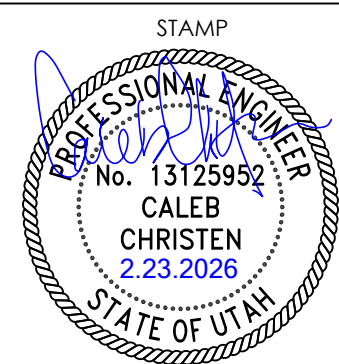




PROVO BATHROOMS - QUAIL ORCHARD 4 BATH

COVER



DATE	REVISION			

PROJECT NO: 26-007

DRAWN BY: CKC

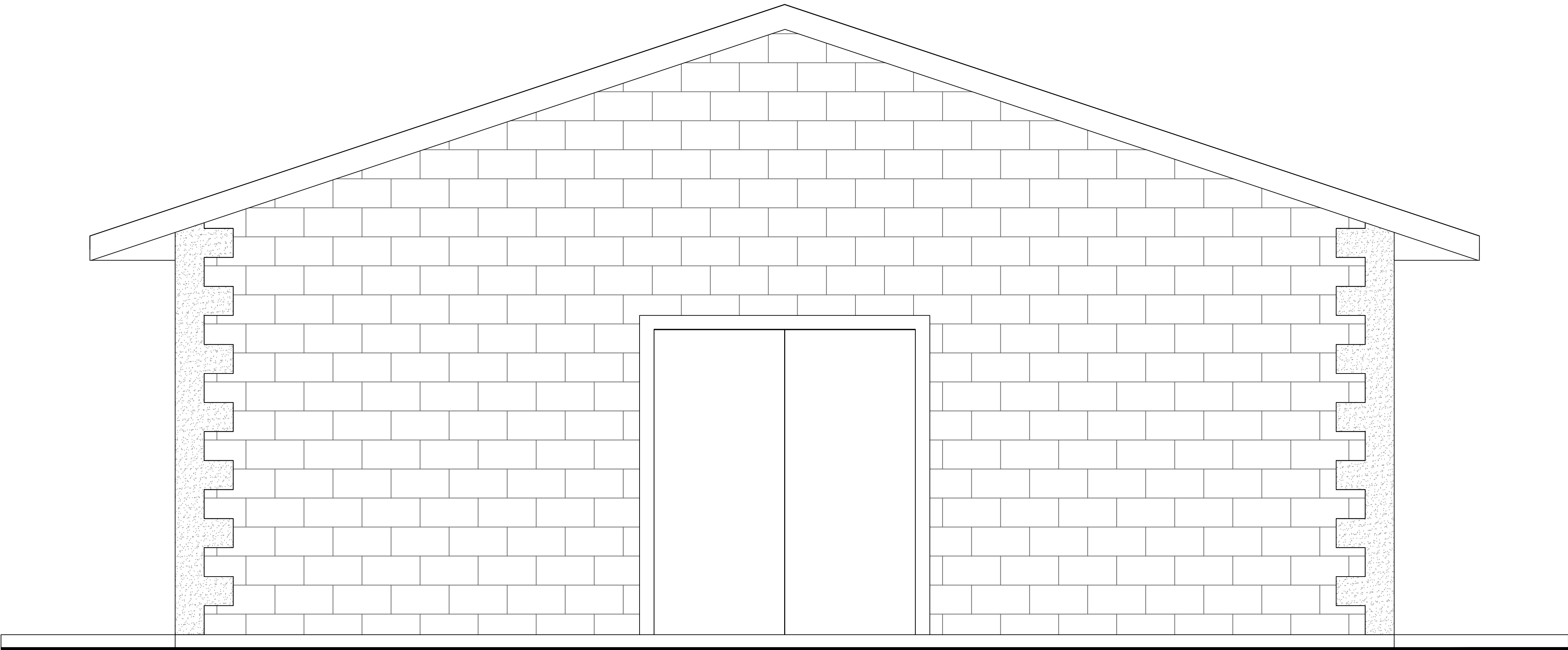
CHECKED BY: CKC

DATE: 2.23.26

SCALE: 1/4" = 1'-0"
(24"x36")

SHEET

C



PROVO BATHROOMS - QUAIL ORCHARD 4 BATH

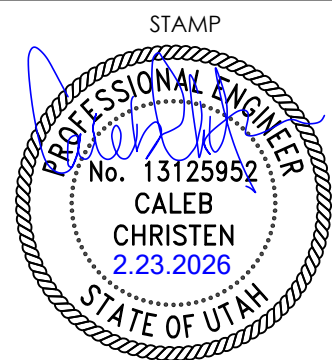
SHEET INDEX:

- C: COVER
- A-1: PLANS
- A-2: ELEVATIONS AND SECTIONS
- A-3: DETAILS
- SD-0: STRUCTURAL NOTES
- SD-1: STRUCTURAL DETAILS



PROVO BATHROOMS - QUAIL ORCHARD 4 BATH

PLANS



DATE	REVISION			

PROJECT NO: 26-007

DRAWN BY: CKC

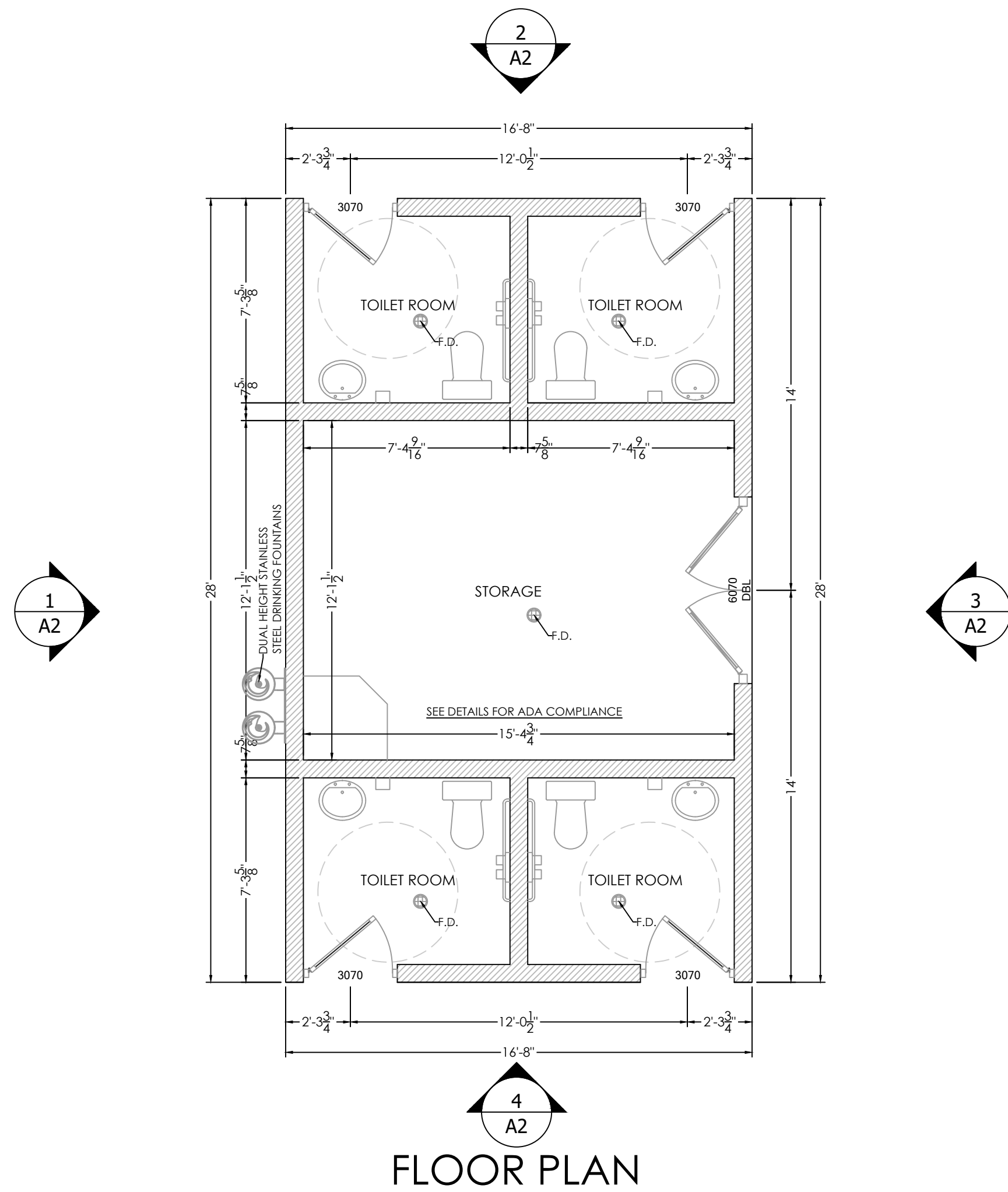
CHECKED BY: CKC

DATE: 2.23.26

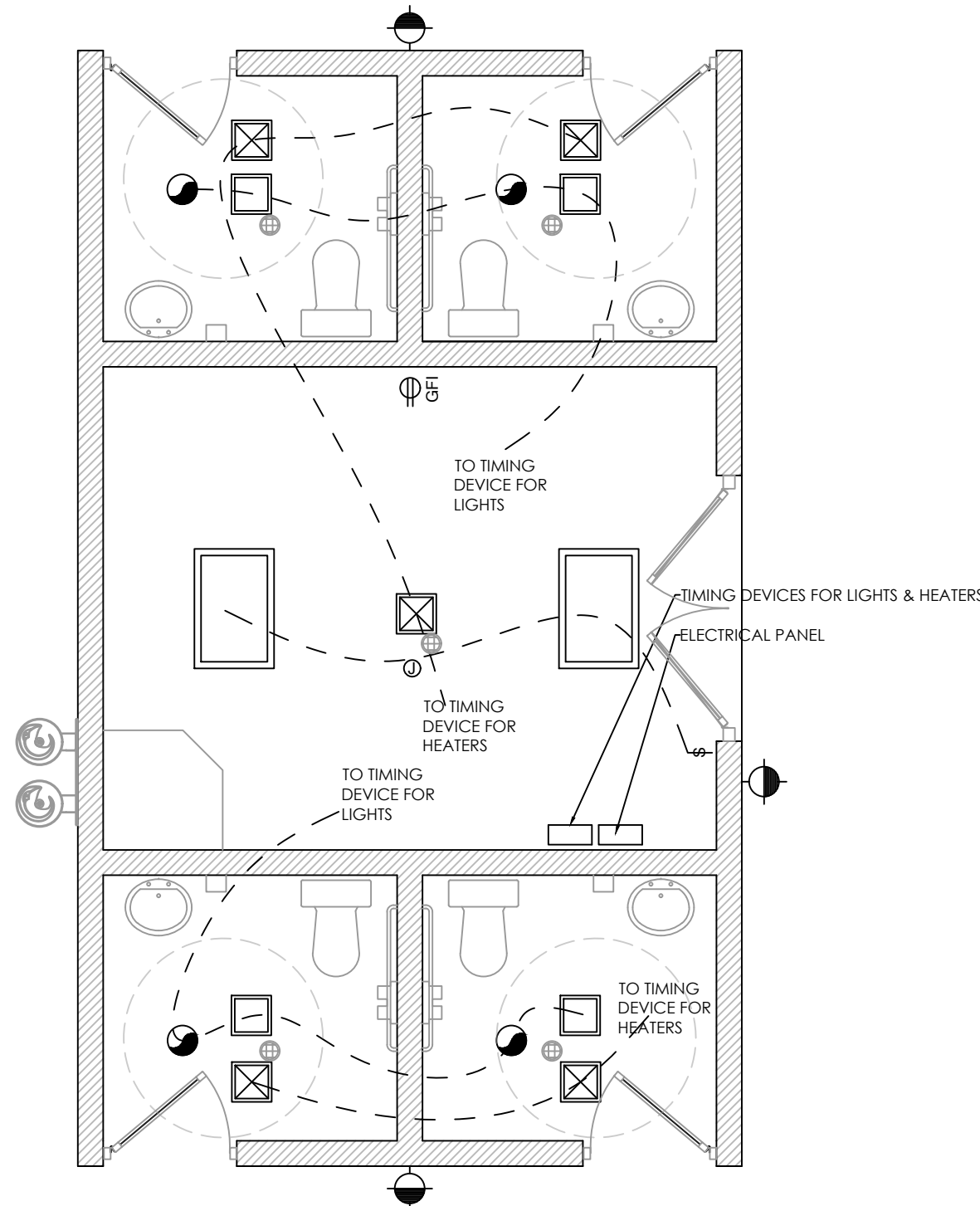
SCALE: 1/4" = 1'-0"
(24"x36")

SHEET

A-1

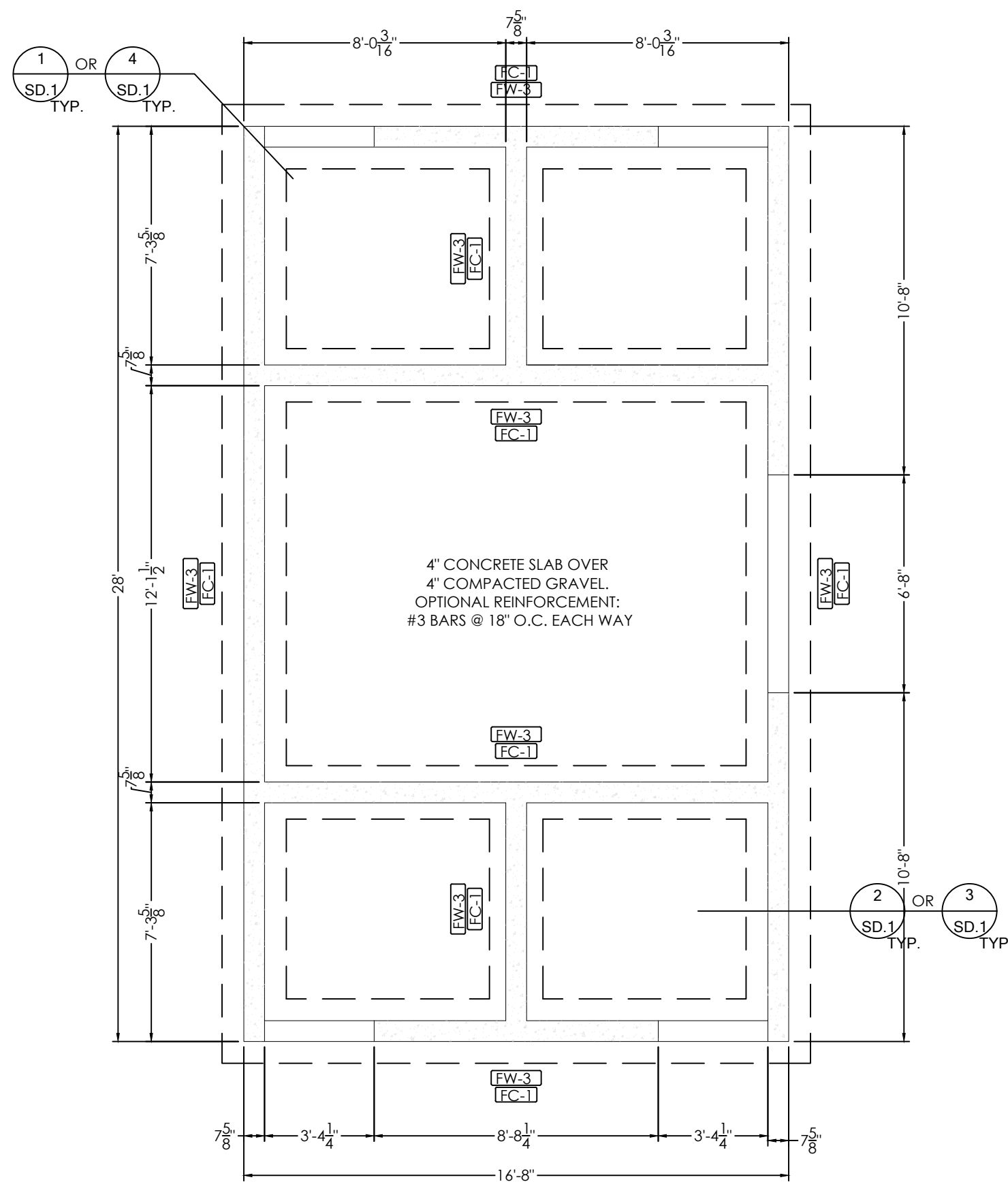


FLOOR PLAN

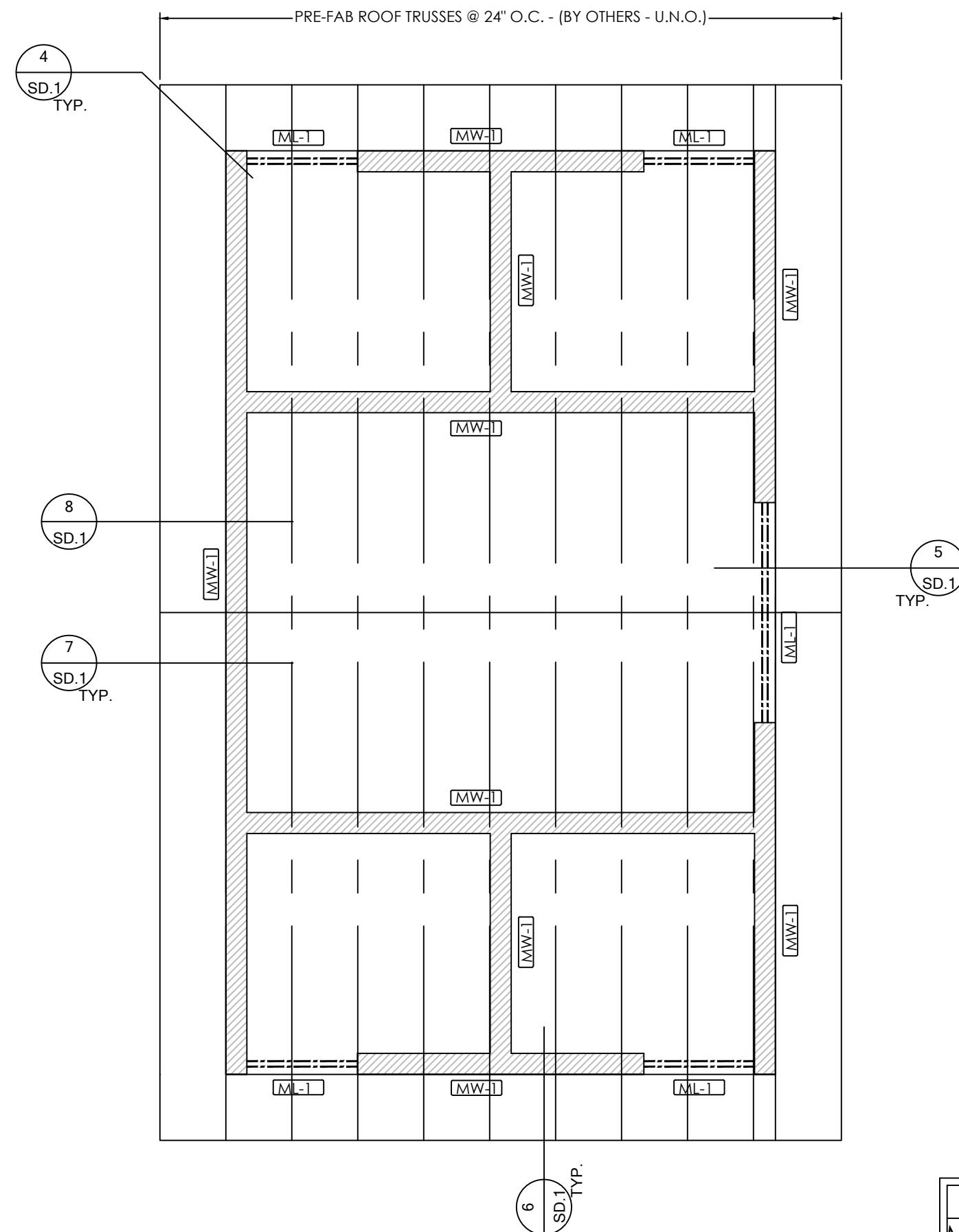


ELECTRICAL LEGEND	
	EXHAUST FAN
	HIGH PRESSURE SODIUM SURFACE MOUNTED LIGHT FIXTURE W/ LEXAN COVER IN RESTROOMS & 2X2 FLOURESCENT LIGHT IN STORAGE ROOM
	DOUBLE POLE SWITCH
	WALL MOUNTED PHOTO CELL HIGH PRESSURE SODIUM TYPE LIGHT FIXTURE
	GFI OUTLET
	JUNCTION BOX
	CEILING MOUNTED ELECTRIC HEATER

ELECTRICAL PLAN



FOUNDATION PLAN



ROOF PLAN

MASONRY LINTEL SCHEDULE			
MARK	LEN.	WIDTH	DEPTH
ML-1	3' - 7'	8"	24"

REINFORCEMENT			
(1) #4 BAR CONT. 4" FROM BOTTOM OF LINTEL			

MASONRY WALL SCHEDULE				
MARK	WIDTH	HEIGHT	VERTICAL	HORIZONTAL
MW-1	8"	9' 4"	#4 BARS @ 48" O.C.	#4 BARS @ 40" O.C.

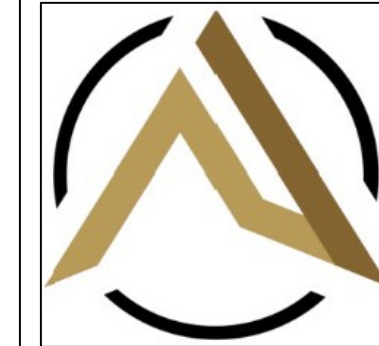
NOTES				
1. ALL HORIZONTAL CORNER LAP SPICES TO BE A MINIMUM OF 24" FROM FOUNDATION WALL CORNER				
2. REBAR AROUND OPENINGS - USE (1) #5 BAR WITHIN 2" OF BOTH SIDES OF OPENING. EXTEND BOTH BARS DOWNWARD 24" PAST OPENING AND WITHIN 3" TO THE TOP OF THE FOUNDATION WALL. USE (1) HORIZONTAL BAR WITHIN 4" OF BOTTOM OF OPENING. EXTEND 24" PAST BOTH SIDES OF OPENING.				
3. PLACE 1/2" x 12" ANCHOR BOLTS @ 32" O.C. W/ A MIN. 6" EMBEDMENT - U.N.O. USE 3" x 3" x 1/2" PLATE WASHERS.				
4. NORMAL WEIGHT CMU BLOCKS U.N.O.				

FOUNDATION WALL SCHEDULE			
DESIG.	WIDTH	HEIGHT	REINFORCEMENT
FW3	8"	36" (MAX)	#4 BARS @ 24" O.C. (3) #4 BARS EQ. SPACE
FW4	8"	48" (MAX)	#4 BARS @ 24" O.C. (4) #4 BARS EQ. SPACE
FW5	8"	60" (MAX)	#4 BARS @ 24" O.C. (4) #4 BARS EQ. SPACE
FW6	8"	72" (MAX)	#4 BARS @ 24" O.C. (5) #4 BARS EQ. SPACE
FW7	8"	84" (MAX)	#4 BARS @ 24" O.C. (6) #4 BARS EQ. SPACE
FW8	8"	96" (MAX)	#4 BARS @ 24" O.C. (6) #4 BARS EQ. SPACE
FW9	8"	108" (MAX)	#4 BARS @ 16" O.C. (7) #4 BARS EQ. SPACE

NOTES			
1. ALL HORIZONTAL CORNER LAP SPICES TO BE A MINIMUM OF 24" FROM FOUNDATION WALL CORNER			
2. REBAR AROUND OPENINGS - USE (2) HORIZONTAL BARS WITHIN 2" OF THE TOP OPENING EXTENDING AT LEAST 24" PAST BOTH SIDES OF OPENING. USE (1) BAR WITHIN 2" OF BOTH SIDES OF OPENING. EXTEND BOTH BARS DOWNWARD 24" PAST OPENING AND WITHIN 3" TO THE TOP OF THE FOUNDATION WALL. USE (1) HORIZONTAL BAR WITHIN 4" OF BOTTOM OF OPENING. EXTEND 24" PAST BOTH SIDES OF OPENING.			
3. PLACE 1/2" x 12" ANCHOR BOLTS @ 32" O.C. W/ A MIN. 7" EMBEDMENT - U.N.O. USE 3" x 3" x 1/2" PLATE WASHERS.			

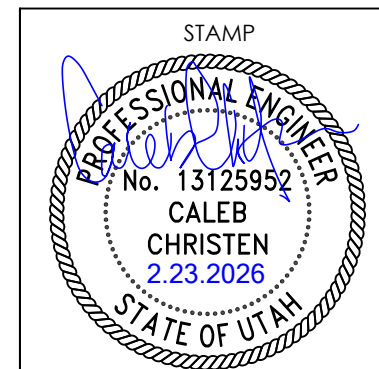
TYPICAL FOOTING SCHEDULE			
MARK	LENGTH	WIDTH	DEPTH
FC-1	CONT.	20"	10"
FC-2	CONT.	18"	10"
FC-3	CONT.	24"	10"
FC-4	CONT.	30"	10"
FC-5	CONT.	36"	10"
FC-6	CONT.	42"	12"
FC-7	CONT.	48"	12"

REINFORCEMENT			
(2) #4 BARS CONT. @ EQUAL SPACING			
(3) #4 BARS EACH WAY @ EQUAL SPACING			
(4) #4 BARS EACH WAY @ EQUAL SPACING			
(5) #5 BARS EACH WAY @ EQUAL SPACING			
(6) #5 BARS EACH WAY @ EQUAL SPACING			
(7) #5 BARS EACH WAY @ EQUAL SPACING			



PROVO BATHROOMS - QUAIL ORCHARD 4 BATH

ELEVATIONS & SECTIONS



DATE	REVISION			

PROJECT NO: 26-007

DRAWN BY: CKC

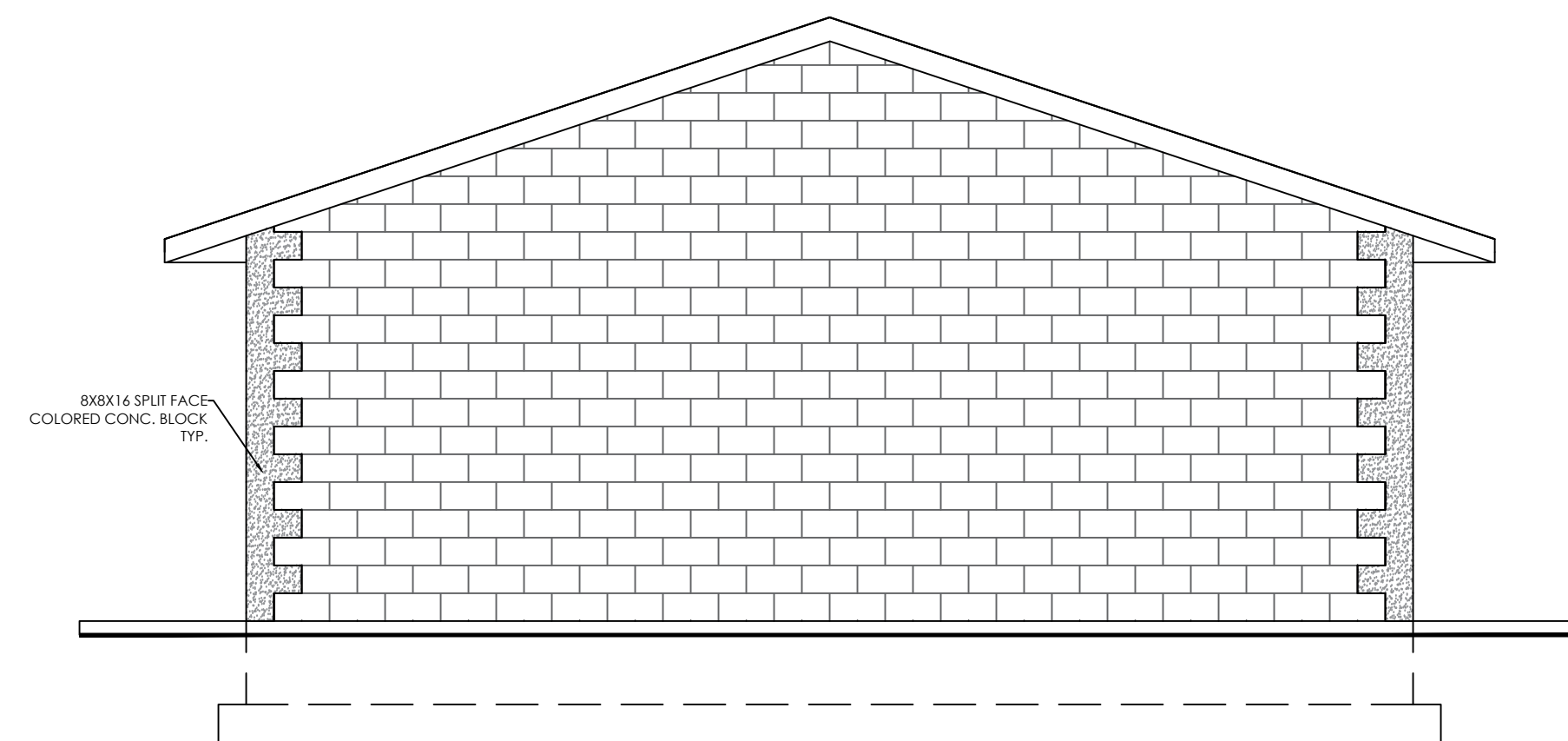
CHECKED BY: CKC

DATE: 2.23.26

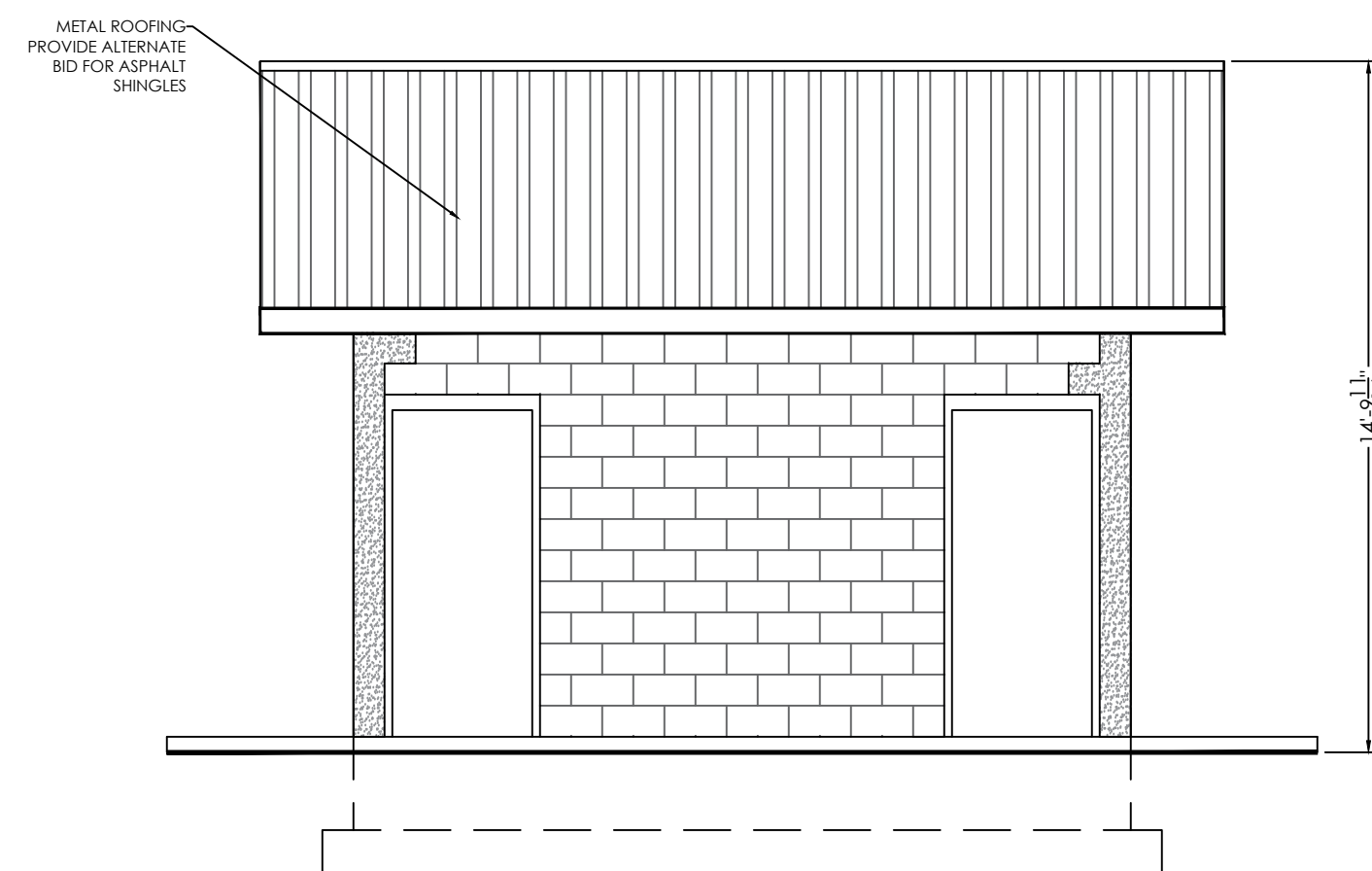
SCALE:

SHEET

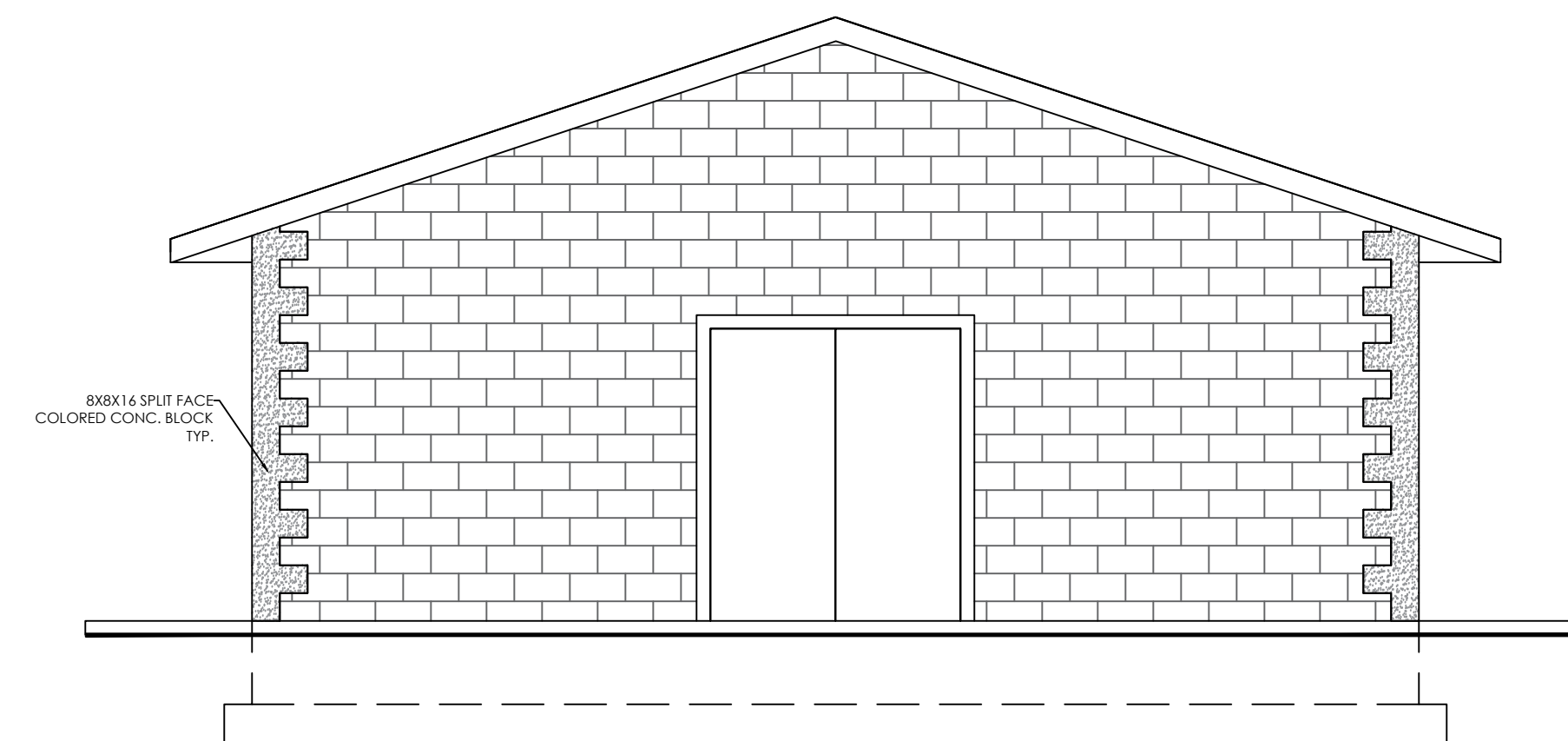
A-2



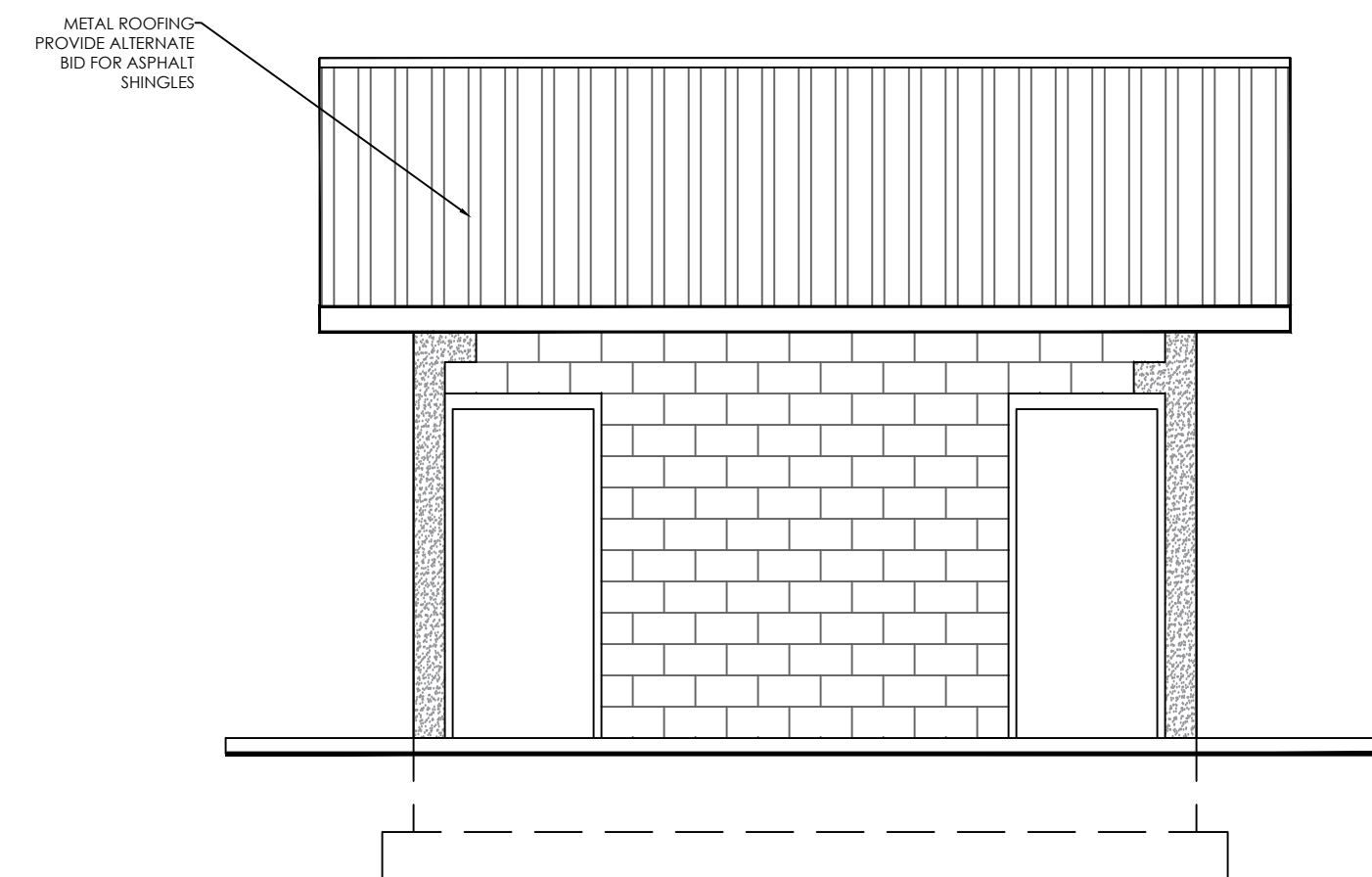
E1 ELEVATION 1
SCALE: 1/4"=1'-0"



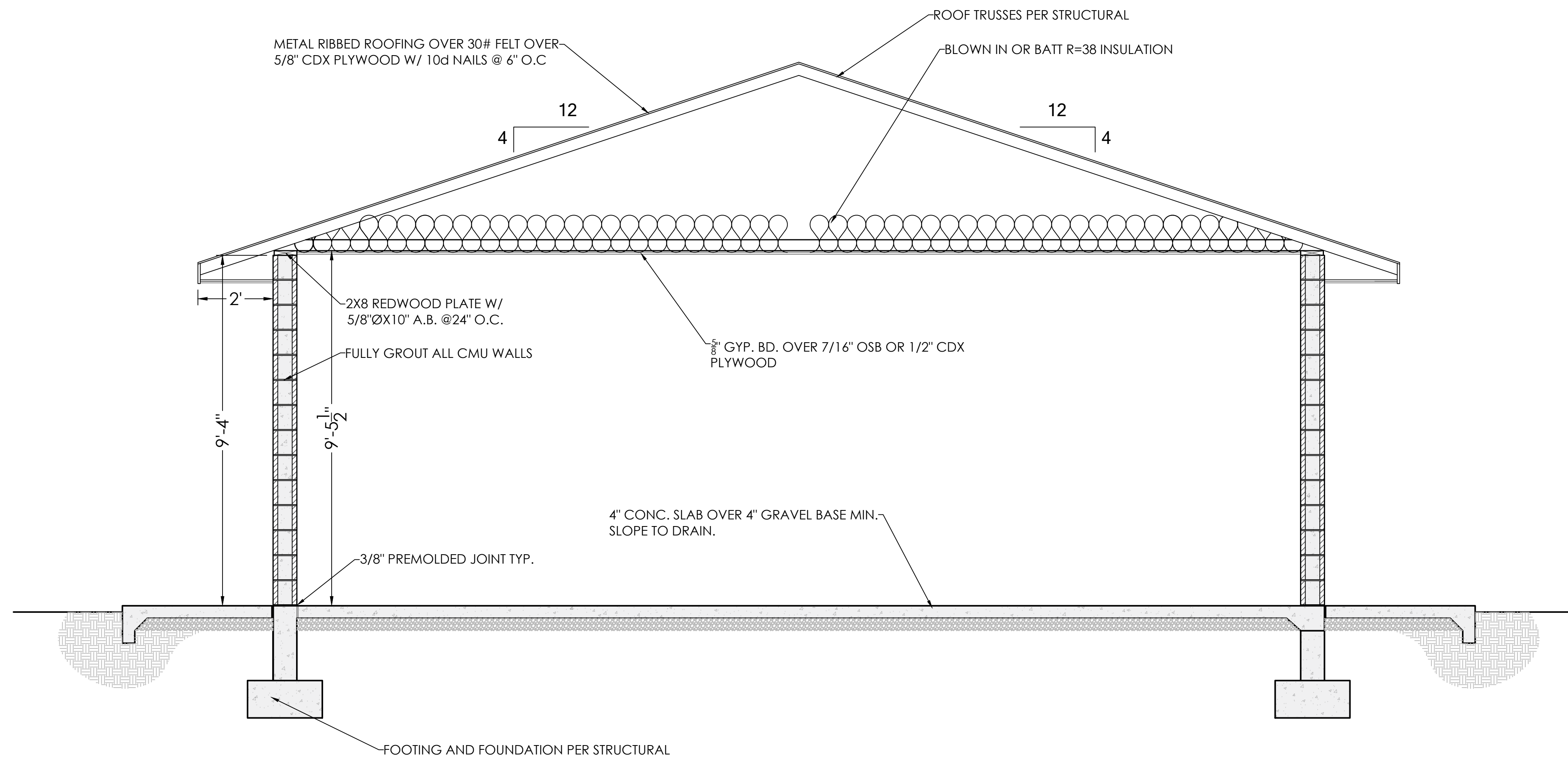
E2 ELEVATION 2
SCALE: 1/4"=1'-0"



E3 ELEVATION 3
SCALE: 1/4"=1'-0"



E4 ELEVATION 4
SCALE: 1/4"=1'-0"



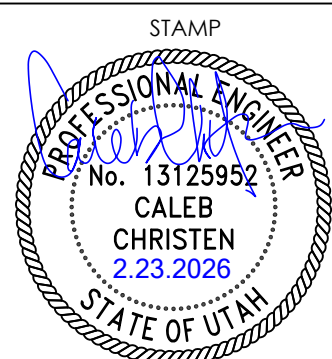
SECTION

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



PROVO BATHROOMS - QUAIL ORCHARD 4 BATH

DETAILS



DATE	REVISION			

PROJECT NO: 26-007

DRAWN BY: CKC

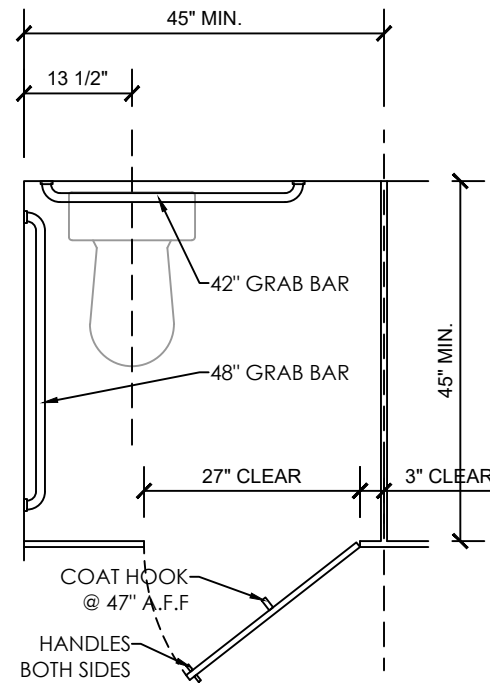
CHECKED BY: CKC

DATE: 2.23.26

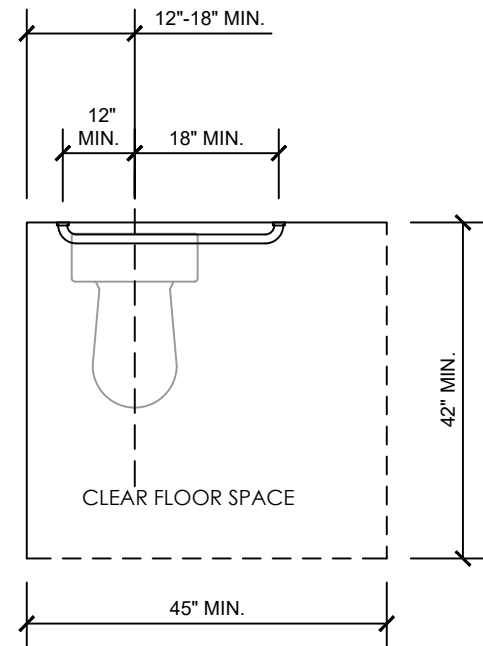
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SHEET

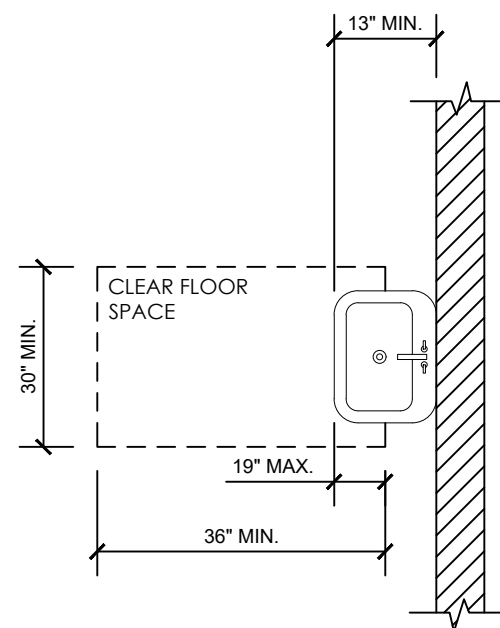
A-3



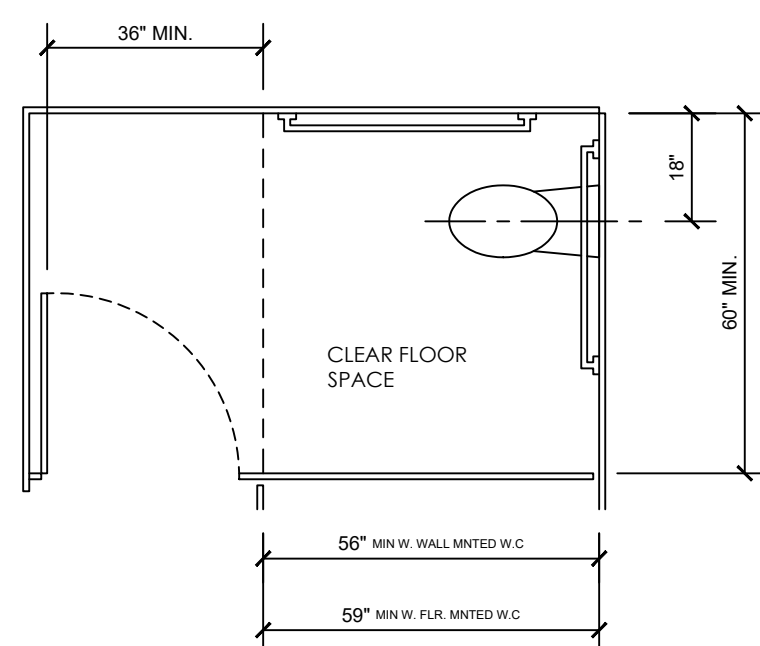
1 TYPICAL ADA DETAIL
SCALE: 1/2"=1'-0"



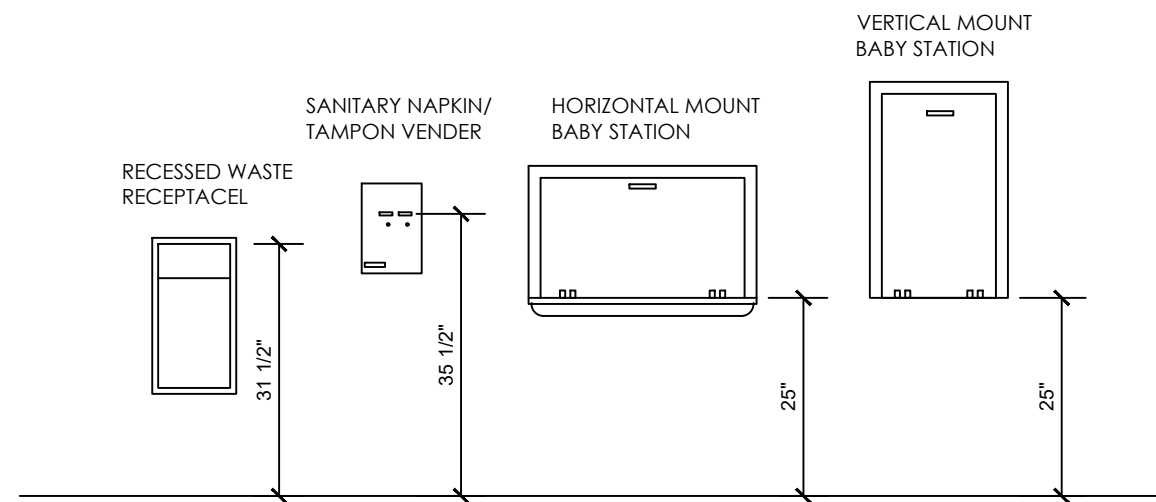
2 FLOOR SPACE @ WATER CLOSET
SCALE: 1/2"=1'-0"



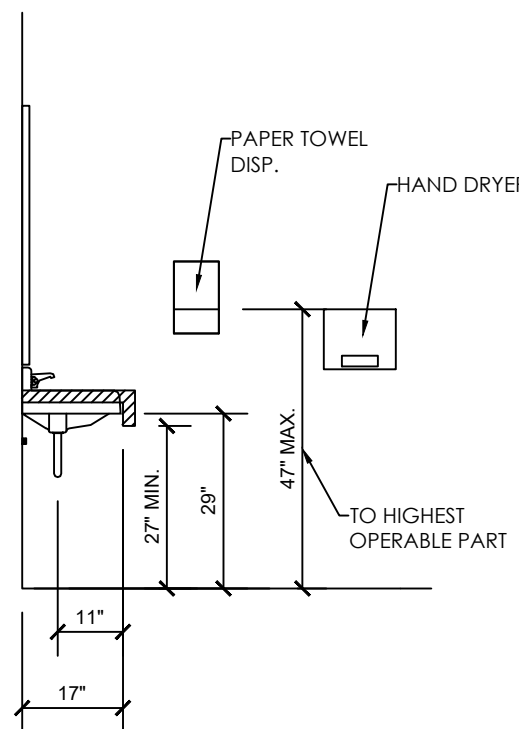
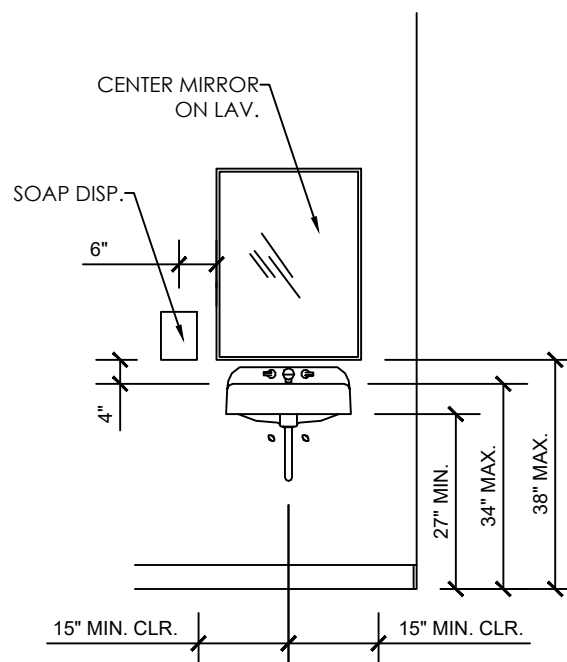
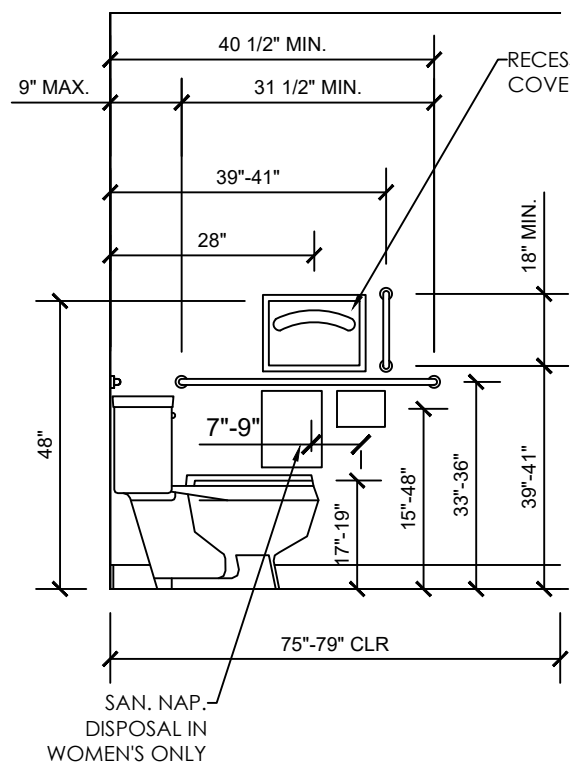
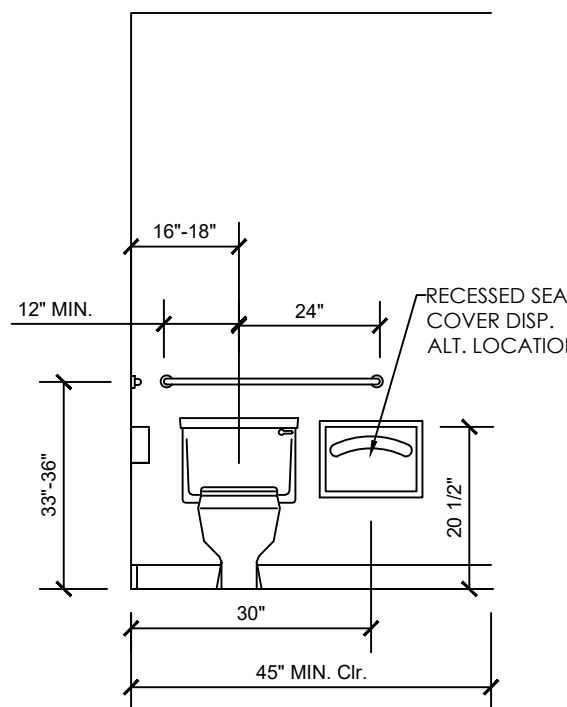
3 FLOOR SPACE @ LAVS & SINKS
SCALE: 1/2"=1'-0"



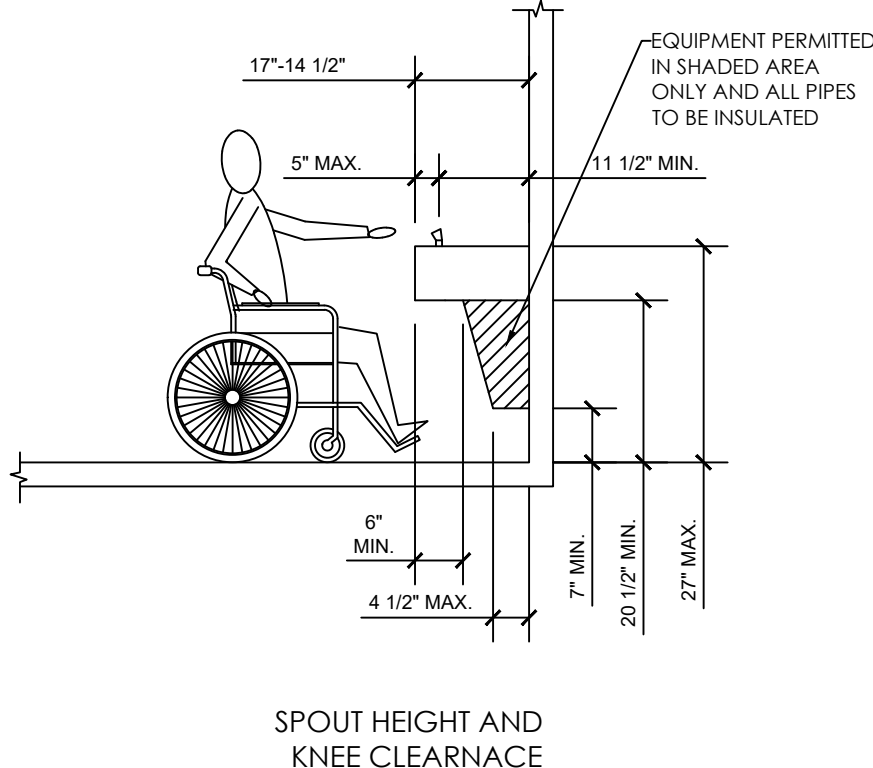
4 STANDARD STALL (END OF ROW)
SCALE: 1/2"=1'-0"



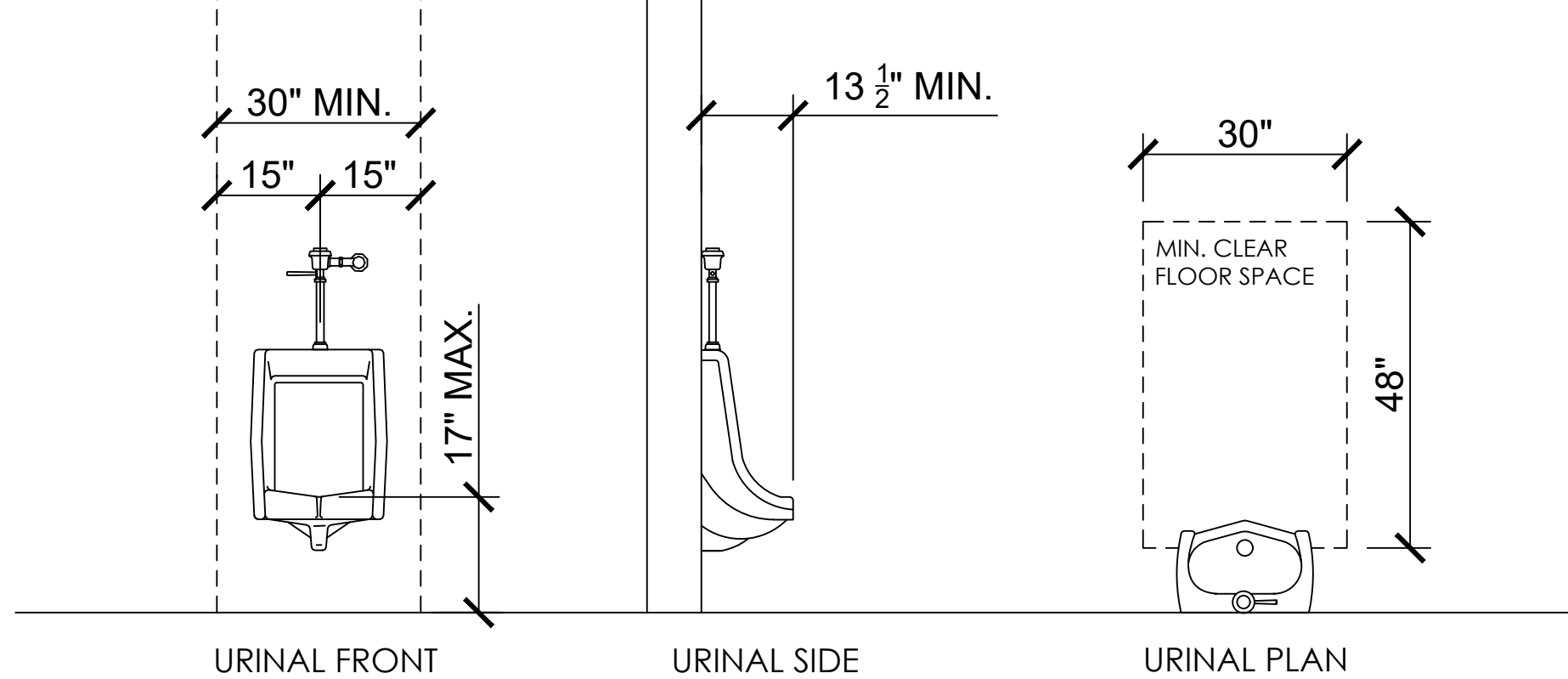
5 MOUNTING HEIGHT OF MISC. FIXTURES
SCALE: 1/2"=1'-0"



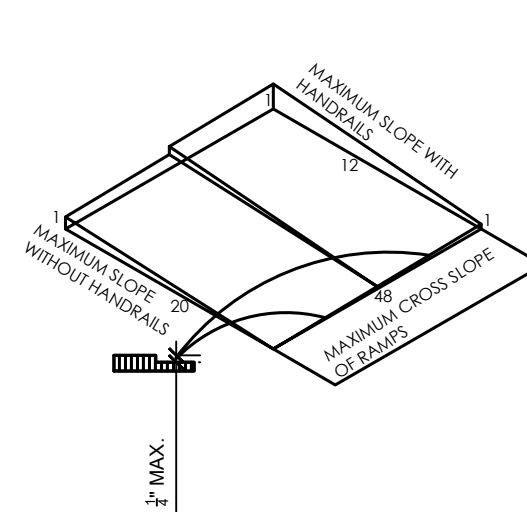
6 CLEARANCES IN THE BATHROOM
SCALE: 1/2"=1'-0"



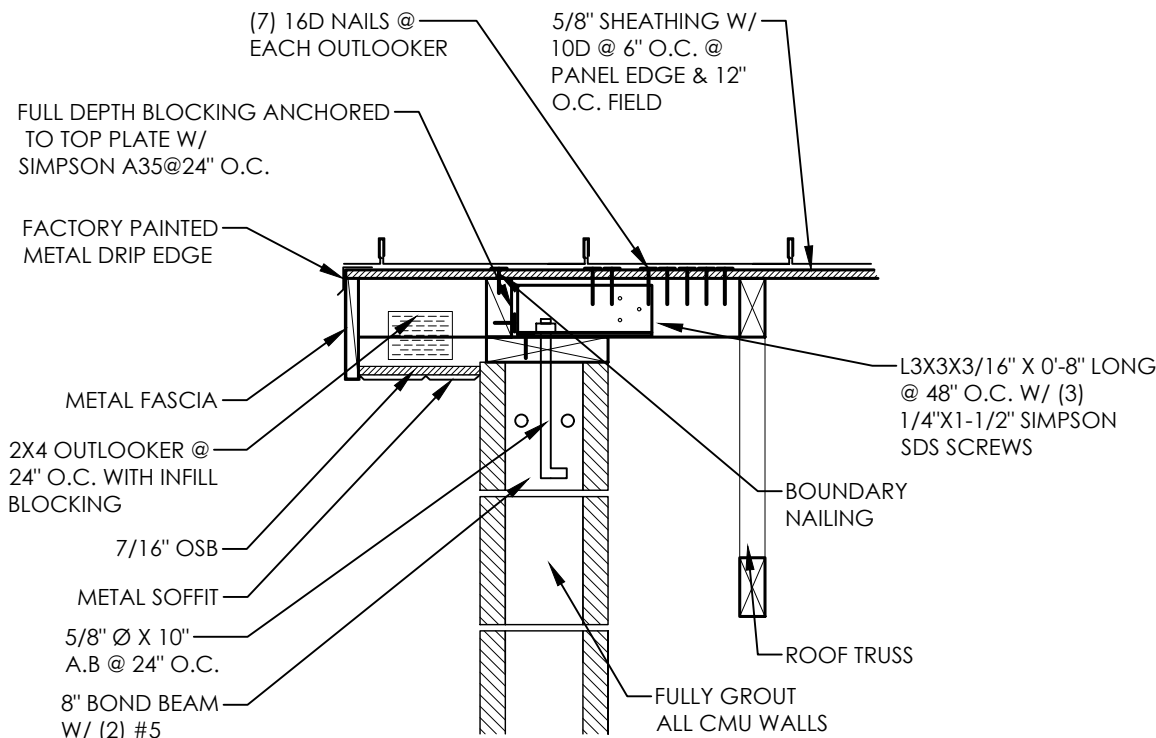
7 SPOUT HEIGHT AND KNEE CLEARANCE
SCALE: 1/2"=1'-0"



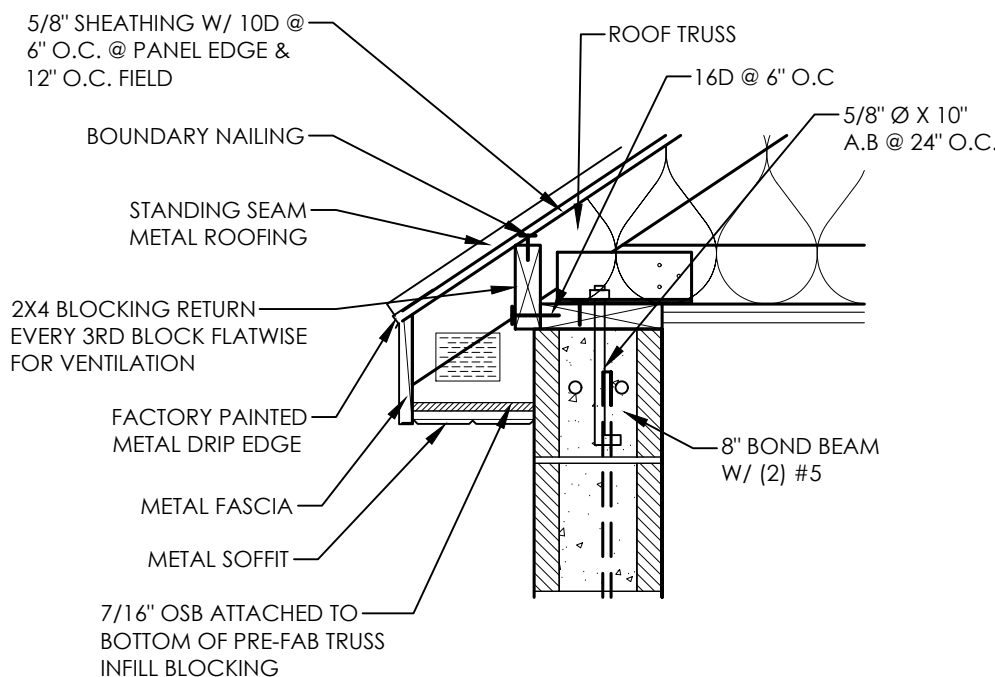
8 CLEARANCES FOR URINALS
SCALE: 1/2"=1'-0"



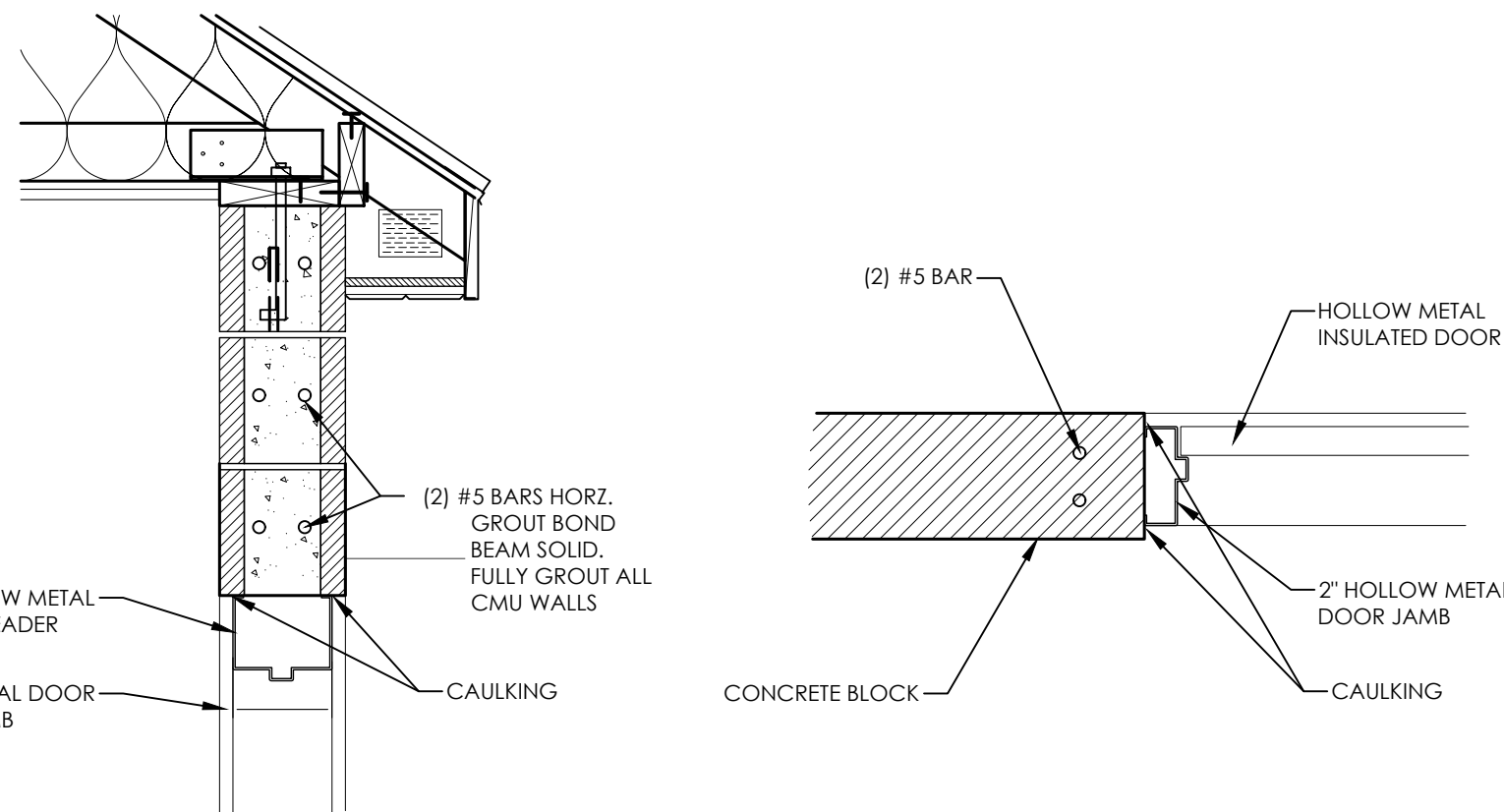
9 ADA SURFACE REQUIREMENTS
SCALE: 1/2"=1'-0"



10 RAKE DETAIL
SCALE: 1-1/2"=1'-0"



11 EAVE SOFFIT DETAIL
SCALE: 1-1/2"=1'-0"



12 DOOR HEADER & JAMB DETAIL
SCALE: 1-1/2"=1'-0"

STRUCTURAL DESIGN CRITERIA			
GOVERNING CODE: IBC 2021			
VERTICAL LOADS			
ROOF LOADING: ROOF DEAD LOAD ROOF LIVE LOAD ROOF SNOW LOAD GROUND SNOW LOAD, P _g FLAT ROOF SNOW LOAD, P _f EXPOSURE FACTOR, C _s THERMAL FACTOR, C _t IMPORTANCE FACTOR, I DRIFT SURCHARGE	15.0 PSF	FLOOR LOADING: FLOOR DEAD LOAD	15.0 PSF
	20.0 PSF	FLOOR LIVE LOAD	40.0 PSF
	49.1 PSF		
	64.0 PSF		
	49.1 PSF		
		WALL WEIGHT: FLOOR DEAD LOAD (FRAMING)	70.0 PSF
	1.0		
	1.0		
	1.0		
	PER PLAN		
HORIZONTAL LOADS			
WIND PARAMETERS:		SEISMIC PARAMETERS:	
ULTIMATE DESIGN WIND SPEED	105MPH	SEISMIC RISK CATEGORY	
NOMINAL DESIGN WIND SPEED	85 MPH	SEISMIC DESIGN CATEGORY	
WIND RISK CATEGORY	II	SPECTRAL RESPONSE ACCELERATIONS	
WIND EXPOSURE	C	S _s	1.55g
INTERNAL PRESSURE COEFFICIENT	0.18	S ₁	0.51g
CLADDING PRESSURE	16.0 PSF	F ₂	1.00g
		F ₃	1.80g
		S _{ms}	1.04g
		S _{s1}	0.68g
		FORCE RESISTING SYSTEM	MASONRY
		R	5
		Cd	3.5
		2	2
		IMPORTANCE FACTOR, I	1.0
		DESIGN BASE SHEAR, V	0.127W
		ANALYSIS PROCEDURE	E.L.F.

1. CONSTRUCTION DOCUMENTS ARE VALID FOR A SINGLE USE AT THE PROJECT LOCATION AND SHALL NOT BE REUSED, COPIED, OR REPRODUCED WITHOUT WRITTEN APPROVAL OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

2. THE GENERAL CONTRACTOR SHALL:

A. FIELD VERIFY ALL SITE CONDITIONS AND IMMEDIATELY NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER REGARDING ANY DISCREPANCIES WITH ACTUAL CONDITIONS AT THE SITE.

B. COORDINATE ALL WORK BETWEEN THE VARIOUS TRADES AND SUBCONTRACTORS. REPORT ANY MODIFICATIONS TO THE STRUCTURAL PORTION OF THE BUILDING BY OTHER TRADES TO THE ARCHITECT AND ENGINEER.

3. CONTRACT DOCUMENTS:

A. DETAILS, SECTIONS AND NOTES SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO ALL SIMILAR SITUATIONS ELSEWHERE, UNLESS NOTED OR SHOWN OTHERWISE.

B. THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE OVER SHOP DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE.

4. BUILDING CODE COMPLIANCE:

A. INSPECTION, TESTING, CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND STANDARDS. ASTM AND IBC DESIGNATIONS SHALL BE AMENDED TO LATEST DATE UNLESS NOTED OTHERWISE.

5. CONSTRUCTION SEQUENCE, SHORING, AND BRACING REQUIREMENTS:

A. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE METHOD, MEANS, AND SEQUENCE OF ALL STRUCTURAL ERECTION EXCEPT WHEN SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. HE SHALL PROVIDE TEMPORARY SHORING AND BRACING AS HIS METHOD OF ERECTION REQUIRES TO PROVIDE ADEQUATE VERTICAL AND LATERAL SUPPORT DURING ERECTION. THIS SHORING AND BRACING SHALL REMAIN IN PLACE UNTIL ALL PERMANENT MEMBERS ARE PLACED AND ALL FINAL CONNECTIONS ARE COMPLETED, INCLUDING ALL ROOF AND FLOOR ATTACHMENTS.

B. SHORING AND SUPPORTING FORM WORK FOR SUSPENDED CONCRETE OR MASONRY MATERIAL SHALL REMAIN IN PLACE AND SHALL NOT BE REMOVED UNTIL THE STRUCTURAL MEMBERS HAVE ACQUIRED SUFFICIENT STRENGTH TO SAFELY SUPPORT THEIR OWN WEIGHT AND ANY ADDITIONAL CONSTRUCTION, STORAGE, AND/OR OTHER LOADS TO WHICH THEY MAY BE SUBJECTED. IN NO CASE SHALL THEY BE REMOVED PRIOR TO 7 DAYS. RE-SHORING SHALL BE IMMEDIATELY INSTALLED UPON REMOVAL OF SUCH FORMS AND SHALL REMAIN IN PLACE UNTIL 28 DAYS AFTER PLACING OF MATERIAL OR UNTIL MATERIAL HAS REACHED ITS 28 DAY DESIGN STRENGTH, WHICHEVER IS LONGER. DO NOT REMOVE LARGE AREAS OF SHORING BEFORE STARTING RE-SHORING PROCEDURES.

C. NON-BEARING INTERIOR WALLS SHALL BE ADEQUATELY BRACED TO THE STRUCTURE ABOVE WITH ALLOWANCE FOR DEFLECTION OF THE STRUCTURE ABOVE AND/OR BELOW.

D. BUILDING WALLS WHICH RETAIN EARTH MUST BE BRACED AT THE TOP. DO NOT BACKFILL UNLESS BRACING IS PROVIDED OR UNTIL THE COMPLETE FLOOR OR ROOF SYSTEM IS IN PLACE, TYPICAL, UNLESS NOTED OTHERWISE.

6. OMISSIONS AND/OR CONFLICTS:

A. OMISSIONS IN AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER AND SHALL BE RESOLVED BY THE SAME BEFORE PROCEEDING WITH ANY WORK INVOLVED.

7. REMODEL AND ADDITION PLANS:

A. THE ENGINEER ASSUMES NO LIABILITY FOR THE DESIGN AND CONSTRUCTION OF THE EXISTING BUILDING.

B. NOTIFY ENGINEER OF ANY DISCREPANCIES WITH THE EXISTING SITE AND PROPOSED CONSTRUCTION DOCUMENTS PRIOR TO ANY DEMOLITION AND CONSTRUCTION.

DEFERRED SUBMITTAL NOTES

1. PRE-FABRICATED METAL PLATE TRUSSES ARE TO BE SUBMITTED SUBSEQUENT TO THE TIME OF APPLICATION.

2. DEFERRED SUBMITTALS SHALL HAVE THE PRIOR APPROVAL OF THE BUILDING OFFICIAL.

3. DEFERRED SUBMITTAL DOCUMENTS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO SHALL REVIEW AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING.

4. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

SITE PREPARATION

1. STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE ACCURACY, COMPLETENESS, OR CODE COMPLIANCE OF ARCHITECTURAL, ELECTRICAL, MECHANICAL OR DRAINAGE SPECS.

2. SOILS REPORT:

A. IF SOILS CONDITIONS VARY FROM THE SOILS REPORT, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ARCHITECT AND THE STRUCTURAL ENGINEER.

B. FDN DESIGN BASED ON THE NOTED PSF SOIL BEARING CAPACITY. WE RECOMMEND THAT A LICENSED GEOTECHNICAL ENGINEER VERIFY THE SOIL BEARING CAPACITY, SLOPE STABILITY, ETC.

3. REQUIREMENTS:

A. DO NOT PLACE FOOTINGS OR FOUNDATIONS ON DISTURBED SOILS, UNDOCUMENTED FILL, DEBRIS, FROZEN SOIL, OR IN PONDED WATER.

B. ALL UNSUITABLE SOILS AND VEGETATION, SUCH AS TOPSOIL, ORGANIC SOILS, UNDOCUMENTED FILL, DISTURBED NATIVE SOILS, AND OTHER DELETERIOUS MATERIALS, SHALL BE REMOVED FROM BELOW FOOTINGS, FOUNDATIONS, AND FLOOR SLABS.

C. STRUCTURAL FILL SHALL CONSIST OF IMPORTED, WELL GRADED, GRANULAR SOIL WITH A MAXIMUM PARTICLE SIZE OF THREE INCHES, LESS THAN 30 PERCENT RETAINED ON THE ½" SIEVE, AND LESS THAN 15 PERCENT FINES (MATERIAL PASSING THE NO. 200 SIEVE). THE LIQUID LIMIT OF THE FINES SHALL NOT EXCEED 35 PERCENT AND THE PLASTICITY INDEX SHALL BE BELOW 15.

D. STRUCTURAL FILL SHALL BE PLACED IN MAXIMUM EIGHT INCH LOOSE LIFTS AND COMPACTED ON A HORIZONTAL PLANE. MOISTURE SHALL BE MAINTAINED BY PROPER MIXING AT A MOISTURE CONTENT WITHIN TWO PERCENT OF THE OPTIMUM MOISTURE DETERMINED BY ASTM D 1557. COMPACT TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557 BELOW FOOTINGS, FOUNDATIONS, AND FLOOR SLABS.

E. ALL STRUCTURAL FILL THAT BECOMES DISTURBED DURING CONSTRUCTION SHALL BE RE-COMPACTED PER THE COMPACTION REQUIREMENTS SPECIFIED ABOVE. IF SOFT OR PUMPING CONDITIONS ARE ENCOUNTERED, THE SUB-GRADE MUST BE PROPERLY STABILIZED. DE-WATERING, PLACEMENT OF GEO-FABRIC, OR OTHER STABILIZATION MAY BE REQUIRED.

F. ALL SLABS ON GRADE SHALL BE UNDERLAIN BY FOUR INCHES OF FREE-DRAINING GRANULAR MATERIAL SUCH AS "PEA" GRAVEL OR THREE-QUARTERS TO ONE INCH MINUS CLEAN GRAVEL.

G. THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL HAVE A 5-PERCENT SLOPE AWAY FROM THE BUILDING FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE FOUNDATION WALL. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, A 5-PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. IMPERVIOUS SURFACES WITHIN 10 FEET OF THE BUILDING FOUNDATION SHALL HAVE A MINIMUM 2-PERCENT SLOPE.

CONCRETE

1. CONCRETE MATERIALS, QUALITY CONTROL, AND CONSTRUCTION SHALL COMPLY WITH CURRENT EDITIONS OF IBC AND ACI 318.

2. COMPRESSIVE STRENGTH (MINIMUM SPECIFIED AT 28 DAYS)

A. FOOTINGS:

3,000 PSI

B. INTERIOR FLOOR SLABS ON GRADE: 4,000 PSI

C. EXTERIOR FLOOR SLABS ON GRADE: 4,000 PSI

D. SUSPENDED SLABS: 4,000 PSI

E. WALLS: 3,000 PSI FOR R-2 AND R-3 OCCUPANCIES, 4,000 PSI FOR OTHER

NOTE: 2500 PSI CONCRETE USED IN FOOTING DESIGN, HIGHER STRENGTHS SPECIFIED FOR QUALITY CONTROL.

3. MATERIALS

A. CEMENTS (ASTM C 150). CONCRETE EXPOSED TO FREEZING AND THAWING OR DEICING CHEMICALS SHALL CONFORM TO THE MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIOS AND MINIMUM COMPRESSIVE STRENGTH REQUIREMENTS OF ACI-318.

B. AGGREGATES (ASTM C 33): NOMINAL MAXIMUM SIZE OF COARSE AGGREGATE SHALL NOT BE LARGER THAN ½ THE NARROWEST DIMENSION BETWEEN FORMS, NOR ½ THE DEPTH OF SLABS, NOR ½ THE MINIMUM CLEAR SPACING BETWEEN REINFORCING BARS OR WIRES, TENDONS, OR DUCTS.

C. WATER USED IN MIXING CONCRETE SHALL BE POTABLE, CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIS, SALTS, ORGANIC MATERIALS, OR OTHER SUBSTANCES DELETERIOUS TO CONCRETE OR REINFORCEMENT.

D. ADMIXTURES SHALL BE SUBJECT TO PRIOR APPROVAL BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

E. CONCRETE EXPOSED TO FREEZING AND THAWING OR DEICING CHEMICALS SHALL BE AIR-ENTRAINED WITH AIR CONTENT INDICATED IN ACI 318. TOLERANCE ON AIR CONTENT AS DELIVERED SHALL BE PLUS/MINUS 1.5 PERCENT.

4. CONSTRUCTION:

A. CONCRETE SHALL BE PROPERLY VIBRATED DURING PLACEMENT.

B. PRIOR TO PLACING CONCRETE, CHECK WITH ALL TRADES TO ENSURE PROPER PLACEMENT OF OPENINGS, BLOCK OUTS, SLEEVES, CURBS, CONDUITS, BOLTS, INSERTS, EMBEDS, DOWELS, ETC. ANCHOR BOLTS AND DOWELS SHALL BE PLACED PRIOR TO CASTING CONCRETE.

C. CONSTRUCTION JOINTS AND BULKHEADS SHALL BE FORMED WITH A KEYWAY. ALL CONTACT SURFACES, NEW OR EXISTING, AT CONSTRUCTION JOINTS SHALL BE INTENTIONALLY ROUGHENED PRIOR TO CASTING ADJACENT POUR.

D. OPENINGS IN FLOORS AND/OR WALLS SHALL HAVE ADDITIONAL REINFORCING AROUND ALL SIDES OF THE OPENING EQUIVALENT TO THE BARS CUT BY THE OPENING WITH HALF ON EACH SIDE OF THE OPENING OR 2-#4 BARS, WHICHEVER IS GREATER, UNLESS NOTED OTHERWISE. BARS PARALLEL TO THE PRINCIPAL REINFORCING SHALL RUN FULL LENGTH OF THE SPAN. BARS IN THE OTHER DIRECTION SHALL RUN 24 INCHES BEYOND THE EDGE OF THE OPENING OR END WITH A STANDARD HOOK. ALSO PROVIDE 2-#4 x 4'-0" DIAGONAL BARS AT EACH CORNER OF EACH OPENING.

E. NO PENETRATION SHALL BE ALLOWED THROUGH ANY CONCRETE BEAM, JOIST, COLUMN, PIER, WALL, OR JAMB WITHOUT THE ARCHITECT'S AND STRUCTURAL ENGINEER'S PRIOR WRITTEN APPROVAL. PENETRATIONS SHALL BE RE-ROUTED AS REQUIRED AT THESE LOCATIONS.

5. FOOTINGS:

A. FOOTINGS SHALL BEAR ON PROPERLY PREPARED MATERIAL. SEE THE SITE PREPARATION NOTES.

B. FOOTINGS SHALL BE CENTERED BELOW THE WALL AND/OR COLUMN ABOVE, TYPICAL UNLESS NOTED OTHERWISE.

C. EXTERIOR FOOTINGS SHALL BEAR BELOW THE EFFECTS OF FROST.

D. STAGGER FOOTING CONSTRUCTION JOINTS FROM WALL CONSTRUCTION JOINTS ABOVE BY AT LEAST 6 FEET.

E. REINFORCING IN CONTINUOUS FOOTINGS SHALL BE CONTINUOUS AT CORNERS AND/OR INTERSECTIONS BY PROVIDING PROPER LAP LENGTHS AND/OR CORNER BARS.

F. EXTERIOR CONTINUOUS FOOTINGS WITHOUT CONCRETE FOUNDATION WALLS ABOVE SHALL BE REINFORCED WITH A MINIMUM OF 2-#4 LONGITUDINAL TOP BARS IN ADDITION TO REINFORCING SPECIFIED IN THE FOOTING SCHEDULE.

G. NO PENETRATIONS SHALL BE ALLOWED THROUGH ANY CONCRETE FOOTING, WHEN CONFLICTS ARISE BETWEEN UNDERGROUND PLUMBING, UTILITIES, ETC., THE FOOTING SHALL BE STEPPED DOWN BELOW THE CONFLICT AND A CONCRETE WALL, PIER, COLUMN, ETC. SHALL BE EXTENDED TO THE FOOTING AS REQUIRED.

H. BEARING SURFACES FOR FOOTINGS WHICH ARE, OR BECOME, UNDERMINED DURING CONSTRUCTION SHALL BE BACKFILLED WITH A LEAN-MIX CONCRETE (1000 PSI MIN.).

6. SLABS ON GRADE:

A. INTERIOR SLABS ON GRADE SHALL BE A MINIMUM OF 4 INCHES THICK, SHALL BEAR ON A 4 INCH MINIMUM LAYER OF FREE-DRAINING GRAVEL.

B. CONTROL JOINT SPACING RULE OF THUMB IS 24x SLAB THICKNESS (4" SLAB = 8'-0" MAX O.C. EACH WAY). PROVIDE CONTROL JOINTS AT APPROX. 15'-0" EACH WAY (MAXIMUM).

C. SAW CUT WITHIN 6-18 HOURS OF POURING CONCRETE - 24 HOURS MAX. CONCRETE MUST BE HARD ENOUGH TO PREVENT RAVELING OF JOINT EDGES OR DISLODGING OF COARSE AGGREGATE.

D. LARGE AREAS OF INTERIOR SLABS ON GRADE SHALL BE PLACED IN STRIPS NOT TO EXCEED 120 FEET IN LENGTH NOR 30 FEET IN WIDTH WHICH ARE SUBDIVIDED BY CONSTRUCTION AND/OR CONTRACTION (CONTROL) JOINTS INTO ROUGHLY SQUARES WHOSE SIDES SHALL NOT EXCEED 15 FEET IN EITHER DIRECTION.

7. WALLS:

A. PLACE VERTICAL REINFORCING IN THE CENTER OF THE WALL (EXCEPT FOR RETAINING WALLS, OR WHEN EACH FACE IS SPECIFIED).

B. VERTICAL REINFORCING SHALL BE DOWELED TO FOOTING OR STRUCTURE BELOW AND TO STRUCTURE ABOVE WITH THE SAME SIZE BAR AND SPACING, TYPICAL, UNLESS NOTED OTHERWISE.

C. PROVIDE CORNER BARS AT ALL INTERSECTIONS AND CORNERS. USE SAME SIZE BAR AND SPACING AS THE HORIZONTAL REINFORCING.

D. HORIZONTAL REINFORCING SHALL TERMINATE AT THE ENDS OF WALLS AND AT OPENINGS WITH A STANDARD HOOK.

E. WHEN TWO CURTAINS OF STEEL ARE REQUIRED, THE SPLICES IN THE HORIZONTAL REINFORCING OF EACH CURTAIN SHALL NOT OCCUR AT THE SAME LOCATION.

F. PROVIDE DRAINAGE AT THE BASE OF RETAINING WALLS AND AT THE BASE OF ALL BASEMENT WALLS.

G. ANCHOR BOLTS ARE TO HAVE A MIN. 7" EMBEDMENT INTO CONCRETE. PROVIDE 1 BOLT A MIN. OF 4" FROM END OF PLATE & A MAX. OF 12" FROM END OF PLATE. EACH PLATE IS TO HAVE A MIN. OF 2 BOLTS. ANCHOR BOLT SPACING IS NOT TO EXCEED 32" O.C. U.N.O. ON PLANS.

H. ANCHOR BOLT WASHERS TO BE A MINIMUM 3"x3"x0.229" WITH ROUND OR SLOTTED HOLES WITH CUT WASHER AND PLACED WITHIN ½" OF SHEATHED FACE OF PLATE.

REINFORCING STEEL

1. CODES AND STANDARDS:

A. REINFORCING STEEL SHALL COMPLY WITH:

I. CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".

II. AMERICAN CONCRETE INSTITUTE "DETAILING MANUAL", ACI 315 (OR SP-66).

2. MATERIALS:

A. REINFORCING STEEL SHALL BE NEW STOCK DEFORMED BARS AND SHALL CONFORM TO ASTM A615, GRADE 60, WITH A DESIGN YIELD STRENGTH OF 60,000 PSI, EXCEPT AS NOTED BELOW.

I. DOWELS TO BE BENT IN THE FIELD DURING CONSTRUCTION SHALL BE ASTM A615, GRADE 40 OR ASTM A706, GRADE 60, "LOW ALLOY STEEL".

II. REINFORCING TO BE WELDED SHALL BE ASTM A706, GRADE 60, "LOW-ALLOY STEEL".

3. CONSTRUCTION:

A. REINFORCING SHALL BE DETAILED, BOLSTERED, AND SUPPORTED PER ACI 318 AND IBC.

B. REINFORCING STEEL SHALL BE FREE OF LOOSE, FLAKY RUST, SCALE, GREASE, OIL, DIRT, AND OTHER MATERIALS WHICH MIGHT AFFECT OR IMPAIR BOND.

C. REINFORCING SHALL BE CONTINUOUS IN WALLS, BEAMS, COLUMNS, SLABS, FOOTINGS, ETC.

D. SPLICES IN CONTINUOUS REINFORCING SHALL BE MADE IN AREAS OF COMPRESSION AND/OR AT POINTS OF MINIMUM STRESS, TYPICAL UNLESS NOTED OTHERWISE. LAP SPLICES SHALL BE 40 BAR DIAMETERS LONG IN CONCRETE AND 48 BAR DIAMETERS LONG IN MASONRY. MINIMUM LAP SHALL BE 24 INCHES LONG. DOWELS SHALL HAVE A MINIMUM OF 30 BAR DIAMETERS EMBEDMENT. TENSION SPLICES SHALL BE USED IN CONCRETE WHEN SPECIFICALLY NOTED. USE A CLASS B SPLICE. SPLICES IN TOP BARS IN SUSPENDED SLABS AND BEAMS SHALL BE MADE AT MID SPAN. SPLICES IN BOTTOM BARS IN SUSPENDED SLABS AND BEAMS SHALL BE MADE AT SUPPORTS.

E. BENDS SHALL BE MADE COLD. DO NOT USE HEAT. BENDS SHALL BE DONE IN THE FABRICATOR'S SHOP UNLESS SPECIFICALLY NOTED FOR THE FIELD. DO NOT UN-BEND OR RE-BEND A PREVIOUSLY BENT BAR.

F. REINFORCING STEEL IN CONCRETE SHALL BE SECURELY ANCHORED AND TIED IN PLACE PRIOR TO PLACING CONCRETE AND SHALL BE POSITIONED WITH THE FOLLOWING MINIMUM CONCRETE COVER:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"

CONCRETE EXPOSED TO EARTH OR WEATHER:

#6 AND LARGER.....2"

#5 AND SMALLER.....1 1/2"

CONCRETE NOT EXPOSED TO EARTH OR WEATHER:

SLABS AND WALLS, #11 AND SMALLER.....1 1/2"

BEAMS AND COLUMNS, MAIN REINFORCING OR TIES.....1 1/2"

SLABS ON GRADE.....CENTER OF SLAB

G. NO REINFORCING STEEL SHALL BE WELDED UNLESS SPECIFICALLY NOTED AS SUCH. USE E90XX ELECTRODES AND ASTM A706 REINFORCING. COMPLY WITH AWS REQUIREMENTS.

POST INSTALLED ANCHORS

1. EPOXY ADHESIVE ANCHORING SYSTEMS:

A. CONCRETE: HILTI HIT-RE 500-SD OR SIMPSON SET-XP.

B. MASONRY (GROUTED): HILTI HIT-HY 150-MAX OR SIMPSON SET.

C. STEEL REINFORCEMENT AND RODS SHALL BE EMBEDDED 10 BAR DIAMETERS UNLESS NOTED OTHERWISE IN THE STRUCTURAL DRAWING AND DETAILS, WHERE 10 BAR DIAMETERS EXCEED THE MEMBER THICKNESS MINUS MINIMUM COVER, STEEL REINFORCEMENT SHALL BE EMBEDDED THE MEMBER THICKNESS MINUS MINIMUM COVER WITH A STANDARD HOOK.

D. EMBEDDED PORTIONS OF STEEL REINFORCEMENT AND RODS SHALL BE CLEAN, STRAIGHT, AND FREE OF MILL SCALE, RUST AND OTHER COATINGS THAT IMPAIR THE BOND WITH THE ADHESIVE. REINFORCEMENT MUST NOT BE BENT AFTER INSTALLATION.

2. MECHANICAL EXPANSION ANCHORS:

A. CONCRETE: HILTI KWIK BOLT TZ.

B. MASONRY: HILTI KWIK BOLT 3.

C. EXPANSION ANCHORS SHALL NOT BE USED IN TENSILE LOAD APPLICATIONS (E.G. HOLD-DOWNS, MOMENT FRAMES) AND MAY NOT BE USED TO SUBSTITUTE OTHER ANCHOR SYSTEMS.

3. POST-INSTALLED ANCHORING SYSTEMS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. HOLE CLEANING METHOD SHALL BE BASED ON DRILLING METHOD AND BORE HOLE CONDITIONS AND SHALL CONFORM TO THE MANUFACTURER'S INSTRUCTIONS.

GENERAL FRAMING NOTES

1. ALL JOISTS, RAFTERS, POSTS AND HEADERS SHALL BE DOUGLAS FIR LARCH NO.2 OR EQUAL U.N.O.

2. ALL JOISTS AND RAFTERS SHALL HAVE SOLID BLOCKING AT THEIR BEARING POINTS.

3. ALL WOOD LUMBER PLACED ONTO CONCRETE SHALL BE PRESSURE TREATED OR REDWOOD.

4. ALL WOOD CONNECTIONS MUST CARRY THE CAPACITY OF THE MEMBER, CONTRACTOR IS RESPONSIBLE FOR CONNECTIONS. IF OTHER THAN STANDARD CONNECTIONS ARE REQUIRED, SEE PROJECT ENGINEER FOR ADDITIONAL ASSISTANCE. USE SIMPSON OR EQUAL CONNECTIONS FOR WOOD TO WOOD.

5. ALL COLUMNS SHALL EXTEND DOWN THROUGH THE STRUCTURE TO THE FOUNDATION. ALL COLUMNS SHALL BE BRACED AT ALL FLOOR LEVELS. COLUMNS SHALL BE AS WIDE AS THE MEMBER THEY SUPPORT. POSTS SUPPORTED BY SLABS OR FND WALLS TO HAVE SIMPSON CB POST BASE OR EQUIVALENT.

6. ALL FLOOR SHEATHING TO BE ½" THICK T&G SHEATHING GLUED AND NAILED WITH 8d COMMON NAILS OR EQUAL @ 6" O.C. EDGES AND @ 12" O.C. IN THE FIELD.

7. VERIFY ALL BEAM SIZES WITH ENGINEERING SPECIFICATIONS.

8. ALL BEAMS AND HEADERS OVER 48" SHALL BE SUPPORTED BY DOUBLE TRIMMERS UNLESS NOTED OTHERWISE.

9. TRUSS MANUFACTURER SHALL PROVIDE ENGINEERING SPECS. FOR ALL TRUSSES.

10. 12" ROOF NAILING SCHEDULE AS FOLLOWS: (8" ROOF SHEATHING TO USE 10d NAILS)

8d NAILS @ 6" O.C. AT EDGES OF ROOF

8d NAILS @ 4" O.C. AT GABLE ENDS

SPACE NAILS 12" O.C. ON INTERMEDIATE MEMBERS

STAGGER SHEATHING JOINTS

SHEATHING PERP. TO RAFTERS AND TRUSSES

11. PROVIDE SQUASH BLOCKING AT RIM JOIST BELOW ALL POSTS FROM ROOF, HEADER OR BEAM POINT LOADS. SQUASH BLOCKING TO BE SAME MATERIAL AS POST ABOVE.

12. PROVIDE DOUBLE FLOOR JOISTS BELOW ALL PARALLEL BEARING WALLS ABOVE.

13. GLULAM BEAMS SHALL BE 24F-V4 DF/DF FOR SINGLE SPANS AND 24F-V8 DF/DF FOR MULTIPLE SPANS, AND CANTILEVERED SPANS. GLULAMS EXPOSED TO WEATHER SHALL BE PRESSURE TREATED OR PROVIDE WEATHER PROTECTIVE COATING.

14. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING PROPERTIES E=2000KSI,F_b=2600PSI,F_v=285PSI.

15. ALL RAFTERS AND JOISTS OVER THREE FEET LONG SHALL BE HANGEROED IF NOT SUPPORTED BY BOTTOM BEARING. ALL HANGERS AND OTHER WOOD CONNECTIONS MUST BE DESIGNED TO CARRY THE CAPACITY OF THE MEMBER THAT THEY ARE SUPPORTING.

16. FRAMING CONNECTIONS NOTED ON THE DRAWINGS ARE SIMPSON STRONG-TIE OR EQUAL. INSTALL WITH THE CATALOG DESIGNATED CONNECTOR IN EACH HOLE.

17. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED UNLESS SPECIFICALLY SHOWN, NOTED OR APPROVED BY ENGINEER.

18. LAG SCREWS SHALL BE INSERTED IN A DRILLED PILOT HOLE 60%-75% OF THE SHANK DIAMETER BY TURNING WITH A WRENCH, NOT BY DRIVING WITH A HAMMER. ALL NUTS, BOLTS AND LAG SCREWS SHALL BE PROVIDED WITH AN OVERSIZED WASHER.

19. NAILS TO BE COMMON WIRE UNLESS OTHERWISE NOTED.

20. ALL BOLT HOLES SHALL BE DRILLED WITH A BIT ¼" TO ½" LARGER THAN THE NOMINAL BOLT DIAMETER.

21. ALL JOINTS IN WALL SHEATHING SHALL OCCUR IN THE MIDDLE OF A PLATE OR BLOCK AND NAILED ON EACH SIDE OF THE JOINT WITH EDGE NAILING PER SHEARWALL SCHEDULE.

22. COLUMNS AND POSTS LOCATED ON CONCRETE OR MASONRY FLOORS OR DECKS EXPOSED TO THE WEATHER OR TO WATER SPLASH OR IN BASEMENTS, AND WHICH SUPPORT PERMANENT STRUCTURES, SHALL BE SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS PROJECTING ABOVE FLOORS UNLESS APPROVED WOOD OF NATURAL RESISTANCE TO DECAY OR TREATED WOOD IS USED. THE PEDESTAL SHALL PROJECT AT LEAST 6" ABOVE EXPOSED EARTH & AT LEAST 1" ABOVE SUCH FLOORS.

23. ALL FASTENERS IN PRESSURE TREATED LUMBER ARE TO COMPLY WITH CURRENT IBC REQUIREMENTS.

24. ALL STAPLES INTO WOOD DIAPHRAGMS ARE TO BE A MINIMUM OF 1½" GAGE WITH SPACING PER PLANS.

25. CHIMNEY & FIREPLACE FRAMING - PROVIDE FULL HT. 2x6 STUDS (MIN.) FROM BEARING TO TOP OF CHIMNEY. USE (2) ½"x3½" SDS SCREWS AT EACH STUD TO RAFTER/TRUSS CHORD INTERSECTION.

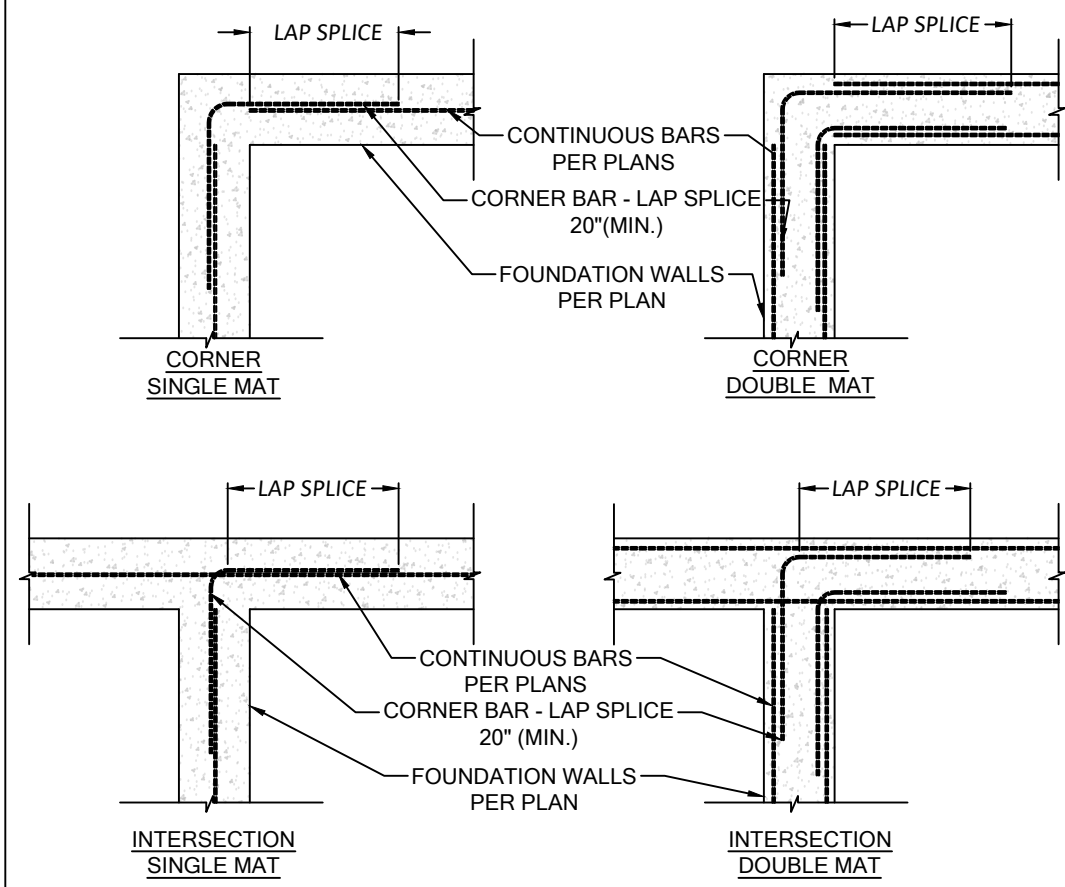
26. PROVIDE (2) KING STUDS ON EACH SIDE OF HEADER GREATER THAN 8'-0" IN LENGTH U.N.O.

PROVO BATHROOMS - QUAIL ORCHARD 4 BATH

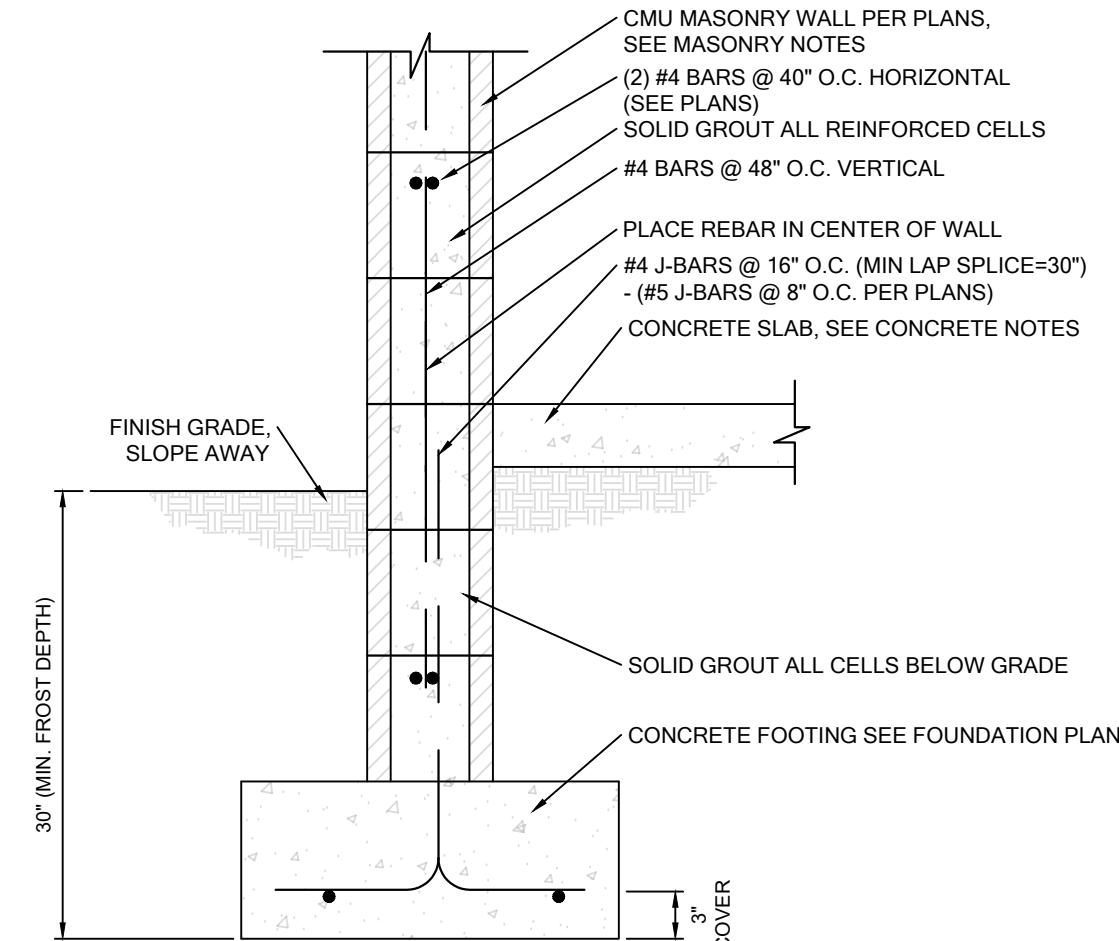
STRUCTURAL NOTES

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PROJECT NO:		26-007		
DRAWN BY:		CKC		
CHECKED BY:		CKC		
DATE:		2.23.26		
SCALE:		NTS		
SHEET				

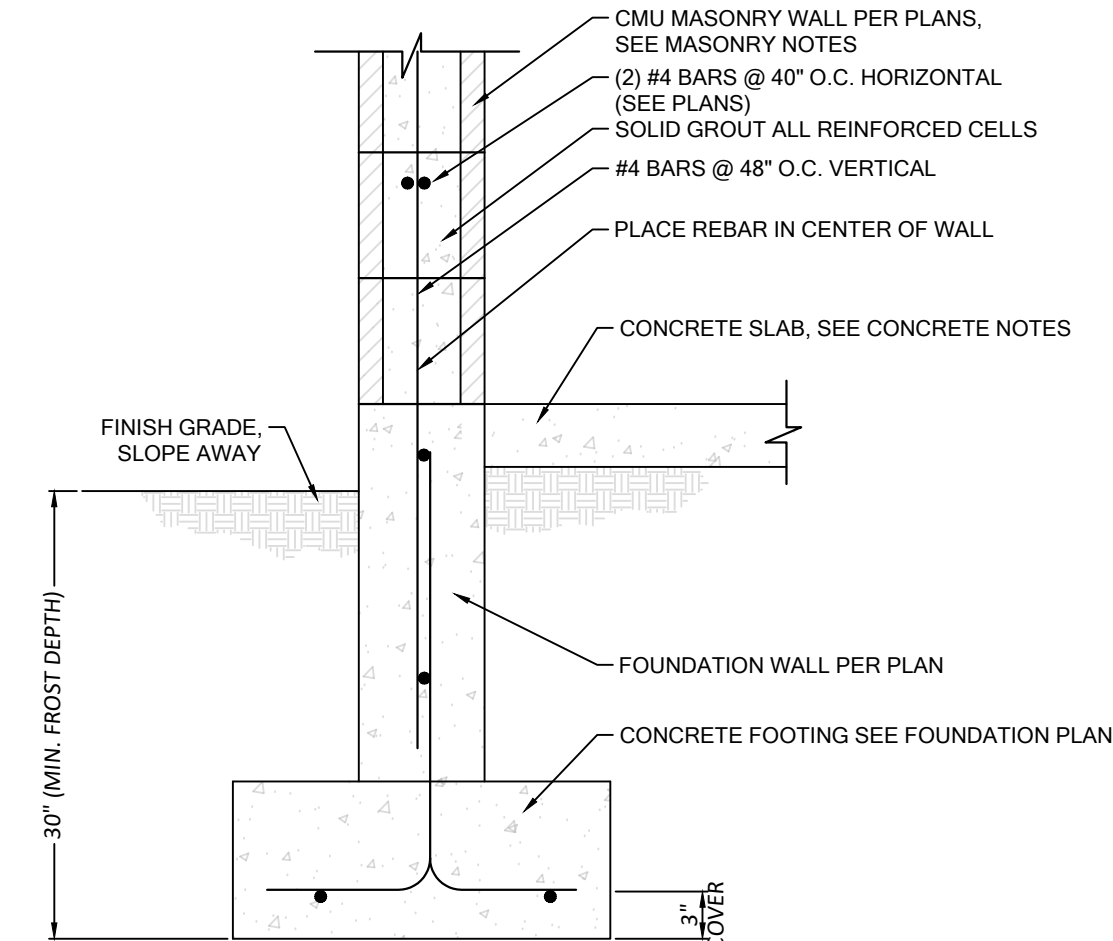
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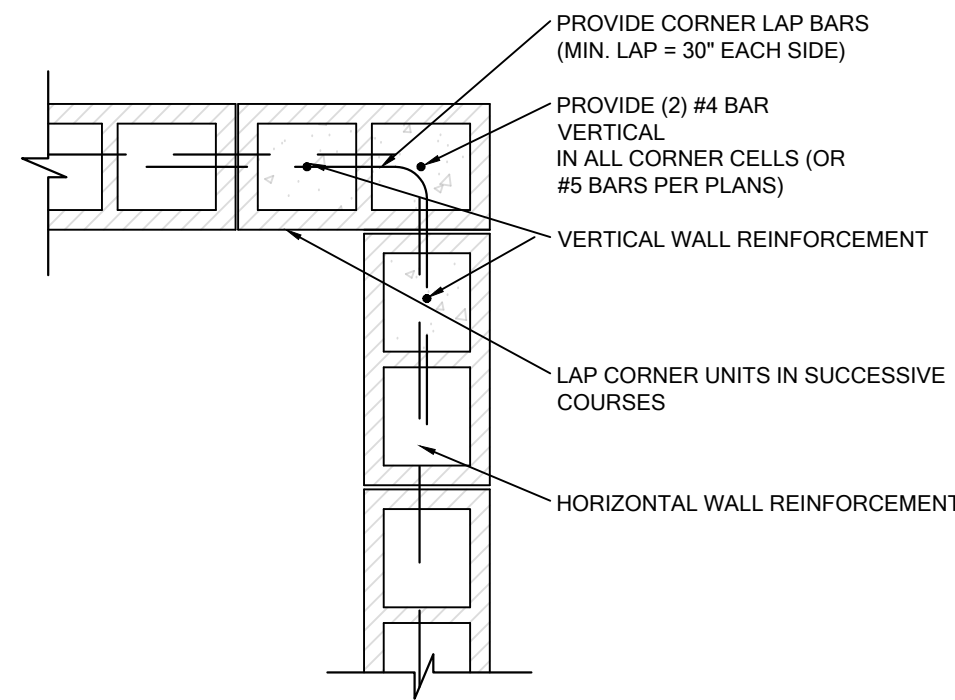
1 TYP. CONCRETE CORNER REINFORCING



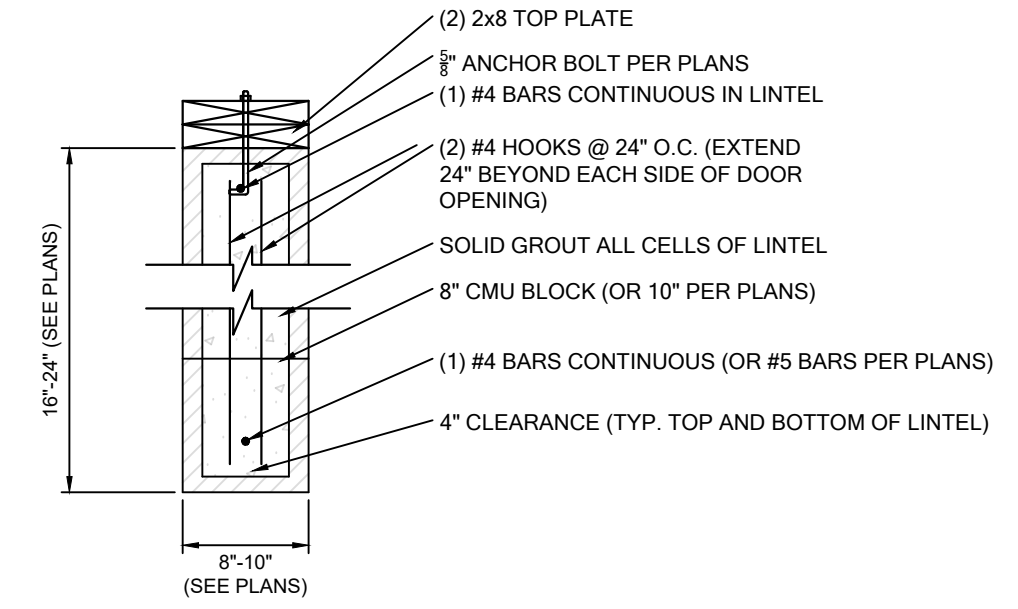
2 CMU FOUNDATION WALL DETAIL



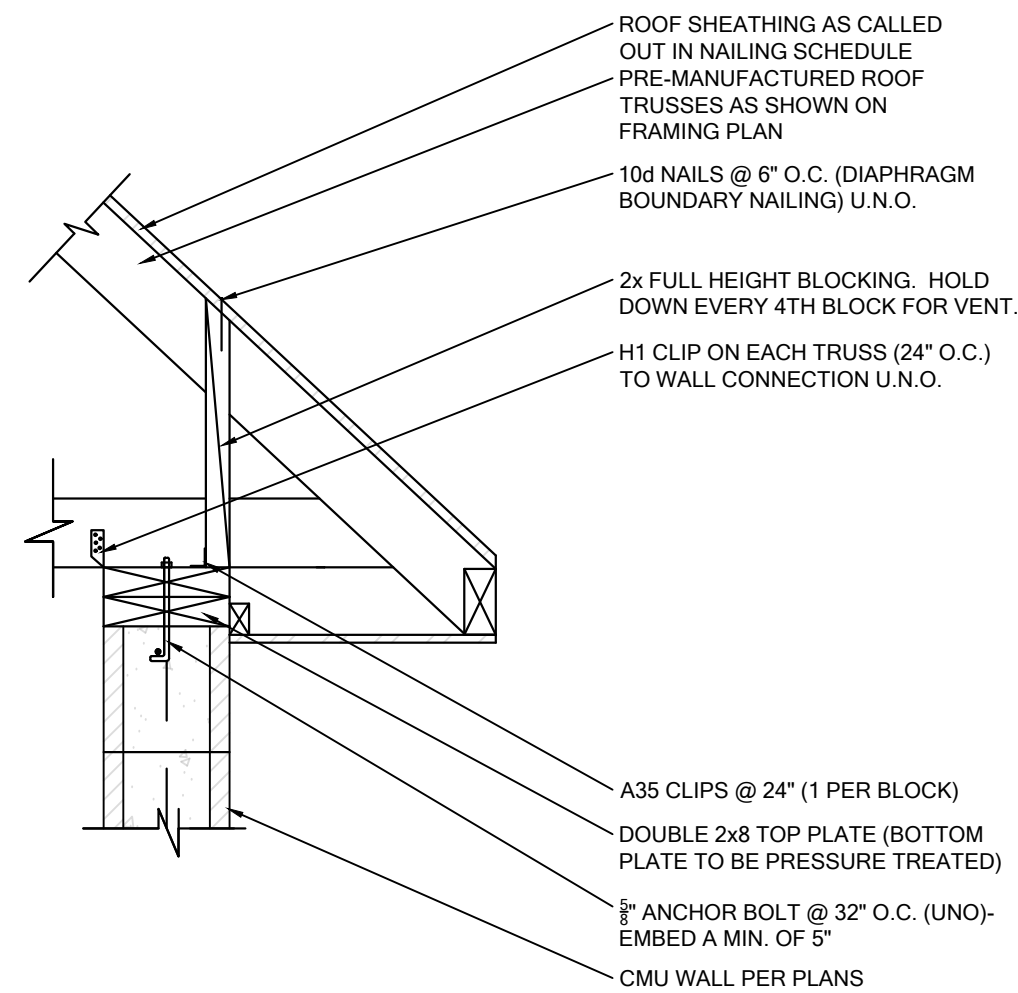
3 CMU TO FOUNDATION WALL DETAIL



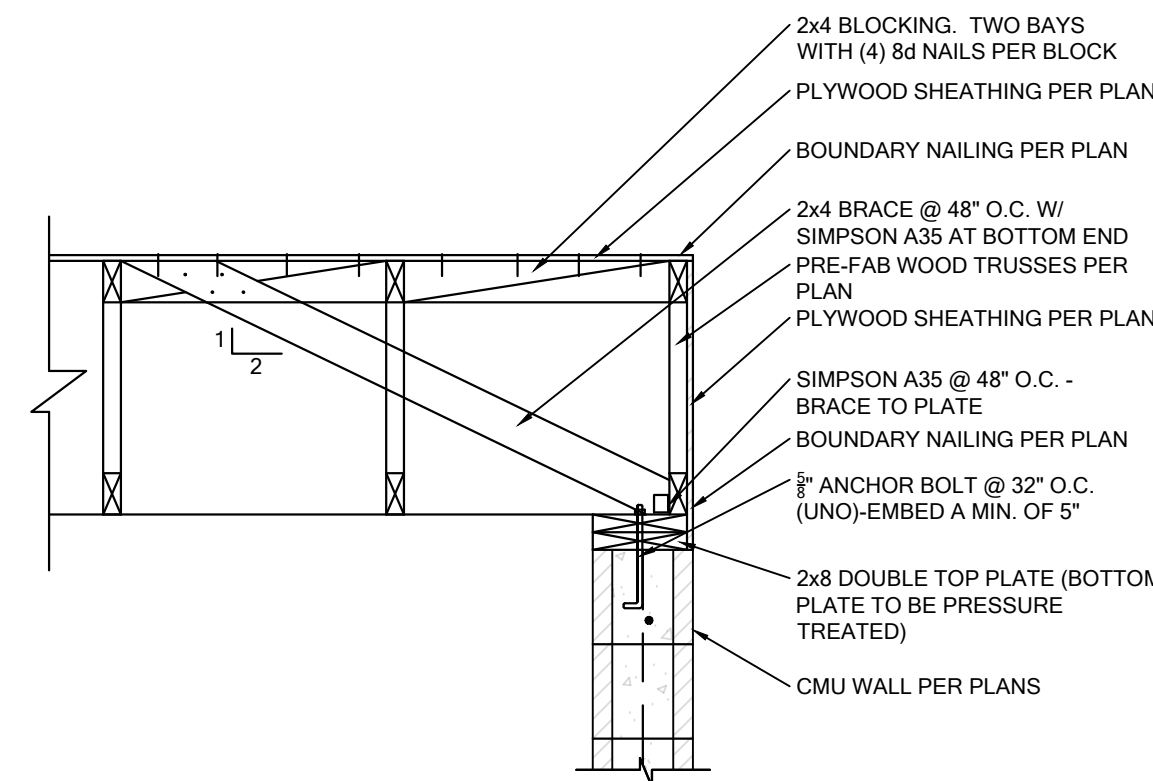
4 MASONRY WALL CORNER DETAIL



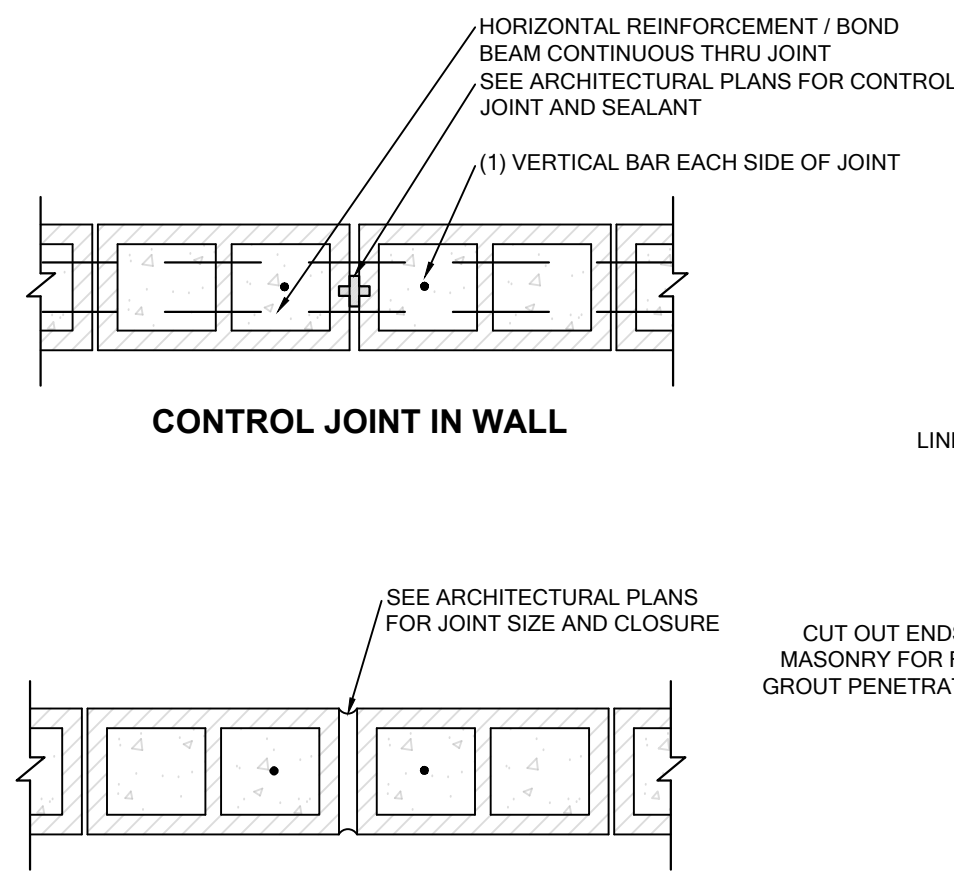
5 LINTEL DETAIL



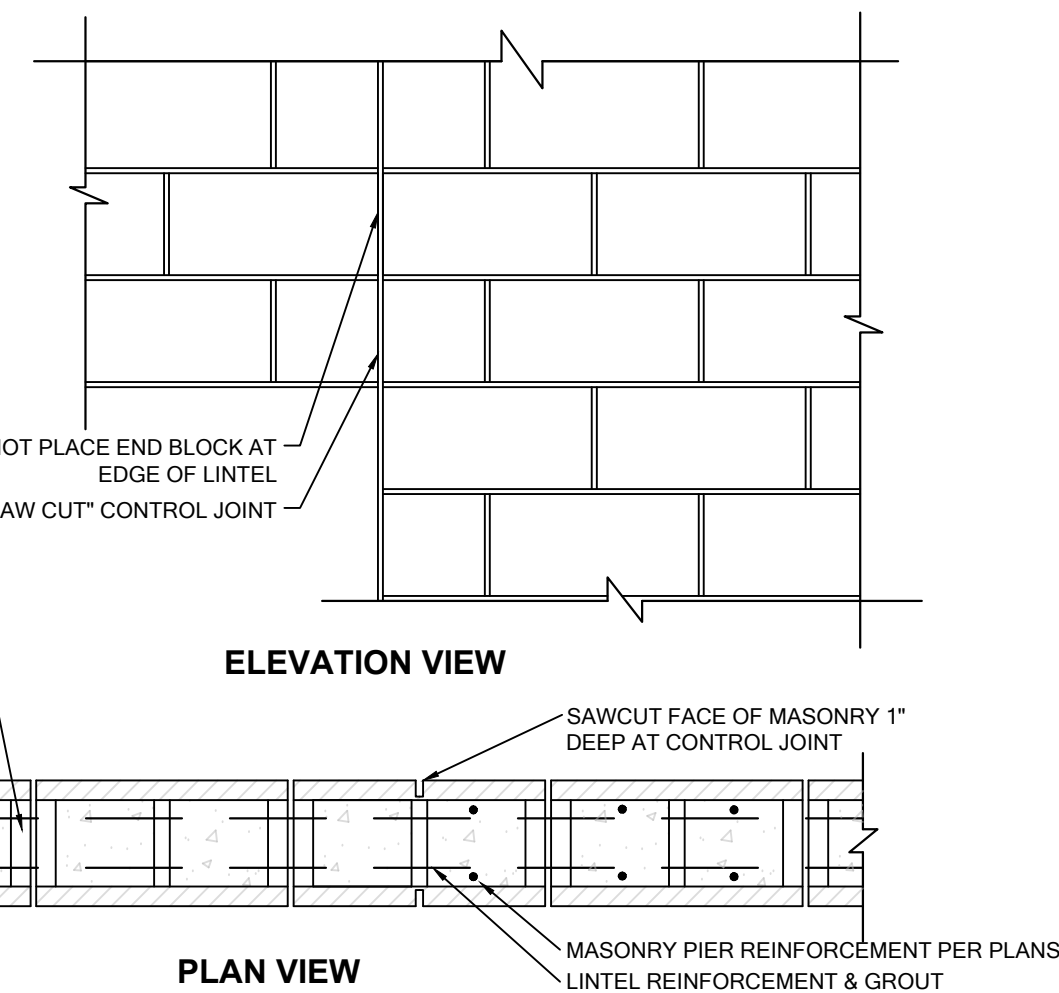
6 TRUSS TO CMU WALL CONNECTION DETAIL



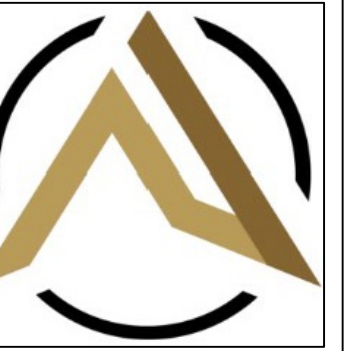
7 GABLE END TRUSS BRACING DETAIL



8 CMU EXPANSION JOINT DETAIL

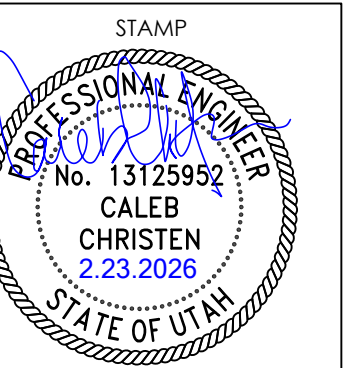


9 ELEVATION AND PLAN VIEWS



PROVO BATHROOMS - QUAIL ORCHARD 4 BATH

STRUCTURAL DETAILS



DATE	REVISION			

PROJECT NO: 26-007
 DRAWN BY: CKC
 CHECKED BY: CKC
 DATE: 2.23.26
 SCALE: NTS

SHEET

SD-1