GENERAL NOTES:

1. 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 ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

2. 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.

3. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. 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.

5. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS.

6. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

STRUCTURAL DESIGN CRITERIA:

BUILDING CODES: BOCA 1999

ROOF DESIGN LOADS:

GROUND SNOW LOAD.....60 PSF
SNOW EXP. FACTOR Ce=0.9
SNOW LOAD IMPORTANCE FACTOR I=1.0

DESIGN ROOF SNOW LOAD
Ps= 42 PSF & DRIFT

FLOOR DESIGN LOADS:

1ST FLOOR LIVE LOAD.....100 PSF
2ND FLOOR LIVE LOAD.....80 PSF
STAIRS.....100 PSF

LATERAL LOADS:

BASIC WIND SPEED V=85 MPH, EXPOSURE C,
IMPORTANCE FACTOR I=1.1

SEISMIC DESIGN CRITERIA:
ACCELERATION COEFFICIENTS Av=0.11, Aa=0.11
SEISMIC PERFORMANCE CATEGORY C
SEISMIC HAZARD EXPOSURE GROUP I
SOIL PROFILE TYPE S3, S=1.5
SEISMIC-RESISTING SYSTEM:

2nd FLOOR LEVEL:
LOADBEARING WALL SYSTEM WITH LIGHT FRAMED SHEAR WALLS
R=6.5, Cd=4.0
SEISMIC BASE SHEAR: V= 0.042xW

1ST FLOOR LEVEL:
BUILDING FRAME SYSTEM WITH CONCENTRICALLY BRACED FRAME:
R=5, Cd=4.5
SEISMIC BASE SHEAR: V= 0.055xW

EARTHWORK NOTES:

(SEE SB101 FOR NOTES)

FOUNDATION NOTES:

(SEE SB101 FOR NOTES)

CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318-02.

2. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:

4000 PSI FOR ALL FLOOR SLABS
3000 PSI FOR FOUNDATION WALLS, PIERS, AND FOOTINGS

3. ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED.

4. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

5. PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH CONCRETE WALLS.

6. REINFORCING BARS SHALL CONFORM TO ASTM A-615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH ACI 315-LATEST EDITION.

7. SPLICES OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACI 318-95, UNLESS OTHERWISE NOTED ON DRAWINGS.

8. SLAB-ON-GRADE SHALL BE FIBER REINFORCED. FIBER REINFORCEMENT SHALL BE ADDED AT A MINIMUM RATE OF 1.5 POUNDS PER CUBIC YARD OF CONCRETE. FIBER MANUFACTURER AND RATE OF APPLICATION SHALL BE APPROVED PRIOR TO PLACEMENT OF CONCRETE.

9. COMPLETE SHOP DRAWINGS OF ALL REINFORCING STEEL SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF THAT PORTION OF THE WORK.

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" - NINTH EDITION.

2. STRUCTURAL STEEL SHALL CONFORM TO ASTM A572, GRADE 50 STEEL. STEEL FOR PLATES AND ANGLES SHALL CONFORM TO ASTM A36. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B. STRUCTURAL PIPE SHALL CONFORM TO ASTM A53, GRADE B.

3. FIELD CONNECTIONS SHALL BE BOLTED USING 3/4" DIAMETER A325N HIGH STRENGTH BOLTS EXCEPT WHERE FIELD WELDING IS INDICATED ON THE DRAWINGS.

4. ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION. ELECTRODES SHALL BE E70XX.

5. STEEL FRAMING MEMBERS AND COMPONENTS NOT EXPOSED TO WEATHER SHALL BE SHOP PRIMED WITH ONE COAT TNEMEC 10-99 OR EQUAL, 2.0-3.5 MILS DRY THICKNESS.

6. STEEL FRAMING MEMBERS AND COMPONENTS EXPOSED TO WEATHER SHALL BE GALVANIZED U.N.O.

7. SHOP DRAWINGS DETAILING FABRICATION AND ERECTION OF EACH METAL FABRICATION INDICATED SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO FABRICATION AND CONSTRUCTION.

STRUCTURAL STEEL CONNECTION NOTES:

1. ALL CONNECTIONS BETWEEN STRUCTURAL STEEL MEMBERS SHALL BE DESIGNED BY THE STRUCTURAL STEEL FABRICATOR EXCEPT WHERE CONNECTIONS ARE DETAILED ON THE DRAWINGS.

CONNECTIONS HAVE TO BE DESIGNED AND DETAILED ACCORDING TO AISC MANUAL OF STEEL CONSTRUCTION ASD, 9TH EDITION. FOR ANY CONNECTIONS THAT DO NOT COMPLY WITH THE TYPICAL DETAILS SHOWN IN THE MANUAL (THIS INCLUDES CONNECTIONS WITH DIFFERENT ANGLE SIZES, BOLT GAGES, BOLT EDGE DISTANCES, ETC.) THE FABRICATOR SHALL SUBMIT THE DESIGN CALCULATIONS, STAMPED BY A PROFESSIONAL ENGINEER.

2. ALL BEAM END CONNECTIONS SHALL BE TAKEN AS "SIMPLE FRAMING" CONNECTIONS. CLASSIFICATION SHALL BE TYPE 2 FOR THE ALLOWABLE STRESS DESIGN.

3. REACTIONS AT BEAM ENDS SHALL BE ONE HALF THE ALLOWABLE UNIFORM LOAD GIVEN IN THE TABLE OF "ALLOWABLE LOADS ON BEAMS" IN THE AISC MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN, NINTH EDITION, UNLESS REACTIONS ARE SHOWN ON THE DRAWINGS. REACTIONS SHOWN ON THE DRAWINGS ARE SERVICE LOAD REACTIONS. REACTIONS ARE THE SAME AT BOTH BEAM ENDS U.N.O.

4. BEAM TO COLUMN CONNECTIONS SHALL BE SINGLE PLATE TYPE, UNLESS SPECIFICALLY DETAILED ON THE DRAWINGS. SINGLE PLATE CONNECTIONSS SHALL BE DESIGNED AND DETAILED (SEE TYPICAL DETAIL ON THIS DRAWING) ACCORDING TO THE AISC MANUAL OF STEEL CONSTRUCTION, VOLUME II, APPENDIX C. DESIGN VALUES FOR FLEXIBLE SUPPORTS SHALL BE USED. BEAM TO BEAM CONNECTIONS MAY BE DOUBLE ANGLE OR SINGLE ANGLE CONNECTIONS, EXCEPT WHERE SPECIFICALLY DETAILED ON DRAWINGS.

5. SLOTTED BOLT HOLES ARE NOT ALLOWED AT BEAMS LOCATED AT BRACED BAYS AND WHERE NOTED ON FRAMING PLANS.

6. ALL CONNECTIONS ARE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.

OPEN WEB STEEL JOISTS AND DECK NOTES:

1. OPEN WEB STEEL JOISTS SHALL CONFORM TO STEEL JOIST INSTITUTE "STANDARD SPECIFICATIONS FOR STEEL JOISTS AND JOIST GIRDERS".

2. ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE CONSTRUCTION LOADS ARE PLACED ON THE JOISTS. ALL JOIST BRIDGING AND BRIDGING ACCESSORIES SHALL BE SPECIFIED AND PROVIDED BY JOIST FABRICATOR UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

3. JOISTS @ COLUMNS SHALL BE DETAILED AS TIE JOIST W/ BOTTOM CHORD EXTENSIONS AS SHOWN ON TYPICAL DETAILS.

4. ITEMS ATTACHED TO STEEL JOISTS SHALL BE ATTACHED AT JOIST PANEL POINT LOCATIONS ONLY OR AN ADDITIONAL WEB MEMBER SHALL BE ADDED TO THE JOIST AT THE LOCATION OF THE LOAD. SEE TYPICAL DETAIL XX/SFXXX. MAX. CONCENTRATED LOAD SHALL NOT EXCEED 100 LBS. MAX. 6 HANGERS ARE ALLOWED AT EACH JOIST.

5. STEEL JOISTS SHALL BE PRIMED PER SPECIFICATIONS.

6. STEEL FLOOR DECK SHALL BE GALV. FORM DECK 1.0C24 AS MANUFACTURED BY VULCRAFT OR APPROVED ALTERNATE.

FLOOR DECK SHALL BE FASTENED AS FOLLOWS, UNLESS SHOWN OTHERWISE ON THE DRAWINGS:
AT SUPPORTS - 5/8" DIAMETER PUDDLE WELDS AT 33/4 PATTERN
AT PERIMETER STEEL PARALLEL TO DECK SPAN - 5/8" DIAMETER PUDDLE WELDS AT 18" O.C. MAXIMUM
16 GA. MIN. WELDING WASHERS ARE REQ'D @ ALL WELDS.

TIMBER FRAMING NOTES:

1. ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH THE AITCH TIMBER MANUAL - LATEST EDITION.

2. INDIVIDUAL TIMBER FRAMING MEMBERS SHALL BE VISUALLY GRADED, MINIMUM GRADE NO.1/NO.2 SPRUCE-PINE-FIR, KILN DRIED TO 19% MAXIMUM MOISTTURE CONTENT, UNLESS NOTED OTHERWISE, HEAVY TIMBER (CUSTOM TRUSSES, BEAMS, POSTS) SHALL BE DOUGLAS FIR-LARCH NO. 2.

3. PRESSURE TREATED TIMBER SHALL BE USED FOR SILL MEMBERS AND WHERE SHOWN ON DRAWINGS. PRESSURE TREATED TIMBER SHALL BE SOUTHERN YELLOW PINE #2.

4. ROOF SHEATHING SHALL BE U.N.O. 19/32" APA RATED SHEATHING, PANLE SPAN RATING 40/20, EXPOSURE 1, NAILED WITH MINIMUM OF 10d NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. A 1/8" GAP IS REQUIRED BETWEEN ROOF PANELS AT ALL END AND EDGE JOINTS.

5. WALL SHEATHING SHALL BE 15/32" APA RATED SHEATHING, EXPOSURE 1, NAILED WITH MINIMUM OF 10d NAILS AT 6" (U.N.O.) O.C. AT PANEL EDGES AND AT 12" O.C. AT INTERMEDIATE FRAMING. ALL PANEL EDGES SHALL BE BLOCKED WITH 2x4 MINIMUM.

6. THE QUANTITY AND SIZE OF FASTENERS CONNECTING WOOD FRAME MEMBERS SHALL BE NOT LESS THAN SPECIFIED IN THE BOCA NATIONAL CODE, 1999 - TABLE 2305.2 FASTENING SCHEDULE. ALL NAILS SHALL BE COMMON TYPE NAILS.

7. ALL MISCELLANEOUS METAL HARDWARE (HANGERS, TIES, ETC.) SHALL BE AS MANUFACTURED BY SIMPSON STRONG TIE OR APPROVED EQUAL.

WOOD TRUSS NOTES:

1. MATERIALS: ANY WOOD SPECIES AND GRADE THAT SATISFIES THE DESIGN REQUIREMENTS, GALVANIZED METAL PLATE CONNECTORS.

2. APPLICABLE SPECIFICATIONS:
NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION AND TPI DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES, LATEST EDITIONS.

3. TRUSSES SHALL BE DESIGNED, IN ADDITION TO THEIR OWN WEIGHT, FOR THE LOADS SHOWN ON TRUSS LOAD DIAGRAMS - SEE SFXXX.

4. THE TRUSS SUPPLIER SHALL DESIGN TRUSSES AT THEIR SUPPORTS FOR THE MAXIMUM ALLOWABLE BEARING STRESSES OF 425 PSI AND THE PROVIDED BEARING LENGTH. DOUBLE TRUSSES OR SHOP/FIELD INSTALLED REINFORCEMENT AT TRUSS BEARING MAY BE REQUIRED WHERE BEARING STRESSES ARE EXCEEDED. TRUSS DESIGNER SHALL SPECIFY ON THE TRUSS SHOP DRAWINGS ALL REQUIRED, SHOP OR FIELD, TRUSS BEARING REINFORCEMENT.

5. THE TRUSS SUPPLIER SHALL SPECIFY ALL BRACING REQUIRED FOR TEMPORARY CONSTRUCTION LOADING AND FOR PERMANENT LATERAL SUPPORT OF TRUSS COMPRESSION MEMBERS. NOTE THAT THERE IS NO CEILING TO BRACE TRUSS BOTTOM CHORD.

6. SUBMITTALS:
A. PROVIDE DESIGN CALCULATIONS, SHOP DRAWINGS, AND ERECTION PROCEDURES ALL AFFIXED WITH THE SEAL OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF MAINE.
B. SHOP DRAWINGS SHALL SHOW STRESS GRADE AND SIZE OF MEMBERS, SIZE AND LOCATION OF PLATE CONNECTORS, SIZE AND LOCATION OF BRACING.
C. GENERAL CONTRACTOR SHALL REVIEW AND APPROVE TRUSS SHOP DRAWINGS PRIOR TO SUBMITTING THEM TO THE PROJECT ARCHITECT.

7. FABRICATED TRUSSES SHALL BE INSPECTED AT THE FABRICATION PLANT, AND APPROVED TRUSSES SHALL RECEIVE THE TPI MARK OF APPROVAL IN ACCORDANCE WITH THE TPI IN-PLANT INSPECTION LICENSE AGREEMENT.

LIGHT GAGE METAL FRAMING NOTES:

(THESE NOTES ARE APPLICABLE ONLY TO THE EXTERIOR WALL FRAMING PLAN FOR THE INTERIOR WALL FRAMING SEE SPECIFICATION SECTION 09255)

SEE PROJECT SPECIFICATION SECTION 05400 FOR ADD'L DESIGN CRITERIA

1. THE EXTENT OF THE WORK FOR THE EXTERIOR METAL STUD WALL SYSTEM IS DETAILED ON THE ARCHITECTURAL DRAWINGS. THESE NOTES SHALL BE WORKED IN CONJUNCTION WITH THOSE DRAWINGS AND THE SPECIFICATIONS.

2. THE FOLLOWING SPECIFICATIONS AND PUBLICATIONS (LATEST EDITION) SHALL BE FOLLOWED.

A. AMERICAN IRON AND STEEL INSTITUTE COLD FORM DESIGN MANUAL, SPECIFICATION FOR THE DESIGN OF COLD FORM STEEL STRUCTURAL MEMBERS.

B. AMERICAN SOCIETY FOR TESTING AND MATERIALS.

C. AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL CONSTRUCTION 9TH EDITION.

3. PROVIDE CHANNEL SHAPED STUDS, JOISTS, RUNNERS, TRACKS, BLOCKING, CLIP ANGLES, SHOES, REINFORCEMENTS, FASTENERS, AND OTHER ACCESSORIES RECOMMENDED BY THE MANUFACTURER FOR A COMPLETE FRAMING SYSTEM.

4. FABRICATION OF LIGHT GAGE STEEL SHALL CONFORM WITH REQUIREMENTS OF ASTM A446 WITH THE FOLLOWING MINIMUM YIELD POINTS (Fy):

A. 16 GA. AND HEAVIER - Fy = 50,000 PSI (GRADE D)
B. 18 GA. - Fy = 33,000 PSI (GRADE B)
C. ALL WALL FRAMING MEMBERS AND COMPONENTS SHALL BE 18 GAGE MINIMUM.

5. THE LIGHT GAGE METAL FRAMING SIZES SHOWN ON DRAWINGS ARE AS MANUFACTURED BY SUPER STUD BUILDING PRODUCTS, INC., AND ARE PROVIDED FOR THE PRELIMINARY COST ESTIMATE ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN BID COST BASED ON THE LIGHT GAGE DESIGN - SEE NOTE 11 BELOW.

6. THE EXTERIOR WALL SYSTEM SHALL BE DESIGNED FOR A MAXIMUM ALLOWABLE DEFLECTION AS SHOWN IN PROJECT SPECIFICATION 05400. THE SPAN SHALL BE MEASURED FROM POINT OF ATTACHMENT TO STRUCTURAL STEEL OR CONCRETE, INCLUDING EFFECT OF STUDS ONLY, NOT SHEATHING BOARD OR FACING MATERIAL.

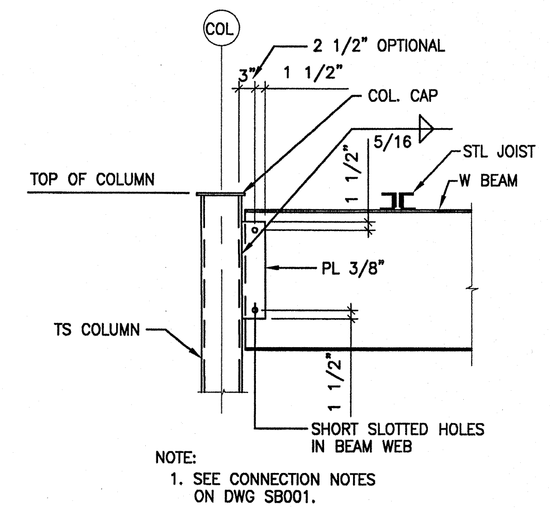
7. THE DESIGN WIND PRESSURE SHALL BE IN ACCORDANCE WITH BOCA 1999. SEE STRUCTURAL DESIGN CRITERIA NOTES ON THIS DRAWING.

8. STUDS SHALL BE INSTALLED AFTER FLOORS CONCRETE DECK ARE CONSTRUCTED. STUD CONNECTIONS TO THE PERIMETER STEEL FRAMING SHALL ALLOW FOR A MINIMUM OF 3/4" FRAMING DEFLECTION.

9. ALL FASTENERS CONNECTING LIGHT GAGE MEMBERS AND ACCESSORIES SHALL BE A MINIMUM OF NO. 10 SIZE SCREWS SPACED NOT CLOSER THAN ONE-HALF INCH ON CENTER. NUMBER OF FASTENERS SHALL BE AS SHOWN ON DETAILS. ALL FASTENERS SHALL BE GALVANIZED OR CADMIUM PLATED.

10. ALL FASTENERS CONNECTING LIGHT GAGE MEMBERS TO STRUCTURAL STEEL SHALL BE POWER DRIVEN FASTENERS OF 0.145" DIAMETER MINIMUM. ALL FASTENERS OF LIGHT GAGE MEMBERS TO CONCRETE SHALL BE POWER DRIVEN FASTENERS OF 0.177" DIAMETER MINIMUM WITH A MINIMUM OF 1-7/16 INCH EMBEDMENT.

11. THE LIGHT GAGE METAL FRAMING SUBCONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS ALL AFFIXED WITH THE SEAL OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF MAINE. THESE DRAWINGS SHALL ILLUSTRATE THE DESIGN OF EXTERIOR STUD WALL FRAMING INCLUDING HEADERS, JAMBS, TRACKS, AND ALL NECESSARY STRUCTURAL STEEL STIFFENING AND BRACING.



NOTE:
1. SEE CONNECTION NOTES ON DWG SB001.

TYP. SINGLE PLATE CONNECTION

(CONNECTION SHOWN @ ROOF LEVEL. SIM CONNECTION @ FLOOR LEVEL)

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PROJECT NORTH

PROJECT TITLE: BOY SCOUTS OF AMERICA
PINE TREE COUNCIL
PORTLAND, ME.

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A/E OF RECORD:	JSW
SMRT CAD FILE:	SG001-03152
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SHEET TITLE: GENERAL NOTES

SHEET No. SG001

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