

GENERAL NOTES

Norwalk
Building 43

Norwalk, California

Skidmore, Owings & Merrill
Architects/Engineers
One Maritime Plaza
San Francisco, California

Jaros, Baum & Bolles
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New York, New York

Approved for the Owner by

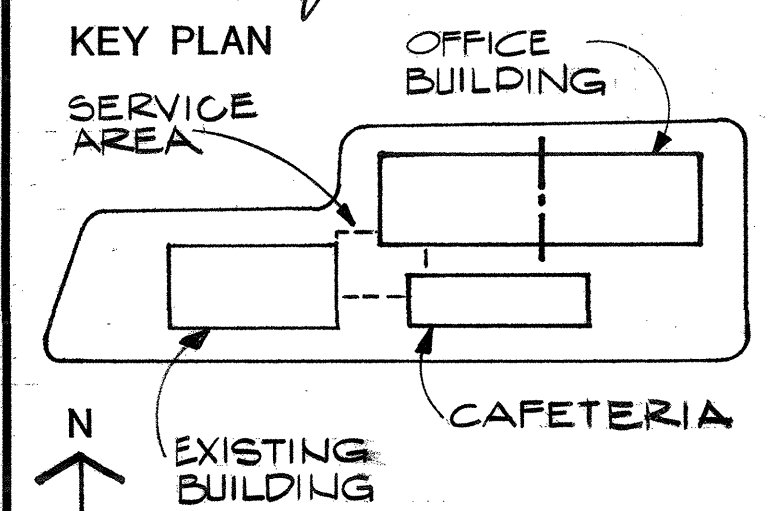
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Checked by
CHIDLEY
Job Number
10293-200
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9-9-81

Revisions

No.	Revisions Indicated thus Δ:	Date
1	ISSUE FOR STRUCTURAL STEEL SCOPE BID.	9-9-81
2	ISSUE FOR STRUCTURAL STEEL MILL ORDER APPENDUM NO. 1	9-23-81
3	ISSUED FOR METAL DECK BID.	11-3-81
4	ISSUED FOR PILE BID	11-23-81
5	ISSUED FOR CONCRETE BID	12-8-81
6	ISSUED FOR FOUNDATION & PILE PERMIT	12-18-81
7	ISSUED FOR PLAN CHECK	1-29-82
8	APPENDUM NO. 37	4-30-82
9	ISSUED FOR BUILDING PERMIT	5-17-82
10	APPENDUM NO. 41	5-17-82
11	APPENDUM NO. 47	6-11-82
12	APPENDUM NO. 66	8-5-82

Site & Layout SE 1117



GENERAL NOTES

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CONCRETE

STRUCTURAL STEEL

GENERAL

METAL DECK

- OTHER DRAWINGS: FOR ITEMS NOT SHOWN ON STRUCTURAL DRAWINGS, SEE OTHER DRAWINGS AND SPECIFICATIONS.
 - DESIGN BASIS: SUBMIT COMPUTATIONS TO SUBSTANTIATE DESIGN.
 - FOR DECK AS FORM
 - FOR COMPOSITE SLAB
 - FOR COMPOSITE BEAM: NUMBER OF SHEAR CONNECTORS SHOWN ON DRAWINGS BASED UPON DESIGN VALUE OF 10.0 KIPS PER STUD. ADDITIONAL STUDS MAY BE REQUIRED FOR OTHER DECK GEOMETRY. SUBMIT DETAILED STUD LAYOUT.
 - DIAPHRAGM: MINIMUM SHEAR SHALL BE 1870 LBS/FOOT.
 - MATERIALS (UNLESS OTHERWISE SHOWN):
 - DECK AND FLASHINGS 18 GAUGE
 - SHEAR CONNECTORS 3/4" x 4-1/2" LONG AFTER WELDING
 - FILL REINFORCEMENT 6 x 6 - W1.4 x W1.4
 - DRAWINGS INDICATIONS:
- NOTE: DECK TO BE 3 SPAN CONTINUOUS WHEREVER FRAMING ALLOWS.
- QUALITY CONTROL (IN ADDITION TO SOURCE QUALITY CONTROL, SEE SPECS. TESTING PAID FOR BY CONTRACTOR; RETESTING PAID FOR BY SUBCONTRACTOR):
 - THE FIRST TWO STUDS, AT THE START OF EACH PRODUCTION PERIOD (THE INTERVAL BETWEEN START-UP AND ANY SHUT-DOWN OF EQUIPMENT) AND THE START OF EACH NEW WELDING PROCEDURE, SHALL BE TESTED BY BENDING TO AN ANGLE OF 45° BY STRIKING THE STUD WITH A HAMMER. IF FAILURE OCCURS IN THE WELD, THE PROCEDURE SHALL BE CORRECTED AND THE NEXT TWO STUDS SHALL BE WELDED AND TESTED PRIOR TO WELDING OF ANY MORE STUDS. THE INSPECTOR SHALL BE PROMPTLY INFORMED OF ANY CHANGES IN THE WELDING PROCEDURE AT ANY TIME DURING CONSTRUCTION. AT HIS OPTION, THE INSPECTOR MAY SELECT ADDITIONAL STUDS TO BE TESTED.
 - IN ADDITION TO THE TESTS REQUIRED IN ITEM A., AT LEAST ONE STUD ON EACH MEMBER CONTAINING 10 OR MORE STUDS TOTAL, AFTER BEING ALLOWED TO COOL, SHALL BE TESTED BY BENDING TO AN ANGLE OF 15° BY STRIKING THE STUD WITH A HAMMER. IF FAILURE OCCURS, THE PROCEDURE IN ITEM A. SHALL BE FOLLOWED. BENT STUDS THAT SHOW NO SIGN OF FAILURE SHALL BE ACCEPTED AS SHEAR CONNECTORS, PROVIDED NO PORTION IS LESS THAN ONE INCH FROM A PROPOSED CONCRETE SURFACE, AND PROVIDED THE BEND IS NO GREATER THAN 15°.
 - IN ADDITION TO THE TESTS REQUIRED IN ITEMS A. AND B., ALL WELDS SHALL BE VISUALLY INSPECTED AND WELD FILLET OF LESS THAN 300" IS CAUSE FOR FURTHER INSPECTION. SUCH STUDS SHALL BE TESTED AS SPECIFIED IN ITEM A. HEREIN.

FOUNDATIONS:

- GENERAL:
 - ALL ELEVATIONS ARE REFERENCED TO GROUND FLOOR ELEVATION 100'-0" WHICH IS 111.25' WITH RESPECT TO CITY DATUM.
 - A GEOTECHNICAL EXPLORATION REPORT CONTAINING SOIL BORING DATA HAS BEEN PREPARED BY: R. T. FRANKLIN & ASSOCIATES, 234 SOUTH BUENA VISTA STREET, BURBANK, CALIFORNIA.
 - SEE DRAWINGS OTHER THAN STRUCTURAL FOR ITEMS NOT SHOWN (I.E.: CIVIL FOR GRADES, ARCH. FOR WATERPROOFING, PLUMBING FOR FLOOR DRAINS).
- DRILLED PILES:
 - MATERIALS:

NORMAL WEIGHT CONCRETE (150 PCF) f'c = 4000 psi

REINFORCEMENT: GR 60
 - DESIGN:

DESIGN LOADS:

VERTICAL: 300 kips

LATERAL:

FIXED HEAD 32 kips

FREE HEAD 12 kips
- FOOTINGS:
 - MATERIALS:

OFFICE BUILDING:

PILE CAPS

TIE BEAMS

GRADE BEAMS f'c = 4000 psi

CAFETERIA BUILDING & SERVICE AREA:

FOOTINGS & FOUNDATION WALLS f'c = 3000 psi
 - DESIGN:

NEAR GRADE OR ON ENGINEERED FILL 1500 psf

AT BASEMENT LEVEL 2000 psf
 - SUBGRADES:

ALL SOIL SUPPORTING FOOTINGS AND SLABS SHALL BE FOUNDED UPON UNDISTURBED, NATURAL SUBGRADE WHERE POSSIBLE. SOME ON-SITE MATERIAL WILL REQUIRE COMPACTION. FILLED SUBGRADES ARE TO BE COMPACTED TO 90% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT. ALL SUBGRADES ARE TO BE PREPARED AS DIRECTED BY AND VERIFIED AS TO BEARING CAPACITY BY THE SOILS TESTING AGENCY.

METAL DECK-CONTINUED

ELECTRIFIED UNITS:

H.H. ROBERTSON Q.L. WKX-18/20

OR APPROVED EQUAL,

S = 0.323/0.672 in³/ft.

A = 1.324 in³/ft.

I = 1.694 in⁴/ft.

NON-ELECTRIFIED UNITS:

H.H. ROBERTSON Q.L. 22-18

OR APPROVED EQUAL,

S = 0.763/0.712 in³/ft.

A = 0.895 in³/ft.

I = 1.221 in⁴/ft.

MATERIAL ASTM A 446 GRADE A.

1. GENERAL

- ALL CONCRETE REINFORCED, UNLESS SPECIFICALLY NOTED UNREINFORCED.
- CONCRETE SHALL HAVE OBTAINED FULL DESIGN STRENGTH AND ALL SUPPORTS (TOP & BOTTOM) WHICH ARE REQUIRED FOR STABILITY OF WALL SHALL HAVE BEEN COMPLETED BEFORE BACK-FILLING.
- MAINTAIN SHORES AND FORMS UNTIL CONCRETE HAS REACHED 0.67 F'C AND A MINIMUM OF 3 DAYS AFTER POUR.
- NO CONSTRUCTION MATERIAL SHALL BE STORED OR CONSTRUCTION ACTIVITIES TAKE PLACE ON CONCRETE SLABS OR COMPOSITE FLOORS UNTIL CONCRETE HAS REACHED 0.75 F'C AND A MINIMUM OF 7 DAYS AFTER POUR. DO NOT EXCEED 0.75 DESIGN LOAD OR RESHORE.

2. MATERIALS

- ALL CONCRETE SHALL BE NORMAL WEIGHT (APPROXIMATELY 145 PCF) AND HAVE THE FOLLOWING 28-DAY MINIMUM COMPRESSIVE STRENGTH (F'C):

PILES, PILECAPS AND FOOTINGS: SEE FOUNDATION NOTES

WALLS, SLABS, BEAMS, GIRDERS, COLUMNS AND DECK FILLS: 3000 PSI
- REINFORCING BARS: ASTM A615, GR 60
- WELDED WIRE MESH: ASTM A185

3. DETAILING

- COVER: UNLESS OTHERWISE NOTED, MINIMUM COVERAGE FOR REINFORCING BARS SHALL BE:

CONCRETE CAST AGAINST EARTH 3"

CONCRETE EXPOSED TO EARTH OR WEATHER 2"

OTHER EXPOSURES:

SLABS, WALLS 1"

BEAMS, COLUMNS 1-1/2"
- SPLICES: UNLESS OTHERWISE NOTED, LAP SPLICE PER ACI, BUT NO LESS THAN 40 BAR DIAMETERS. LAP WELDED WIRE MESH 2 MODULES.
- DOWELS: SLABS, FOOTINGS AND WALLS SHALL BE DOWELED INTO BEAMS, GIRDERS, OTHER WALLS AND FOOTINGS WITH BARS OF SAME SIZE AND SPACING.

4. POURS AND JOINTS

- PROVIDE RELIEF AND EXPANSION JOINTS, AS SHOWN.
- PROVIDE CONSTRUCTION JOINTS AT 60' MINIMUM FOR WALLS AND SUPPORTED SLABS. PROVIDE CONSTRUCTION JOINTS AT 180' (EACH WAY) MINIMUM FOR SLABS ON GRADE AND FOR DECK FILLS.
- WHERE DRAWING SHOWS "THOROUGHLY ROUGHEN AND CLEAN" SANDBLAST OR CHIP TO REMOVE LATENT MATERIAL, EXPOSE COARSE AGGREGATE, ROUGHEN SURFACE TO DEPTH OF 1/4" MINIMUM AND THEN CLEAN SURFACE AND WET BEFORE NEXT POUR.

1. GENERAL:

- STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED PER AISC "SPECIFICATION FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", LATEST EDITION AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", LATEST EDITION.
- WELDING SHALL CONFORM TO THE REQUIREMENTS OF AWS "CODE FOR ARC AND GAS WELDINGS IN BUILDING CONSTRUCTION", LATEST EDITION AND PERFORMED BY CERTIFIED WELDERS.

2. MATERIALS:

- STEEL GRADES FOR OFFICE BUILDING:

COLUMNS ASTM A572, GRADE 50

BEAMS AND GIRDERS ASTM A36 AND ASTM A572, GRADE 50 (HS)

POSTS AND STRUTS ASTM A501

BASE PLATES ASTM A36

CONTINUITY PLATES ASTM A36

COLUMN SPLICE PLATES ASTM A572, GRADE 50

DOUBLER PLATES ASTM A572, GRADE 50

MISCELLANEOUS SHAPES AND PLATES ASTM A36
- STEEL GRADE FOR CAFETERIA BUILDING:

ALL SHAPES AND PLATES ASTM A36

POSTS AND STRUTS ASTM A501
- BOLTS ASTM A325 AND ASTM A490, TYPE 1
- ANCHOR BOLTS ASTM A307, GRADE A
- WELDS PER AWS
- SHEAR CONNECTORS PER AWS (HEADED STUD TYPE)

3. SUBMITTALS: SUBMIT FOR REVIEW, ENGINEERED AND CHECKED SHOP DRAWINGS SHOWING:

- SHOP FABRICATION DETAILS
- ERECTION DETAILS AND DIAGRAMS

4. FABRICATION:

- BEAMS SHALL BE FABRICATED WITH NATURAL CAMBER UP. PROVIDE FABRICATED CAMBER AS SHOWN.
- BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF 2 BOLTS. USE 1" x 3/4" A325X, UNLESS NOTED OTHERWISE. SIMPLE SHEAR CONNECTIONS SHALL BE CAPABLE OF END ROTATION PER AISC; PROVIDE SLOTTED HOLES AS NECESSARY.
- BUTT WELDS SHALL BE FULL PENETRATION WELDS UNLESS NOTED OTHERWISE. FILLET WELDS SHALL BE AISC MINIMUM FOR THICKNESSES OF MATERIAL JOINED, UNLESS NOTED OTHERWISE.
- SHEAR CONNECTORS SHALL BE 3/4" x 4-1/2" LONG, AFTER WELDING, UNLESS NOTED OTHERWISE.
- AFTER FABRICATION, STEEL SHALL BE CLEANED OF RUST, MILL SCALE, AND OTHER FOREIGN MATERIALS.

5. ERECTION:

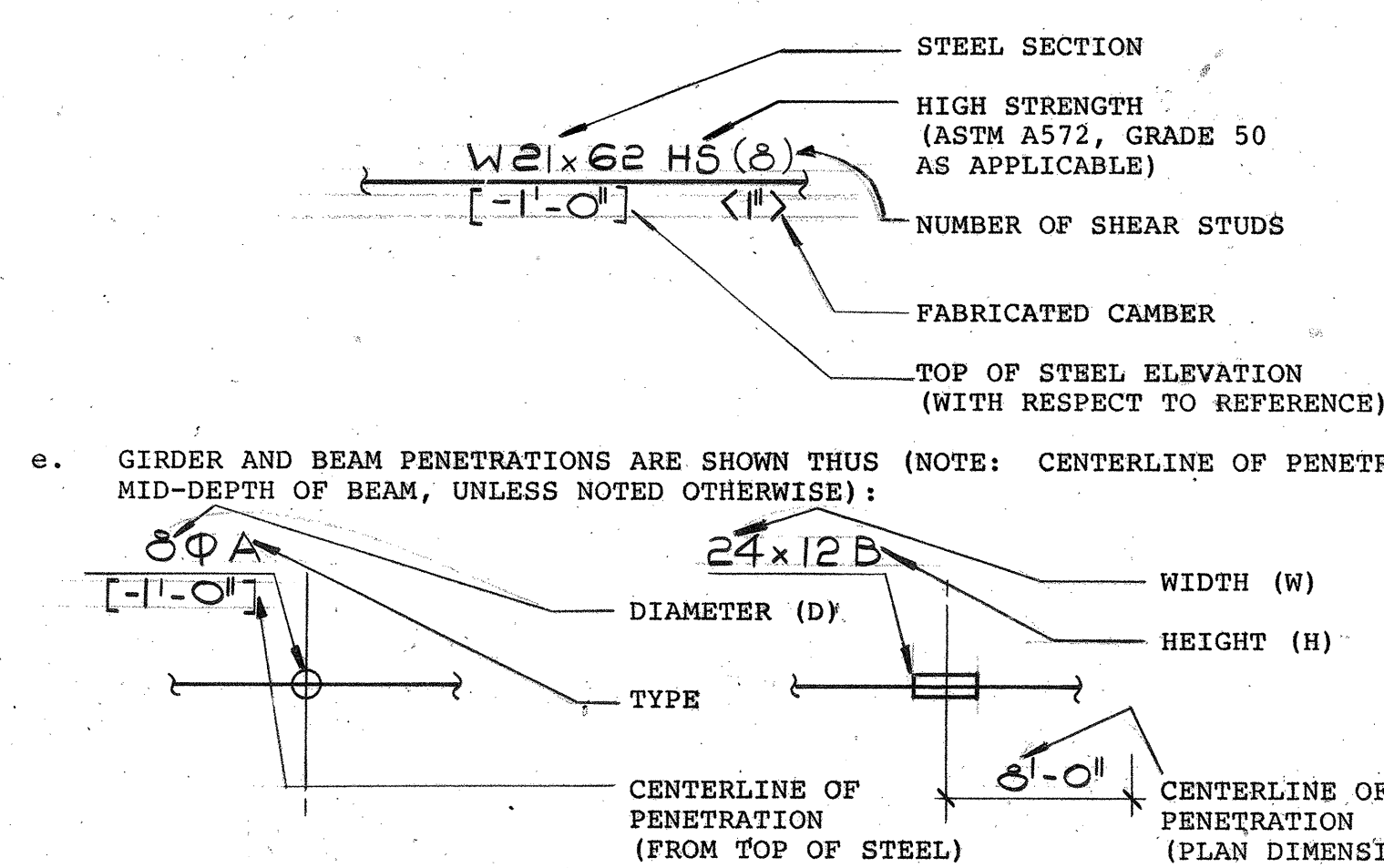
- REMOVE LOOSE MILL SCALE, RUST, AND FOREIGN MATERIAL PRIOR TO APPLICATION OF FIRE-PROOFING OR EMBEDMENT INTO CONCRETE.
- PREPARE SURFACES TO BE PAINTED AS SPECIFIED.

6. QUALITY CONTROL: STRUCTURAL STEEL SHALL BE CONTINUOUSLY INSPECTED; SEE SPECIFICATIONS.

7. DRAWING INDICATIONS:

- BEAM OR GIRDER TO COLUMN MOMENT CONNECTIONS ARE SHOWN THUS:
- BEAM TO GIRDER MOMENT CONNECTIONS ARE SHOWN THUS:
- BEAMS WITH WEB HORIZONTAL SHOWN THUS (NOTE: ELEVATION OF BEAM SHOWN INDICATES CENTERLINE OF WEB):

d. COMPOSITE BEAMS AND GIRDERS ARE SHOWN THUS:



QUALITY CONTROL (CONTINUED)

- ALL COMPLETE PENETRATION GROOVE WELDS CONTAINED IN JOINTS AND SPLICES OF DUCTILE MOMENT RESISTING FRAMES SHALL BE TESTED 100 PERCENT EITHER BY ULTRASONIC TESTING OR BY RADIOGRAPHY.

NOTE:

- STRUCTURAL DESIGN CALCULATIONS AND SHOP DRAWINGS FOR STEEL STAIRS SHALL BE SUBMITTED TO THE LOS ANGELES COUNTY BUILDING DEPARTMENT FOR APPROVAL.
- CRANE FOR PRECAST ERECTION WILL LOCATE 15'-0" MIN. FROM BASEMENT WALLS.