# TERMITE PROTECTION OF SOILS

TERMITE PROTECTION OF SOILS:
TERMITE PROTECTION SHALL BE PROVIDED AS DEFINED IN SECTION 1816 OF THE FLORIDA BUILDING CODE. TERMITE TREATMENT SHALL BE PERFORMED AFTER ALL EXCAVATIONS, BACKFILLING AND COMPACTION IS COMPLETED, INCLUDING AREAS OF EXTERIOR CONCRETE OR GRADE WITHIN 1 FOOT OF THE PRIMARY STRUCTURE. RETREATMENT OF SOILS MAY BE REQUIRED IF ANY TREATED SOILS ARE DISTURBED DURING THE CONSTRUCTION PROCESS. ALL TREATED SOILS ARE TO BE PROTECTED FROM RAINFALL DILUTION. REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION.

# LIGHT-FRAME TRUSS CONSTRUCTION

THE ROOF STRUCTURE FOR THIS BUILDING IS COMPRISED OF STEEL FRAMES AND PURLINS AS INDICATED IN THE PRE-ENGINEERED METAL BUILDING DRAWINGS. AS PER FLORIDA STATUTE, LIGHT-FRAME TRUSS CONSTRUCTION SIGNS ARE NOT REQUIRED.

# STRUCTURAL NOTES

(REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION)

**1. FOOTINGS & FOUNDATION EXCAVATION:**

A. A GEOTECHNICAL ANALYSIS HAS BEEN PERFORMED ON THIS SITE. SEE PROJECT MANUAL FOR GEOTECHNICAL INFORMATION. APPROPRIATE RECOMMENDATIONS STATED IN THE GEOTECHNICAL REPORT ISSUED BY UNIVERSAL ENGINEERING SCIENCES DATED FEBRUARY 27, 2018 SHALL BE FOLLOWED.
B. THESE FOUNDATIONS HAVE BEEN DESIGNED FOR A SOIL BEARING OF 2000 PSF FOR CONTINUOUS AND FOR ISOLATED FOOTINGS.
C. FOUNDATIONS AND SLAB SHALL BEAR ON COMPACTED NATURAL SOILS OR ON PROPERLY PLACED AND COMPACTED STRUCTURAL FILL. SEE GEOTECHNICAL REPORT FOR SPECIFIC REQUIREMENTS REGARDING EXCAVATION AND PREPARATION OF SUBGRADE. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT TO DIRECT THE REMOVAL OF UNSUITABLE SOILS AND TO DETERMINE THE ADEQUACY OF THE BEARING SURFACE PRIOR TO PLACEMENT OF THE REINFORCEMENT AND CONCRETE.
D. FOOTING WIDTHS TO BE AS SHOWN ON PLANS AND DETAILS. BOTTOM OF FOOTING IS TO BE EXCAVATED SQUARE AND TRUE.
E. WHERE ANY OPEN TRENCH HAS BEEN EXPOSED TO RAIN, SNOW OR ICE PRIOR TO POURING CONCRETE, ALL REINFORCING IN THAT TRENCH SHALL BE REMOVED AND THE BOTTOM OF THE TRENCH SHALL BE DRAINED OF ALL WATER AND CLEANED OF MUD, SNOW OR ICE. A GEOTECHNICAL ENGINEER OR HIS TECHNICAL REPRESENTATIVE SHALL INSPECT THE BOTTOM OF THE TRENCH AND OBSERVE THE RE-COMPACTION OF SOILS PRIOR TO PLACING REINFORCEMENT AND POURING OF CONCRETE.
F. ALL STRIP FOOTINGS SHALL BE CENTERED UNDER WALLS BEING SUPPORTED AND ALL ISOLATED FOOTINGS SHALL BE CENTERED UNDER COLUMNS, UNLESS NOTED OTHERWISE.
G. MINIMUM EXTERIOR FOOTING DEPTH SHALL BE AS INDICATED ON THE FOUNDATION PLAN SHEET S2.
H. IN THE EVENT THAT ORGANIC SOIL OR UNCOMPACTED FILL IS FOUND BELOW FOOTINGS OR FLOOR SLABS, IT SHALL BE REMOVED AND REPLACED WITH SELECT FILL, COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
I. STRUCTURAL FILL SHOULD BE PLACED IN NO GREATER THAN 8" LOOSE LIFTS AND COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. ADEQUATE DENSITY AND MOISTURE CONTENT TESTS SHOULD BE PERFORMED TO INSURE COMPLIANCE WITH PROJECT SPECIFICATIONS. SUBGRADE INSPECTION AND FILL TESTING UNDER CONTROLLED CONDITIONS IS CONSIDERED ESSENTIAL IF THE FOOTINGS ARE TO BE FOUNDED IN FILL. A TESTING FREQUENCY OF AT LEAST ONE FIELD DENSITY TEST FOR EACH 2500 SQUARE FEET OF LIFT, BUT NOT LESS THAN 3 TESTS PER LIFT IS RECOMMENDED WITHIN THE BUILDING AREAS.

**2. CONCRETE:**

A. ALL READY MIX CONCRETE SHALL BE 4000 psi FOR ALL CONCRETE PLACEMENT. DO NOT ADD WATER TO THE MIX DESIGN AFTER DELIVERY TO THE PROJECT SITE.
B. EXPOSED EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED (TOTAL AIR CONTENT = 5%). INTERIOR CONCRETE SHALL NOT BE AIR-ENTRAINED.
C. UNLESS NOTED OTHERWISE, CONCRETE COVER OVER STEEL REINFORCEMENT SHALL CONFORM TO THE MINIMUM REQUIREMENT BY ACI 318.
D. REINFORCEMENT DETAILING AND PLACEMENT SHALL CONFORM TO ACI 318 AND ACI 315, EXCEPT WHERE OTHERWISE INDICATED.
E. HOT OR COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305-89 AND ACI 306-1-90, RESPECTIVELY.
F. ANY CONCRETE PLACED BY MEANS OF PUMPING SHALL BE DONE IN ACCORDANCE WITH ACI 304.2R (82).
G. CEMENT SHALL CONFORM TO A.S.T.M. C-150 TYPE I.
H. AGGREGATES SHALL CONFORM TO A.S.T.M. C-33 FOR NORMAL WEIGHT CONCRETE & A.S.T.M. C-330 FOR LIGHTWEIGHT CONCRETE.
I. READY MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH A.S.T.M. C-94.
J. ADMIXTURES MAY BE USED WITH THE APPROVAL OF THE STRUCTURAL ENGINEER. ADMIXTURES USED TO INCREASE THE WORKABILITY OF THE CONCRETE SHALL NOT BE CONSIDERED TO REDUCE THE CEMENT CONTENT. NO CALCIUM CHLORIDE ADMIXTURES ALLOWED.

**3. SLABS ON GRADE:**

A. FLOOR SLABS ARE TO BE PLACED AND FINISHED IN ACCORDANCE WITH ACI 302 (SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION).
B. THICKNESS TOLERANCE FOR ALL SLABS IS TO BE PER ACI 117 AND IS TO BE NO MORE THAN +⅜" (THICKER) AND NO MORE THAN -¼" (THINNER) FROM THE DESIGN THICKNESS.
C. CONCRETE USED FOR FLOOR SLABS SHALL INCLUDE SUPERPLASTICIZER. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION.

**4. REINFORCING:**

A. REINFORCING BARS SHALL BE BILLET STEEL, ASTM A 615, GRADE 60. PROVIDE CONTINUOUS BENT BARS AT FOOTING STEPS AND 90 DEGREE BENT TIES AT CORNERS. UNLESS OTHERWISE NOTED, LAP SPLICES OR EMBEDMENT LENGTHS SHALL CONFORM TO CLASS B SPLICE (SEE SPLICE TABLE). ADJACENT BAR SPLICES IN WALLS AND FOOTINGS TO BE ALTERNATED. ALL FOOTINGS SHALL REQUIRED HOOKED REINFORCING PROJECTED INTO WALLS, PILASTERS OR COLUMNS. THE SIZE AND SPACING OF DOWELS ARE TO MATCH VERTICAL REINFORCING.
B. WELDED WIRE FABRIC (WWF) SHALL CONFORM TO THE CURRENT ASTM SPECIFICATION FOR COLD DRAWN STEEL REINFORCEMENT WIRE. LAP END AND EDGES MINIMUM 6".
C. REINFORCING DETAILING, BENDING, AND PLACING SHALL CONFORM TO ACI 315.
D. MINIMUM CONCRETE COVERAGE: THE MINIMUM CLEAR DISTANCES BETWEEN REINFORCING STEEL AND FACE OF CONCRETE SHALL BE MAINTAINED UNLESS NOTED OTHERWISE:
   SLABS ON EARTH.....CENTER OF SLAB
   CONCRETE BELOW GRADE, FORMED.....2"
   CONCRETE BELOW GRADE, UNFORMED AND POURED AGAINST EARTH.....3"

**5. LUMBER:**

A. TREATED LUMBER: IN LOCATIONS WHERE TREATED LUMBER IS SHOWN ON DRAWINGS, THE APPROVED PRESSURE TREATED WOODS ARE ACQ-D(CARBONATE) OR CA-B TREATED WOODS WITHOUT AMMONIA CARRIERS. THE CHEMICAL RETENTION LEVELS ARE TO BE NO GREATER THAN 0.4 PCF FOR ACQ-2, 0.21 PCF FOR CA-B. ALL METAL CONNECTORS ARE TO HAVE A GALVANIZED COATING OF NO LESS THAN 1.85 OUNCES OF ZINC PER SQUARE FOOT PER ASTM A653. ALL BOLTS, SCREWS NAILS AND OTHER FASTENERS ARE TO BE GALVANIZED PER ASTM A153. WHERE TREATED LUMBER IS SHOWN IN EXTERIOR INSTALLATIONS WITH NO ROOF COVERINGS TO PREVENT DIRECT EXPOSURE TO RAIN, USE HOT DIP GALVANIZED CONNECTORS PER ASTM A123.

**6. STRUCTURAL STEEL:**

A. FABRICATOR QUALIFICATIONS: FABRICATOR MUST PARTICIPATE IN THE AISC QUALITY CONTROL PROGRAM AND BE DESIGNATED AN AISC-CERTIFIED PLANT.
B. MATERIALS:
   STRUCTURAL STEEL ..... ASTM A992, GRADE 50 UNLESS NOTED
   PLATES, ANGLES, CHANNELS, AND MISCELLANEOUS STEEL ..... ASTM A36
   ANCHOR RODS ..... ASTM F1554, GRADE 36
   HIGH STRENGTH BOLTS ..... ASTM A325 (¾"ø) UNLESS NOTED (OF NORTH AMERICAN MANUFACTURE)
   WELDING ELECTRODES ..... AWS A5.1 (E70XX)
   PIPE ..... ASTM A53, GRADE B
   SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS (HSS)..... ASTM A500, GRADE B

**7. LIGHT GAUGE STEEL:** SHALL CONFORM TO AISI (LATEST EDITION) AND THE FOLLOWING:

A. ALL LIGHT GAUGE METAL STUDS, JOISTS AND HEADERS ARE TO MEET OR EXCEED INDUSTRY STANDARDS AS SET FORTH BY THE STEEL STUDS MANUFACTURER'S ASSOCIATION (SSMA).
B. LIGHT GAUGE STEEL MEMBER DESIGNATIONS SHOWN ON THE CONSTRUCTION DOCUMENTS ARE SSMA STANDARD DESIGNATIONS.
C. ALL LIGHT GAUGE STEEL WALLS SHALL BE LATERALLY BRIDGED AT 48" O.C. (VERTICALLY) USING 2"x20ga STRAP BRACING ATTACHED TO EACH STUD FLANGE. SOLID BLOCKING WITHIN THE PLANE OF THE STRAP BRACING MUST BE PROVIDED AT EACH END OF WALL, ADJACENT TO WALL OPENINGS, AND AT 8' O.C. MAXIMUM. ALL BRIDGING AND BRACING IS TO BE POSITIVELY CONNECTED TO STUDS.
D. MINIMUM TRACK GAUGE TO MEET OR EXCEED GAUGE OF SUPPORTED STUDS.
E. BOTTOM TRACK FASTENERS TO BE SPACED AT EACH END OF WALL, ADJACENT TO WALL OPENINGS, AND AT 48" O.C. MAXIMUM.
F. POWDER ACTUATED FASTENERS SHALL BE DS HEAVY DUTY 0.177ø x 1½" LONG MANUFACTURED FROM MODIFIED AISI 1061 STEEL AUSTEMPERED TO A HARDNESS OF 52-56 HRC AND ZINC PLATED IN ACCORDANCE WITH ASTM B633,SC1, TYPE III. FASTENERS SHALL BE INSTALLED BY A QUALIFIED OPERATOR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. POWDER ACTUATED FASTENERS SHALL BE AS MANUFACTURED BY "HILTI FASTENING SYSTEMS" OR EQUIVALENT.
G. ALL LOAD BEARING STUDS TO BE SEATED SQUARELY INTO TOP AND BOTTOM WALL TRACKS WITH NO MORE THAN A ⅛" GAP.
H. THE DESIGN OF SLIP TRACKS SHALL CONFORM TO THE GUIDELINES ESTABLISHED IN SSMA TECHNICAL NOTE NO. 1 PUBLISHED JANUARY, 2001.

**8. CONCRETE MASONRY UNITS (CMU):**

A. ALL CMU SHALL BE 2-CELL BLOCK. CELLS THAT ARE BELOW GRADE OR CONTAIN REINFORCING STEEL SHALL BE FILLED SOLID WITH GROUT, INCLUDING BOND BEAMS AND LINTELS.
B. VERTICAL CELLS TO BE FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED, CONTINUOUS VERTICAL CELL NOT LESS THAN 2"x3" IN PLAN DIMENSIONS.
C. UNLESS NOTED OTHERWISE, FOUNDATION DOWELS SHALL EXTEND A MINIMUM 42 BAR DIAMETERS INTO THE MASONRY WALL OR PARTITION. LAPS OR SPLICES SHALL BE MIN 42 BAR DIAMETERS. THERE SHALL BE A FOUNDATION DOWEL FOR EACH VERTICAL REINFORCING BAR.
D. VERTICAL WALL REINFORCING SHALL EXTEND CONTINUOUS FROM THE TOP OF FOUNDATION TO EMBED INTO CAP BOND BEAM.
E. AN ADDITIONAL VERTICAL BAR WITH FOUNDATION DOWEL, SAME SIZE AND LENGTH AS THE DESIGNATED WALL REINFORCING BARS, SHALL BE PLACED:
   AT INTERSECTION OF WALLS.
   ON EACH SIDE OF DOOR AND WINDOW OPENINGS.
   ON EACH SIDE OF CONTROL JOINTS. (REFER TO ARCHITECTURAL ELEVATIONS FOR CONTROL JOINT LOCATIONS)
F. BOND BEAMS AT TOP OF CMU WALLS SHALL BE CONTINUOUS. ALL INTERMEDIATE BOND BEAMS, IF ANY, SHALL BE CONTINUOUS EXCEPT WHERE INTERSECTED BY OPENINGS.
G. HORIZONTAL MASONRY JOINT REINFORCEMENT SHALL BE FABRICATED 9 GAUGE LADDER TYPE UNITS INSTALLED IN EVERY JOINT BELOW GRADE AND AT 16" O.C. ABOVE GRADE. WHERE DOUBLE WYTHE CMU IS SHOWN, WYTHES MUST BE CONTINUOUSLY TIED TOGETHER WITH 9 GAUGE TRUSS TYPE JOINT REINFORCEMENT.
H. CONCRETE MASONRY UNITS SHALL CONFORM TO THE PROVISIONS OF THE CURRENT BUILDING CODE, UNLESS NOTED OTHERWISE. SEE DESIGN CRITERIA FOR BUILDING CODE INFORMATION.
I. VERTICAL REINFORCING SHALL BE #5's @ 32" O.C. - LAP SPLICES TO BE 30". VERTICAL REINFORCEMENT SHALL BE CENTERED IN EACH CELL BY USE OF REBAR POSITIONERS AT A MAXIMUM SPACING OF 24" O.C. - POSITIONERS SHALL BE 9 ga. WIRE AND HOT DIP GALVANIZED.

**9. GENERAL:**

A. CONTRACTOR HAS SOLE RESPONSIBILITY TO COMPLY WITH ALL OSHA REGULATIONS.
B. THE STRUCTURAL DESIGN OF THE BUILDING IS BASED UPON THE FULL INTERACTION OF ALL ITS COMPONENT PARTS, WITH NO PROVISION MADE FOR CONDITIONS OCCURRING DURING CONSTRUCTION. THE STRUCTURE IS STABLE ONLY IN ITS COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING DURING CONSTRUCTION. TEMPORARY SUPPORTS REQUIRED FOR STABILITY DURING ALL INTERMEDIATE STAGES OF CONSTRUCTION SHALL BE DESIGNED, FURNISHED AND INSTALLED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTIBILITY ANALYSIS AND ERECTION PROCEDURES, INCLUDING DESIGN AND ERECTION OF FALSEWORK, TEMPORARY BRACING, ETC. THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION.
C. CORRECTIONS DUE TO UNFORESEEN FIELD CONDITIONS OR DIMENSIONAL DISCREPANCIES ON CONSTRUCTION DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT FOR REVIEW AND AUTHORIZATION PRIOR TO CORRECTIVE MEASURES BEING IMPLEMENTED.
D. STRUCTURAL DRAWINGS ARE TO BE USED IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
E. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.
F. ALL SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY THE PROJECT ARCHITECT/ENGINEER PRIOR TO SUBMITTING TO THE BUILDING DEPARTMENT FOR REVIEW AND APPROVAL.

**10. SIMPSON "AT-XP" ADHESIVE SYSTEM: CONCRETE IAPMO UES ER-263 - MASONRY IAPMO ES-281:**

A. CONTRACTOR TO FOLLOW ALL REQUIREMENTS, INSTRUCTIONS, AND RECOMMENDATIONS FOR ADHESIVE APPLICATION.
B. SUBSTITUTIONS FOR SIMPSON "AT-XP" ANCHORING ADHESIVE SHALL BE ONLY UPON THE APPROVAL OF THE PROJECT ENGINEER OF RECORD.

**11. SPECIAL INSPECTIONS REQUIREMENTS:**

A. OWNER SHALL ENGAGE ONE OR MORE QUALIFIED SPECIAL INSPECTORS AND/OR TESTING AGENCIES TO CONDUCT STRUCTURAL TESTS, CONSTRUCTION MATERIAL TESTING, AND SPECIAL INSPECTIONS SPECIFIED IN THE "STATEMENT OF SPECIAL INSPECTIONS".
B. FOR THE SPECIFIC RESPONSIBILITY OF THE OWNER, CONTRACTOR, AND SPECIAL INSPECTOR REFER TO SECTION 01 45 16 OF THE PROJECT MANUAL.

# DESIGN CRITERIA

**BUILDING CODE:** 2017 FLORIDA BUILDING CODE (2015)

**DESIGN LOADS:**

ROOF DEAD LOAD..... 5.5 psf
ROOF COLLATERAL LOAD..... 2.5 psf
ADDITIONAL CEILING SYSTEM COLLATERAL
AT PARTS AREA "A"..... 2.0 psf
ROOF LIVE LOAD..... 20.0 psf
SPRINKLER LOADS
UNIFORM BRANCH PIPE LOAD..... 0.0 psf
LINEAR LOOP/TEE MAIN PIPE LOAD..... 0.0 plf

**SNOW LOAD:**

$P_g$ = 0 psf
$P_f$ = 0 psf
$C_e$ = 1.0
$C_t$ = 1.0
$I_s$ = 1.0

**WIND CALCULATION METHOD:** ENVELOPE

$V_{ult}$ = 140 mph $V_{asd}$ = 108.4 mph
EXPOSURE = "C"
RISK CATEGORY = II
BUILDING, ENCLOSED $GC_p$ = ±0.18

**MAIN FORCE RESISTING SYSTEM:**

WALL AND ROOFS q = 22.1 psf
PARAPETS $q_p$ = 22.9 psf

**WIND COMPONENTS & CLADDING: All Wind Pressures & Forces in "ASD"**
(Wind pressures below were used by JS Smith Consulting Engineers, P.C. for design. Components designed by others for use in this project will require wind pressures derived by that supplier.)

WALL AREAS 10 SQUARE FEET OR LESS = 31.8 psf
WALL INTERIOR ZONES = 20.7 psf & -23.0 psf
WALL END ZONES = 20.7 psf & -26.0 psf
PARAPETS AT INTERIOR ZONES = 17.0 psf & -26.2 psf
PARAPETS AT END ZONES = 17.0 psf & -27.9 psf
ROOF INTERIOR ZONES = 8.4 psf & -23.8 psf
ROOF EDGE ZONES = 8.4 psf & -28.3 psf
ROOF CORNER ZONES = 8.4 psf & -28.3 psf

**BASE SHEAR:**

$V_X$: WIND = 36.3 k
SEISMIC = 22.3 k
$V_Y$: WIND = 26.8 k
SEISMIC = 22.3 k

**SEISMIC DESIGN:** EQUIVALENT FORCE PROCEDURE

$S_S$ = 0.078
$S_1$ = 0.041
$S_{DS}$ = 0.130
$S_{D1}$ = 0.096
SITE CLASS = E
SEISMIC DESIGN CATEGORY = B
$I_e$ = 1.0

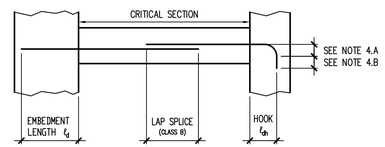
**SEISMIC FORCE RESISTING SYSTEM:**

STEEL NOT DETAILED FOR SEISMIC
R = 3.00
$C_S$ = 0.043
$\rho$ = 1.00

## SPLICE TABLE[1]
(UNLESS NOTED OTHERWISE)

| BAR SIZE | LAP SPLICES (in.)[2] | | EMBED LENGTH (in.) | | |
|---|---|---|---|---|---|
| | TOP BARS[3] Class B | OTHERS Class B | TOP BARS[3] ld | OTHERS ld | HOOKS[5] ldh |
| #3 | 25 | 19 | 19 | 15 | 8 |
| #4 | 33 | 25 | 25 | 19 | 10 |
| #5 | 41 | 31 | 31 | 24 | 12 |
| #6 | 49 | 37 | 37 | 29 | 15 |
| #7 | 71 | 54 | 54 | 42 | 17 |

1. SPLICE TABLE IS BASED ON THE FOLLOWING:
   A. CONCRETE f'c = 4000 psi
   B. GRADE 60 REBAR
   C. BAR SPACING NOT LESS THAN 2 BAR DIAMETERS OR 1"
   D. CONCRETE COVER NOT LESS THAN ONE BAR DIAMETER
2. LAP LENGTHS SHOWN ARE FOR CLASS "B" TENSION SPLICES PER ACI 318-11 CHAPTER 12.
3. TOP BARS ARE DEFINED AS HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12" OF CONCRETE IS CAST BELOW THE REINFORCEMENT IN THAT MEMBER.
4. STANDARD 90° HOOKS:
   A. RADIUS = 4 BAR DIAMETERS FOR #3 THRU #8
   B. LENGTH = 12 BAR DIAMETERS
5. HOOK LENGTH MAY BE REDUCED IN ACCORDANCE WITH ACI 318-11 CHAPTER 12.5





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OCALA, FL 34476

STRUCTURAL NOTES


O'Reilly AUTO PARTS
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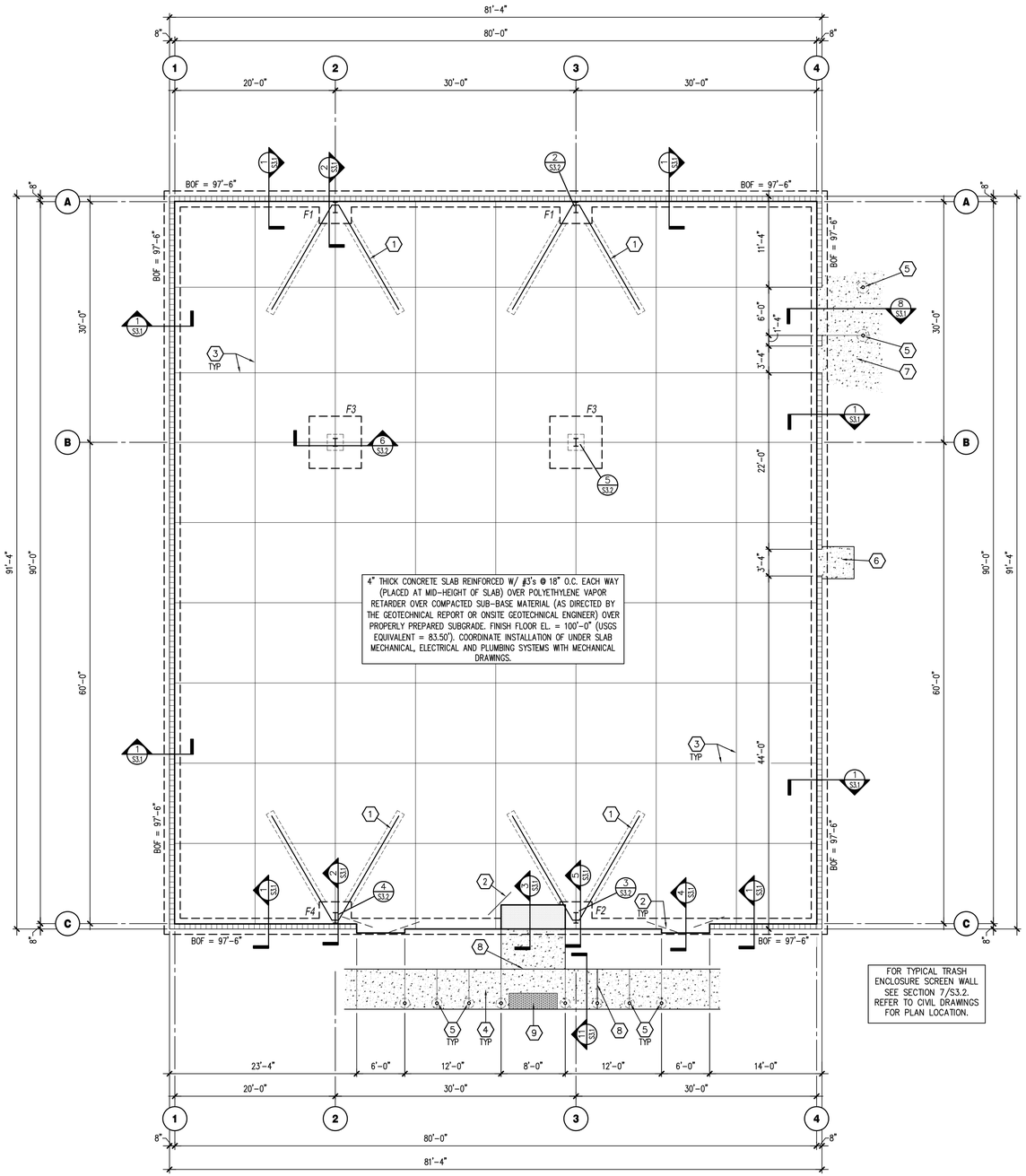
(417) 862-2674 TELEPHONE


DRAWN BY: MW
CHECKED BY: AS
DATE: JUNE 15, 2018
REVISION:
PROJECT NUMBER: 18076-OF4
SHEET NUMBER: S1




## FOUNDATION PLAN

**SCALE: 1/8" = 1'-0"**

TRUE NORTH

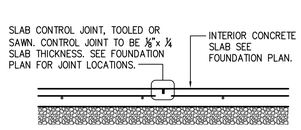
## KEYNOTES

1. SLAB HAIRPIN. SEE DETAIL 7/S3.1
2. PROVIDE #4x4'-0" DOWEL. ANGLE DOWEL AT SLAB INSIDE CORNERS
3. CONTROL OR CONSTRUCTION JOINT SEE DETAILS 1 & 2/S2
4. SIDEWALK: PROVIDE 4" THICK CONCRETE REINFORCED W/ #3's @ 18" O.C. EACH WAY (PLACED AT MID-HEIGHT OF SLAB) OVER COMPACTED SUB-BASE MATERIAL (AS DIRECTED BY THE GEOTECHNICAL REPORT OR ONSITE GEOTECHNICAL ENGINEER) PROPERLY PREPARED SUBGRADE. SEE CIVIL DRAWINGS FOR JOINT REQUIREMENTS, EXTENTS OF FLATWORK, AND TOP OF CONCRETE SPOT ELEVATIONS.
5. STEEL BOLLARD: SEE SITE DEVELOPMENT PLANS AND DETAILS. (WHERE APPLICABLE, ALIGN WITH CENTERLINE OF STOREFRONT MULLIONS AND JAMBS OF OVERHEAD DOOR.)
6. 4'x4' (MIN.) DOORPAD: PROVIDE 4" THICK CONCRETE REINFORCED W/ #3's @ 18" O.C. EACH WAY (PLACED AT MID-HEIGHT OF SLAB) OVER COMPACTED SUB-BASE MATERIAL (AS DIRECTED BY THE GEOTECHNICAL REPORT OR ONSITE GEOTECHNICAL ENGINEER) ON PROPERLY PREPARED SUBGRADE. CENTER PAD ON DOOR. SEE CIVIL DRAWINGS FOR TOP OF CONCRETE SPOT ELEVATIONS.
7. CONCRETE PAVING AND DOOR PAD, SEE CIVIL DRAWINGS
8. ISOLATION JOINT. SEE DETAIL 3/S2 (SPACING NOT TO EXCEED 30'-0" O.C.)
9. DETECTABLE WARNING SURFACE (IF REQUIRED), REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.

## FOUNDATION SCHEDULE

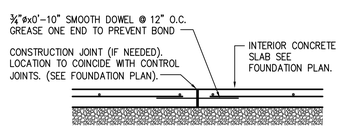
| MARK | FOOTING SIZE (W x L x T) | FOOTING REINFORCEMENT LONG. | FOOTING REINFORCEMENT TRANS. | BOTTOM OF FOOTING ELEVATION | PILASTER SIZE | PILASTER REINFORCEMENT VERT. | PILASTER REINFORCEMENT TIES | TOP OF PILASTER ELEVATION | MARK |
|---|---|---|---|---|---|---|---|---|---|
| F1 | 4'-0"x4'-0"x1'-6" | (6) #5's | (6) #5's | 97'-6" | ---------- | ------- | ---------- | ---------- | F1 |
| F2 | 4'-0"x4'-0"x1'-6" | (6) #5's | (6) #5's | 97'-6" | ---------- | ------- | ---------- | ---------- | F2 |
| F3 | 6'-6"x6'-6"x1'-6" | (7) #4 EACH WAY TOP & BOTT. | | 96'-0" | 2'-6"x2'-6" | (12) #6 | 6/S3.2 | 99'-4" | F3 |
| F4 | 4'-0"x4'-0"x1'-6" | (6) #5's | (6) #5's | 97'-6" | ---------- | ------- | ---------- | ---------- | F4 |
| | | | | | | | | | |

NOTES:
1. ALL ANCHOR BOLTS SHALL BE SIZE, QUANTITY AND SPACING AS SPECIFIED BY THE PRE-ENGINEERED METAL BUILDING MANUFACTURER. MAINTAIN 3" MINIMUM CONCRETE COVER AROUND BOLTS. TIES SHALL WRAP AROUND ANCHOR BOLTS.
2. COLUMN BASE PLATES ARE TO REST ON TOP OF SLAB. PROVIDE LEVEL BEARING SURFACE FOR EVEN CONTACT.
3. COLUMN FOOTING REINFORCEMENT TO BE INTEGRAL WITH CONTINUOUS FOUNDATION REINFORCEMENT (WHERE APPLICABLE).
4. PROVIDE ANCHOR BOLT TEMPLATES AT COLUMN.
5. ALL SPREAD FOOTINGS ARE TO BE CENTERED BENEATH COLUMNS UNLESS NOTED OTHERWISE.



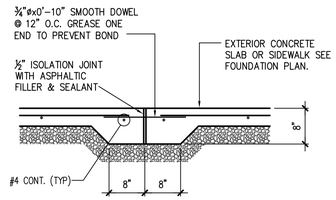

**1 S2 TYP. CONTROL JOINT DETAIL**

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




**2 S2 TYP. CONSTR. JOINT DETAIL**

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




**3 S2 SIDEWALK ISOLATION JOINT**

SCALE: 3/4" = 1'-0"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PROJECT:
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FOUNDATION PLAN

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(417) 862-2674 TELEPHONE

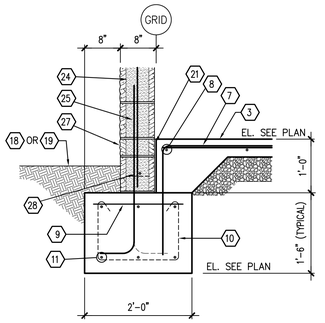
| DRAWN BY: | CHECKED BY: |
|---|---|
| MW | AS |

DATE: JUNE 15, 2018

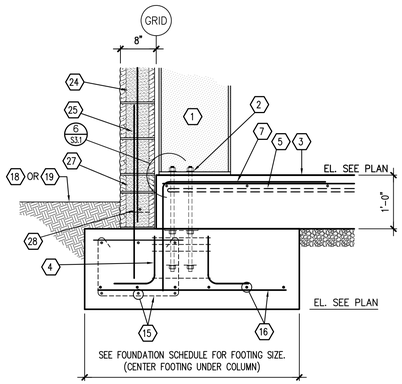
REVISION:

PROJECT NUMBER: 18076-OF4

SHEET NUMBER: S2




**1 SECTION** S3.1 — SCALE: 3/4" = 1'-0"

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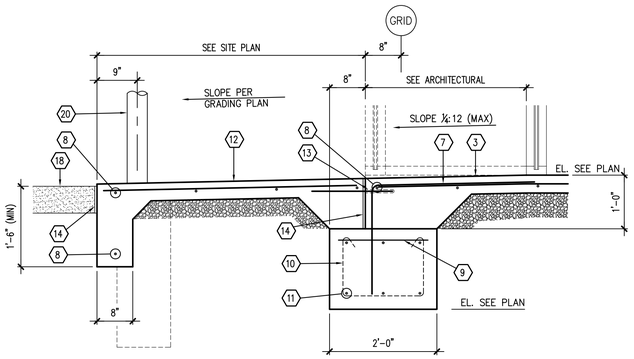


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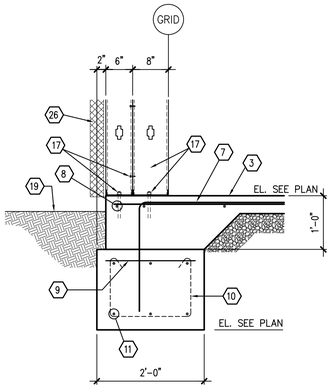


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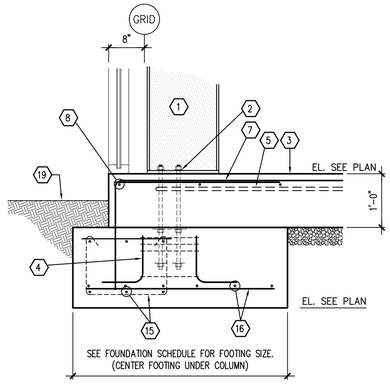
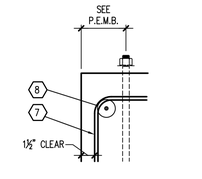



**5 SECTION** S3.1 — SCALE: 3/4" = 1'-0"

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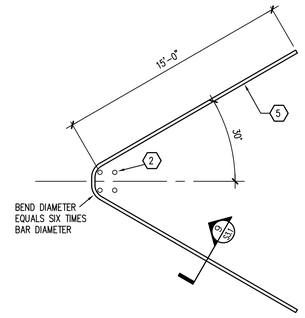
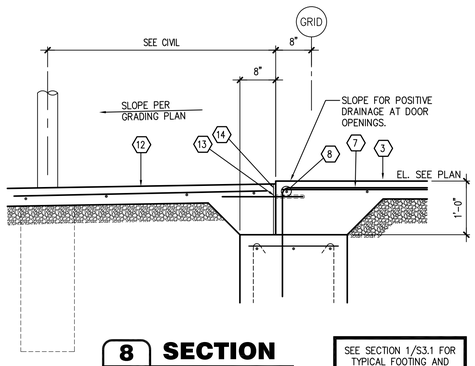
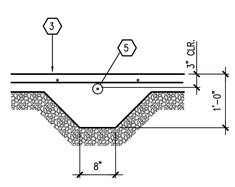



**TYPICAL HAIRPIN DETAIL** 7 / S3.1 — SCALE: NONE




**8 SECTION** S3.1 — SCALE: 3/4" = 1'-0"

SEE SECTION 1/S3.1 FOR TYPICAL FOOTING AND REINFORCEMENT

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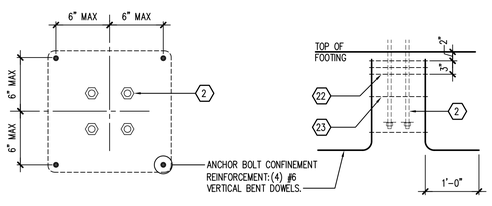
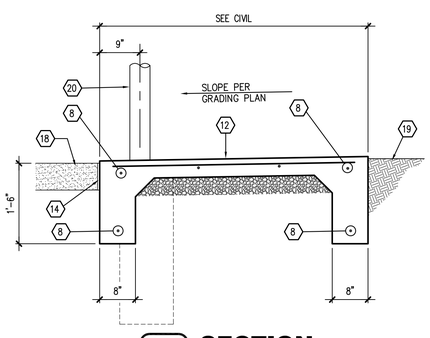



**10 SECTION** S3.1 — SCALE: VARIES




**11 SECTION** S3.1 — SCALE: 3/4" = 1'-0"

## KEYNOTES

1. PRE-ENGINEERED METAL BUILDING STRUCTURAL SYSTEM. SEE P.E.M.B. SHOP DRAWINGS FOR ADDITIONAL INFORMATION.
2. ANCHOR BOLTS. REFER TO FOUNDATION SCHEDULE AND PRE-ENGINEERED METAL BUILDING DRAWINGS FOR SIZE, QUANTITY AND PLAN LOCATION. SEE 1/S3.2 FOR TYPICAL SHOP FABRICATED ANCHOR ASSEMBLY.
3. INTERIOR CONCRETE SLAB SEE FOUNDATION PLAN.
4. SEE DETAIL 10/S3.1 FOR VERTICAL ANCHOR BOLT CONFINEMENT REINFORCEMENT
5. #5 SLAB HAIRPIN – SEE DETAIL 7/S3.1
6. SEE FOUNDATION SCHEDULE FOR PILASTER REINFORCEMENT.
7. #3x5'-0" DOWEL @ 36" O.C. FIELD BEND AS SHOWN 24"
8. #4 CONTINUOUS
9. #3 DOWELS @ 48" O.C.
10. #3 STIRRUPS @ 48" O.C.
11. (3) #4's CONTINUOUS TOP & BOTTOM.
12. EXTERIOR CONCRETE SLAB OR SIDEWALK SEE FOUNDATION PLAN.
13. AT EXTERIOR DOOR LOCATIONS DRILL 6" DEEP HOLES FOR #4x1'-6" DOWELS @ 24" O.C. – APPLY ADHESIVE AND INSTALL DOWELS. SEE ADHESIVE SYSTEM NOTES SHEET S1 FOR ADHESIVE ANCHOR INSTALLATION
14. ½" ISOLATION JOINT WITH ASPHALTIC FILLER & SEALANT
15. CONTINUOUS FOOTING REINFORCEMENT TO RUN THROUGH COLUMN FOUNDATIONS. SEE SECTION 1/S3.1 FOR REINFORCEMENT INFORMATION.
16. COLUMN FOOTING REINFORCEMENT SEE FOUNDATION SCHEDULE.
17. SEE CORRELATING STRUCTURAL FRAMING SECTION FOR METAL STUD SIZE, GAUGE, SPACING, AND ATTACHMENT REQUIREMENTS. REFER TO ARCHITECTURAL FOR FINISHES AND ADDITIONAL REQUIREMENTS. PROVIDE ½"ø ANCHOR BOLTS @ 48" O.C. AND WITHIN 6" OF ENDS OF WALLS (7" EMBEDMENT & 2" HOOK)
18. PAVING, SEE SITE DEVELOPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
19. SEE GRADING PLAN FOR FINISHED GRADES.
20. STEEL BOLLARD SEE SITE PLAN.
21. ⅜" ISOLATION JOINT WITH ASPHALTIC FILLER & SEALANT
22. (3) #3 TIES @ 1½" O.C.
23. #3 TIES @ 12" O.C. (PROVIDE 2 TIES MINIMUM)
24. 8" (NOM) SPLIT FACE OR SMOOTH FACE CMU. REFER TO CMU WALL NOTES ON SHEET S1 FOR WALL VERTICAL AND HORIZONTAL REINFORCEMENT.
25. HOOKED DOWEL PROJECTING INTO MASONRY WALL. MATCH SIZE AND SPACING OF WALL REINFORCEMENT, SEE STRUCTURAL NOTES SHEET S1.
26. WALL FINISH, SEE ARCHITECTURAL
27. 4" TALL SPLIT FACE OR SMOOTH FACE CMU.
28. FIRST COURSE TO BE CONTINUOUS 8" (NOM) SPLIT FACE OR SMOOTH FACE BOND BEAM W/ (1) #5 CONTINUOUS

AARON D. SMITH LICENSE No. 78886 STATE OF FLORIDA PROFESSIONAL ENGINEER

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PROJECT:
NEW O'REILLY AUTO PARTS STORE
6179 SW HWY 200
OCALA, FL 34476

FOUNDATION DETAILS

O'Reilly AUTO PARTS


CORPORATE OFFICES
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| DRAWN BY: | CHECKED BY: |
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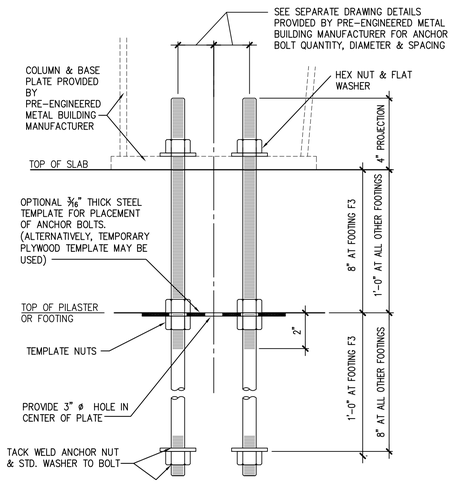
DATE: JUNE 15, 2018

REVISION:

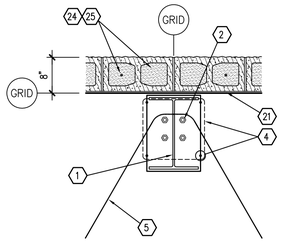
PROJECT NUMBER: 18076-OF4

SHEET NUMBER: S3.1

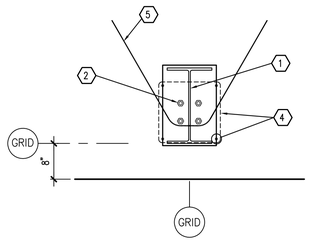



NOTE: ANCHOR BOLT ASSEMBLY TO BE PLACED IN FORM PRIOR TO POURING CONCRETE. BOLT MATERIAL MAY BE F1554 GR. 36, OR CONTINUOUSLY THREADED A36 ROD. ALL ANCHOR BOLTS SHALL BE CLEAN AND FREE OF ALL OIL, GREASE, ICE, ETC.

**1 ANCHOR ASSEMBLY**
S3.2 SCALE: NONE




**2 DETAIL**
S3.2 SCALE: 3/4" = 1'-0"




**3 DETAIL**
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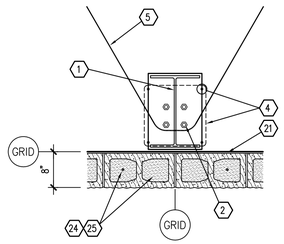
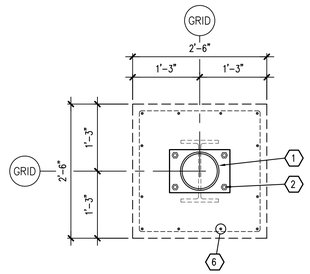
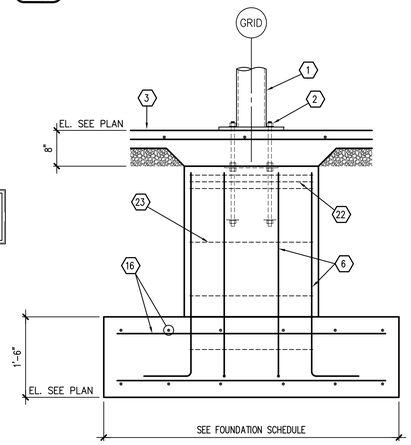



**4 DETAIL**
S3.2 SCALE: 3/4" = 1'-0"

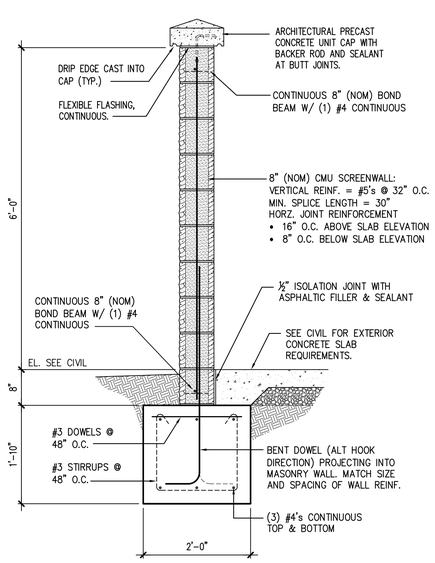



**5 DETAIL**
S3.2 SCALE: 3/4" = 1'-0"

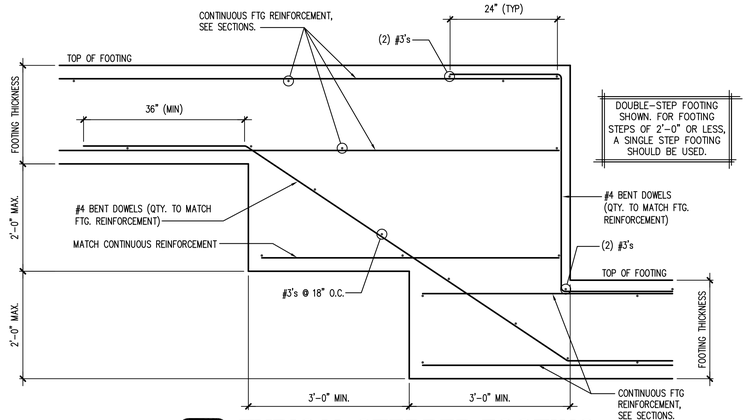
REFER TO PEMB SUPPLIER FOR COLUMN SHAPE, SIZE, AND ORIENTATION AT THIS LOCATION




**6 SECTION**
S3.2 SCALE: 3/4" = 1'-0"




**7 SCREEN WALL**
S3.2 SCALE: 3/4" = 1'-0"




**8 TYPICAL STEPPED FOOTING**
S3.2 SCALE: NONE (IF REQUIRED BY FIELD CONDITIONS)

## KEYNOTES

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2. ANCHOR BOLTS. REFER TO FOUNDATION SCHEDULE AND PRE-ENGINEERED METAL BUILDING DRAWINGS FOR SIZE, QUANTITY AND PLAN LOCATION. SEE 1/S3.2 FOR TYPICAL SHOP FABRICATED ANCHOR ASSEMBLY.
3. INTERIOR CONCRETE SLAB SEE FOUNDATION PLAN.
4. SEE DETAIL 10/S3.1 FOR VERTICAL ANCHOR BOLT CONFINEMENT REINFORCEMENT
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12. EXTERIOR CONCRETE SLAB OR SIDEWALK SEE FOUNDATION PLAN.
13. AT EXTERIOR DOOR LOCATIONS DRILL 6" DEEP HOLES FOR #4x1'-6" DOWELS @ 24" O.C. – APPLY ADHESIVE AND INSTALL DOWELS. SEE ADHESIVE SYSTEM NOTES SHEET S1 FOR ADHESIVE ANCHOR INSTALLATION
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PROJECT:
NEW O'REILLY AUTO PARTS STORE
6179 SW HWY 200
OCALA, FL 34476

FOUNDATION DETAILS

O'Reilly AUTO PARTS
CORPORATE OFFICES
233 SOUTH PATTERSON
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| DRAWN BY: | CHECKED BY: |
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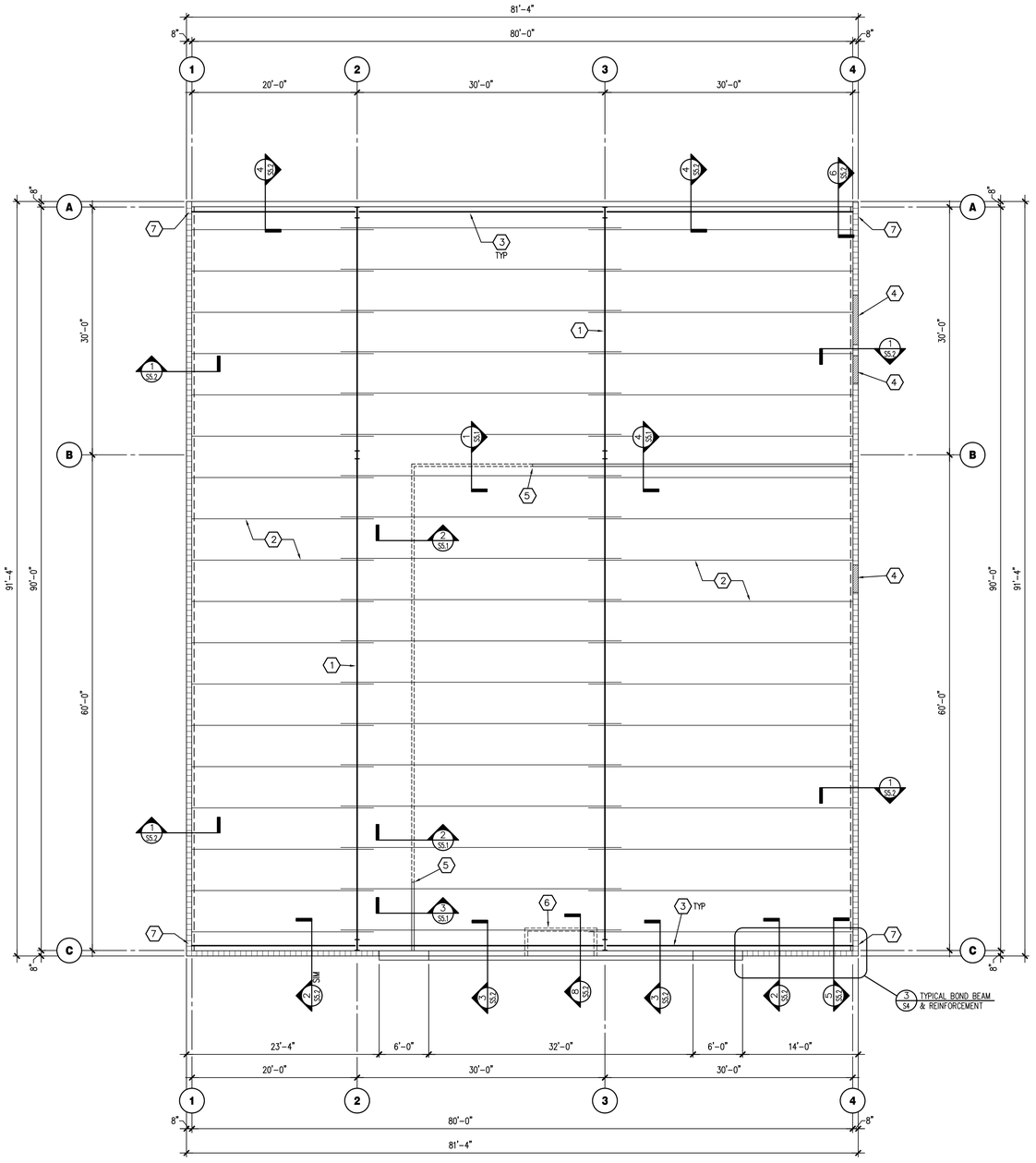
DATE: JUNE 15, 2018

REVISION:

PROJECT NUMBER: 18076-OF4

SHEET NUMBER: S3.2




## FRAMING PLAN

SCALE: 1/8" = 1'-0"

TRUE NORTH

FOR MASONRY CONTROL JOINT SEE DETAIL 2/S4. COORDINATE WITH ARCHITECTURAL FOR CONTROL JOINT LOCATIONS.

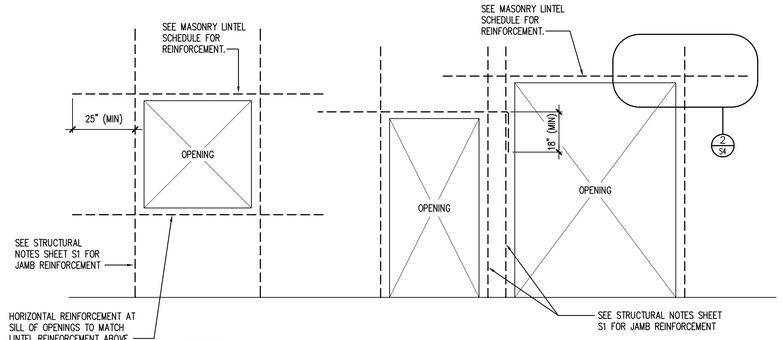
FOR LOCATIONS OF MECHANICAL OPENINGS IN MASONRY WALLS, REFER TO MECHANICAL DRAWINGS. SEE MASONRY LINTEL SCHEDULE FOR BOND BEAM REQUIREMENTS. OPENINGS GREATER THAN 60" WIDE REQUIRE NOTIFICATION TO THE PROJECT ENGINEER FOR SPECIAL ANALYSIS. MECHANICAL OPENINGS SHALL NOT BE LOCATED OVER ANY EXTERIOR DOORS. TOP OF OPENING TO BE LOCATED A MINIMUM 12" BELOW CONTINUOUS LEDGER ANGLES AND 18" BELOW WIND BEAM CENTERLINE

## MASONRY LINTEL SCHEDULE

| | |
|---|---|
| | 0'-0" TO 5'-0" MASONRY OPENING: 8" DEEP LINTEL BLOCK WITH (2) #5's CONTINUOUS AS SHOWN. LINTEL BLOCK TO EXTEND 32" BEYOND OPENINGS, SEE WALL ELEVATION 1/S4 & 2/S4 |
| | 5'-1" TO 8'-0" MASONRY OPENING: 16" DEEP LINTEL BLOCK WITH (4) #5's CONTINUOUS AS SHOWN. LINTEL BLOCK TO EXTEND 32" BEYOND OPENINGS, SEE WALL ELEVATION 1/S4 & 2/S4 |

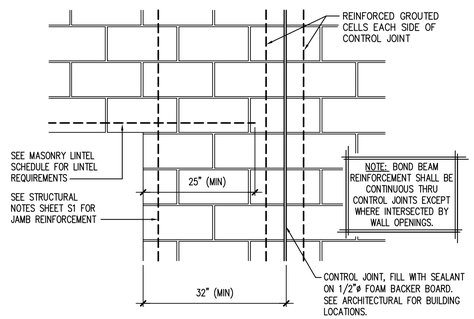
## KEYNOTES

1. STEEL COLUMN AND FRAME BY PRE-ENGINEERD METAL BUILDING MANUFACTURER. HOLD FRAME DRIFT TO H/150.
2. ROOF PURLINS BY PRE-ENGINEERED METAL BUILDING MANUFACTURER. REFER TO SECTION 8/S5.2 FOR SPECIAL CONNECTION OF ROOF PURLINS AT MASONRY WALL FOR PURLINS SUPPORTING RTU LOADS.
3. SPANDREL BEAM BY PRE-ENGINEERED METAL BUILDING MANUFACTURER. HOLD DEFLECTION TO L/240.
4. MASONRY LINTEL OVER DOOR OPENINGS, SEE MASONRY LINTEL SCHEDULE.
5. PROVIDE JOINT IN GYP BOARD AT TRANSITION BETWEEN FLOOR SUPPORTED FULL-HEIGHT WALL AND SUSPENDED HEADER WALL TO ALLOW FOR DIFFERENTIAL MOVEMENT. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
6. 6"x16 ga. (600S162-54) METAL STUD CEILING FRAMING AND BRACING OVER ENTRY. REFER TO ARCHITECTURAL DRAWINGS FOR FRAMING PROFILES. PROVIDE MINIMUM (3) #10 SDS AT ALL FRAMING CONNECTIONS.
7. FILL ALL CELLS IN MASONRY WALL A MINIMUM 4'-8" IN EACH DIRECTION FROM CORNER TO ALLOW FOR METAL BUILDING CONNECTIONS.



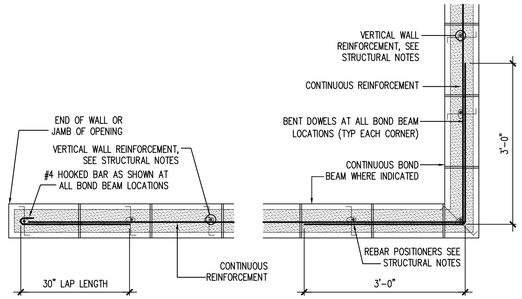

## 1 MASONRY WALL OPENINGS

S4 SCALE: NONE




## 2 TYPICAL MASONRY LINTEL DETAIL

S4 SCALE: NONE




## 3 PLAN VIEW OF TYPICAL MASONRY BOND BEAM

S4 SCALE: NONE

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PROJECT:
NEW O'REILLY AUTO PARTS STORE
6179 SW HWY 200
OCALA, FL 34476

# FRAMING PLAN

O'Reilly AUTO PARTS


CORPORATE OFFICES
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SPRINGFIELD, MISSOURI 65802
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DRAWN BY: MW
CHECKED BY: AS
DATE: JUNE 15, 2018
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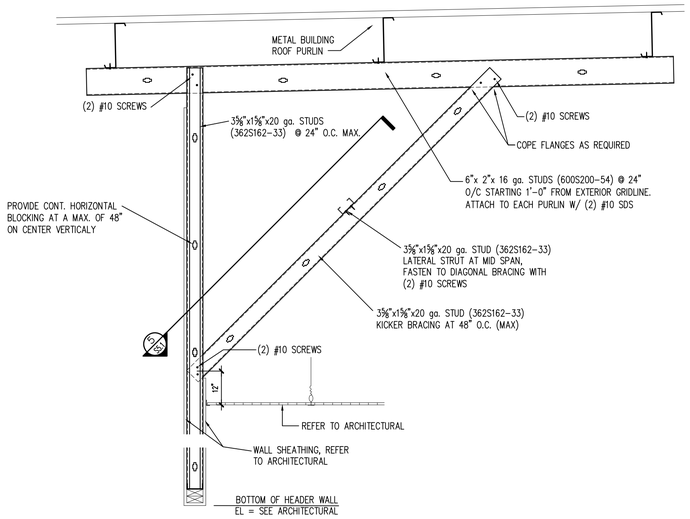
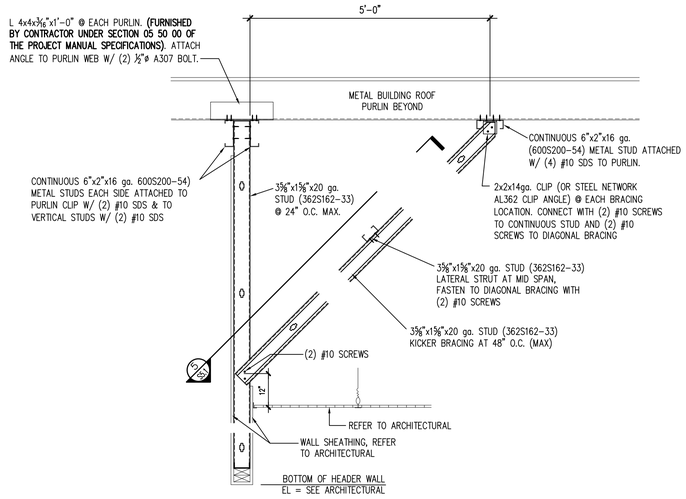
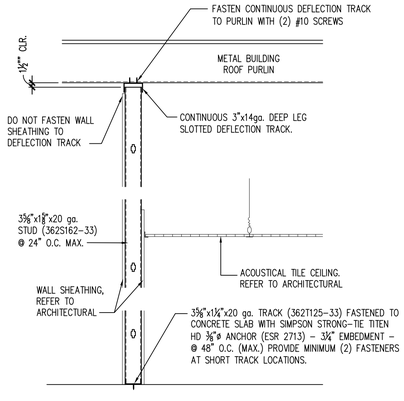
PROJECT NUMBER: 18076-OF4
SHEET NUMBER: S4




**1 SECTION**
S5.1 SCALE: 3/4" = 1'-0"




**2 SECTION**
S5.1 SCALE: 3/4" = 1'-0"




**3 SECTION**
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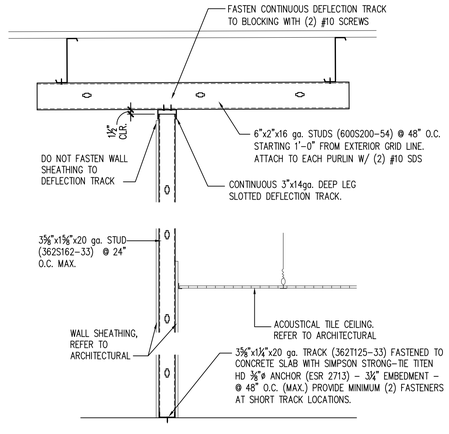
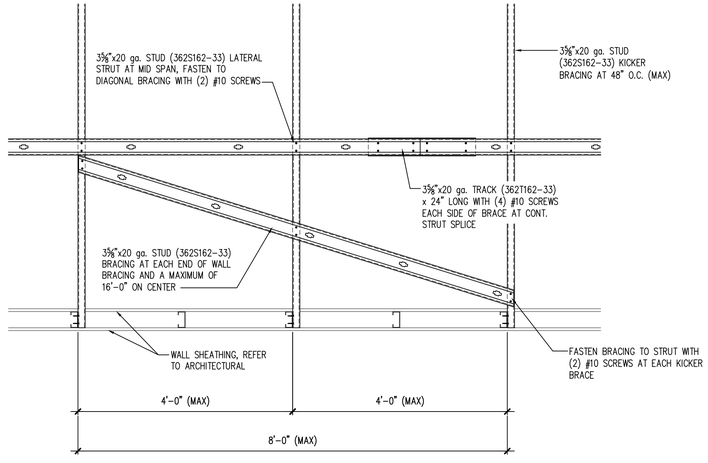



**4 SECTION**
S5.1 SCALE: 3/4" = 1'-0"




**5 SECTION**
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Florida State Certificate of Authorization No. 26287
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PROJECT:
NEW O'REILLY AUTO PARTS STORE
6179 SW HWY 200
OCALA, FL 34476

# FRAMING DETAILS

O'Reilly AUTO PARTS
CORPORATE OFFICES
233 SOUTH PATTERSON
SPRINGFIELD, MISSOURI 65802
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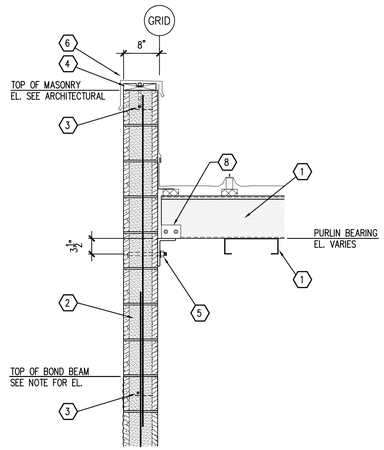
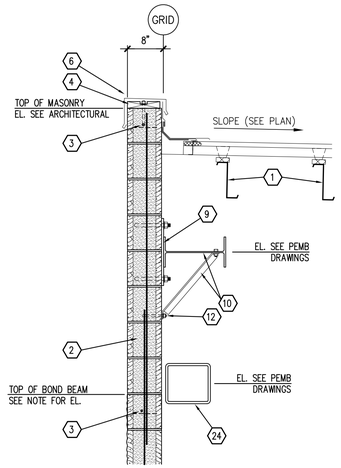
DRAWN BY: MW
CHECKED BY: AS
DATE: JUNE 15, 2018
REVISION:
PROJECT NUMBER: 18076-OF4
SHEET NUMBER: S5.1




**1 SECTION** S5.2 SCALE: 3/4" = 1'-0"

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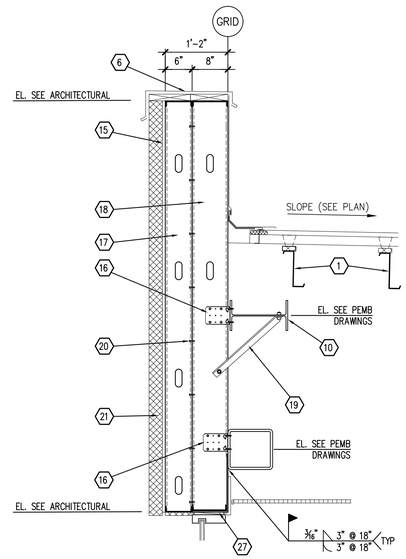


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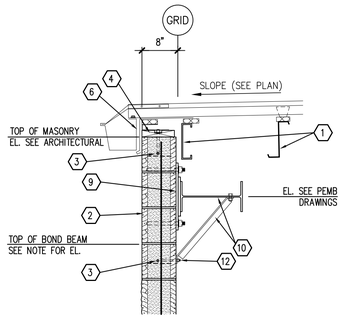
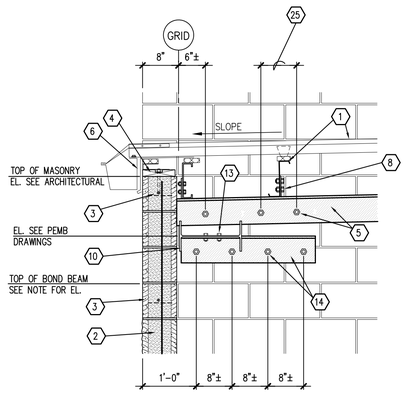


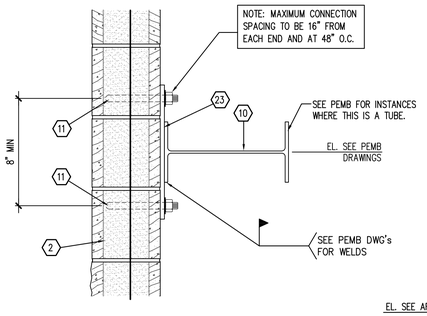

**4 SECTION** S5.2 SCALE: 3/4" = 1'-0"



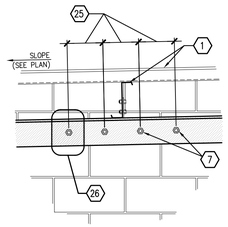

**5 SECTION** S5.2 SCALE: 3/4" = 1'-0"



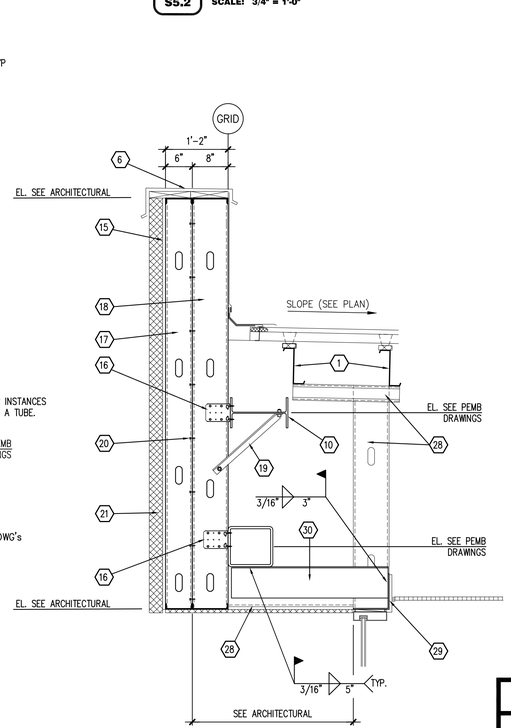

**6 SECTION** S5.2 SCALE: 3/4" = 1'-0"




**7 DETAIL** S5.2 SCALE: 1 1/2" = 1'-0"




**9 DETAIL AT RTU's** S5.2 SCALE: 1 1/2" = 1'-0"




**8 SECTION** S5.2 SCALE: 3/4" = 1'-0"

## KEYNOTES

1. PRE-ENGINEERED METAL BUILDING STRUCTURAL SYSTEM. SEE P.E.M.B. SHOP DRAWINGS FOR ADDITIONAL INFORMATION.
2. 8" (NOM) SPLIT FACE OR SMOOTH FACE CMU. REFER TO STRUCTURAL NOTES ON SHEET S1 FOR WALL VERTICAL AND HORIZONTAL REINFORCEMENT
3. CONTINUOUS 8" (NOM) SPLIT FACE OR SMOOTH FACE LINTEL BLOCK OR BOND BEAM W/ (1) #5 CONT.
4. CONTINUOUS FIRE TREATED 2x NAILER WITH ½"ø GALVANIZED ANCHOR BOLTS @ 32" O.C.
5. CONTINUOUS L 6"x4"x½" LEDGER ANGLE FURNISHED BY THE PRE-ENGINEERED METAL BUILDING SUPPLIER. ANCHOR TO WALL BY DRILLING ⅞"ø x0'-6½" DEEP HOLES INTO MASONRY FOR ¾"ø x0'-8½" A36 ALL-THREAD ROD EACH SIDE OF PURLINS IN FULLY GROUTED CELLS. SEE SECTIONS 5/S5.2 & 6/S5.2 FOR TYPICAL ANCHOR SPACING, SEE 9/S5.2 FOR SPECIAL ANCHORAGE OF PURLINS SUPPORTING RTU's. ANCHOR TO ALSO BE LOCATED WITHIN 6" OF ANGLE ENDS. APPLY ADHESIVE AND INSTALL ANCHOR IN ACCORDANCE WITH ADHESIVE ANCHOR INSTALLATION NOTES, SHEET S1
6. REFER TO ARCHITECTURAL FOR ALL ROOF FLASHING REQUIREMENTS
7. AT ROOF PURLINS SUPPORTING ROOF UNIT LOADS PROVIDE (4) ¾"ø x0'-8½" A36 ALL-THREAD ROD ANCHORS IN FULLY GROUTED CELLS SPACED AS SHOWN. APPLY ADHESIVE AND INSTALL ANCHOR. REFER TO ADHESIVE ANCHOR INSTALLATION NOTES.
8. CONNECTION CLIP AND BOLTS BY PRE-ENGINEERED METAL BUILDING SUPPLIER
9. REFER TO DETAIL 7/S5.2 FOR CONNECTION OF WIND BEAM TO MASONRY. SEE PEMB DRAWINGS FOR WIND BEAM INFORMATION.
10. PRE-ENGINEERED METAL BUILDING WIND BEAM AND BRACING. SEE P.E.M.B. SHOP DRAWINGS. FIELD DRILL HOLES IN WIND BEAM TO MATCH CLIP LOCATIONS.
11. ANCHOR WIND BEAM TO WALL BY DRILLING ⅞"ø x0'-6½" DEEP HOLES INTO MASONRY FOR (2) ¾"ø x0'-8½" A36 ALL-THREAD RODS IN FULLY GROUTED CELLS. APPLY ADHESIVE AND INSTALL ANCHORS PER ADHESIVE ANCHOR INSTALLATION NOTES.
12. DRILL ⅝"ø x0'-4¼" DEEP HOLES INTO MASONRY FOR (1) ½"ø x0'-5½" A36 ALL-THREAD ROD IN FULLY GROUTED CELLS. APPLY ADHESIVE AND INSTALL ANCHORS. REFER TO ADHESIVE ANCHOR INSTALLATION NOTES.
13. BOLTS BY PRE-ENGINEERED METAL BUILDING SUPPLIER
14. L 6"x4"x½" STRUT ANGLE. ANCHOR TO WALL BY DRILLING ⅞"ø x0'-6½" DEEP HOLES INTO MASONRY FOR (4) ¾"ø x0'-8½" A36 ALL-THREAD RODS (AS SHOWN IN DETAIL 6/S5.2) IN FULLY GROUTED CELLS. APPLY ADHESIVE AND INSTALL ANCHORS. REFER TO ADHESIVE ANCHOR INSTALLATION NOTES. NOTE: CONTROL JOINTS MUST NOT BE LOCATED WITHIN 4" OF STRUT ANGLE ANCHORS.
15. REFER TO ARCHITECTURAL DRAWINGS FOR EXTERIOR WALL SHEATHING. WALL SHEATHING SHALL BE ATTACHED TO EACH STUD AS PER SHEATHING MANUFACTURER'S REQUIREMENTS FOR WIND PRESSURES INDICATED ON SHEET S1. MINIMUM ATTACHMENT REQUIREMENT TO BE #8 CORROSION-RESISTANT (1" LONG) SCREWS @ 8" O.C. AT PERIMETER OF SHEETS AND AT 8" O.C. IN THE INTERIOR FIELD.
16. 16 ga SIMPSON FCB43.5 CONNECTOR W/ (4) #12-14 SCREWS TO STUDS AND (2) #12-24 TO MIN. 3/16" THICK STEEL
17. 6"x16 ga. METAL STUDS (600S162-54) @ 24" O.C.
18. 8"x16 ga. METAL STUDS (800S162-54) @ 24" O.C.
19. PRE-ENGINEERED METAL BUILDING BRACING. SEE P.E.M.B. SHOP DRAWINGS. FIELD DRILL HOLES IN STUDS FOR ½"ø BOLTED CONNECTIONS
20. CONNECT STUDS TOGETHER WITH #12 SCREWS @ 12" O.C.
21. EXTERIOR INSULATION FINISH SYSTEM, REFER TO ARCHITECTURAL
22. L 6"x4"x½" STRUT ANGLE. ANCHOR TO WALL BY DRILLING ⅜"ø x0'-6½" DEEP HOLES INTO MASONRY FOR (4) ¾"ø x0'-8½" A36 ALL-THREAD RODS (AS SHOWN IN DETAIL 5/S5.2) IN FULLY GROUTED CELLS. ANCHORS SHALL NOT BE LOCATED WITHIN 1½" OF ANY MASONRY HEAD JOINTS. ANCHOR SPACING MAY BE ADJUSTED 2"± TO AVOID HEAD JOINTS. APPLY ADHESIVE AND INSTALL ANCHORS. REFER TO ADHESIVE ANCHOR INSTALLATION NOTES. NOTE: CONTROL JOINTS MUST NOT BE LOCATED WITHIN 4" OF STRUT ANGLE ANCHORS.
23. CONNECTION PLATE BY PEMB. FIELD WELD METAL SHIMS TO WIND BEAM AS SHOWN. SHIMS TO BE PROVIDED BY CONTRACTOR.
24. PRE-ENGINEERED METAL BUILDING WIND BEAM SEE P.E.M.B. SHOP DRAWINGS FOR LOCATION
25. 8"± (CENTERED UPON PURLIN) ANCHORS SHALL NOT BE LOCATED WITHIN 1½" OF ANY MASONRY HEAD JOINTS. ANCHOR SPACING MAY BE ADJUSTED 2"± TO AVOID HEAD JOINTS
26. NO ANCHOR SHALL BE LOCATED WITHIN 1½" OF ANY MASONRY HEAD JOINTS. (TYPICAL ALL ANCHOR LOCATIONS)
27. CONTINUOUS ¼" THICK BENT PLATE, FIELD WELD TO WIND BEAM ⌐ 13/8
28. METAL STUDS, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION
29. CONTINUOUS ¼" THICK BENT PLATE ⌐ 8/8
30. CONTINUOUS ¼" THICK BENT PLATE @ 48" O.C. (MINIMUM 3 PLATES) ⌐ 8/8

## MASONRY NOTES

1. IN ALL CASES, THREADED ROD ANCHORS ARE TO BE INSTALLED IN GROUTED CELLS.
2. SOLIDLY GROUT ALL CELLS & COURSES FROM BOND BEAM AT ELEVATION 112'-0" TO TOP OF WALL.
3. FILL ALL CELLS FULL HEIGHT FROM SLAB TO PARAPET 4'-8" EACH DIRECTION FROM CORNER TO ALLOW FOR METAL BUILDING CONNECTIONS. SEE FRAMING PLAN SHEET S4 FOR MORE INFORMATION.
4. ANCHORS SHALL NOT BE LOCATED WITHIN 1½" OF ANY MASONRY HEAD JOINTS. ANCHOR SPACING MAY BE ADJUSTED 2"± TO AVOID HEAD JOINTS.

AARON D. SMITH LICENSE No. 78886 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DATE: JUNE 15, 2018

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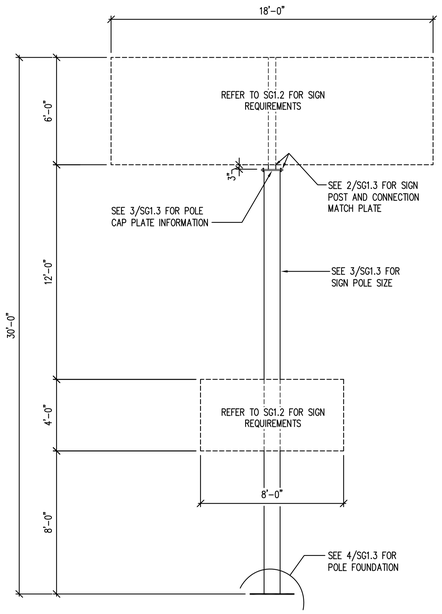
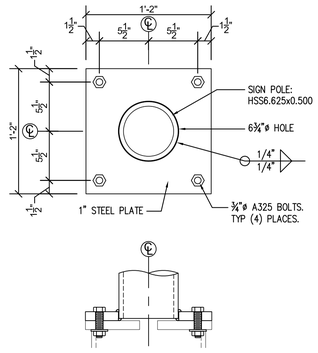


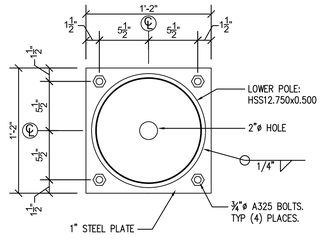

## 1 GROUND SIGN ELEVATION

SG1.3 SCALE: 1/4" = 1'-0" (SEE SITE PLAN FOR LOCATION)



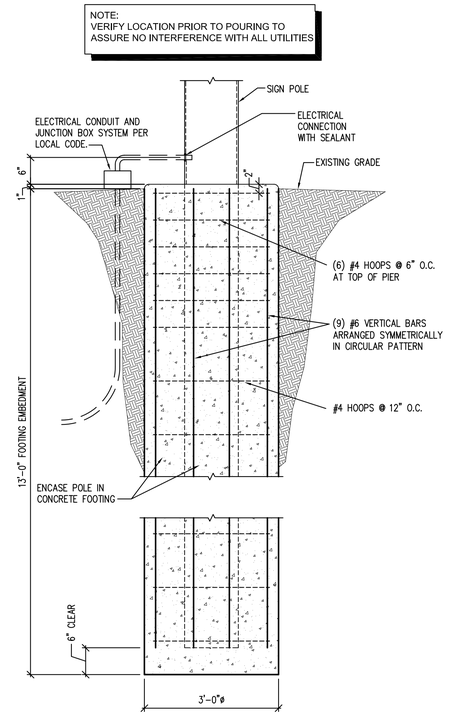

## 2 SIGN MATCH PLATE

SG1.3 SCALE: 1 1/2" = 1'-0"




## 3 POLE CAP PLATE

SG1.3 SCALE: 1 1/2" = 1'-0"




## 4 POLE FOUNDATION SECTION

SG1.3 SCALE: 3/4" = 1'-0"

# GENERAL NOTES

A. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.

B. CONTACT OWNER'S OR TENANT'S DESIGNATED PROJECT ADMINISTRATOR FOR QUESTIONS OR CLARIFICATIONS.

C. SITE SIGN FOUNDATIONS AND ROUGH-IN ELECTRICAL TO BE PROVIDED BY CONTRACTOR.

D. REQUIRED GOVERNMENTAL PERMITS FOR PERMANENT TYPE SIGNAGE TO BE PROVIDED BY OWNER OR OTHERS (N.I.C.).

# DESIGN CRITERIA

A. GOVERNING BUILDING CODE
2017 FLORIDA BUILDING CODE (2015 IBC)

B. WIND CRITERIA:
B.1. RISK CATEGORY II
B.2. $V_{ULT}$ = 140 mph
B.3. $V_{ASD}$ = 108.4 mph
B.4. EXPOSURE "C"

C. SEISMIC CRITERIA:
C.1. SITE CLASS = E
C.2. SDC = B
C.3. $S_S$ = 0.078
C.4. $S_1$ = 0.041
C.5. $S_{DS}$ = 0.130
C.6. $S_{D1}$ = 0.096

# STRUCTURAL NOTES

A. A GEOTECHNICAL ANALYSIS HAS BEEN PERFORMED ON THIS SITE. SEE PROJECT MANUAL FOR GEOTECHNICAL INFORMATION. APPROPRIATE RECOMMENDATIONS STATED IN THE GEOTECHNICAL REPORT ISSUED BY UNIVERSAL ENGINEERING SCIENCES DATED FEBRUARY 27, 2018 SHALL BE FOLLOWED.

B. THESE FOUNDATIONS HAVE BEEN DESIGNED FOR A VERTICAL SOIL BEARING OF 2000 psf AND LATERAL BEARING OF 250 psf/ft.

C. ALL READY MIX CONCRETE SHALL BE 4000 psi FOR ALL CONCRETE PLACEMENT. DO NOT ADD WATER TO THE MIX DESIGN AFTER DELIVERY TO THE PROJECT SITE.

D. EXPOSED EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED (TOTAL AIR CONTENT = 5%).

E. HOT OR COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305-89 AND ACI 306-1-90, RESPECTIVELY.

F. ANY CONCRETE PLACED BY MEANS OF PUMPING SHALL BE DONE IN ACCORDANCE WITH ACI 304.2R (82).

G. CEMENT SHALL CONFORM TO A.S.T.M. C-150 TYPE I/II.

H. AGGREGATES SHALL CONFORM TO A.S.T.M. C-33 FOR NORMAL WEIGHT CONCRETE.

I. READY MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH A.S.T.M. C-94.

J. ADMIXTURES MAY BE USED WITH THE APPROVAL OF THE STRUCTURAL ENGINEER. ADMIXTURES USED TO INCREASE THE WORKABILITY OF THE CONCRETE SHALL NOT BE CONSIDERED TO REDUCE THE CEMENT CONTENT. NO CALCIUM CHLORIDE ADMIXTURES ALLOWED.

K. FABRICATOR QUALIFICATIONS: FABRICATOR MUST PARTICIPATE IN THE AISC QUALITY CONTROL PROGRAM AND BE DESIGNATED AN AISC-CERTIFIED PLANT.

L. MATERIALS:
- STRUCTURAL STEEL..... ASTM A992, GRADE 50ksi
- PLATES, ANGLES, AND MISC STEEL..... ASTM A36ksi
- ANCHOR RODS..... ASTM F1554, GRADE 36
- HIGH STRENGTH BOLTS ..... ASTM A325 (OF NORTH AMERICAN MANUFACTURE)
- WELDING ELECTRODES..... AWS A5.1 (E70XX)
- PIPE..... ASTM A53, GRADE B
- ROUND HSS..... ASTM A500, GRADE B, Fy = 42ksi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