

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 AND CONDITIONS MUST BE VERIFIED IN THE FIELD...
4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE...
5. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL...
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...

DESIGN LOADS

- 1. BUILDING CODE: INTERNATIONAL BUILDING CODE (2003 EDITION) ASCE 7-02 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
2. DESIGN FLOOR LIVE LOADS: GROUND FLOOR STRUCTURAL SLAB: 100 PSF, STAIRS: 100 PSF, PRIVATE CORRIDORS: 40 PSF, PUBLIC CORRIDORS: 100 PSF, PRIVATE ROOMS: 40 PSF, PUBLIC ROOMS: 100 PSF, STORAGE: 125 PSF.
3. DESIGN ROOF LIVE LOADS: 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, SNOWDRIFTING LOADS (Pd): -AT SHADED AREAS ADJACENT TO STAIR TOWERS: 58 PSF, -AT ROOF DECK: 98 PSF.
4. DESIGN WIND LOADS: WIND BASIC WIND SPEED: 100 MPH, WIND LOAD IMPORTANCE FACTOR (I): 1.0, WIND EXPOSURE: C, INTERNAL PRESSURE COEFFICIENT: +/- .18, COMPONENTS & CLADDING LOADS PER ASCE 7-02.
5. DESIGN SEISMIC LOADS: EQUIVALENT LATERAL FORCE PROCEDURE, SEISMIC USE GROUP: I, SEISMIC IMPORTANCE FACTOR (Is): 1.0, MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss = .369, Si = .098, SEISMIC SITE CLASS: D, SPECTRAL RESPONSE COEFFICIENTS: Sds = .371, Sd1 = .157, SEISMIC DESIGN CATEGORY: C, BASIC STRUCTURAL SYSTEM: BEARING WALL SYSTEM, BASIC SEISMIC FORCE RESTRAINT SYSTEM: LIGHT FRAME WALLS W/ SHEAR PANELS (WOOD), RESPONSE MODIFICATION FACTOR (R): 6.5, SEISMIC RESPONSE COEFFICIENT (Cs): .06.

FOUNDATION NOTES (SOIL SUPPORTED)

- 1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH A REPORT ENTITLED "GEOTECHNICAL ENGINEERING SERVICES, PROPOSED PEARL PLACE PHASE 1 DEVELOPMENT", PREPARED BY S.W. COLE ENGINEERING, INC. THE RECOMMENDATIONS OF THE REPORT ARE PART OF THIS WORK. REFER TO THIS REPORT FOR SPECIFIC RECOMMENDATIONS.
2. 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 PER THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. REFER TO THIS REPORT FOR SPECIFIC BEARING RECOMMENDATIONS.
3. PRESUMPTIVE BEARING CAPACITY 3,000 PSF.
4. EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 4.5 FEET BELOW THE FINAL EXTERIOR GRADE FOR PROTECTION AGAINST FROST.
5. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL SUBGRADES 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, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO FLOW. 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.
8. 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 REPORT FOR ADDITIONAL AND/OR MORE SPECIFIC REQUIREMENTS.

CONCRETE NOTES

- 1. CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318 - LATEST)" AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301 - LATEST)." THESE PUBLICATIONS IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848-3800.
2. GENERAL CONTRACTOR, CONSTRUCTION MANAGER AND/OR OWNER'S CLERK OF THE WORKS SHALL HAVE AVAILABLE ON SITE AT ALL TIMES A COPY OF ACI FIELD REFERENCE MANUAL SP-15(LATEST) THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848-3800.
3. CONCRETE SHALL BE CONTROLLED CONCRETE, PROPORTIONED, MIXED, AND PLACED IN THE PRESENCE OF A REPRESENTATIVE OF AN APPROVED TESTING AGENCY.
4. CONCRETE MIX DESIGN: EXTERIOR SLABS ON GRADE: A. STRENGTH: 4500PSI @28 DAYS, B. AGGREGATE: 1", C. W/C RATIO: 0.45 MAX, D. ENTRAINMENT AIR: 7% MAX, 5% MIN, E. SLUMP: 4" MAX, INTERIOR STRUCTURAL SLABS ON GRADE: A. STRENGTH: 4000 PSI @28 DAYS, B. AGGREGATE: 3/4", C. W/C RATIO: 0.48 MAX, D. ENTRAINMENT AIR ONLY (NO ENTRAINMENT), E. SLUMP: 4" MAX, INTERIOR ELEVATED SLABS: A. STRENGTH: 3000 PSI @28 DAYS, B. AGGREGATE: 3/4", C. W/C RATIO: 0.55 MAX, D. ENTRAINMENT AIR ONLY (NO ENTRAINMENT), E. SLUMP: 4" MAX, A. ADD AIR ENTRAINING ADMIXTURE AT MANUFACTURER'S PRESCRIBED RATE TO RESULT IN CONCRETE AT POINT OF PLACEMENT HAVING THE ABOVE NOTED AIR CONTENTS, B. ADDITIONAL SLUMP MAY BE ACHIEVED BY THE ADDITION OF A MIDRANGE OR HIGH RANGE WATER REDUCING ADMIXTURE. MAXIMUM SLUMP AFTER ADDITION OF ADMIXTURE SHALL BE 8 INCHES.
5. ADJUSTMENT TO CONCRETE MIXES: MIX ADJUSTMENTS MAY BE REQUESTED BY THE CONTRACTOR, WHEN CHARACTERISTICS OF THE MATERIALS, JOB CONDITIONS, WEATHER OR OTHER CIRCUMSTANCES WARRANT, AT NO ADDITIONAL COST TO THE OWNER AS ACCEPTED BY THE ARCHITECT. LABORATORY TEST DATA FOR THE REVISED MIX DESIGN AND STRENGTH DATA MUST BE SUBMITTED AND ACCEPTED BY THE ARCHITECT BEFORE USING IN WORK.
A. WATER MAY BE ADDED AT THE PROJECT ONLY IF THE MAXIMUM SPECIFIED WATER-CEMENT RATIO AND SLUMP ARE NOT EXCEEDED. CONTRACTOR SHALL HAVE BATCH TICKET INDICATING WATER AND CEMENT MIXED IN THE PLANT, AND SHALL RECORD THE WATER ADDED AS EVIDENCE THAT THE WATER-CEMENT RATIO HAS NOT BEEN EXCEEDED.
B. ADDITIONAL DOSES OF SUPER PLASTICIZER SHOULD BE USED WHEN DELAYS OCCUR AND REQUIRED SLUMP HAS NOT BEEN MAINTAINED. MAXIMUM OF TWO ADDITIONAL DOSAGES ARE PERMITTED PER ACI 212.3R RECOMMENDATIONS.
6. CONCRETE MIXING: A. JOB-SITE MIXING WILL NOT BE PERMITTED. B. READY-MIX CONCRETE MUST COMPLY WITH THE REQUIREMENTS OF ASTM C94, AND AS SPECIFIED HEREIN. PROVIDE BATCH TICKET FOR EACH BATCH, DISCHARGED AND USED IN WORK, INDICATING PROJECT NAME, MIX TYPE, MIX TIME, BATCH QUANTITY, AND PROPORTIONS OF INGREDIENTS.
7. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
8. PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH EXTERIOR CONCRETE, OR SLABS.
9. 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.
10. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.
11. FIBER REINFORCEMENT SHALL BE TYPE III SYNTHETIC VIRGIN HOMOPOLYMER POLYPROPYLENE FIBERS CONFORMING TO ASTM C1116.
12. COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW. REFER TO SPECIFICATIONS. PROVIDE AND SCHEDULE ON A SHOP DRAWINGS THE NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN PLACE. MINIMUM REQUIREMENTS SHALL BE: HIGH CHAIRS AT 4'-0" O.C. WITH CONTINUOUS #5 SUPPORT BAR; SLAB BOLSTERS, CONTINUOUS AND 3'-6" O.C.; BEAM BOLSTERS AT 5'-0" O.C.
13. 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"
14. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT NECESSARY SPLICES OR HOOKED BARS AT DISCONTINUOUS ENDS. PROVIDE CLASS - 8 TENSION LAP SPLICES FOR ALL REINFORCING UNLESS OTHERWISE SHOWN ON PLAN.
15. WELDING OF REINFORCEMENT IS NOT PERMITTED.
16. FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENING AS SHOWN ON THE CONTRACT DOCUMENTS TYPICAL DETAILS.
17. PROVIDE A MIN. 15 MIL. POLYOLEFIN GEOMEMBRANE TYPE VAPOR RETARDER UNDER INTERIOR SLABS CAST ON GRADE. SEAL JOINTS PER MANUFACTURERS RECOMMENDATIONS. SEE TYPICAL DETAILS AND GEOTECHNICAL REPORT FOR SPECIFIC UNDERSLAB PREPARATION REQUIREMENTS.
18. 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.
19. 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 APPROVAL PRIOR TO PREPARATION OF THE REINFORCEMENT SHOP DRAWINGS.
20. 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 MAX LENGTH 30'-0" ** MAX AREA 900 SF PLACED IN ALTERNATE PANELS
C) CONCRETE ON STEEL DECK MAX LENGTH 90'-0" MAX AREA 8,100 SF
** EXCEED ONLY WHERE INTERMEDIATE CONTRACTION JOINTS ARE PROVIDED. MINIMUM OF 72 HOURS SHALL ELAPSE BETWEEN ADJACENT CONCRETE PLACEMENTS.
21. CONCRETE SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS EXCEPT WHERE SHOWN OR NOTED. VERTICAL CONSTRUCTION JOINTS AND STOPS IN CONCRETE WORK SHALL BE MADE AT MIDSPAN OR AT POINTS OF MINIMUM SHEAR.
22. 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.
23. ALL GROUT BENEATH BASE PLATES & BEARING PLATES SHALL BE "3-STAR" 5000-PSI NON-SHRINK GROUT BY U.S. GROUT CORP.
24. INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF COMPLETION AT LEAST 24 HOURS PRIOR TO THE SCHEDULED COMPLETION OF THE INSTALLATION OF REINFORCEMENT.

STRUCTURAL STEEL NOTES

- 1. 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.
2. 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)
3. STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B (46 KSI).
4. FIELD CONNECTIONS SHALL BE BOLTED USING 3/4" DIAMETER ASTM A325N HIGH STRENGTH BOLTS (U.N.O.) EXCEPT WHERE SLIP CRITICAL CONNECTIONS ARE REQUIRED AND NOTED BY A325 (SC) ON THE DRAWINGS. PROVIDE A490 (SC) CONNECTIONS AT ALL MOMENT CONNECTIONS, BRACED FRAMES, RELIEVING ANGLES AND AS OTHERWISE NOTED.
5. 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).
6. METAL FLOOR DECK SHALL BE AS INDICATED ON THE DRAWINGS IN ACCORDANCE WITH THE LATEST EDITION OF "DESIGN MANUAL FOR FLOOR AND ROOF DECKS" BY THE STEEL INSTITUTE. METAL FLOOR DECK SHALL BE FORMED OF STEEL SHEETS CONFORMING TO ASTM A611. METAL FLOOR DECK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A525 G80. SEE PLAN FOR DECK DEPTH AND GAGES.
7. FASTEN METAL FLOOR DECK TO EACH BEAM AND AROUND THE PERIMETER OF THE BUILDING WITH 5/8" DIAMETER PUDDLE WELDS AT 12" O.C. PROVIDE (3) #10 TEEKS SCREW SIDELAP FASTENERS FOR EACH SPAN U.N.O..
8. DESIGN AND DETAIL ALL CONNECTIONS ACCORDING TO AISC STANDARD CONNECTION TABLES. DESIGN STANDARD BEAM CONNECTIONS FOR THE MAXIMUM LOAD CAPACITY OF THE MEMBER. BRACED CONNECTIONS HAVE BEEN DETAIL ON THE DRAWINGS.
9. ALL STEEL SHALL BE FABRICATED AND SHIPPED AS BARE UN-PAINTED STEEL, EXCEPT STEEL PERMANENTLY EXPOSED TO WEATHER. ALL STEEL EXPOSED TO WEATHER SHALL BE PAINTED WITH THE FABRICATOR'S RUST INHIBITIVE PRIMER, TNEMC 10-99 OR EQUAL AND TOP COATED WITH TNEMC SERIES 2 GLOSS ENAMEL OR HOT DIPPED GALVANIZED AS INDICATED ON THE DRAWINGS.
12. SEE CONCRETE NOTES AND DRAWINGS FOR ANCHOR BOLT INFORMATION, TYP.
13. COAT ALL COLUMNS BELOW SLAB WITH BITUMINOUS MASTIC.
14. PROVIDE 3/8" MINIMUM STIFFENER PLATES EACH SIDE OF BEAM WEB AT BEAMS FRAMING OVER COLUMNS AND AT BEAMS SUPPORTING COLUMNS ABOVE.
15. 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.
16. PROVIDE ALL ANGLES, PLATES, ANCHORS, BOLTS, ETC., SHOWN ON ARCHITECTURAL DRAWINGS.
17. LINTELS FOR EXTERIOR MASONRY AND STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED ACCORDING TO ASTM A123, UNLESS OTHERWISE NOTED TO BE PAINTED. REFER TO LINTEL SCHEDULE FOR LINTEL SIZES.
18. PROVIDE L 4 X 4 X 1/4 SLAB SUPPORT ANGLE AS REFERRED AT COLUMNS WHERE STRUCTURAL MEMBERS DO NOT FRAME IN AT ALL FOUR SIDES.
19. ALL EXPOSED STEEL TO BE "ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS)". SEE SPECIFICATIONS FOR REQUIREMENTS.
MASONRY NOTES
1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1-02.
2. ALL CONCRETE MASONRY UNITS SHALL BE ASTM C90 GRADE N, TYPE I STANDARD WEIGHT BLOCKS INCLUDING STRETCHERS AND CORNER BLOCKS. MINIMUM PRISM STRENGTH OF BLOCK SHALL BE F'M = 1500 PSI IN 28 DAYS.
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-0-WAL TRUSS DESIGN, STANDARD CLASS MILL GALVANIZED WITH 3/16" DIAMETER SIDE RODS AND 9 GAUGE CROSS TIES, UNO. REINFORCING SHALL BE PLACED IN MASONRY WALLS AT EVERY SECOND BLOCK COURSE.
7. CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS OTHERWISE NOTED. PROVIDE FULL MORTAR COVERAGE ON ALL WEBS AND FACE SHELLS. PROVIDE CORNER BLOCKS AND END BLOCKS TO FINISH ALL 90 DEGREE CORNERS AND WALL OPENINGS.
8. PROVIDE LINTELS AS AT WALL PENETRATIONS AS SHOWN IN THE LINTEL SCHEDULE.
9. STANDARD LAP LENGTH OF GRADE 60 MASONRY REINFORCING BARS SHALL BE 48 BAR DIAMETERS. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCEMENT
10. CELLS TO BE GROUTED SHALL BE 2-CELL BLOCK. ALIGN CELLS TO MAINTAIN A CLEAR UNOBSTRUCTED, CONTINUOUS VERTICAL CHASE. CELLS MUST BE KEPT CLEAN OF PROTRUSIONS OR FINS OF MORTAR. FILL CELLS OF MASONRY UNITS AND WALL CAVITIES WHERE INDICATED WITH 2500 PSI GROUT. MAXIMUM GROUT LIFT WITHOUT CLEAN-OUTS SHALL BE 4'-0". HIGH LIFT GROUTING SHALL CONFORM TO CODE REQUIREMENTS WITH A MINIMUM CEMENT CONTENT OF 8 BAGS PER CUBIC YARD. SUPPORT ALL VERTICAL BARS IN CENTER OF GROUTED CELLS WITH VERTICAL BAR POSITIONER.
12. FIELD PENETRATIONS THROUGH BLOCK WALLS SHALL NOT BE MADE THROUGH BOND BEAMS, LINTELS OR GROUTED CELLS.
WOOD TRUSS NOTES:
GENERAL
1. TRUSSES SHALL BE DESIGNED, FABRICATED, ERECTED, AND BRACED IN ACCORDANCE WITH ANSI/TPI 1-2002 "NATIONAL DESIGN STANDARD FOR CONSTRUCTION, METAL PLATE CONNECTED WOOD TRUSSES" AS NOTED IN THE NOTES AND SPECIFICATIONS AND ALL OTHER APPLICABLE CODES.
2. ERECTION AND TEMPORARY BRACING SHALL CONFORM TO WTCA/TPI BCSI 1-03 (SUPERSEDING HB-91).
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. DIAGONAL STRUTS AND CONNECTIONS INDICATED ON SHOP DRAWINGS SHALL BE APPLIED UNLESS NOTIFIED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD.
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 AND UPLIFT CONNECTIONS.
7. PROVIDE GABLE END TRUSSES WITH VERTICALS AT 16" O.C. CALCULATE WIND LOADS PER CRITERIA INDICATED IN THE DRAWINGS & NOTES.
8. ALL TRUSSES SHALL BE DESIGNED FOR UNBALANCED LOADS.

WOOD TRUSS NOTES (CONTINUED):

- 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. (LOCATION OF BRACING SHALL ALSO BE INDICATED ON THE TRUSSES BY EITHER A TAG OR A PAINT MARK.)
2. TRUSS DESIGN DRAWINGS/CALCULATIONS STAMPED BY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MAINE.
3. 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 ENAB THE BUILDING DESIGNER TO REVIEW THE SIZE, CONNECTIONS, AND ANCHORAGE OF PERMANENT CONTINUOUS LATERAL BRACING.
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) 2001 EDITION.
2. 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.
3. 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)
BOISE: I-JOIST (BCI), VERSALAM (LVL)
4. 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 ACO TO 0.4 #/CF IN ACCORDANCE WITH AWPA C-18. ACZA IS STRICTLY PROHIBITED.
5. 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.
6. ALL BUILT-UP BEAMS AND COLUMNS SHALL BE NAILED AS FOLLOWS (FASTENING IN EACH PLY):
UNIFORMLY LOADED BEAMS:
BEAM DEPTH <18" - 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.
7. FASTENING NOT SPECIFIED SHALL CONFORM WITH IBC TABLE 2304.9.1.
8. 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 G-90 (U.N.O.). CONNECTION HARDWARE USED IN CONJUNCTION WITH PRESERVATIVE TREATMENT SHALL BE GALVANIZED G165 (ZMAX) USE FASTENERS & HANGERS OF SAME MATERIAL & COATING. REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES.
9. 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).

SUBMITTALS

- 1. 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, SHORING AND 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 SEPA. COPY WILL BE REVIEWED AND SEPA WILL BE RETURNED. CONTRACTOR SHALL ALLOW 10 WORKING DAYS FOR REVIEW.
2. REQUIRED SUBMITTALS INCLUDE:
STATEMENT OF SPECIAL INSPECTIONS
CONCRETE MIX DESIGNS
CONCRETE REINFORCING INCLUDING BAR SUPPORTS
STRUCTURAL STEEL MILL CERTIFICATIONS
STRUCTURAL STEEL FRAMING FABRICATION DRAWINGS
STRUCTURAL STEEL CONNECTION DESIGN
STRUCTURAL STEEL STAIR DESIGN

REFER TO SPECIFICATIONS FOR DETAILED INFORMATION REGARDING SUBMITTALS.

TESTING

- 1. OWNER WILL ENGAGE A QUALIFIED TESTING AGENCY TO CONDUCT PERIODIC TESTS TO CONFIRM CONSTRUCTION IS IN CONFORMANCE WITH SPECIFIED PROCEDURES AND SPECIFICATIONS.
2. TESTING SHALL INCLUDE:
DRAWING FILL GRADATION AND COMPACTION
CONCRETE SLUMP, TEMPERATURE, AIR CONTENT AT POINT OF PLACEMENT
CONCRETE COMPRESSION TESTS
STRUCTURAL STEEL FIELD BOLTED CONNECTIONS
STRUCTURAL STEEL FIELD WELDED CONNECTION
HEADED SHEAR STUDS
REFER TO SPECIFICATIONS AND STATEMENT OF SPECIAL INSPECTIONS FOR DETAILED INFORMATION REGARDING TESTING & INSPECTION REQUIREMENTS.

VEENER LINTELS

- 1. THE FOLLOWING MINIMUM LINTELS SHALL BE USED FOR VENEER OPENING, UNO:
MASONRY OPENING LINTEL SIZE
LESS THAN 6'-0" L5x5x3/8
6'-0" TO 10'-0" BENT PL 7x5x3/8 LLV
10'-0" TO 12'-0" BENT PL 8x5x3/8 LLV
2. PROVIDE 8" OF BEARING AT EACH END OF ALL LINTELS.
3. ALL LINTELS SHALL BE HOT-DIPPED GALVANIZED.

Pearl Place Building 1 & 2 Portland Maine

Developer

Avesta Pearl Street One, L.P.

Architect Winton Scott Architects

Landscape Architect Carroll Associates

Structural Engineer Becker Structural Engineers

BUILDING 1 & 2

General Notes S1.0

Sept 1, 2006

Scale: N.T.S.