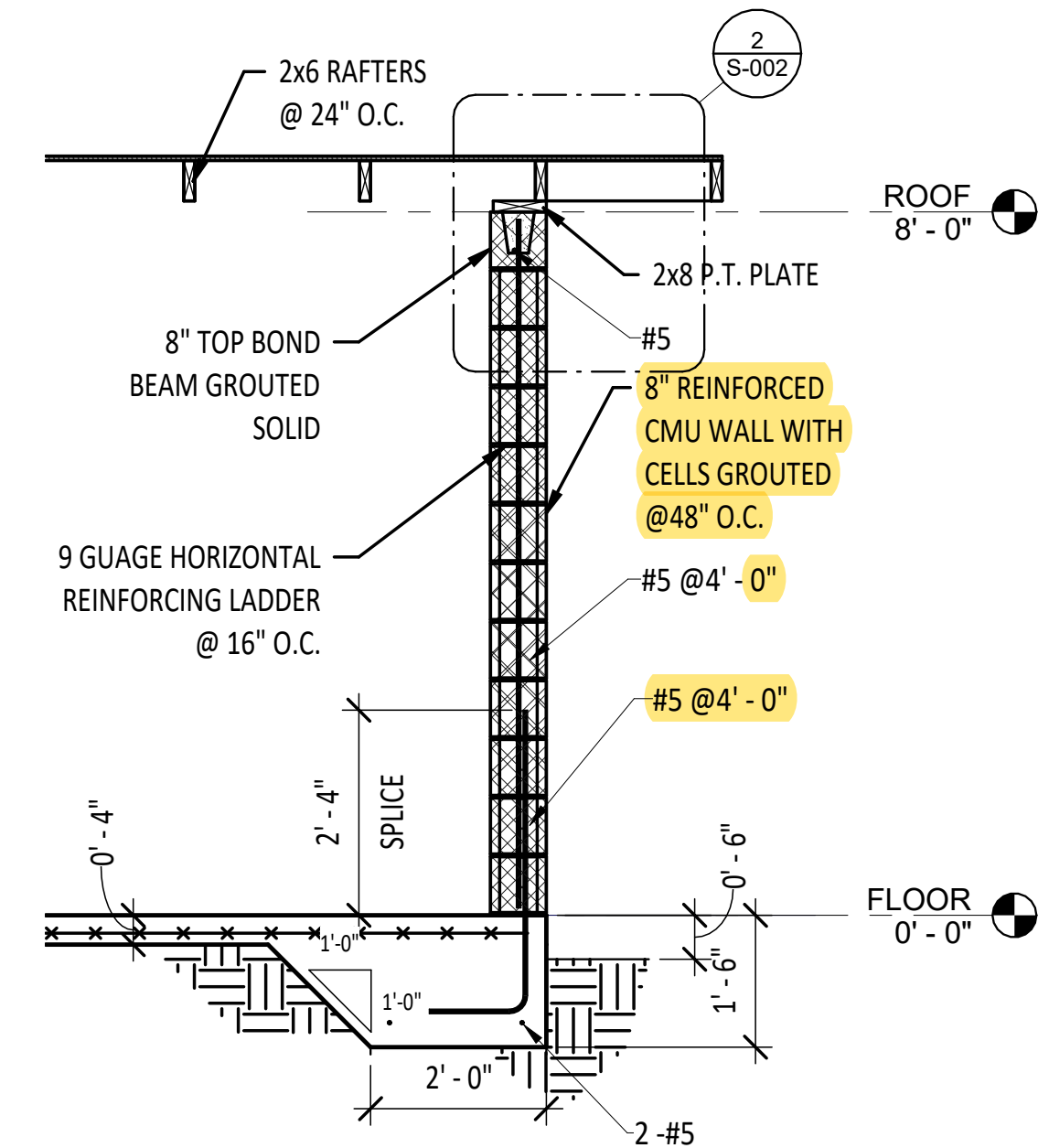
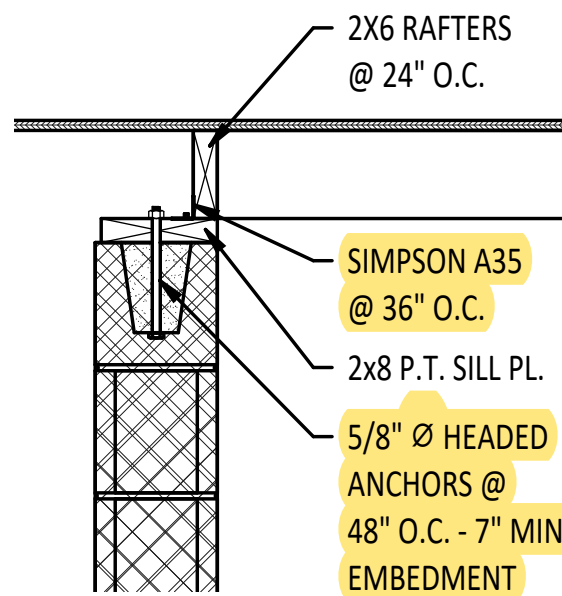
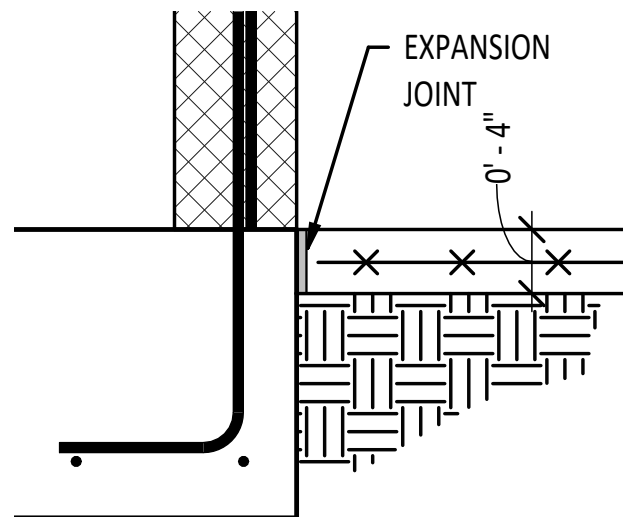




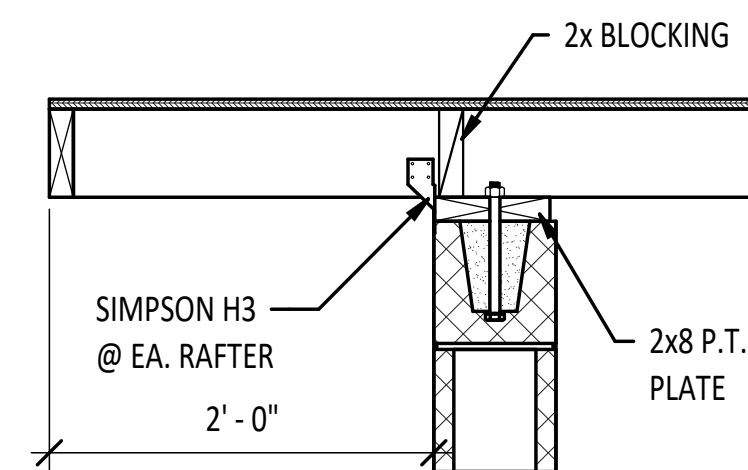
1 STRUCTURAL - WALL SECTION
1/2" = 1'-0"



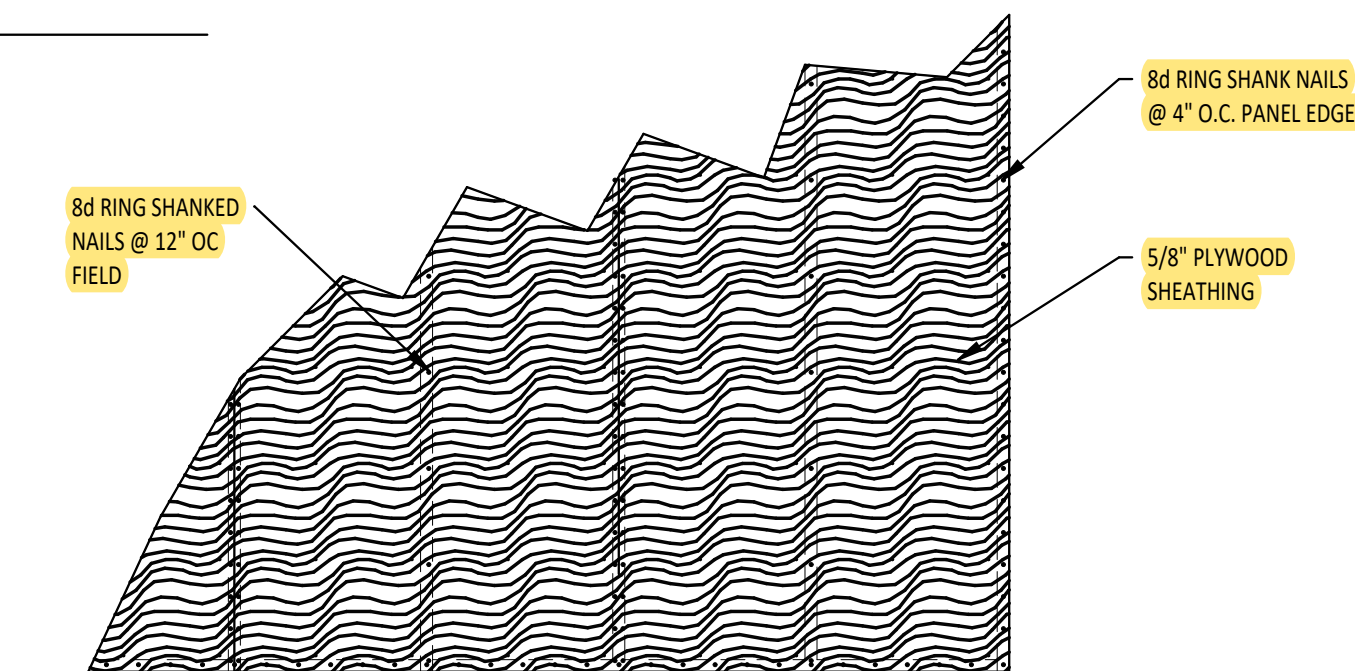
2 DETAIL - TOP OF WALL
1" = 1'-0"



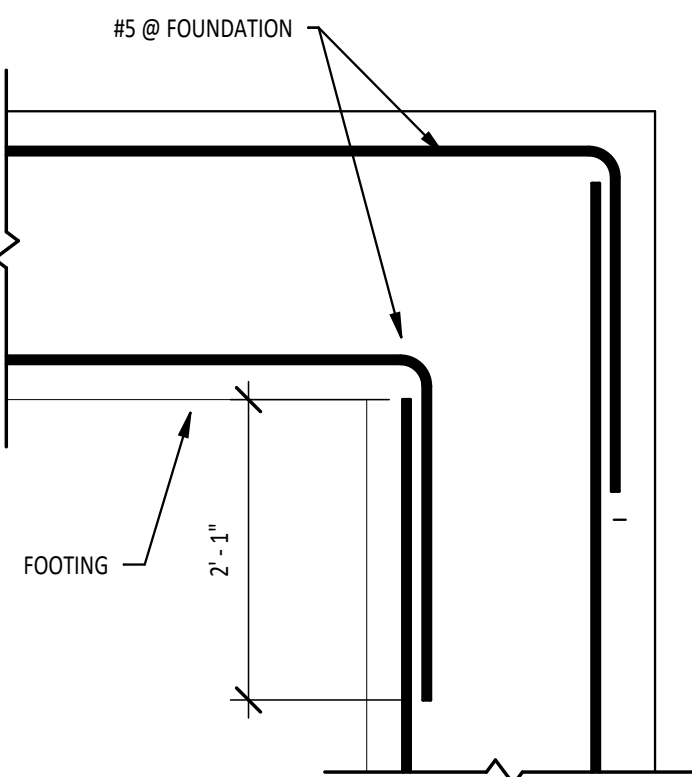
3 DETAIL - APPROACH SLAB
1" = 1'-0"



4 DETAIL - RAFTER CONNECTION
1" = 1'-0"



6 ROOF SHEATHING
1/2" = 1'-0"



5 FOOTING SPLICE
3/4" = 1'-0"

GENERAL NOTES:

- ALL CONSTRUCTION AND DESIGN SHALL CONFORM TO THE 2023 FBC (8TH ED)
- THE STRUCTURAL DRAWINGS SHALL BE UTILIZED IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS.
- THE STRUCTURAL DRAWINGS ARE INTENDED FOR THE STRUCTURE TO ACT AS WHOLE ONCE CONSTRUCTION IS COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE SAFETY AND STABILITY (I.E, TEMPORARY BRACING IF REQUIRED) DURING CONSTRUCTION AS A RESULT OF CONSTRUCTIONS METHODS AND SEQUENCES.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STRUCTURES. THE ENGINEER SHALL BE NOTIFIED ON ANY DISCREPANCY BETWEEN THE EXISTING CONDITIONS AND CONSTRUCTION DOCUMENTS.
- DESIGN CRITERIA

A. CODE: 2023 FBC (8TH ED)

B. LOADS AND DESIGN CRITERIA: THE FOLLOWING LOADS AND CRITERIA WERE USED IN ADDITION TO THE DEAD LOAD OF THE STRUCTURE.

LIVE LOADS:

ROOF	20 PSF
CEILING	10 PSF

SOIL CRITERIA:

ALLOWABLE SOIL BEARING	2000 PSF
PASSIVE PRESSURE	150 PCF
FRICTION COEFFICIENT	0.35

WIND CRITERIA:

WIND SPEED: 130 MPH (3-SECOND GUST)

CATEGORY: II

EXPOSURE: B

INTERNAL PRESSURES: +/- 0.18

CLADDING AND COMPONENTS

ZONE 1	21.3 / -34.15 PSF
ZONE 2	21.5 / -59.45 PSF
ZONE 3	21.5 / -69.75 PSF
ZONE 4	37.32 / -40.48 PSF
ZONE 5	37.32 / 49.96 PSF

CONCRETE AND REINFORCING STEEL:

- ALL CONCRETE DESIGNED PER CURRENT EDITION OF AC1 318
- CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:
 - FOUNDATION WALLS, PIERS, AND FOOTINGS 3000 PSI
 - SLAB ON CARE: 3000 PSI
 - ALL OTHER CONCRETE 3000 PSI
- ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WITH A NORMAL AIR DENSITY OF 145 PSF.
- PROVIDE CONSTRUCTION JOINTS WHERE SHOWN, OMIT NONE AND ADD NONE WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT / ENGINEER.SUBMIT DRAWINGS SHOWING ALL PROPOSED CONSTRUCTION JOINT LOCATIONS FOR APPROVAL PRIOR TO PREPARATIONS OF AFFECTED REINFORCEMENT SHOP DRAWINGS
- MINIMUM ELAPSED TIME BETWEEN ADJACENT CONCRETE PLACEMENTS SHALL BE 48 HOURS
- CONCRETE MIX DESIGN FOR EACH TYPE AND STRENGTH OF CONCRETE SPECIFIED SHALL BE SUBMITTED FOR ARCHITECT / ENGINEER REVIEW 30 DAYS PRIOR TO PLACEMENT OF CONCRETE
- ALL REINFORCING STEEL ASTM A615 GRADE 60, ALL WELDED WIRE FABRIC ASTM A185

REINFORCING STEEL:

- ALL BAR REINFORCEMENT SHALL BE CONFORM TO ASTM 615 GRADE 60.
- WELD WIRE FABRIC REINFORCEMENT SHALL CONFORM TO ASTM A185
- CLEARANCE OF MAIN REINFORCEMENT FROM ADJACENT SHALL BE CONFORM TO THE FOLLOWING (UNLESS OTHERWISE SHOWN IN DETAIL).
 - UNFORMED SURFACES IN CONTACT WITH GROUND (FOOTING OR WALL BOTTOM).....3"
 - SLAB ON GRADE2 1/2"
 - FORMED SURFACE IN CONTACT WITH GROUND OR EXPOSED TO WEATHER (WALLS, PIERS).....2"
 - IN ALL CASES, CLEARANCE NOT LESS THAN DIAMETER OF BARS.

NOTE: MAXIMUM DEVIATION FROM THESE REQUIREMENTS SHALL BE + 1/4" FOR SECTIONS 10" OR LESS AND +1/2" FOR SECTIONS OVER 10" THICK.

- REINFORCEMENT SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS UNLESS OTHERWISE INDICATED ON DRAWS
- WHERE REINFORCEMENT IS NOT SHOWN ON DRAWINGS, PROVIDE REINFORCEMENT IN ACCORDANCE WITH APPLICABLE TYPICAL DETAILS OR SIMILAR TO THAT SHOWN FOR MOST NEARLY SIMILAR SITUATION, AS DETERMINED BY THE ARCHITECT / ENGINEER. IN NO CASE SHALL REINFORCEMENT BE LESS THAN MINIMUM PERMITTED BY APPLICABLE CODES.
- ALL WORKMANSHIP AND MATERIAL SHALL BE CONFORMED TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI-315)
- ALL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE ARCHITECT/ENGINEER OR OWNER TESTING AGENCY BEFORE CONCRETE IS PLACED.
- WHERE CONTINUOUS BARS ARE CALLED FOR THEY SHALL BE CONTINUOUSLY AROUND CORNERS, LAPPED AT NECESSARY SPLICES AND HOOKED AT CONTINUOUS ENDS.
- WELDED WIRE FABRIC SHALL BE LAPPED ONE FULL MESH PANEL OR 6" MIN.
- ALL REINFORCING SPLICES SHALL CONFORM TO THE TABLE(S) PROVIDED IN THE GENERAL NOTES FOR STRENGTH OF CONCRETE BUT IN NO CASE LESS THAN THE REQUIREMENTS OF THE LATEST EDITION OF A318
- SLABS AND WALLS SHALL NOT BE SLEEVED OR BOXED OUT OR HAVE THEIR REINFORCEMENT INTERRUPTED EXCEPT SPECIFICALLY NOTED ON THE DRAWINGS. PROVIDE ADDITIONAL REINFORCEMENT AROUND OPENINGS AS SHOWN IN THE DETAILS.
- SUBMIT CHECKED SHOP DRAWINGS TO THE ARCHITECT / ENGINEER FOR REVIEW PRIOR TO FABRICATION OF REINFORCEMENT.
- BAR SUPPORTS SHALL BE GALVANIZED OR STAINLESS STEEL. BAR SUPPORTS IN CONTACT WITH EXPOSE SURFACE SHALL BE GALVANIZE AND PLASTIC TIPPED.

COMPACTION REQUIREMENTS

- SUBGRADE SOILS AND STRUCTURAL FILL MATERIALS SHALL BE COMPACTED TO THE FOLLOWING PERCENTAGES OF THE ASTM D1557 MAXIMUM DRY DENSITY AT +/- 2% OPTIMUM MOISTURE CONTENT:

MATERIAL	MINIMUM PERCENT COMPACTION
STRUCTURAL FILL,IN THE BUILDING AREA	95
SUBBASE FOR SLAB SUPPORT	95
SUBGRADE BELOW STRUCTURAL FILL	95
MISCELLANEOUS BACKFILL	90

GENERAL WOOD NOTES:

DIMENSIONAL LUMBER

- DIMENSIONAL LUMBER USED AS STRUCTURAL FRAMING (I.E. JOISTS, RAFTERS,HEADERS) SHALL BE SOUTHERN YELLOW PINE NO.2 OR EQUAL.
- DIMENSIONAL LUMBER USED FOR STUDS WALLS SHALL BE STUD GRADE UNLESS NOTED OTHERWISE. STUDS SHALL HAVE BE SPACES AT 16" MIN WITH A DOUBLE TOP PLATE. SPLICES IN THE DOUBLE TOP WALLS SHALL BE ALTERNATE TOP AND BOTTOM. IN NO CASE SHALL 2x4 BEARING WALLS SUPPORT MORE THAN TWO FLOORS OF FRAMING IN ADDITION TO ROOF AND CEILING
- ROUGH CUT TIMBER USED AS STRUCTURAL FRAMING SHALL BE AS SPECIFIED IN THE CONSTRUCTION DOCUMENTS
- ALL LUMBER IN CONTACT WITH THE GROUND, CONCRETE SHALL BE PRESSURED-TREATED. CONTRACTOR MAY SUBMIT FOR APPROVAL A MOISTURE BARRIER IN-LIEU OF THE PRESSURE TREATED WOOD.
- FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT TREATED WOOD SHALL BE OF HOT-DIPPED ZINC COATED GALVANIZED STEEL OR STAINLESS STEEL AND SHALL FOLLOW CURRENT SIMPSON GUIDELINES BASED ON WEATHER EXPOSURE WHERE STAINLESS STEEL CONNECTORS OR HOT DIPPED CONNECTORS ARE SPECIFIED IN THE DRAWINGS, STAINLESS STEEL OR HOT DIPPED GALVANIZED FASTENERS SHALL BE USED TO MATCH THE CONNECTORS TYPE.
- ALL NAILS FOR STRUCTURAL WORK SHALL BE COMMON WIRE NAILS UNLESS NOTED OR DETAILED OTHERWISE MEETING ASTM F1667. HOLES SHALL BE PRE-DRILLED WHERE NECESSARY TO PREVENT SPLITTING. NAILS SHALL HAVE THE MINIMUM PROPERTIES SPECIFIED IN THE TABLE BELOW:

NAIL TYPE	SHANK DIAMETER- INCHES	MINIMUM PENETRATION - INCHES
6d	0.113	1.13
8d	0.131	1.31
10d	0.148	1.48
12d	0.148	1.48
16d	0.162	1.63
20d	0.192	1.92

NAILING NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE PER THE NAILING SCHEDULE BELOW:

- JOIST SITTING ON SILL OR GIRDER (3) 8d TOENAILS, EA. SIDE
- BLOCKING BETWEEN JOIST/RAFTERS (2) 10d TOENAILS EA. SIDE, EA. END
- RIM BLOCKING BETWEEN JOIST/RAFTERS (3) 10d TOENAILS EA. END
- TOP PLATE TO STUD (2) 16d END NAILS
- STUD TO SILL PLATE (2) 16d END NAILS OR (4) 8d TOENAILS
- DOUBLE STUDS (2) 10d @ 12" O.C.
- DOUBLE TOP STUDS - BETWEEN SPLICE NAILING 16d @ 16" O.C. FACE NAILS
- DOUBLE TOP STUDS - EACH SIDE OF SPLICE PLATE (8) 16d
- BLOCKING TO TOP PLATE (2) 10d TOENAILS EACH SIDE
- BLOCKING TO FLOOR/ROOF SHEATHING (4) 10d NAILS
- RIM JOIST OR BLK TO TOP PLATE OR SILL PLATE 8d TOENAILS @ 6" O.C.
- CONTINUOUS (2) AND (3) PIECE HEADERS 16d @ 16" O.C. ALONG EACH EDGE
- CEILING JOIST LAPS OVER PARTITIONS (3) 16d FACE NAILS, MINIMUM
- RAFTER TO TOP PLATE OR SILL PLATE (3) 8d TOENAILS EACH SIDE
- BUILT-UP CORNER STUDS 16d @ 24" O.C.
- TONGUE AND GROOVE DECKING (2) 16d AT EACH BEARING
- CROSS BRIDGING (2) 10d EACH END
- HORIZONTAL BLOCKING BETWEEN WALL STUDS (2) 10d TOENAILS EACH END
- I-JOISTS SITTING ON TOP PLATE OR BEAM (2) 10d NAILS THROUGH JOIST FLANGE

NAILING SCHEDULE NOTES:

- ALL OTHER NAILING REQUIREMENTS NOTE SHOWN ON DRAWINGS OR IN SCHEDULE ABOVE SHALL BE IN ACCORDANCE WITH 2012 FBC.
- POWER DRIVEN OR PNEUMATIC NAILS OTHER THAN COMMON NAILS MAY BE USED IF DATA IS SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
- MINIMUM NAIL LENGTHS SHALL BE SUFFICIENT TO ACHIEVE MINIMUM PENETRATION INTO MAIN MEMBER AS NOTED IN SCHEDULE ON NOTE ABOVE.

NEW BATHROOM

RICHARDSON COMMUNITY CENTER

O'NEAL CONTRACTING

DRAWN BY: GG

CHKD BY: GG

APPRD BY: GG

GILL ENGINEERING SERVICES, INC
AUTH # 30824
GARY GILL PE #51942
163 SW MIDTOWN PL. SUITE 101
LAKE CITY, FL 32025 386-590-1242

DETAILS AND NOTES

PROJECT #: 2412-021

DWG #: S-002

REV #: 0

3/26/2024 3:25:34 PM

email: ggill@gillengineeringervices.com

Gill
Engineering Services, Inc.