

COMPONENTS AND CLADDING PRESSURES (PSF) U.N.O.

- ZONE 1: +30.1 / -47.7
- ZONE 2: +30.1 / -83.2
- ZONE 3: +30.1 / -123.1
- ZONE 4: +52.2 / -56.6
- ZONE 5: +52.2 / -69.9

PERMIT PLANS

FOR:

SUN 'N LAKE

EMS / FIRE STATION



DESIGN DATA	
CODE CONFORMANCE REVIEW:	
APPLICABLE CODES:	
FLORIDA BUILDING CODE 5th Edition	FLORIDA MECHANICAL CODE 5th Edition
FLORIDA PLUMBING CODE 5th Edition	NATIONAL ELECTRICAL CODE (LATEST EDITION)
FLORIDA FIRE PREVENTION CODE (LATEST EDITION)	
DESIGN ITEM	REQUIRED DESIGNED
OCCUPANCY CLASSIFICATION (MIXED)	BUSINESS - B, RESIDENTIAL R-2
CONSTRUCTION TYPE	TYPE III-B, SPRINKLED
BUILDING HEIGHT AND AREAS Allowable Heights (sprinkled) Allowable Stories (sprinkled) Allowable One Story Area (sprinkled)	55 feet THREE story 19,000 sq ft 18.00 feet one story 4,591 proposed
MINIMUM OCCUPANT LOAD FOR EGRESS CAPACITY	TOTAL OCCUPANT LOAD 50
WIND DESIGN CRITERIA	150 m.p.h.
Roof angle (degrees)	22.62 degrees
Exposure Category	C
Internal Pressure Coefficient	+/-0.18
(h) Mean roof height	19.00 feet
ROOF DESIGN LOADS	
TOP CHORD LIVE LOAD: 20 psf	
TOP CHORD DEAD LOAD: 10 psf	
BOTTOM CHORD LIVE LOAD: NON-CONCURRENT 10 psf	
BOTTOM CHORD DEAD LOAD: 10 psf	
ALL GLAZING SHALL BE LARGE AND SMALL MISSILE IMPACT RATED. (INCLUDING EXTERIOR DOORS & OVERHEAD GARAGE DOORS)	

SITE ADDRESS:
4212 SUN 'N LAKE BLVD.
SEBRING, FLA. 33872

OWNER:
HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS
P.O. BOX 1926
SEBRING, FLA. 33871-1926

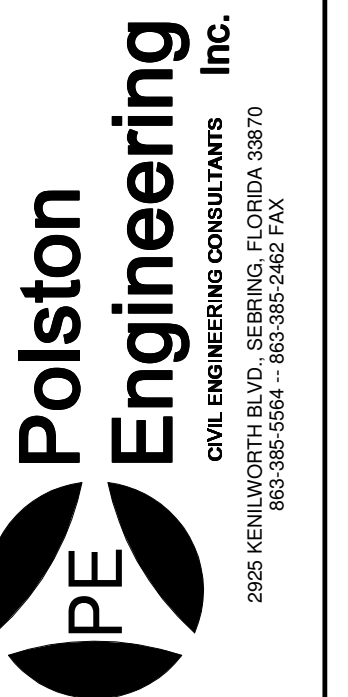
LIVING SPACE 1,896
GARAGE SPACE 2,622
COVERED ENTRY 73
TOTAL 4,591 SQ. FT.

SHEET INDEX

1. FRONT & REAR ELEVATIONS
2. LEFT & RIGHT ELEVATIONS
3. FLOOR PLAN
4. FOUNDATION PLAN
5. STRUCTURAL & ROOF FRAMING
6. STRUCTURAL NOTES
7. DETAIL "M"
8. DETAIL "N" & "O"
9. DOOR & WINDOW BUCK DETAILS
10. HANDI-CAP BATH DETAILS
11. BATH #2 DETAILS
12. KITCHEN CABINET DETAILS & SPECS.
13. FIRE ALARM PLAN
14. A/C PLAN
15. FLOORING PLAN
16. ELECTRICAL PLAN
17. ELECTRICAL RISER & PANEL SCHEDULE
18. PLUMBING PLAN
19. PLUMBING RISER & SPECS.
20. SECURITY PLAN

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

CERTIFICATE OF AUTHORIZATION #5884
 ROGER DALE POLSTON P.E. # 33222
 MARVIN LUTHER VOLPE P.E. # 46630
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Highlands County
 Board of County Commissioners
SUN 'N LAKE
EMS / FIRE STATION
15073

DRAWING:

COVER SHEET

SCALE:

SHEET #



FRONT ELEVATION

ADDENDUM - 3-7-2017

DOWNSPOUTS ADDED AS SHOWN AT FRONT OF BUILDING WITH A CONCRETE SPLASH PAD TO DISSIPATE THE DISCHARGE.



REAR ELEVATION

ADDENDUM - 3-7-2017

DOWNSPOUTS ADDED AS SHOWN AT REAR OF BUILDING WITH A CONCRETE SPLASH PAD TO DISSIPATE THE DISCHARGE.

DATE:	DR	CH
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3-7-2017		

CERTIFICATE OF AUTHORIZATION #5884
 ROGER DALE POLSTON P.E. # 33222
 MARVIN LUTHER VOLPE P.E. # 46838
 REGISTERED PROFESSIONAL ENGINEERS
 STATE OF FLORIDA
 SCALE: 1/4" = 1'-0"
 GUTTERS ADDED (SEE ELEVATIONS)

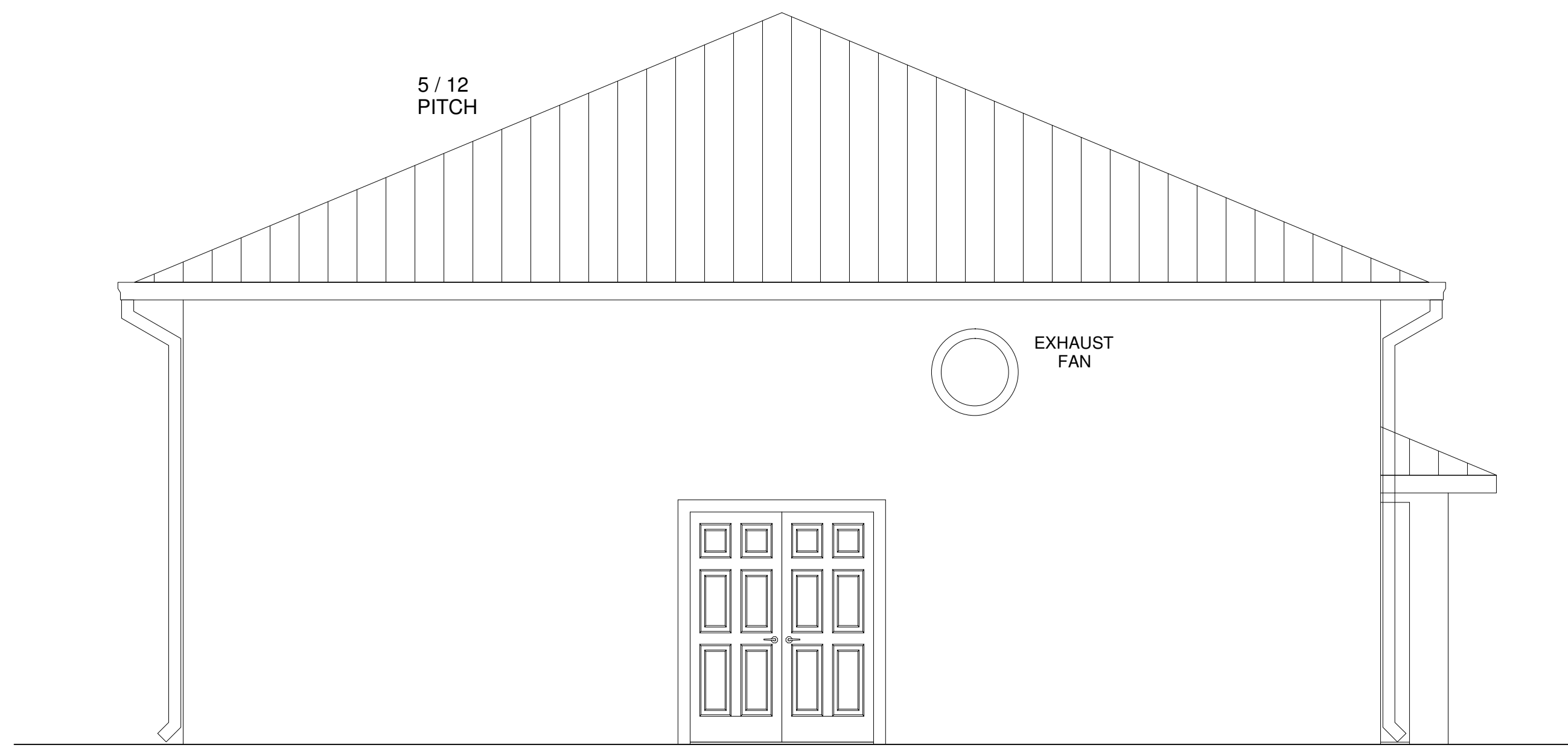
Polston Engineering Inc.
 PE
 CIVIL ENGINEERING CONSULTANTS
 2955 KENNESAW AVENUE, SUITE 33870
 KENNESAW, GA 30144
 770.428.2422 FAX 770.428.2422

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SUN 'N LAKE
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 15073

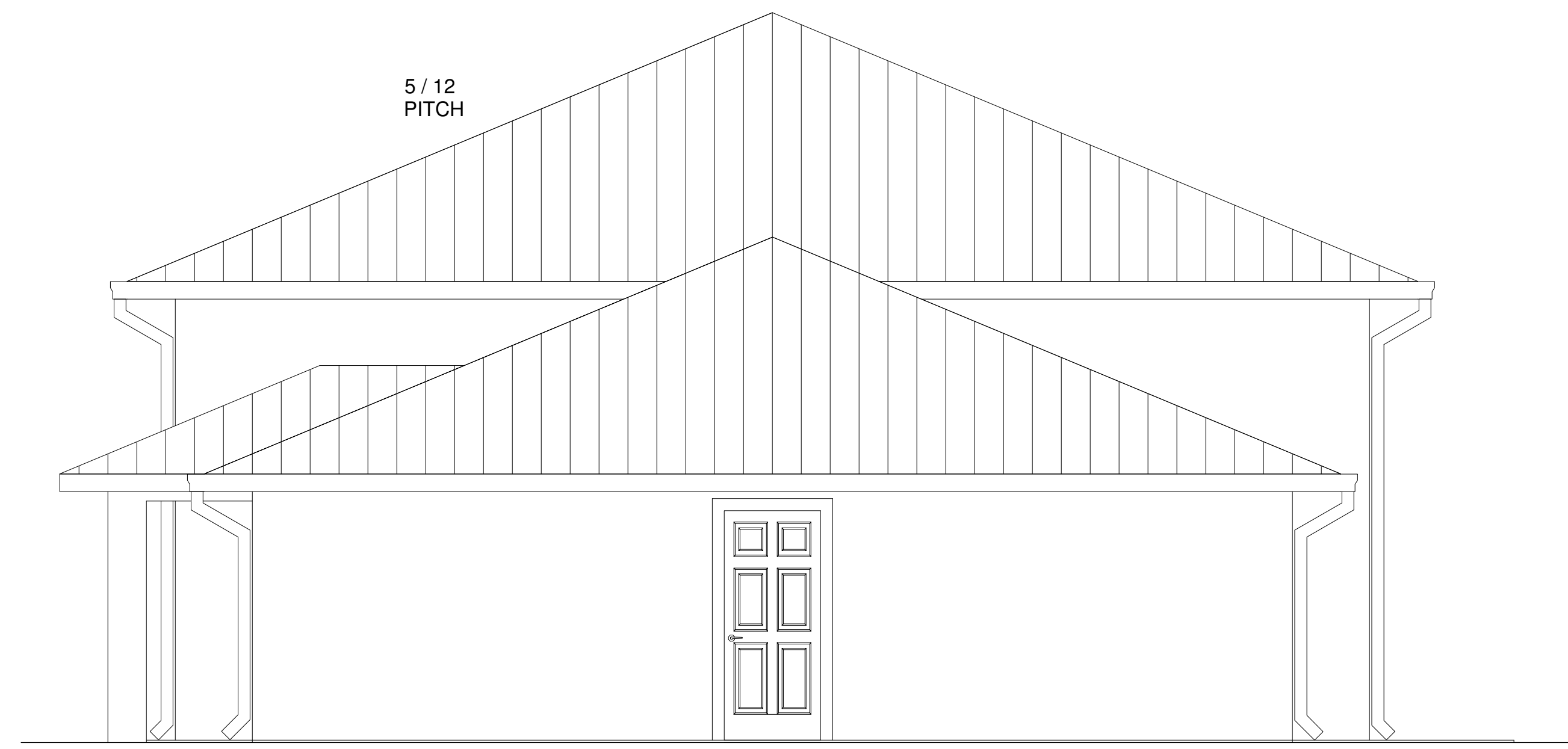
DRAWING:
 FRONT & REAR ELEVATIONS

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

SHEET #
 1



LEFT SIDE ELEVATION



RIGHT SIDE ELEVATION

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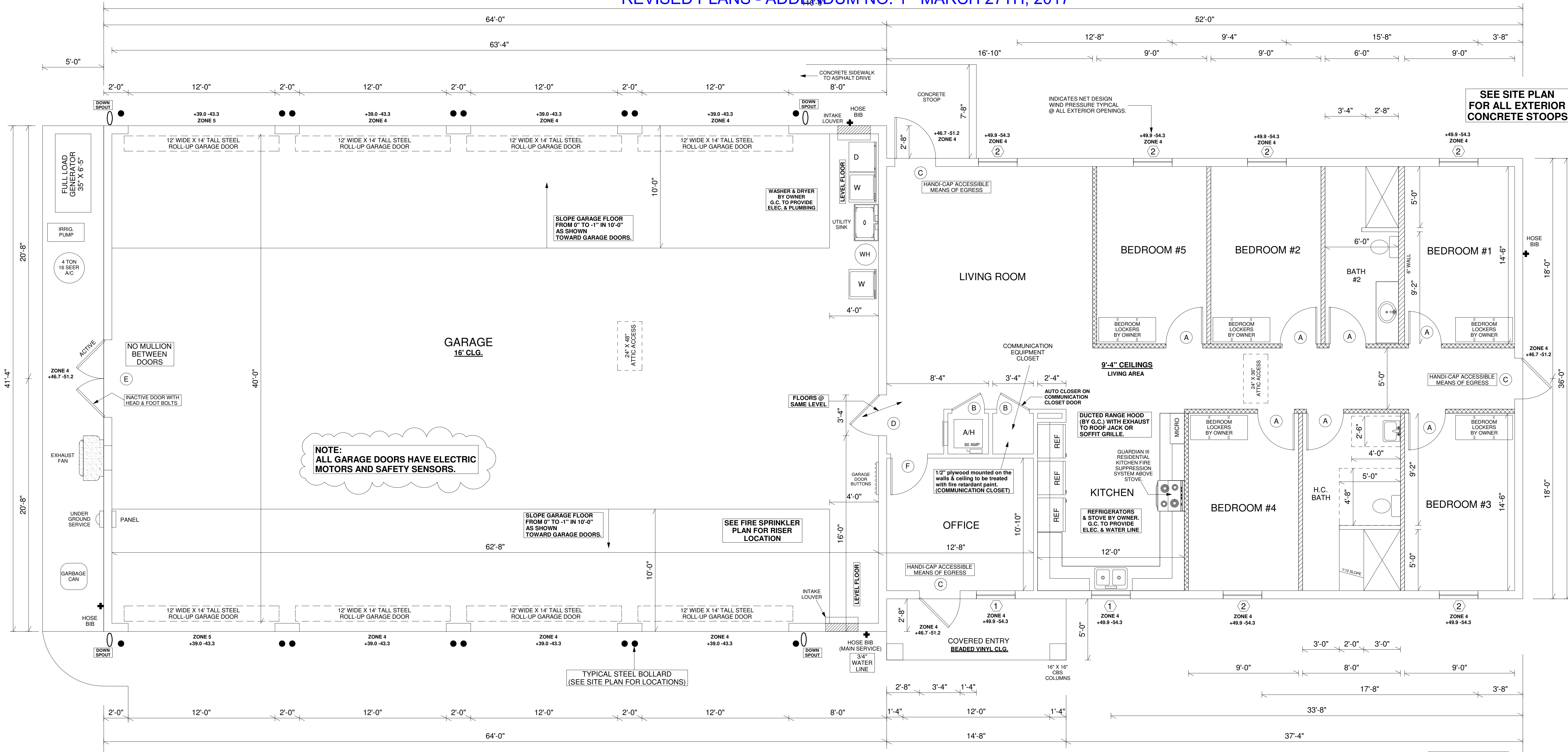
DRAWING:
 LEFT & RIGHT
 ELEVATIONS

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

SHEET # 2

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-10-2017		
3-7-2017		GUTTERS ADDED (SEE ELEVATIONS)

REVISED PLANS - ADDENDUM NO. 1 MARCH 27TH, 2017



DOOR & FRAME SCHEDULE

NO.	SIZE	TYPE	FINISH	FRAME	HARDWARE	NOTES	MANUFACTURER
A	3068	6 PANEL MASONITE	PAINT	WOOD	FLAT LEVER DOOR KNOBS WITH WALL STOP	PRIVACY LOCK	
B	2868	6 PANEL MASONITE	PAINT	WOOD	FLAT LEVER DOOR KNOBS	AUTO CLOSER ON COMMUNICATION CLOSET DOOR	
C	3080	6 PANEL FIBERGLASS	PAINT	COMPOSITE	FLAT LEVER DOOR KNOBS	AUTO CLOSER	THERMA-TRU
D	3068	FLAT PANEL STEEL	PAINT	STEEL	FLAT LEVER DOOR KNOBS	DEAD BOLT SINGLE CYLINDER AUTO CLOSER	45 MINUTE RATING
E	2-3080	6 PANEL FIBERGLASS	PAINT	COMPOSITE	FLAT LEVER DOOR KNOBS WITH OVERHEAD STOP	NO MULLION BETWEEN DOORS	THERMA-TRU
F	3068	6 PANEL MASONITE	PAINT	WOOD	FLAT LEVER DOOR KNOBS WITH WALL STOP	NO LOCKING MECHANISM	

WINDOW SCHEDULE

NO.	TYPE	FRAME MATERIAL	COLOR	ROUGH BLOCK OPENING - VERIFY	SCREEN	GLAZING	MANUFACTURER
1	24 SH	VINYL	WHITE	38" WIDE X 50 5/8" HIGH	STANDARD	LO-E (ENERGY SHIELD) TINTED (SUPER SPACER)	PGT WINDGUARD SERIES 5500
2	25 SH	VINYL	WHITE	38" WIDE X 63" HIGH	STANDARD	LO-E (ENERGY SHIELD) TINTED (SUPER SPACER)	PGT WINDGUARD SERIES 5500

NOTE: ALL ROUGH BLOCK OPENINGS SHALL BE COORDINATED AND VERIFIED BY THE CONTRACTOR PRIOR TO START OF WALL & FOUNDATION CONSTRUCTION. TYPICAL.

ALL GLAZING SHALL BE LARGE AND SMALL MISSILE IMPACT RATED. (INCLUDING EXTERIOR DOORS & OVERHEAD GARAGE DOORS)

WALL LEGEND

INTERIOR FRAME SMOKE WALLS WITH R-11 BATT INSULATION. ALL PENETRATIONS SHALL BE SEALED.

INTERIOR FRAME WALLS WITH R-11 BATT INSULATION.

ROOF PENETRATIONS

LIGHTNING PROTECTION SYSTEM ROOF PENETRATIONS TO BE MADE AT THE OVERHANGS & NOT THE OCCUPIED SPACES.

"All exterior components and cladding, including but not limited to doors, windows and roof coverings, must be certified and installed to meet the design wind pressures shown on these drawings."

LIVING SPACE 1,896
GARAGE SPACE 2,622
COVERED ENTRY 73
TOTAL 4,591 SQ. FT.

GENERAL NOTES:

- ALL INTERIOR FRAME WALLS SHALL HAVE R-11 INSULATION.
- ALL INTERIOR WALLS NOT RECEIVING TILE SHALL HAVE A KNOCK DOWN FINISH WITH SQUARE INTERSECTING CORNERS.
- OWNER WILL BE RESPONSIBLE FOR ALL UTILITY CONNECTION AND IMPACT FEES.
- REFER TO APPROVED SITE PLAN AND LANDSCAPE PLAN FOR: IRRIGATION, LANDSCAPING, PARKING LOT DESIGN, SIDEWALKS AND OTHER SITE DEVELOPEMENT REQUIREMENTS.

PAINT SPECS & INFO:

ALL INTERIOR & EXTERIOR CONCRETE WALLS AND ALL INTERIOR DRYWALL FINISHED WALLS AND CEILINGS SHALL HAVE ONE COAT PRIMER & TWO COATS SATIN FINISH.
ALL EXTERIOR WALLS SHALL BE OF SAME COLOR AND ALL WINDOW BANDS SHALL BE OF SAME COLOR.
ALL INTERIOR WALLS SHALL BE OF SAME COLOR AND ALL CEILINGS SHALL BE OF SAME COLOR.
ALL EXTERIOR DOORS AND TRIM SHALL HAVE ONE COAT PRIMER & TWO COATS GLOSS FINISH.
ALL EXTERIOR DOORS AND TRIM SHALL BE OF SAME COLOR.
ALL INTERIOR DOORS AND TRIM SHALL HAVE ONE COAT PRIMER & TWO COATS GLOSS FINISH.

ALL PAINT AND PAINT PRODUCTS SHALL BE LISTED ON THE CURRENT EDITION OF THE MPI APPROVED PRODUCT LIST. PRODUCTS FROM THE FOLLOWING MANUFACTURER'S WILL BE CONSIDERED:

- SHERWIN WILLIAMS - (A-100 OR BETTER)
- BENJAMIN MOORE - (EQUIVALENT TO A-100)
- PORTER PAINTS (ACRI-PRO OR BETTER)

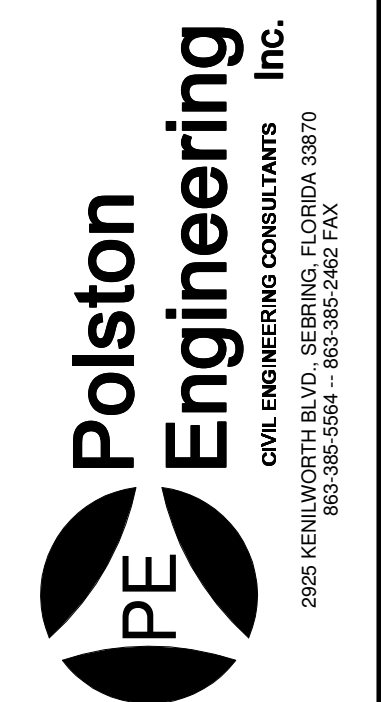
(ALL FINAL PAINT & COLOR SELECTIONS REST WITH THE OWNER)

NOTES:

- ALL INTERIOR WOOD DOOR CASINGS SHALL BE (2 1/4" COLONIAL, FINGER JOINT, PAINT GRADE)
- ALL DOOR HARDWARE SHALL BE (SCHLAGE BRAND, BRUSHED NICKLE) INTERIOR & EXTERIOR.

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CERTIFICATE OF AUTHORIZATION #5884
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER VOLPE P.E. # 46650



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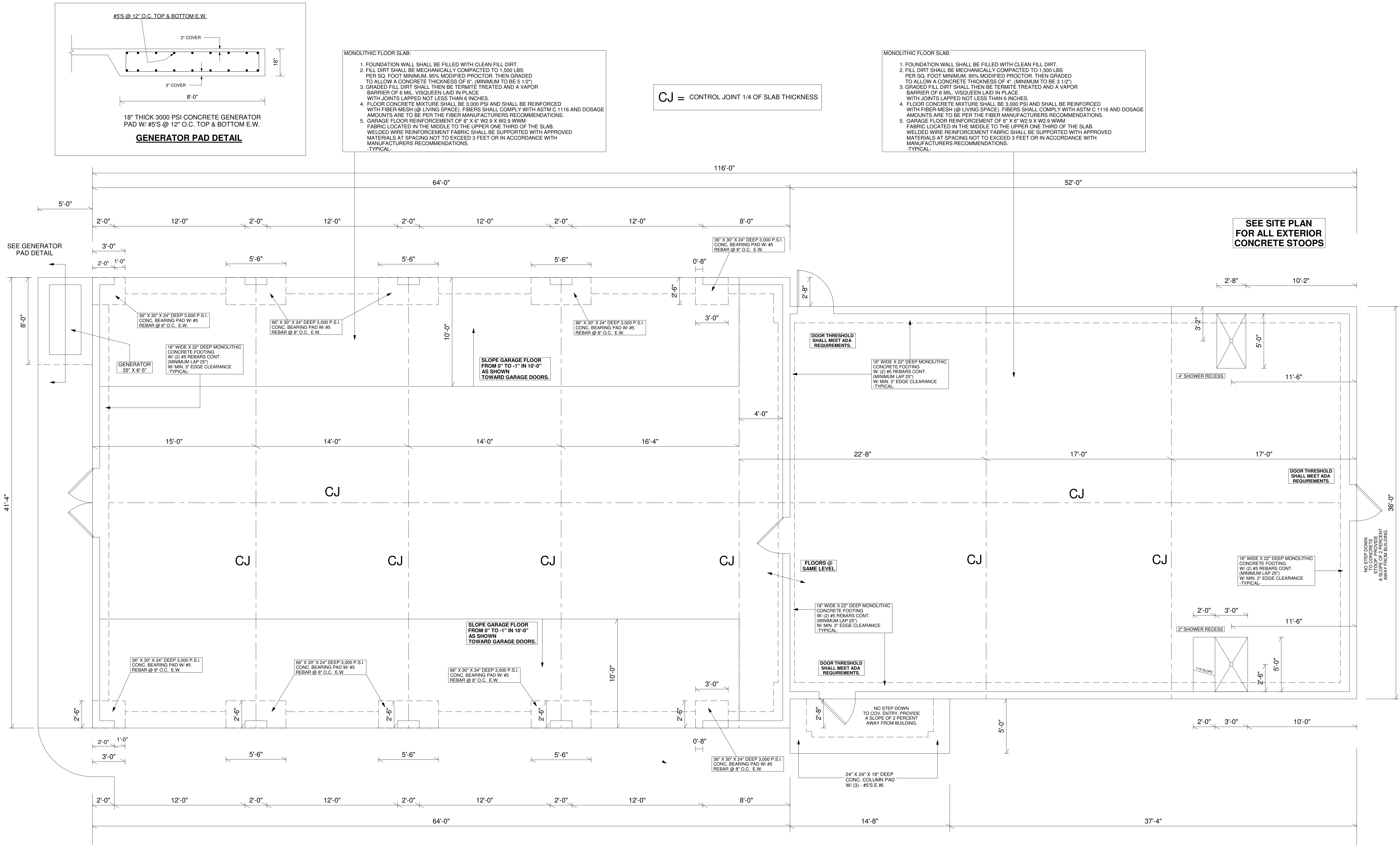
DRAWING:
FLOOR PLAN

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

SHEET # 3

15073

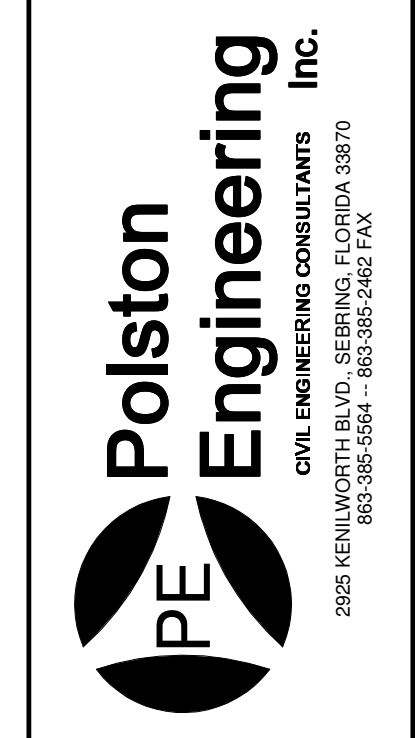
GUTTERS ADDED (SEE ELEVATIONS)



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 HARVIN LUTHER VOISE P.E. # 46650

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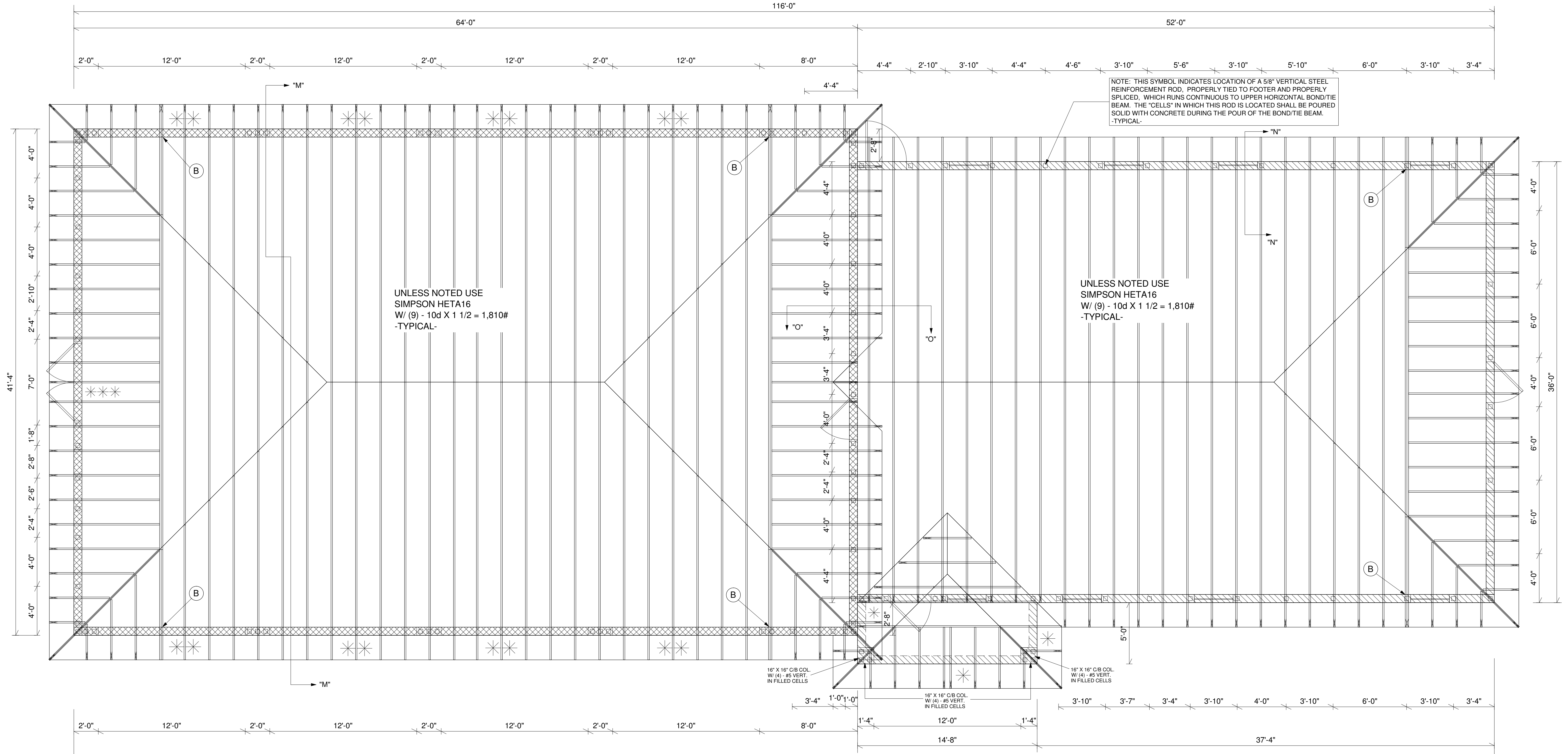
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DRAWING:
 FOUNDATION

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

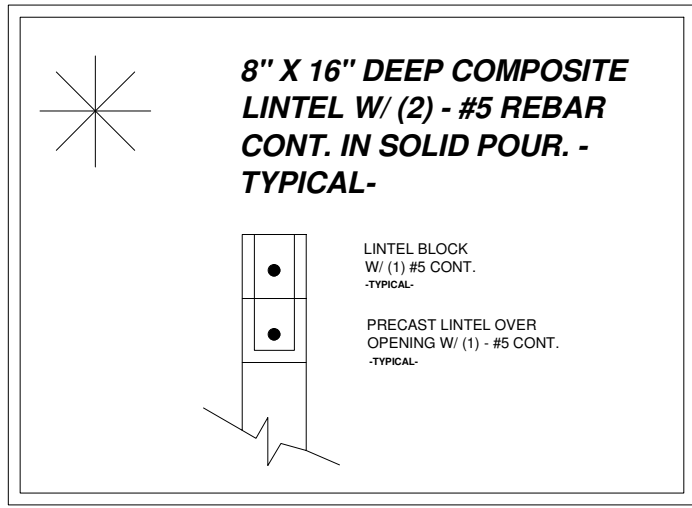
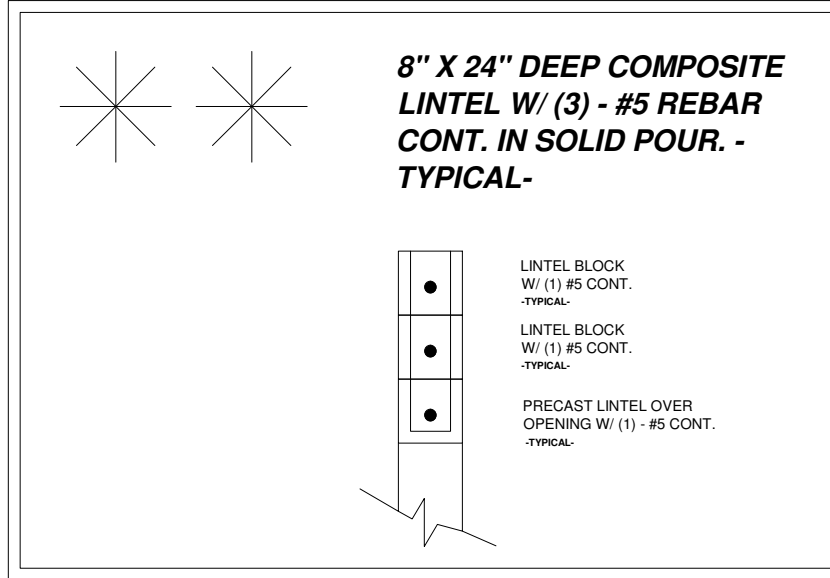
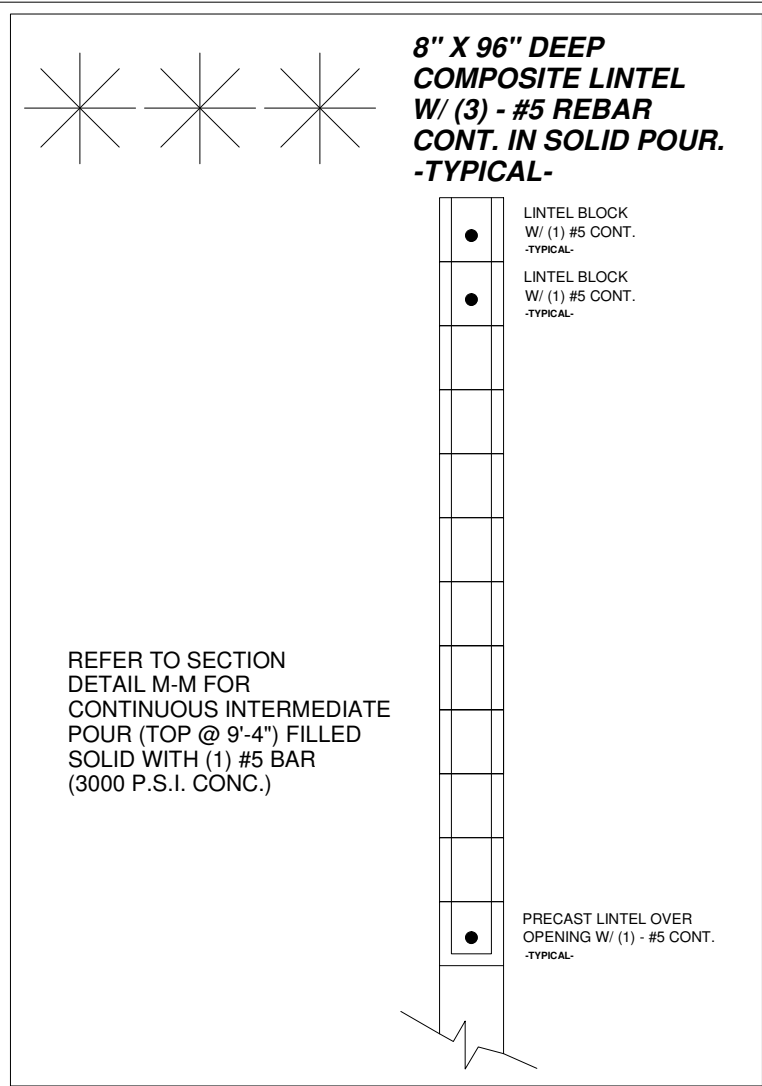
SHEET # 4



NOTE: THIS SYMBOL INDICATES LOCATION OF A 5/8" VERTICAL STEEL REINFORCEMENT ROD, PROPERLY TIED TO FOOTER AND PROPERLY SPICED, WHICH RUNS CONTINUOUS TO UPPER HORIZONTAL BOND/TIE BEAM. THE "CELLS" IN WHICH THIS ROD IS LOCATED SHALL BE POURED SOLID WITH CONCRETE DURING THE POUR OF THE BOND/TIE BEAM. -TYPICAL-

UNLESS NOTED USE SIMPSON HETA16 W/ (9) - 10d X 1 1/2 = 1,810# -TYPICAL-

UNLESS NOTED USE SIMPSON HETA16 W/ (9) - 10d X 1 1/2 = 1,810# -TYPICAL-



NOTE: PROVIDE 2" X 4" BLOCKING @ 48" O.C. @ THE BOTTOM CHORD OF ALL TRUSSES AT EXTERIOR ENTRIES AND PORCHES (AREAS EXPOSED TO WIND). CEILING SHEATHING IN THOSE AREAS TO BE 5/8" EXTERIOR GRADE DRYWALL OR 1/2" EXTERIOR GRADE PLYWOOD.

- VERTICAL REINFORCEMENT:
1. AT ALL INSIDE & OUTSIDE CORNERS.
 2. AT EACH SIDE OF ALL OPENINGS.
 3. TWO #5 BARS ARE NEEDED AT EACH SIDE OF ALL OPENINGS WIDER THAN 12'-0".
 4. AT ALL LOCATIONS WHERE A GIRDER BEAM OR GIRDER TRUSS BEAR ON MASONRY WALLS.
 5. AT ALL #1 HIP TRUSS LOCATIONS.

(CONCRETE MIXTURE SHALL BE 3,000 PSI) -TYPICAL-

(1) #5 VERTICAL IN FILLED CELL @ 4'-0" O.C. (MAX.) FOR ALL 16'-0" TALL WALLS. VERTICAL DOWN ROD SHALL RUN FROM FOOTING TO THE LINTEL & ALL STEEL LAPS SHALL BE MIN. OF 30". -TYPICAL-

(1) #5 VERTICAL IN FILLED CELL @ 6'-0" O.C. (MAX.) FOR ALL 9'-4" TALL WALLS. VERTICAL DOWN ROD SHALL RUN FROM FOOTING TO THE LINTEL & ALL STEEL LAPS SHALL BE MIN. OF 30". -TYPICAL-

STRUCTURAL DESIGN BASED ON TRUSS FRAMING SHOWN. DEVIATION FROM THIS FRAMING MAY VOID STRUCTURAL DESIGN. PROVIDE TRUSS MANUFACTURERS ENGINEERING TO POLSTON ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO ORDERING TRUSSES.

NOTE: ALL TRUSS TO TRUSS CONNECTIONS ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER PER ANSI / TPI - 2007

ALL CONTINUOUS LATERAL WEB BRACING SHOWN ON TRUSS DESIGN DRAWINGS, AND ALL BOTTOM CHORD AND PIGGY BACK RAT RUNS TO BE 2 X 4 #3 S.Y.P. AND SHALL BE PROPERLY DIAGONALLY BRACED PER THE LATEST EDITION OF WTCA'S BCSI. CONNECT TO EACH TRUSS W/ (2) 16d NAILS -TYPICAL-

WALL LEGEND

	= TRUSS BEARING @ 9'-4" A.F.F.
	= TRUSS BEARING @ 16'-0" ABOVE GARAGE FLOOR

ANCHORAGE SCHEDULE

MODEL	NO.	FASTENERS	RATED UPLIFT
A	SIMPSON HETA16	1 (9) - 10d X 1 1/2	1,810#
B	SIMPSON HETA16	1 (10) - 10d X 1 1/2	2,235#

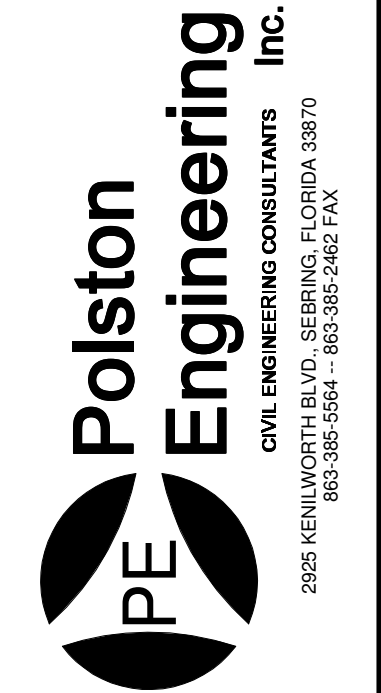
(OR EQUIV.)

NOTE: INSTALL ALL STRUCTURAL HARDWARE ACCORDING TO MANUFACTURERS REQUIREMENTS. UNLESS NOTED USE SIMPSON HETA16 W/ (9) - 10d X 1 1/2 = 1,810#

DR CH

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CERTIFICATE OF AUTHORIZATION #5884
 ROGER DALE POLSTON P.E. # 33222
 MARVIN LUTHER VOLPE P.E. # 46633



Highlands County
 Board of County Commissioners
 SUN 'N LAKE
 EMS / FIRE STATION
 15073

DRAWING:
 STRUCTURAL & ROOF FRAMING

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

SHEET # 5

GENERAL

- 1 THE GENERAL CONTRACTOR SHALL REVIEW AND DETERMINE THAT DIMENSIONS ARE COORDINATED BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO FABRICATION OR START OF CONSTRUCTION.
- 2 THE GENERAL CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, THE WORK PERSONS, AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION.
- 3 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH.
- 4 THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ANCHORED, EMBEDDED, SUPPORTED ITEMS WHICH AFFECT THE STRUCTURAL DRAWINGS AND NOTIFY THE ARCHITECT / ENGINEER OF ANY DISCREPANCIES.

CONCRETE AND REINFORCING

- 1 CONCRETE WORK SHALL CONFORM TO ACI CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-02)
- 2 ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH & PROPERTIES AS FOLLOWS:

	MAX.	SLUMP	WATER / CMT
SLAB ON GRADE & FOUNDATION	3000 PSI	6±1"	0.62
FILLED CELLS	3000 PSI	9±1"	0.65
ALL OTHER CONCRETE	3000 PSI	5±1"	0.58

- 3 REBARS SHALL CONFORM TO ASTM-615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
- 4 MINIMUM COVER FOR REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.

FOOTINGS	3"
SLABS ON GRADE	1 ½" FROM TOP
BEAMS	1 ½" (ON TIES)
COLUMNS	1 ½" (ON TIES)

- 5 SPLICES AND ANCHORAGE OF REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.

WELDED WIRE FABRIC	6"
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LONGITUDINAL FOOTER BARS	MINIMUM 25" LAP
--------------------------	-----------------

MASONRY

- 1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI STANDARD BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES (ACI 530-02 / ASCE 5-02 / TMS 402-02), SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-02 / ASCE 6-02/TMS 602-02) ASTM C476, ASTM C1019, AND NCMA TEK 107.
- 2 CONCRETE BLOCKS SHALL CONFORM TO ASTM C-90. (f'm = 1500 PSI) (1900 PSI ON THE NET AREA)
- 3 MORTAR SHALL COMPLY WITH ASTM C270, TYPE M OR S. (COMPRESSIVE STRENGTH = 2500 PSI AND 1800 PSI, RESPECTIVELY. SITE TESTED MORTAR CUBES SHALL ACHIEVE A MINIMUM OF 80% OF THE DESIGN COMPRESSIVE STRENGTH)
- 4 BLOCK SHALL NOT BE MOISTENED BEFORE GROUTING.
- 5 ALL MASONRY CROSS WEBS SHALL BE FULLY BEDDED IN MORTAR AROUND CELLS TO BE GROUTED.
- 6 THE MINIMUM CONTINUOUS UNOBSTRUCTED CELL AREA IN CELL TO RECEIVE GROUT MUST BE NOT LESS THAN 2"x3". MORTAR FINS MUST BE REMOVED AS BLOCK PLACEMENT PROCEEDS. MORTAR DROPPINGS MUST BE KEPT OUT OF CELLS WHICH ARE TO BE GROUTED.
- 7 WHERE SHOWN, CELLS OF BLOCK MASONRY SHALL BE FILLED WITH GROUT WITH MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, AND MEET ASTM C476. GROUT SHALL BE PROVIDED BY CONCRETE SUPPLIER FROM THEIR BATCH PLANT WITH A SLUMP OF 8" TO 10". JOB SITE MIXING OF GROUT SHALL NOT BE PERMITTED. TESTING SHALL CONFORM TO ASTM C1019.
- 8 GROUT FOR FILLED CELLS SHALL BE POURED OR PUMPED IN LIFTS NOT TO EXCEED FOUR (4) FEET IN HEIGHT. FILLED CELLS SHALL BE CONSOLIDATED AT TIME OF POURING BY RODDING OR VIBRATING BETWEEN LIFTS.
- 9 PROVIDE KNOCK-OUT CMU AT BASE OF EACH FILLED CELL TO ALLOW VISUAL VERIFICATION OF COMPLETE GROUT PENETRATION (FOR LIFTS OF 5'-0" OR LESS, A KNOCK-OUT AT BASE OF LIFT WILL NOT BE REQUIRED).
- 10 VERTICAL REINFORCING MUST HAVE A MINIMUM CLEARANCE OF 1/2" TO INSIDE FACE. MIN VERTICAL BAR LAP = 40 X BAR DIAMETER. VERTICAL REINFORCEMENT IN WALLS SHALL BE SECURED AND LATERALLY SUPPORTED AGAINST DISPLACEMENT AT INTERVALS NOT EXCEEDING 192 X BAR DIAMETER NOR 10 FT.
- 11 GROUT PLACEMENT STOPPED FOR (1) HOUR OR MORE SHOULD BE STOPPED (1 1/2") BELOW THE TOP OF THE MASONRY UNIT TO PROVIDE A KEY FOR SUBSEQUENT GROUTING.
- 12 SEE FOUNDATION PLANS FOR ALL VERT FEINFORCING. TYP VERTICAL REINFORCING SIZE & SPACING SHALL BE ABOVE AND BELOW ALL WALL OPENINGS.
- 13 TEMPORARY BRACING AND SHORING OF WALLS TO PROVIDE STABILITY DURING CONSTRUCTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 14 DO NOT APPLY UNIFORM LOADS TO MASONRY WALLS FOR (3) DAYS.
- 15 DO NOT APPLY CONCENTRATED LOADS TO MASONRY WALLS FOR (7) DAYS.
- 16 EXTEND ALL VERTICAL WALL REINFORCEMENT TO WITHIN 2" OF TOP OF WALL OR BEAM UNLESS NOTED OTHERWISE. TERMINATE REINFORCING WITH STANDARD ACI HOOK.
17. TYPICAL HORIZONTAL WALL REINFORCING SHALL BE PREFABRICATED, GALVANIZED, LADDER TYPE. MINIMUM TWO 9-GUAGE WIRES WITH CROSS TIES. USE PREFABRICATED L'S AT CORNERS AND T'S AT WALL INTERSECTIONS WITH SAME GAUGE WIRE. HORIZONTAL REDINFORCING AT 16" O.C. VERTICALLY STARTING AT THE FIRST COURSE ABOVE THE FOUNDATION USING 6" LAP SPLICE.

CERTIFICATE OF AUTHORIZATION #6884
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER VOLPE P.E. # 46630



Highlands County
Board of County Commissioners
SUN 'N LAKE
EMS / FIRE STATION

DRAWING:
STRUCTURAL
NOTES

SCALE:
N/A

SHEET # 6

DATE:	DR	CH
4-26-2016		
8-12-2016		
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1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

2025 REVISED PER 15073
882.385.5541 / 882.385.242 FAX
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882.385.5541 / 882.385.242 FAX
GUTTERS ADDED (SEE ELEVATIONS)

15073

"All exterior components and cladding, including but not limited to doors, windows and roof coverings, must be certified and installed to meet the design wind pressures shown on these drawings."

5/8" CDX PLYWOOD SHEATHING
W/ 10d @ 6" O.C. EDGES &
INTERMEDIATE & @ 4" O.C. @
GABLE ENDS -TYPICAL-

26 GAUGE PAINTED METAL ROOF
WITH MINIMUM 3-YEAR AGED
SOLAR REFLECTIVE INDEX OF 64
(SM PANEL WITH 9" RIB)
OVER 30# FELT
-ASTM-D-226 TYPE 1

NOTE: METAL ROOF ASSEMBLY
CERTIFIED TO WITHSTAND
150 MPH WIND SPEEDS.

UNLESS NOTED USE
SIMPSON HETA16
W/ (9) - 10d X 1 1/2" = 1,810#

GUTTER STRAPS @ 24" O.C.

-TYPICAL-
24 GA. MTL. GUTTER

3 X 4 MTL.
DOWNSPOUT

ALUMINUM DRIP EDGE
6" ALUMINUM FACIA OVER
2" X 6" SPRUCE SUB-FACIA

NON-VENTED VINYL SOFFIT

TYPICAL HORIZONTAL WALL REINFORCING SHALL BE PREFABRICATED,
GALVANIZED, LADDER TYPE, MINIMUM TWO 9-GAUGE WIRES WITH
CROSS TIES, USE PREFABRICATED L'S AT CORNERS AND T'S AT WALL
INTERSECTIONS WITH SAME GAUGE WIRE. HORIZONTAL REDINFORCING
AT 16" O.C. VERTICALLY STARTING AT THE FIRST COURSE ABOVE THE
FOUNDATION USING 6" LAP SPLICE.

(1) #5 VERTICAL IN FILLED CELL @ 4'-0" O.C. (MAX.)
FOR ALL 14'-0" TALL WALLS. VERTICAL DOWN ROD
SHALL RUN FROM FOOTING TO TIE LINTEL & ALL
STEEL LAPS SHALL BE MIN. OF 30". -TYPICAL-

FOOTING DOWEL: (TYP)

#5 REBAR W/ STANDARD HOOK @ ALL VERTICAL REBARS.

-ALL CORNERS

- (1) BAR EACH SIDE OF ALL OPENINGS

- (2) BARS EACH SIDE OF ALL OPENINGS WIDER THAN 12'-0"

- UNDER ALL GIRDER TRUSSES

(ALSO REFER TO STRUCTURAL PAGE FOR VERTICAL PLACEMENT)

1/2" THICK STUCCO WITH SKIP TROWEL
FINISH ON ALL EXTERIOR WALLS (TYP.)

FINISHED GRADE @ 4"
BELOW FINISHED FLOOR

SUPPORT LONGITUDINAL FOOTER BARS
WITH CHAIRS @ 4'-0" O.C. (TYPICAL)

18" WIDE X 22" DEEP MONOLITHIC
CONCRETE FOOTING
W/ (2) #5 REBARS CONT.
(MINIMUM LAP 25")
W/ MIN. 3" EDGE CLEARANCE
-TYPICAL-

SECTION DETAIL M-M

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

#9 X 1 1/2" WOOD FAST WEATHER
SEAL FASTENER SCREWS @ 12"
O.C. W/ NEOPHRENE WASHERS
OR PER MANUFACTURER SPECS.

MINIMUM R-20 OPEN CELL SPRAY
FOAM INSULATION TO UNDERSIDE
OF ROOF DECK OVER GARAGE.

PRE-ENGINEERED
WOOD TRUSSES
@ 24" O.C.

UN-VENTED
ATTIC
SPACE

CONCRETE FILLED
DOUBLE LINTEL BLOCK
COURSE W/ (1) #5 BAR
CONTINUOUS IN EACH

5/8" TYPE-X CEILING BOARD
W/ KNOCK DOWN FINISH

CONTINUOUS INTERMEDIATE POUR
(TOP @ 9'-4") FILLED SOLID WITH
(1) #5 BAR (3000 P.S.I. CONC.)

3/8" STUCCO WITH SAND FINISH
ON ALL INTERIOR GARAGE WALLS.
(LAUNDRY AREA & CLOSET)

CONCRETE SLAB
THICKNESS OF 6".
(MINIMUM TO BE 5 1/2")

FINISH FLOOR

MONOLITHIC FLOOR SLAB:

- FOUNDATION WALL SHALL BE FILLED WITH CLEAN FILL DIRT.
- FILL DIRT SHALL BE MECHANICALLY COMPACTED TO 1,500 LBS PER SQ. FOOT MINIMUM. 95% MODIFIED PROCTOR. THEN GRADED TO ALLOW A CONCRETE THICKNESS OF 6". (MINIMUM TO BE 5 1/2")
- GRADED FILL DIRT SHALL THEN BE TERMITE TREATED AND A VAPOR BARRIER OF 6 MIL. VISQUEEN LAID IN PLACE WITH JOINTS LAPPED NOT LESS THAN 6 INCHES.
- FLOOR CONCRETE MIXTURE SHALL BE 3,000 PSI AND SHALL BE REINFORCED WITH FIBER-MESH (@ LIVING SPACE). FIBERS SHALL COMPLY WITH ASTM C 1116 AND DOSAGE AMOUNTS ARE TO BE PER THE FIBER MANUFACTURERS RECOMMENDATIONS.
- GARAGE FLOOR REINFORCEMENT OF 6" X 6" W2.9 X W2.9 WWM FABRIC LOCATED IN THE MIDDLE TO THE UPPER ONE THIRD OF THE SLAB. WELDED WIRE REINFORCEMENT FABRIC SHALL BE SUPPORTED WITH APPROVED MATERIALS AT SPACING NOT TO EXCEED 3 FEET OR IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. -TYPICAL-

#9 X 1 1/2" WOOD FAST WEATHER
SEAL FASTENER SCREWS @ 12"
O.C. W/ NEOPHRENE WASHERS
OR PER MANUFACTURER SPECS.

MINIMUM R-20 OPEN CELL SPRAY
FOAM INSULATION TO UNDERSIDE
OF ROOF DECK OVER GARAGE.

PRE-ENGINEERED
WOOD TRUSSES
@ 24" O.C.

UN-VENTED
ATTIC
SPACE

CONCRETE FILLED
DOUBLE LINTEL BLOCK
COURSE W/ (1) #5 BAR
CONTINUOUS IN EACH

GROUTED CAST-CRETE LINTEL
W/ (1) #5 REBAR CONTINUOUS
WITH 30" MINIMUM LAP

GARAGE
DOOR
OPENING

CONCRETE SLAB
THICKNESS OF 6".
(MINIMUM TO BE 5 1/2")

FINISH FLOOR

18" WIDE X 22" DEEP MONOLITHIC
CONCRETE FOOTING
W/ (2) #5 REBARS CONT.
(MINIMUM LAP 25")
W/ MIN. 3" EDGE CLEARANCE
-TYPICAL-

SUPPORT LONGITUDINAL FOOTER BARS
WITH CHAIRS @ 4'-0" O.C. (TYPICAL)

5/8" CDX PLYWOOD SHEATHING
W/ 10d @ 6" O.C. EDGES &
INTERMEDIATE & @ 4" O.C. @
GABLE ENDS -TYPICAL-

26 GAUGE PAINTED METAL ROOF
WITH MINIMUM 3-YEAR AGED
SOLAR REFLECTIVE INDEX OF 64
(SM PANEL WITH 9" RIB)
OVER 30# FELT
-ASTM-D-226 TYPE 1

NOTE: METAL ROOF ASSEMBLY
CERTIFIED TO WITHSTAND
150 MPH WIND SPEEDS.

UNLESS NOTED USE
SIMPSON HETA16
W/ (9) - 10d X 1 1/2" = 1,810#

GUTTER STRAPS @ 24" O.C.

-TYPICAL-
24 GA. MTL. GUTTER

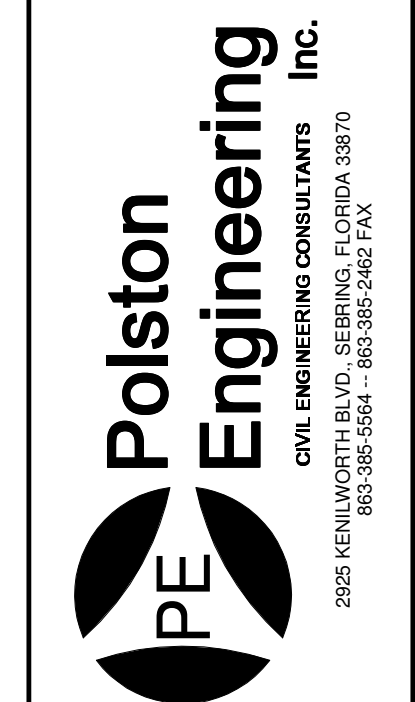
3 X 4 MTL.
DOWNSPOUT

ALUMINUM DRIP EDGE
6" ALUMINUM FACIA OVER
2" X 6" SPRUCE SUB-FACIA

NON-VENTED VINYL SOFFIT

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

CERTIFICATE OF AUTHORIZATION #4884
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER VOLPE P.E. # 46850
2025 REVISED PLAN FOR THE PROJECT
ORIGINAL SIGNATURE AND STAMP REQUIRED



Highlands County
Board of County Commissioners
SUN 'N LAKE
EMS / FIRE STATION
15073

DRAWING:
SECTION
DETAIL M-M

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

SHEET # **7**

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

CERTIFICATE OF AUTHORIZATION #5884
 ROGER DALE POLSTON P.E. # 35222
 HARVIN LUTHER VOLPE P.E. # 46650



Highlands County
 Board of County Commissioners
 SUN 'N LAKE
 EMS / FIRE STATION
 15073

DRAWING:
 SECTION
 DETAILS
 N-N & O-O

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

SHEET # 8

GUTTERS ADDED (SEE ELEVATIONS)

"All exterior components and cladding, including but not limited to doors, windows and roof coverings, must be certified and installed to meet the design wind pressures shown on these drawings."

5/8" CDX PLYWOOD SHEATHING
 W/ 10d @ 6" O.C. EDGES &
 INTERMEDIATE & @ 4" O.C. @
 GABLE ENDS -TYPICAL-

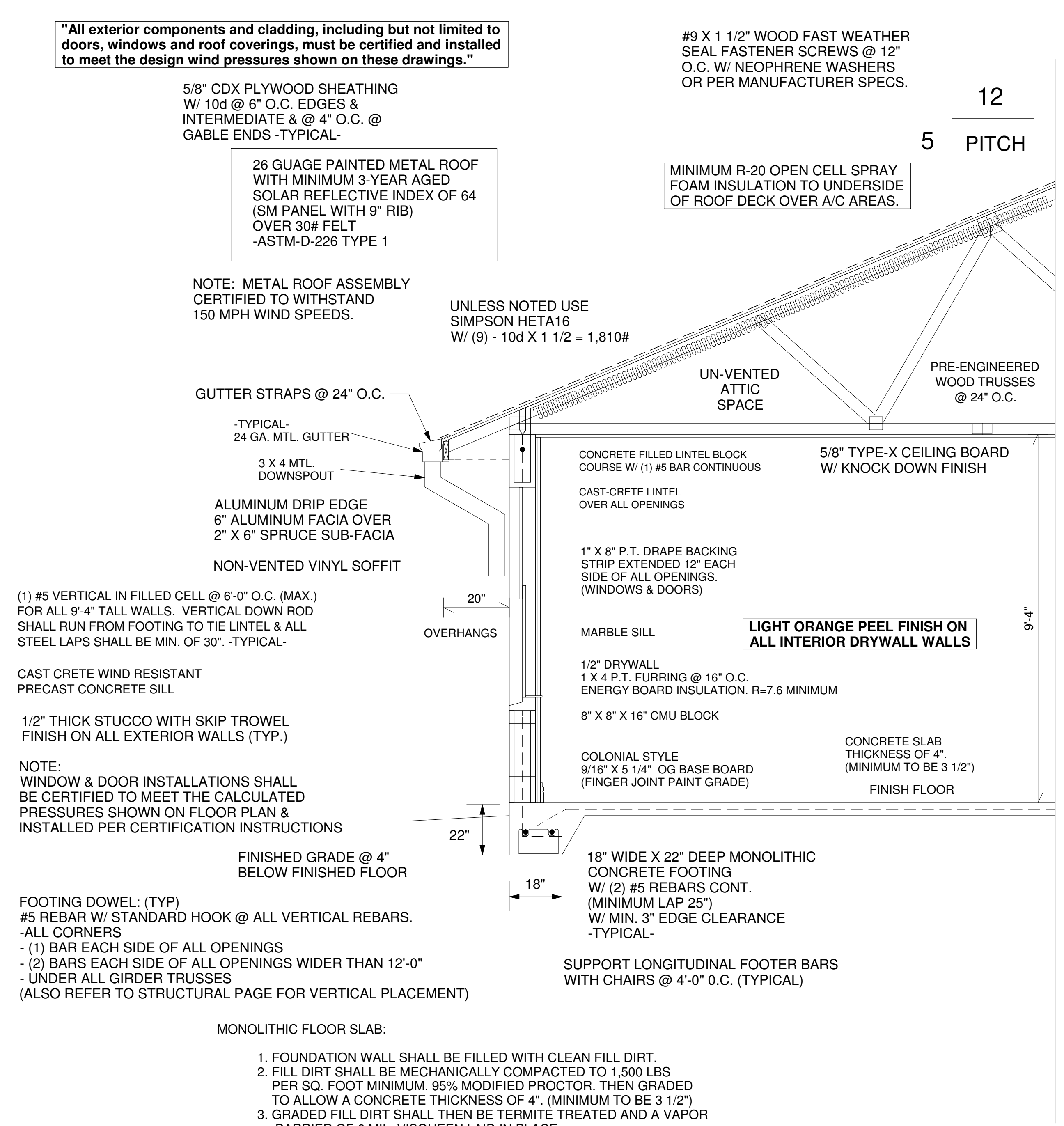
26 GAUGE PAINTED METAL ROOF
 WITH MINIMUM 3-YEAR AGED
 SOLAR REFLECTIVE INDEX OF 64
 (SM PANEL WITH 9" RIB)
 OVER 30# FELT
 -ASTM-D-226 TYPE 1

NOTE: METAL ROOF ASSEMBLY
 CERTIFIED TO WITHSTAND
 150 MPH WIND SPEEDS.

UNLESS NOTED USE
 SIMPSON HETA16
 W/ (9) - 10d X 1 1/2 = 1,810#

MINIMUM R-20 OPEN CELL SPRAY
 FOAM INSULATION TO UNDERSIDE
 OF ROOF DECK OVER A/C AREAS.

#9 X 1 1/2" WOOD FAST WEATHER
 SEAL FASTENER SCREWS @ 12"
 O.C. W/ NEOPHRENE WASHERS
 OR PER MANUFACTURER SPECS.



SECTION DETAIL N-N

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

(1) #5 VERTICAL IN FILLED CELL @ 6'-0" O.C. (MAX.)
 FOR ALL 9'-4" TALL WALLS. VERTICAL DOWN ROD
 SHALL RUN FROM FOOTING TO TIE LINTEL & ALL
 STEEL LAPS SHALL BE MIN. OF 30". -TYPICAL-

CAST CRETE WIND RESISTANT
 PRECAST CONCRETE SILL

1/2" THICK STUCCO WITH SKIP TROWEL
 FINISH ON ALL EXTERIOR WALLS (TYP.)

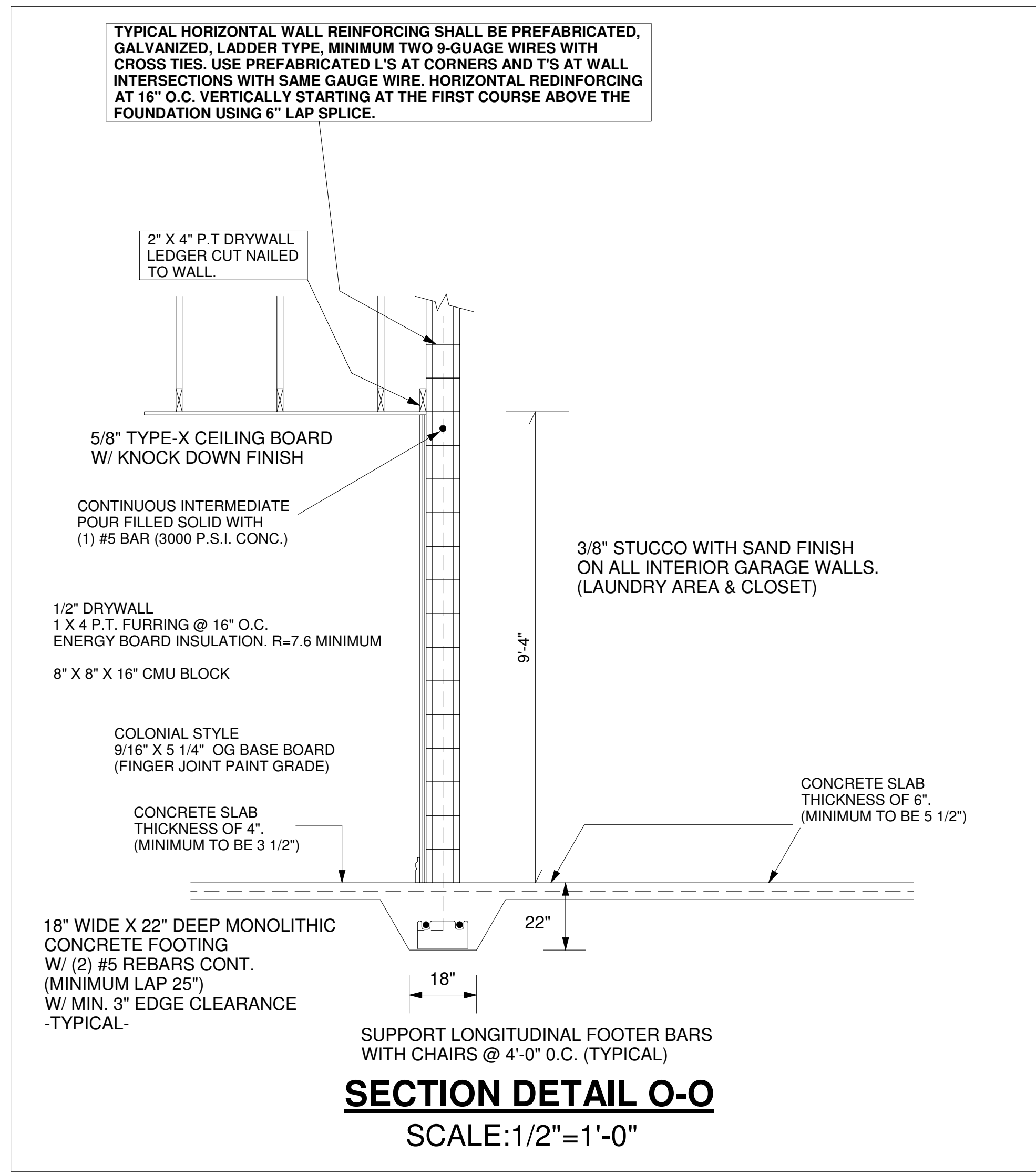
NOTE:
 WINDOW & DOOR INSTALLATIONS SHALL
 BE CERTIFIED TO MEET THE CALCULATED
 PRESSURES SHOWN ON FLOOR PLAN &
 INSTALLED PER CERTIFICATION INSTRUCTIONS

FINISHED GRADE @ 4"
 BELOW FINISHED FLOOR

FOOTING DOWEL: (TYP)
 #5 REBAR W/ STANDARD HOOK @ ALL VERTICAL REBARS.
 -ALL CORNERS
 - (1) BAR EACH SIDE OF ALL OPENINGS
 - (2) BARS EACH SIDE OF ALL OPENINGS WIDER THAN 12'-0"
 - UNDER ALL GIRDER TRUSSES
 (ALSO REFER TO STRUCTURAL PAGE FOR VERTICAL PLACEMENT)

MONOLITHIC FLOOR SLAB:

- FOUNDATION WALL SHALL BE FILLED WITH CLEAN FILL DIRT.
- FILL DIRT SHALL BE MECHANICALLY COMPACTED TO 1,500 LBS PER SQ. FOOT MINIMUM. 95% MODIFIED PROCTOR. THEN GRADED TO ALLOW A CONCRETE THICKNESS OF 4". (MINIMUM TO BE 3 1/2")
- GRADED FILL DIRT SHALL THEN BE TERMITE TREATED AND A VAPOR BARRIER OF 6 MIL. VISQUEEN LAID IN PLACE WITH JOINTS LAPPED NOT LESS THAN 6 INCHES.
- FLOOR CONCRETE MIXTURE SHALL BE 3,000 PSI AND SHALL BE REINFORCED WITH FIBER-MESH (@ LIVING SPACE). FIBERS SHALL COMPLY WITH ASTM C 1116 AND DOSAGE AMOUNTS ARE TO BE PER THE FIBER MANUFACTURERS RECOMMENDATIONS.
- GARAGE FLOOR REINFORCEMENT OF 6" X 6" W2.9 X W2.9 WWM FABRIC LOCATED IN THE MIDDLE TO THE UPPER ONE THIRD OF THE SLAB. WELDED WIRE REINFORCEMENT FABRIC SHALL BE SUPPORTED WITH APPROVED MATERIALS AT SPACING NOT TO EXCEED 3 FEET OR IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. -TYPICAL-



SECTION DETAIL O-O

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

TYPICAL HORIZONTAL WALL REINFORCING SHALL BE PREFABRICATED,
 GALVANIZED, LADDER TYPE, MINIMUM TWO 9-GUAGE WIRES WITH
 CROSS TIES. USE PREFABRICATED L'S AT CORNERS AND T'S AT WALL
 INTERSECTIONS WITH SAME GAUGE WIRE. HORIZONTAL REDINFORCING
 AT 16" O.C. VERTICALLY STARTING AT THE FIRST COURSE ABOVE THE
 FOUNDATION USING 6" LAP SPLICE.

2" X 4" P.T DRYWALL
 LEDGER CUT NAILED
 TO WALL.

5/8" TYPE-X CEILING BOARD
 W/ KNOCK DOWN FINISH

CONTINUOUS INTERMEDIATE
 POUR FILLED SOLID WITH
 (1) #5 BAR (3000 P.S.I. CONC.)

1/2" DRYWALL
 1 X 4 P.T. FURRING @ 16" O.C.
 ENERGY BOARD INSULATION. R=7.6 MINIMUM

8" X 8" X 16" CMU BLOCK

COLONIAL STYLE
 9/16" X 5 1/4" OG BASE BOARD
 (FINGER JOINT PAINT GRADE)

CONCRETE SLAB
 THICKNESS OF 4".
 (MINIMUM TO BE 3 1/2")

3/8" STUCCO WITH SAND FINISH
 ON ALL INTERIOR GARAGE WALLS.
 (LAUNDRY AREA & CLOSET)

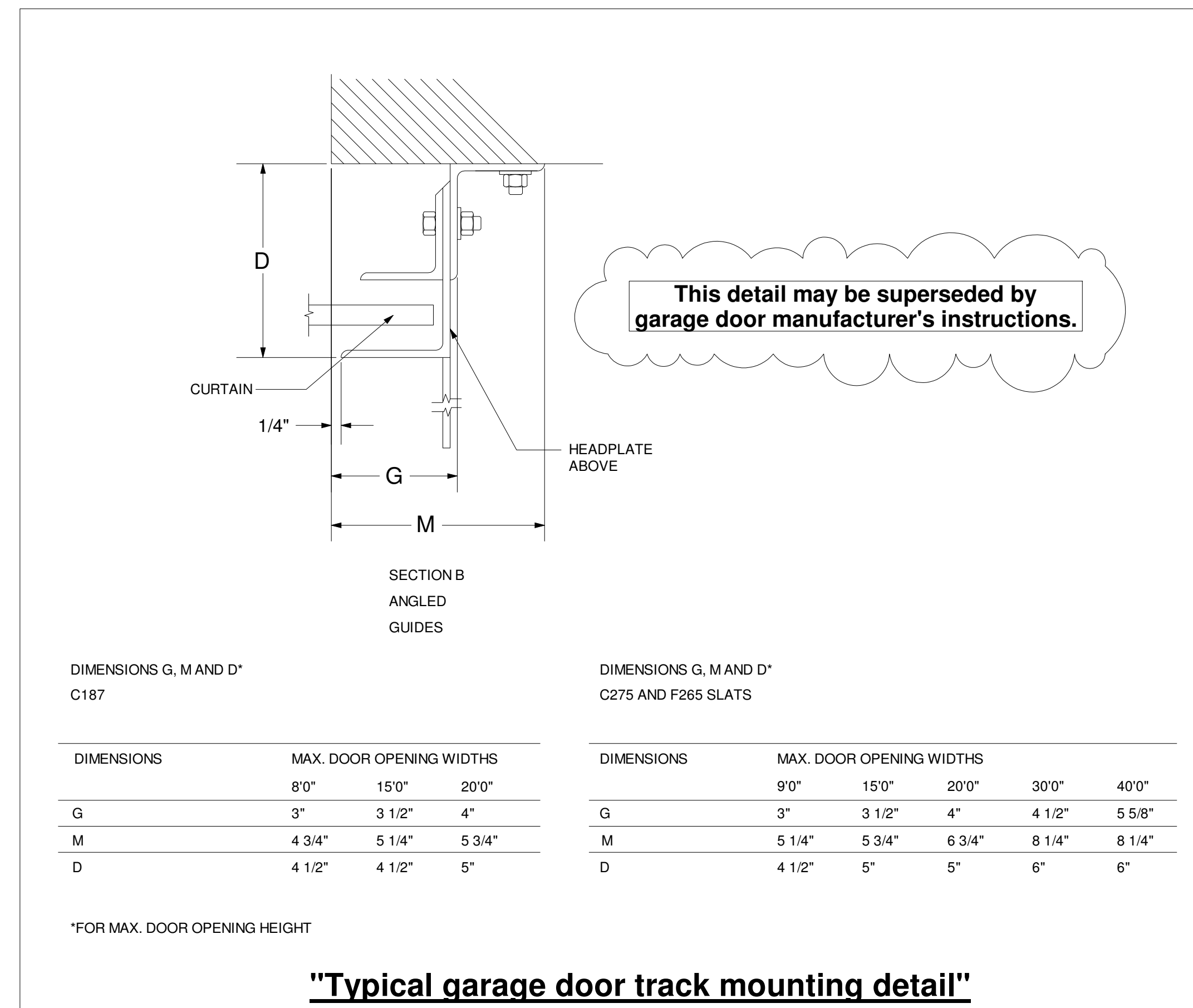
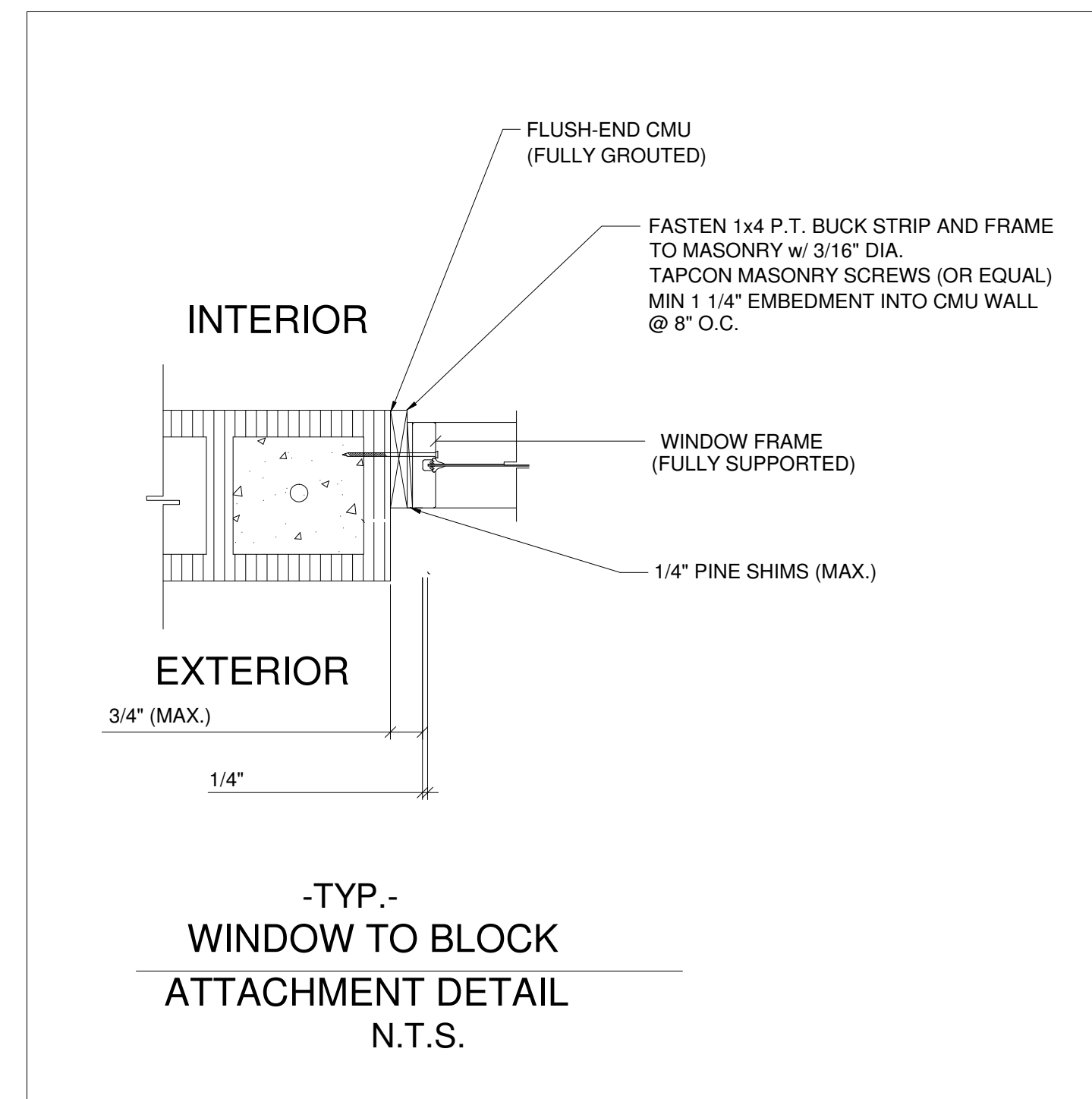
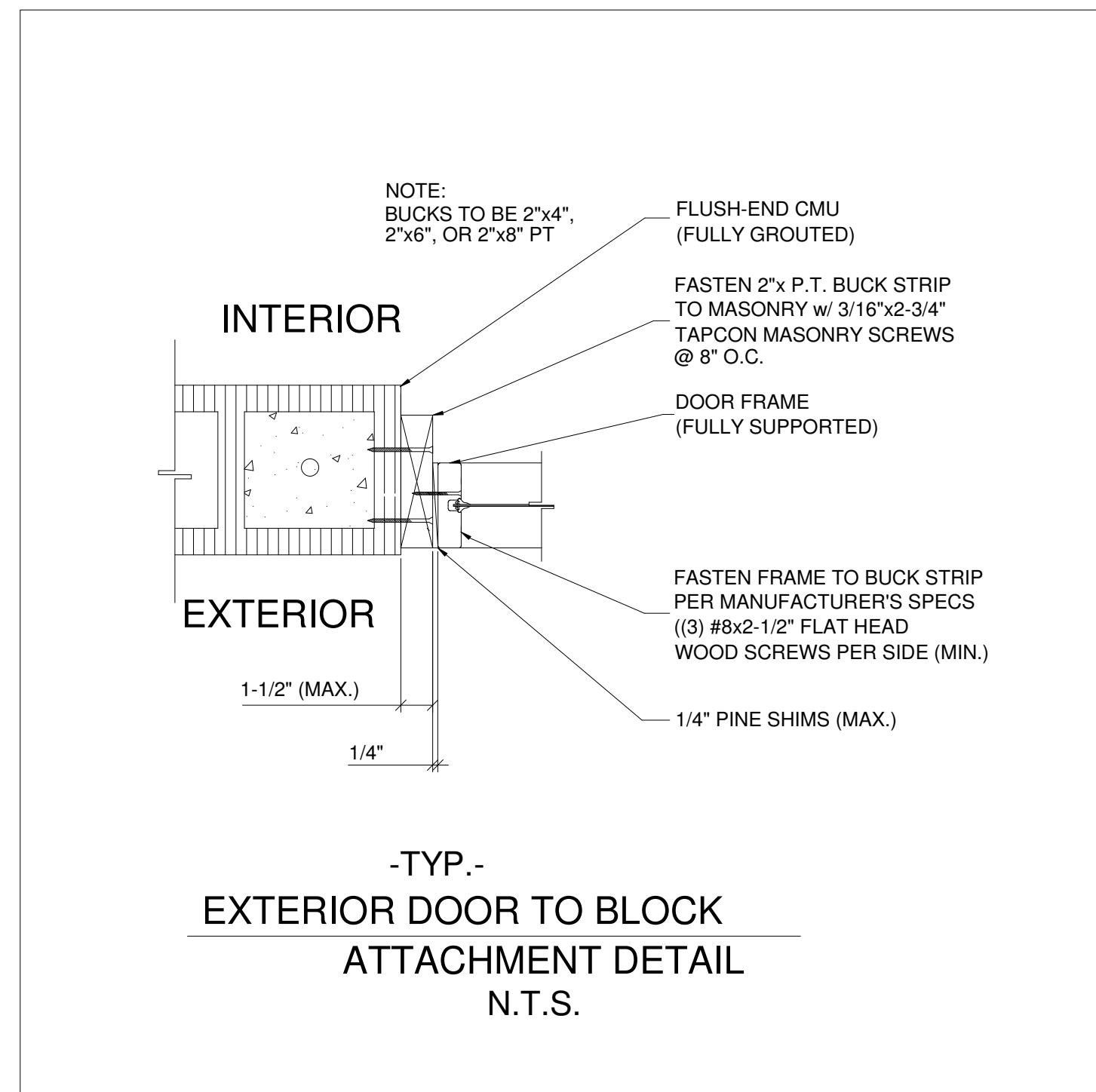
CONCRETE SLAB
 THICKNESS OF 6".
 (MINIMUM TO BE 5 1/2")

18" WIDE X 22" DEEP MONOLITHIC
 CONCRETE FOOTING
 W/ (2) #5 REBARS CONT.
 (MINIMUM LAP 25")
 W/ MIN. 3" EDGE CLEARANCE
 -TYPICAL-

SUPPORT LONGITUDINAL FOOTER BARS
 WITH CHAIRS @ 4'-0" O.C. (TYPICAL)

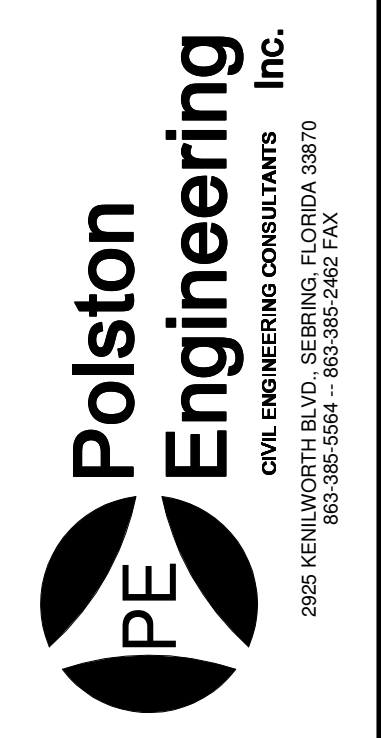
SECTION DETAIL O-O

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



DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

CERTIFICATE OF AUTHORIZATION #5884
 ROGER DALE POLSTON P.E. # 33222
 MARVIN LUTHER VOLPE P.E. # 46630
 REGISTERED PROFESSIONAL ENGINEERS
 ORIGINAL SIGNATURE AND STAMP REQUIRED



Highlands County
 Board of County Commissioners
SUN 'N LAKE
 EMS / FIRE STATION

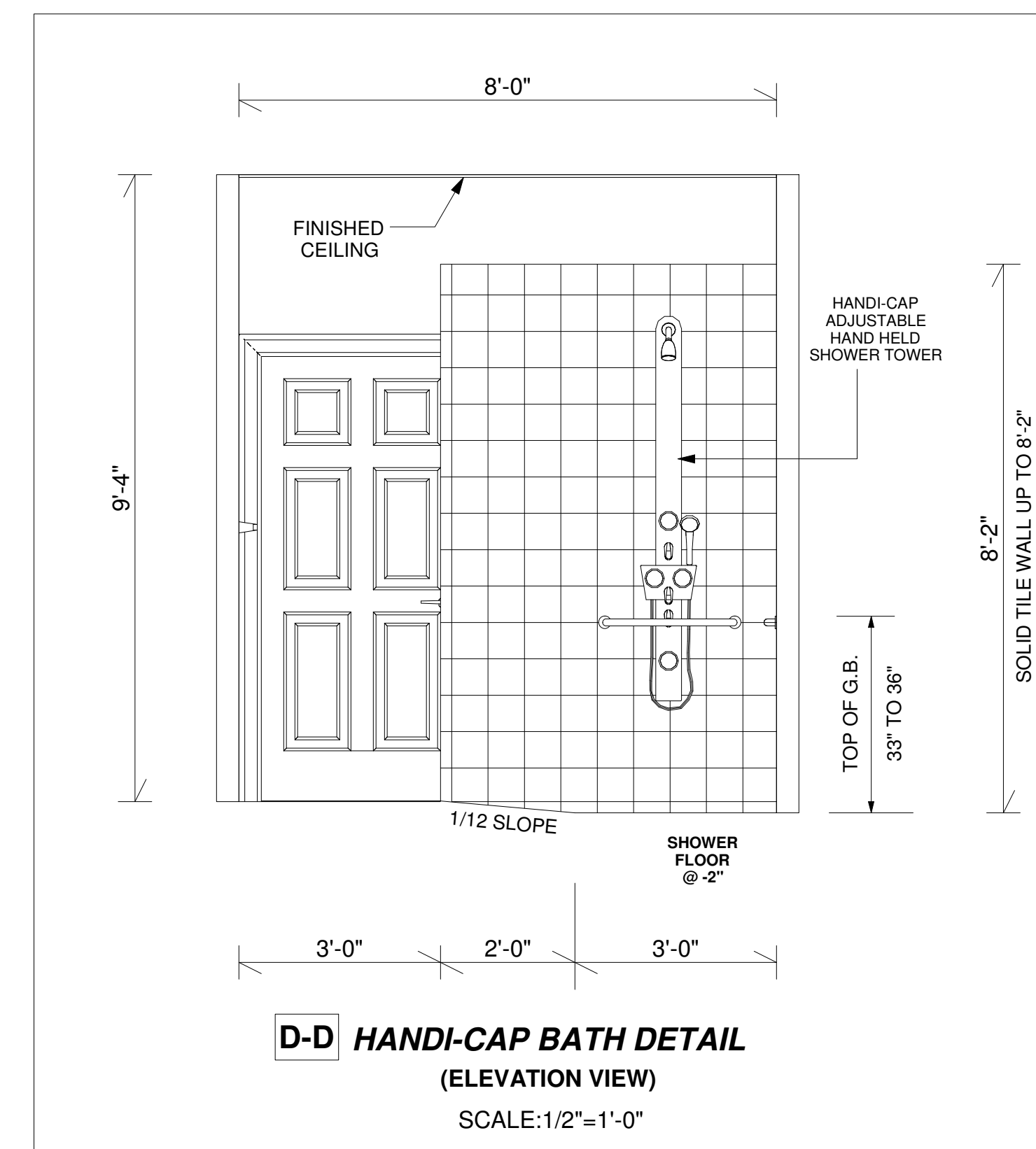
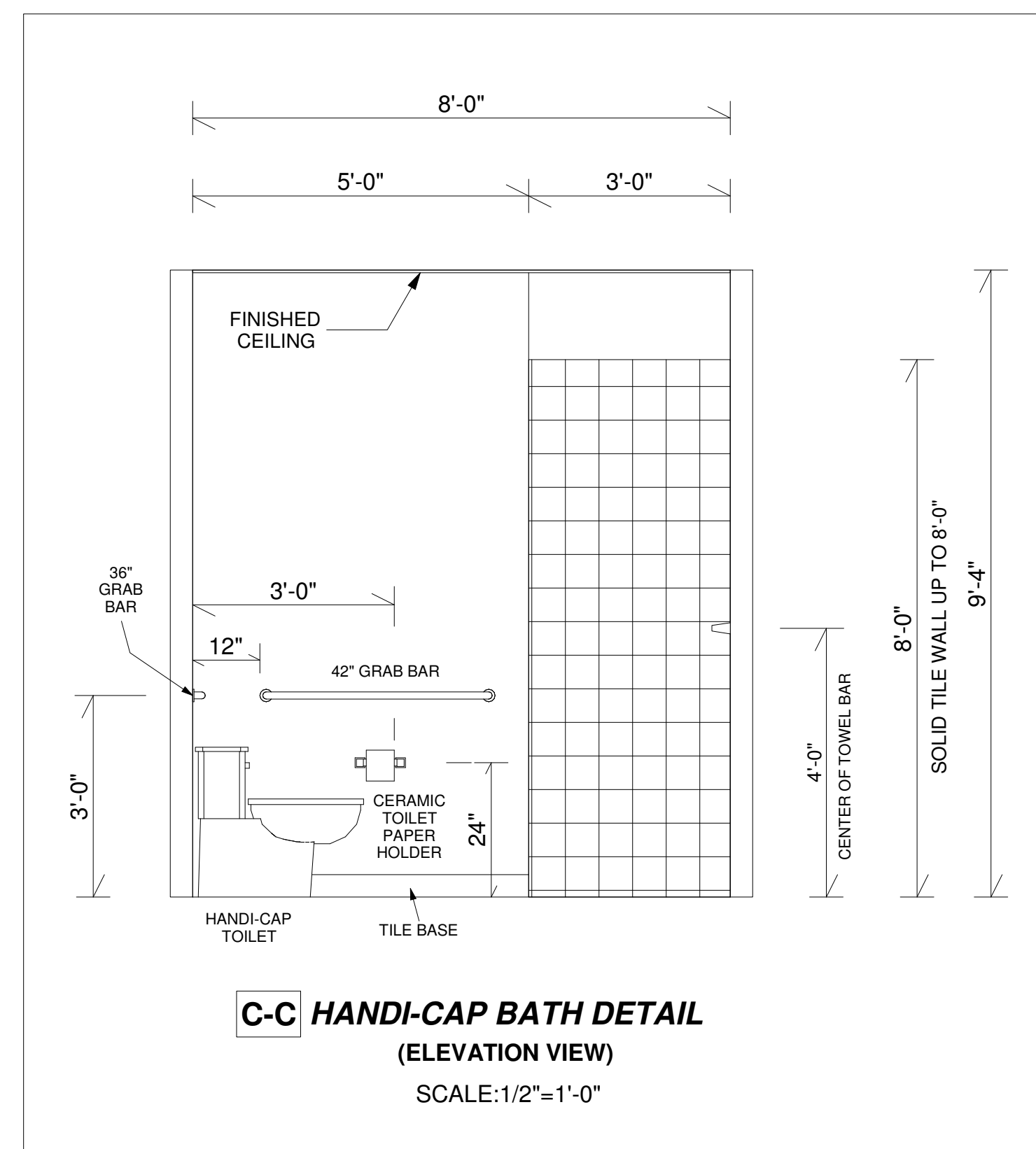
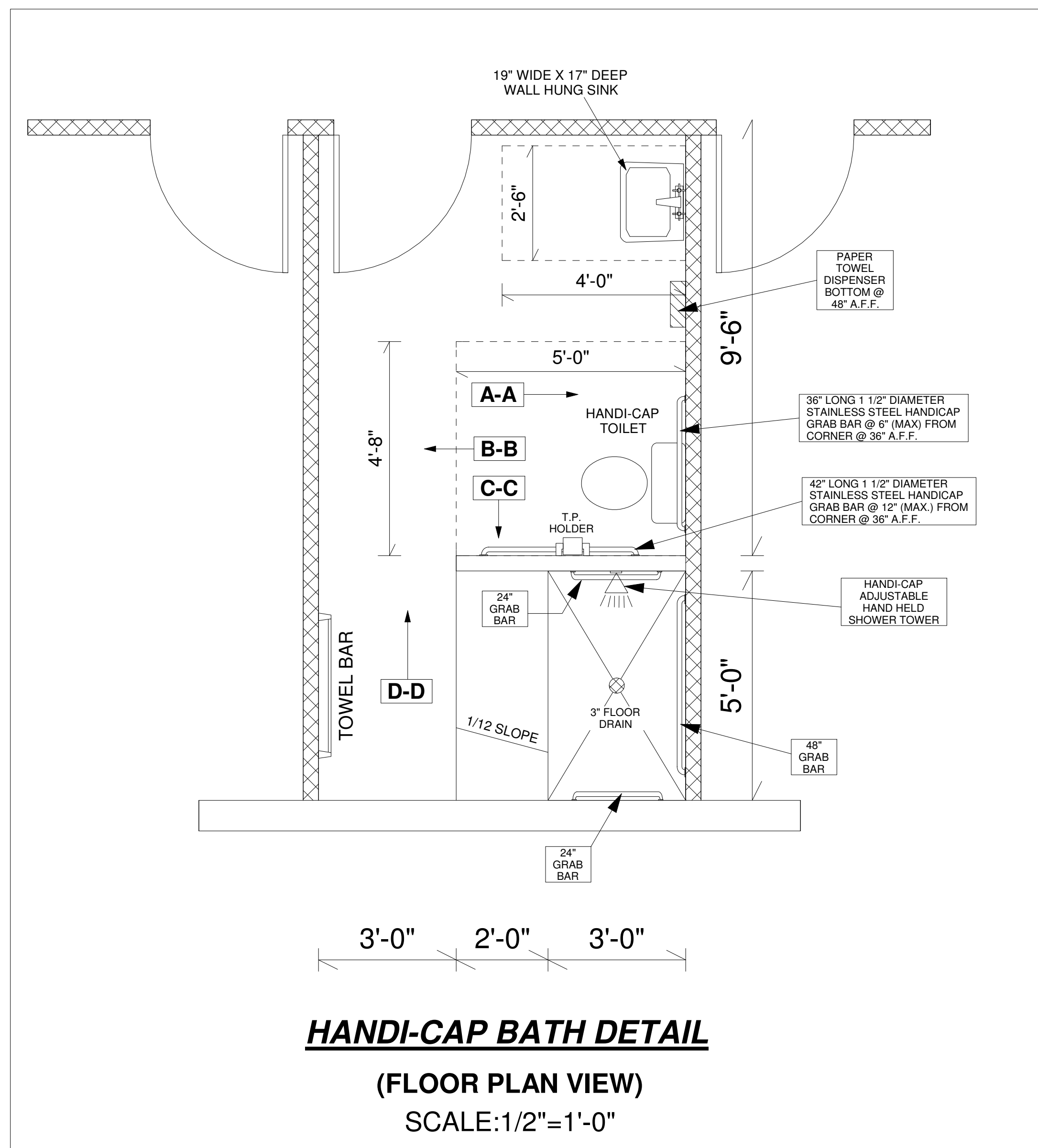
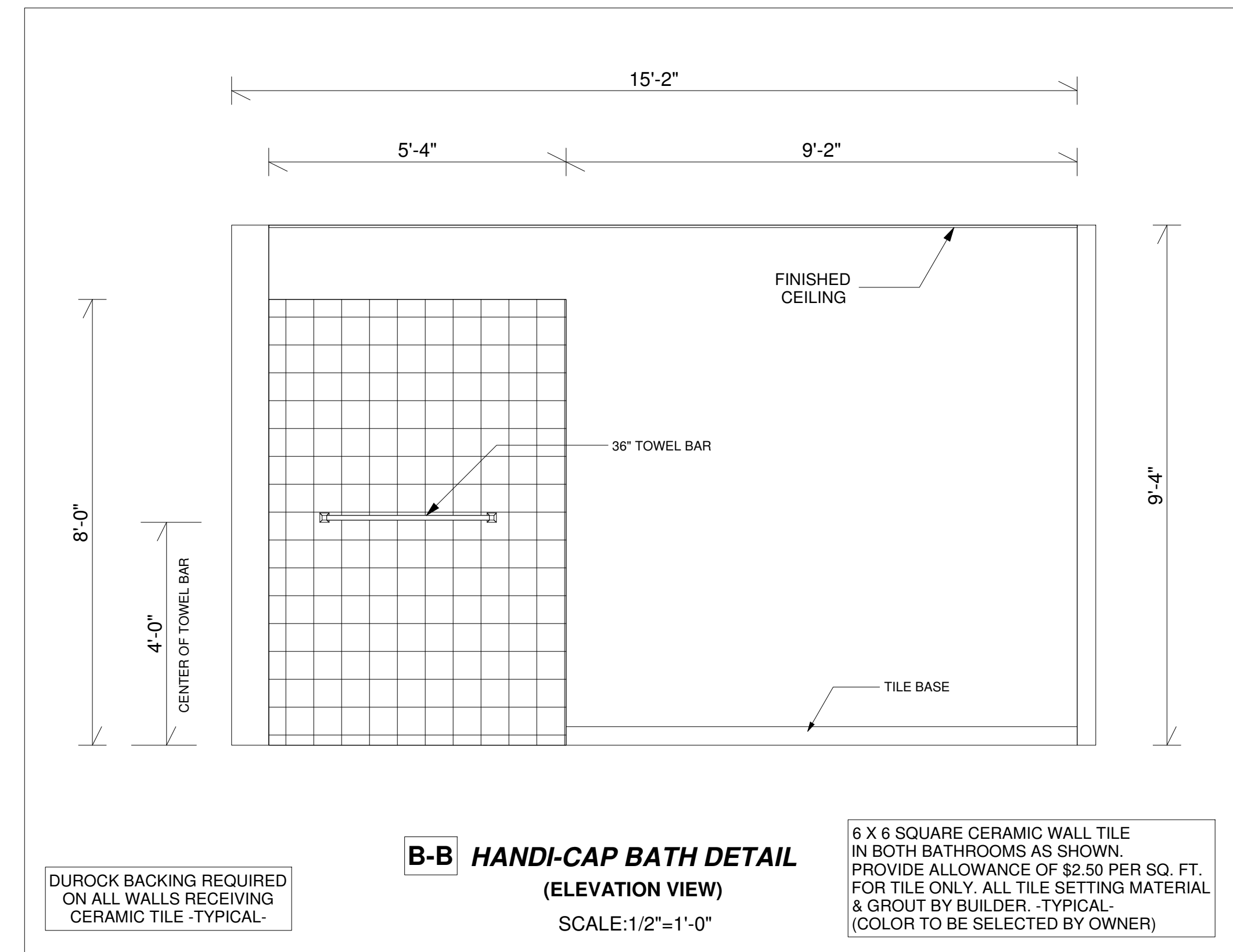
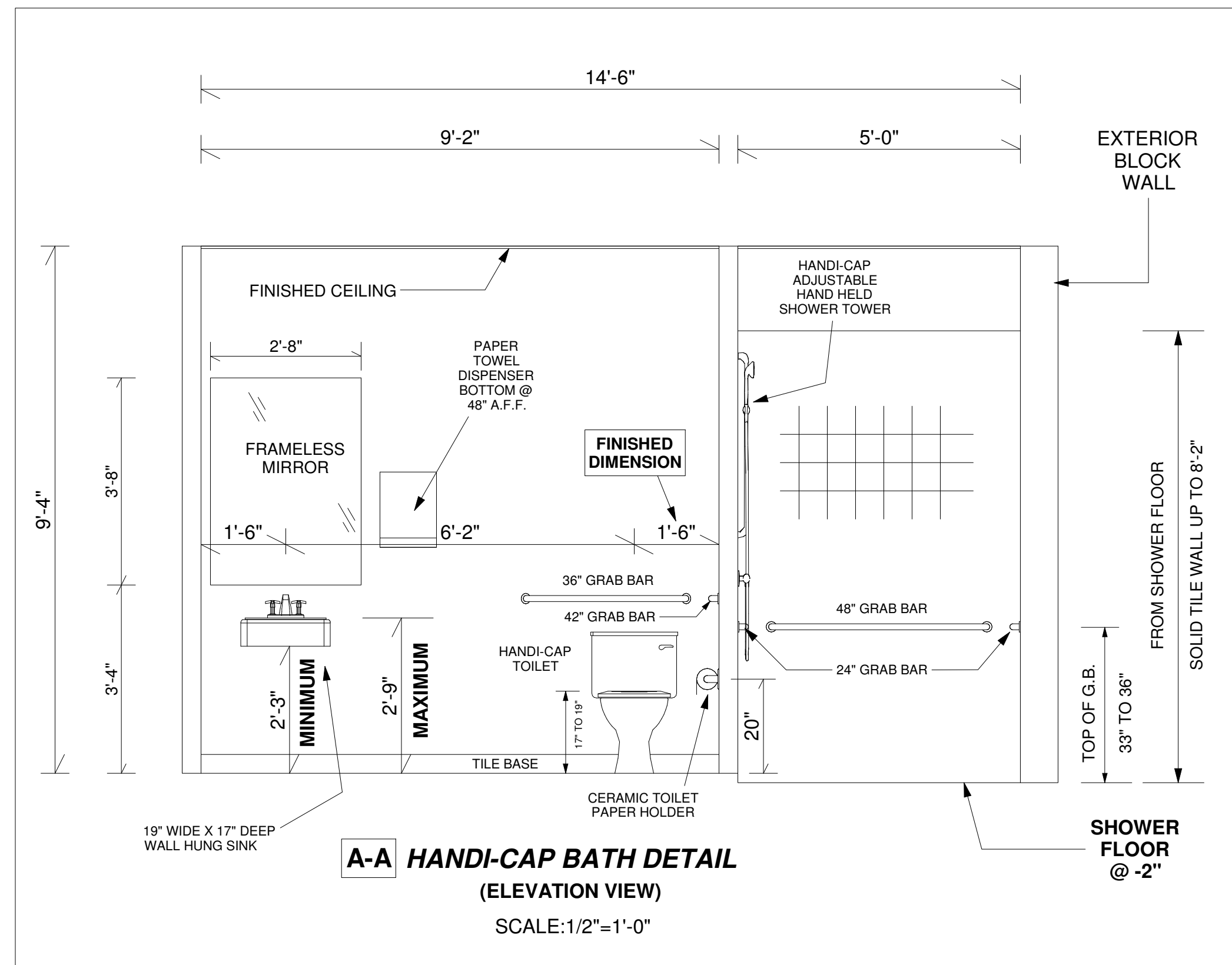
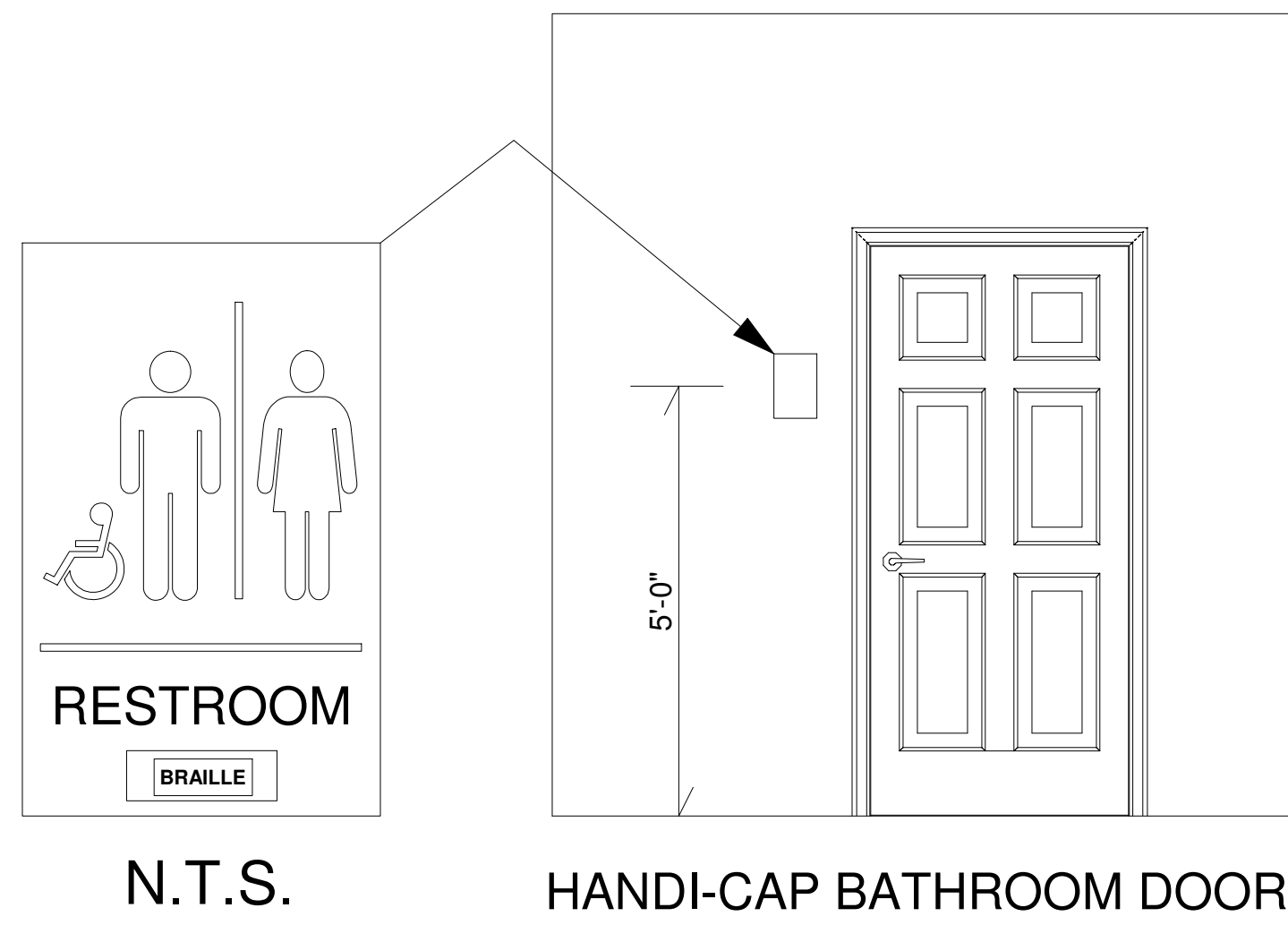
15073

DRAWING:
 DOOR & WINDOW
 BUCK DETAILS

SCALE:
 AS SHOWN

SHEET # 9

"Typical garage door track mounting detail"



DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

CERTIFICATE OF AUTHORIZATION #5884
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER VOLPE P.E. # 46650



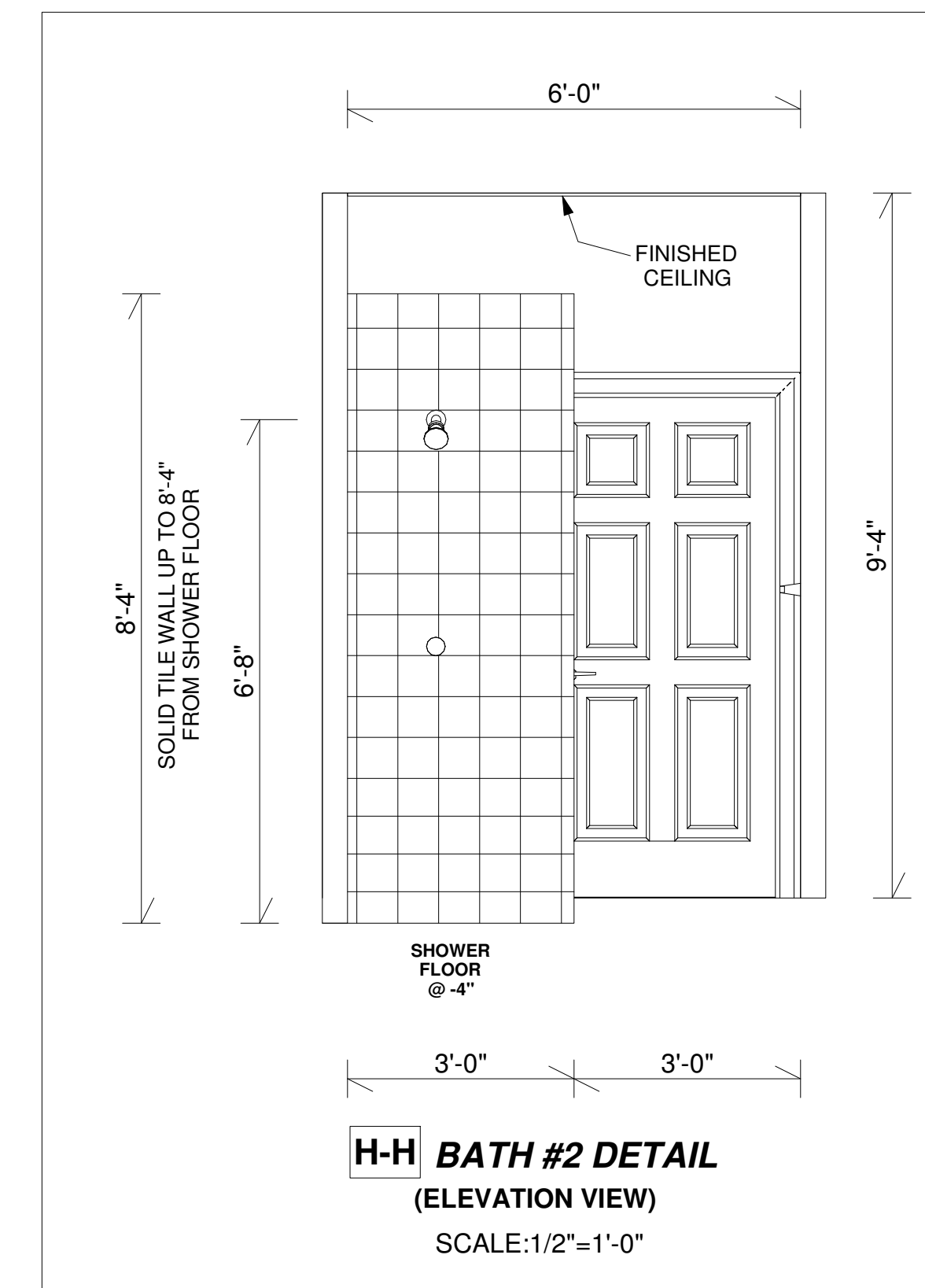
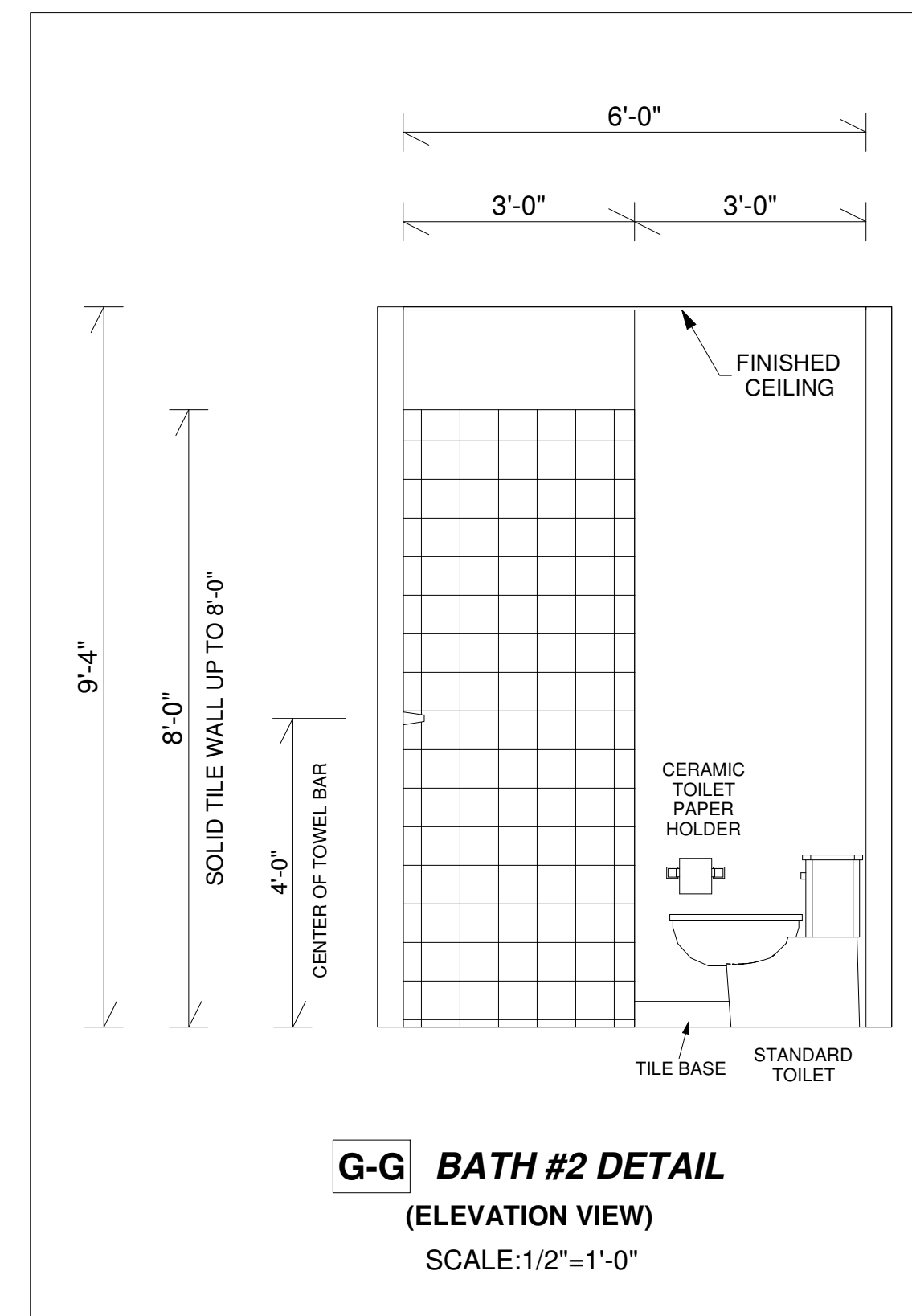
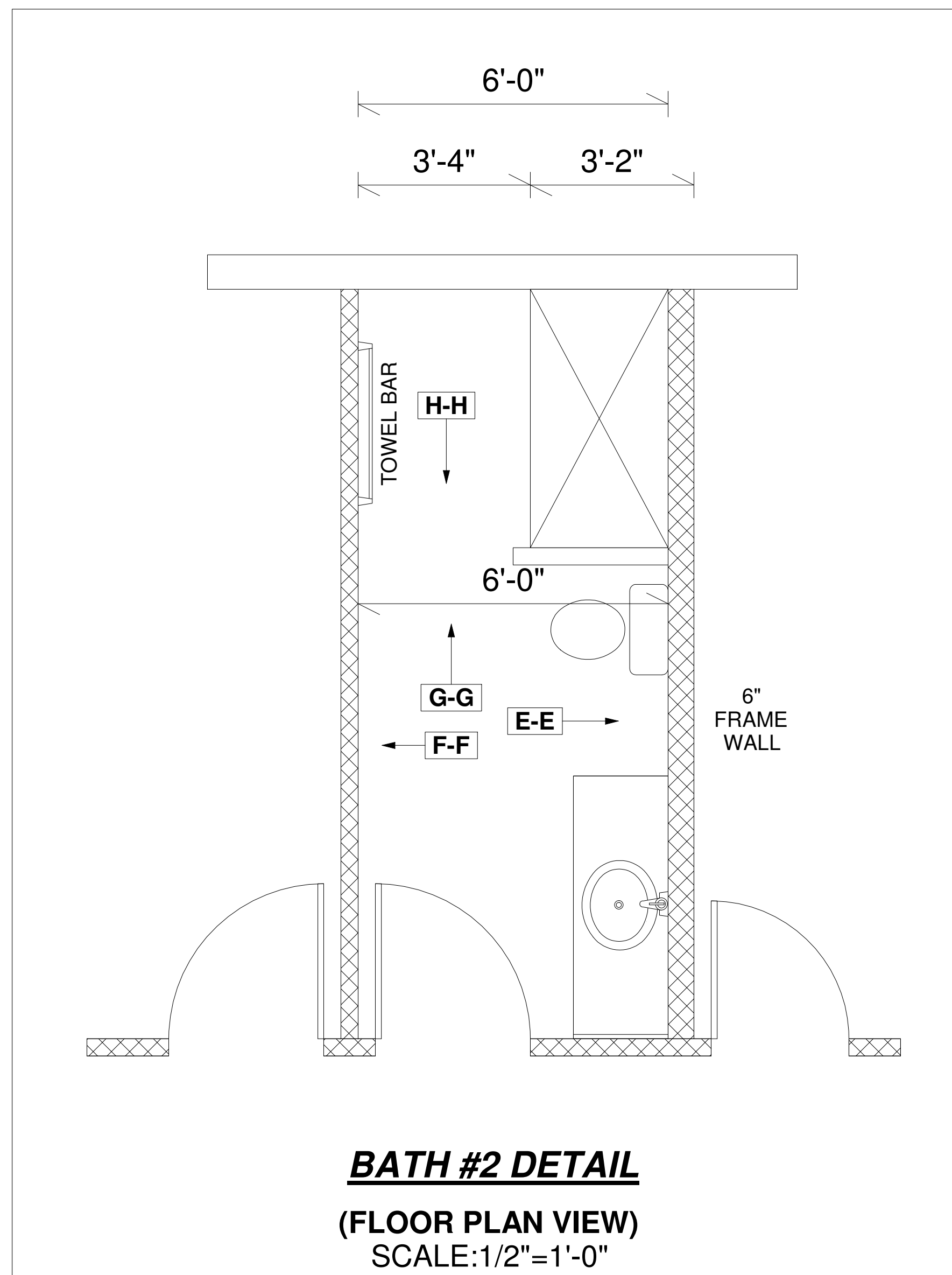
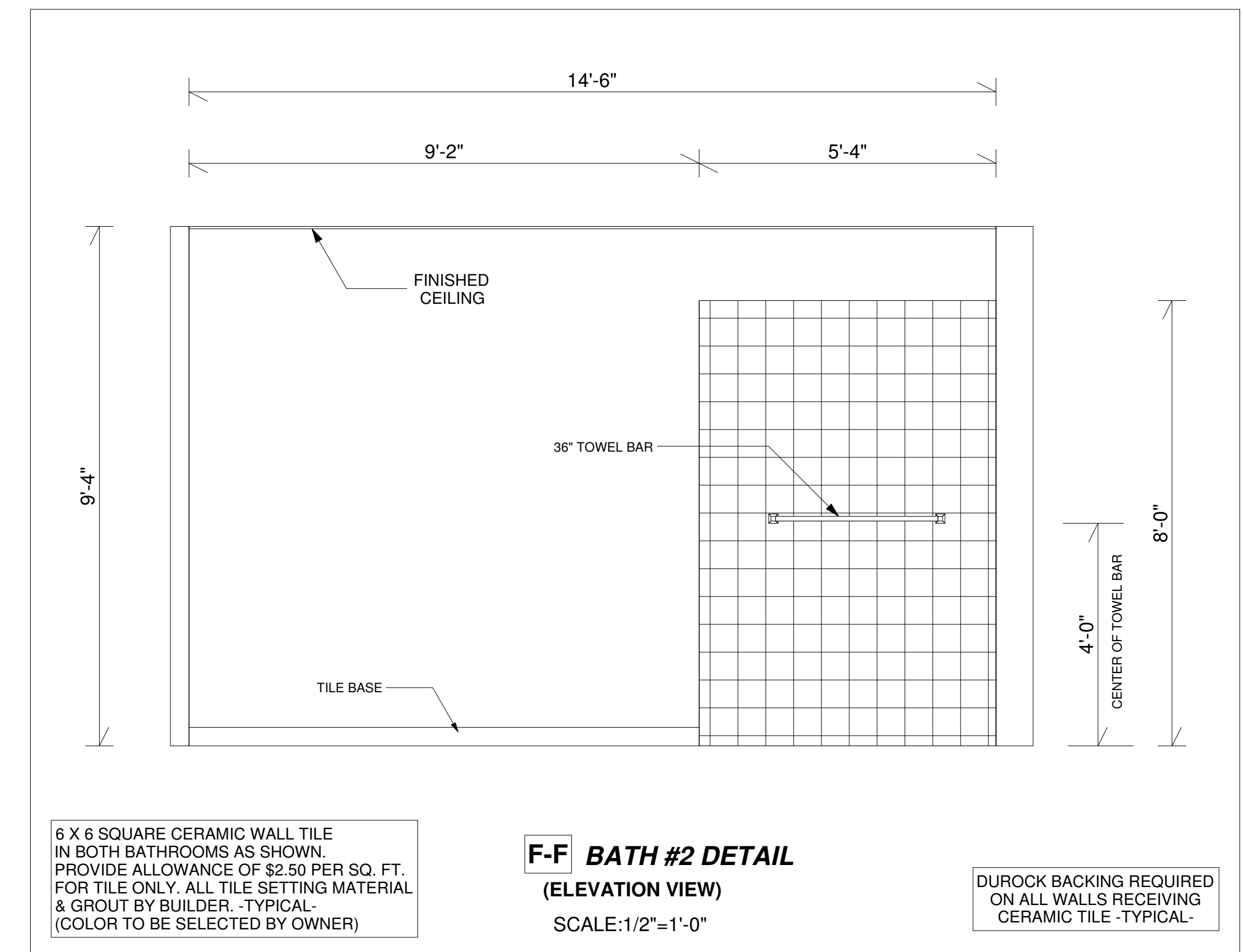
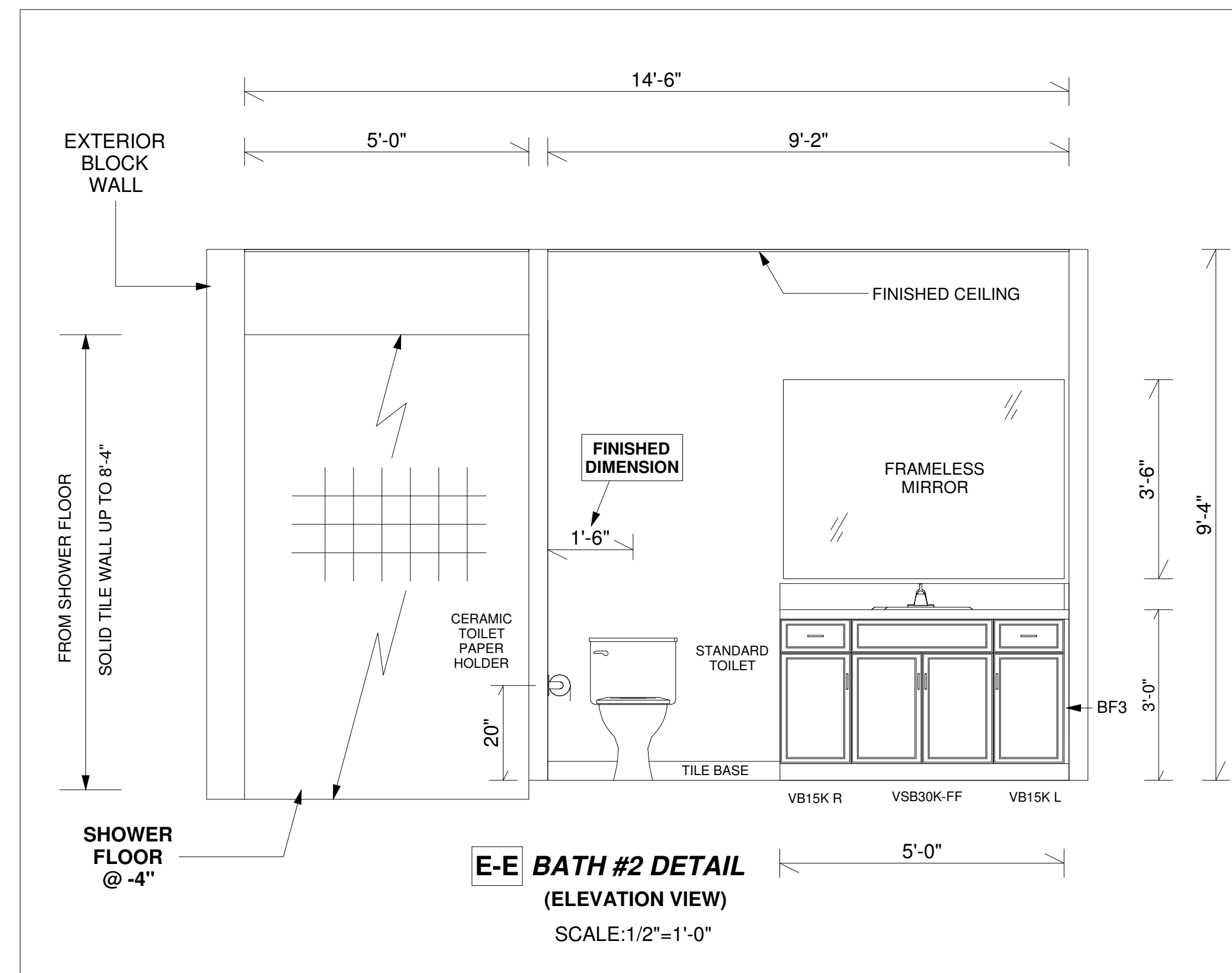
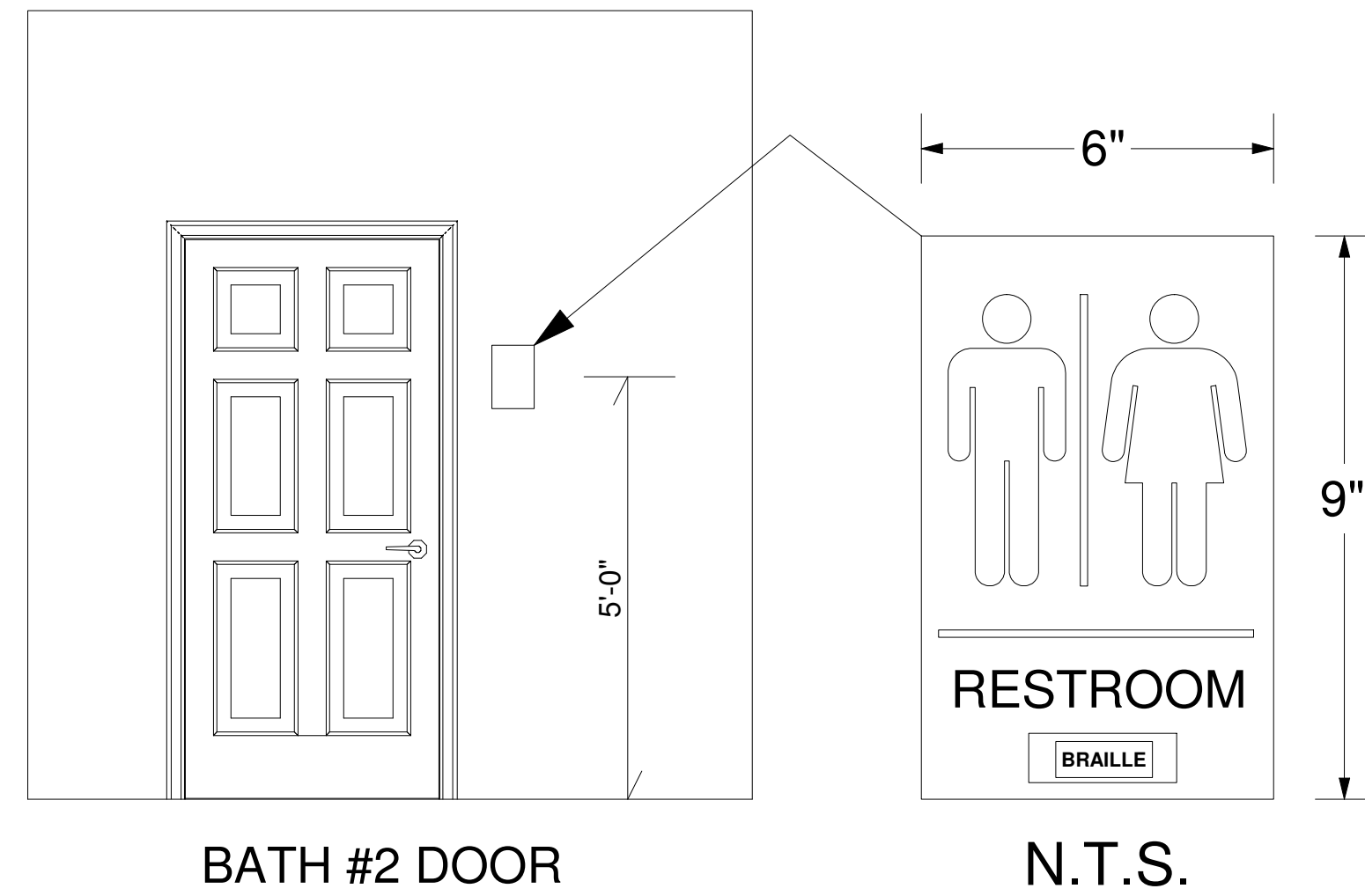
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Board of County Commissioners
SUN 'N LAKE
EMS / FIRE STATION

15073

DRAWING:
HANDI-CAP
BATHROOM
DETAILS

SCALE:
AS SHOWN

SHEET # 10



DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

CERTIFICATE OF AUTHORIZATION #5884
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER VOLPE P.E. # 46630

REGISTERED PROFESSIONAL ENGINEERS
2955 KENNAWAY AVENUE, SUITE 330
DADE COUNTY, FLORIDA 33133
TEL: 305-385-1554 FAX: 305-385-2422



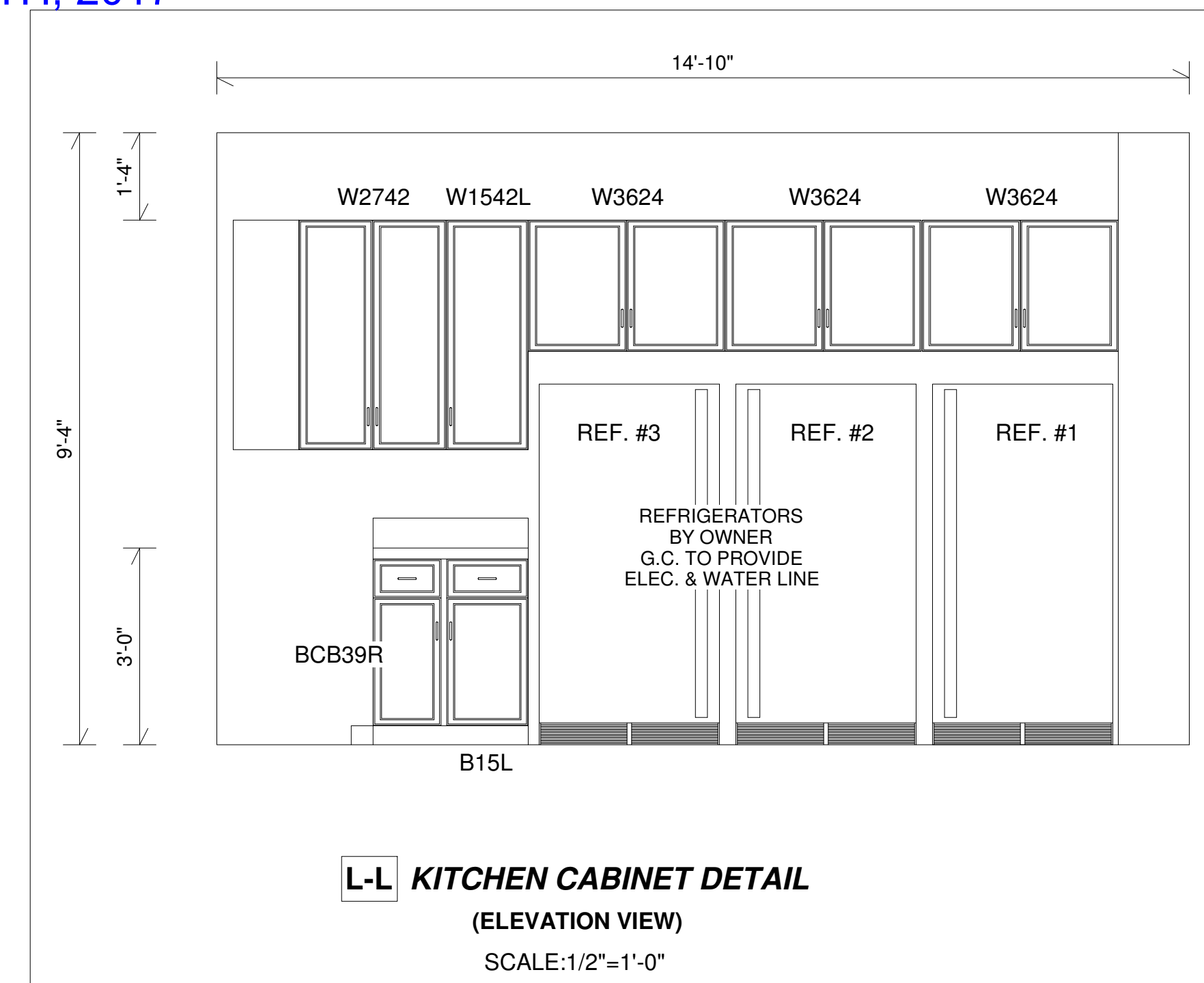
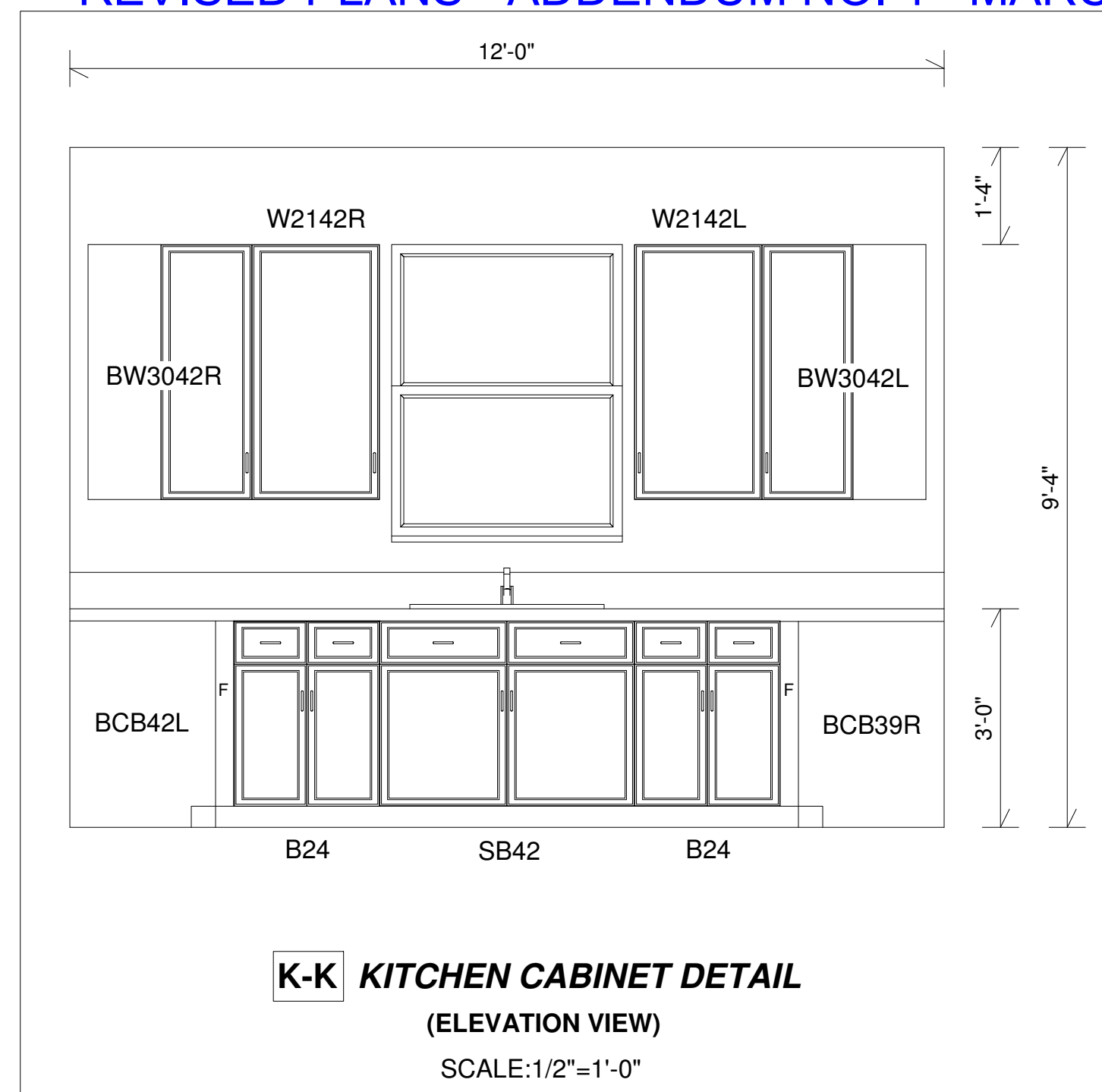
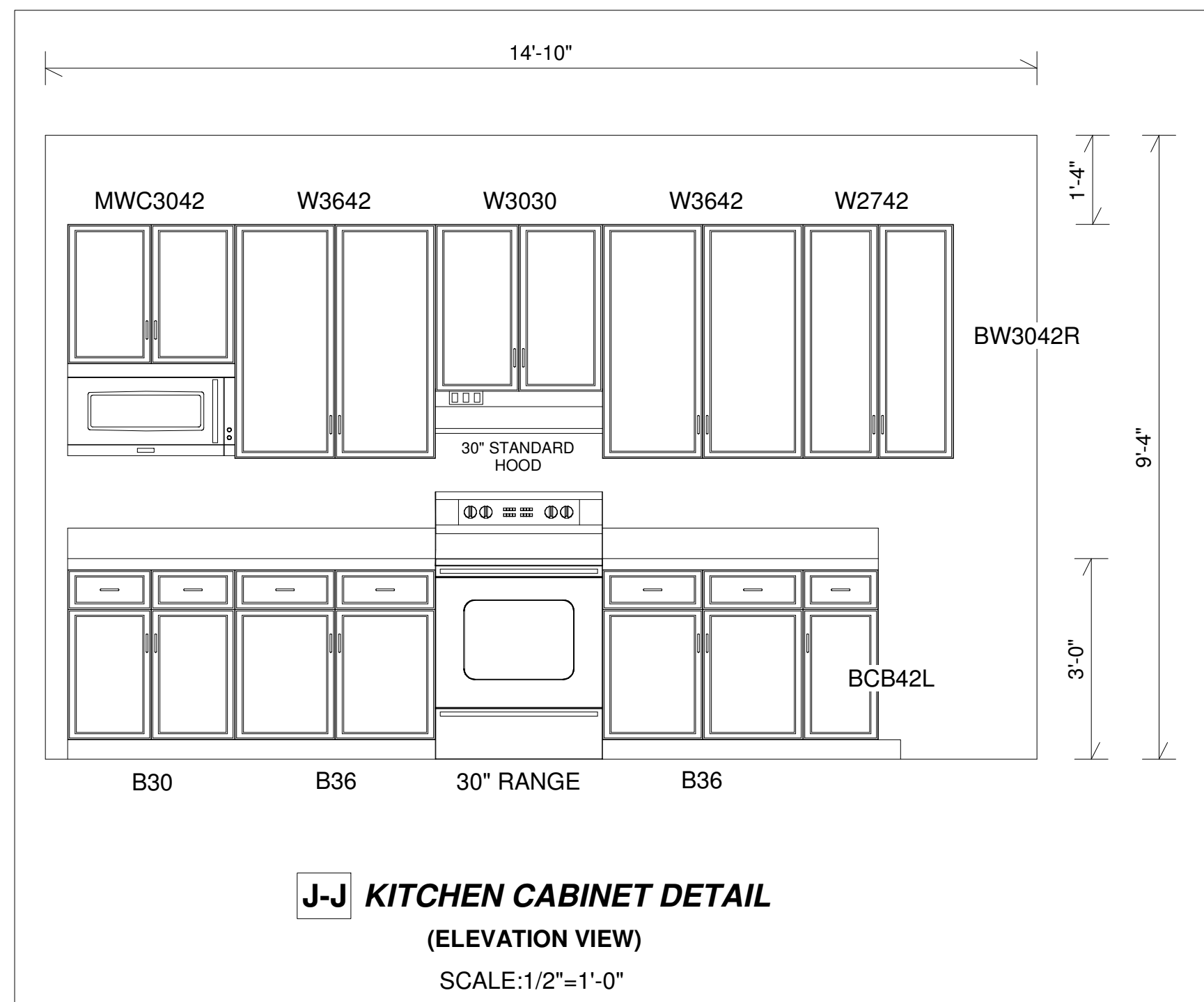
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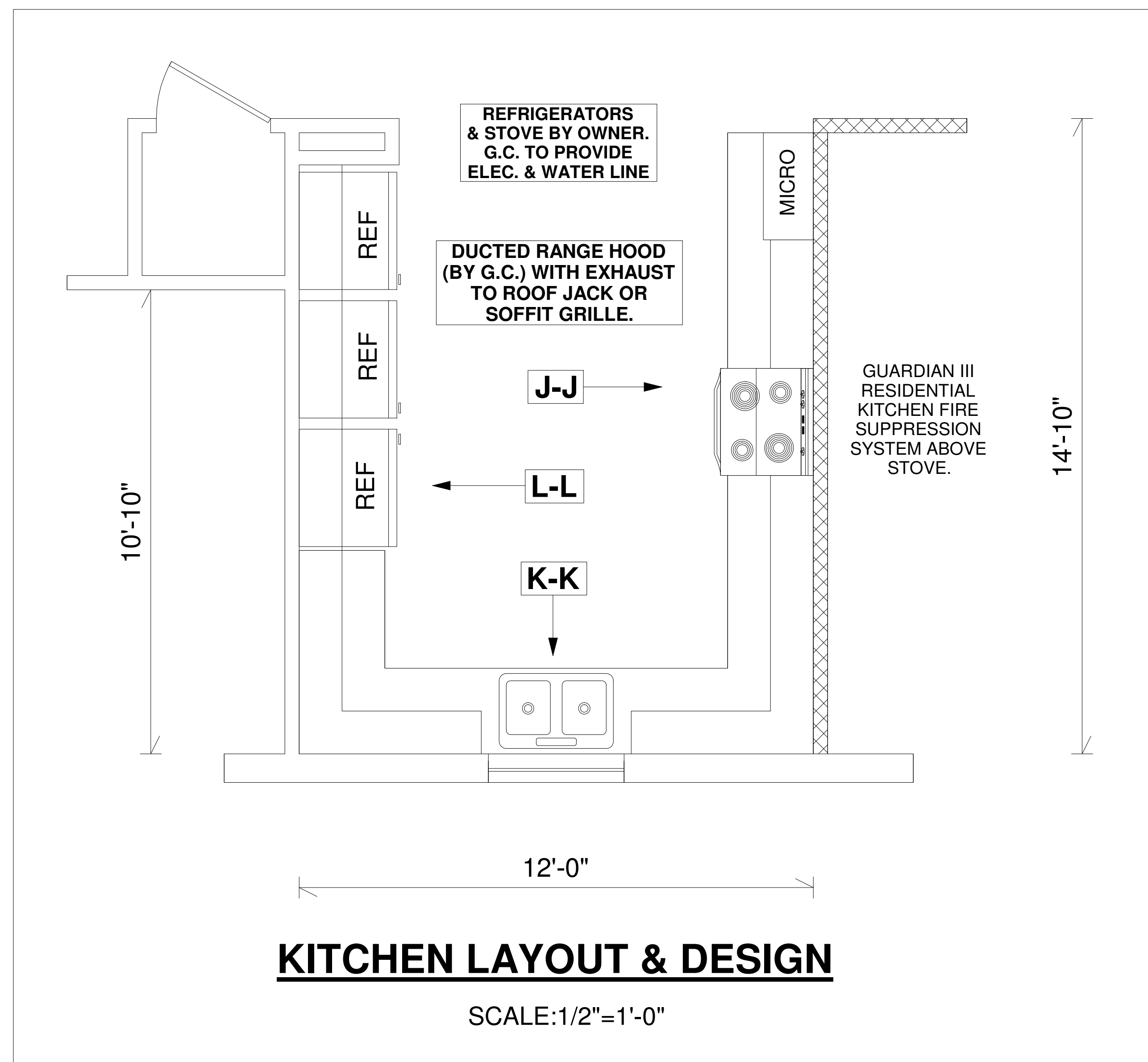
DRAWING:
BATHROOM #2
DETAILS

SCALE:
AS SHOWN

SHEET # **11**



ALL DIMENSIONS & SIZE DESIGNATIONS GIVEN ARE SUBJECT TO VERIFICATION ON JOB SITE AND ADJUSTMENT TO FIT CONDITIONS.



CABINET SPECIFICATIONS
CABINET CONSTRUCTION TO BE LAMINATE ON PLYWOOD CONSTRUCTION. LAMINATE ON CABINETS SHALL BE VERTICAL GRADE. BASE CABINET HEIGHT = 34 1/2" AND DEPTH = 24". VANITY BASE HEIGHT = 34 1/2" AND DEPTH = 21". WALL CABINET HEIGHT = 42" AND DEPTH = 12". DRAWERS TO BE MINIMUM 1/2" PLYWOOD SIDES WITH MINIMUM 1/4" PLYWOOD CAPTIVE BOTTOM. DRAWER SLIDES TO BE FULL EXTENSION HEAVY DUTY BALL BEARING SLIDES. ADJUSTABLE HALF SHELVES IN BASE CABINETS AND FULL DEPTH SHELVES IN WALL CABINETS. DOORS AND DRAWER FRONTS SHALL BE RAISED PANEL THERMOFOIL TO MATCH LAMINATE. HINGES TO BE CONCEALED TYPE HINGES WITH MINIMUM 100 DEGREE OPENING ANGLE. PROVIDE A \$4.00 ALLOWANCE PER HANDLE OR KNOB FOR DOORS & DRAWERS.

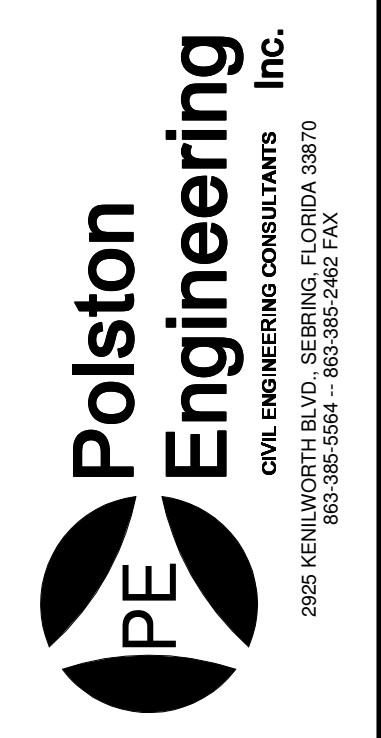
COUNTERTOP SPECIFICATIONS
KITCHEN COUNTERTOPS TO BE STANDARD COLOR LAMINATE ON PLYWOOD CONSTRUCTION. BACKSPLASH TO BE 4" TALL LAMINATE ON PLYWOOD CONSTRUCTION. LAMINATE ON COUNTERTOPS AND BACK SPLASHES SHALL BE HORIZONTAL GRADE. BATH COUNTERTOPS TO BE CULTURED MARBLE WITH INTEGRAL SINK AND BACKSPLASH.

CONSTRUCTION NOTES
PROVIDE WALL CABINET WITH OPENING AND SHELF FOR A COUNTERTOP MICROWAVE OVEN. CABINET OVER RANGE HOOD VENT WILL HOUSE FIRE SUPPRESSION EQUIPMENT. USE BLIND CORNER CABINETS IN BASE AND WALL APPLICATIONS - (NO LAZY SUSANS). PROVIDE A MINIMUM 74" WIDE BY 72" TALL OPENING FOR 2 STANDARD 36" REFRIGERATORS. PROVIDE A CUTOUT IN LAMINATE TOP FOR STANDARD STAINLESS DROP IN SINK.

CERTIFICATE OF AUTHORIZATION #5884
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER VOLPE P.E. # 46833

DATE:	DR	CH
4-26-2016		
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1-31-2017		
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2-10-2017		
3-7-2017		

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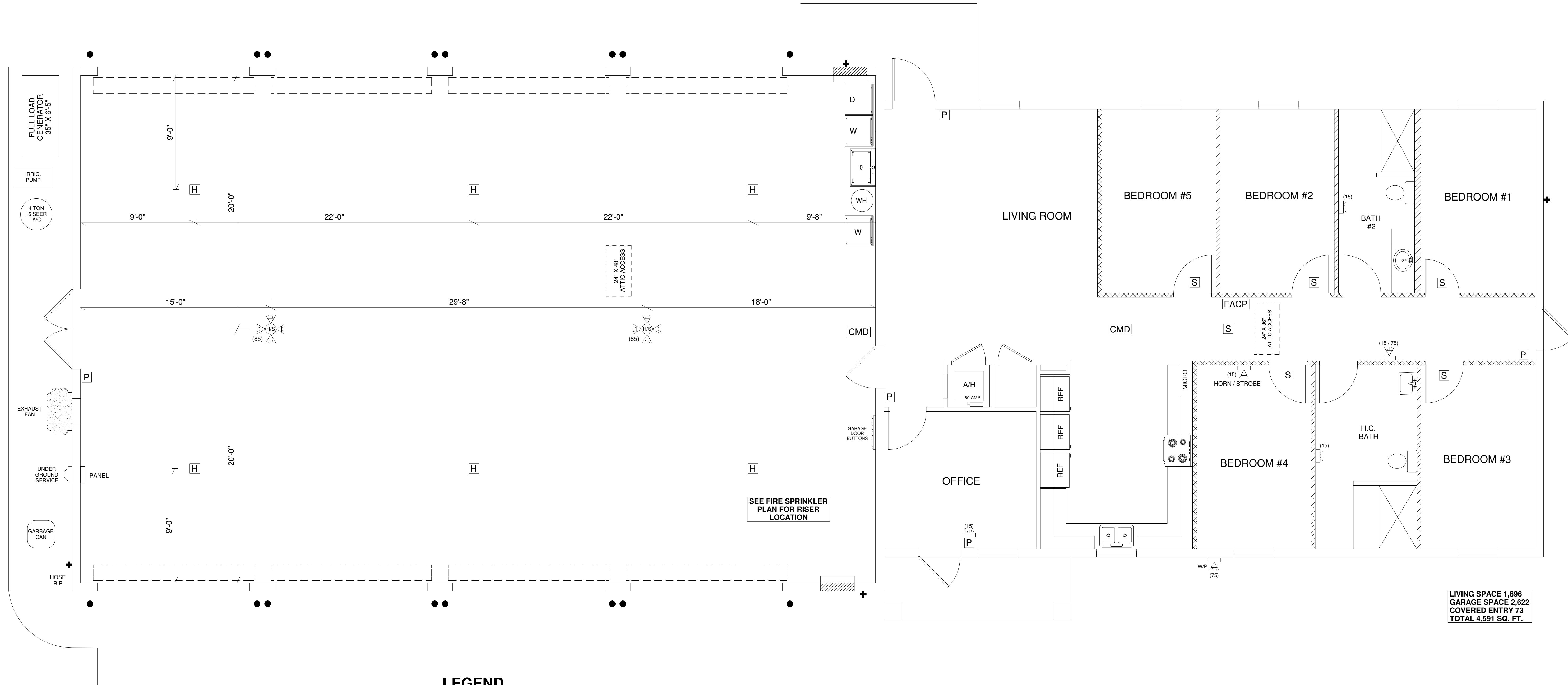
Highlands County
Board of County Commissioners
SUN 'N LAKE
EMS / FIRE STATION

DRAWING:
KITCHEN CABINET
DETAIL & SPECS

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

SHEET # 12

15073



LIVING SPACE 1,896
GARAGE SPACE 2,622
COVERED ENTRY 73
TOTAL 4,591 SQ. FT.

LEGEND

FACP	FIRE ALARM CONTROL PANEL (5 ZONE)
P	MANUAL PULL STATION
S	PHOTO-ELECTRIC SMOKE DETECTOR
H	RATE-OF-RISE SPOT HEAT DETECTOR (194 DEGREES)
CMD	CARBON MONOXIDE DETECTOR
(cd)	WALL MOUNT FIRE HORN / STROBE
(wp)	OUTDOOR WALL MOUNT FIRE HORN / STROBE
(cd)	CEILING MOUNT FIRE HORN / STROBE

FIRE ALARM SYSTEM TO BE INSTALLED PER - NFPA 70 & 72 & FOLLOW DESIGN OF NFPA 101 & (CURRENT APPLICABLE EDITIONS)

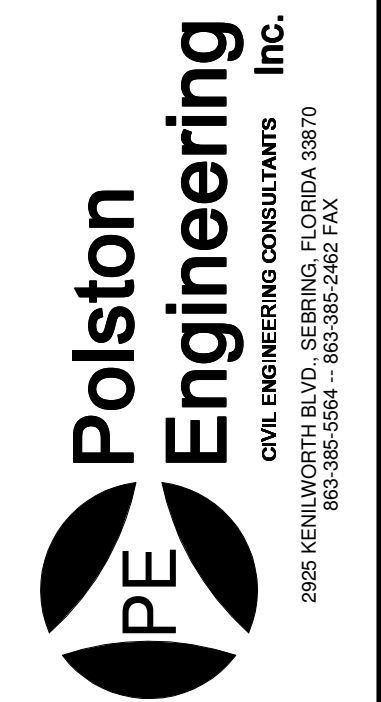
FIRE ALARM DESIGN BY:

SAFEGUARD SECURITY, INC.
528 W. MAIN ST.
P.O. BOX 2048
WAUCHULA, FLA. 33873

Sprinkler valve tamper switch and water flow switch to be connected to fire alarm.
Generator monitoring of :
(1) Generator running
(2) Generator fault
(3) Generator switch in nonautomatic position (Per NFPA 110) to be connected to fire alarm.
Input/output matrix, riser diagram, wire voltage drop and battery calcs to be included with permit application from fire alarm contractor of record.
Spec sheets of all equipment to be submitted at time of permit application.

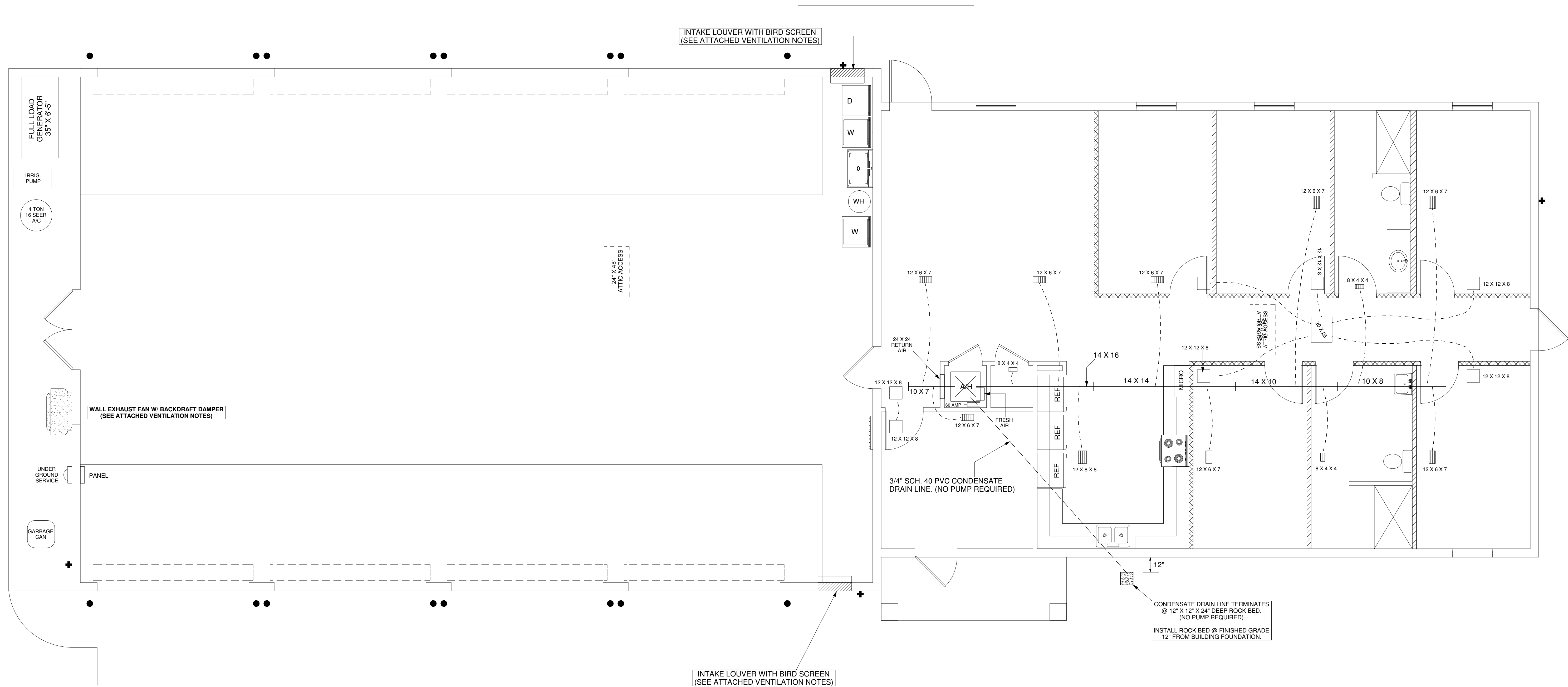
DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

CERTIFICATE OF AUTHORIZATION #5884
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER VOLPE P.E. # 46630
REGISTERED PROFESSIONAL ENGINEERS
DESIGNED, DRAWN, AND CHECKED BY
ORIGINAL SIGNATURE AND PRACTICE SEAL



Highlands County
Board of County Commissioners
SUN 'N LAKE
EMS / FIRE STATION
15073

DRAWING:
FIRE ALARM
SCALE:
1/4"=1'-0"
SHEET # 13



AIR CONDITIONING SPECIFICATIONS

1. AIR CONDITIONER TO BE 4 TON 16 SEER WITH 10 KW ELECTRIC HEAT.
2. ALL SUPPLY GRILLS AND FRESH AIRS TO HAVE ROUND DAMPERS AT DUCT TAKE OFFS FOR AIR BALANCING.
3. ALL SUPPLY GRILLES ARE TO BE CURVED BLADES AND FULLY ADJUSTABLE.
4. MAIN RETURN AIR TO HAVE WIDE LOUVERS AND NOT STAMPED LOUVERS. HOP OVER RETURNS NEED TO HAVE WIDE LOUVERS ALSO.
5. ALL TRUNKLINES TO BE 1 1/2" FIBROUS DUCTBOARD R-6 INSULATION.
6. DRAINLINE TO BE SLABBED IN GROUND AND REFRIGERANT LINES TO BE RAN OVERHEAD.
7. DRYER VENTING AND RANGE VENTING TO BE PROVIDED AND INSTALLED TO CODE.
8. ONE CASE OF 24" X 24" FILTERS TO BE PROVIDED TO OWNER WITH OWNER MANUAL.
9. ALL EXTERIOR REFRIGERANT LINES TO BE COVERED WITH GALVANIZED SHIELD.

GENERAL NOTES: FOR GARAGE VENTILATION

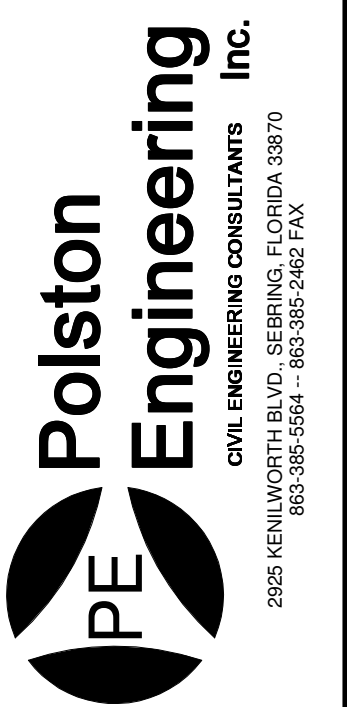
PROVIDE VENTILATION PER FMC 2014 SECTION 404. EXHAUST FAN AND LOUVER SIZE AND LOCATION SHALL BE COORDINATED WITH THE OWNER PRIOR TO START OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SIZES AND LOCATIONS OF ALL ROUGH OPENINGS.

ALL INTAKE LOUVERS SHALL BE LARGE AND SMALL MISSILE IMPACT RATED. (INCLUDING WALL EXHAUST FAN AND BACKDRAFT DAMPER)

IN THE EVENT THAT THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE CODE, THE CODE SHALL TAKE PRECEDENCE. THE MECHANICAL CONTRACTOR SHALL STUDY THE CONTRACT DOCUMENTS AND SUBMIT A BID BASED ON WORK WHICH COMPLIES WITH ALL CODE REQUIREMENTS. ANY CONFLICT BETWEEN THE CONTRACTOR DOCUMENTS AND THE CODE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT / ENGINEER PRIOR TO BID. THE COST OF ANY WORK WHICH ARISES OUT OF ANY CHANGES DUE TO CODE REQUIREMENTS SHALL BE PAID BY THE MECHANICAL CONTRACTOR.

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

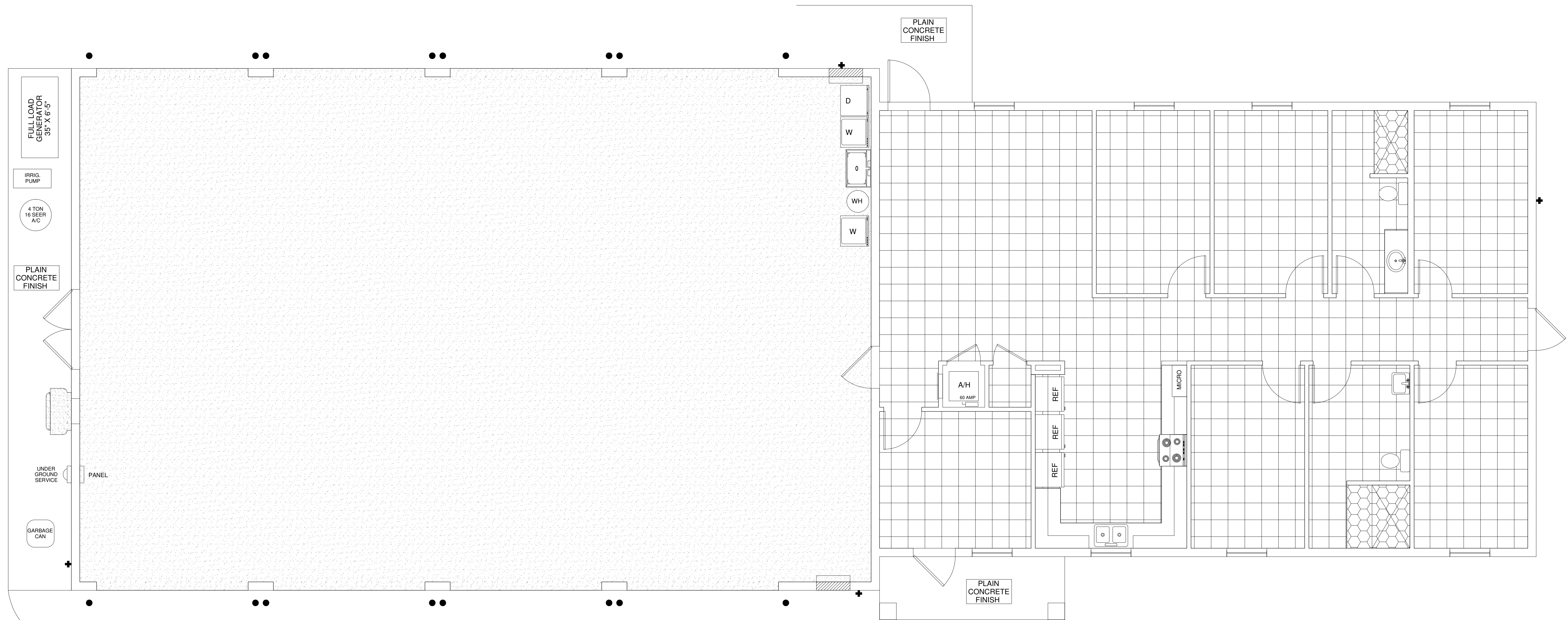
CERTIFICATE OF AUTHORIZATION #5884
 ROGER DALE POLSTON P.E. # 33222
 MARVIN LUTHER VOLPE P.E. # 46650
 PRINTED COPIES ARE NOT VALID WITHOUT ORIGINAL SIGNATURE AND REGISTER SEAL.



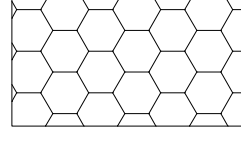
Highlands County
 Board of County Commissioners
SUN 'N LAKE
 EMS / FIRE STATION

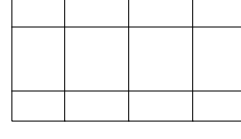
15073

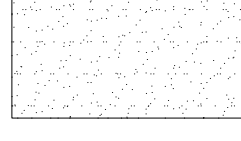
DRAWING:
 A/C PLAN
 SCALE:
 1/4" = 1'-0"
 SHEET # 14

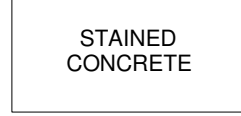



FLOORING SPECIFICATIONS

- 

6 X 6 NON-SLIP HEXAGON CERAMIC FLOOR TILE ON SHOWER FLOORS. PROVIDE ALLOWANCE OF \$2.50 PER SQ. FT. FOR TILE ONLY. ALL TILE SETTING MATERIAL & GROUT BY BUILDER. -TYPICAL- (COLOR TO BE SELECTED BY OWNER)
- 

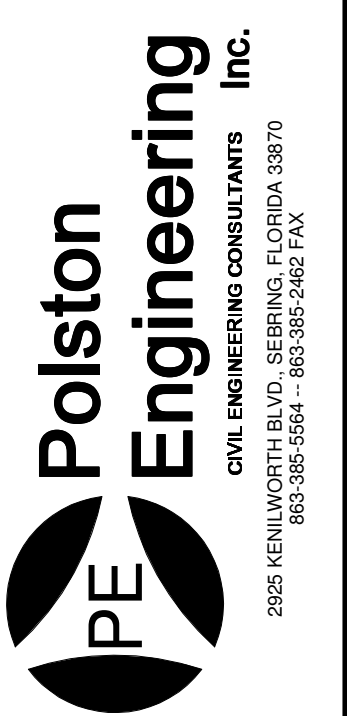
16 X 16 NON-SLIP CERAMIC FLOOR TILE ON FLOORS AS SHOWN. PROVIDE ALLOWANCE OF \$2.50 PER SQ. FT. FOR TILE ONLY. ALL TILE SETTING MATERIAL & GROUT BY BUILDER. -TYPICAL- (COLOR TO BE SELECTED BY OWNER)
- 

NON-SLIP EPOXY PAINT ON GARAGE FLOOR, LAUNDRY ROOM FLOOR & CLOSET AS SHOWN. (COLOR TO BE SELECTED BY OWNER)
- 

STAINED CONCRETE
- 

PLAIN CONCRETE FINISH

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 MARVIN LUTHER VOLPE P.E. # 46650



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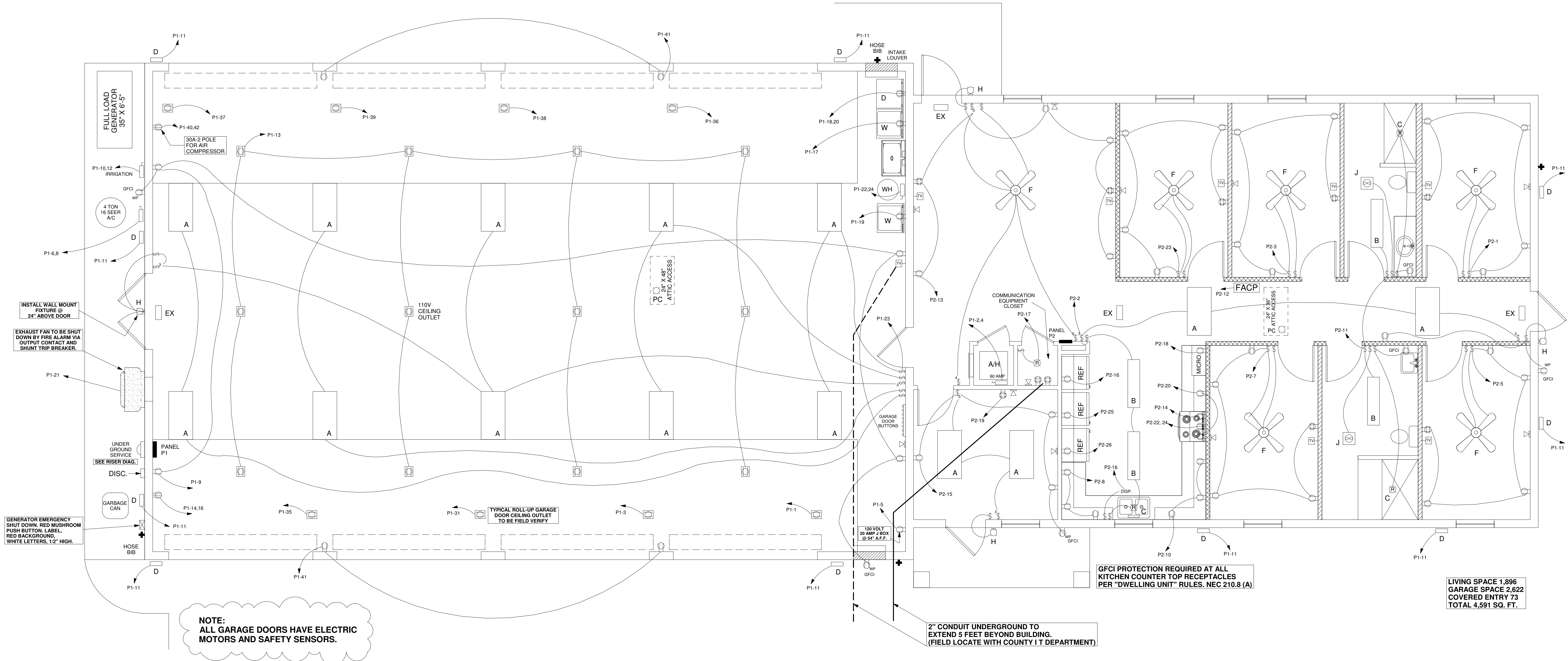
DRAWING:
 FLOORING PLAN

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

SHEET # 15

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

GUTTERS ADDED (SEE ELEVATIONS)



NOTE:
ALL GARAGE DOORS HAVE ELECTRIC MOTORS AND SAFETY SENSORS.

GFCI PROTECTION REQUIRED AT ALL KITCHEN COUNTER TOP RECEPTACLES PER "DWELLING UNIT" RULES, NEC 210.8 (A)

LIVING SPACE 1,896
GARAGE SPACE 2,622
COVERED ENTRY 73
TOTAL 4,591 SQ. FT.

2" CONDUIT UNDERGROUND TO EXTEND 5 FEET BEYOND BUILDING. (FIELD LOCATE WITH COUNTY IT DEPARTMENT)

ELECTRICAL NOTES:

- All branch circuit wiring in MC cable.
- All light fixtures supported per NEC.
- All devices 15 amp, 125 volt. Receptacles to be tamper resistant, mounted 18" AFF to center, except mounted above counters to be 44" AFF to center. Switches are toggle, mounted 46" AFF to center. Color per Owner.
- Exterior wall pack lights and sign lights are to be controlled by a photo cell facing north, with a switch to bypass the photocell should the photo cell fail. Switch to be located by Owner or GC. If necessary, shield the photo cell from surrounding lighting.
- Grounding system to be 24 ohms or less. If more ground rods are required, couple the existing rods with another 10' rod to drive deeper. Demonstrate to Owner the ground reading.
- Lightning protection system to be designed and installation by a certified and licensed contractor.
- Surge protection device to be installed on panel P1, made by Eaton, Zoro #G3170851, mfr. #CVX050-208Y.
- Three copies in three ring binders, and one disc shall be provided to the Owner for the operational, instructional, and maintenance manuals for the electrical panels, surge arrester, disconnect switches, generator, and automatic transfer switch.
- Electrical panels, disconnect switches shall be labeled with 1" or higher black phenolic tags with 3/16" white lettering. Tags shall be fastened with screws or rivets. Disconnect switch tags shall state the panel and circuit number, and the equipment served. Panels shall state the panel name, voltage and phases. Auto transformer and generator will have red background with 3/16" high white letters.
- Upon completion of the project, the electrical contractor shall review the function and operation of the equipment with the Owner, including shutting off power to the facility to demonstrate the operation of the standby generator. The time and frequency to exercise the generator shall be set per the Owners requirements.
- All work per NEC and local codes.

FIXTURE SCHEDULE

TYPE	DESCRIPTION
A	2 X 4 FLUOR. LITHONIA 2GT8432A12120 GEB10IS, W/ PLASTER FRAME, W/ 4 EA. 32 WATT LAMPS (RECESSED BETWEEN TRUSSES)
B	1 X 4 FLUOR. LITHONIA GT8232A12120 GEB10IS, W/ PLASTER FRAME, W/ 2 EA. 32 WATT LAMPS
C	RECESSED, LITHONIA L7XF W/ 6LF2, 26 WATT TRT LAMP
D	WALL PACK, RAB LIGHTING WP1CF42, BRONZE, W/ LAMPS
EX	EXIT LIGHT, LITHONIA, EXR LED EL M6 RED, W/ BATTERY BACK-UP
F	CEILING FAN, HAMPTON BAY SOUTHWIND 52", BRUSHED NICKLE, W/ REMOTE, MODEL 52379, W/ LIGHT KIT, 40 WATT LAMPS
G	SIGN LIGHT, RAB LIGHTING EZF32QT, BRONZE, W/ LAMP
H	EXTERIOR WALL MOUNT, PROGRESS P5800-20, W/ 18 WATT CFL LAMP
J	BATH EXHAUST FAN, NUTONE QTZEN150, USE W/ TIMER SWITCH, LEVITON LTB30-1LZ (WITH EXHAUST DUCTED TO SOFFIT GRILLE)

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	Ventilation Fan: Ceiling Mounted
	Ceiling Mounted Light Fixture: Recessed
	Wall Mounted Light Fixtures: Flush Mounted
	Fluorescent Light Fixture
	240V Receptacle
	110V Receptacle: Quadruplex
	110V Receptacles: Duplex, Weather Proof, GFCI
	Switches: Single Pole, Weather Proof, 3-Way, 4-Way
	SINGLE GANG BOX WITH 1" CONDUIT (WITH PULL STRING) RUN BACK TO CLOSET ON OPPOSITE WALL FROM UTILITY SINK. COUNTY IT DEPARTMENT WILL PROVIDE CABLING & JACKS.
	SINGLE GANG BOX WITH 1" CONDUIT (WITH PULL STRING) RUN BACK TO THE COMMUNICATIONS EQUIPMENT LOCATION IN THE OFFICE COUNTY IT DEPARTMENT WILL PROVIDE THE VOICE/DATA CABLING & JACKS.

DATE:	DR	CH
4-26-2016		
8-12-2016		
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1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

CERTIFICATE OF AUTHORIZATION #5884
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER VOLPE P.E. # 46630

Polston Engineering Inc.
CIVIL ENGINEERING CONSULTANTS
205 NENAWA RD. S.W. COLLEGE WA. 98522
360-382-5547 / 360-382-2427 FAX
ORIGINAL SIGNATURE AND STAMP REQUIRED

Highlands County
Board of County Commissioners
SUN 'N LAKE
EMS / FIRE STATION
15073

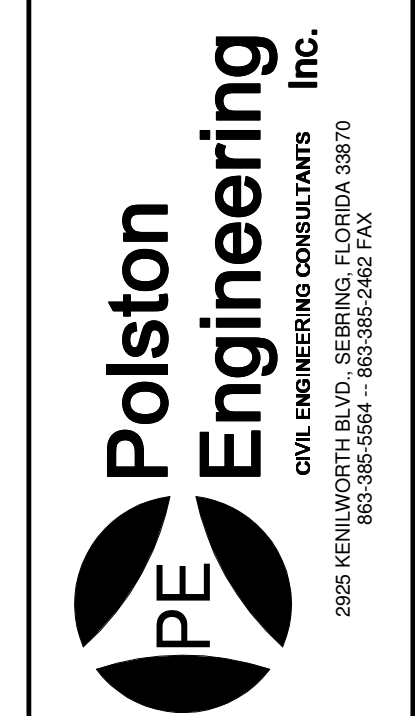
DRAWING:
ELECTRICAL PLAN

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

SHEET # **16**

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

CERTIFICATE OF AUTHORIZATION #5884
 ROGER DALE POLSTON P.E. # 33222
 HARVIN LUTHER VOLPE P.E. # 46850



Highlands County
 Board of County Commissioners
SUN 'N LAKE
 EMS / FIRE STATION

DRAWING:
 ELECTRICAL
 RISER &
 PANEL SCHEDULE

SCALE:
 N/A

SHEET # 17

15073

GUTTERS ADDED (SEE ELEVATIONS)

PANEL SCHEDULE

PANEL P 1

FEEDER 3 ea. 300 cu NEUTRAL 300 1/2" cu E.G. #4 cu 3" C

DESCRIPTION	QTY	AMP	VOLTS	WATTAGE	DESCRIPTION
1 GARAGE DOOR OPENER	1127	20	5000		AIR HANDLER
3 GARAGE DOOR OPENER	1127	20	5000		
5 SPRINKLER TAMPER/FLOW ALARM	180	20	4000		CONDENSING UNIT
7 SPARE	-0-	20	4000		
9 GARAGE OUTLETS	1080	20	1380		IRRIGATION PUMP
11 EXTERIOR & SIGN LIGHTING	400	20	1380		
13 GARAGE CEILING LIGHTS	1440	20	2680		COMPRESSOR OUTLET #1
15 GENERATOR OUTLET & BATT. CHGR.	240	20	2680		
17 WASHING MACHINE #1	1440	20	2640		DRYER
19 WASHING MACHINE #2	1440	20	2640		
21 GARAGE EXHAUST FAN	1200	20	2250		WATER HEATER
23 GARAGE LIGHTING	1280	20	2250		
25 SUB PANEL "P2"	5954	100	30		SURGE PROTECTION DEVICE
27	9796	100			
29	10,500	100			
31 GARAGE DOOR OPENER	1127	20	-0-		SPARE
33 SPARE	-0-	20	-0-		SPARE
35 GARAGE DOOR OPENER	1127	20	1127		GARAGE DOOR OPENER
37 GARAGE DOOR OPENER	1127	20	1127		GARAGE DOOR OPENER
39 GARAGE DOOR OPENER	1127	20	2080		COMPRESSOR OUTLET #2
41 GARAGE OUTLETS	720	20	2680		

** SHUNT TRIP BREAKER

TOTAL LINE A	30,972
TOTAL LINE B	28,560
TOTAL LINE C	29,724
TOTAL A & B & C	89,256
25% LIGHTING	996
25% LARGEST MOTOR	1602
TOTAL DEMAND VA	83,854
TOTAL AMPS	232.9

PANEL SCHEDULE

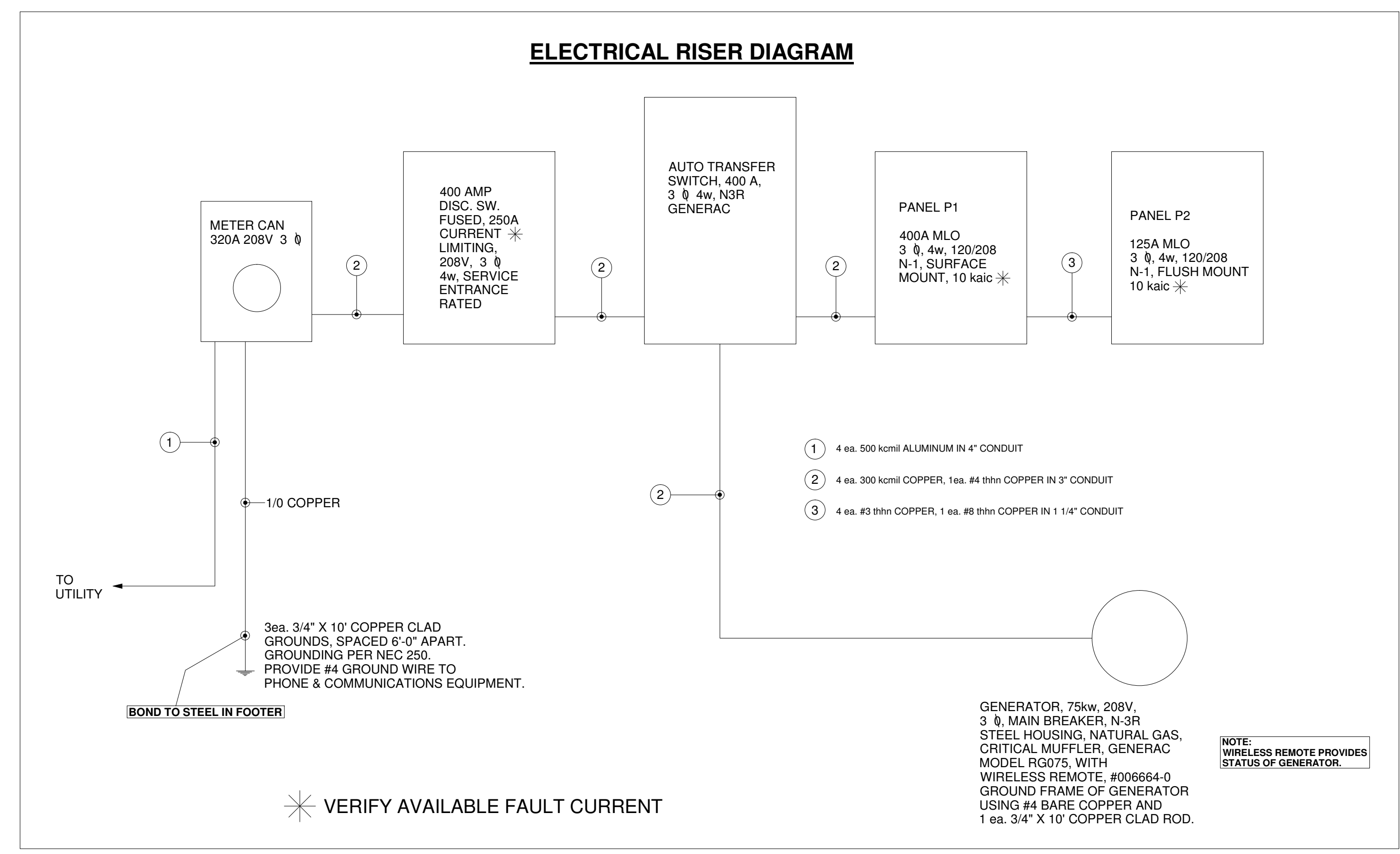
PANEL P 2

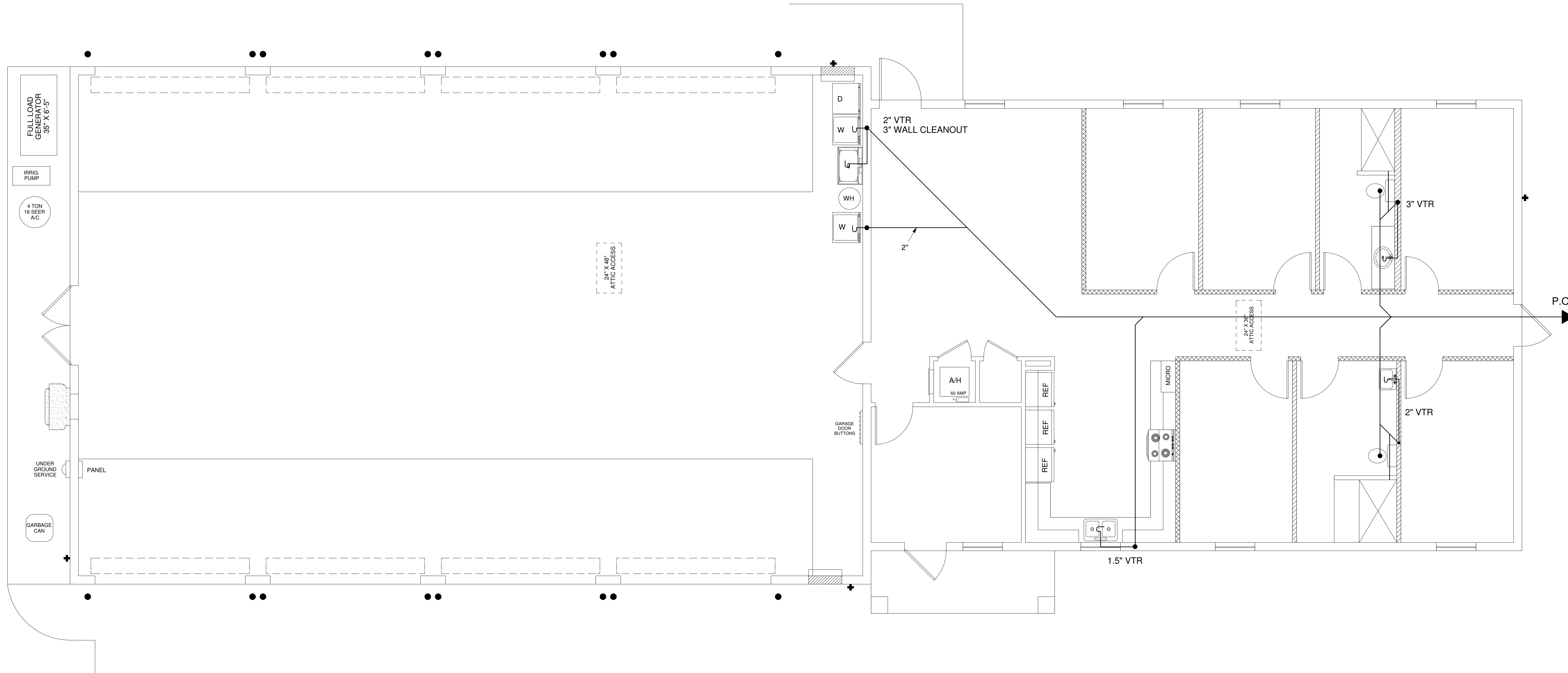
FEEDER 3 ea. #3 1/2" cu NEUTRAL 1 ea. #3 1/2" cu E.G. #8 1/2" cu 1 1/4" C

DESCRIPTION	QTY	AMP	VOLTS	WATTAGE	DESCRIPTION
1 BEDROOM #1	1360	20	864		KITCHEN HALL LIGHTING
3 BEDROOM #2	1360	20	-0-		SPARE
5 BEDROOM #3	1360	20	-0-		SPARE
7 BEDROOM #4	1360	20	540		KITCHEN OUTLETS
9 SPARE	-0-	20	540		KITCHEN OUTLETS
11 H.C. BATH & BATH #2	660	20	180		FAN
13 LIVING AREA	1060	20	180		GUARDIAN FIRE SYSTEM
15 OFFICE	1396	20	1500		REFRIGERATOR #3
17 COMMUNICATIONS LIGHTING & RECEPTACLES	784	20	1760		MICROWAVE/GARAGE DISPOSAL
19 COMMUNICATIONS OUTLET	360	20	540		KITCHEN OUTLETS & HOOD
21 SPARE	-0-	20	5000		RANGE
23 BEDROOM #5	1180	20	5000		
25 REFRIGERATOR #1	1500	20	1500		REFRIGERATOR #2
27 SPACE					SPACE
29 SPACE					SPACE
31					
33					
35					
37					
39					
41					

TOTAL LINE A 9264
 TOTAL LINE B 9,796
 TOTAL LINE C 10,500
 TOTAL A & B & C 29,560
 25% LIGHTING SEE PANEL P1 FOR TOTAL
 25% LARGEST MOTOR SEE PANEL P1
 TOTAL DEMAND VA 29,560
 TOTAL AMPS 82.1

** AFCI PROTECTION REQUIRED





CERTIFICATE OF AUTHORIZATION #5884
 ROGER DALE POLSTON P.E. # 33222
 MARVIN LUTHER VOICE P.E. # 46838



Highlands County
 Board of County Commissioners
SUN 'N LAKE
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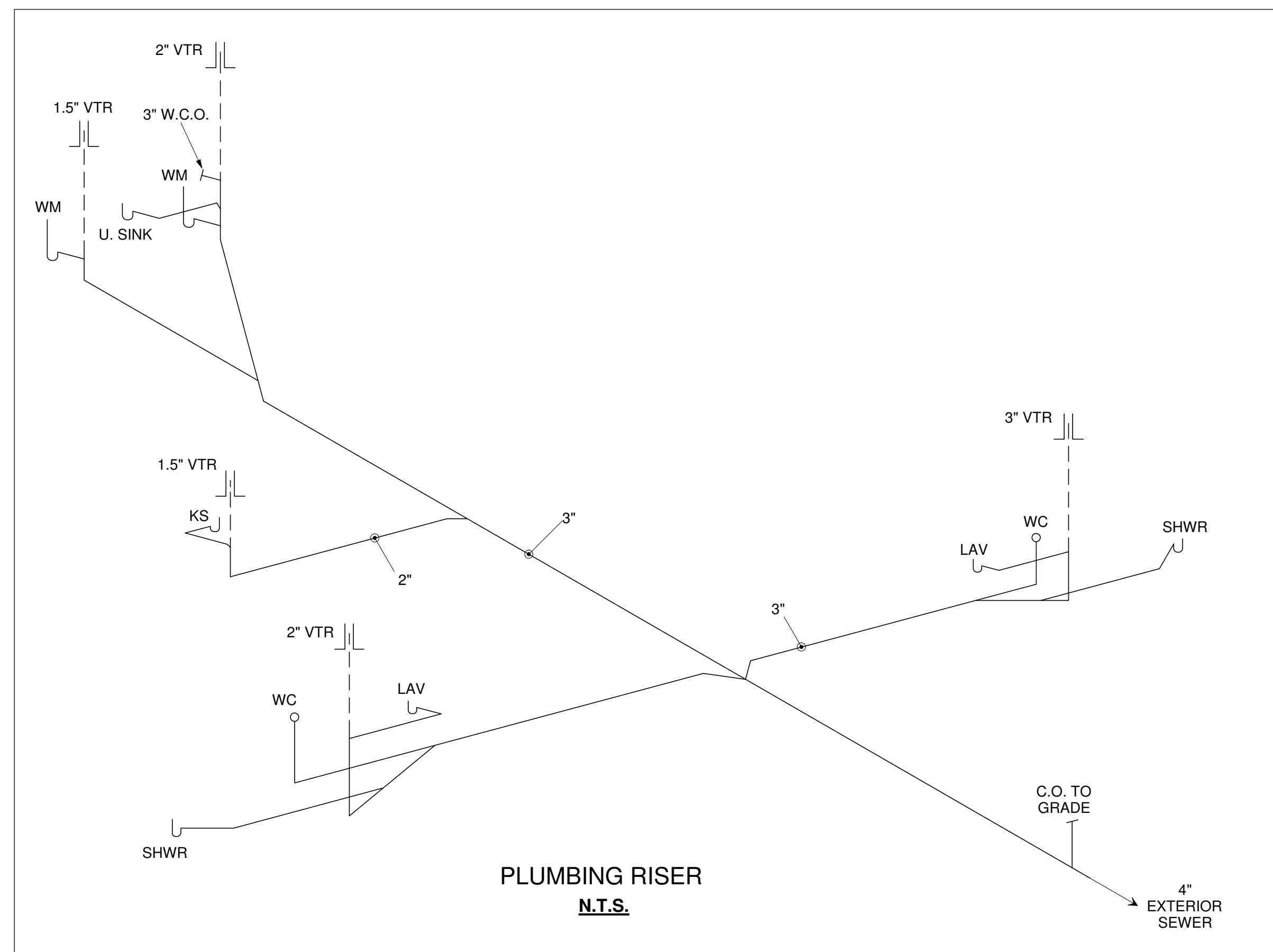
DRAWING:
 PLUMBING
 PLAN

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

SHEET # 18

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

GUTTERS ADDED (SEE ELEVATIONS)



PLUMBING NOTES & SPECS

Plumbing System to be installed in accordance with drawings herein, as well as FBC Plumbing and other applicable codes.

Drainage and vent piping to be schedule 40 PVC/ DWV, installed true to line and grade; joined according to FBC Plumbing.

Building Sewer to be 4" PVC 3034 unless routed under pavement/ concrete, in which case piping shall be PVC/DWV schedule 40.

Water system to be FBC approved plastic distribution system (PEX, CPVC) or copper tubing type L. Sized per FBC; not less than 3/4".

Exterior water service line to be PVC schedule 40, not less than 1", installed with minimum 12" clean soil cover; not to be routed within 10' of building sewer.

Floor drain: Zurn Z507-3NL Cast Iron medium duty deep flange drain with cast iron top & grate

Trap primer: Jones T74-011 1.5"x8" 17ga brass primer tailpiece

Utility sink: Mustee 17W, Delta 2131LF faucet

Kitchen sink: Dayton DSE233224 20 ga double bowl sink; Delta 400-DST faucet

ADA lavatory: Kohler K-2005-0 Kingston basin
Delta 501-DST faucet
Mainline ML10294 17 ga brass grid drain
Mainline ML102EZ Lav Guard trap & supply covers

ADA toilet: Kohler K-4199-0 Highline bowl
Kohler K-4468-0 Wellworth tank
Mainline ML1055SSC000 Open front, less cover solid plastic seat; SS hardware
Mainline ML8942 1.5" x 42" concealed flange grab bar
Mainline ML8936 1.5" x 36" concealed flange grab bar

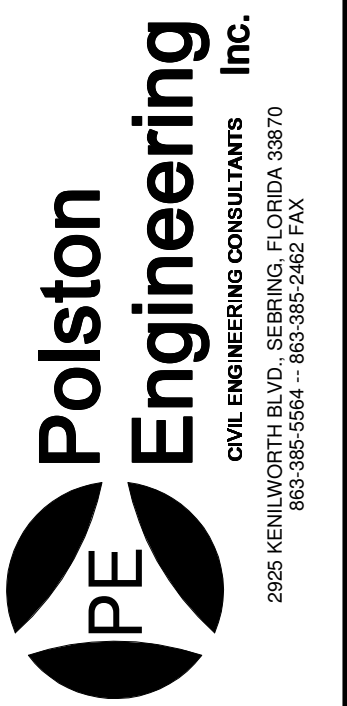
Countertop lavatory is cultured marble
Delta 520-TPM_DST faucet

Elongated toilet, non ADA bath: Kohler K4198-0 Wellworth elongated bowl
Kohler K-4468-0 Wellworth tank
Mainline ML1055SSC000 Open front, less cover solid plastic seat; SS hardware

Shower valves (2) : Delta R10000 valve body, Delta T13220 trim

Water Heater: Rheem 656755 PROE40-T2-RH95 40 gallon tall, 240V 4.5KW/ 4.5 KW

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MARVIN LUTHER VOLPE P.E. # 46650



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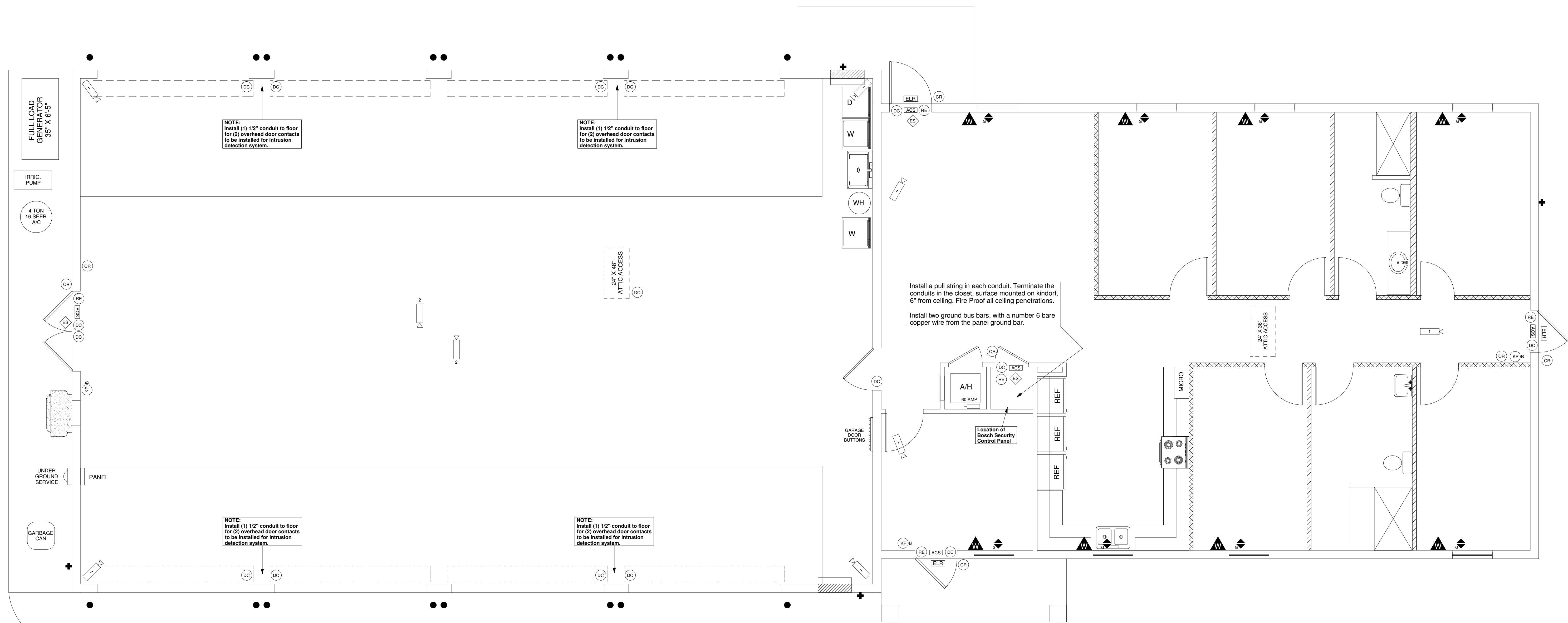
DRAWING:
PLUMBING
RISER & SPECS

SCALE:
AS SHOWN

SHEET # 19

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
3-7-2017		

GUTTERS ADDED (SEE ELEVATIONS)



LEGEND

DEVISE SYMBOL	MANUFACTURER	PART NUMBER	DESCRIPTION
CR	HID	RP40	Card Reader
ACS	HID	EH400-K	Door Controller
DC	GE Sentrol	Varies	Door Contacts
RE	Bosch	DS160	Request to exit
ES	HES	Varies	Electric Strike
ELR	TBD	TBD	Electric Latch Retraction
KP/B	Bosch	D1260	Door Alarm Keypad
▲	Bosch	ISN-C60-B	Window Contacts
◆	Bosch	DS11011	Glass Break Sensor
1	Axis Communications	M3006-V	Fixed IP Camera
2	Axis Communications	Q3709-PVE	180 Degree Camera

SECURITY NOTES:

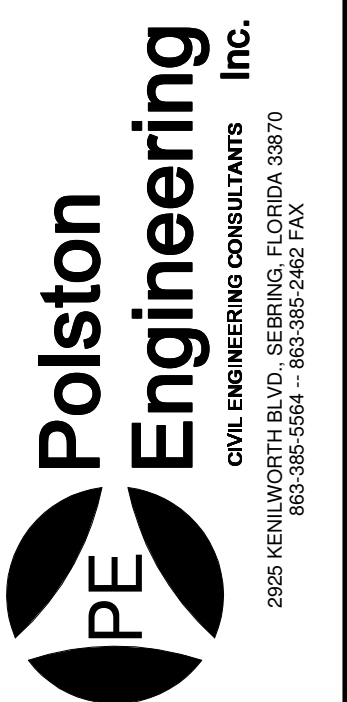
1. ALL CCTV and Access Control shall be configured to existing Genetec Security Center County System.
2. Intrusion Detection System shall integrate with the Genetec Security Center System.
3. Intrusion Detection System shall be Bosch D7412GV4-C and shall also be monitored 24/7 365 Days a year.
4. Each door requires (1) 1/2" Conduit to lead back to the IDF Room with a 4 Square mounted above the door.
5. Each Camera requires (1) 1/2" Conduit to lead back to the IDF Room with a 4 Square mounted near the camera location.
6. Every Window Contact and Glass Break Sensor shall receive (1) 1/2" conduit for the cabling to these devices. I.E. one conductor per window with single gang box mounted above the window in the ceiling.
7. Install a pull string in each conduit. Terminate the conduits in the closet, surface mounted on kindorf, 6" from ceiling. Fire Proof all ceiling penetrations.

SECURITY PLAN DESIGN BY:

SiteSecure
111 Kelsey Lane Suite D, Tampa, Florida 33619

DATE:	DR	CH
4-26-2016		
8-12-2016		
1-4-2017		
1-31-2017		
2-1-2017		
2-10-2017		
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CERTIFICATE OF AUTHORIZATION #5884
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MARVIN LUTHER VOLPE P.E. # 46650
REGISTERED CONSULTANTS ARE NOT VALID WITHOUT ORIGINAL SIGNATURE AND PAID SEAL



Highlands County
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15073

DRAWING:
SECURITY PLAN

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

SHEET # 20