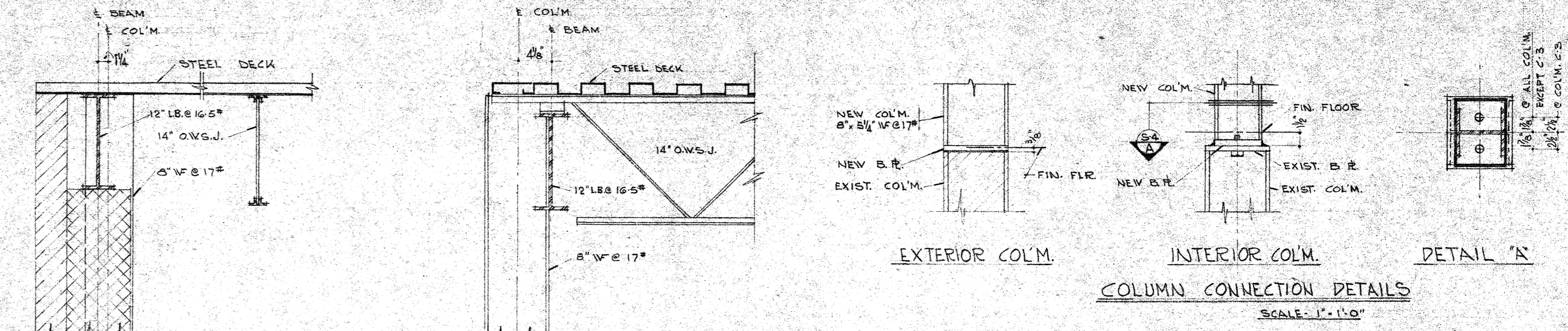


FOOTING SCHEDULE

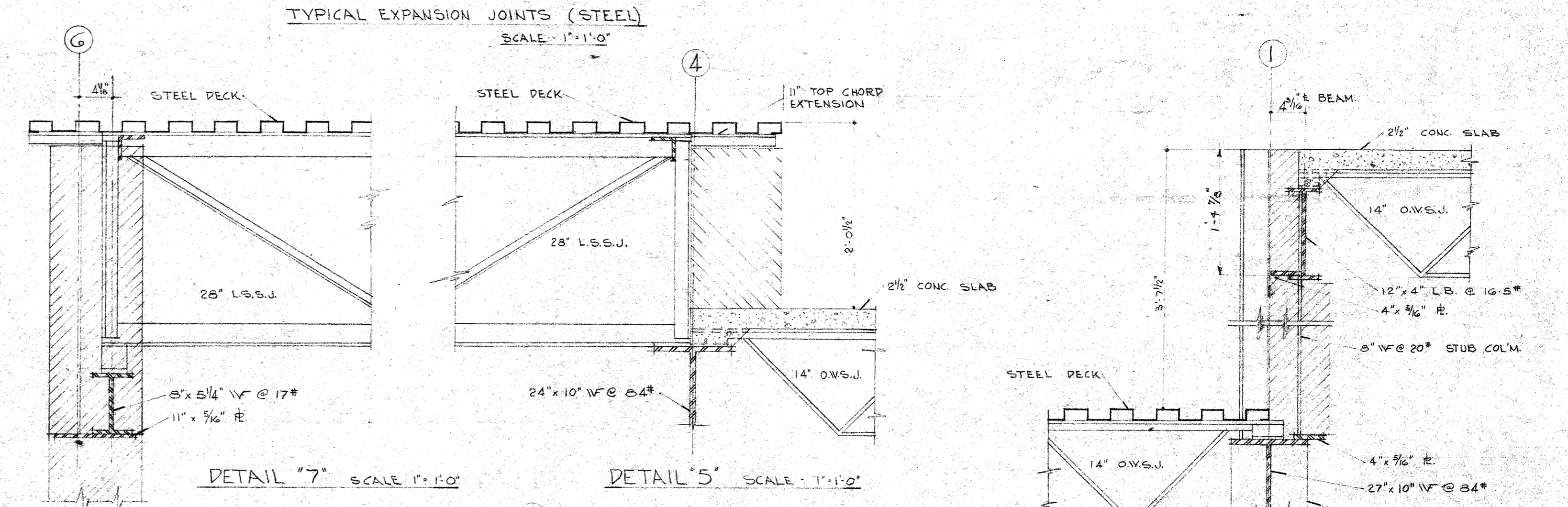
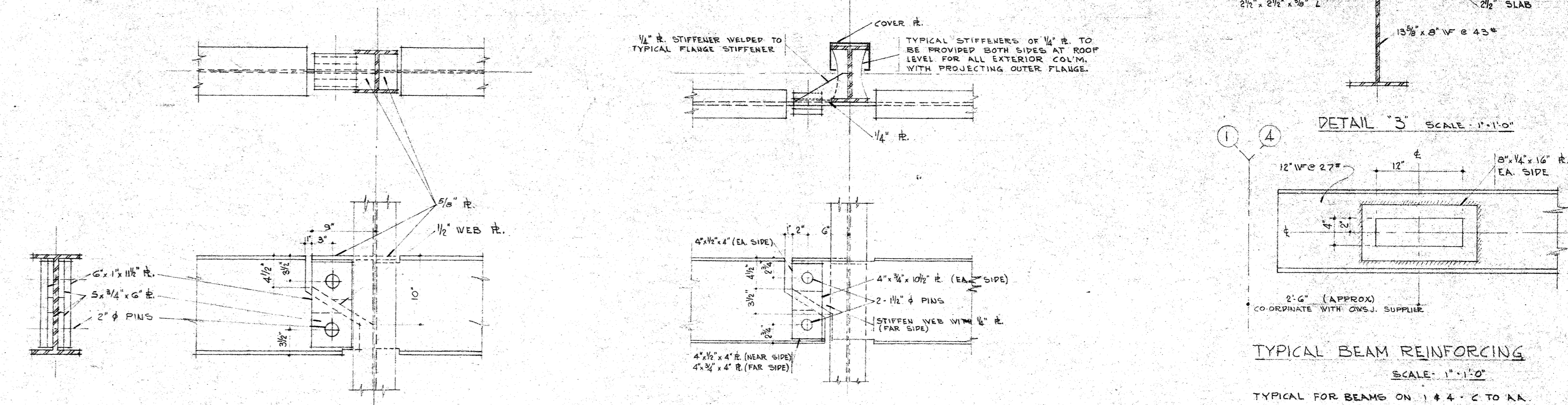
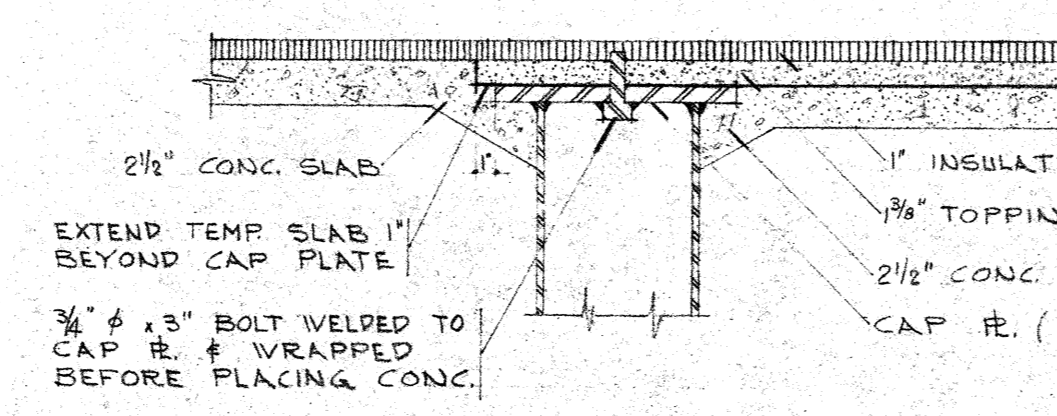
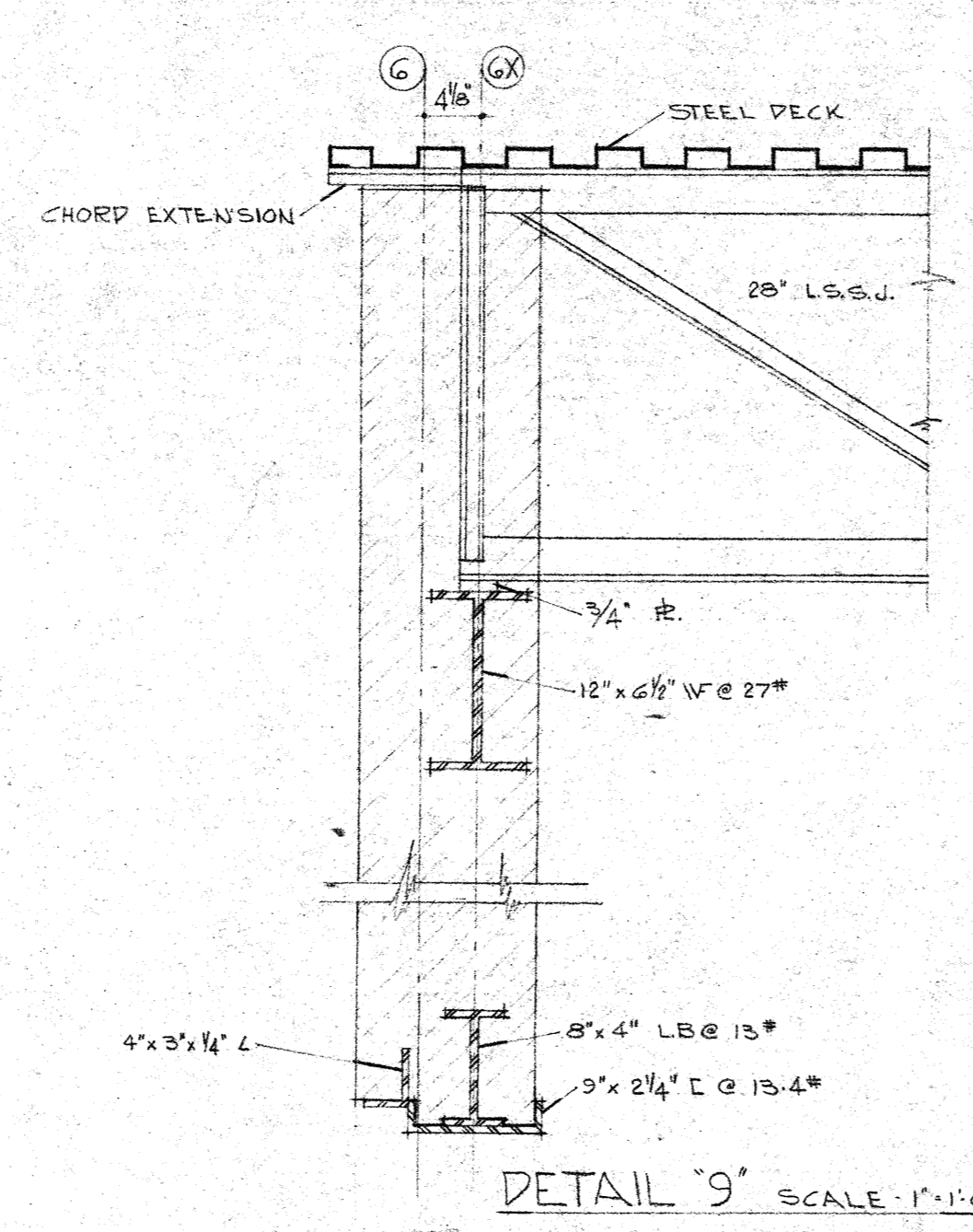
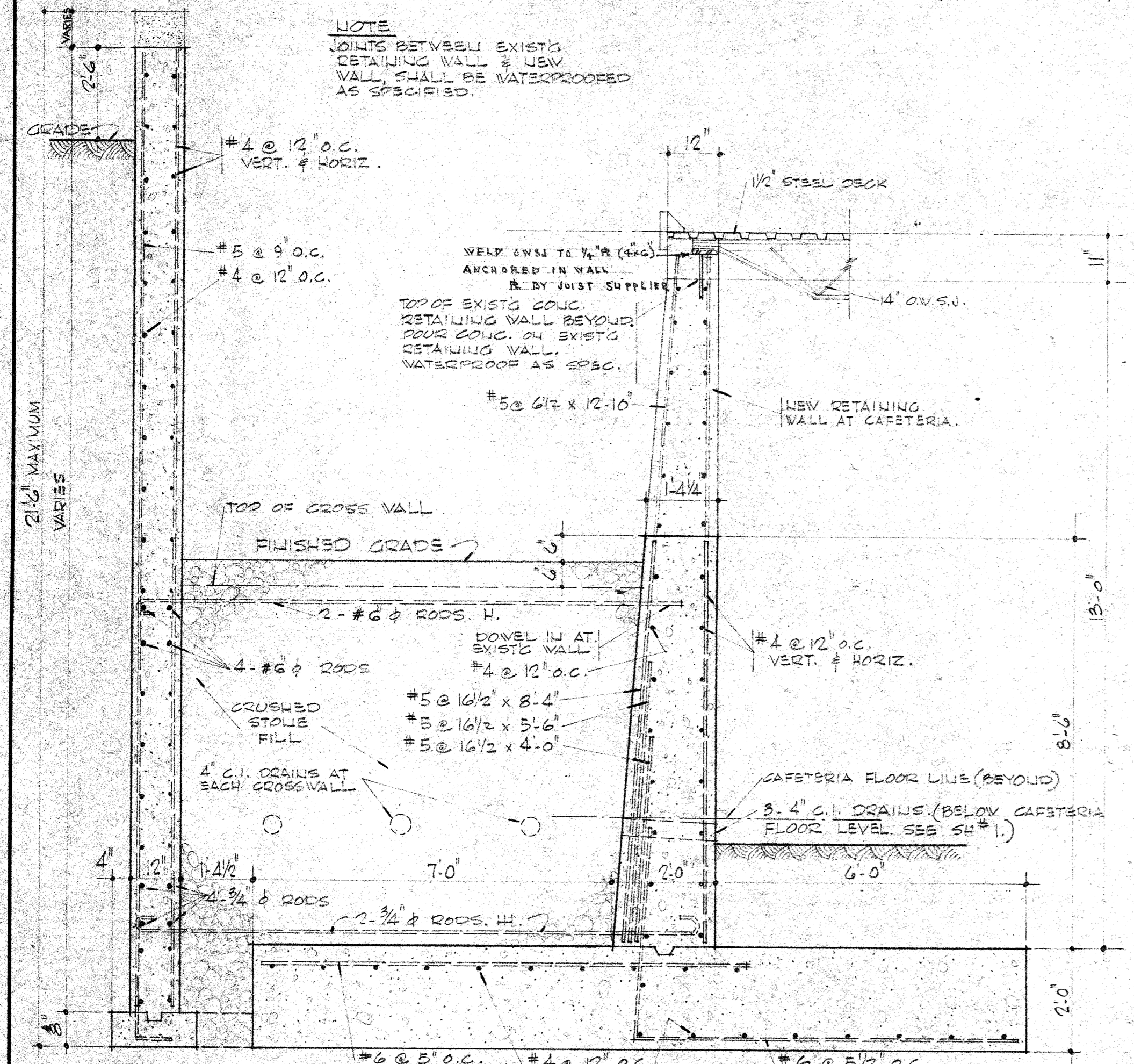
FTG. TYPE	FOOTING SIZE	REINFORCING	PIER SIZE	REINFORCING	REMARKS
A	6'-0" x 2'-0" x 14" DP	7-#6 E.W.	16" x 16"	4-#6 #2 LAT. TIES @ 12" O.C.	
B	6'-0" x 2'-0" x 14" DP	8-#6 E.W.	16" x 16"	4-#6 #2 LAT. TIES @ 12" O.C.	
C	7'-0" x 7'-0" x 15" DP	8-#7 E.W.	16" x 16"	4-#6 #2 LAT. TIES @ 12" O.C.	
D	7'-0" x 7'-0" x 15" DP	10-#7 E.W.	16" x 16"	4-#6 #2 LAT. TIES @ 12" O.C.	WALL COL. @ 11'-0" x 16" R.H.M.F. SIMILAR
E	8'-0" x 8'-0" x 16" DP	9-#7 E.W.	18" x 18"	4-#7 #2 LAT. TIES @ 12" O.C.	
F	8'-0" x 8'-0" x 16" DP	8-#8 E.W.	18" x 18"	4-#7 #2 LAT. TIES @ 12" O.C.	
G	10'-0" x 10'-0" x 19" DP	11-#8 E.W.	20" x 20"	4-#8 #3 LAT. TIES @ 16" O.C.	
H	11'-0" x 11'-0" x 22" DP	15-#8 E.W.	24" x 24"	4-#8 #3 LAT. TIES @ 16" O.C.	
J	11'-0" x 11'-0" x 22" DP	17-#8 E.W.	24" x 24"	4-#8 #3 LAT. TIES @ 16" O.C.	
K	12'-0" x 12'-0" x 24" DP	20-#8 E.W.	24" x 24"	4-#8 #3 LAT. TIES @ 16" O.C.	
L	5'-0" x 5'-0" x 12" DP	8-#5 E.W.	WALL PIER 12" x 12"	4-#5 #2 LAT. TIES @ 12" O.C.	12" x 12" ISOLATED PIER FOR HOIST CYLINDER
M	2'-0" x 2'-0" x 12" DP	8-#5 E.W.	12" x 12"	4-#5 #2 LAT. TIES @ 12" O.C.	
N	4'-0" x 4'-0" x 12" DP	8-#4 E.W.	12" x 12"	4-#4 #2 LAT. TIES @ 12" O.C.	
O	5'-0" x 5'-0" x 18" DP	10-#8 E.W.	20" x 20"	4-#8 #3 LAT. TIES @ 16" O.C.	

GENERAL NOTES

- 1) ALL DIM. ON STRUCTURAL DRAWING MUST BE CHECKED WITH ARCHITECTURAL DRAWING & ANY DISCREPANCIES REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH WORK.
- 2) ALL REINFORCING BARS UNLESS SPECIFICALLY NOTED OTHERWISE SHALL BE HARD OR INTERMEDIATE GRADE HI BOND STEEL WITH AN ALLOWABLE WORKING STRESS OF 20,000 PSI PER SQUARE FOOT.
- 3) CONCRETE SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI EXCEPT 2500 PSI FOR SLABS ON GRADE & SLABS OVER GYS.J.
- 4) STEEL BEAMS BEARING ON MASONRY WALL SHALL HAVE A MINIMUM BEARING OF 8" UNLESS OTHERWISE NOTED. VOIDS IN UNITS OF WALLS SHALL BE PREFILLED WITH 2000# PER SQUARE INCH CONCRETE OR BRICK LAID IN CEMENT MORTAR SHALL BE USED. THIS SHALL BE DONE FOR A DEPTH EQUAL TO THE LENGTH OF BEARING & FOR A LENGTH EQUAL TO TWICE THE LENGTH OF BEARING.
- 5) OVER ALL OPENINGS IN MASONRY WALL UNLESS OTHERWISE SHOWN PROVIDE FOR 1L 3/4" x 3/4" x 3/4" FOR SPANS UP TO 4'-0" OR 1L 5/8" x 3/4" x 3/4" FOR SPANS FROM 4'-0" TO 6'-0". FOR EACH 4" OF WALL THICKNESS. CONTRACTOR MUST CHECK ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS FOR THE LOCATION OF THESE LINTELS.
- 6) LINE OF SLOPE BETWEEN ADJACENT EXCAVATIONS FOR FOOTINGS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10. MAXIMUM STEP APPROXIMATELY 2'-0".
- 7) ALL FOOTINGS MUST BE CARRIED DOWN TO UNDISTURBED SOIL CAPABLE OF SAFELY SUSTAINING 2000 PER SQUARE FOOT AND MUST BE FULLY PROTECTED AGAINST FROST ACTION DURING CONSTRUCTION.
- 8) DURING BACKFILLING ALL MATERIAL MUST BE PLACED EVENLY ON EACH SIDE OF WALL EXCEPT WHERE GRADE RISE ABOVE LOWER FLOOR.
- 9) ALL COLM. IN MASONRY WALL SHALL HAVE ADJUSTABLE STRAP ANCHORS @ 25" O.C.

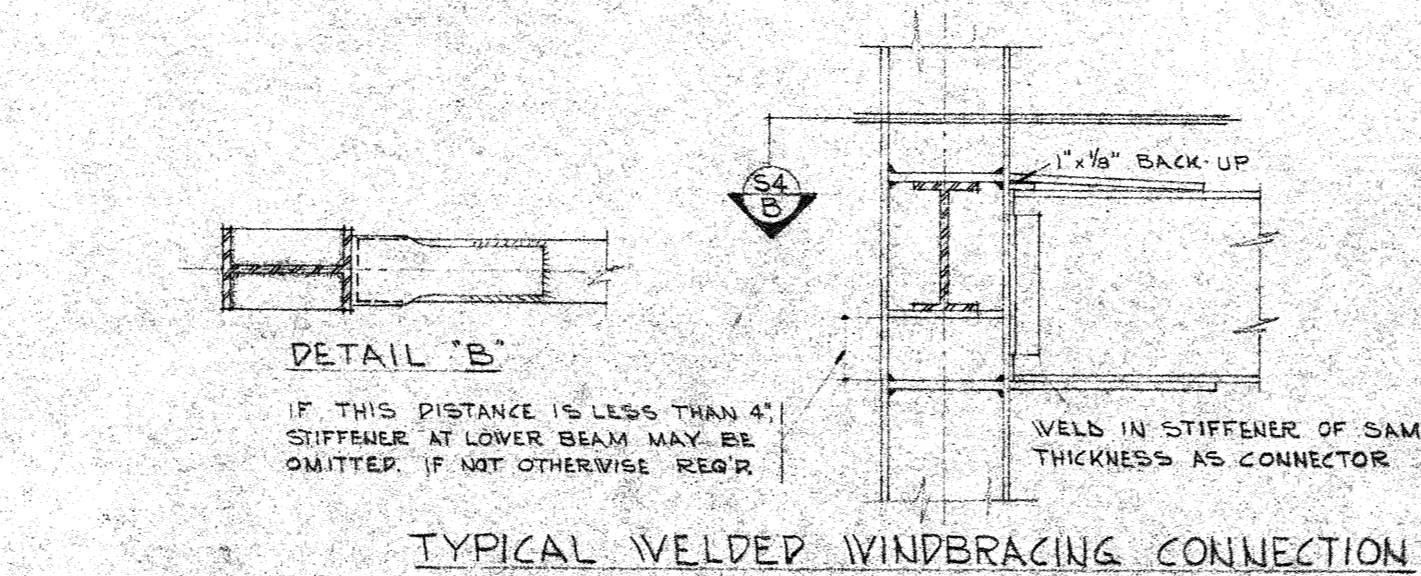
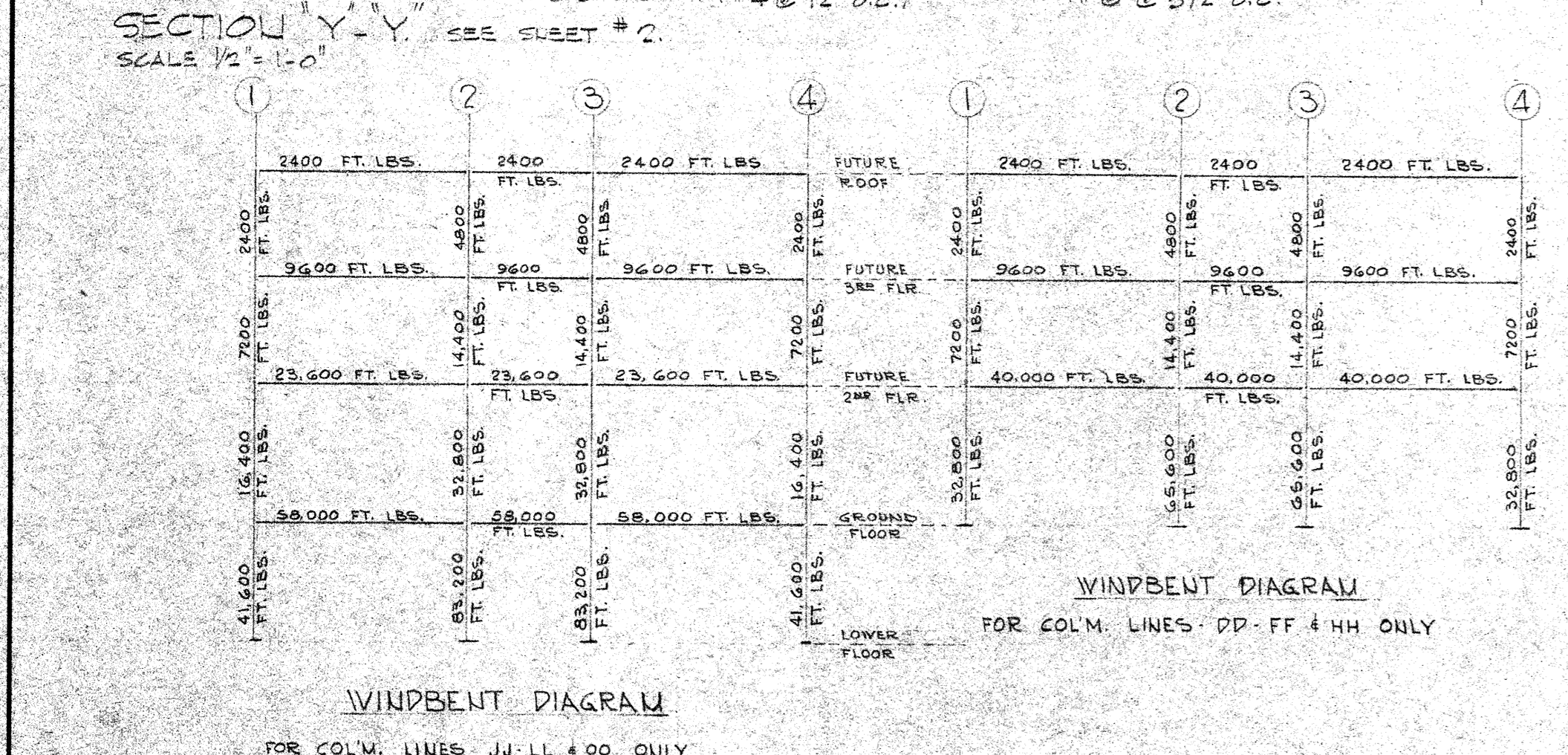
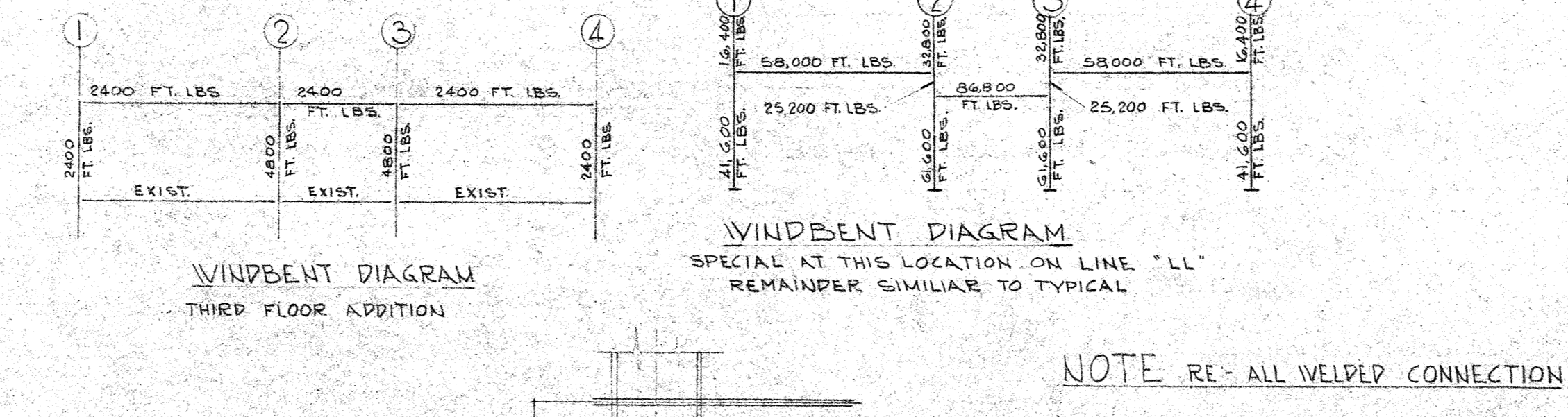


NOTE
JOINTS BETWEEN EXISTING STAINING WALL & NEW WALL SHALL BE WATERPROOFED AS SPECIFIED.



FOR ALL COLMS ON LINES 2 & 3 EXCEPT EE-2

WINDBENT DIAGRAM
SPECIAL AT THIS LOCATION ON LINE 'LL' REMAINDER SIMILAR TO TYPICAL



NOTE RE- ALL WELDED CONNECTION

- 1) ALL WELDS AT ENDS OF PLATE TO BE BASED ON WORKING STRESS OF 24,000 PSI AND BE CAPABLE OF DEVELOPING A STRESS OF 40,000 PSI IN NECKED PLATES.
- 2) # WIDTH AT COLM. TO BE AT LEAST 1/4 TIMES NECKED WIDTH.
- 3) UNWELDED LENGTH OF # TO BE 1-10 TO 1-20 TIMES NECKED WIDTH.
- 4) MIN. PLATE THICKNESS - 5/16"
- 5) WHERE COLM. STIFFENERS REQR. MIN. THICKNESS 5/16"

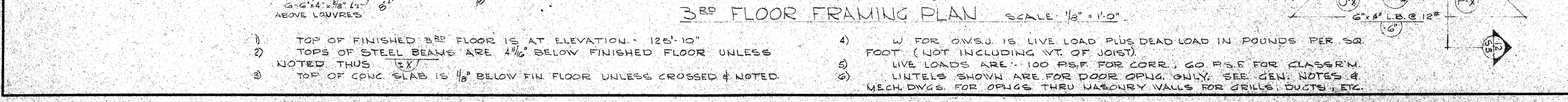
STRUCTURAL DETAILS		DATE	SCALE
		OCT 61	A5 NOTE
ADDITION TO WATERLOO COLLEGIATE WATERLOO ONTARIO		DRAWN BY: T.R.W. CHECKED BY: E.W.H.	JOB: 2-341-7 SHEET: 5-4



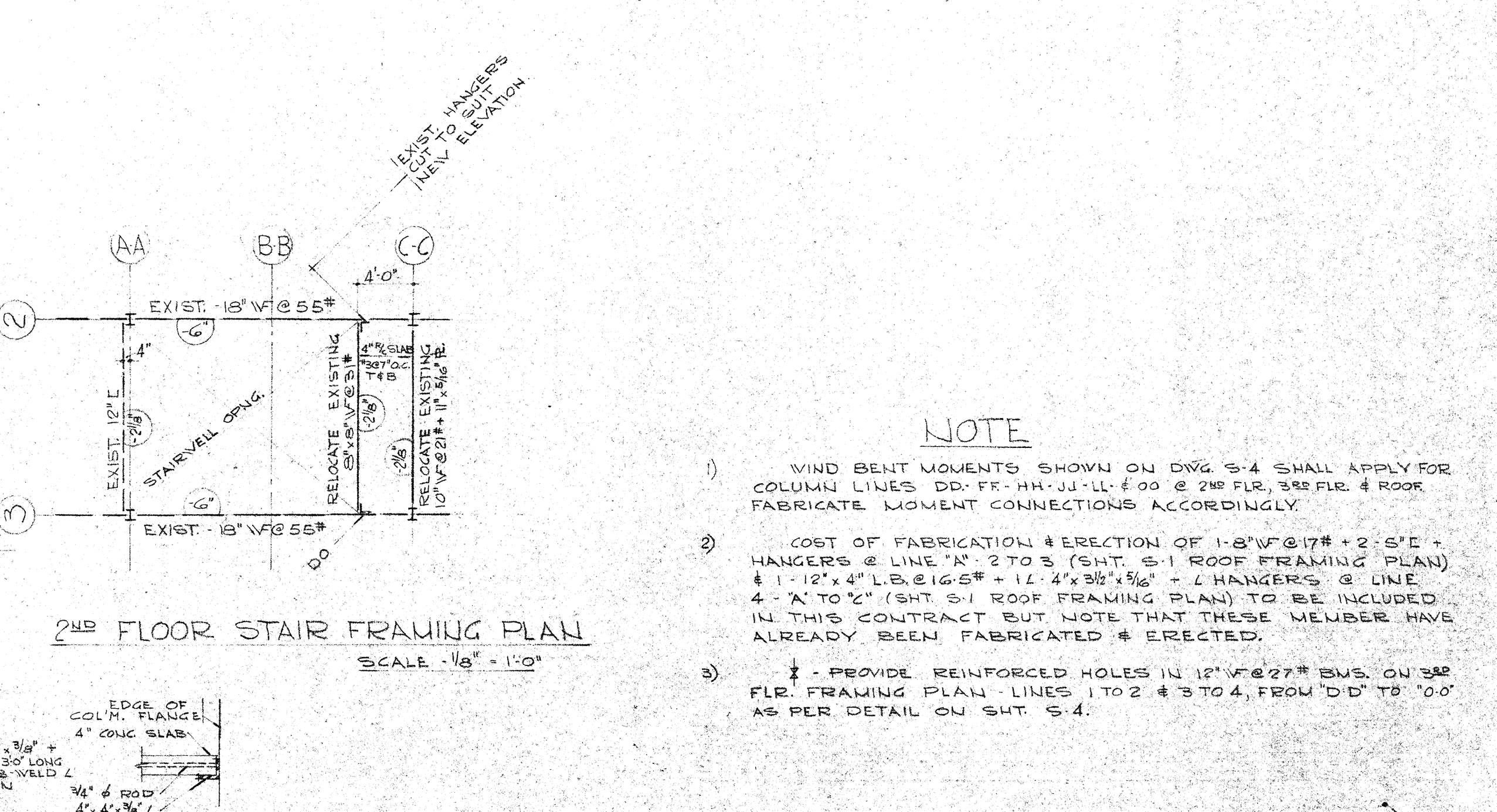
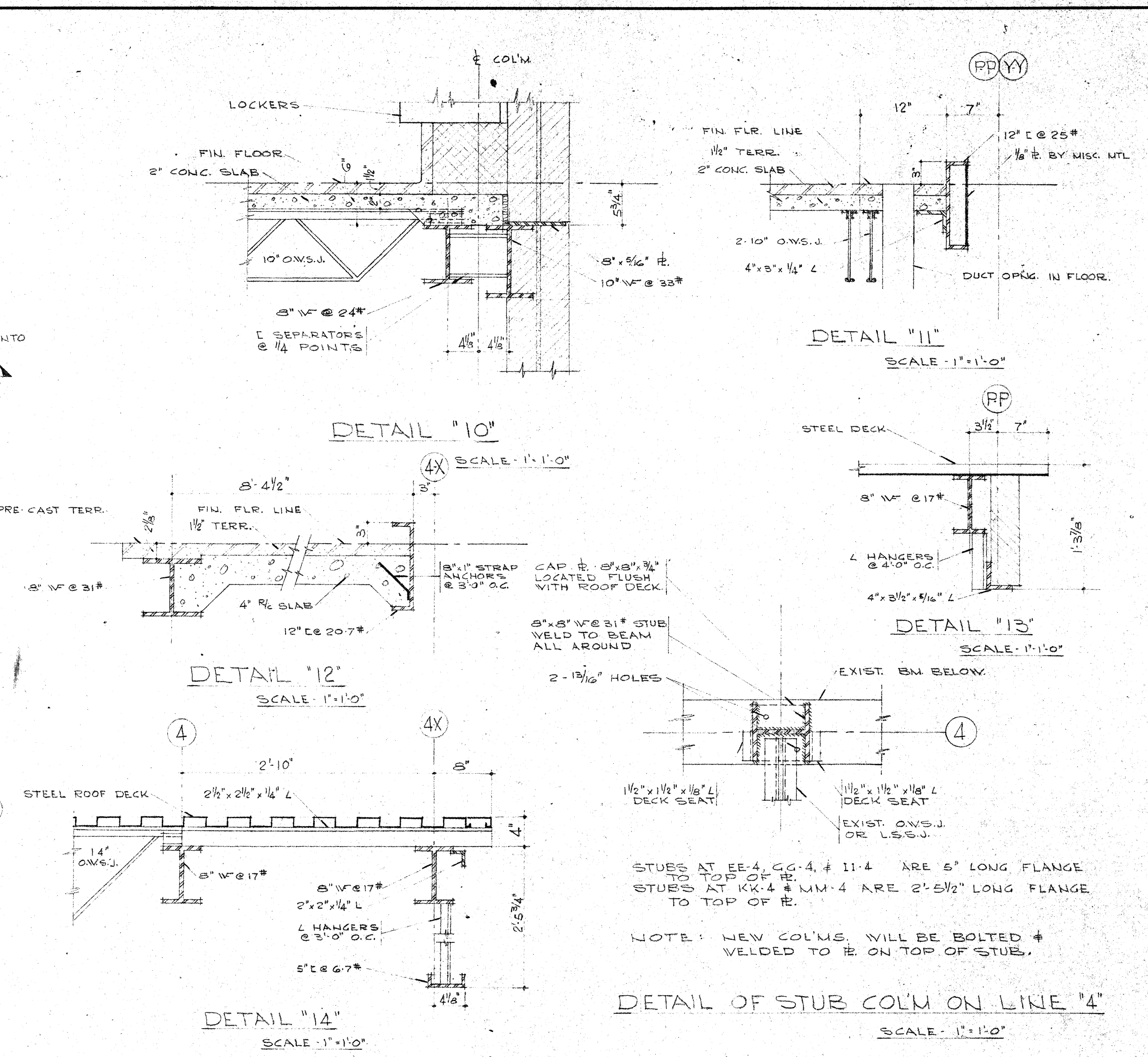
HIGH ROOF FRAMING PLAN SCALE 1/8" = 1'-0"



2ND FLOOR FRAMING PLAN SCALE 1/8" = 1'-0"



3RD FLOOR FRAMING PLAN SCALE 1/8" = 1'-0"



2ND FLOOR STAIR FRAMING PLAN SCALE 1/8" = 1'-0"

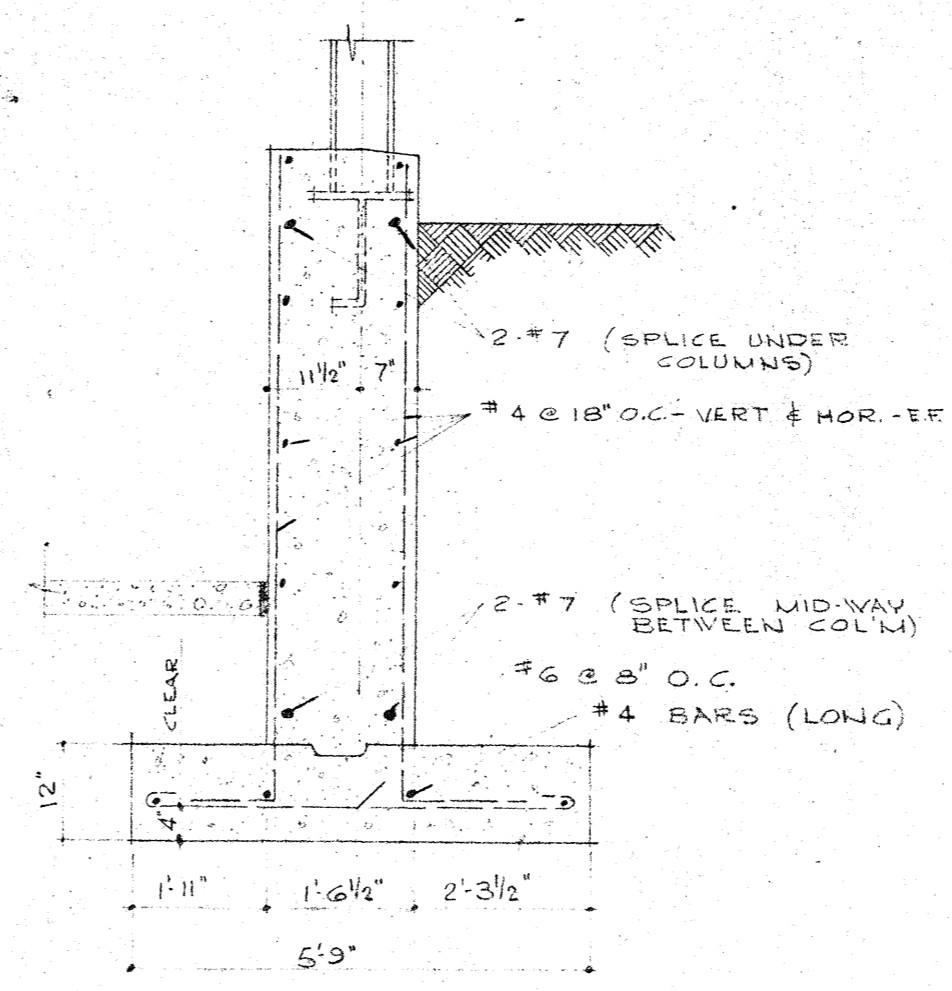
- NOTE**
- 1) WIND BENT MOMENTS SHOWN ON OWSJ 5-4 SHALL APPLY FOR COLUMN LINES DD, FF, HH, JJ, LL & 2ND FLR, 3RD FLR & ROOF. FABRICATE MOMENT CONNECTIONS ACCORDINGLY.
 - 2) COST OF FABRICATION & ERECTION OF 1-8"W@17" + 2-5"E + HANGERS @ LINE "A" 2 TO 3 (SHT. 5-1 ROOF FRAMING PLAN) & 1-12"x4" LB @ 16.5" + 11-4"x3/8"x3/8" + L HANGERS @ LINE 4 - "A" TO "C" (SHT. 5-1 ROOF FRAMING PLAN) TO BE INCLUDED IN THIS CONTRACT BUT NOTE THAT THESE MEMBERS HAVE ALREADY BEEN FABRICATED & ERECTED.
 - 3) 1 - PROVIDE REINFORCED HOLES IN 12"W@27" EMS. ON 3RD FLR. FRAMING PLAN LINES 1 TO 2 & 3 TO 4, FROM "DD" TO "OO" AS PER DETAIL ON SHT. 5-4.

		CLASSROOM FRAMING PLAN & DETAILS		SCALE AS NOTED
		DATE MAY 68		DRAWN BY T.R.W.
		CHECKED BY	ADDITION TO WATERLOO COLLEGIATE WATERLOO ONTARIO	SHEET S-5

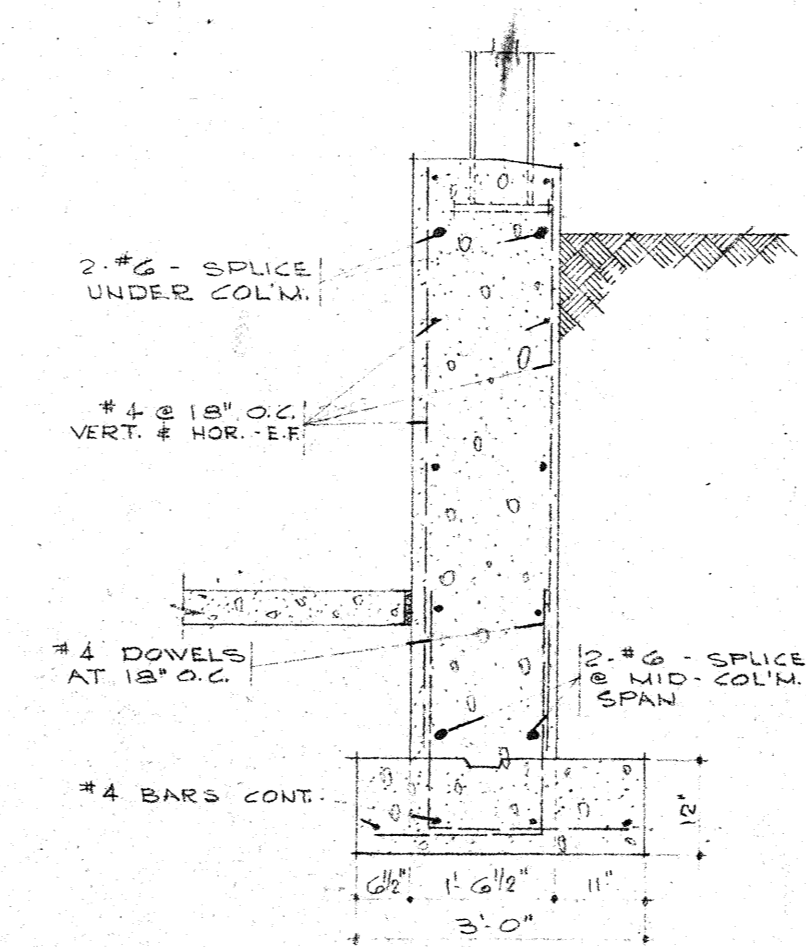
MM NN OO PP QQ RR SS TT UU VV WW XX YY

GENERAL NOTES

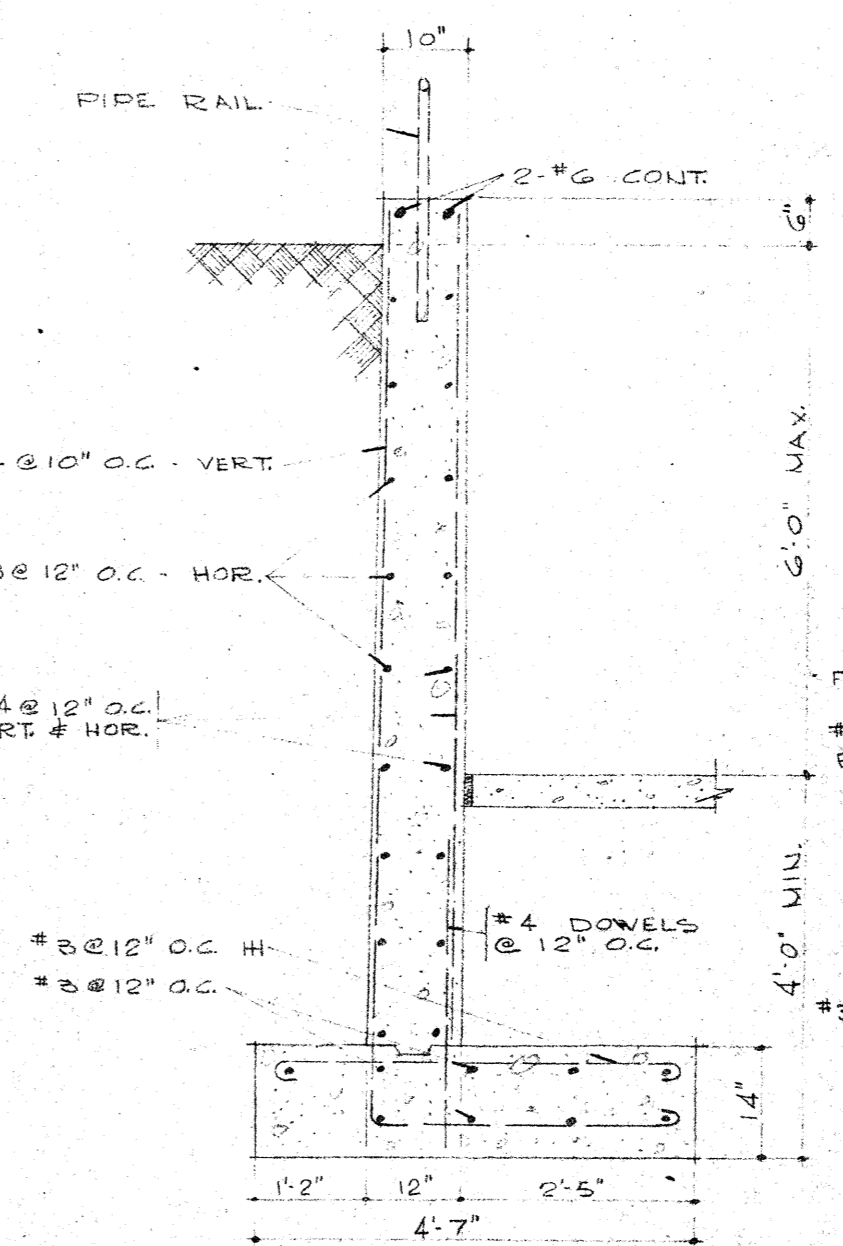
- 1) ALL DIM ON STRUCTURAL DWGS. MUST BE CHECKED WITH ARCHITECTURAL DRAWINGS & ANY DISCREPANCIES REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH WORK.
- 2) ALL REINFORCING BARS UNLESS SPECIFICALLY NOTED OTHERWISE SHALL BE HARD OR INTERMEDIATE GRADE HI-BOND STEEL WITH AN ALLOWABLE WORKING STRESS OF 20,000 PSI PER SQUARE INCH.
- 3) CONCRETE SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI, EXCEPT 2500 PSI FOR SLABS ON GRADE & SLABS OVER OTHERS.
- 4) STEEL BEAMS BEARING ON MASONRY WALL SHALL HAVE A MINIMUM BEARING OF 8" UNLESS OTHERWISE NOTE. Voids IN UNITS OF WALLS SHALL BE PREFILLED WITH 20000 PSI CONC. OR BRICK LAID IN CEMENT MORTAR SHALL BE USED. THIS SHALL BE DONE FOR A DEPTH EQUAL TO THE LENGTH OF BEARING & FOR A LENGTH EQUAL TO TWICE THE LENGTH OF BEARING.
- 5) OVER ALL OPENINGS IN MASONRY WALL UNLESS OTHERWISE SHOWN PROVIDE FOR 12" x 3 1/2" x 3 1/2" x 1/2" FOR SPANS UP TO 4'-0" OR 12" x 5" x 3 1/2" x 1/2" FOR SPANS FROM 4'-0" TO 6'-0" FOR EACH 4" OF WALL THICKNESS. CONTRACTOR MUST CHECK ARCHITECTURAL, STRUCTURAL & MECHANICAL DRAWINGS FOR LOCATION OF THESE LINTELS.
- 6) LINE OF SLOPE BETWEEN ADJACENT EXCAVATIONS FOR FOOTINGS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN RUN OF 10. MAXIMUM STEP APPROX. 2'-0".
- 7) ALL FOOTINGS SHALL BE CARRIED DOWN TO UNDISTURBED SOIL CAPABLE OF SAFELY SUSTAINING 2000# PER SQUARE FOOT AND MUST BE FULLY PROTECTED AGAINST FROST ACTION DURING CONSTRUCTION.
- 8) DURING BACKFILLING ALL MATERIAL MUST BE PLACED EVENLY ON EACH SIDE OF WALL EXCEPT WHERE GRADE RISES ABOVE LOWER FLOOR.
- 9) ALL COLUMNS IN MASONRY WALL SHALL HAVE ADJUSTABLE STRAP ANCHORS @ 25 1/2" O.C.
- 10) PLACE 2" DRY PACKED GROUT UNDER ALL BASE PLATES.



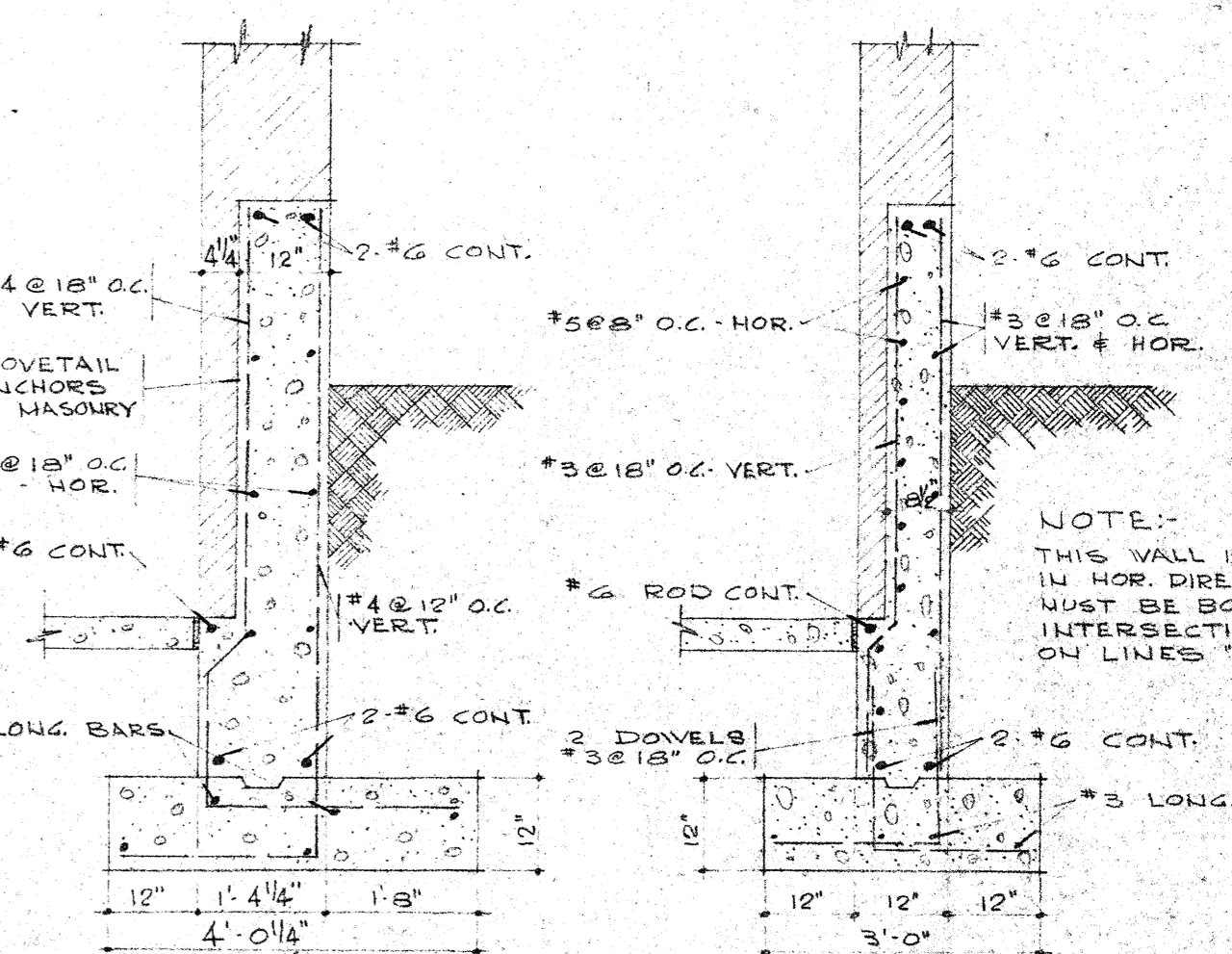
DETAIL "F"- "F" SCALE 1/2" = 1'-0"



DETAIL "G"- "G" SCALE 1/2" = 1'-0"



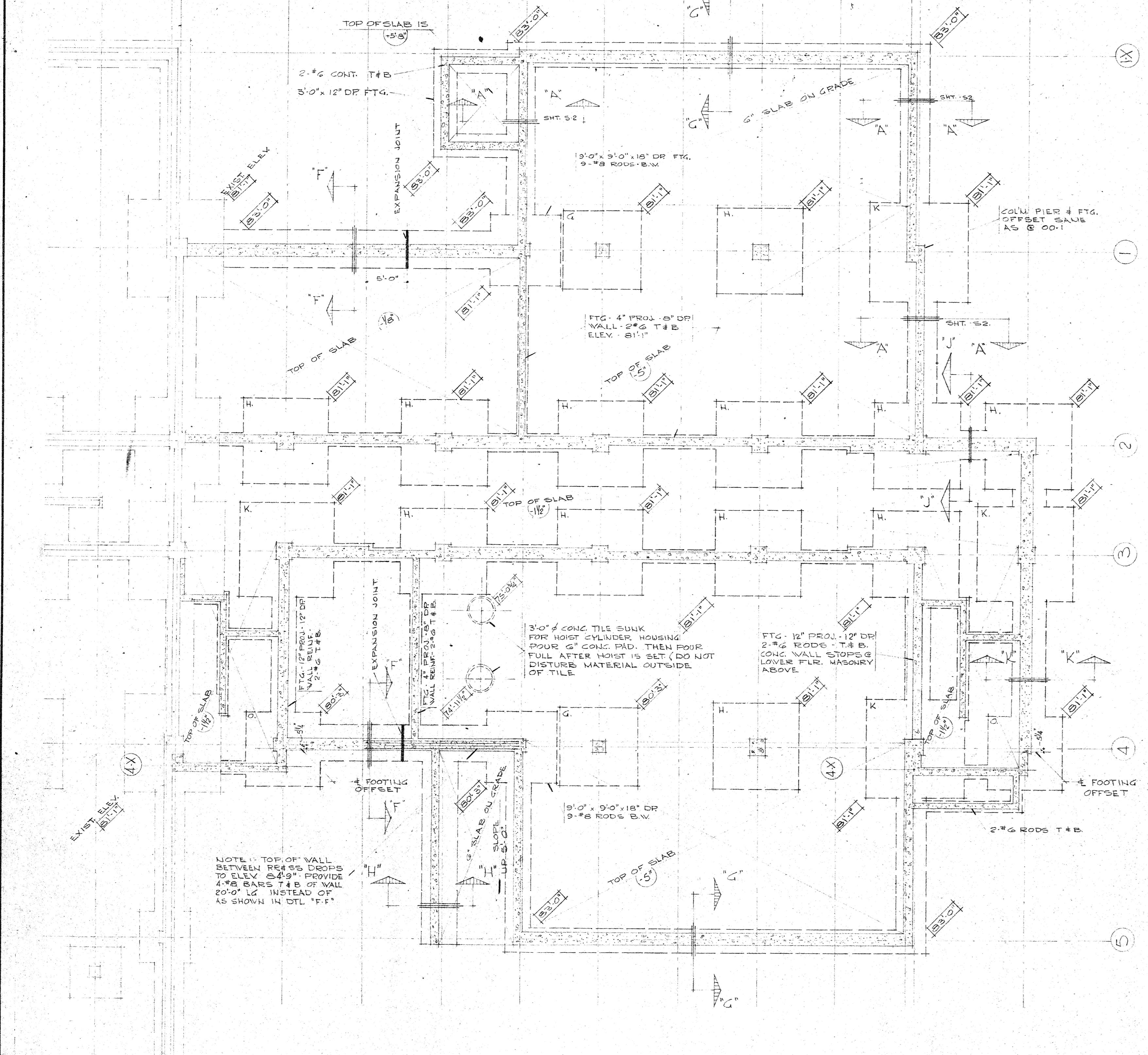
DETAIL "H"- "H" SCALE 1/2" = 1'-0"



DETAIL "K"- "K" SCALE 1/2" = 1'-0"

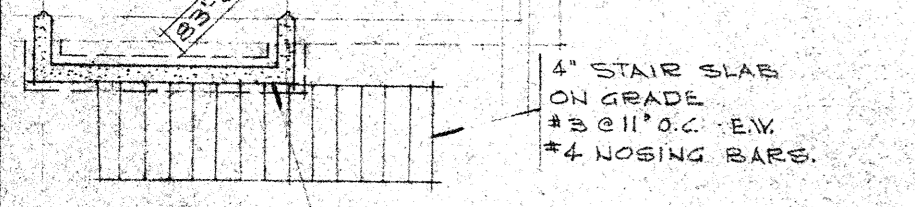
DETAIL "J"- "J" SCALE 1/2" = 1'-0"

NOTE: THIS WALL IS REINF. IN HOR. DIRECTION & MUST BE BONDED TO INTERSECTING WALLS ON LINES "VX" & "VY".

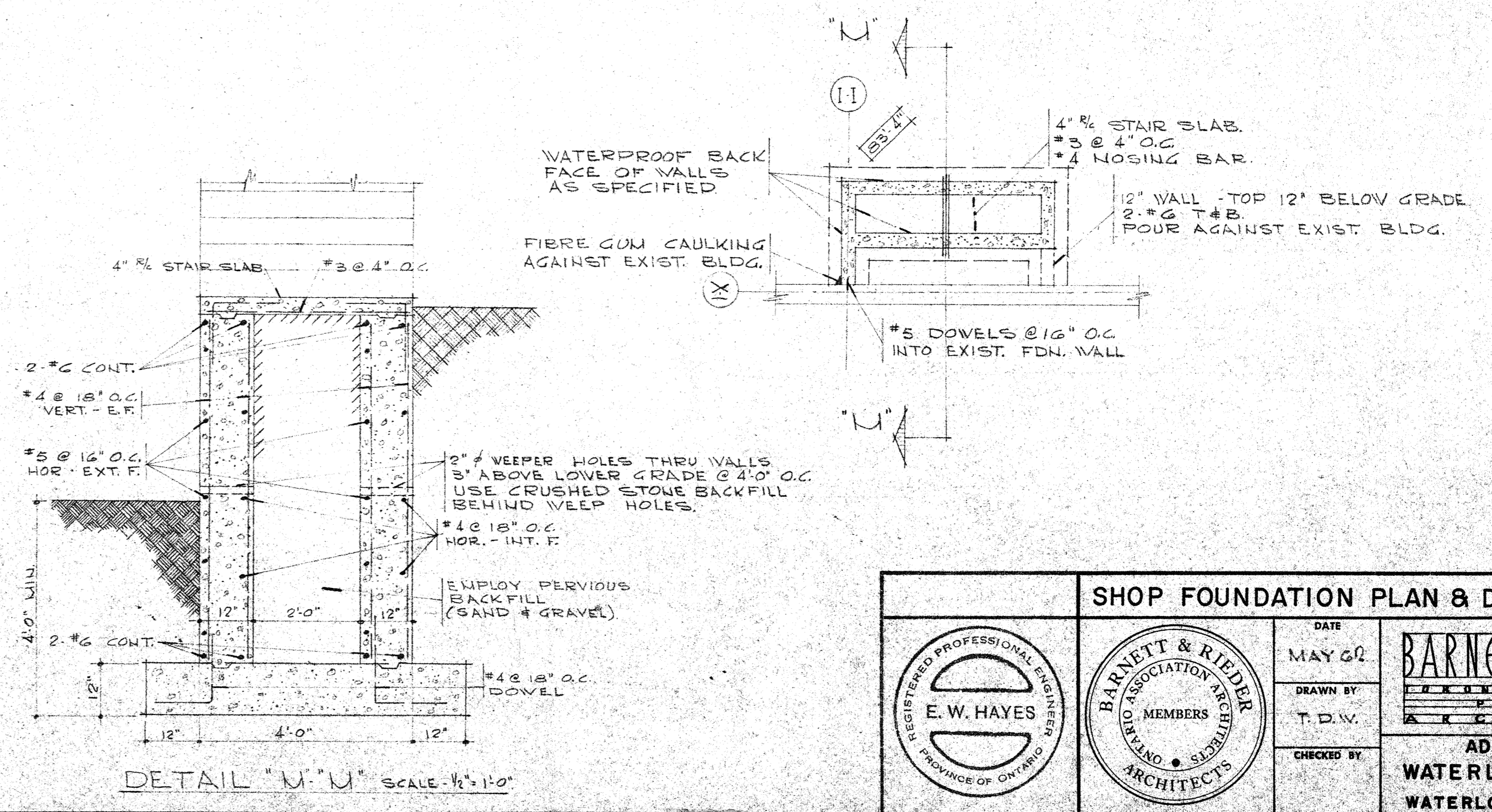


SHOP FOUNDATION PLAN SCALE 1/8" = 1'-0"

- 1) TOP OF FINISHED LOWER FLOOR IS AT ELEV. -8'-9"
- 2) TOP OF CONC. SLAB IS 0" BELOW FINISHED FLOOR UNLESS CROSSED & NOTED.
- 3) ALL ELEV. SHOWN THUS ARE TO BOTTOMS OF FOOTINGS.
- 4) ALL SLABS ARE 4" SLAB ON GRADE WITH #3 @ 12" O.C. EW UNLESS OTHERWISE NOTED.
- 5) FOR EXPANSION JOINT IN FOUNDATION WALLS USE 2"x4" KEY, PLASTIC WATER STOP & 1" ASPHALT IMPREGNATED FIBRE BOARD.
- 6) 6" CONC. RAMP FROM AUTO SHOP TO EXT. TO BE REINF. WITH 2 LAYERS OF #4 @ 12" O.C. - B.W. - T#B.



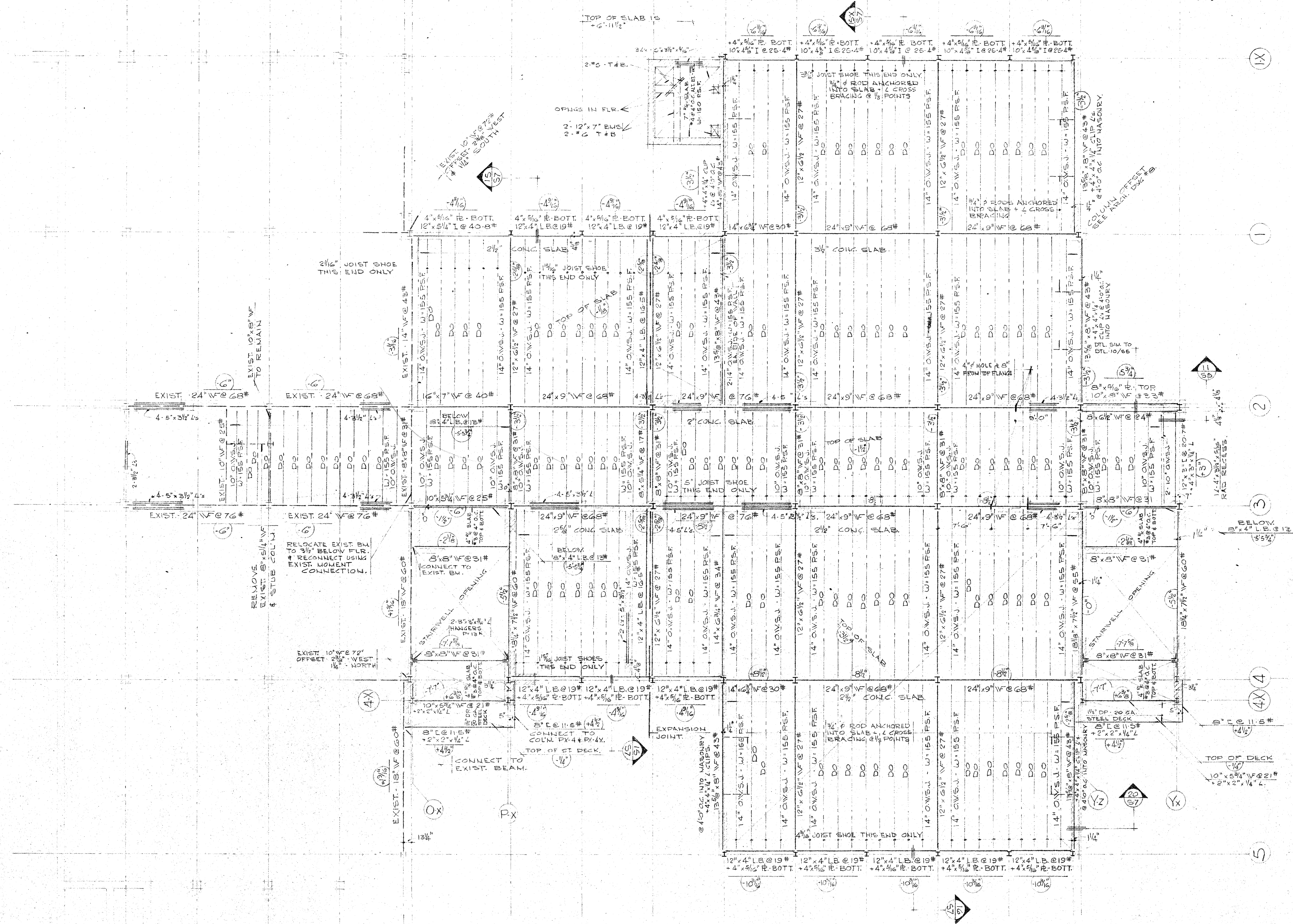
REINFORCING SAME AS WALL IN DTL. "M"- "U"



DETAIL "M"- "U" SCALE 1/2" = 1'-0"

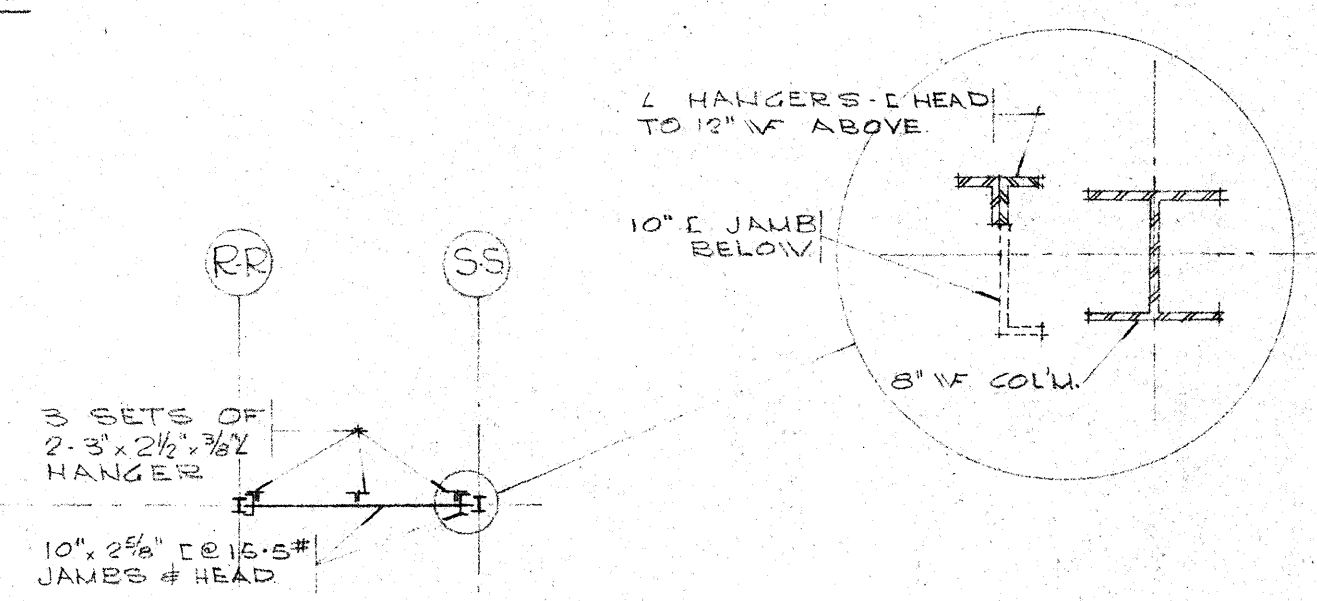
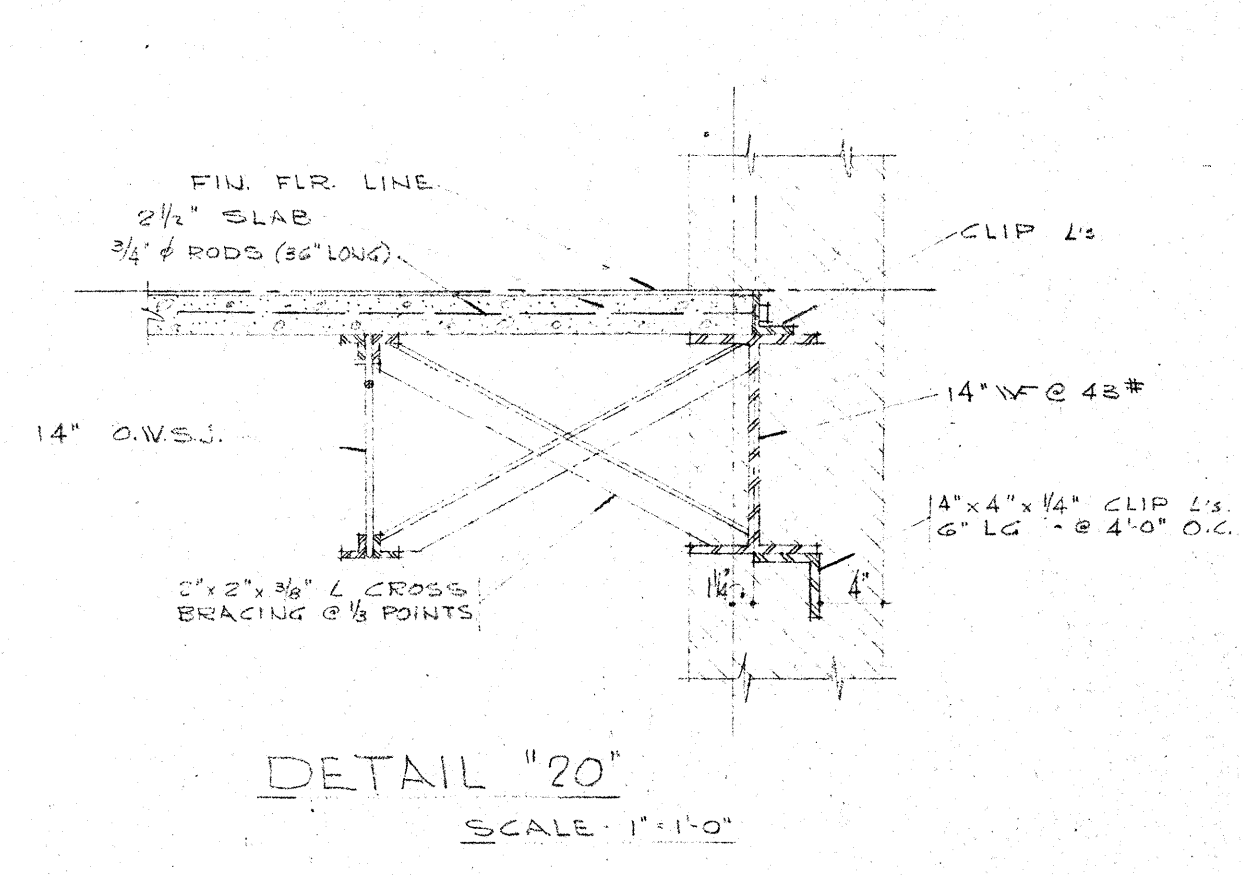
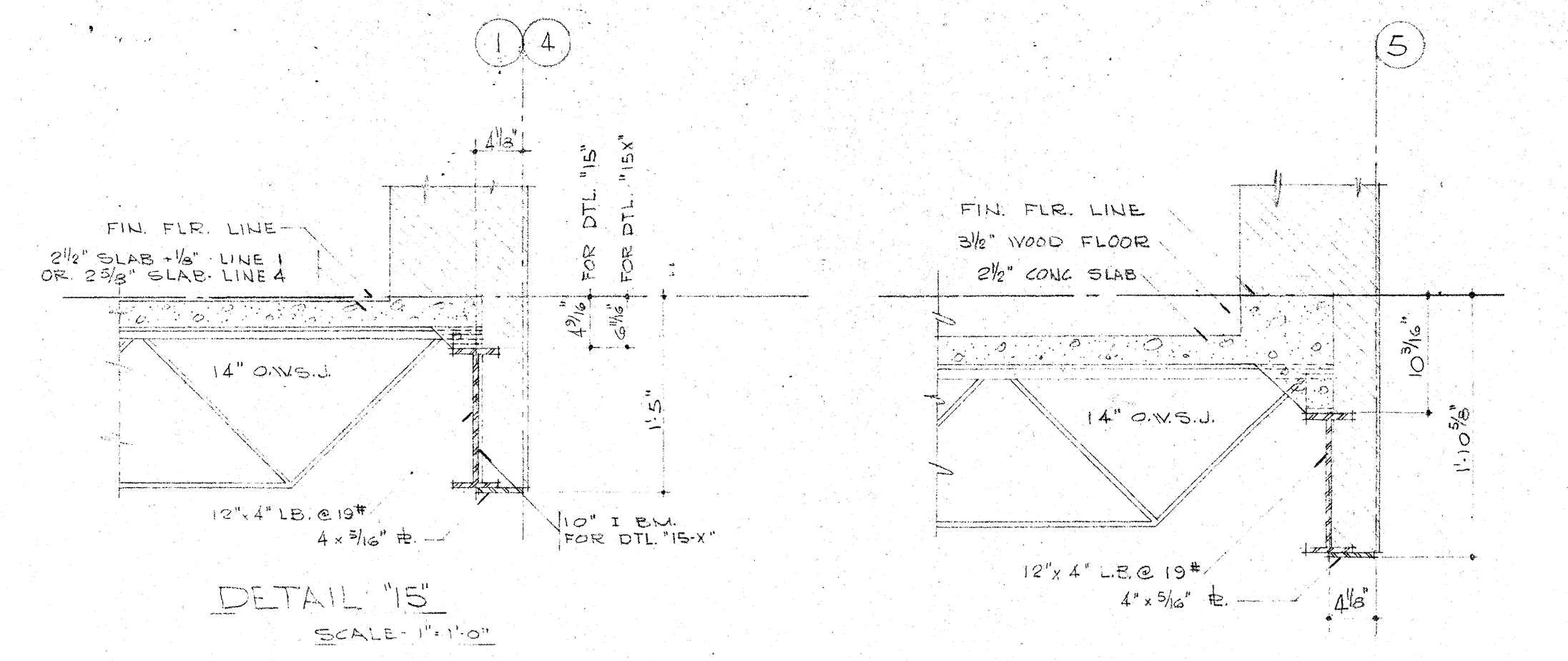
REGISTERED PROFESSIONAL ENGINEER		SHOP FOUNDATION PLAN & DETAILS		SCALE	
<p>E.W. HAYES</p>	<p>BARNETT & RIEDER ARCHITECTS</p>	DATE	MAY 20	AS NOTED	
		DRAWN BY	T.D.V.	JOB NO.	Q241-7
		CHECKED BY		SHEET	5-6
		<p>ADDITION TO WATERLOO COLLEGIATE WATERLOO ONTARIO</p>			

JJ KK LL MM NN OO PP QQ RR SS TT UU VV WW VX XX YY



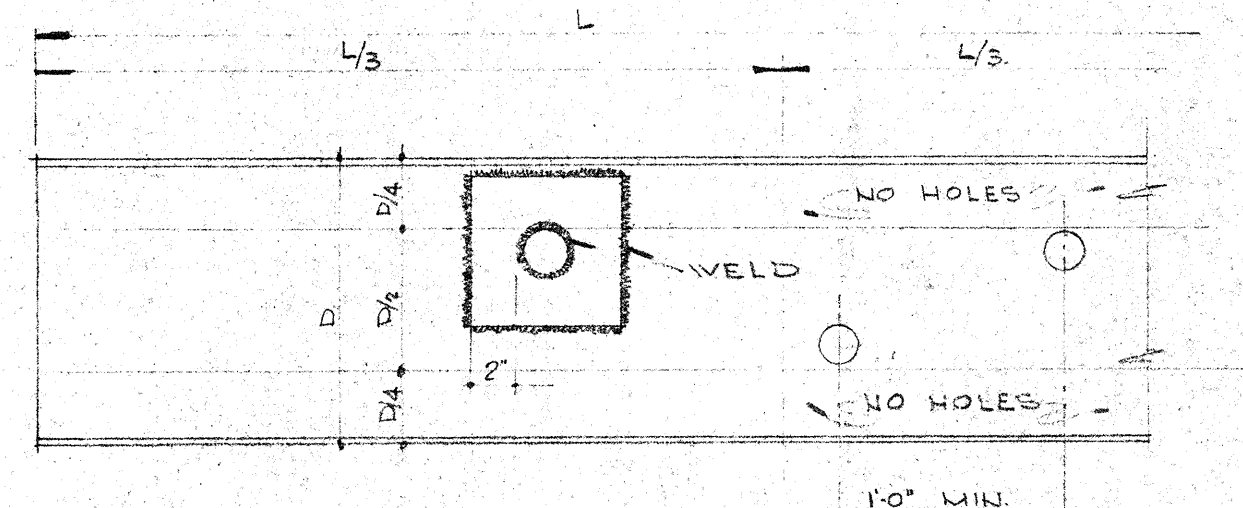
GROUND FLOOR FRAMING PLAN
SCALE: 1/8" = 1'-0"

- 1) TOP OF FIN. GROUND FLOOR IS AT ELEVATION .98' ± 2 1/2'
- 2) TOPS OF STEEL BEAMS ARE 6" BELOW TOP OF FINISHED FLOOR UNLESS NOTED THIS WAY
- 3) W FOR OWS.U. IS LIVE LOAD PLUS DEAD LOAD IN POUNDS PER SQUARE FOOT (NOT INCLUDING WT. OF JOIST)
- 4) TOP OF CONG. SLAB ARE 0' BELOW FIN. GROUND FLOOR UNLESS CROSSED
- 5) # NOTED
- 6) CARE MUST BE TAKEN TO PACK JOIST SHOES TO PROPER DEPTH WHETHER NOTED ON PLAN OR NOT
- 7) LINTELS SHOWN ARE FOR DOOR OPNG ONLY. SEE GEN. NOTES & MECH. DWGS. FOR OPNGS THRU MASONRY WALLS FOR GRILLS, DUCTS, ETC.



OVERHEAD DOOR FRAME
SCALE: 1/4" = 1'-0"

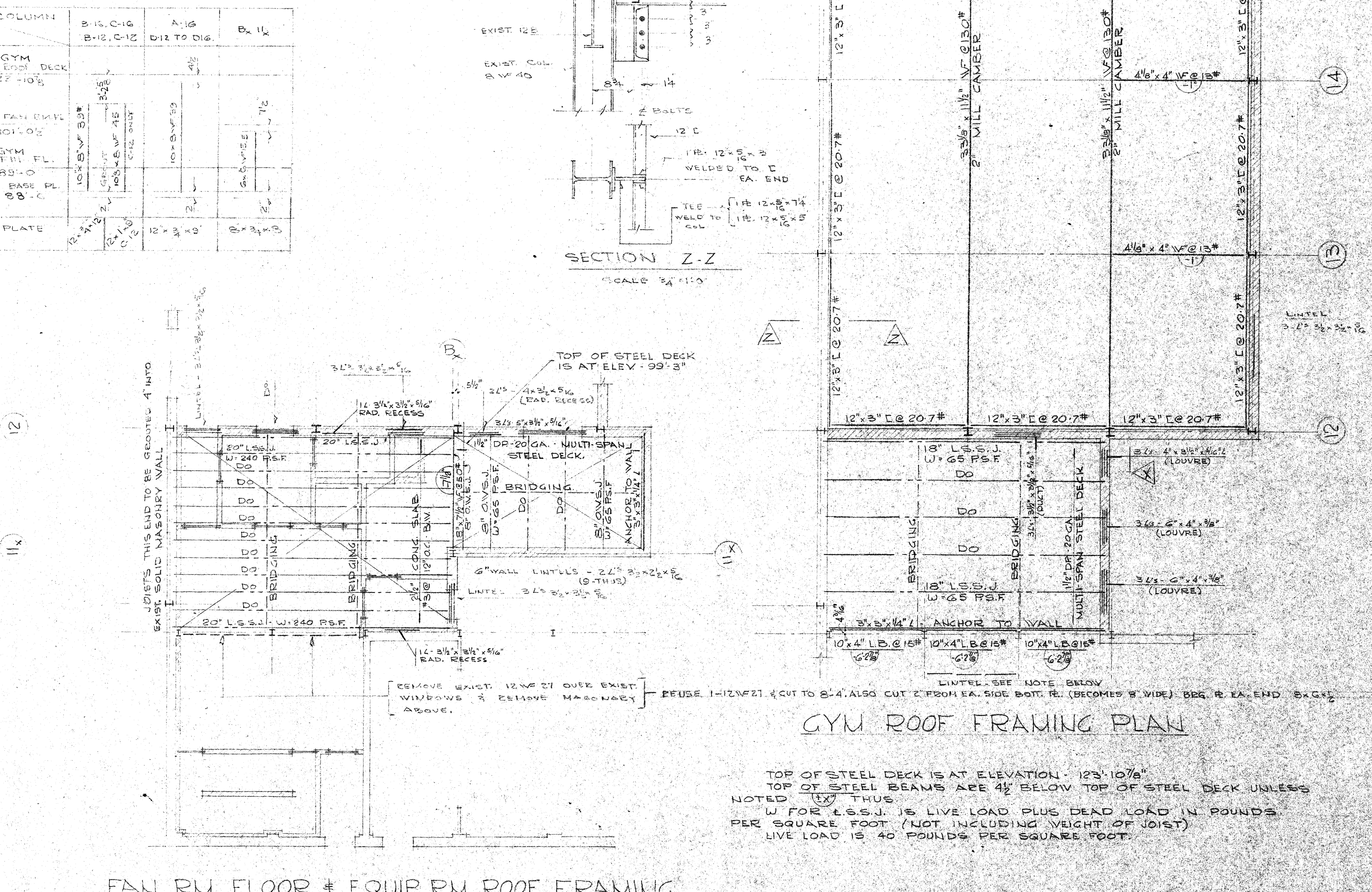
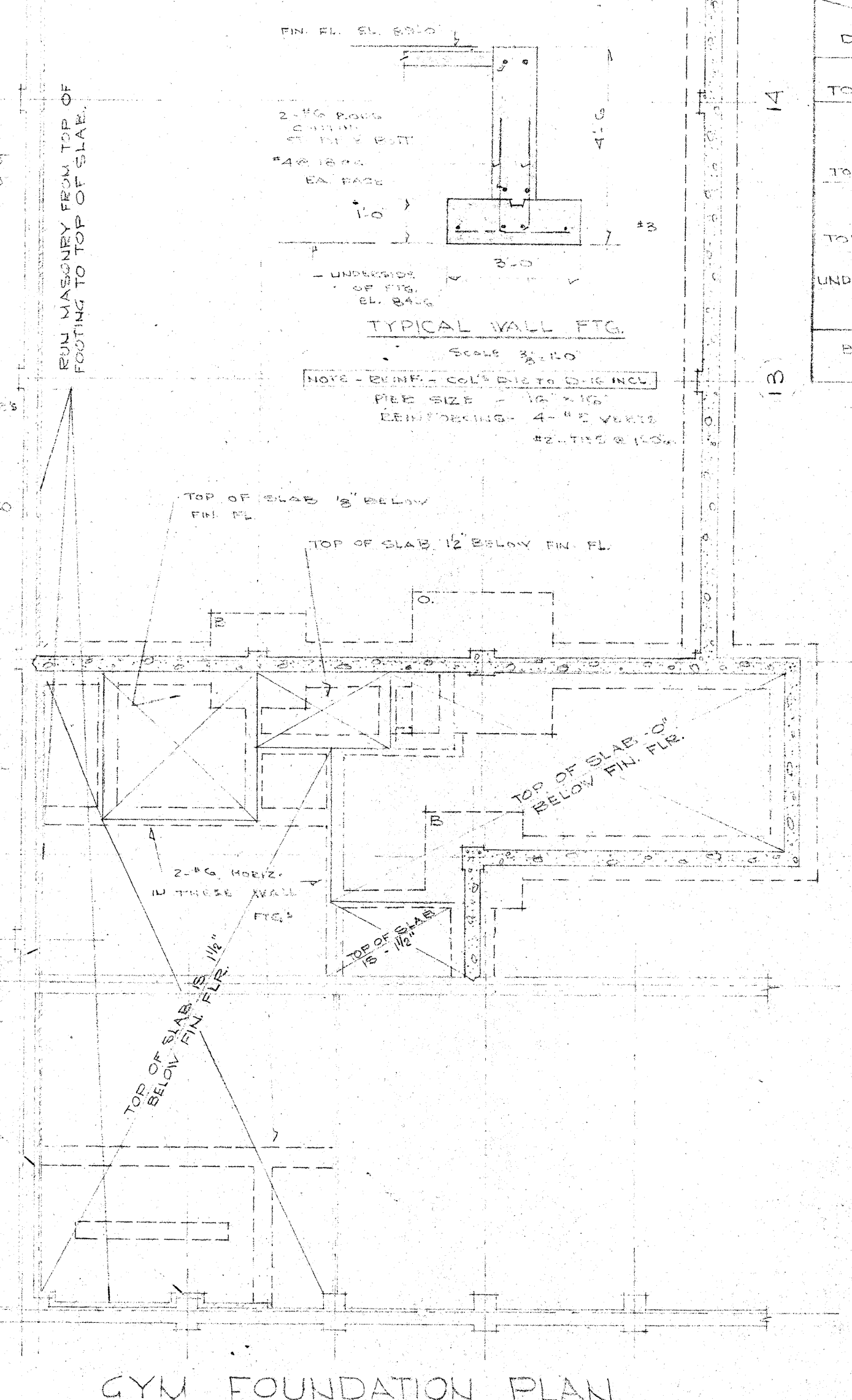
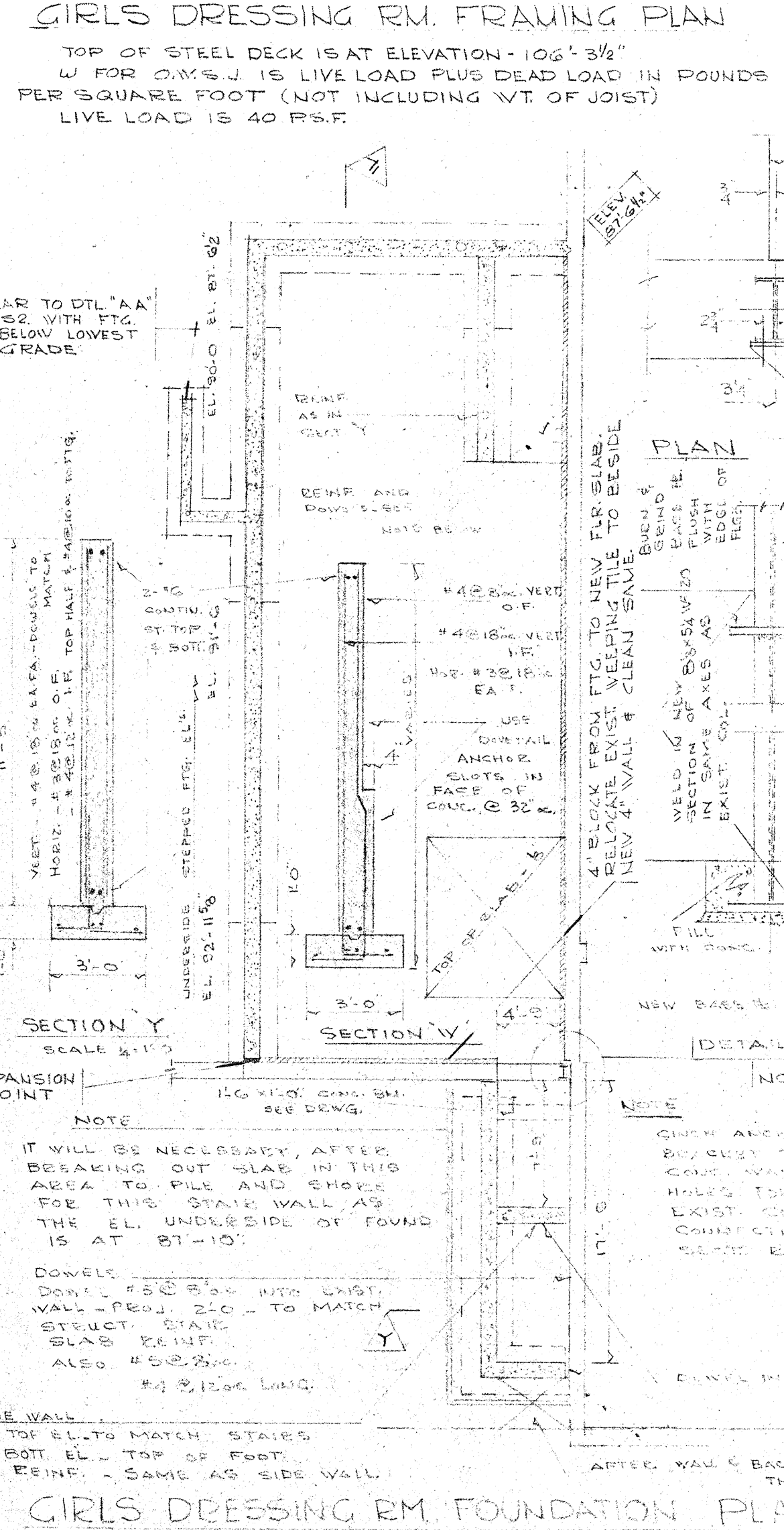
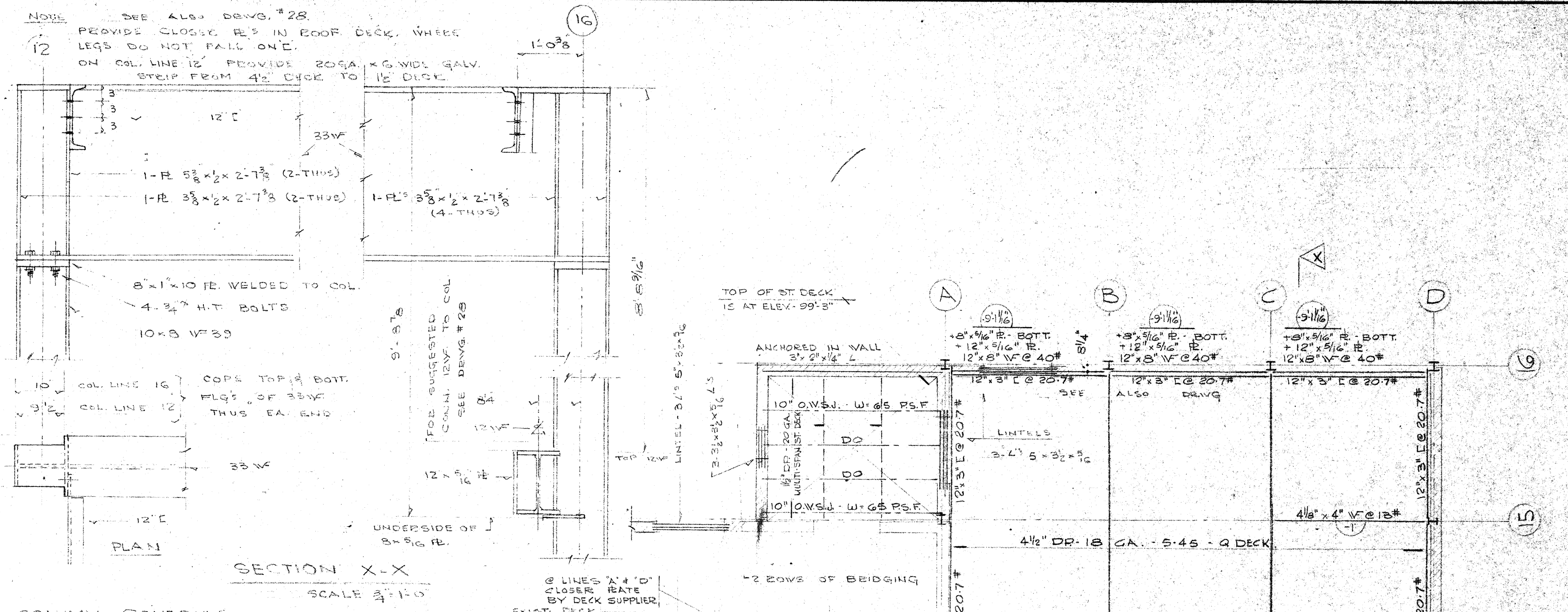
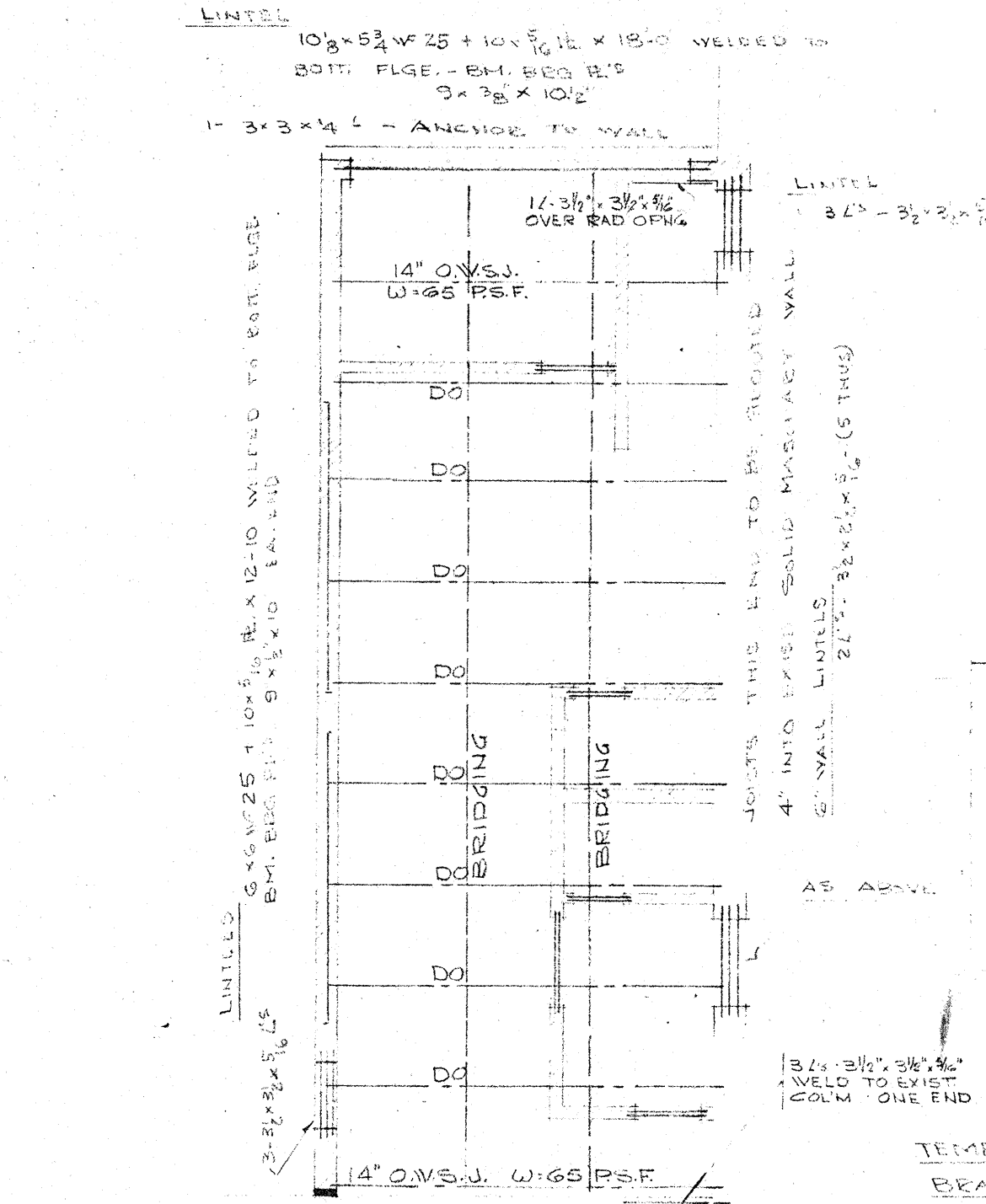
NOTE: WIND BENT MOMENTS SHOWN ON DWG. S-4 SHALL APPLY FOR COL. LINES TT, VV, & XX FABRICATE ACCORDINGLY.



NOTE: MAX. Ø OF HOLE IS 1/2 BEAM DEPTH. IF HOLES ARE LARGER THAN 2 1/2" Ø OR LOCATED OUTSIDE OF MIDDLE 1/3 OF BEAM SPAN THE BEAM WEB TO BE REINFORCED. REINFORCING TO BE SAME THICKNESS AS BEAM WEB. ALL HOLES OUTSIDE MIDDLE 1/3 OF SPAN TO BE TO ARCHITECTS APPROVAL.

TYPICAL DETAIL SHOWING HOLES IN BEAM WEB
SEE STRUCTURAL PLANS FOR LOCATION & SIZE OF HOLES.

		SHOP GROUND FLOOR FRAMING PLAN & DETAILS		SCALE AS NOTED
		DATE MAY 02		JOB Q-821-7
DRAWN BY T.D.W.		CHECKED BY 		SHEET S-7
ADDITION TO WATERLOO COLLEGIATE WATERLOO ONTARIO				



GYM AREA FRAMING & DETAILS

		DATE	MAY 68		SCALE	AS SHOWN
		DRAWN BY	T.D.W.		JOB NO.	0-217
		CHECKED BY	ATB		SHEET	5-3
		ADDITION TO WATERLOO COLLEGIATE WATERLOO ONTARIO				

