

James R. Offield  
8/12/89

## GENERAL REQUIREMENTS

1. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE STRUCTURAL DRAWINGS BEFORE BEGINNING ANY WORK. HE SHALL NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES, OMISSIONS, OR CONFLICTS HE MAY FIND BETWEEN THE VARIOUS ELEMENTS OF THE DRAWINGS BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
2. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL SITE CONDITIONS AND DIMENSIONS. HE SHALL NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.
3. THE CONTRACTOR SHALL INVESTIGATE THE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS TANKS, CESSPOOLS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER OF ANY CONDITION WHICH IN HIS OPINION MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS TO THE STRUCTURE.
5. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES.
6. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FLOORS OR ROOFS. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.
7. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING:
  - A. THE LATEST EDITION (1988) OF THE UNIFORM BUILDING CODE.
  - B. ALL CODES AND STANDARDS LISTED ELSEWHERE IN THESE NOTES AND/OR SPECIFICATIONS (ASTM SPECIFICATIONS NOTED SHALL BE THE LATEST EDITION)
  - C. ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
8. DESIGN LIVE LOADS:

ROOF	20 PSF (REDUCIBLE)
WIND	75 MPH, EXPOSURE B, I=1-15
SEISMIC	ZONE 2B, I=1.0
	OCCUPANCY CATEGORY III
	Rw = 6
9. REFER TO OTHER DRAWINGS (ARCHITECTURAL, CIVIL, MECHANICAL, ETC.) FOR INFORMATION NOT COVERED BY THE STRUCTURAL DRAWINGS OR THESE NOTES.
10. SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE THE NOTES, DRAWINGS, AND/OR SPECIFICATIONS DIFFER, THE MORE STRINGENT REQUIREMENT SHALL APPLY. DO NOT SCALE DRAWINGS.

## SHOP DRAWINGS

1. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS WHERE REQUIRED BY THESE GENERAL NOTES OR BY THE SPECIFICATIONS. SUBMITTALS SHALL CONSIST OF TWO BLUE-LINE SHOTS AND ONE REPRODUCIBLE SEPA FOR APPROVAL. THE REPRODUCIBLE SEPA WILL BE RETURNED TO THE CONTRACTOR, NOTATED FOR HIS USE.
2. THE CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTAL TO THE ENGINEER. ALL ITEMS NOT IN ACCORDANCE WITH CONTRACT DRAWINGS SHALL BE CLEARLY FLAGGED OR REVISED PRIOR TO SUBMITTAL TO THE ENGINEER.
3. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM ORIGINAL CONTRACT DRAWINGS, ONLY WHEN CLEARLY FLAGGED OR REQUESTED IN WRITING BY SUBSTITUTING PARTIES, SHALL BE CONSIDERED APPROVED AFTER ENGINEER'S REVIEW, UNLESS NOTIFIED OTHERWISE.
4. THE SHOP DRAWINGS DO NOT REPLACE THE ORIGINAL CONTRACT DRAWINGS. ITEMS OMITTED OR SHOWN INCORRECTLY WHICH ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR THE ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO THE ORIGINAL CONTRACT DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE ITEMS ARE CONSTRUCTED TO ORIGINAL DRAWINGS.
5. THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO THE ORIGINAL DRAWINGS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW.
6. DIMENSIONS INDICATED ON SHOP DRAWINGS ARE NOT REVIEWED UNLESS SPECIFICALLY NOTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS WITH THE ARCHITECT AND WITH ACTUAL FIELD CONDITIONS.
7. THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUTS PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING PERSON OR COMPANY.
8. REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE CONTRACTOR.

## FOUNDATIONS & EXCAVATIONS

1. ALL FOOTINGS SHALL REST ON MATERIAL CAPABLE OF SUPPORTING 1500 TO 4000 P.S.F. MINIMUM WITHOUT SIGNIFICANT SETTLEMENT PER PROJECT GEOTECHNICAL REPORT.
2. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
3. FOOTING ELEVATIONS SHOWN ON PLANS ARE FOR ESTIMATING PURPOSES ONLY AND SHALL BE VERIFIED IN THE FIELD.
4. A SOILS ENGINEER SHALL INSPECT ALL FOOTING EXCAVATIONS AND FILLS TO VERIFY DEPTHS AND SOIL BEARING CAPACITY PRIOR TO PLACEMENT OF FORMS AND/OR REINFORCING STEEL. SLOPES SHALL BE SHORED OR FLATTENED IF SO DIRECTED BY THE SOILS ENGINEER. THE CONTRACTOR SHALL PROVIDE FOR PROPER DE-WATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER, SEEPAGE, ETC.
5. SEE "TYPICAL GRADING AND SLAB SUPPORT" DETAIL ON DRAWINGS FOR STRUCTURAL FILL AND SUB-BASE PREPARATION FOR FOOTINGS AND SLABS ON GRADE.
6. FOR SOIL INFORMATION REFER TO FOUNDATION INVESTIGATION BY CONVERSE CONSULTANTS SOUTHWEST, INC. PROJECT No. 89-33353-01, DATED JULY 24, 1989.

## CONCRETE

1. CONCRETE USED IN THE WORK SHALL HAVE THE FOLLOWING MINIMUM ULTIMATE COMPRESSIVE STRENGTHS AT AGE 28 DAYS:

A. FOOTINGS & SLABS ON GRADE	3000 P.S.I.
B. LEAN CONCRETE FILL	1500 P.S.I.
2. ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) WITH MODIFICATIONS AS NOTED IN THE DRAWINGS OR SPECIFICATIONS.
3. ALL REGULAR WEIGHT CONCRETE SHALL BE STONE CONCRETE UTILIZING AGGREGATE CONFORMING TO ASTM C33. CEMENT SHALL BE TYPE V CONFORMING TO ASTM C150 WHERE IN CONTACT WITH EARTH AND TYPE II ELSEWHERE. MIXING OPERATIONS, ETC. SHALL CONFORM TO ASTM C-94. PLACEMENT SHALL CONFORM TO ACI STANDARD 614 AND PROJECT SPECIFICATIONS.
4. ALL CONCRETE MIXES SHALL BE DESIGNED BY A CERTIFIED INDEPENDENT TESTING LABORATORY WHO SHALL SUBMIT COPIES OF THE DESIGN FOR APPROVAL AND SHALL IN ADDITION SUBMIT COPIES OF 7 AND 28 DAY CYLINDER TEST RESULTS TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT, AND OBTAIN APPROVAL PRIOR TO USE.
5. BEFORE CONCRETE IS PLACED THE CONTRACTOR SHALL COORDINATE AND CHECK WITH ALL TRADES TO INSURE THE PROPER PLACEMENT OF ALL OPENINGS, CURBS, SLEEVES, INSERTS, DEPRESSIONS, ETC. RELATING TO THE WORK. CORING IN CONCRETE IS NOT PERMITTED EXCEPT AS SHOWN. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT WITH SLEEVES OR INSERTS. NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS.
6. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
7. CONCRETE SHALL NOT BE FREELY DROPPED MORE THAN THREE FEET.
8. CONCRETE SHALL NOT BE PLACED WITH A SLUMP EXCEEDING 4", PRIOR TO ADDITION OF PLASTICIZER. REFER TO SPECIFICATIONS.
9. MINIMUM CONCRETE COVER OVER REINFORCING STEEL SHALL BE AS FOLLOWS:

A. CONCRETE AGAINST EARTH (UNFORMED)	3"
B. CONCRETE AGAINST EARTH (FORMED)	2"
C. CONCRETE SLAB	1"
10. CONSTRUCTION OR COLD JOINTS OTHER THAN THOSE SHOWN ON THE PLANS SHALL NOT BE MADE WITHOUT PRIOR APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.
11. FLOOR SLAB POURS SHALL BE LIMITED TO 550 SQUARE FEET (SECTIONS TO BE APPROXIMATELY SQUARE) OR AS SHOWN ON THE PLANS. A COLD JOINT, SAW CUT OR PRECAST CONCRETE RAILS MAY BE USED. WHEN USED, SAW CUT MUST BE PERFORMED WITHIN 7 HOURS AFTER INITIAL SET HAS OCCURED.
12. AN INITIAL CURING OF CONCRETE SHALL IMMEDIATELY FOLLOW THE FINISHING OPERATION. THE CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST OVERNIGHT BY USE OF ANY OF THE FOLLOWING:
  - A. FLOODING OR CONTINUOUS SPRINKLING
  - B. ABSORPTIVE MAT OR FABRIC KEPT CONTINUOUSLY WET
  - C. CURING COMPOUNDS APPLIED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE CURING COMPOUND MANUFACTURER
13. IMMEDIATELY FOLLOWING THE INITIAL CURING AND BEFORE THE CONCRETE HAS DRIED, ADDITIONAL CURING SHALL BE ACCOMPLISHED FOR 7 CONSECUTIVE DAYS BY:
  - A. CONTINUING THE METHOD USED FOR THE INITIAL CURING
  - B. WATERPROOF PAPER
  - C. OTHER MOISTURE-RETAINING COVERINGS AS APPROVED

## REINFORCING STEEL

1. REINFORCING STEEL SHALL BE NEW STOCK, DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 UNLESS NOTED OTHERWISE, (GRADE 40 MAY BE USED FOR #3 BARS, TIES, AND STIRRUPS).
2. ALL BARS SHALL BE FREE OF RUST, GREASE, MILL SCALE, OR ANY MATERIAL WHICH MIGHT AFFECT ITS BOND TO CONCRETE.
3. ALL BAR BENDS MUST BE MADE COLD. REBENDING OF BARS WILL NOT BE PERMITTED.
4. BENDING, PLACING, SPACING, CONCRETE PROTECTIVE COVER, SPACING, AND ALL OTHER DETAILS OF REINFORCEMENT SHALL CONFORM TO THE "BUILDING CODE REQUIREMENT FOR REINFORCED CONCRETE" A.C.I. 318, CHAPTER 7 AND THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" A.C.I. 315.
5. ALL TESTING OF REINFORCING STEEL SHALL BE AS REQUIRED BY LOCAL BUILDING CODE AND THE SPECIFICATIONS.
6. REINFORCING STEEL PLACING DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR PLACING. APPROVED DRAWINGS ARE REQUIRED AT THE JOB SITE ONE DAY PRIOR TO PLACING REINFORCING.
7. ALL BARS SHALL BE MARKED SO THAT THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE.
8. BAR SPLICES ARE TO BE CLASS "A" IN CONCRETE; 40 BAR DIAMETERS IN C.M.U. UNLESS NOTED OTHERWISE. SPLICES SHALL BE MADE ONLY WHERE INDICATED ON THE DRAWINGS.
9. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL MESH AND ONE HALF, WHICH EVER IS GREATER.
10. DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING AS THE VERTICAL REINFORCING, RESPECTIVELY. SPLICE LENGTH SHALL BE 30 BAR DIAMETERS UNLESS NOTED OTHERWISE.

## CONCRETE MASONRY UNITS

1. MASONRY UNITS SHALL BE LIGHT WEIGHT, 2000 P.S.I., GRADE "M" UNITS CONFORMING TO THE LATEST ASTM DESIGNATION C-90 AND, IN ADDITION, THE REQUIREMENT OF THE QUALITY CONTROL STANDARDS OF THE CONCRETE MASONRY ASSOCIATION OF CALIFORNIA AND NEVADA. THE MINIMUM COMPRESSIVE STRENGTH OF MASONRY "m" AS DETERMINED BY PRISM TESTS SHALL BE 2000 PSI WITH SPECIAL INSPECTION.
2. BLOCK UNITS SHALL BE SUFFICIENTLY MOIST AT TIME OF LAYING TO PREVENT DEHYDRATION OF MORTAR AND GROUT.
3. BLOCK UNITS SHALL BE FREE OF ALL SUBSTANCES WHICH MIGHT IMPAIR THE BOND OF THE BLOCK TO THE MORTAR AND GROUT.
4. MORTAR MIX SHALL CONFORM TO REQUIREMENTS FOR U.B.C. TABLE 24-A, TYPE "S" OR "M" MIX CONSISTING OF ONE PART CEMENT AND THREE PARTS SAND WITH 1/4 TO 1/2 PART LIME. MORTAR SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.
5. GROUT SHALL CONFORM TO REQUIREMENTS OF SECTION 2403 OF U.B.C. FOR COARSE GROUT CONSISTING OF ONE PART CEMENT AND THREE PARTS SAND WITH 1/10 TO 1/15 PART LIME. GROUT SPACE MORE THAN TWO INCHES IN WIDTH MAY HAVE IN ADDITION TO THE SAND NOT MORE THAN TWO PARTS PEA GRAVEL. USE SUFFICIENT WATER FOR GROUT TO FLOW INTO ALL JOINTS OF THE MASONRY WITHOUT SEGREGATION. GROUT SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2000 P.S.I. AT 28 DAYS.
6. CEMENT FOR MORTAR AND GROUT SHALL BE A LOW ALKALI TYPE CONFORMING TO ASTM C150. CEMENT USED IN CONCRETE MASONRY MATERIALS BELOW GRADE SHALL BE TYPE V.
7. PROVIDE A MINIMUM OF 1/2 INCH GROUT BETWEEN MAIN REINFORCING AND MASONRY UNITS. MAXIMUM GROUT POUR HEIGHT IS TO BE IN ACCORDANCE WITH TABLE 24G OF THE UBC.
8. CELLS SHALL BE IN VERTICAL ALIGNMENT. DOWELS IN FOOTINGS SHALL BE SET TO ALIGN WITH CORES CONTAINING REINFORCING STEEL.
9. REFER TO ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS FOR SURFACE AND HEIGHT OF UNITS, LAYING PATTERN, COLOR, JOINT TYPE, ETC.

## LIGHT GAGE STEEL FRAMING

1. ALL METAL STUDS FRAMING MEMBERS, AND RUNNER TRACKS SHALL BE OF THE TYPE AND SIZE SHOWN ON THE DRAWINGS.
2. ALL MEMBERS SHALL BE FORMED FROM STEEL MEETING THE REQUIREMENTS OF ASTM A570 EXCEPT THE MINIMUM YIELD STRENGTH SHALL BE 50,000 P.S.I.
3. TRACK SHALL BE SECURELY ANCHORED TO CONCRETE FLOOR.
4. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY OR ON AN ANGLE AS IN BRACING TO FIT SQUARELY AGAINST ABUTTING MEMBERS.
5. STUDS SHALL BE SPACED SQUARELY IN THE TRACK WITH THE STUD WEB AND FLANGES ABUTTING THE TRACK WEB, PLUMBED OR ALIGNED, AND SECURELY ATTACHED TO THE FLANGES OF WEB OF BOTH THE UPPER AND LOWER TRACKS.
6. JACK STUDS SHALL BE SECURELY ANCHORED TO CONCRETE FLOOR.
7. ATTACHMENTS OF SIMILAR COMPONENTS SHALL BE DONE BY SCREWING FOR LIGHTER GAGES, AND SCREWING OR WELDING FOR 16 GAGE OR HEAVIER. WIRE TYPING OF FRAMING COMPONENTS IN STRUCTURAL APPLICATIONS SHALL NOT BE PERMITTED.

## STRUCTURAL STEEL

1. ALL PHASES OF WORK PERTAINING TO STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL STEEL (LATEST EDITION OF THE UNIFORM BUILDING CODE AND TO THE MANUAL OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION).
2. STRUCTURAL STEEL, ROLLED SECTIONS, AND PLATE USED IN THE WORK SHALL CONFORM TO ASTM A36.
3. PIPE SHALL BE WELDED SEAMLESS CONFORMING TO ASTM A53, GRADE "B" AND TUBE STEEL SHALL BE COLD FORMED CONFORMING TO ASTM A500, GRADE "B".
4. ALL STRUCTURAL STEEL WHICH WILL BE EXPOSED TO VIEW IN THE COMPLETED STRUCTURE, EXCEPT THAT PORTION TO BE FIELD WELDED, SHALL RECEIVE ONE SHOP COAT OF PAINT. UNPAINTED EXPOSED AREAS SHALL BE FIELD PRIMED USING SAME PAINT AS SHOP PRIMER.
5. BEARING SURFACES OF ALL COLUMNS SHALL BE MILLED OR SAW CUT TO A TRUE AND ACCURATE PLANE NORMAL TO THE AXIS OF THE COLUMN.
6. ALL STRUCTURAL STEEL SHALL BE FABRICATED IN AN I.C.B.O. CERTIFIED SHOP. ANY FABRICATION ACCOMPLISHED IN OTHER THAN A CERTIFIED SHOP MUST HAVE CONTINUOUS INSPECTION BY AN INDEPENDENT TESTING LABORATORY AND BE ACCOMPANIED BY A CERTIFICATE OF COMPLIANCE WITH THE DESIGN REQUIREMENTS, STAMPED BY A NEVADA LICENSED PROFESSIONAL ENGINEER. ANY STEEL DELIVERED WHICH WAS NOT FABRICATED BY A CERTIFIED SHOP OR NOT ACCOMPANIED BY A CERTIFICATION, SHALL BE REJECTED, OR 100% NON-DESTRUCTIVE TESTING AND CERTIFICATION BY AN INDEPENDENT TESTING LABORATORY WILL BE REQUIRED PRIOR TO ERECTION.
7. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. ANY FABRICATION PERFORMED PRIOR TO RECEIPT OF APPROVED SHOP DRAWINGS SHALL BE PERFORMED AT THE CONTRACTOR'S OWN RISK. FINAL DIMENSIONS USED FOR FABRICATION OF ALL STEEL SHALL BE THE TRUE FIELD DIMENSIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SUPPLY THESE DIMENSIONS TO THE STEEL FABRICATORS.
8. ALL STEEL CONNECTIONS SHALL BE AS DETAILED ON THE DRAWINGS OR DESIGNED PER REACTIONS SHOWN ON THE PLANS. CONNECTIONS SHALL BE STANDARD A.I.S.C. CONNECTIONS (EITHER WELDED OR BOLTED OR A COMBINATION OF THE TWO) OR FABRICATOR'S ENGINEER MAY PROVIDE ALTERNATE DESIGN OF CONNECTIONS. WHERE ALTERNATE CONNECTION DESIGNS ARE DESIRED THEY SHALL BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL AND SHALL INCLUDE SUBSTANTIATING CALCULATIONS BY A NEVADA LICENSED STRUCTURAL ENGINEER.
9. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM-A307, UNLESS NOTED OTHERWISE. SIZE SHALL BE AS INDICATED ON THE DRAWINGS.
10. ALL GROUT UNDER COLUMN BASE PLATES SHALL BE NON-SHRINK GROUT, MASTER BUILDERS "EMBECC 153" OR EQUAL.
11. ALL WELDING SHALL BE PERFORMED BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELDING SHOWN ON THE DRAWINGS OR NOTES. CERTIFICATES SHALL BE ISSUED BY A TESTING AGENCY APPROVED BY CLARK COUNTY, NEVADA BUILDING DEPARTMENT.
12. ALL WELDING SHALL BE DONE USING E70 SERIES LOW HYDROGEN RODS AND BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY STANDARDS.

## WELDING

1. ALL WELDING SHALL BE PERFORMED BY WELDERS HOLDING CURRENT CERTIFICATES ACCEPTABLE TO THE ENGINEER AND TO THE REGULATING BUILDING DEPARTMENT. ALL WELDED STRUCTURAL STEEL SHALL BEAR THE WELDER'S STAMP OR FULL RADIOGRAPHIC OR ULTRASONIC INSPECTION WILL BE REQUIRED.
2. ALL WELDING SHALL BE PERFORMED USING THE ELECTRIC ARC PROCESS IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF THE "CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY.
3. ALL FIELD WELDING MUST HAVE CONTINUOUS INSPECTION, NON-DESTRUCTIVE TESTING, AND CERTIFICATION BY AN INDEPENDENT TESTING LABORATORY AND A STAMP BY A LICENSED NEVADA ENGINEER.
4. ALL WELDS SHALL UTILIZE LOW HYDROGEN ELECTRODES (E70XX FOR STRUCTURAL STEEL AND E80XX FOR REINFORCING STEEL) OR OTHER A.I.S.C. APPROVED EQUIVALENT METHODS.
5. ALL WELDS SHALL BE CLEANED OF SLAG TO PERMIT VISUAL INSPECTION.

## METAL DECKING

1. STEEL DECK SHALL BE AS MANUFACTURED BY VESCO MANUFACTURING COMPANY OR EQUAL. TYPES AND GAGES SHALL BE AS SHOWN ON THE DRAWINGS. ALL SHEETS SHALL BE COATED BEFORE FABRICATION BY THE CONTINUOUS SHOP HOT GALVANIZED PROCESS OR PRIMER PAINTED AS NOTED ON DRAWINGS. SHEETS SHALL CONFORM TO ASTM A811, GRADE C AND ZINC COATING SHALL CONFORM TO ASTM A594, CLASS G-50.
2. DECK SHALL BE ANCHORED BY WELDING OR BY SCREWS TO ALL STRUCTURAL SUPPORTS. REFER TO PLANS FOR COMPLETE DECKING ATTACHMENT INFORMATION.
3. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION. ANY FABRICATION ACCOMPLISHED PRIOR TO RECEIPT OF APPROVED SHOP DRAWINGS SHALL BE ACCOMPLISHED AT THE CONTRACTOR'S OWN RISK. DRAWINGS SHALL DELINEATE ALL WELDING CLOSURES, DETAILS OF INSTALLATION, ETC.
4. CUTTING AND FRAMING OF OPENINGS NOT SHOWN ON DRAWINGS AS REQUIRED BY OTHER TRADES SHALL BE THE RESPONSIBILITY OF THE TRADE INVOLVED.

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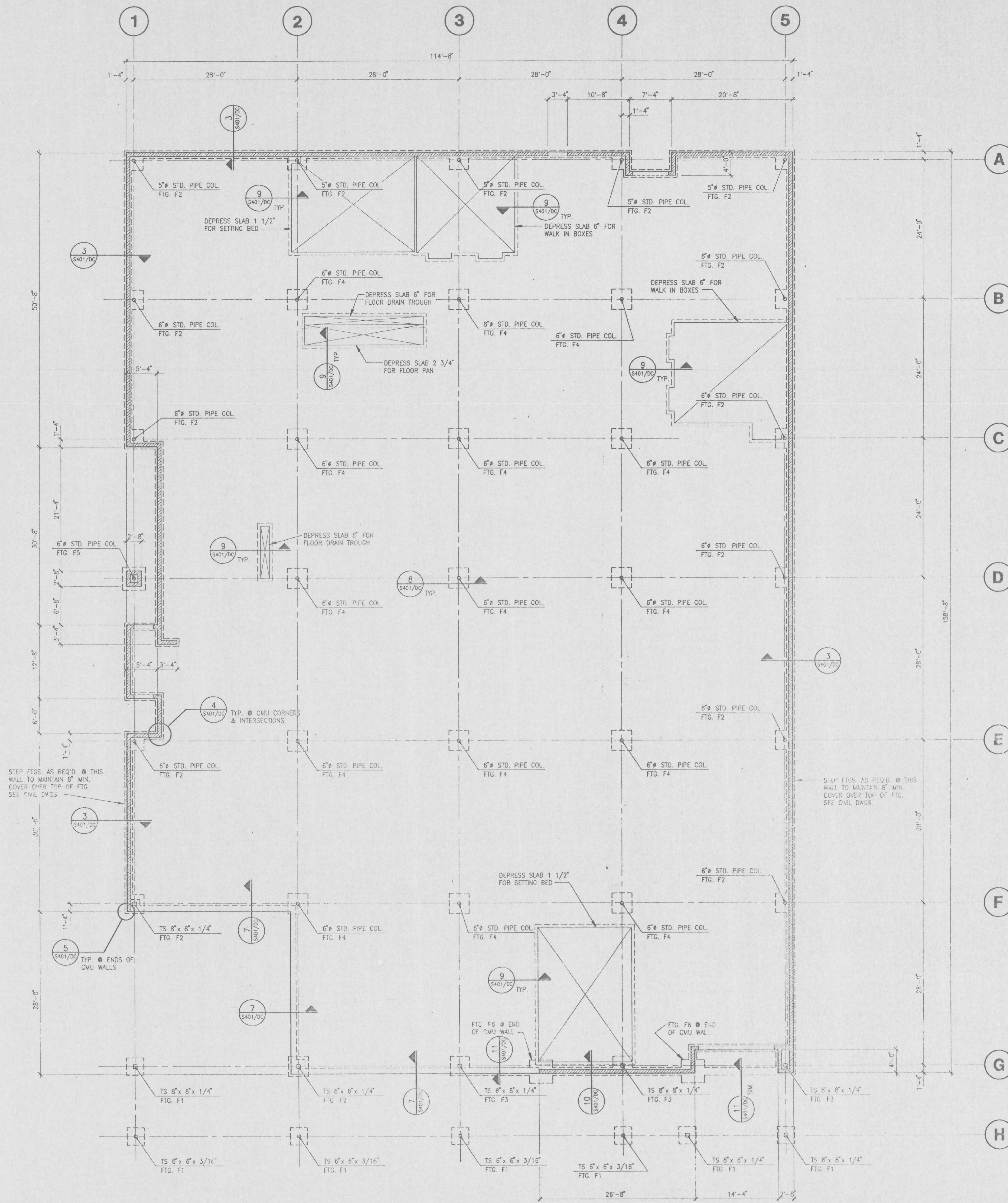
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# NOTES:

- FLOOR SLAB SHALL BE 5" THICK CONCRETE SLAB w/ #3 AT 18" ON CENTER EACH WAY CENTERED IN SLAB, TYPICAL.
- TOP OF FOOTINGS SHALL BE 12" BELOW TOP OF CONCRETE SLAB, TYPICAL UNLESS NOTED OTHERWISE.
- FOR PIPES THRU FOOTINGS AND TRENCHES ADJACENT TO FOOTINGS SEE DETAILS 1 (S401/DC) AND 2 (S401/SH) (SEE MECH. AND/OR CIVIL DWGS. FOR LOCATIONS WHERE OCCURS)
- ALL CMU WALLS SHALL HAVE #5 @ 32" O.C. VERTICAL (CENTERED IN WALL) & 2-#4 @ 48" O.C. HORIZONTAL, TYPICAL UNLESS NOTED OTHERWISE.
- FOR TYPICAL REINFORCING AROUND OPENINGS IN CMU WALLS SEE 12 (S401/SH)
- FOR TYPICAL CMU JOINT DETAIL, SEE 13 (S401/SH) (SEE ARCH. DWGS. FOR JOINT LOCATIONS)
- VERIFY EXACT SIZE, LOCATION, AND DEPTH OF ALL FLOOR SLAB DEPRESSIONS WITH ARCH. DRAWINGS.
- FOR SUBGRADE PREPARATION BELOW SLAB ON GRADE AND FOOTINGS SEE SOILS REPORT AND DETAIL 16 (S401/SH)

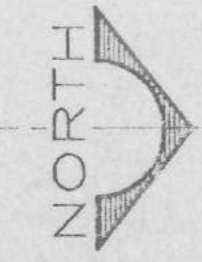
## FOOTING SCHEDULE

NO.	SIZE	REINFORCING
F1	3'-0" SQ. x 12" THK.	5-#4 E.W. BOTT.
F2	3'-4" SQ. x 12" THK.	5-#4 E.W. BOTT.
F3	3'-4" SQ. x 24" THK.	5-#4 E.W. TOP & BOTT.
F4	3'-6" SQ. x 12" THK.	6-#4 E.W. BOTT.
F5	4'-0" SQ. x 12" THK.	4-#5 E.W. BOTT.
F6	4'-0" SQ. x 24" THK.	4-#5 E.W. TOP & BOTT.



## FOUNDATION PLAN - DINING COMMONS

SCALE: 1/8" = 1'-0"



RECORD DRAWING 9/10/90

UNIVERSITY OF NEVADA, LAS VEGAS  
Student Housing and Dining Commons  
Las Vegas, Nevada

Drawing Title:  
FOUNDATION  
PLAN

Revisions:

Date: 8/18/89

HSE Project: 9101

Drawing:

S101/DC

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Project

**UNIVERSITY OF NEVADA, LAS VEGAS**  
Student Housing and Dining Commons  
Las Vegas, Nevada

RECORD DRAWING 9/10/90

Drawing Title:  
**ROOF  
FRAMING  
PLAN**

Revisions:

Date: 8/18/89

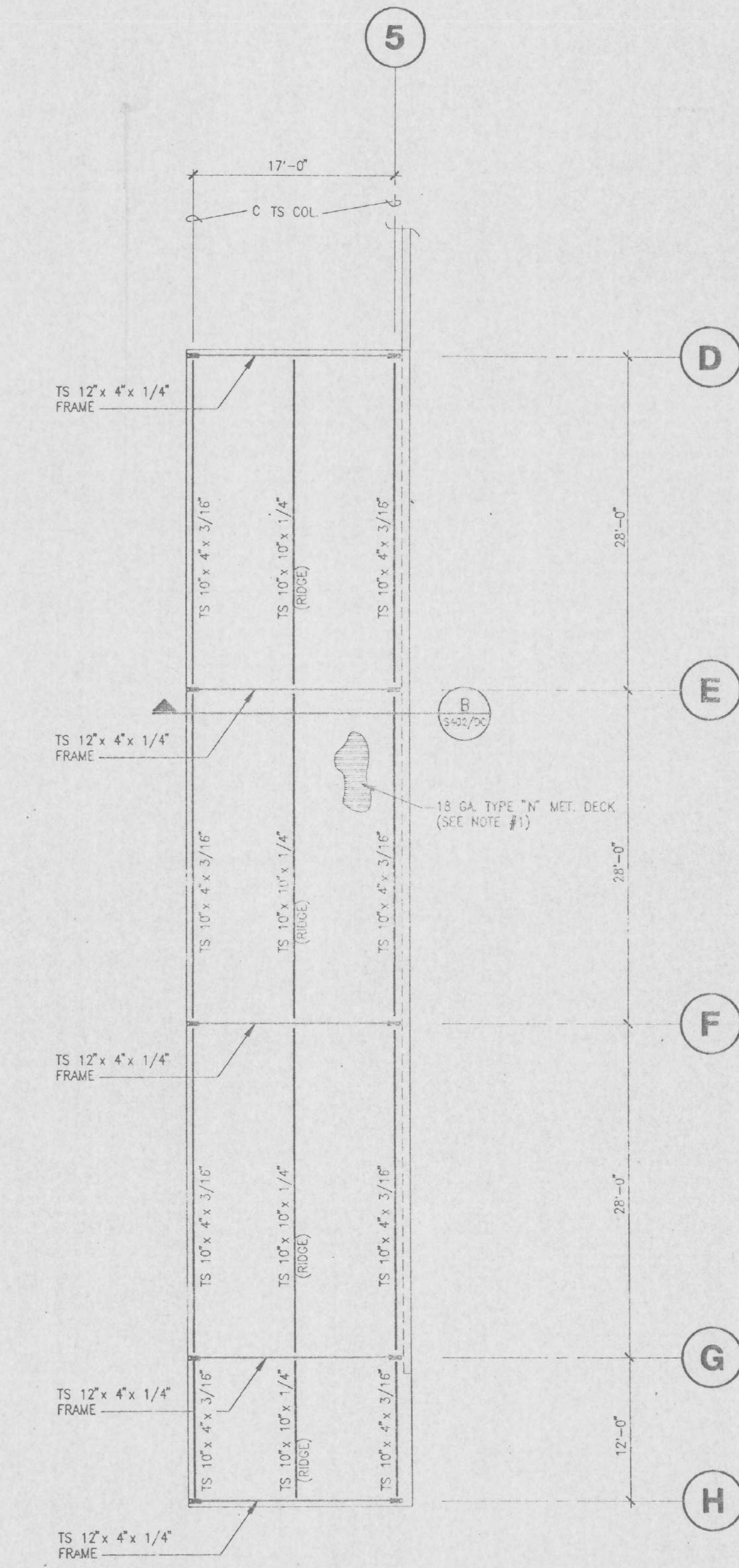
HSE Project: 9101

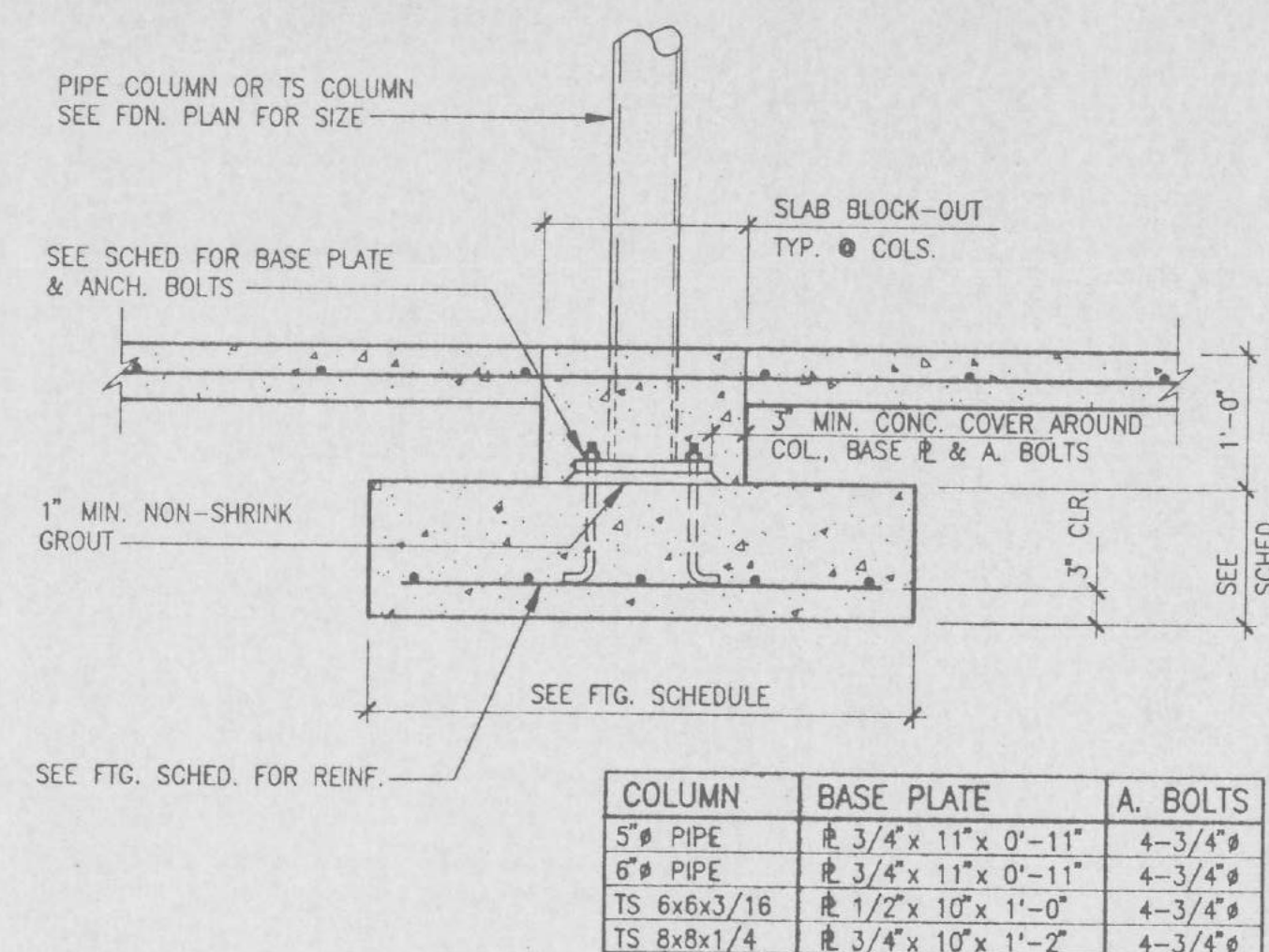
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S102/DC

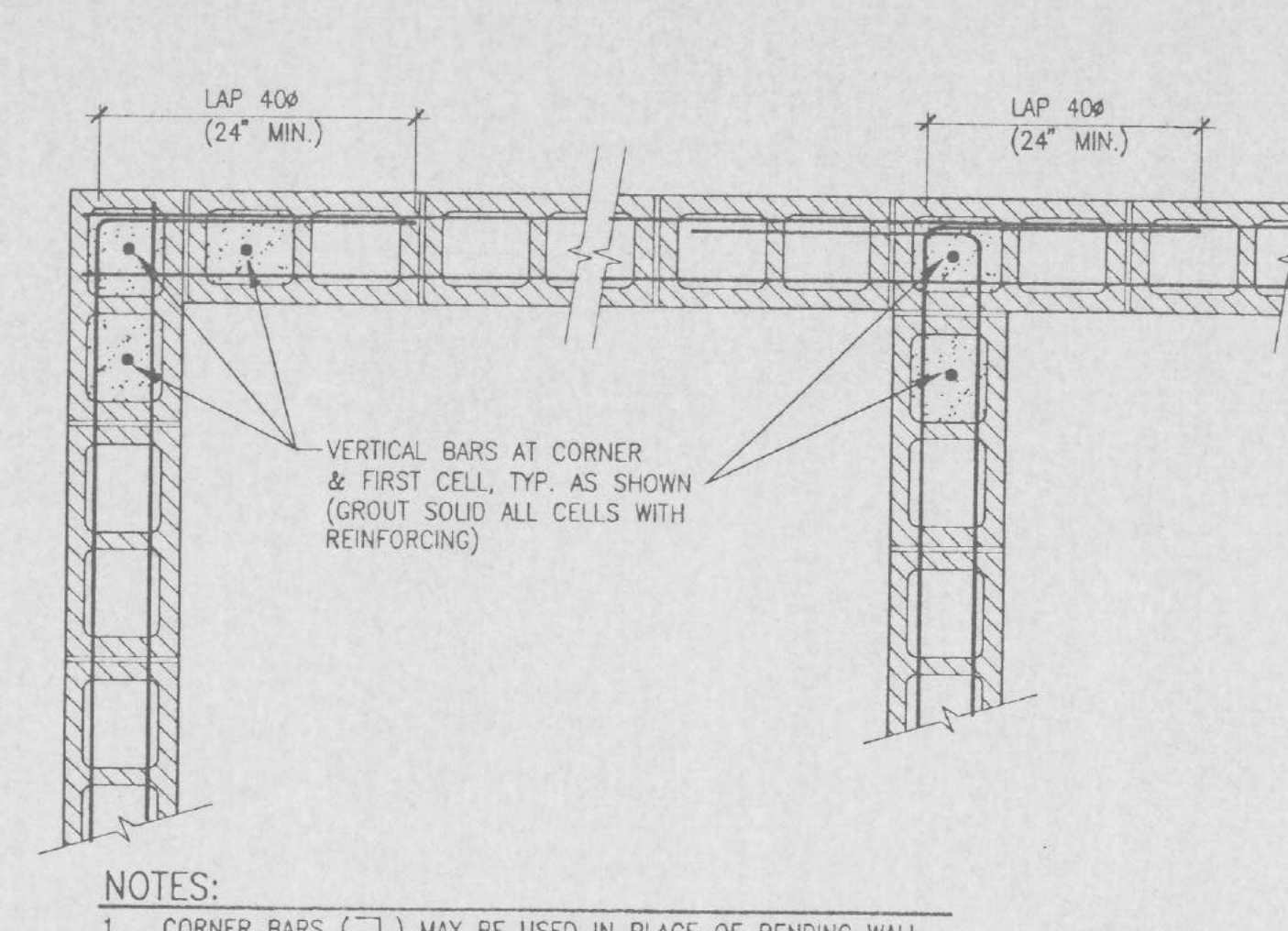
**NOTES:**

1. METAL DECKING • ROOF SHALL BE 18 GA. TYPE "N" MET. DECK w/ 4-1/2" PUDDLE WELDS PER SHEET TO ALL SUPPORTS AND SIDE SEAM WELDS • 12" O.C. TYPICAL.
2. TOP OF STEEL (T.O.S.) ELEVATIONS SHOWN ON FRAMING PLAN ARE DISTANCE ABOVE TOP OF CONCRETE SLAB • FLOOR, TYPICAL.



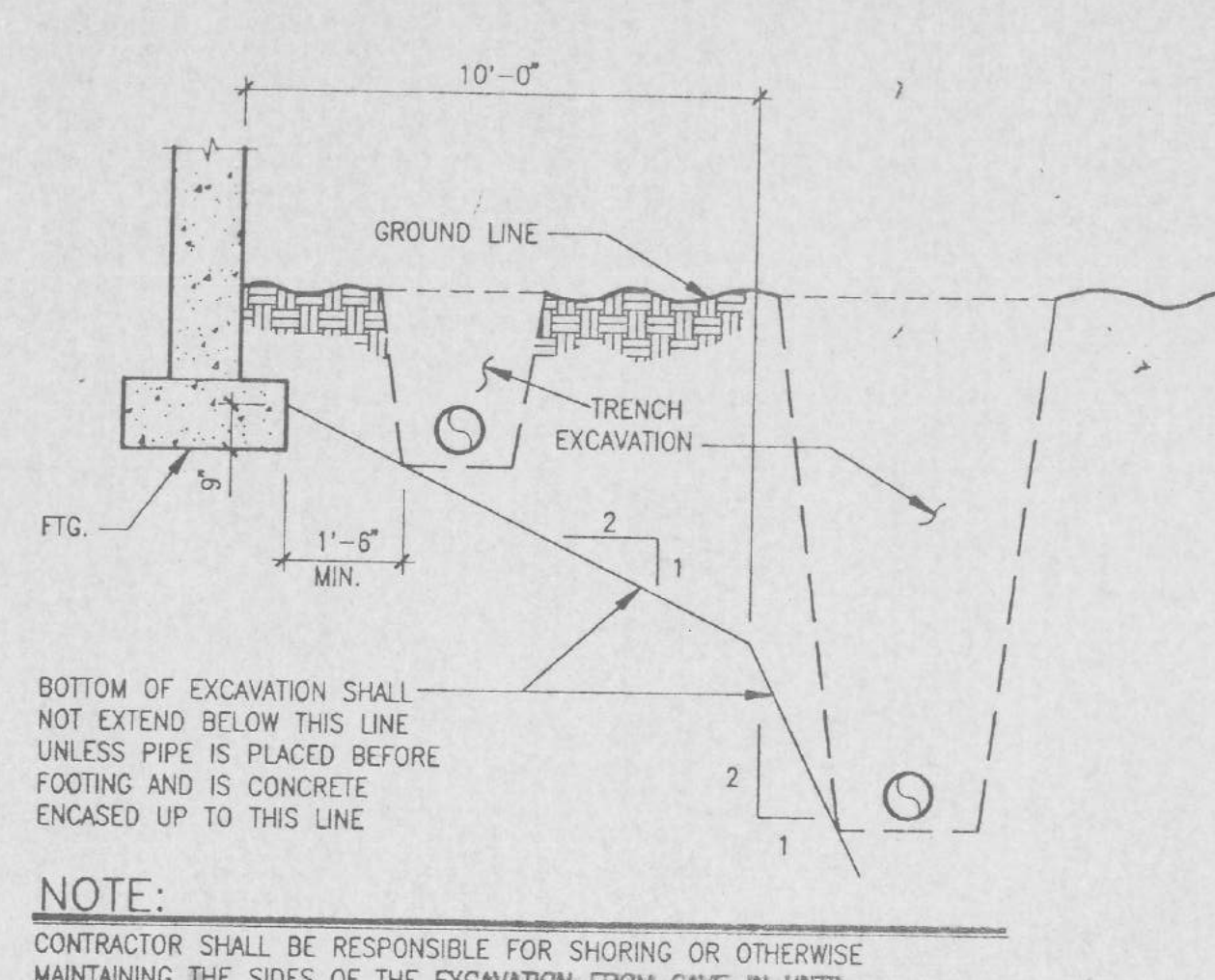


SECTION  
SCALE: 3/4" = 1'-0"



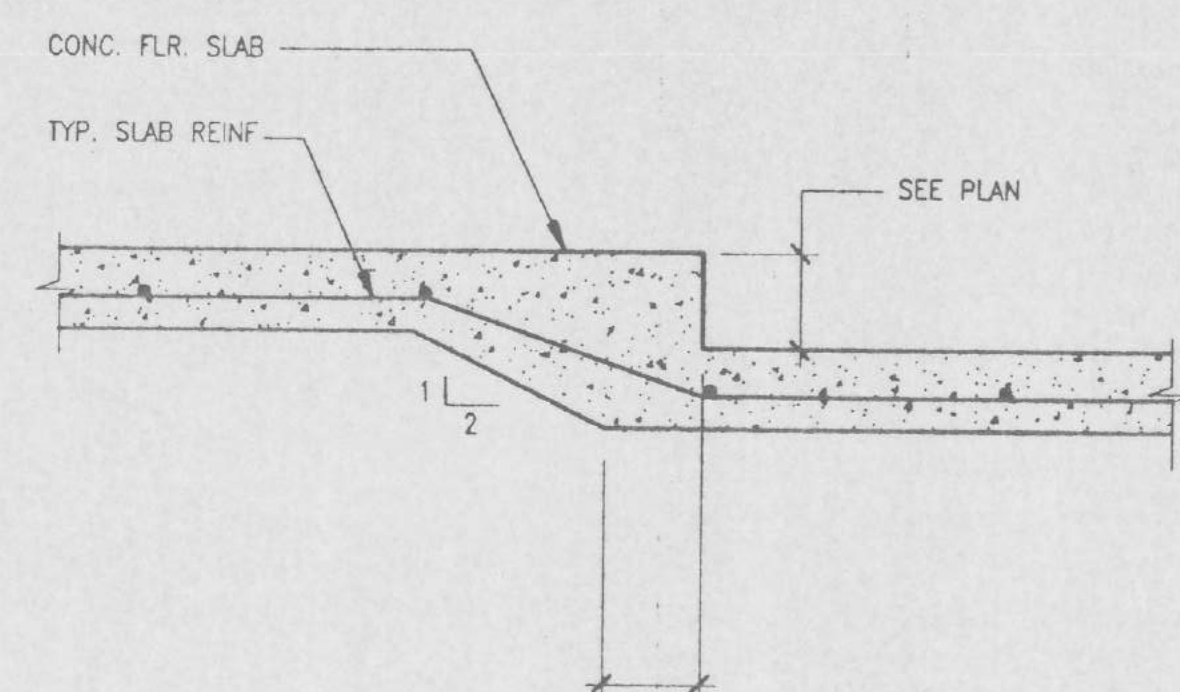
- NOTES:
- CORNER BARS ( ) MAY BE USED IN PLACE OF BENDING WALL REINFORCING PROVIDED EACH END LAP IS 40 DIAMETERS (2'-0" MIN.)
  - WHERE DIFFERENT SIZE BARS OCCUR AT CORNERS, LAP LENGTH SHALL BE BASED ON LARGEST BAR DIAMETER.

DETAIL  
SCALE: 1" = 1'-0"

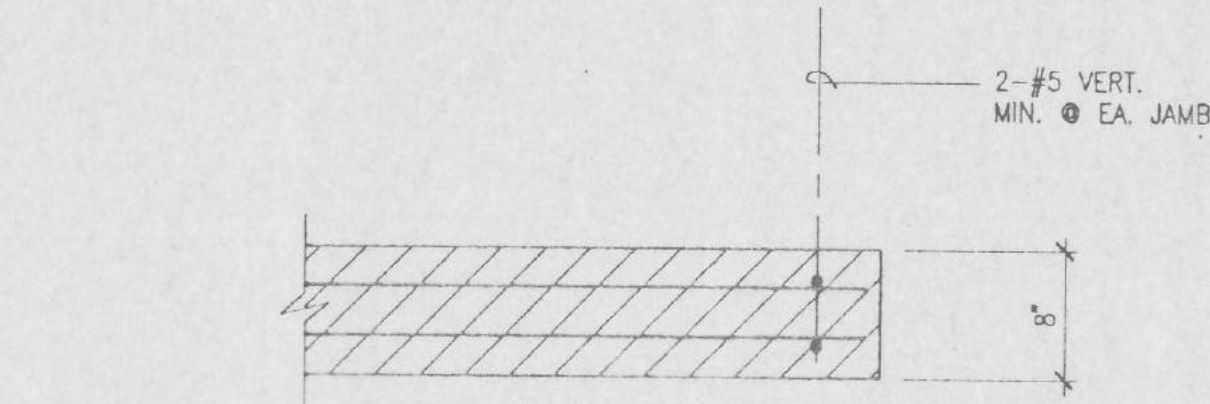


- NOTE:
- CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING OR OTHERWISE MAINTAINING THE SIDES OF THE EXCAVATION FROM CAVE-IN UNTIL ALL BACKFILL IS COMPLETED. BACKFILL IN ACCORDANCE WITH GENERAL NOTES AND SPECIFICATIONS.

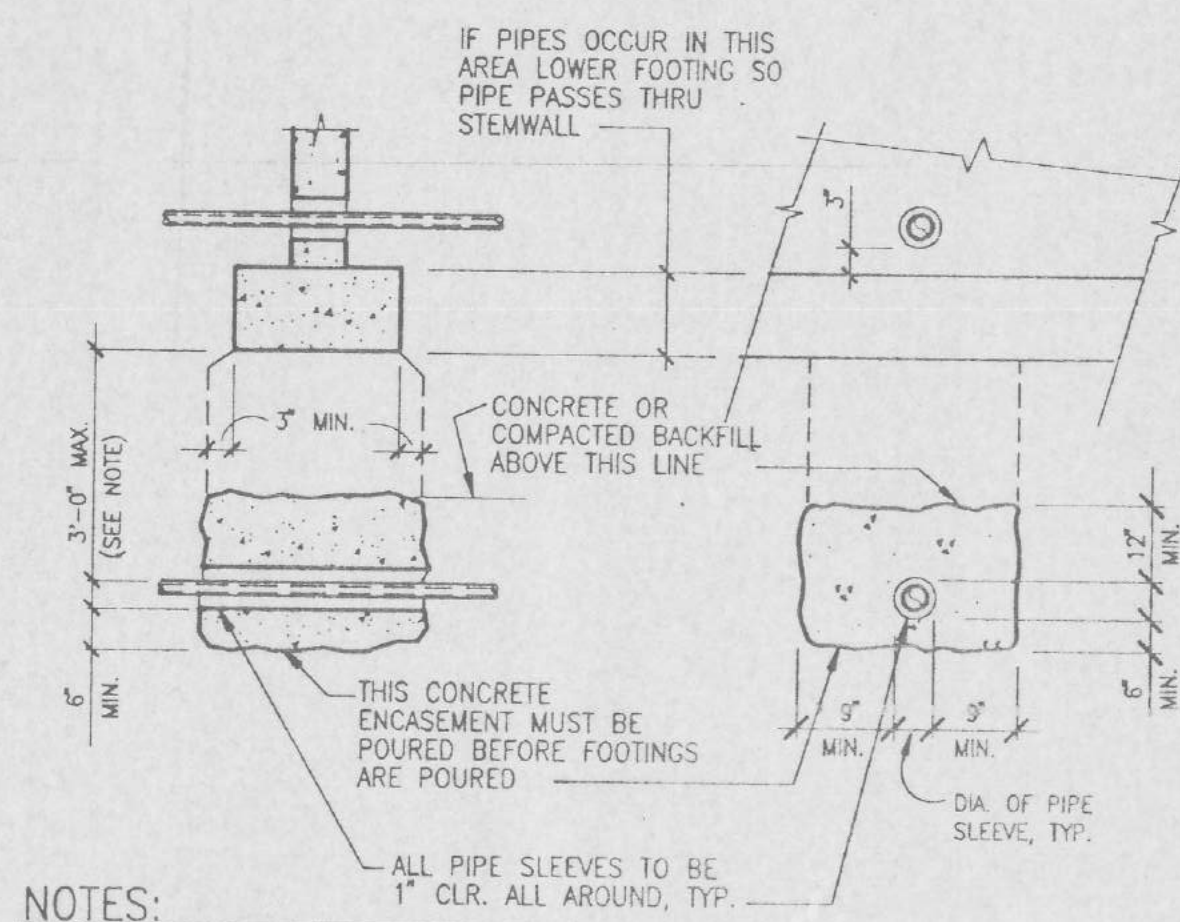
DETAIL  
SCALE: NONE



DETAIL  
SCALE: 1" = 1'-0"

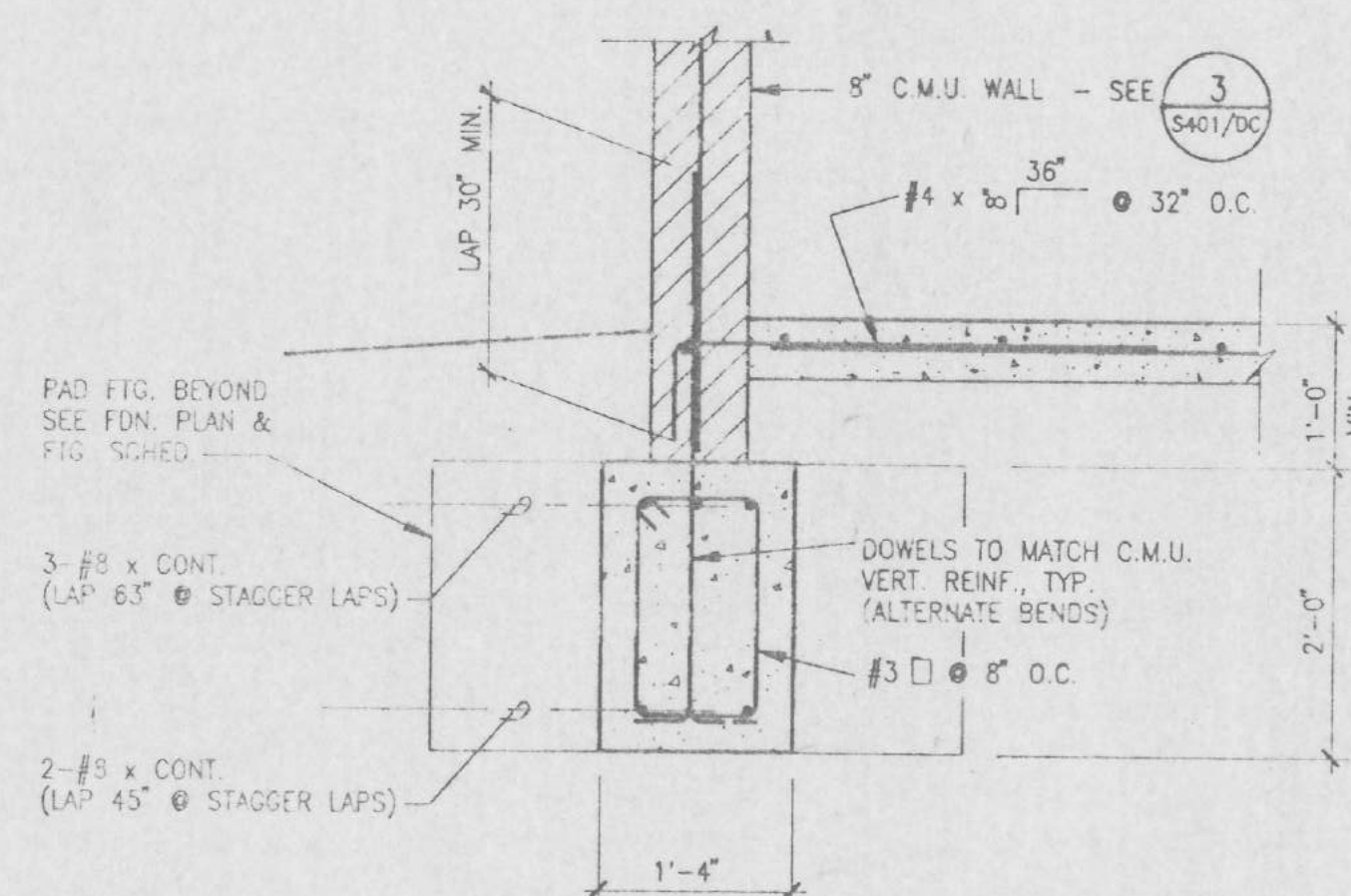


DETAIL  
SCALE: 1" = 1'-0"

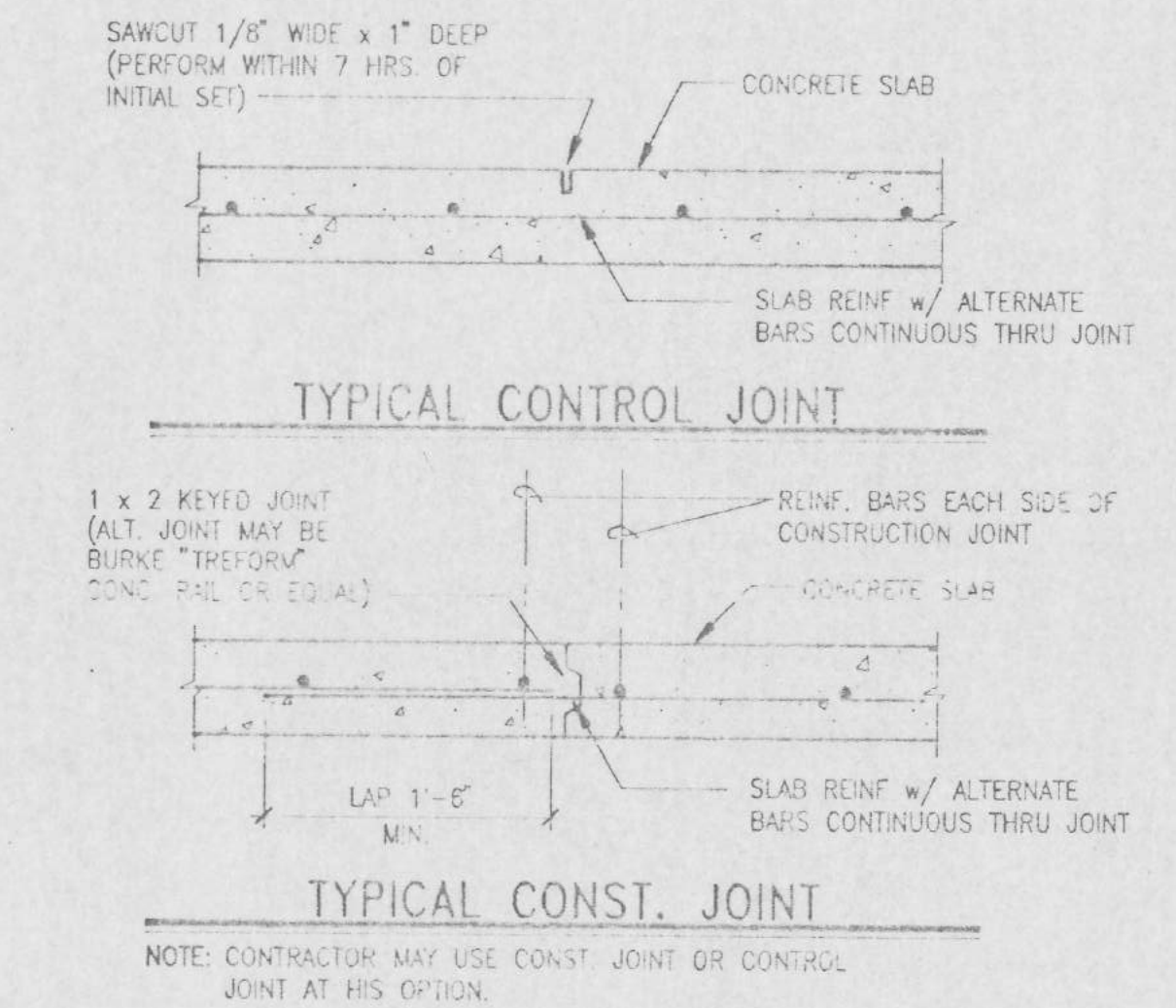


- NOTES:
- FOR PIPES MORE THAN 3'-0" BELOW BOIT. OF FTG. CONC. ENCASEMENT IS NOT REQUIRED, COMPACT SOIL TO 95%
  - SEE MECH. SPECS FOR CAULKING.
  - BUILDING FOOTING CONTRACTOR MAY FORM ENDS OF CONCRETE ENCASEMENT OR AT HIS OPTION LET CONCRETE SLOUGH TO NATURAL SLOPE.

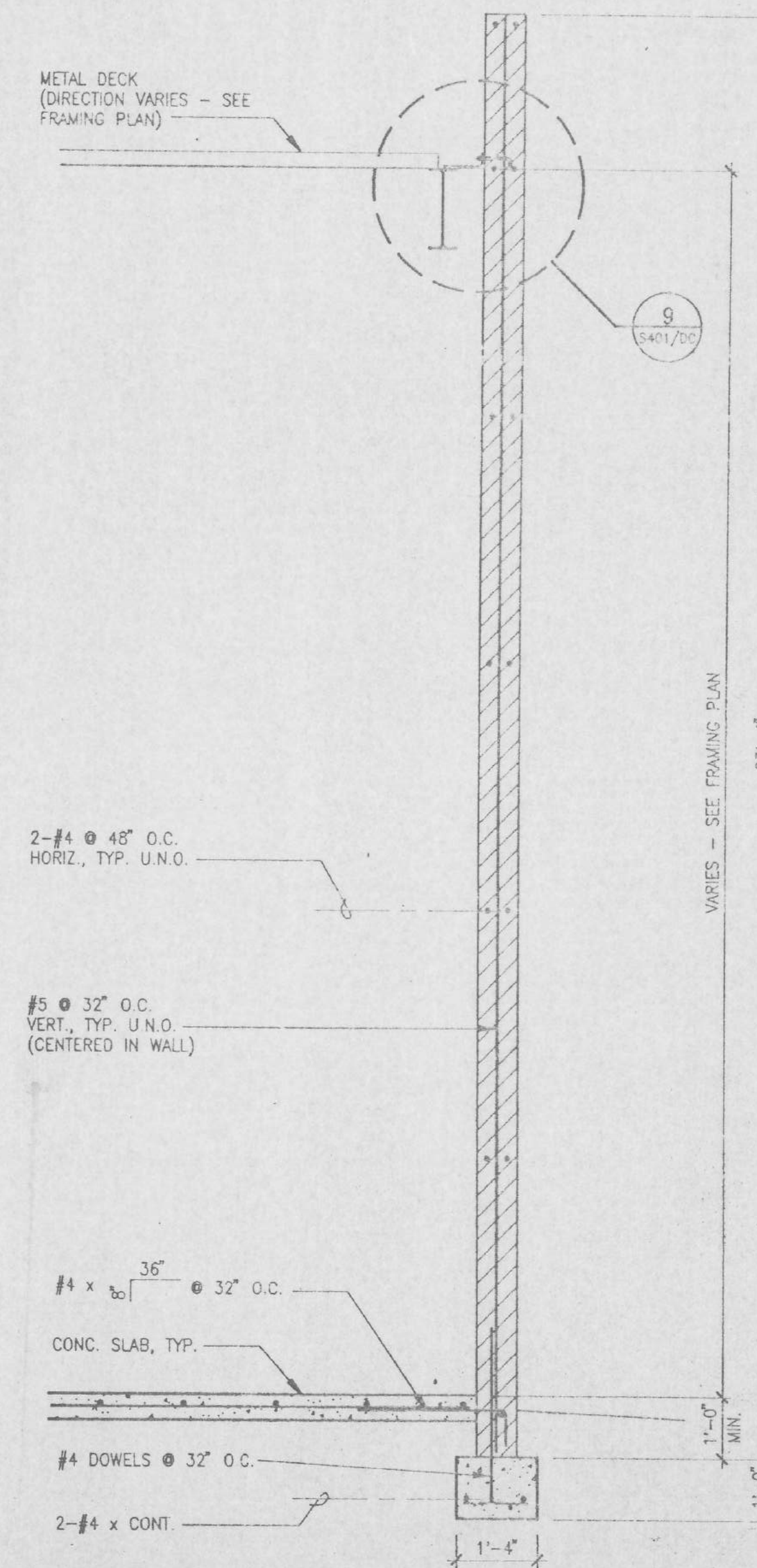
DETAIL  
SCALE: NONE



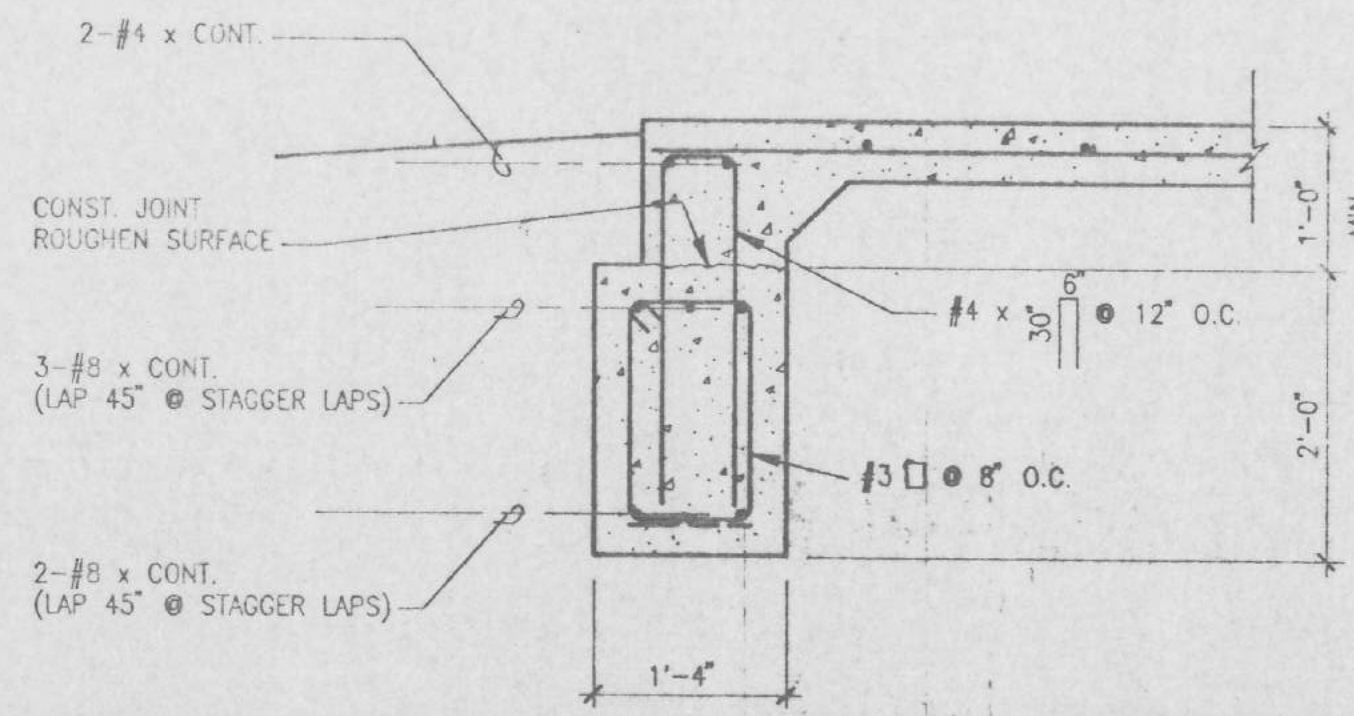
SECTION  
SCALE: 3/4" = 1'-0"



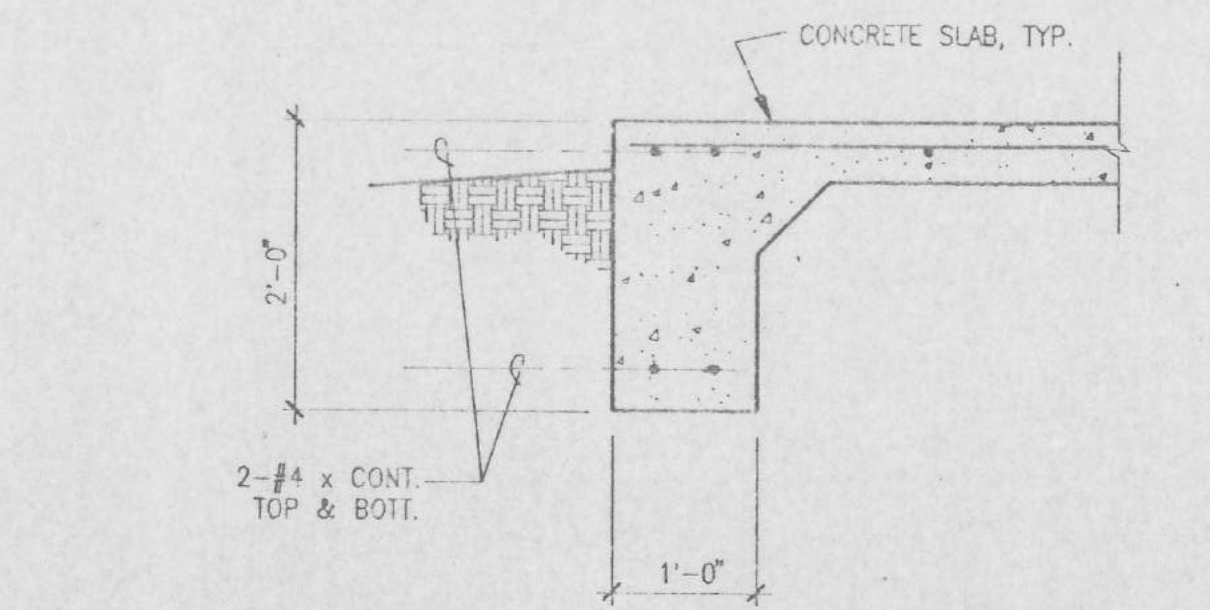
DETAIL  
SCALE: FULL SIZE



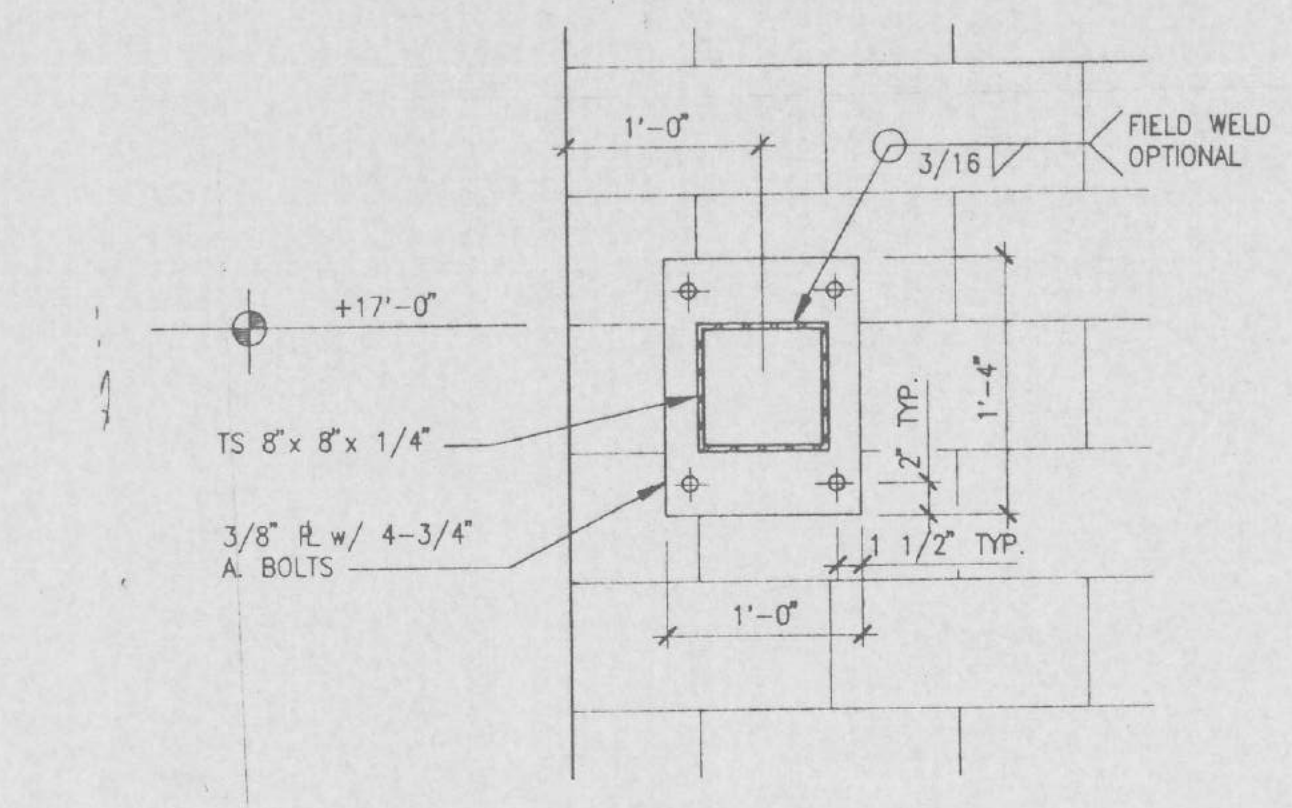
SECTION  
SCALE: 1/2" = 1'-0"



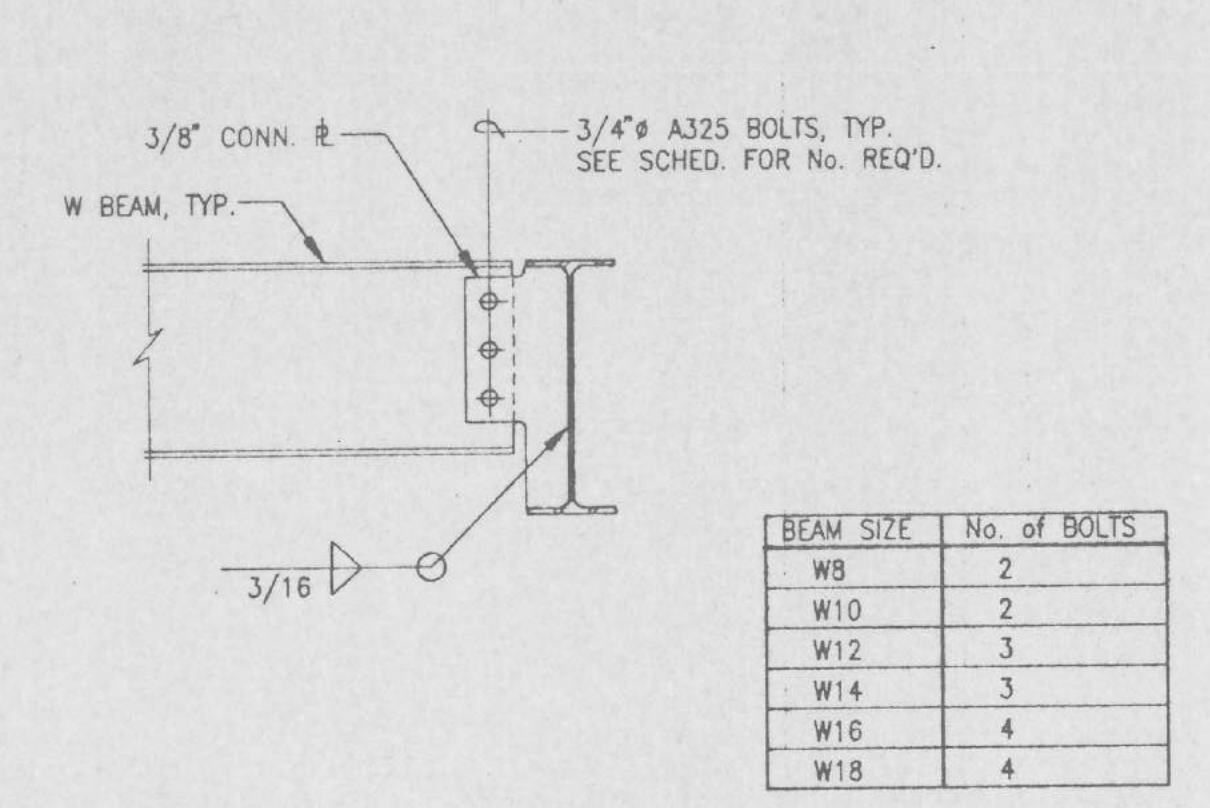
SECTION  
SCALE: 3/4" = 1'-0"



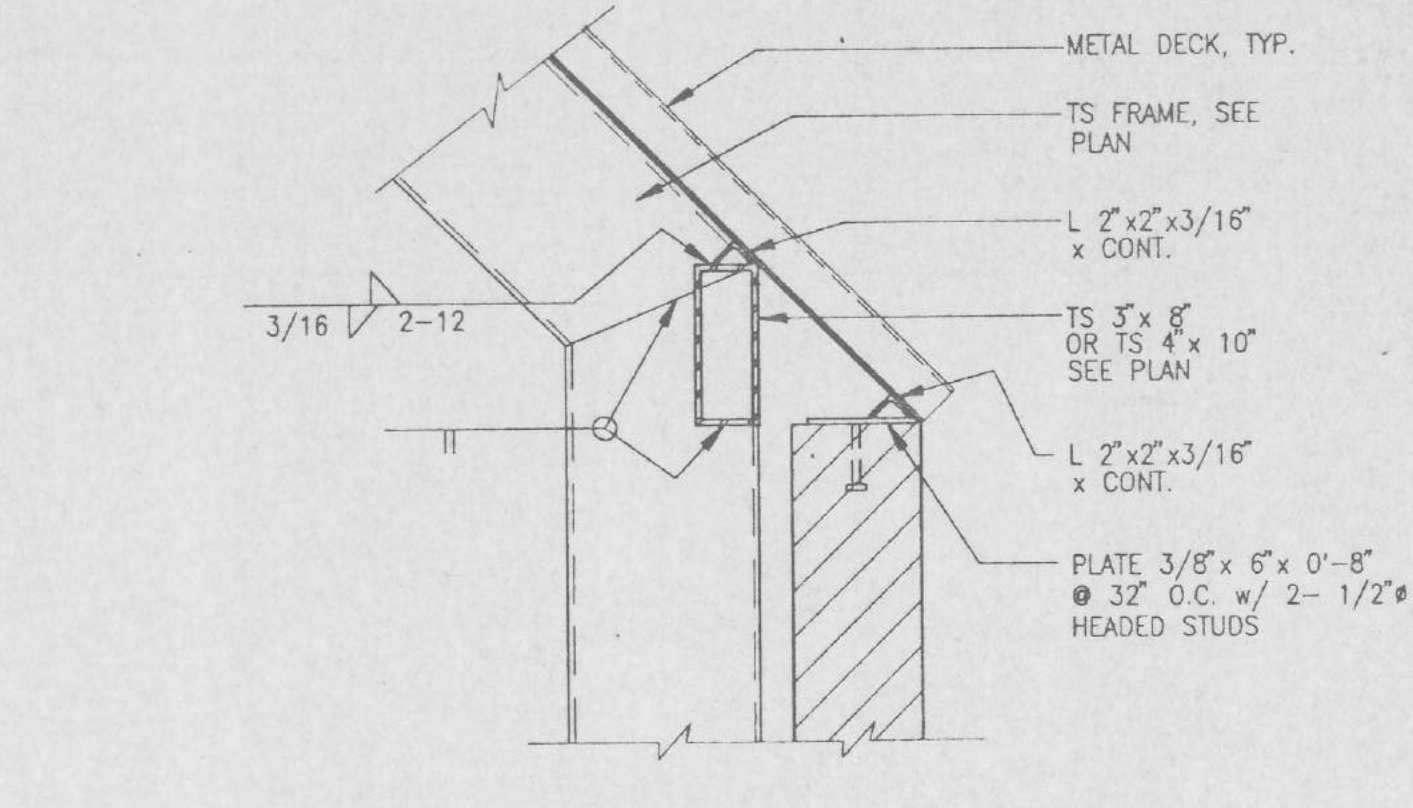
SECTION  
SCALE: 3/4" = 1'-0"



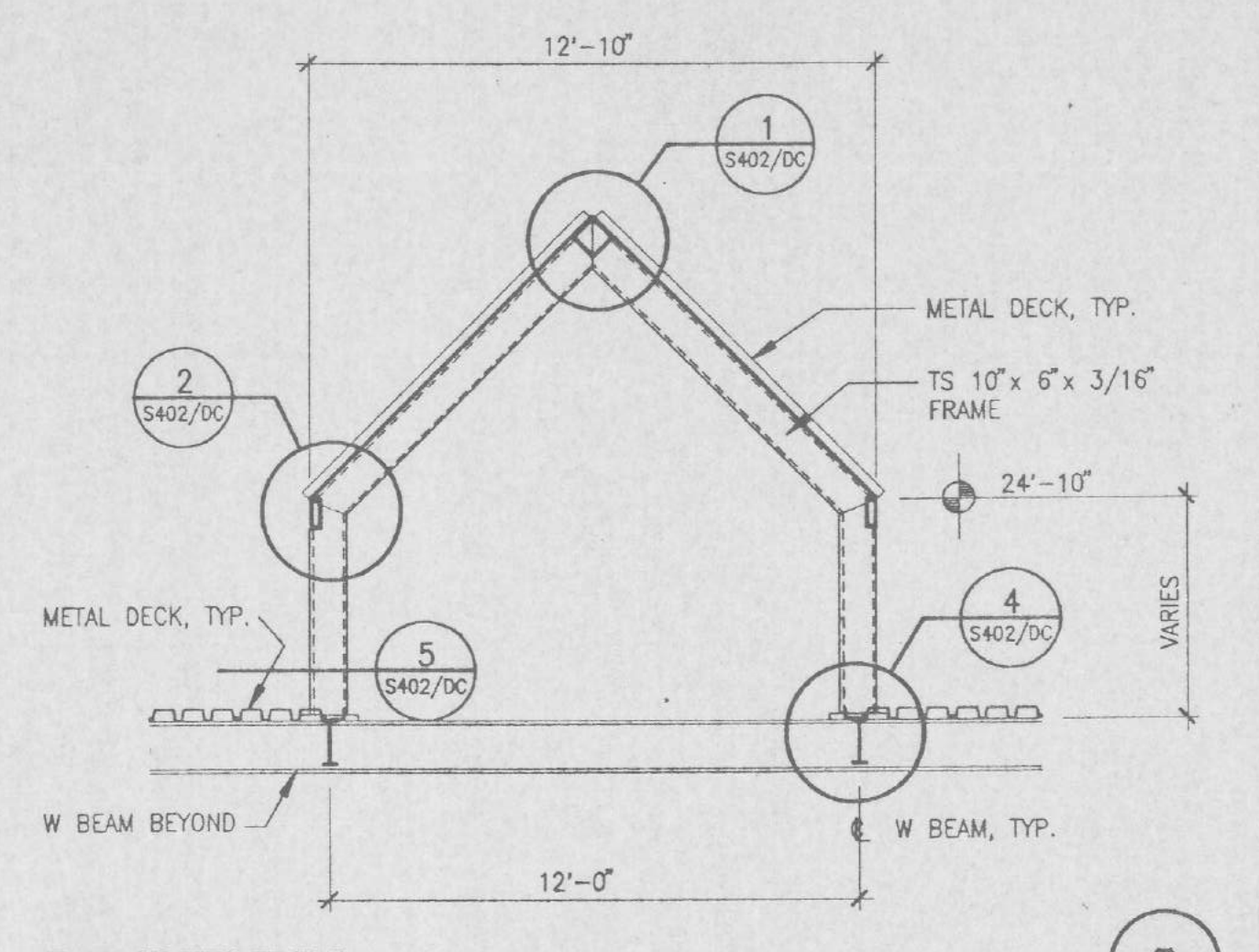
**DETAIL 10**  
SCALE: 1" = 1'-0"



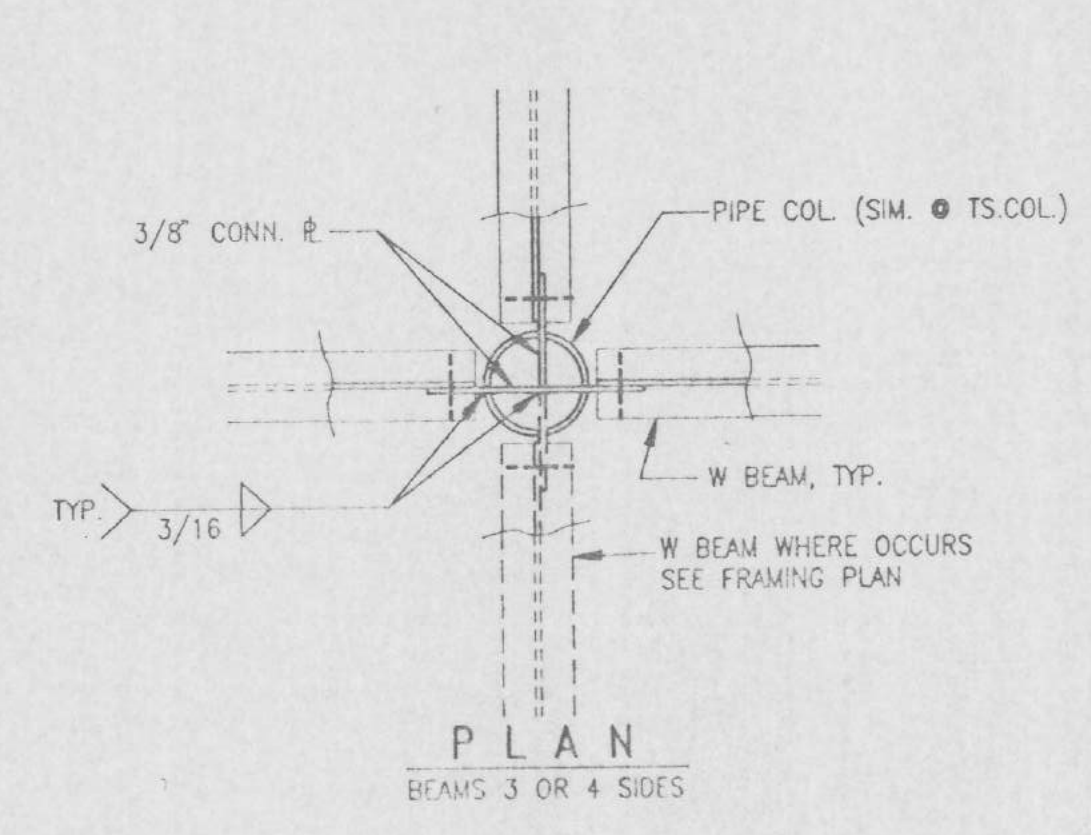
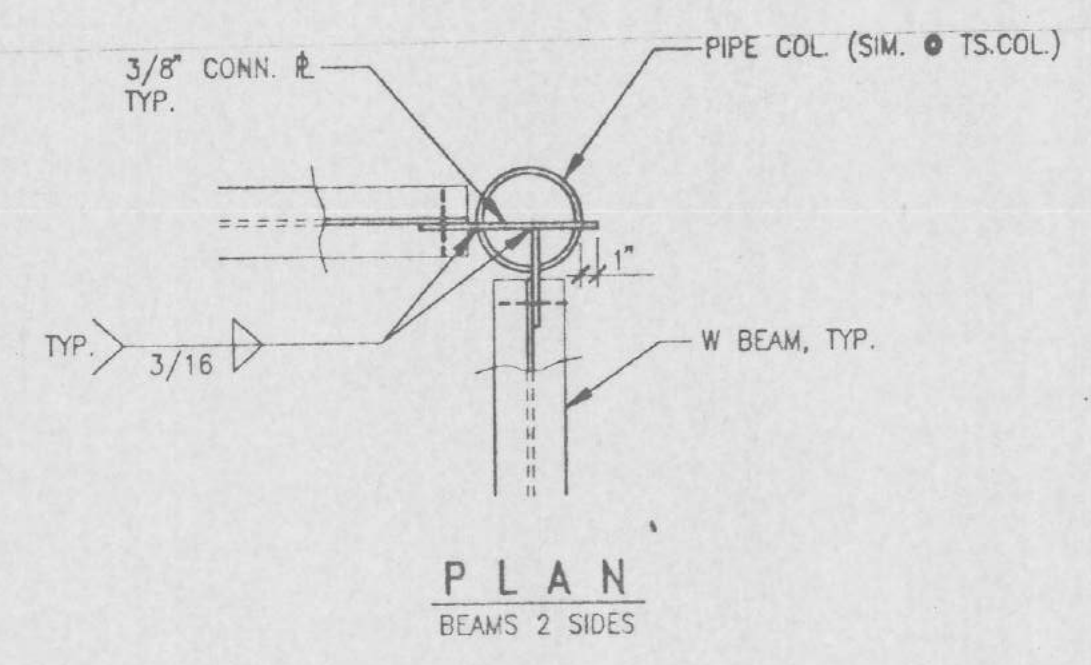
**DETAIL 7**  
SCALE: 1" = 1'-0"



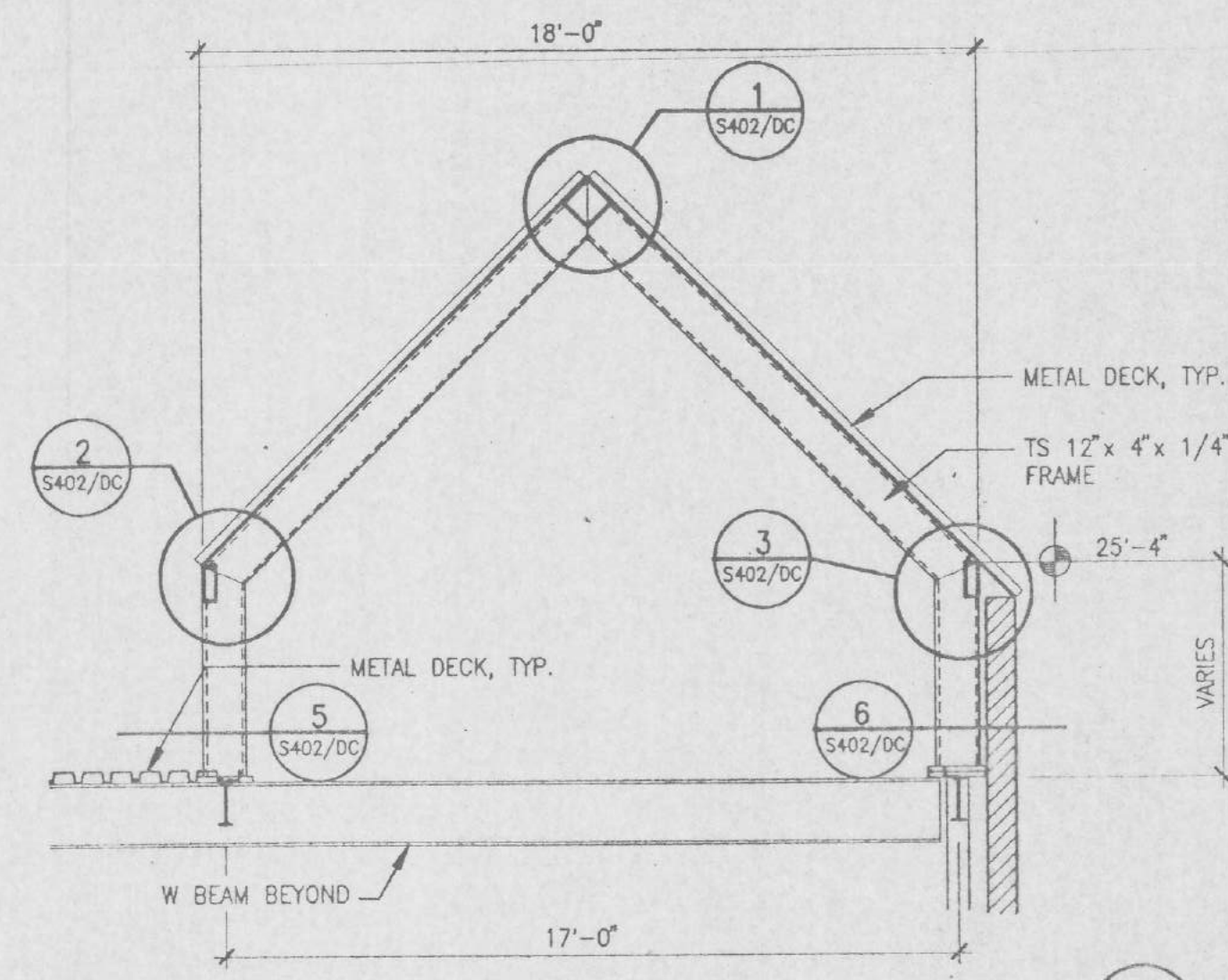
**DETAIL 3**  
SCALE: 1" = 1'-0"



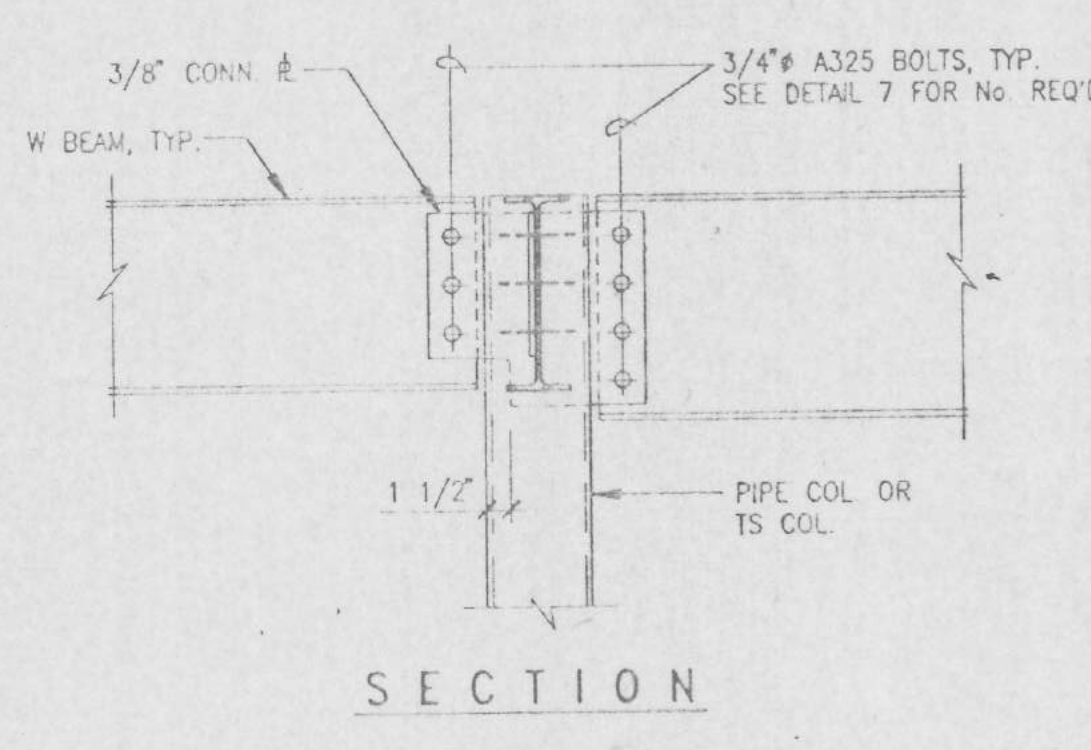
**SECTION A**  
SCALE: 1/4" = 1'-0"



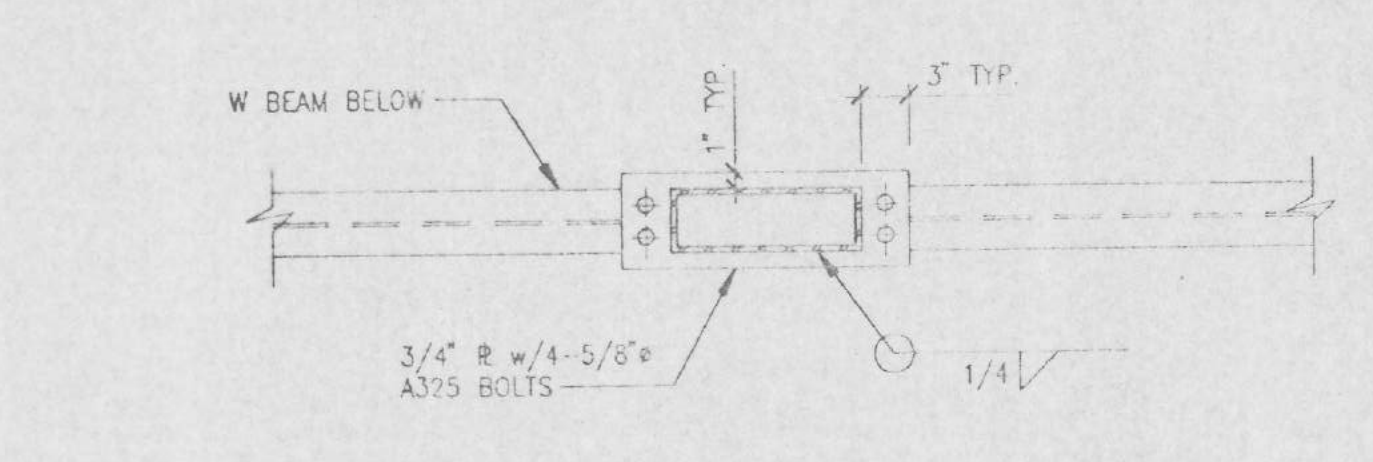
**DETAIL 4**  
SCALE: 1" = 1'-0"



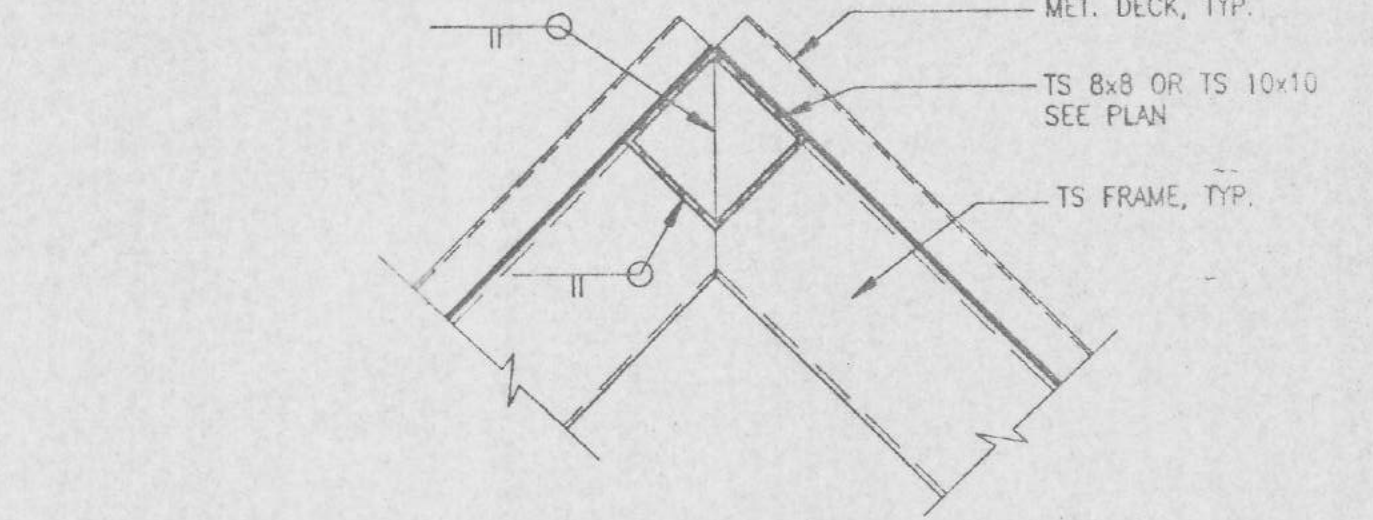
**SECTION B**  
SCALE: 1/4" = 1'-0"



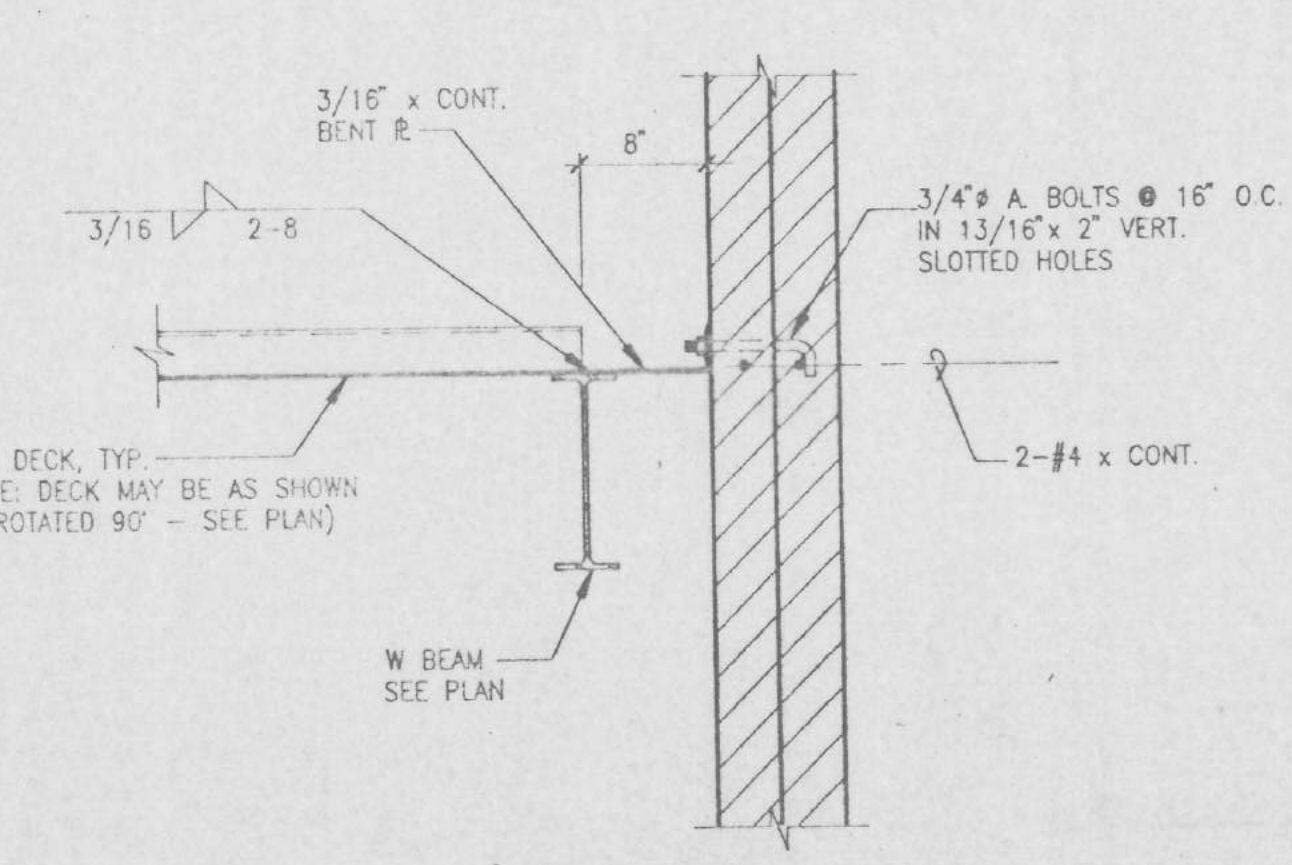
**DETAIL 8**  
SCALE: 1" = 1'-0"



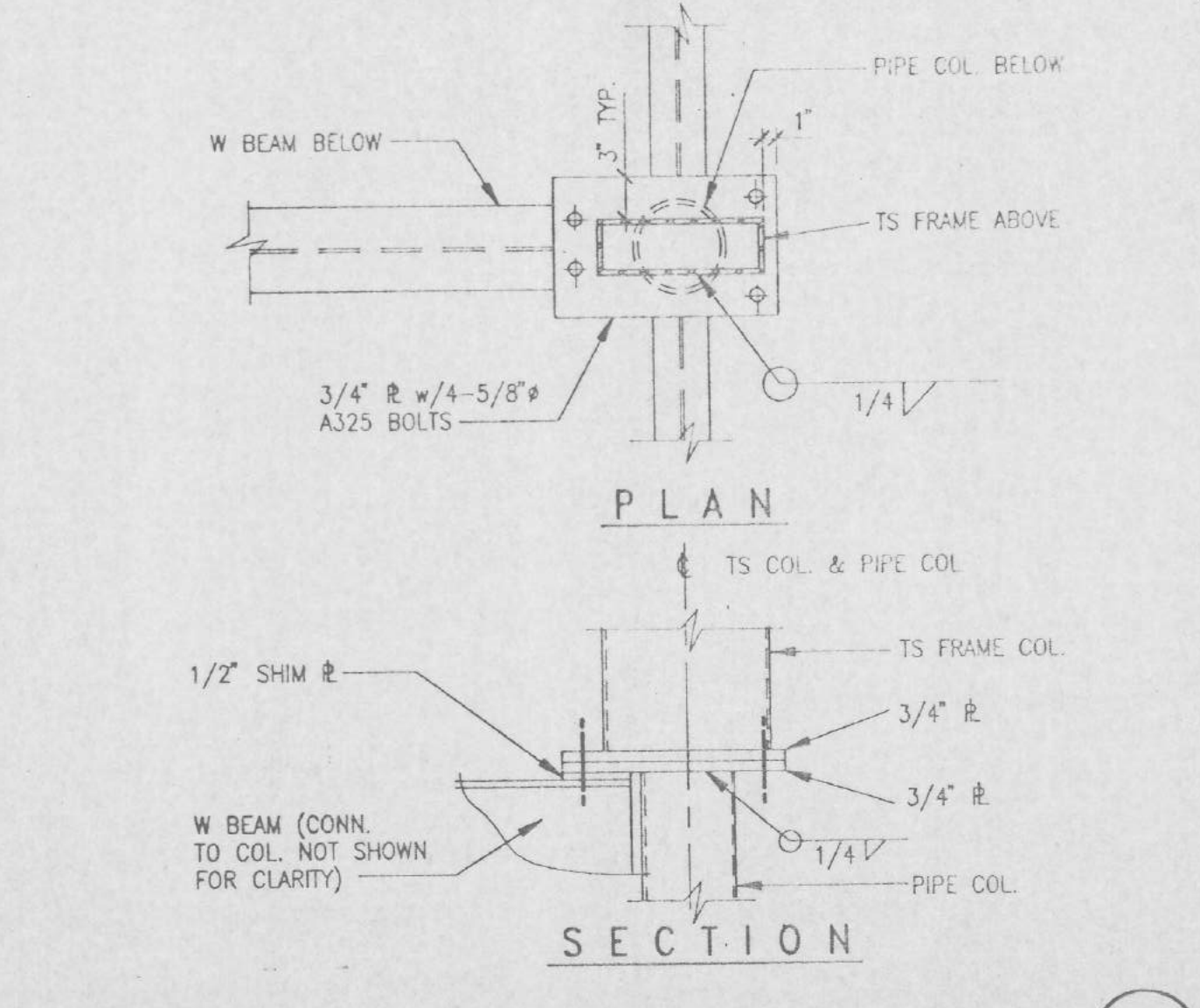
**DETAIL 5**  
SCALE: 1" = 1'-0"



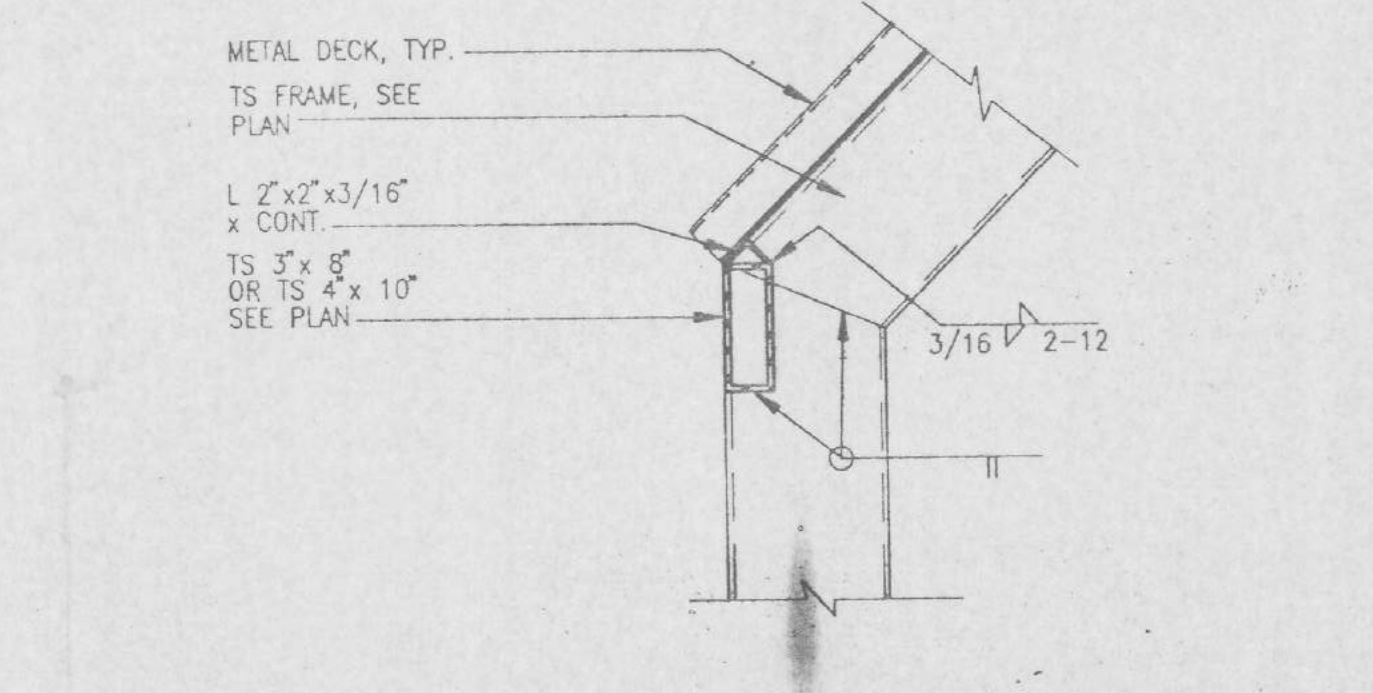
**DETAIL 1**  
SCALE: 1" = 1'-0"



**DETAIL 9**  
SCALE: 1" = 1'-0"



**DETAIL 6**  
SCALE: 1" = 1'-0"



**DETAIL 2**  
SCALE: 1" = 1'-0"