

General

1. This project shall meet all requirements of the City of Addison, Texas.
2. Live Loads: Wind Loads—Per UBC, see wood framing notes for additional loads.
3. Foundations are designed to meet the recommendations contained in a soil report prepared for this project by John H. Haynes & Associates, Inc. dated April 24, 1985 and additional report dated April 25, 1986.
4. All fill material shall have a maximum plasticity index of between 4 and 12 and shall be compacted to a minimum density of 95% standard proctor at or slightly above its optimum moisture content as determined by that test, unless otherwise noted. Shore all walls and grade beams as required during compaction operation.
5. Foundation design is based on allowable bearing pressure of 2,000 PSF.
6. Shop Drawings: Two prints and one sepia tracing of each drawing is to be submitted to the structural engineer for review. Distribution of prints is to be made only from returned sepia bearing a signed review stamp. No work on items shown thereon is to proceed unless the stamp clearly indicates "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED". General Contractor shall precheck all shop drawings before submission to engineer for review. Structural plans shall not be reproduced for use as part of the shop drawings. Allow two weeks for engineer to review.
7. Exposed faces of grade beams shall be rubbed within 24 hours after pouring.
8. General Contractor shall verify the size and location of all mechanical equipment on roof and suspended floors, if any. Principal openings are shown on the drawings. Additional openings and sleeves shall penetrate the floor through slab only. If openings must penetrate a structural element, general contractor shall verify adequacy of such members prior to beginning construction.
9. General Contractor shall verify all dimensions shown on the structural drawings with the architectural drawings. Contractor shall verify dimensions before construction and notify architect of any discrepancies before proceeding with the work.

Concrete

1. All concrete and metal reinforcement shall be fabricated and placed in conformity with the "ACI STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318-83).
2. Poured in place concrete shall strictly adhere to the proportions established in design mixes, consisting of the actual materials to be used during construction, for several strengths and uses intended. These design mixes are to be prepared by a prequalified laboratory, and the materials and test results are to be approved by the engineer prior to use.
3. Poured in place concrete is to be normal weight and is to develop a compressive strength of 3000 PSI at 28 days.
4. Unless noted, metal reinforcement for poured in place concrete to be ASTM A-615 Grade 60, Grade 40, stirrups and ties. Welded wire fabric shall conform to ASTM A-185.
5. Contractor shall verify the presence, location, sizes and correctness of all openings, slab depressions and embedments required prior to concreting. No openings shall be permitted through beams, joists or columns unless shown on the structural drawings or approved by the structural engineer.
6. Proper accessories/supports are to be used as noted and approved on the shop drawings. Provide galvanized or plastic coated chairs and bars supports at all supports at soffits of all exposed members. All reinforcing to be securely and accurately held in locations shown on plans prior to the placement of concrete.
7. Clear minimum coverage of concrete over reinforcing bars shall be as follows:  
 Concrete placed against earth: 3"  
 Formed concrete against earth: 2"  
 Beams to ties/stirrups: 1 1/2"  
 Top and bottom of slabs: 3/4"
8. Construction joints of all types may be used only where shown on fabricator's reviewed placing drawings. All construction joints not shown on plans shall be keyed and located at midspan. Reinforcing shall be continuous thru joint.
9. Provide corner bars in all beams and walls of same size and spacing as adjacent bars, unless noted otherwise. Lap 30 bar diameters.
10. Earthformed grade beams will not be allowed.

Structural Steel

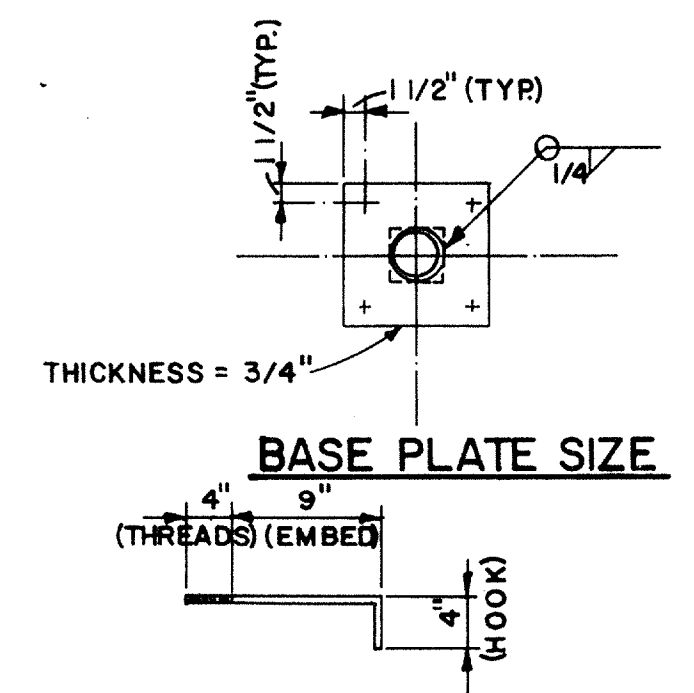
1. All structural steel shall be fabricated and erected in conformity with the requirements of the Eighth Edition, AISC "MANUAL OF STEEL CONSTRUCTION".
2. Except as shown or noted, all structural shapes and plates are to be ASTM A-36 material. Structural tubing to be ASTM A-500, Grade B. Pipe columns to be ASTM A-501.
3. Unless otherwise shown or noted, connection at non-continuous joints shall be detailed as required by Part 4, AISC Manual, framed beam connections, for one-half the allowable loads for beams tabulated in Part 2 of the AISC Manual. Field connections at non-continuous joints are to be bolted or welded.
4. All welding shall conform to recommendations of A.W.S. and all welds, including field, shall be made only by certified welders. Use E70XX electrodes.
5. All bolts not otherwise specified shall be 3/4", high strength bearing type (ASTM A-325) with washers. Provide two nuts and washers each with each anchor bolt required.
6. Provide bolts and punch holes in structural and misc. metal for attachments/wood nailers as required on the architectural, mechanical or structural drawings.
7. All structural and misc. metal is to be cleaned prior to shop painting/shipment in accordance with the Structural Steel Painting Council requirements for the following grade: Power Tool.
8. Shop painting shall conform to the following specifications: Trussed steel joists: TYP-636. (Asphalt paints not permitted) Shapes, plates, etc.: TYP-636. Brush applied 1.5 mil. dry min, spray applied 1.5 mil. dry min.

Plywood Roof Deck Notes:

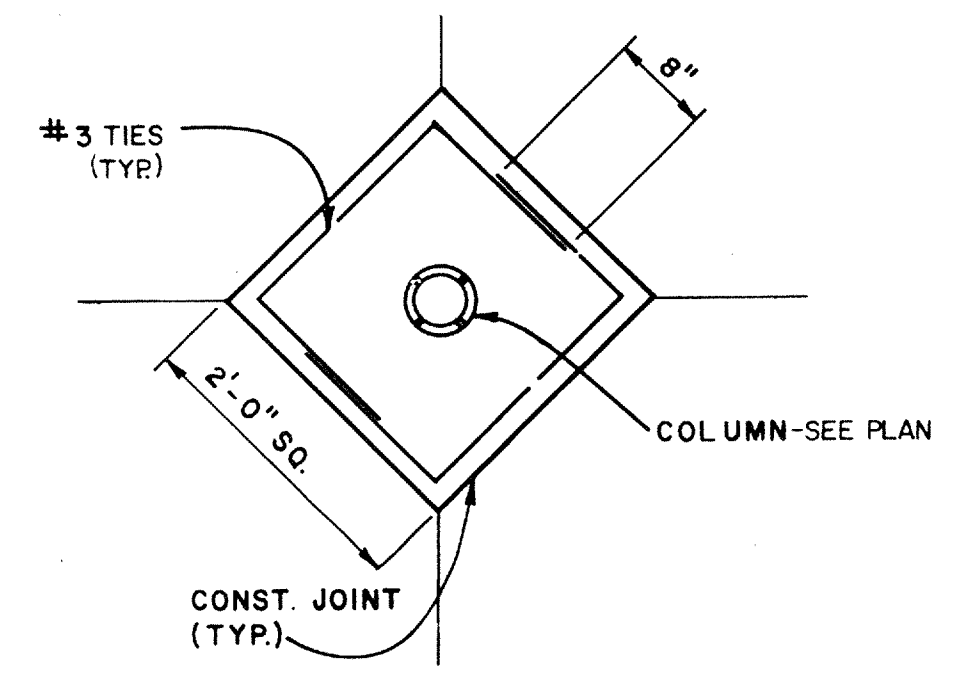
1. Provide 1/2" (U.N.C.) plywood panels structure I grade.
2. All plywood panels to be blocked on all edges.
3. Deck is to be installed with panel long dimension perpendicular to roof truss direction and stagger panels.
4. Nail spacing: (See plan for zone locations).  
 Zone 1:  
 6" O.C. @ roof perimeter (diaphragm)  
 6" O.C. @ other panel edges  
 Zone 2:  
 12" O.C. @ intermediate framing members  
 4" O.C. @ roof perimeter (diaphragm boundaries)  
 6" O.C. @ other panel edges  
 12" O.C. @ intermediate framing members
5. Use 10d nails with 1 5/8" minimum penetration into blocking and framing members.

MASONRY NOTES:

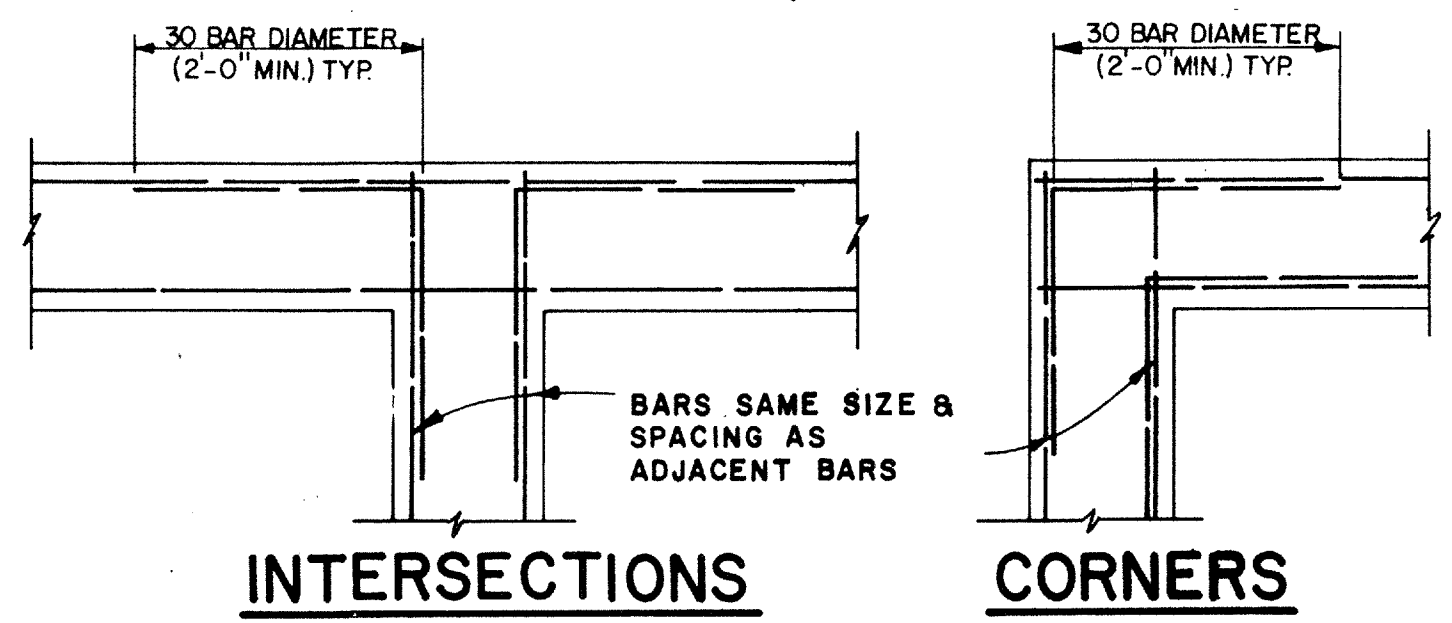
1. Concrete masonry shall be hollow concrete units - Grade N.
2. Mortar used shall be type S.
3. Special inspection is not required.
4. All cells containing reinforcement shall be filled solidly with grout per ASTM-476.
5. Provide two cells each side of all openings with one #5 bar to TOP OF WALL (INCLUDE @ LOUVERS).
6. Horizontal wall reinforcing used shall be standard truss at 16" by Duro - Wall, or equal.
7. Lapped splices for reinforcement shall not be less than 30 bar diameters. Welded or mechanical connections shall develop the strength of reinforcement.
8. All units shall be laid with full mortar beds on the face shells. All head joints shall be filled solidly with mortar for a distance in from the face of the unit not less than the thickness of the longitudinal face shells.
9. Unless the wall is to be poured solid, end walls and cross webs forming cells to be filled shall be full-bedded in mortar to prevent leakage of grout.
10. All reinforcing shall be in place prior to grouting. Vertical reinforcing bars shall be held in position at top and bottom and at intervals not further apart than 192 bar diameters.
11. Shoring for block lintels shall remain in place of a minimum of 15 days after the wall has been completed.
12. Lintels above doors and windows shall be 8" deep with two #5 bars top and bottom, and extend 2'0" past each side of opening.



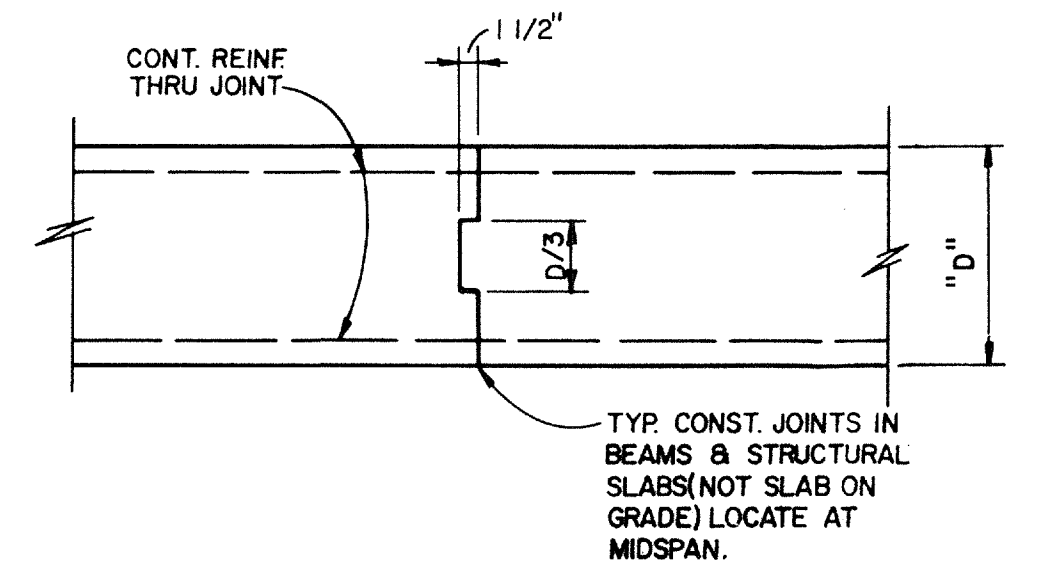
A-307 ANCHOR BOLT  
01 BASE PLATE DETAIL



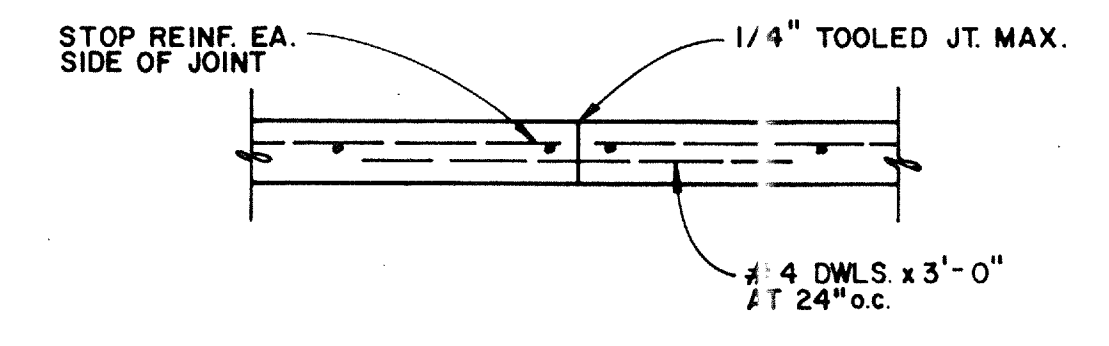
TYP. CONSTRUCTION JOINT AT  
02 INTERIOR COLUMN DET.



03 CORNER BAR DETAIL AT  
ALL WALLS AND BEAM



04 TYP. CONST. JOINT DETAIL  
(FOR BEAMS & STRUCTURAL SLABS ONLY.)

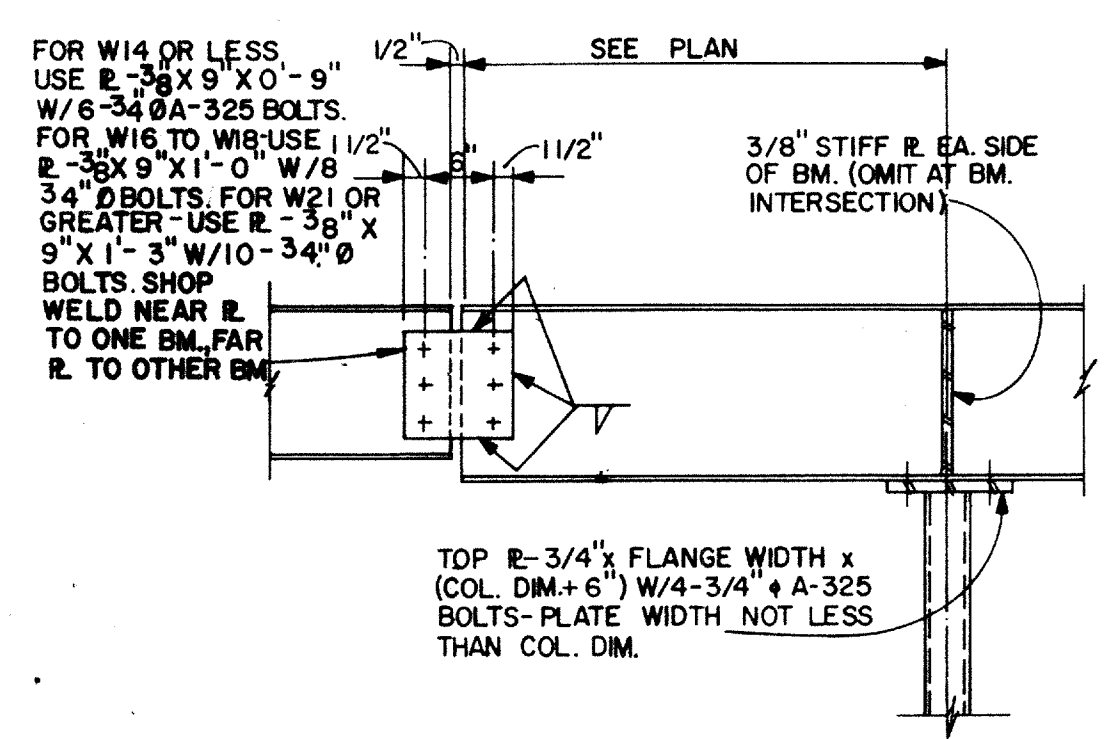


05 TYP. CONSTR. JOINT DETAIL (THRU SLAB ON GRADE)

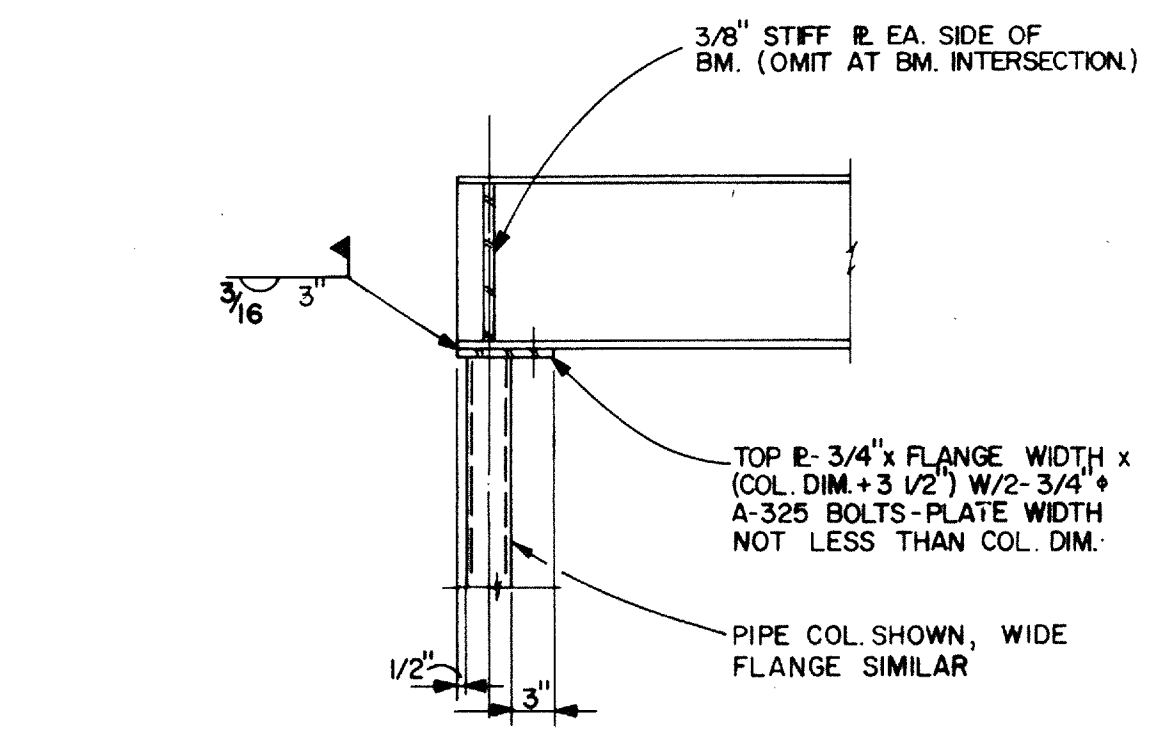
CONTRACTOR'S NOTE:  
 PROVIDE SAW JOINTS WHERE INDICATED THUS: (S.J.) ON PLAN AND CONST. JOINTS (C.J.) WHERE CALLED OUT ON PLAN AS SUCH. CONST. JTS. MAY BE SUBSTITUTED FOR SAW JOINTS AT CONTRACTOR'S OPTION

| FOOTING SCHEDULE |                       |                   |
|------------------|-----------------------|-------------------|
| MARK             | SIZE<br>W x L x T     | REINF.<br>EA. WAY |
| F3.0             | 3'-0" x 3'-0" x 1'-0" | 4 #4              |
| F4.0             | 4'-0" x 4'-0" x 1'-0" | 8 #4              |

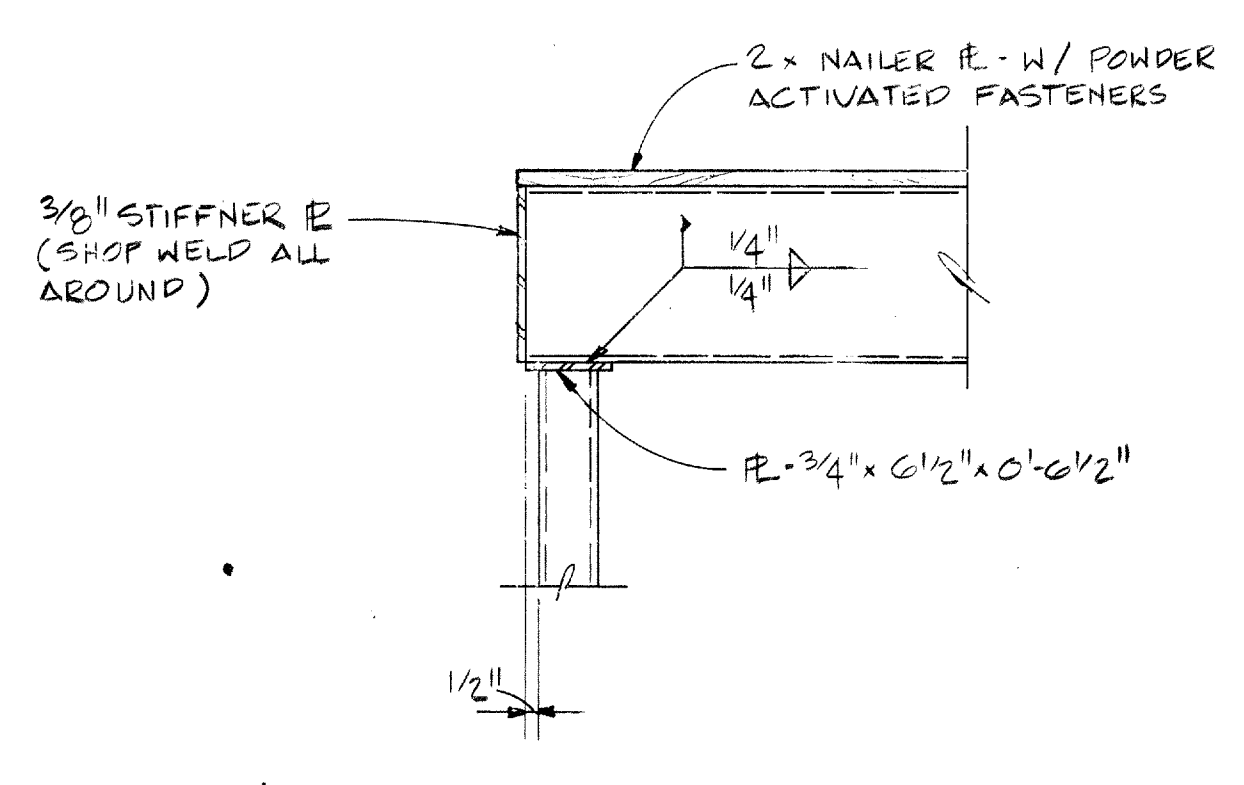
| BASE PLATE SCHEDULE |                     |                |
|---------------------|---------------------|----------------|
| COL                 | SIZE                | REMARKS        |
| 3" @ INTERIOR       | 3/4" x 10" x 0'-10" | 4 #4 @ A-BOLTS |
| 3" @ EXTERIOR       | 3/4" x 4" x 0'-10"  | 2 #4 @ A-BOLTS |
| 3" @ CORNER         | *                   | 2 #4 @ A-BOLTS |
| B" @                | 3/4" x 6" x 1'-0"   | 2 #4 @ A-BOLTS |
| C" @                | 3/4" x 1" x 1'-0"   | 2 #4 @ A-BOLTS |



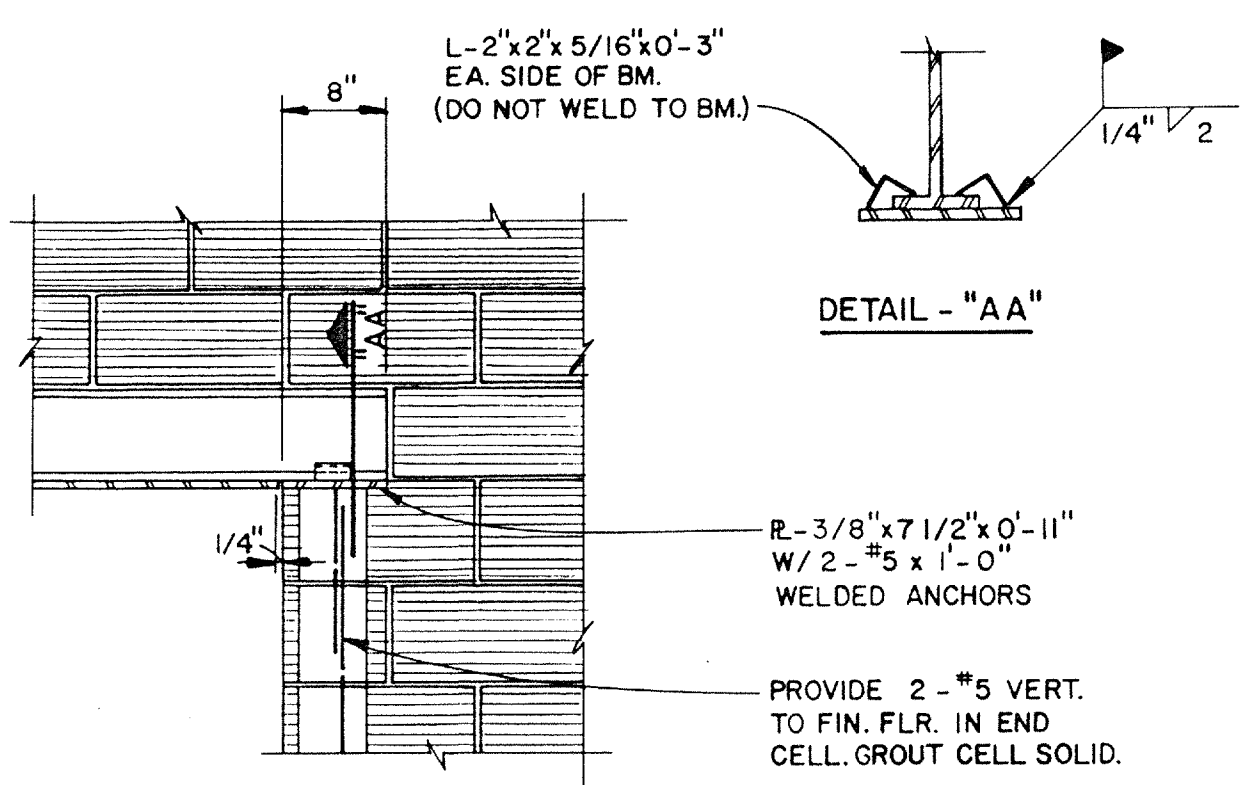
06 TYP. BM. SPLICE & INTERIOR  
COL. CONNX.



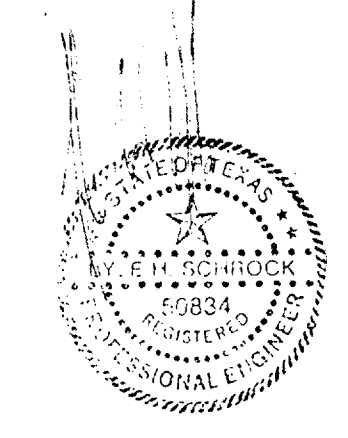
07 TYP. END COL. CONNX.



08 SECTION



09 SECTION



| No  | Revision       | By   | Date                        |
|---|----------------|--|-----------------------------|
| TOWN OF ADDISON<br>DALLAS COUNTY, TEXAS<br><b>CELESTIAL ROAD PUMP STATION</b> |                |  |                             |
| HIXSON & HARRIS, INC. TYPICAL DETAILS & GENERAL NOTES                         |                |  |                             |
| Structural Engineers  |                | Highland Park West<br>4300 MacArthur Avenue, Suite 115 Dallas, Texas 75209<br>(214) 528-3931 |                             |
| <b>GINN, INC.</b><br>Consulting Engineers Dallas, Texas                       |                |  |                             |
| Designed - C.S.   | Drawn - S.L.C. | Date - JANUARY, 1987   | Job No. - 217               |
| Approved -  | Checked - R.K. | Scale - 3/4" = 1'-0"   | Sheet <b>S4</b> of <b>5</b> |