PROJECT NORTH

**NOTES:**

1. TOP OF STEEL (T/STL) = 113'-6½" UNLESS NOTED OTHERWISE (± X'-Y").
2. —— —— INDICATES BRACED BAY
3. ALL JOISTS AT COLUMNS ARE TIE JOISTS (TJ)
4. JOISTS ARE EQUALLY SPACED BETWEEN COL. LINES AND/OR BEAMS UNLESS NOTED OTHERWISE
5. COORDINATE EDGE OF DECK/SLAB WITH ARCH. DWGS.
6. J.S. = JOIST SUBSTITUTE 2.5K3
7. AT PARTITION SUPPORT BEAM PROVIDE 2-(⅝ø") HOLES @ 1'-0" O.C. MIN. IN BOTTOM FLANGE FOR PARTITION. COORDINATE HOLE SIZE, NUMBER OF HOLES & SPACING WITH MFR. PRIOR TO FABRICATION.
8. C.S. = COLUMN STABILIZER SEE TYP. DETAIL ON DWG S14.
9. RD./E.F. = ROOF DRAIN/EXHAUST FAN. (PROVIDE METAL DECK SUPPORT, COORD. SIZE & LOCATIONS PRIOR TO FAB). SEE DWG. S14.
10. ' = 5" JOIST SEATS ONE OR BOTH ENDS.
11. '' = CLEAR DIMENSION BETWEEN FRAMING ANGLES, CHANNELS, OUTSTANDING LEGS OF JOIST TOP CHORDS OR ANY COMBINATION OF THESE.
12. RF OR ROOF FRAME INDICATES METAL DECK SUPPORT AT OPENINGS. COORDINATE SIZE AND LOCATION WITH MECHANICAL UNIT PRIOR TO FABRICATION.
13. JH = JOIST HEADER. DESIGN BY JOIST MANUFACTURER.
14. SF = SINGLE FRAME. SEE DRAWING S14 FOR DETAILS. COORD LOCATION W/ARCH DWGS.
15. FP = FLOOR PENETRATION. PROVIDE METAL DECK SUPPORT AT OPENINGS. COORDINATE SIZE AND LOCATION WITH ARCHITECTURAL, MECHANICAL DRAWINGS AND/OR MECHANICAL UNIT OR DUCT.
16. J1, J2, J3, J4 = MECHANICAL JOISTS. SEE DRAWING S14 FOR DETAILS.
17. COORDINATE ROUGH OPENING DIMENSIONS FOR SKYLIGHTS AND MECHANICAL UNITS WITH SKYLIGHT AND MECHANICAL UNIT MANUFACTURERS RESPECTIVELY

## SECOND FLOOR/LOW ROOF FRAMING PLAN – SOUTH

1/8"=1'-0"

**STRUCTURAL STEEL:**

1. DESIGN SPECIFICATION: AISC ALLOWABLE STRESS DESIGN SPECIFICATION FOR BUILDINGS, 1989.
2. CONSTRUCTION IS AISC TYPE 2. FRAMES ARE NOT FULLY SELF-SUPPORTING AND REQUIRE SUPPORT FROM OTHER STRUCTURAL ELEMENTS.

   THESE ELEMENTS INCLUDE:

   HORIZONTAL FLOOR/ROOF DIAPHRAGMS

   TEMPORARY SUPPORT FOR THE STEEL FRAME MUST BE PROVIDED UNTIL THESE ELEMENTS ARE COMPLETE AND CONNECTED TO THE STEEL FRAME. THE STRUCTURAL ENGINEER OF RECORD HAS NOT DESIGNED AND IS NOT RESPONSIBLE FOR TEMPORARY SUPPORT DURING ERECTION.
3. STRUCTURAL STEEL: ASTM A 992 FOR WIDE FLANGE SHAPES.
   ASTM A 500 GRADE B FOR TUBES
   ASTM A53 TYPE E OR S FOR PIPES.
   ASTM A36 FOR ALL OTHER SHAPES AND PLATES.
4. CONNECTIONS: FIELD BOLTS, ASTM A325N TENSION CONTROL (T/C) BOLTS EXCEPT WHERE FIELD WELDING IS SHOWN.
   ANCHOR BOLTS: MIN. YIELD 36 KSI
   WELDING: E70 ELECTRODES.
5. DESIGN AND DETAIL SIMPLE SHEAR CONNECTIONS USING "ALLOWABLE STRESS DESIGN FOR STRUCTURAL STEEL BUILDINGS, VOLUME II, 1992" BY AISC.
6. CONNECTIONS WITH BOLTS SUBJECT TO SHEAR ONLY ARE DESIGNATED AS SNUG-TIGHT CONNECTIONS REQUIRING WRENCH TIGHTENING ONLY. BOLTS SUBJECT TO TENSION OR SHEAR AND TENSION MUST BE FULLY TIGHTENED. PROVIDE TENSION CONTROL BOLTS FOR FULLY TIGHTENED CONNECTIONS. SUBMIT WRITTEN INSTALLATION PROCEDURE. PROCEDURES MUST BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO THE INSTALLATION OF FULLY TIGHTENED CONNECTIONS.
7. WHERE SHOWN END REACTIONS AND MEMBER FORCES ARE IN KIPS AND KIP-FT. WHERE BEAM REACTIONS ARE NOT SHOWN, DESIGN CONNECTIONS FOR ONE-HALF OF THE ALLOWABLE LOAD CARRYING CAPACITY OF THE BEAM BUT NOT LESS THAN 6 KIPS SERVICE LOAD.
8. PROVIDE MINIMUM OF 3 BOLTS FOR CONNECTIONS TO BRACING UNLESS SHOWN OTHERWISE.
9. IF SINGLE PLATE SHEAR CONNECTIONS ARE USED AT TUBE COLUMNS, BEAM WEBS, OR COLUMN WEBS, LIMIT MAXIMUM PLATE THICKNESS TO ½ X TUBE WALL OR WEB THICKNESS.
10. ROOF AND FLOORS MUST PROVIDE DIAPHRAGM ACTION. ROOF DECK: WELD TO SUPPORTING MEMBERS USING 36/4 PATTERN. PROVIDE 3 ⅝ø HEX HEAD SCREWS PER SPAN FOR SIDELAP CONNECTIONS.
    FLOOR DECK: PROVIDE WELDING WASHERS. USE WELDING PATTERN REQUIRED BY DECK MANUFACTURER.

STATE OF MAINE — DAVID K. PINKHAM — NO. 4433 — REGISTERED PROFESSIONAL ENGINEER
7.15.04

Revisions:

**East End Elementary School**
Portland Public Schools
Portland, Maine


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Green Consultant: Fore Solutions


Job No.: 0309
Date: July 15, 2004
Scale: AS NOTED
Drawn by: kim
Checked by: dkp

Drawing Title: Second Floor/Low Roof Framing Plan South

**S.9**