS ARE NOT SHOWN, OR WHEN ALTERNATE LOCATIONS ARE PROPOSED, 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 CONTRACTION 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.

**REBAR LAP SPLICE TABLE**

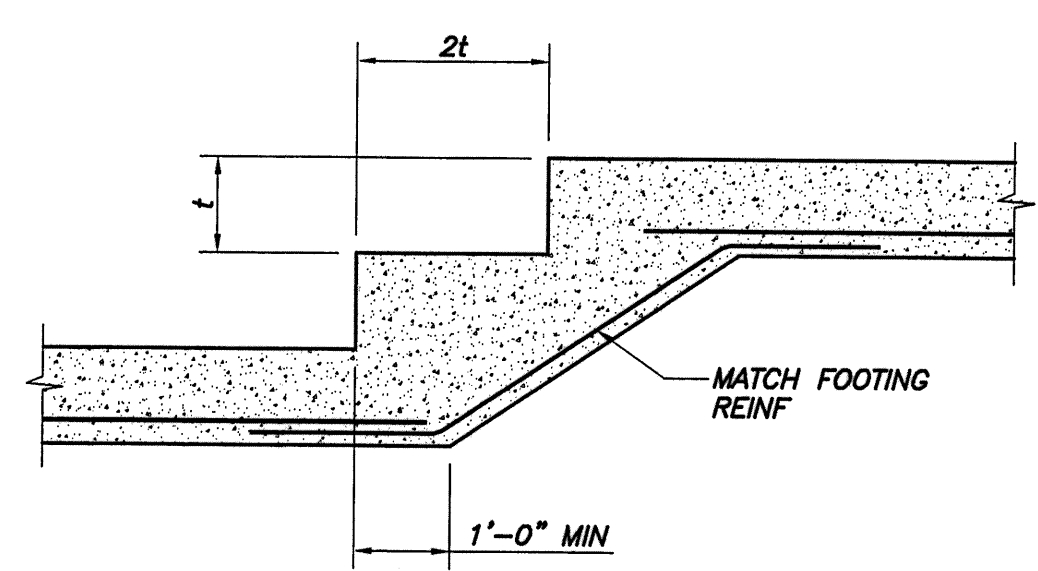
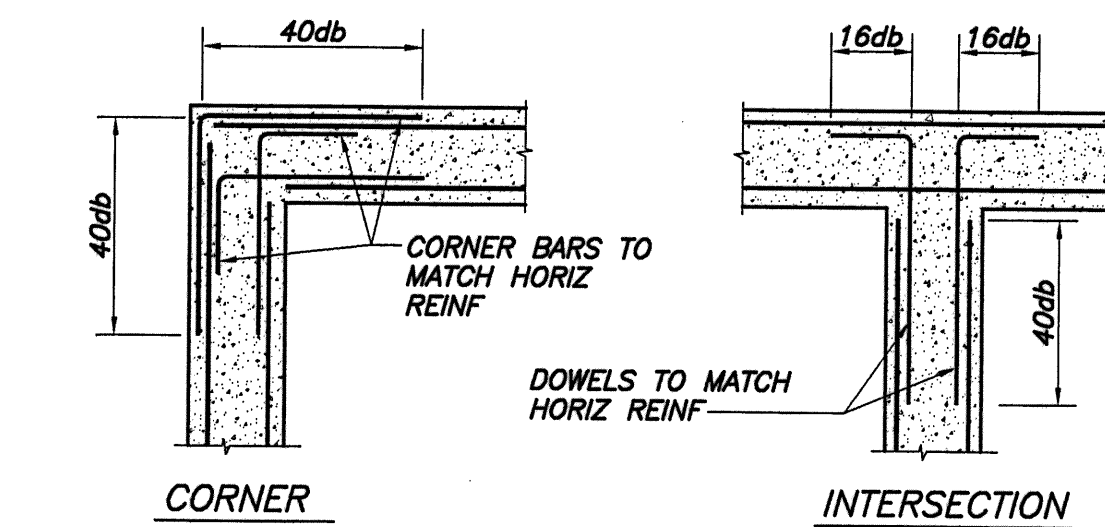
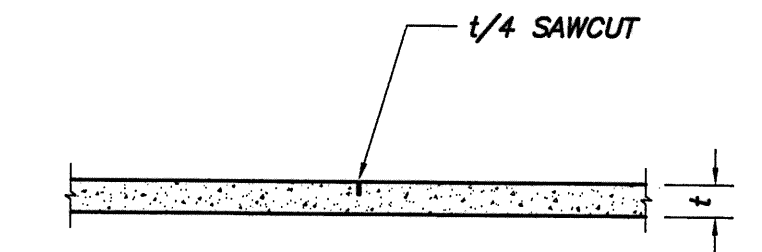
BAR SIZE	LAP LENGTH	
	3,000 PSI	4,000 PSI
#3	30"	24"
#4	36"	32"
#5	48"	42"

**STRUCTURAL STEEL NOTES**

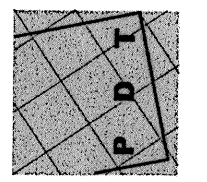
- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN FABRICATION, AND ERECTION OF STRUCTURAL STEEL" 9TH EDITION, AND THE "CODE OF STANDARD PRACTICE, LATEST EDITION.
- STRUCTURAL STEEL: STEEL PLATES, SHAPES, AND BARS, CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE (U.N.O.). STRUCTURAL STEEL SHAPES DESIGNATED ON THE DRAWINGS FOR WIDE-FLANGE SECTIONS: ASTM A992 (ASTM A572 GRADE 50 WITH SPECIAL REQUIREMENTS PER AISC TECHNICAL BULLETIN #3 DATED MARCH, 1997)
- STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B46 KSI.
- FIELD CONNECTIONS SHALL BE BOLTED USING ASTM A325N HIGH STRENGTH BOLTS (U.N.O.)
- 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 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.

**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-PIKE-FIR KILN DRIED TO 19% MAXIMUM MOISTURE CONTENT UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- 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 NAILED TO THE FRAMING AS FOLLOWS, U.N.O.:  
A. ROOFS: 8d NAILS AT 6" AT PANEL EDGES AND 12" AT INTERMEDIATE SUPPORTS.  
B. WALLS: 8d NAILS AT 6" AT PANEL EDGES AND 12" 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.
- ALL TIMBER CONNECTION HARDWARE (JOIST HANGERS, POST BASES, SHEARWALL HOLD-DOWNS, ETC) SHALL BE AS INDICATED ON THE DRAWINGS AND MANUFACTURED BY SIMPSON STRONG-TIE. ALL CONNECTION HARDWARE SHALL BE HOT-DIPPED GALVANIZED 0-90 (U.N.O.). PROVIDE VICOOR ISOLATION BARRIERS PER SIMPSON TECHNICAL BULLETINS. 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).

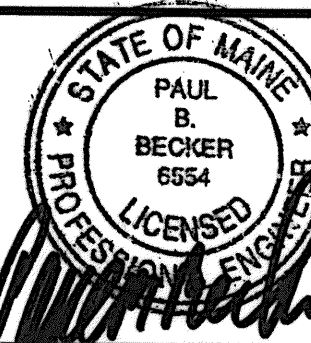


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**Marine Hospital Renovation**  
 MARTIN'S POINT - PORTLAND, MAINE



JOB NO.  
05-108  
DRWN. CHK  
APP DSB

SCALE:  
NOTED

ISSUE  
BID DOCUMENTS  
24 April 2006

TITLE  
GENERAL NOTES  
& TYP DETAILS

SHEET

**S1**