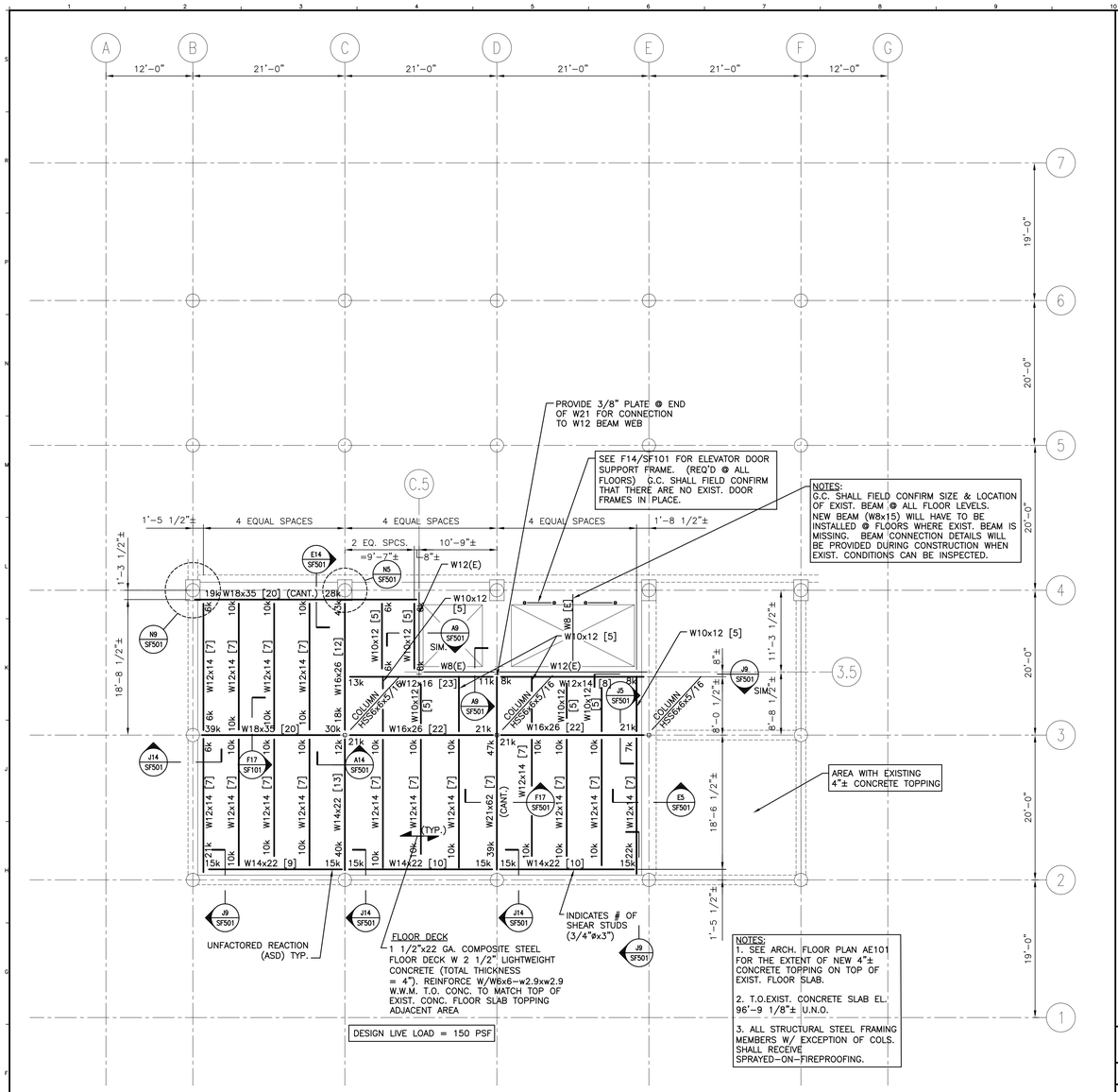


F1 | SEVENTH FLOOR FRAMING PLAN

1/8"=1'-0"

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, GUY'S, 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.

EXISTING CONDITIONS NOTES:

1. WHERE ADHESIVE ANCHORS OR EXPANSION BOLTS ARE SPECIFIED TO BE PLACED IN EXISTING CONCRETE, THE CONTRACTOR SHALL PERFORM DRILLING IN SUCH A MANNER TO AVOID CUTTING EXISTING REINFORCING STEEL. THIS WILL REQUIRE DETERMINATION OF THE LOCATION OF EXISTING REINFORCEMENT BY NON DESTRUCTIVE METHODS. THE CONTRACTOR SHALL EMPLOY A TECTING AGENCY TO MAKE THE DETERMINATIONS IN THE VICINITY OF ALL CONNECTIONS PRIOR TO FABRICATION OF CONNECTION HARDWARE. IF ADJUSTMENT OF ANCHOR LOCATIONS IS REQUIRED, THE CONTRACTOR SHALL SUBMIT SKETCHES OF A PROPOSED LAYOUT FOR REVIEW BY THE ENGINEER. FABRICATION OF STRUCTURAL SUPPORTS SHALL NOT PROCEED UNTIL THE ANCHOR LAYOUT IS APPROVED.
2. THE CONTRACTOR SHALL VERIFY THAT THE PROPOSED HSS COLUMNS C3, D3 AND E3 AS SHOWN ON THE CONTRACT DRAWING, ARE LOCATED OVER THE CENTER LINE OF THE EXISTING CONCRETE WALLS THAT EXTEND FROM THE 5TH TO 6TH FLOORS.
3. AT THE 5TH FLOOR THE DAMAGED WALL UNDER NEW COLUMN E3 SHALL BE REPAIRED WITH EPOXY REPAIR MORTAR PRIOR TO INSTALLING THE COLUMN.

STEEL CONNECTION NOTES

1. STRUCTURAL STEEL CONNECTIONS FOR BEAM–TO–BEAM AND BEAM–TO–COLUMN CONNECTIONS SHALL BE CONSIDERED AS "SIMPLE", (TYPE 2) CONNECTIONS IN ACCORDANCE WITH AISC'S SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS– ALLOWABLE STRESS DESIGN OR TYPE PR CONNECTIONS IN ACCORDANCE WITH THE LOAD AND RESISTANCE FACTOR DESIGN FOR STRUCTURAL STEEL BUILDINGS, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. DESIGN CONNECTIONS IN ACCORDANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION, VOLUME II, CONNECTIONS, ASD OR LRFD.
2. AT COMPOSITE FLOOR FRAMING, BEAM REACTIONS ARE INDICATED AT THE BEAM ENDS IN KIPS. LOADS INDICATED ARE UNFACTORED LOADS FOR ALLOWABLE STRESS DESIGN. FACTORED LOADS FOR LRFD ARE AVAILABLE UPON REQUEST.
3. AT COMPOSITE FLOOR FRAMING, WHERE REACTIONS ARE NOT PROVIDED, AISC MINIMUM CONNECTION LOADS APPLY: 6 KIPS FOR ASD, 10 KIPS FOR LRFD. WHERE A BEAM REACTION IS PROVIDED AT ONE END ONLY, THAT REACTION SHALL BE TAKEN AS TYPICAL FOR BOTH ENDS.
4. WHERE REACTIONS ARE NOT PROVIDED, DESIGN CONNECTIONS TO RESIST 1/2 Wu FROM THE MAXIMUM FACTORED UNIFORM LOAD TABLES IN THE 1993 EDITION OF THE AISC LRFD MANUAL OR 1/2 THE TOTAL ALLOWABLE UNIFORM LOAD FROM THE ALLOWABLE UNIFORM LOAD TABLES IN THE 1989 EDITION OF THE AISC ASD MANUAL.
5. WHERE STEEL BEAMS FRAME TO TUBULAR STEEL COLUMNS, DESIGN CONNECTIONS IN ACCORDANCE WITH DETAIL A14/SF501 AND THE AISC MANUAL OF HOLLOW STRUCTURAL SECTIONS, CONNECTIONS MANUAL.
6. WHERE BEAMS FRAME TO TUBULAR STEEL COLUMNS, SINGLE PLATE CONNECTIONS ARE ACCEPTABLE PROVIDED THAT THE THICKNESS OF THE PLATE IS LESS THAN 2 X THE THICKNESS OF THE WALL OF THE TUBULAR STEEL COLUMN.
7. DESIGN OF WELDS FOR SINGLE PLATE CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE 4–9 IN THE HOLLOW STRUCTURAL SECTIONS CONNECTIONS MANUAL.
8. WHERE BEAMS FRAME TO BOTH SIDES OF A GIRDER, PROVIDE SINGLE ANGLE CONNECTIONS ARRANGED SO THAT BEAMS ON OPPOSITE SIDES OF THE GIRDER DO NOT SHARE ANY COMMON BOLTS OR OTHER DETAILS THAT AVOID ALL BOLTS COMMON TO BOTH MEMBERS.
9. WHERE BEAMS FRAME TO BOTH SIDES OF A COLUMN WEB, AT THE SAME ELEVATION, PROVIDE SEATED CONNECTIONS OR OTHER DETAILS TO AVOID BEAMS BEING SUPPORTED BY COMMON BOLTS.
10. ALL CONNECTION DETAILS NOT PROVIDED WITHIN THESE DOCUMENTS SHALL BE DESIGNED BY THE FABRICATOR IN ACCORDANCE WITH THESE NOTES. WHERE DETAIL IS REQUIRED TO SPECIFY FIELD ATTACHMENT, THAT DETAIL SHALL BE PROVIDED ON THE ERECTION DRAWINGS.
11. ALL CONNECTION DETAILS ARE SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD.

STRUCTURAL STEEL NOTES:

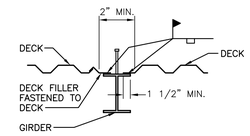
1. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL" – NINTH EDITION.
2. STRUCTURAL STEEL SHALL CONFORM TO ASTM A572, GRADE 50 STEEL. STEEL FOR PLATES AND ANGLES SHALL CONFORM TO ASTM A36. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.
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 TO BE FIREPROOFED SHALL NOT BE PRIMED.
6. STEEL FRAMING MEMBERS AND COMPONENTS EXPOSED TO WEATHER SHALL BE GALVANIZED.
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.

CONCRETE NOTES:

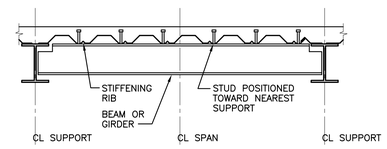
1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318–02.
2. CONCRETE SHALL BE LIGHTWEIGHT WITH COMPRESSIVE STRENGTH AT 28 DAYS: 4000 PSI
3. REINFORCING BARS SHALL CONFORM TO ASTM A–615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH ACI 315–LATEST EDITION.
4. SPLICES OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACI 318–02, UNLESS OTHERWISE NOTED ON DRAWINGS.
5. CONCRETE TOPPING 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. APPLY BOND BREAKER AGENT TO TOP OF EXISTING CONCRETE FLOOR SLAB BEFORE CASTING NEW TOPPING.

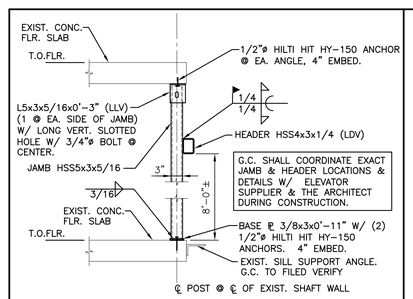
SHEAR STUD PLACEMENT REQ.

1. NUMBERS IN PARENTHESIS SPECIFY QUANTITIES OF 3/4"øx3" SHEAR CONNECTORS. LAY OUT QUANTITIES AT UNIFORM SPACING EXCEPT WHERE OTHERWISE INDICATED OR REQUIRED TO COMPLY WITH OTHER POSITIONING NOTES STATED HEREIN.
2. WHERE THE NUMBER OF SHEAR CONNECTORS IS INDICATED TO BE LOCATED WITHIN GIVEN DIMENSION LINES, LAY OUT STUDS AT EQUAL SPACING WITHIN THOSE LIMITS EXCEPT AS REQUIRED TO COMPLY WITH OTHER POSITIONING NOTES STATED HEREIN.
3. ALL SHEAR STUDS SHALL BE PLACED DIRECTLY OVER BEAM AND GIRDER WEBS. STUD SPACING SHALL BE NO MORE THAN 36" O.C. AND NO LESS THAN 4 1/2" O.C..
4. SEE DETAIL N14/SF501 FOR MINIMUM DECK FASTENING REQUIREMENTS TO SUPPORTS.
5. METAL DECK WITH RIBS PARALLEL TO GIRDER AXIS SHALL BE ADJUSTED SUCH THAT CONCRETE IS FULL DEPTH AT GIRDER FLANGE FOR THE LENGTH OF THE GIRDER IN ACCORDANCE WITH AISC AND STEEL DECK INSTITUTE REQUIREMENTS, SEE BELOW:



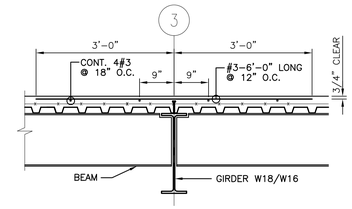
6. METAL DECKING WITH RIBS NOT PARALLEL TO BEAM OR GIRDER AXIS SHALL HAVE STUDS LOCATED IN LOWER RIBS OF DECK AND POSITIONED WITH RESPECT TO THE STIFFENING RIB TOWARD THE NEAREST SUPPORT, SEE BELOW:





F14 | TYP. ELEVATOR DOOR SUPPORT FRAME

3/4"=1'-0"

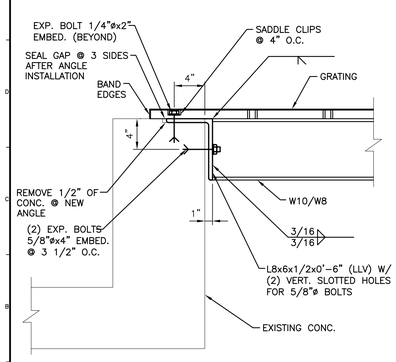


F17 | TYP. DETAIL @ FLOOR GIRDER

3/4"=1'-0"

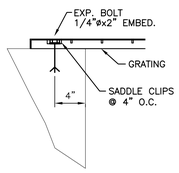
F11 | GENERAL NOTES

NONE



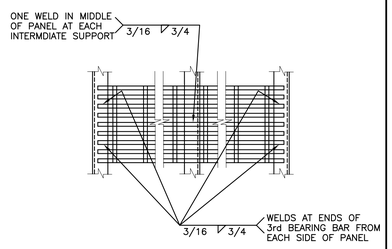
A1 | SECTION

1 1/2"=1'-0"



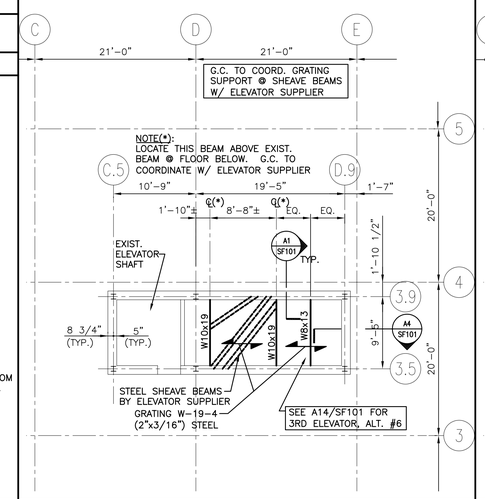
A4 | SECTION

1 1/2"=1'-0"



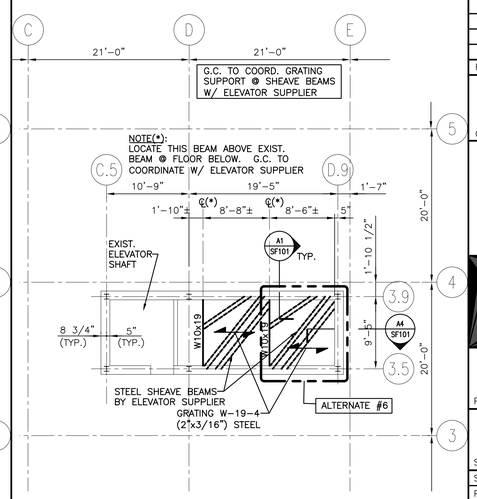
A7 | TYPICAL GRATING ATTACHMENT DETAIL

1 1/2"=1'-0"



A11 | ROOF FRAMING PLAN

1/8"=1'-0"



A14 | ALT. #6 ROOF FRAMING PLAN

1/8"=1'-0"

REV.	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	3–17–03

ISSUED FOR CONSTRUCTION 3-17-03

CURRENT ISSUE STATUS:

PROJECT NORTH

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PORTLAND, MAINE

PROJECT:

SEVENTH FLOOR FRAMING PLAN & NOTES

SHEET TITLE:

SCALE:	1/8"=1'-0"	DATE:	3–17–03
PROJECT MANAGER:	SLB	GRAPHIC SCALE:	0" 1"
JOB CAP/DRAWN:	JSG		
A/E OF RECORD:	FLM	SHEET No.	
SMRT CAD FILE:	SF101–99092	SF101	
PROJECT No.	99092		

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