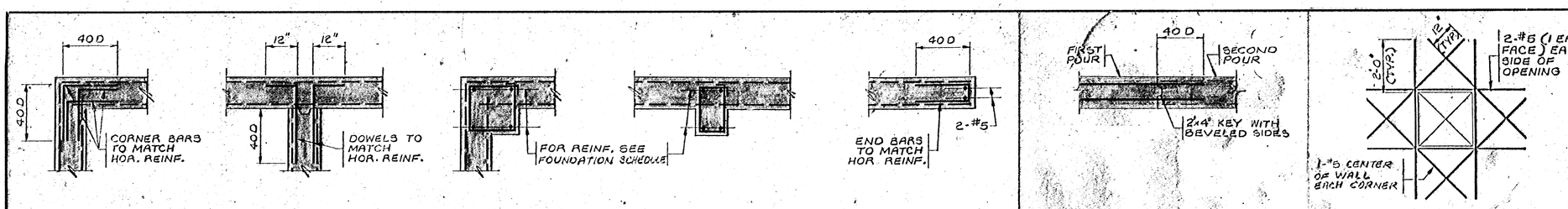
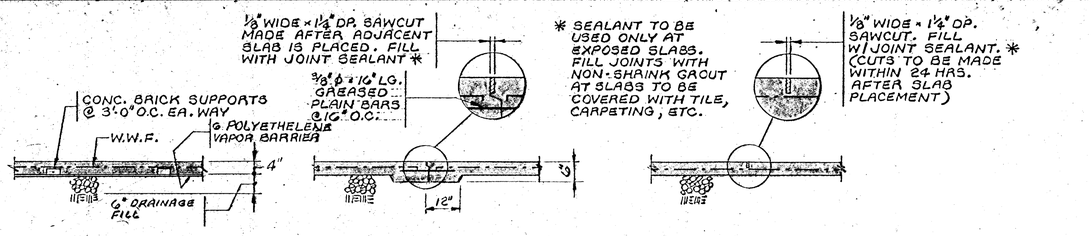


CORNER — INTERSECTION — PILASTERS — END

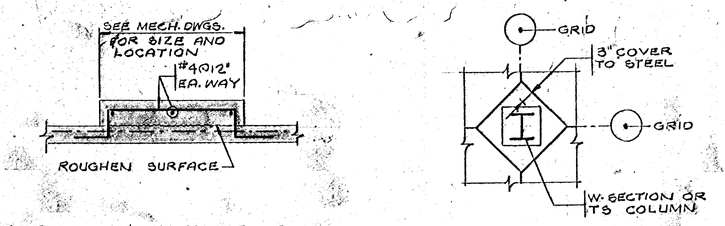
CONCRETE WALL DETAILS

CONSTRUCTION JOINT — OPENING

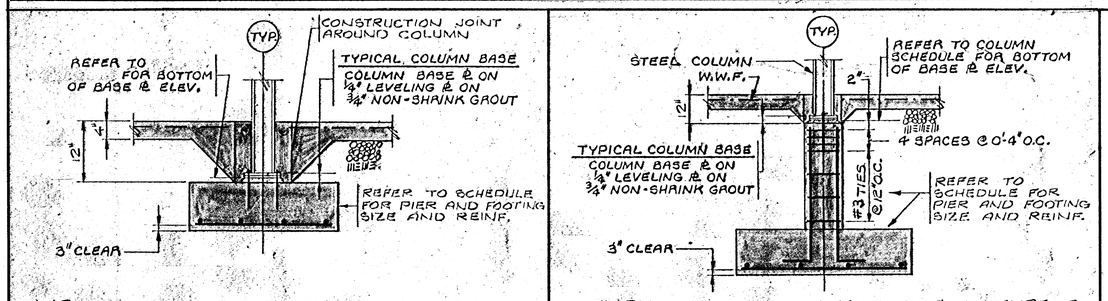


PAVING SLAB — CONSTRUCTION JOINT — CONTROL JOINT

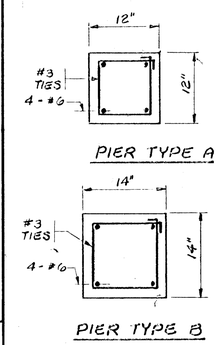
TYPICAL PAVING SLAB DETAILS



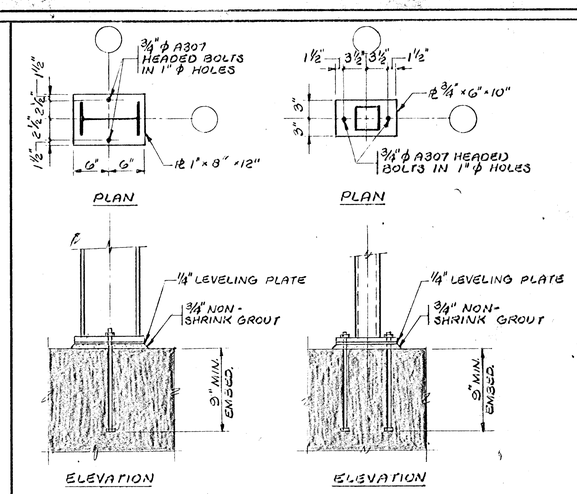
TYPICAL HOUSEKEEPING PAD DETAIL — CONTROL JOINT @ COLUMN



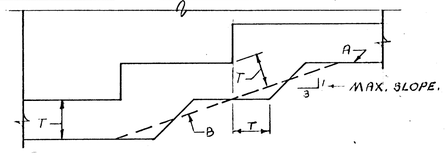
TYPICAL COLUMN FOUNDATION TYPE-A — TYPICAL COLUMN FOUNDATION TYPE-B



PIER TYPE A — PIER TYPE B



COLUMN BASE TYPE 1 — COLUMN BASE TYPE 2



NOTE:
USE "A" OR "B" FOR BOTTOM CONTOUR

TYPICAL ELEVATION OF CONTINUOUS STEPPED WALL FOOTING

FOUNDATION SCHEDULE				
MARK	FOOTING			PIER TYPE
	TYPE*	SIZE - L × W × D	REINFORCING	
F1	B	3'-0" × 3'-0" × 12"	3 - #5 BOT. EA. W.	B
F2	B	2'-0" × 2'-0" × 12"	3 - #5 BOT. EA. W.	A
F3	B	2'-6" × 2'-6" × 12"	3 - #5 BOT. EA. W.	A
F4	B	3'-0" × 3'-0" × 12"	3 - #5 BOT. EA. W.	A
F5	B	WALL - 2'-0" WIDE	SECT. 9 ON S-2	PILASTER 12" × 15"

*-FDN. TYPE "B" CAN BE SUBSTITUTED WHERE APPROPRIATE.

NOTES

UNLESS OTHERWISE NOTED ON DRAWINGS OR IN SPECIFICATIONS

GENERAL

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND SHOP DRAWINGS AND SPECIFICATIONS.
2. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE EFFECTED WORK.
3. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND APPROVAL RECEIVED BEFORE FABRICATION CAN PROCEED. ERECTION SHALL BE MADE FROM APPROVED SHOP DRAWINGS ONLY.
4. UNLESS OTHERWISE NOTED, DETAILS SHOWN ON ANY DRAWINGS ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

DESIGN LIVE LOADS

1. UPPER ROOF: SNOW ZONE 3, 28 PSF
2. LOW ROOF: SNOW/LIVE LOAD, 105 PSF
3. UPPER FLOOR INCLUDING STORAGE AREA: 80 PSF WHICH INCLUDES PARTION ALLOWANCE
4. GROUND FLOOR: 100 PSF WHICH INCLUDES PARTION ALLOWANCE
5. WIND: ZONE 3, EXPOSURE B, REFERENCE WIND PRESSURE = 21 PSF

FOUNDATION

1. THE BOTTOM SURFACE OF EACH FOOTING SHALL REST ON UNDISTURBED MATERIAL HAVING AN ALLOWABLE BEARING VALUE OF AT LEAST 6 TONS PER SQUARE FOOT.
2. THE ESTIMATED ELEVATION OF BOTTOM OF EACH FOOTING IS INDICATED THUS (0'-0"). BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'-0" BELOW FINISH GRADE.
3. NO BACKFILL SHALL BE PLACED AGAINST FOUNDATION WALLS RETAINING EARTH UNLESS THEY ARE SUFFICINETLY BRACED TO PREVENT MOVEMENT OR STRUCTURAL DAMAGE.
4. PROVIDE 6" OF DRAINAGE FILL AND A VAPOR BARRIER UNDER ALL INTERIOR PAVING SLABS.
5. REMOVE ALL TOPSOIL, FILL AND ORGANIC SOIL UNDER FOOTINGS AND SLABS ON GRADE, BACKFILL WITH COARSE SAND AND GRAVEL.

CONCRETE

1. ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF AT LEAST 3000 P.S.I. AT 28 DAYS EXCEPT FOR EXTERIOR CONCRETE TO BE AT LEAST 4000 P.S.I. IN 28 DAYS WITH AIR ENTRAINMENT.
2. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM-A185. LAP TWO SQUARES AT ALL JOINTS AND TIE @ 3'-0" O.C. ALL BARS SHAL BE DEFORMED AND GRADE 60 ASTM A615.
3. NO PIPES SHALL PASS THROUGH CONCRETE WITHOUT PERMISSION OF THE ARCHITECT. STEEL SLEEVES SHALL BE PROVIDED AND SPACED A MINIMUM OF 3 DIAMETERS APART.
4. ALL KEYS SHALL BE 2" X 4" WITH BEVELED SIDES.
5. VERTICAL CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ARCHITECT. ALL CONSTRUCTION JOINTS SHALL BE FORMED WITH A STANDARD KEY.

WOOD

1. ALL STRUCTURAL LUMBER SHALL CONFORM TO THE LATEST EDITION OF THE NFPA "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION".
2. WOOD FLOOR JOISTS, RAFTERS, LINTELS AND GIRDERS SHALL BE NO. 2 GRADE OR BETTER, SPRUCE-PINE-FIR EXCEPT AS MARKED. MEMBERS MARKED THUS * ARE TO BE SOUTHERN PINE, NOT PRESSURE TREATED AND WITH A MAXIMUM MOISTURE CONTENT OF 19%.
3. BEARING AND EXTERIOR WALL STUDS SHALL BE NO. 2 GRADE OR BETTER SPRUCE-PINE-FIR.
4. ALL FLUSH CONNECTIONS SHALL HAVE BEAM OR JOIST HANGERS.
5. ALL NAILING SHALL BE IN ACCORDANCE WITH THE MASSACHUSETTS STATE BUILDING CODE, APPENDIX "H".

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL MATERIALS, WORKMANSHIP AND DETAILS SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". STRUCTURAL STEEL SHALL CONFORM TO SPECIFICATION ASTM-A36, EXCEPT STRUCTURAL TUBING WHICH SHALL CONFORM TO ASTM A500 GRADE B AND PIPE WHICH SHALL CONFORM TO ASTM A501, SIZES GIVEN ARE NPS.
2. ALL SHOP CONNECTIONS SHALL BE WELDED IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL WELDING CODE" AND CONFORM TO SPECIFICATION AWS A5.1, E70 SERIES OR HIGH STRENGTH BOLTED TO CONFORM TO SPECIFICATION ASTM-A325.
3. ALL FIELD CONNECTIONS SHALL BE HIGH STRENGTH BOLTED TO CONFORM TO SPECIFICATION ASTM-A325 EXCEPT CONNECTIONS SHOWN AS FIELD WELDS ON THE DRAWINGS. BOLTS SHALL BE DESIGNED AS BEARING TYPE WITH THREADS IN THE SHEAR PLANE. ALL FIELD WELDS SHALL BE IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL WELDING CODE" AND CONFORM TO SPECIFICATION AWS A5.1, E70 SERIES.
4. CONNECTIONS NOT SHOWN SHALL BE DESIGNED BY THE DETAILER FOR THE MAXIMUM ALLOWABLE LOAD OF THE MEMBER. BRACING CONNECTIONS SHALL BE DESIGNED FOR THE INDICATED LOADS AND MAY BE EITHER BOLTED OR FIELD WELDED.
5. PROVIDE 1/4" THICK LEVELING PLATE UNDER ALL COLUMN BASE PLATES. LEVELING PLATES SHALL BE SET AND GROUTED SOLID BEFORE ERECTION OF COLUMN.
6. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM-A307.
7. ALL STEEL JOISTS SHALL CONFORM TO THE LATEST EDITION OF SJI "STANDARD SPECIFICATIONS". TRIMMERS AND HEADERS SHALL BE DESIGNED BY THE MANUFACTURER FOR THE UNIFORM AND CONCENTRATED LOADS USING THE DESIGN CRITERIA LOADS GIVEN ABOVE.

Souza, True and Partners
Structural Engineers
653 Mt. Auburn St.
Watertown, Mass. 02172
926-6100

COMMONWEALTH OF MASSACHUSETTS — RICHARD W. SOUZA #5216 — REGISTERED PROFESSIONAL ENGINEER

Additions and Renovations to
THE ACTON TOWN HALL
Acton, Massachusetts

title: STRUCTURAL NOTES & TYP. DETAILS

ROBERT G. NEILEY ARCHITECTS
286 Congress Street, Boston MA 02210

drawing: S-1

drawn by | job 26021 | scale — | date 4-4-87