

CONCRETE NOTES

1. ALL CONCRETE WORK SHALL COMPLY WITH THE LATEST RECOMMENDATIONS AND SPECIFICATIONS OF THE AMERICAN CONCRETE INSTITUTE (ACI) AND THE LOCAL BUILDING CODES.
2. ALL CONCRETE SHALL BE NORMAL WEIGHT HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS WITH THE FOLLOWING REQUIREMENTS:
 - PORTLAND CEMENT - ASTM C150, TYPE 1, MINIMUM 51 BAGS PER CUBIC YARD.
 - AGGREGATE - ASTM C33, 1" MAXIMUM SIZE.
 - WATER - 28 GALLONS PER CUBIC YARD WITH A MAXIMUM WATER CEMENT RATIO OF 0.55.
 - ADMITTIVES - USE AIR ENTRAINING AGENT CONFORMING TO ASTM C260 WITH 4-6% TOTAL AIR.
 - USE WATER REDUCING AGENT CONFORMING TO ASTM C494 IN ALL CONCRETE.
 - CALCIUM CHLORIDE SHALL NOT BE USED.
 - DESIGN MIX - SUBMIT A CURRENT (MAXIMUM 18 MONTHS OLD) DESIGN MIX OF THE EXACT SAME MIX TO BE USED ON THE PROJECT, WITH 28 DAY COMPRESSIVE STRENGTH TESTS, TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING CONSTRUCTION.
3. ALL REINFORCING STEEL SHALL COMPLY WITH ASTM A615, GRADE 60 EXCEPT STIRRUPS AND TIES TO BE GRADE 40. WELDED WIRE FABRIC TO CONFORM TO ASTM A185. LAP ALL BARS 30 DIAMETERS MINIMUM AT SPICES INVOLVED OTHERWISE AS SHOWN ON DRAWINGS.
4. FOOTINGS SHALL REST ON SUITABLE UNDISTURBED SOIL OR COMPACTED GRANULAR FILL HAVING A MINIMUM BEARING CAPACITY OF 3000 PSF. ELEVATIONS OF BOTTOM OF FOOTINGS ARE SHOWN ON PLANS, BUT ARE SUBJECT TO REVISION WHEN TRUE SOIL CONDITIONS ARE EXPOSED BY EXCAVATION. THE ENGINEER SHALL BE NOTIFIED PROMPTLY OF ANY WEAK STRATA, WATER CONDITIONS OR OTHER ROOF BEARING CONDITIONS.
5. CONCRETE TEMPERATURE DURING THE FIRST SEVEN DAYS SHALL BE MAINTAINED BETWEEN 50°F AND 90°F. HARD DRAINING MUST BE PREVENTED.
6. CURING
 - A) HORIZONTAL SURFACES SHALL BE KEPT CONTINUOUSLY MOIST FOR A MINIMUM OF SEVEN DAYS.
 - B) VERTICAL SURFACES SHALL RECEIVE 2 COATS (ONE AT TIME OF STRIPPING AND ANOTHER 3 DAYS LATER) OF AN APPROVED NON-TOXIC CURING COMPOUND.
7. ALL FOUNDATION WALLS SHALL BE ADEQUATELY BRACED TO WITHSTAND EARTH AND CONSTRUCTION LOAD PRESSURES. WALLS MUST BE AT LEAST SEVEN DAYS OLD BEFORE BACKFILLING.
8. BACKFILLING AGAINST FOUNDATION WALLS SHALL BE DONE BY PLACING SIMULTANEOUS LEVEL LAYERS ON BOTH SIDES OF THE WALL SUCH THAT THE DIFFERENCE BETWEEN ONE SIDE AND THE OTHER DOES NOT EXCEED 24 INCHES.
9. SELECT BACKFILL OUTSIDE OF FOUNDATION WALL:
 - A) AN APPROVED MATERIAL FREE OF BODIES LARGER THAN 6". ORGANIC MATERIAL, TOPSOIL AND DEBRIS.
 - B) PLACE IN MAXIMUM 8" LEVEL LIFTS AND COMPACT TO 90% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DEFINED BY ASTM D-1557.
10. SHOP DRAWINGS (ONE REPRODUCIBLE PRINT AND TWO BLUE PRINTS) PREPARED IN ACCORDANCE WITH ALL REQUIREMENTS WILL BE REQUIRED FROM THE CONTRACTOR FOR REINFORCING STEEL.

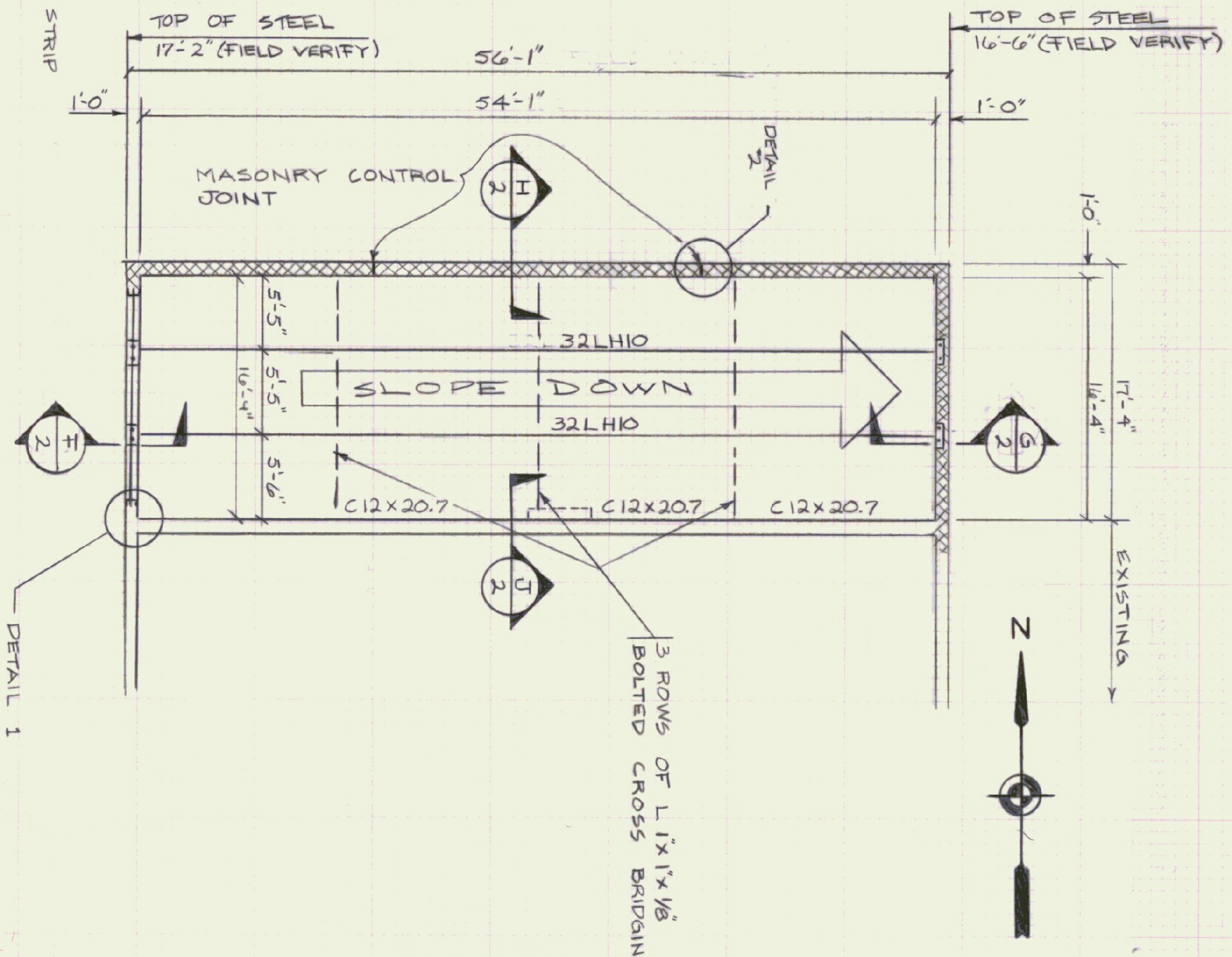
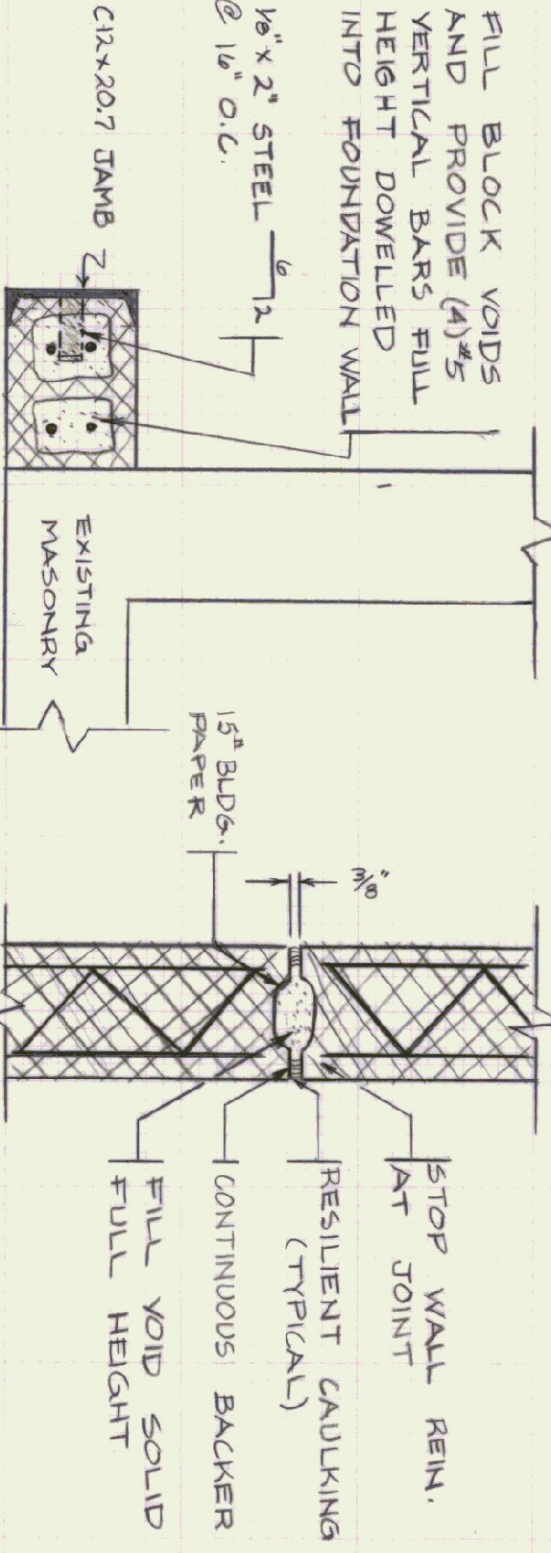
MASONRY CONSTRUCTION NOTES

1. CONCRETE MASONRY SHALL COMPLY WITH THE APPLICABLE SECTIONS OF THE NATIONAL CONCRETE MASONRY ASSOCIATION, PORTLAND CEMENT ASSOCIATION AND AMERICAN CONCRETE INSTITUTE CODES.
 2. CONCRETE MASONRY UNITS SHALL BE LIGHT WEIGHT HOLLOW LOAD-BEARING, ASTM C90, GRADE N, TYPE 1, WITH A MINIMUM COMPRESSIVE STRENGTH ON THE NET AREA OF 2000 PSI, TWO CELLS WITH MINIMUM 50% SOLID.
 3. MORTAR SHALL CONFORM TO ASTM C270 TYPE S WITH A MINIMUM COMPRESSIVE STRENGTH @ 28 DAYS OF 1800 PSI.
 4. HORIZONTAL WALL REINFORCEMENT TO BE UNCOATED TRESS OR LAIDOR TYPE WITH NO. 9 GAGE UNCOATED WIRE CONFORMING TO ASTM A62, AS MANUFACTURED BY DUN-O-MILL, INC. OR APPROVED EQUAL. REINFORCING TO BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS UNLESS INDICATED OTHERWISE ON THE PLANS.
 5. NORMAL MASONRY CONSTRUCTION WEATHER CONDITIONS ASSUMES THE AIR TEMPERATURE TO BE BETWEEN 40 AND 90 DEGREES FARENHEIT WITH MINIMAL WIND AND RAIN, PLUS AVERAGE RELATIVE HUMIDITY. IN CONDITIONS OTHER THAN THESE OCCUR, THE CONTRACTOR MUST MODIFY CONSTRUCTION PROCEDURES IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICES AND THE ABOVE NOTED CODES.
 6. EXTERIOR WALLS SHALL BE CONSTRUCTED IN A WEATHERTIGHT MANNER WITH ALL NECESSARY FLASHING AND WEBS. THEY SHALL RECEIVE TWO COATS OF AN APPROVED, GOOD QUALITY WATER PROOFING AGENT. RECOAT AS REQUIRED TO MAINTAIN A PERMANENT WATER TIGHT SURFACE.
- GRANULAR FILL UNDER SLABS & FOOTINGS**
1. PRIOR TO PLACING GRANULAR FILL ALL ORGANIC MATERIAL, TOPSOIL, DEBRIS AND ANY OTHER DELETERIOUS MATERIAL SHALL BE REMOVED.
 2. GRANULAR FILL SHALL BE AN APPROVED, WELL GRADED BANK RUN OR CRUSHER RUN GRAVEL MEETING THE REQUIREMENTS OF THE FOLLOWING TABLE:
- | SIEVE DESIGNATION | | 2 PASSING |
|-------------------|-------|-----------|
| No. 4 | 100 | 100 |
| No. 100 | 40-70 | 5-20 |
| No. 200 | 5-20 | 4-8 |
3. THE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557, MODIFIED PROCTOR.
 4. THE OWNER WILL TAKE DENSITY TESTS ON THE COMPACTED FILL. IF THE MATERIAL TESTS LESS THAN 95% CORRECTIVE ACTION AND ADDITIONAL TESTING WILL BE REQUIRED. THE ADDITIONAL TESTING AND CORRECTIVE ACTION WILL BE PAID FOR BY THE CONTRACTOR.

STEEL NOTES

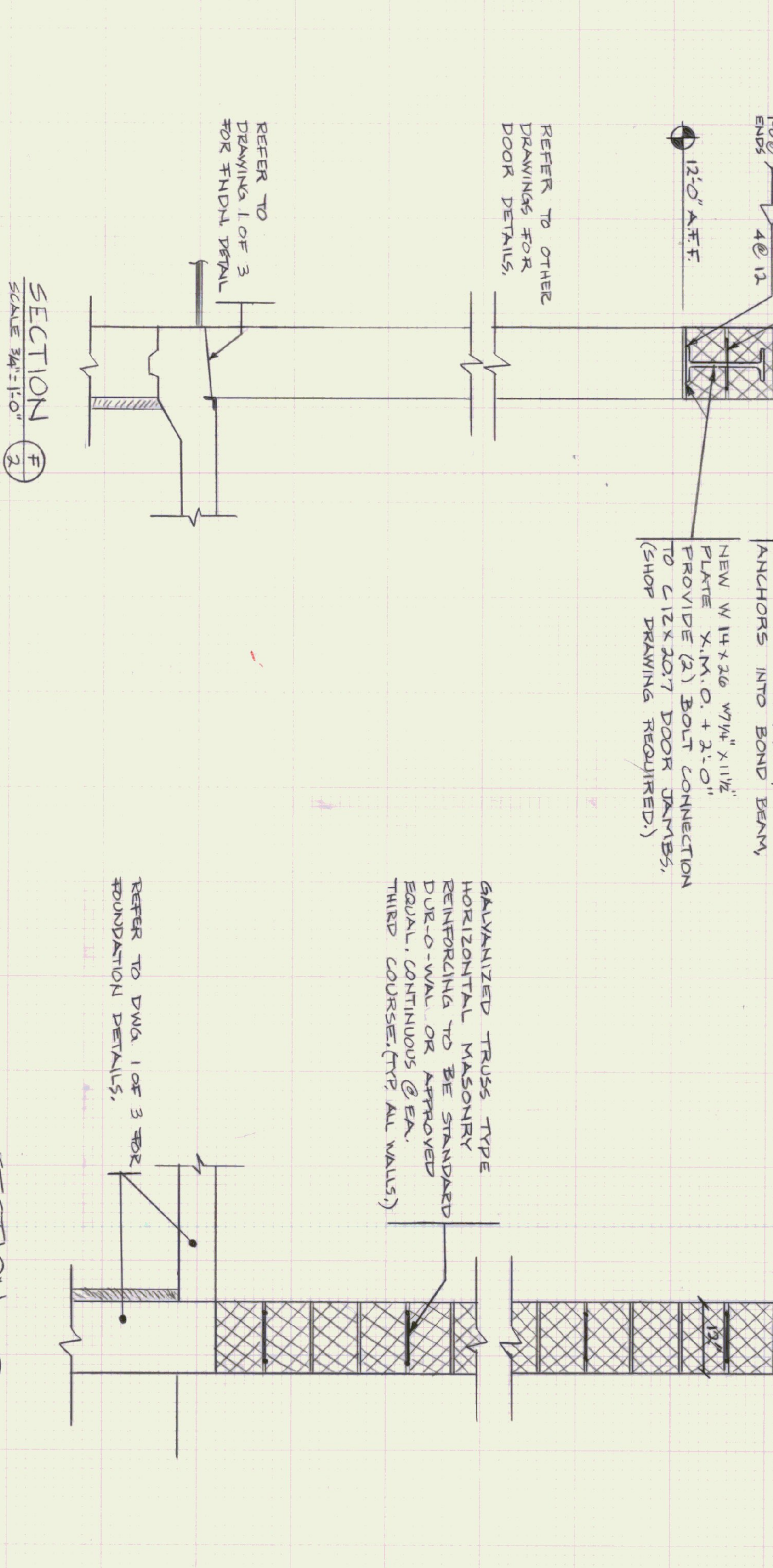
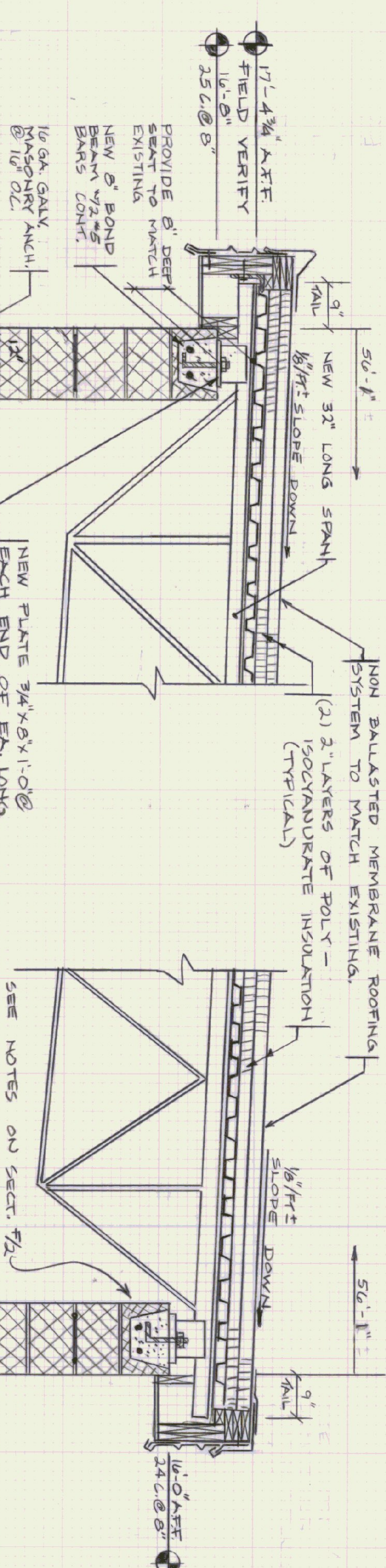
1. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE "SPECIFICATION FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" OF THE A.I.S.C. AND TO THE REQUIREMENTS OF THE LOCAL BUILDING CODES. ALL STEEL SHALL CONFORM TO THE "STRUCTURAL WELDING CODE - ANSI/AISC D1.1" OF THE AMERICAN WELDING SOCIETY.
2. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING:
 - STRUCTURAL SHAPES - ASTM A36, Fy = 36,000 PSI
 - BOLTS - ASTM A325
3. ALL SHIP CONNECTIONS SHALL BE BOLTED OR WELDED. ALL FIELD CONNECTIONS SHALL BE BOLTED EXCEPT WHERE WELDING IS SPECIFICALLY CALLED FOR. BOLTS SHALL BE 3/4" MINIMUM WITH OPEN HOLES 1/16" LARGER.
4. ALL STRUCTURAL STEEL SHALL BE SHOP PAINTED (MINIMUM 2 MILS DRY FILM THICKNESS) WITH AN APPROVED RUST INHIBITIVE PRIME PAINT. STEEL SHALL BE THOROUGHLY CLEANED PRIOR TO PAINTING. FIELD TOUCH UP WITH THE SAME PAINT WILL BE REQUIRED.
5. THE STRUCTURAL STEEL CONTRACTOR SHALL PROVIDE ALL NECESSARY GUNTING AND BRACING REQUIRED TO ERECT AND HOLD THE STEEL FRAME PLUMB AND SQUARE UNTIL THE ROOF DECK AND WALLS ARE INSTALLED.
6. THERE WILL BE NO FIELD BURNING, CUTTING OR OTHER ALTERATIONS OF PRIMARY STRUCTURAL STEEL.
7. LONGSPAN STEEL JOISTS DESIGN, FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE STEEL JOIST INSTITUTE AND THE A.I.S.C.
8. STEEL JOISTS ARE NORMALLY DESIGNED TO SUPPORT UNIFORM LOADS. THE MAGNITUDE AND LOCATION OF CONCENTRATED LOADS MUST BE REVIEWED WITH THE ENGINEER PRIOR TO FABRICATION.
9. ALL ROOF DECKING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, FACTORY MUTUAL REQUIREMENTS AND THE STEEL DECK INSTITUTE (S.D.I.) UNLESS OTHERWISE NOTED. ALL EDGES OF THE DECKING SHALL BE PROPERLY SUPPORTED. OPENINGS X 1/8" THICK PLATE WELDED OR SCREWED TO THE TOP OF THE DECK TO SUPPORT THE OPERATING, FOR PERMISSIBLE LOADS SHALL BE ABOVE, AN L4x4x4 FRAME (BURNING ON STRUCTURAL SUPPORTS) SHALL BE USED UNLESS OTHERWISE NOTED ON PLANS.
10. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS (ONE REPRODUCIBLE PRINT AND TWO BLUE PRINTS) TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION FOR THE FOLLOWING ITEMS:
 - STRUCTURAL STEEL (DOOR JAMBS AND HEADERS)
 - LONGSPAN JOISTS
 - ROOF DECKING
11. DESIGN LOADS:

ROOF LIVE LOAD	= 15 PSF
DEAD LOAD	= 55 PSF
TOTAL	= 70 PSF



ROOF FRAMING PLAN

- 1) ELEVATION TOP OF STEEL NOTED ON PLAN THUS (-----)
- 2) ROOF DECK TO BE 22 GA. 1/2" DEEP TYPE 'B' GALV. METAL (G-70)



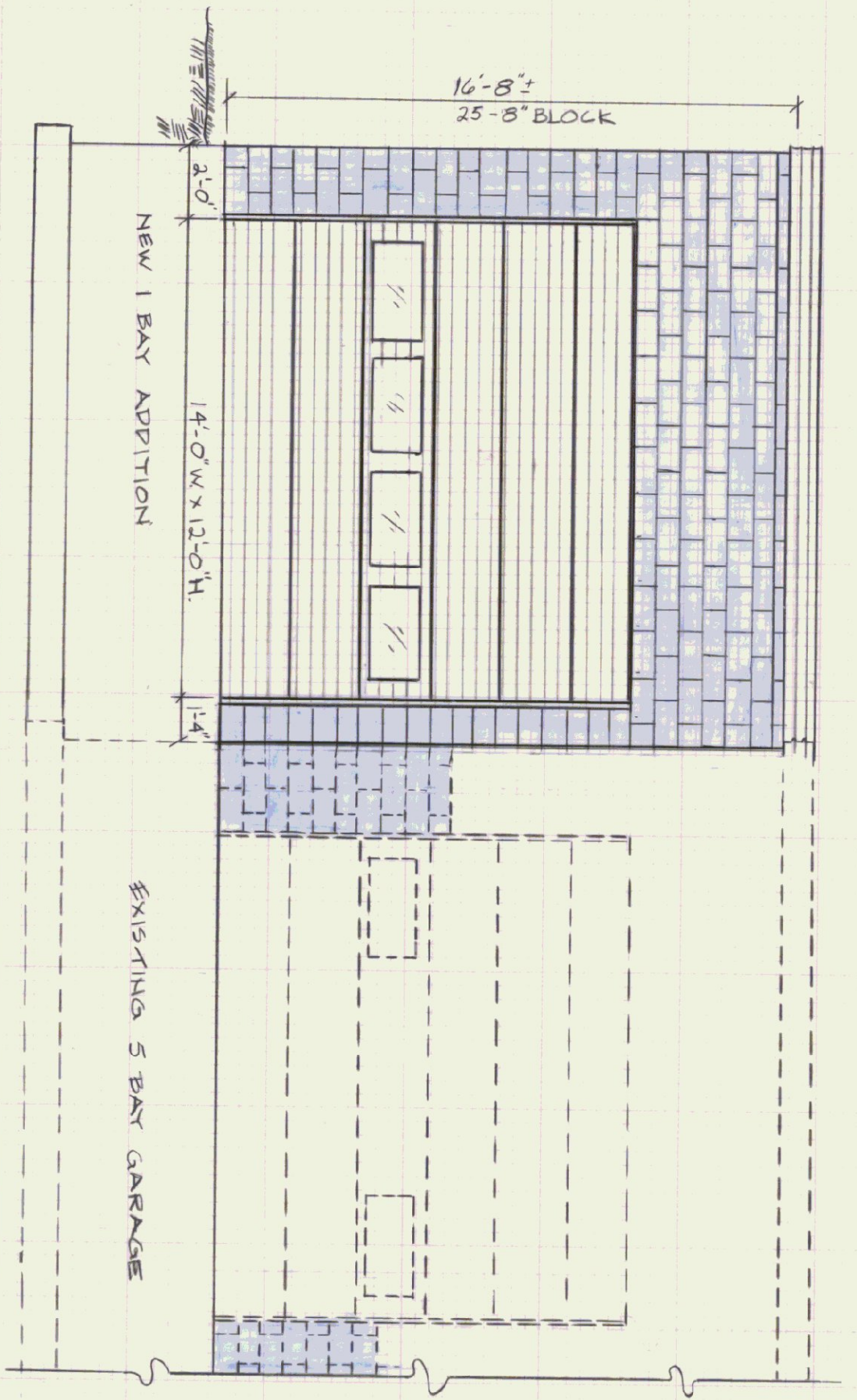
ROOFING NOTES

- 1) ALL FLASHING TO BE 16 OZ. COPPER W/ 20 OZ. COPPER CONTINUOUS CLIF TO MATCH EXISTING
- 2) ALL 2x6 USED ARE TO BE PRESSURE TREATED.
- 3) ALL MATERIALS TO MATCH EXISTING ROOF.
- 4) HERBIKIC PASTE FOR USE ON A PUBLIC BUILDING IS REQUIRED TO PRESERVE THE ASHTRAY, E.I. 105 ASSEMBLY TESTING. ACCEPTABLE HERBIKIC ARE: SWEETWELL, KARLISSE, GOODSTAR.

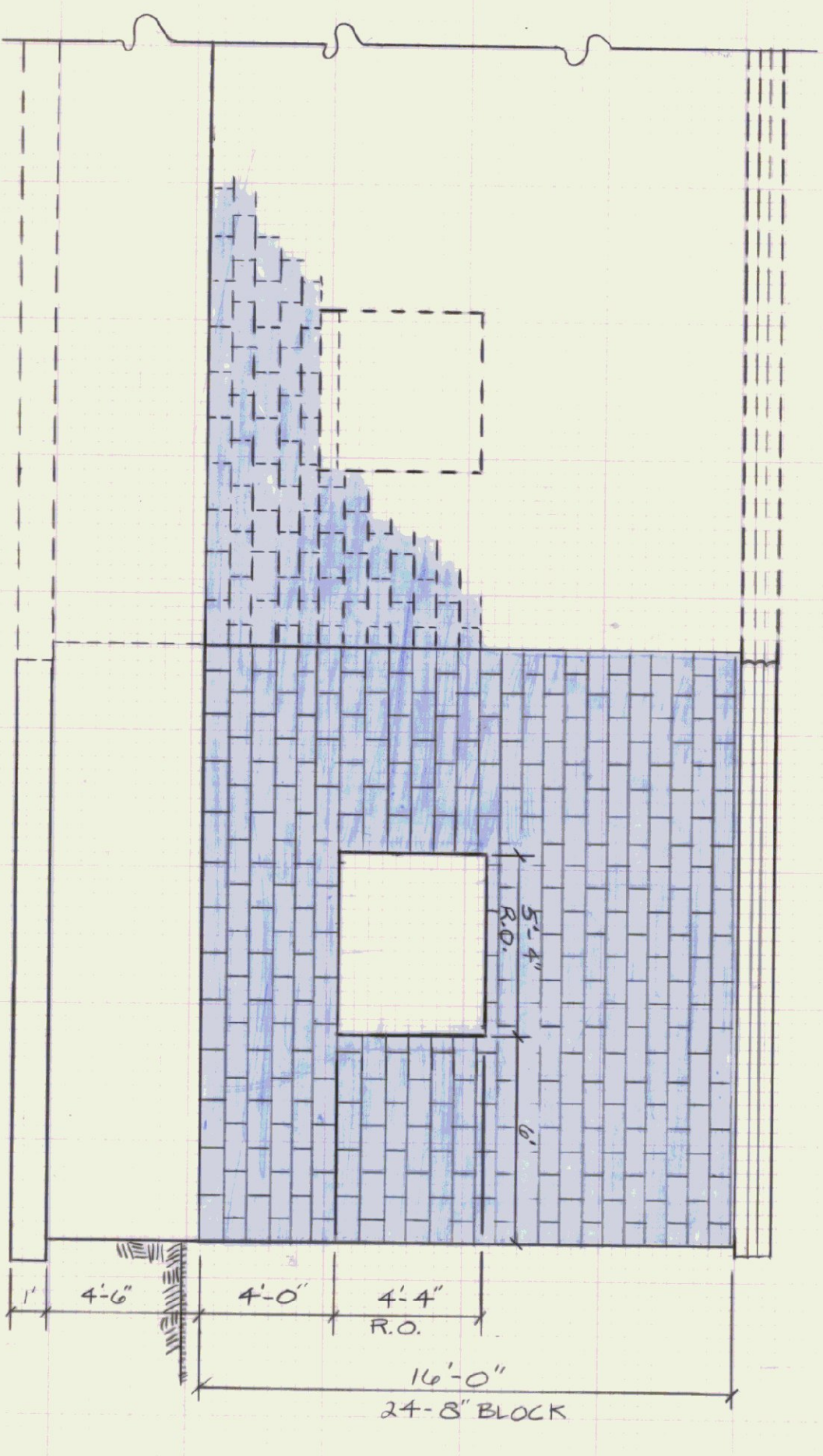
STATE OF VERMONT
DEPARTMENT OF STATE BUILDINGS
AGENCY OF ADMINISTRATION
MONTPELIER, VERMONT

**PROPOSED ADDITION FOR
MAINTENANCE FACILITY**
VERMONT
CASTLETON

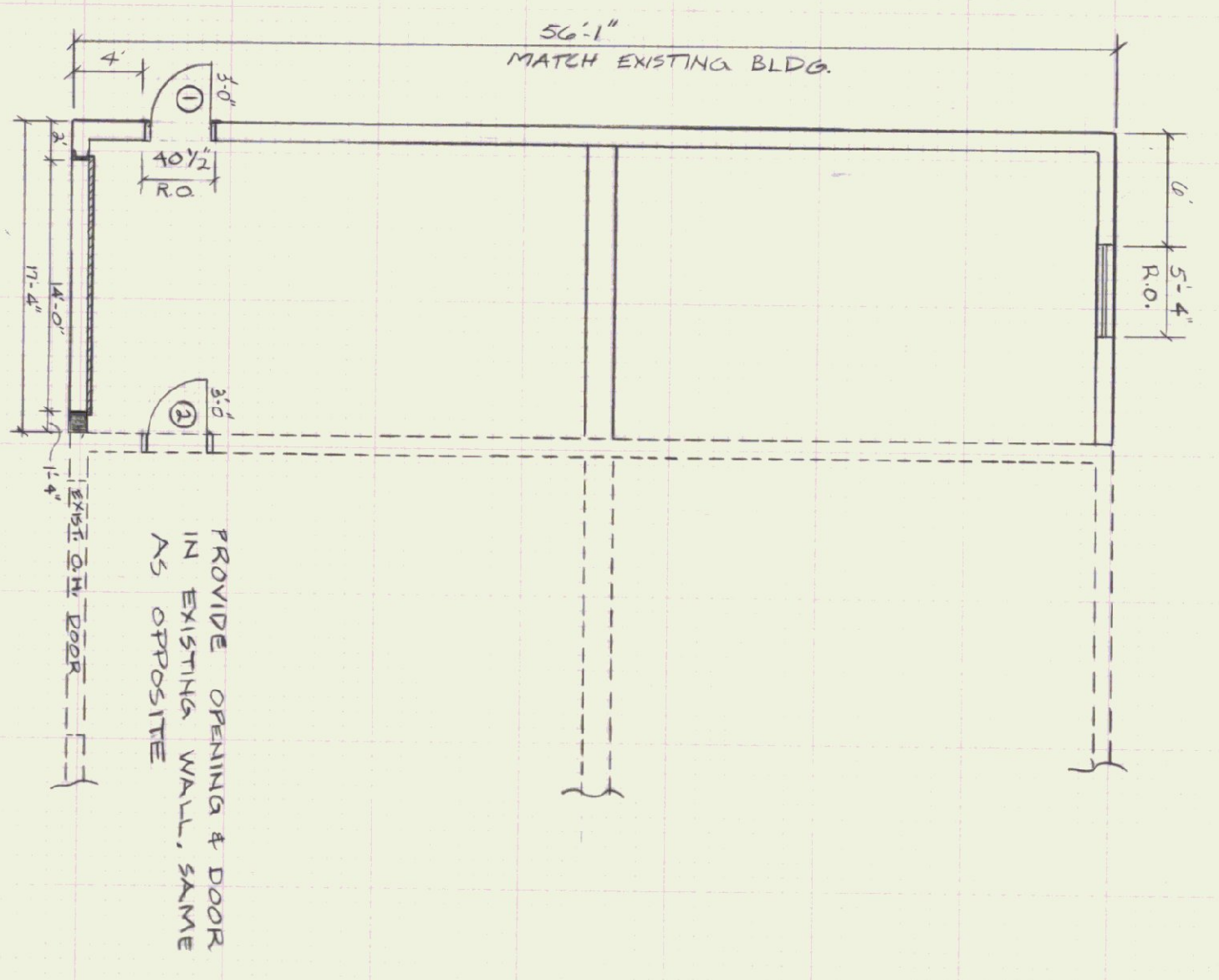
DATE	SCALE	REVISIONS	DWG. NO.
1-25-90	AS NOTED		5-2
DRAWN BY: R. RAY	APPROVED BY: R. RAY		2 OF 3



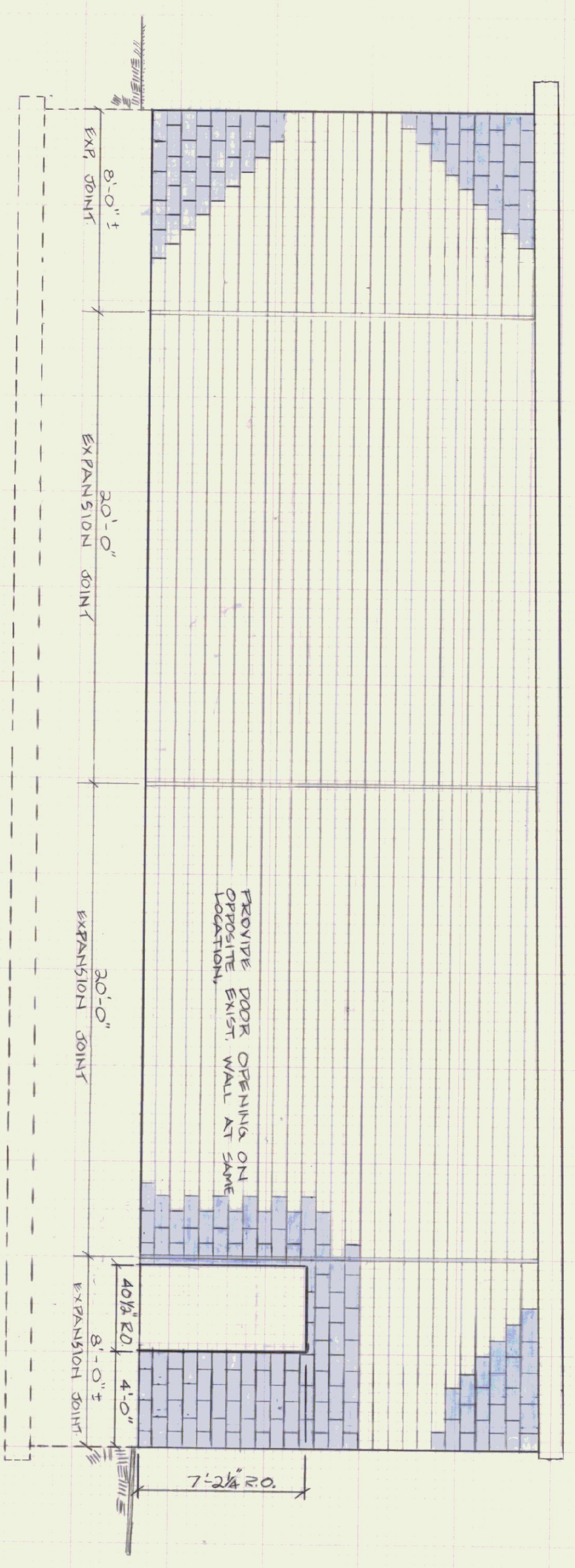
FRONT ELEVATION
1/4" = 1'-0"



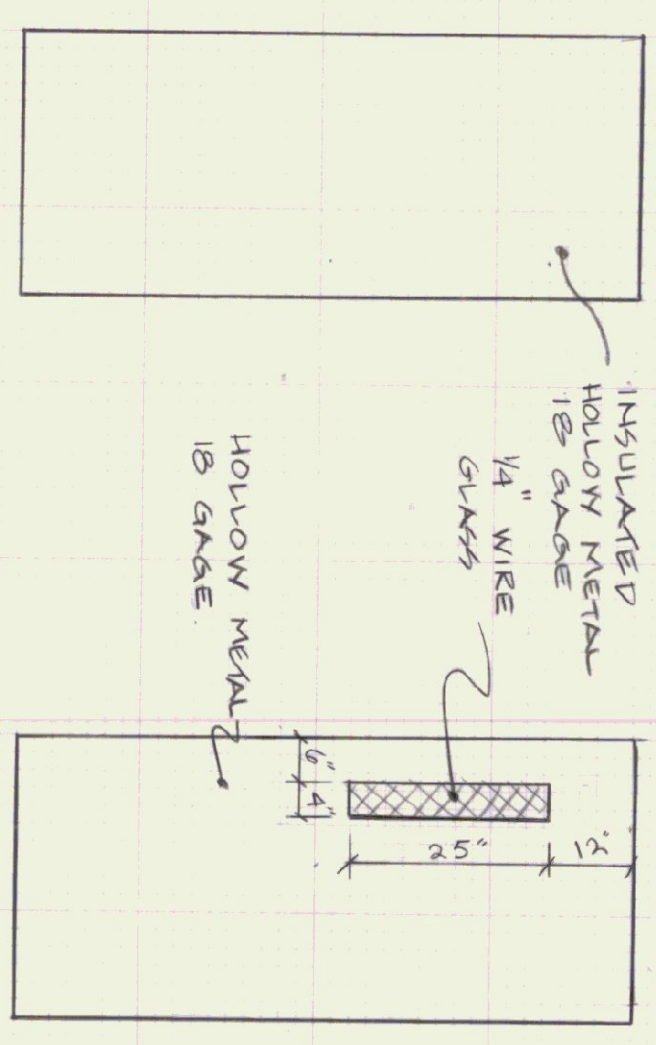
REAR ELEVATION
1/4" = 1'-0"



PLAN
1/8" = 1'-0"



END ELEVATION
1/4" = 1'-0"



NO.	TYPE A			TYPE B			COMMENTS
	TYPE	SIZE	FIN	TYPE	SIZE	FIN	
1	A	3'-7" x 1 3/4"	PTD	T&E 3/4"	2" x 8 1/2"	PTD	3/4 HR. UL 'C' LABEL
2	B	3'-7" x 1 3/4"	PTD		2" x 8 1/2"	PTD	1/2 HR. UL 'B' LABEL

STATE OF VERMONT
DEPARTMENT OF STATE BUILDINGS
AGENCY OF ADMINISTRATION
MONTPELIER, VERMONT

**PROPOSED ADDITION FOR
MAINTENANCE FACILITY
CASTLETON, VERMONT**

DATE: 1-23-90
SCALE: AS NOTED
DRAWN BY: [Signature]
APPROVED BY: [Signature]

REVISIONS:

DWG. NO. 5-3
3 OF 3