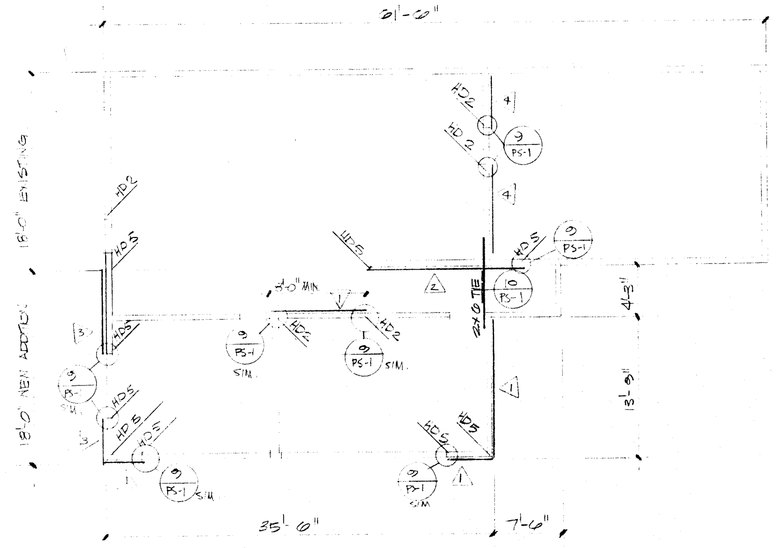


SHEAR WALL PLAN

1/8"=1'-0"

SHEAR WALL SCHEDULE

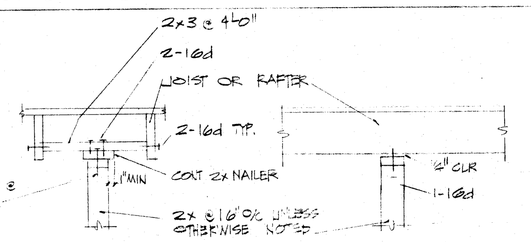
MARK	DESCRIPTION	NAILING*	REMARKS
1	5/8" PLYWOOD ONE SIDE	8d @ 4"/6" EDGES	
2	5/8" PLYWOOD ONE SIDE	8d @ 4"/6" EDGES	FILL IN EXIST OPENINGS AS SHOWN ON TYP DTL & COVER WALL W/ PLYWD
3	3/4" PLYWOOD ONE SIDE	10d @ 4"/6" EDGES	
4	5/8" PLYWOOD OVER EXISTING DIA SHTG - NAIL NEW PLYWD THROUGH SHTG TO STUDS	10d @ 4"/6" EDGES	RENAIL SHTG AT BOTTOM OF NEW DOOR OPENING W/ 8-8d PER BOARD

* PLYWOOD SHALL BE NAILED TO INTERMEDIATE SUPPORTS W/ 8d @ 12"/6"

HD-SIMPSON HOLDOWN ANCHORS OR EQUAL -SEE SHEAR WALL PLAN

TYPE "A" DOWEL TYPE "B" DOWEL

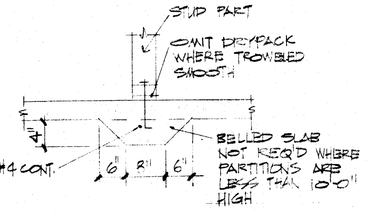
(1) SLABS TO BEARING STUD WALLS



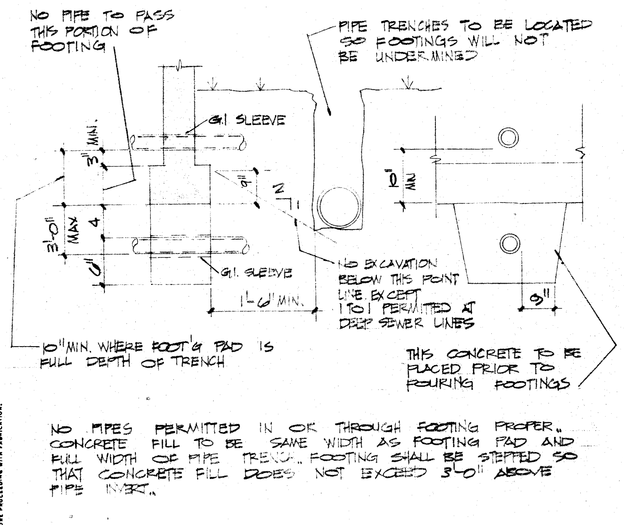
A PARALLEL TO JOIST

B PERPENDICULAR TO JOIST

(2) STUDS TO FRAMING

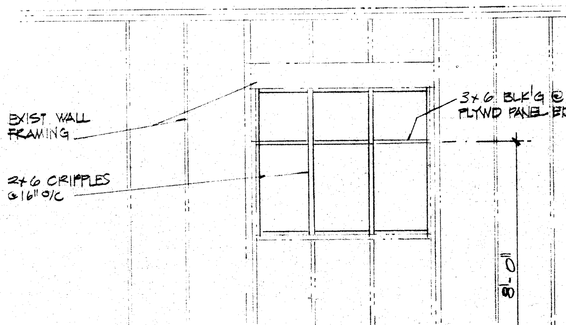


(3) NON BEARING FOOTING

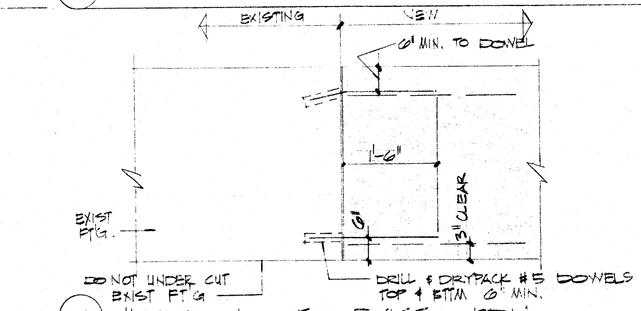


NO PIPES PERMITTED IN OR THROUGH FOOTING PROPER. CONCRETE FILL TO BE SAME WIDTH AS FOOTING PAD AND FULL WIDTH OF PIPE TRENCH. FOOTINGS SHALL BE STEPPED SO THAT CONCRETE FILL DOES NOT EXCEED 3'-0" ABOVE PIPE INVERT.

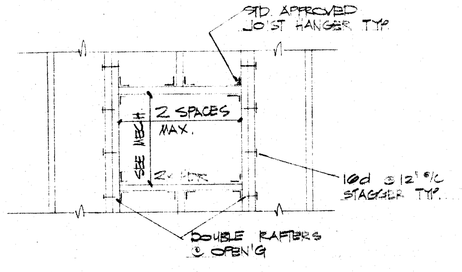
(4) PIPE & TRENCH LOCATIONS



(5) NEW SLAB TO EXIST FOUNDATION

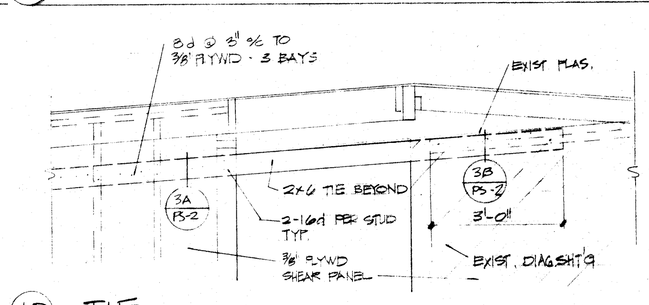


(6) NEW FDN TO EXIST FDN

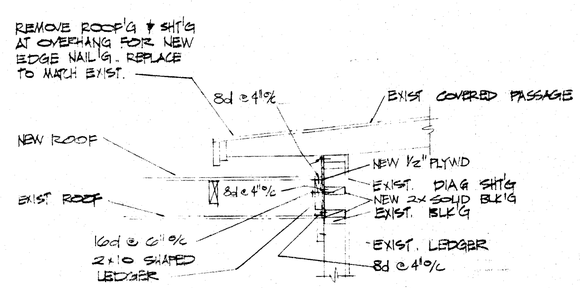


(7) FRAMING AT ROOF OPENING

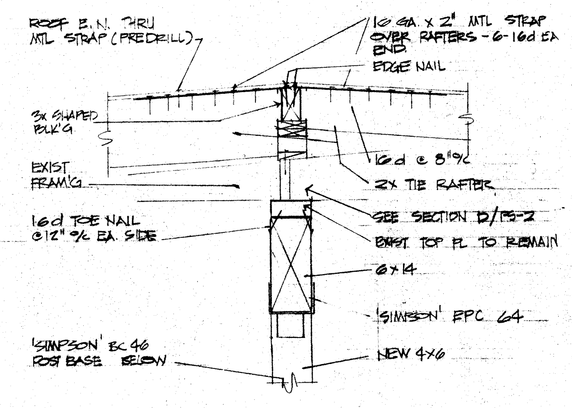
(8) FRAMING AT EXIST. OPEN'G



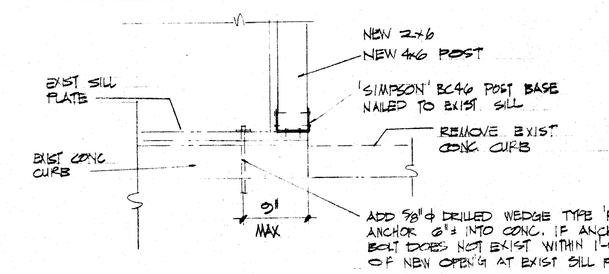
(10) TIE



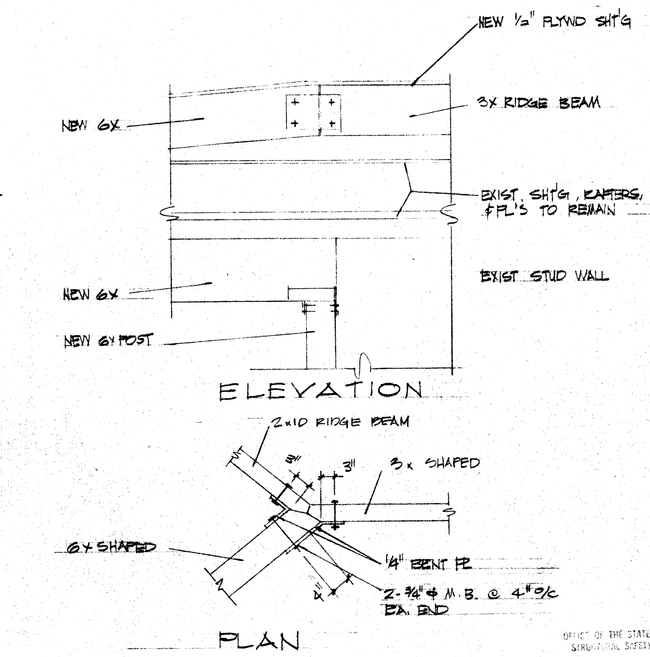
(11) ROOF FRAMING TO EXIST. WALL



(12) TIE SPLICE



(14) POST BASE



(13) POST TO BEAM

(15) RIDGE CONNECTION

MINIMUM NAILING SCHEDULE

Joists or rafters to sides of studs, Eight (8) inch joist or less	3-16d
for each additional four (4) inches in depth of joist	1-16d
Joists or rafters at all bearings--Toe nails, ea. side	2-10d
Stud to bearing -- Toe nails, ea. side	2-10d
Blocking between joists or rafters To Joist or rafters -- Toe nails, ea. side, ea. end--	2-10d
To joist or rafters bearing--Toe nails, ea. side --	2-10d
Blocking between studs, ea. end--2-10d toe or end nail	2-16d
Cross bridging between joist or rafters Toe nails, ea. end	2- 8d
Ribbons to studs One (1) inch ribbons	2- 8d
Two (2) inch ribbons	2-16d
Double top plates----6'-0" min. lap unless noted Lower plate to top of stud	2-20d
Upper plate to lower plate--staggered------	16"@12"
Upper plate to lower plate at intersection	2-16d
Multiple studs-stagger for widths more than ----	4"-16"@12"

All nails shall be common wire nails
Sub-drill where necessary to prevent splitting.
Where possible nails driven perpendicular to the grain.
Shall be used instead of toe nails.

Barbara Ward SE 1349

PROOF LOAD TESTS FOR "RED HEAD" OR SIMILAR TYPES OF CONCRETE ANCHOR BOLTS.

All concrete anchor bolts of the "Red Head" expansion type (loaded in either pullout or shear) shall have 50 percent of the bolts (alternate bolts in any group arrangement) proof tested in tension to twice the allowable tension load. If there are any failures, the immediately adjacent bolts must then also be tested.

Type of Test	Bolt Diameter 3/8"	1/2"	5/8"	3/4"
Direct Pull-Tension, LBS.	1300	2000	2900	4300
Torque Wrench-Torque, FT.LBS.	25	50	110	150

OFFICE OF THE STATE ARCHITECT STRUCTURAL SAFETY SECTION

REG. # 1387

GENERAL NOTES

GENERAL

1. The following notes, typical details and schedules shall apply to all drawings unless otherwise shown or noted. All construction shall comply with requirements of California Administration Code Title 21 & Title 24.
2. Structural drawings shall be used in conjunction with Civil, Architectural, Electrical & Machanical drawings and specifications.
3. Framing conditions not specifically shown shall be framed similar to typical details as shown for respective materials & similar conditions.
4. Provide openings and supports, as required per typical detail, for heaters, mechanical equipment, vents, ducts, pipes, etc. All suspended mechanical equipment to be sway or lateral braced.

FOUNDATION

1. Foundations designed for 1200 PSF maximum.

CONCRETE

1. Concrete strength @ 28 days - shall be F'c = 3,000 p.s.i. MINIMUM. QUANTITIES OF MATERIALS SHALL BE CONTROLLED BY A CLOSED WEIGHT MASTER. CONCRETE DESIGN STRENGTH F'c = 2500 PSI
2. Concrete per A.S.T.M. C150 Type I or II, Low alkali, tested.
3. Reinforcing steel - A.S.T.M. A615, Grade 40.
4. All concrete to be reinforced. All anchor bolts, dowels and other embedded items to be securely tied in place before concrete is poured.
5. Lap all steel 30 dia. min., stagger splices.
6. No brick or other porous material shall support steel. Use concrete block with embedded wire ties to support steel.
7. Dimensions locating reinforcing bars are to face of bars and denotes clear coverage to main steel. Unless otherwise noted, concrete coverage shall be as follows:
   Concrete against earth, not formed ----- 3"
   Concrete against earth, but formed ----- 2"
8. All interior slabs on grade to be reinforced with #3 @ 18" o.c. ea. way. Exterior covered slabs to be reinforced with #3 @18" o.c. ea. way. Also do not dowel exterior slabs to building. Provide bond breakers.
9. See Architectural drawings for depressed slab, slab slope, curbs, etc..

STRUCTURAL STEEL

1. Structural steel shall conform to A.S.T.M. A36. Erection and fabrication per A.I.S.C. Standards, 8th Edition.
2. Pipe columns shall conform to A.S.T.M. A53 Type E or S Grade B, (unless specified Gr. A on plans)
3. Tube columns shall conform to A.S.T.M. A501.
4. Welding to be Electric Shield Arc Process per A.W.S. "Standard Code for Arc and Gas Welding in Building Construction." Minimum fillet welds to be 3/16 x 1½.
5. Provide shop drawings for review by Structural Engineer and Architect prior to fabricating steel.

WOOD FRAMING

1. All lumber to be grade marked Douglas Fir or Redwood where required by specification.
2. Wood sill plates shall have 3/4" drypack under, except where noted and bolted with 5/8" ø x 12" bolts @ 4'-0" on center maximum, with a bolt within 9" of end of each piece, two bolts min. each piece.
3. Provide washer under heads and nuts of bolts and lag screws bearing on wood. Nuts on all bolts shall be tightened before closing in and/or on completion of the job. Cut washers may be used except for sill bolts at shear walls and where noted otherwise. Use plate washers for sill bolts of shear walls. Plate washers typical - 5/8 ø A.B. - 2½" sq. x 1 ½ plate - 3/4 " ø A.B. - 2 3/4" sq. x 5/16" plate.
4. Bolt holes to be nominal diameter of bolt + 1/16 " unless noted otherwise.
5. No structural member shall be cut for pipes, etc., unless specifically shown, noted or approved by Structural Engineer.
6. Roof sheathing and shear wall sheathing, D.F.P.A. grade marked structural I, PS 1 or 2 or ext. sht'g. c-c-c. Floor sheathing, D.F.P.A. structural I, ext. sht'g. c-c plugged, see specifications. Plywood sheathing shall be in single pieces where possible, with 1'-0" min. sheets. Solid block as indicated on plans. Min. nailing for roof or wall to be 8d @ 6" o.c. all edges and 8d @ 12" o.c. field. Use ringshank for floor sht'g. nailing solid block all plywood edges of vertical plywood panels.
7. Limit end splits 3 x & thicker members to ½ the nominal narrow face dimension.
8. Machine Applied Nailing: Use of machine nailing is subject to a satisfactory jobsite demonstration for each project and the approval by the project Architect or Structural Engineer and the Office of the State Architect. The approval is subject to continued satisfactory performance. Machine nailing will not be approved in 5/16" plywood or for use on walls. If nailheads penetrate the outer ply more than would be normal for a hand hammer or if minimum allowable edge distances are not maintained the performance will be deemed unsatisfactory.
9. Retighten bolts before closing-in.

REVISIONS
12-2-81

PIONEER SCHOOL
ALTERATIONS AND ADDITIONS FOR:
BAKERSFIELD CITY SCHOOL DISTRICT

DONALD REINFRO AND ASSOCIATES
ARCHITECTURE ENGINEERING PLANNING
4800 STOCKDALE HIGHWAY SUITE 304 BAKERSFIELD CALIFORNIA 93309 TEL. (805) 327-7075
DRAWN BY PROJECT NO. C 5283 DATE 10-12-81

SHEET NO. PS-1 OF 2 SHEETS