DESIGN CRITERIA:

APPLICABLE CODES, REGULATIONS & STANDARDS:

- 1. THE 2023 FLORIDA BUILDING CODE 8TH EDITION, SPECIFICALLY
- CHAPTER 16 STRUCTURAL DESIGN, CH. 20 ALUMINUM & CH. 23 WOOD 2. AA ASM 35 & SPECIFICATIONS FOR ALUMINUM STRUCTURES,
- PART 1-A OF THE ALUMINUM DESIGN MANUAL PREPARED BY THE ALUMINUM ASSOCIATION, INC. WASHINGTON D.C. 2005 ED.
- 3. ASCE 7-22 & SEI 7
- 4. NDS NATIONAL DESIGN SPECIFICATION FOR WOOD. 5. ACI318 CONCRETE REFERENCE MANUAL.

WIND LOADS:

- 1. BUILDING OCCUPANCY CATEGORY, PARAGRAPH 1604.5 & TABLE 1604.5: RISK CATEGORY: I
- 2. BASIC WIND SPEED, TABLE 1609C, STATE OF FLORIDA DEBRIS REGION & BASIC WIND SPEED. PARAGRAPH 1609.3.1 & TABLE 1609.3.1 EQUIVALENT BASIC WIND SPEED:
- MPH EXPOSURE CATEGORY, PARAGRAPH 1609.4.3:
- 3. WIND LOADS PER FBC TABLE 2002.4 (MWFRS)
- VULT = 110 MPH & EXPOSURE = C

FOR 20 X 20 X 0.013" MESH SCREEN

HORIZONTAL PRESSURES ON WINDWARD SURFACES = 21 PSF 16 PSF HORIZONTAL PRESSURES ON LEEWARD SURFACES = VERTICAL PRESSURES ON SCREEN SURFACES = 7 PSF VERTICAL PRESSURES ON SOLID SURFACES = 21 PSF

FOR 18 X 14 X 0.013" MESH SCREEN, APPLIED FACTOR = FOR ALLOWABLE STRESS DESIGN, APPLIED FACTOR =

FOUNDATION DESIGN:

- 1. PROPOSED 8"X8" MONOLITHIC FOOTER W/ (1) #5 REBAR CONT.
- + 4" SLAB 3000 PSI CONCRETE (MIN.) W/ FIBERMESH

- 1. SCREENED ENCLOSURES CONTAINING SWIMMING POOLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF FBC R4501.17 RESIDENTIAL SWIMMING BARRIER REQUIREMENTS
- 2. ALUMINUM ADDITIONS ARE NOT TO BE INSTALLED ON A MANUFACTURED HOME, TRAILER HOME, OR PRE-FAB HOME IF THE EXISTING STRUCTURE IS ONE OF THESE, A SEPARATE 4TH WALL SUPPORT SYSTEM IS SO TO BE ENGINEERED SO THAT NO ADDITIONAL LOADING IS PLACED ON THE MANUFACTURED HOME. 3. THE ENGINEERING ON THESE PLANS IS SITE SPECIFIC FOR (1)
- STRUCTURE ONLY AT THE PROVIDED ADDRESS(ES).

FASTENER SPECIFICATIONS:

- 1. FASTENERS ARE REQUIRED TO BE SAE GRADE 2 OR BETTER ZINC PLATED. (CONCRETE ANCHORS ARE TO BE 410 S.S. TAPCONS OR BETTER, INSTALLED TO MFG. SPECIFICATIONS)
- 2. WHERE WOOD DECK IS PRESENT USE 1/4" X 3-1/2" GALV. LAG SCREWS IN LIEU OF MASONRY ANCHORS. UNLESS OTHERWISE
- 3. FOR 1" X 2" NON-STRUCTURAL MEMBERS ATTACHED TO HOST a.) FOR MASONRY/CONCRETE APPLICATION USE GALVANIZED 1/4" X 2-3/4" TAPCONS 6" FROM ENDS & 24" CENTER TO CENTER. b.) FOR WOOD APPLICATION USE #14 X 2-3/4" WOOD SCREW AT 6" FROM ENDS & 24" CENTER TO CENETER.
- c.) FOR ALUMINUM APPLICATION USE #10 X 1-1/2" SMS OR TEK 6" FROM ENDS & 24" CENTER TO CENETER.
- d.) WHERE 1" X 2" INSTALLED THROUGHOUT AN "OPEN VIEW" SPACING SHALL BE REDUCED TO 6" FROM ENDS & 18" C.C.

RESPONSIBILITIES:

- 1. ALL SITE WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH APPLICABLE BUILDING CODES, LOCAL ORDANANCES, AND THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
- 2. FOR FASTENERS WHICH ARE NOT VISIBLE AFTER INSTALLATION, THE CONTRACTOR SHALL VERIFY AND ENSURE INSTALLATION HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND IN ACCORDANCE WITH THE ATTACHED DETAILS.
- 3. CONTRACTOR TO PROVIDE NOA'S & INSTALL ALL MATERIALS AS PER MANUFACTURER'S SPECIFICATIONS.
- 4. INTEGRITY OF EXISTING/ HOST STRUCTURE SHALL NOT BE COMPROMISED WITH THE ATTACHMENT OF THE PROPOSED STRUCTURE.
- 5. IT IS THE OWNERS RESPONSIBILITY TO MAINTAIN THE SCREENS & FASTENERS TO MANUFACTURER'S SPECIFICATIONS.
- 6. METAL WITHIN 5FT OF THE WATERS EDGE REQUIRE A CONTINIOUS BOND PER NEC NFPA 70: NATIONAL ELECTRIC CODE 680.43(D)(4): ALL METAL SURFACES THAT ARE WITHIN 1.5M (5FT) OF THE INSIDE WALLS OF THE SPA OR HOT TUB AND THAT ARE NOT SEPERATED FROM THE SPA OR HOT TUB AREA BY A PERMANENT BARRIER SHALL BE BONDED TOGETHER

ALUMINUM SPECIFICATIONS:

- 1. ALUMINUM EXTRUSIONS SHALL BE 6005 T5 ALLOY UNLESS OTHERWISE NOTED.
- 2. ALL SELF MATING BEAM SECTIONS ARE TO BE STITCHED WITH EITHER #12-14 X 1" SMS 6" FROM ENDS & 24" o/c
- 3. ROOF BRACING SHALL BE A MINIMUM 2" X 3" X .050"
- 4. THE MINIMUM NORMAL THICKNESS OF PROTECTOR PANELS (KICKPLATES) SHALL BE AN INDUSTRY STANDARD OF 0.024 INCHES
- 5. SCREEN MATERIAL SHALL BE 18/14 SCREEN UNLESS APPROVED BY FLORIDA ENGINEERING LLC.
- 6. 1" X 2" & 1" X 3" ARE NON-STRUCTURAL MEMBERS MAY BE USED INTERCHANGEABLY.
- 7. DOOR LOCATION MAY BE DETERMINED/ RELOCATED BY CONTRACTOR IN THE FIELD. NOT TO AFFECT DESIGN SPANS AND STRUCTURAL MEMBERS SHOWN

CONCRETE SPECIFICATIONS:

- THE FOLLOWING SPECIFICATIONS ARE APPLICABLE TO THIS PROJECT: 1. WHERE CONCRETE SPECIFICATIONS ARE REQUIRED, WHETHER IN THE SCREEN ENCLOSURE SCOPE OR NOT, BY ONE OR MORE REGULATORY AGENCIES, THE FOLLOWING SPECIFICATIONS ARE APPLICABLE:
- a.) CONCRETE SHALL CONFORM TO ASTM C94 FOR THE FÓLLOWING COMPONENTS:
- i. PORTLAND CEMENT TYPE 1 ASTM C 150
- ii AGGREGATES LARGE AGGREGATE 3/4 MAX. ASTM C 33
- iii. AIR ENTRAINING +/- 1 % ASTM C 260
- iv. WATER REDUCING AGENT ASTM C 494
- v. CLEAN POTABLE WATER
- vi. OTHER ADMIXTURES NOT PERMITTED
 b.) METAL ACCESSORIES SHALL CONFORM TO:
- i. REINFORCING BARS ASTM A615, GRADE 60
- ii. WELDED WIRE FABRIC ASTM A185
- c.) CONCRETE SLUMP AT DISCHARGE CHUTE NOT LESS THAN 3" OR MORE THAN 5". WATER ADDED AFTER BATCHING IS NOT PERMITTED
- d.) PREPARE & PLACE CONCRETE PER AMERICAN CONCRETE INSTITUTE MANUAL OF STANDARD PRACTICE, PART 1, 2, & 3
- INCLUDING HOT WEATHER RECOMMENDATIONS. e.) MOIST CURE OR POLYETHYLENE CURING PERMITTED
- f.) PRIOR TO PLACING CONCRETE, TREAT THE ENTIRE SUBSURFACE
- AREA FOR TERMITES IN COMPLIANCE WITH THE FBC. g.) CONCRETE SLABS SHALL BE PLACED OVER A 6 MIL. POLYETHYLENE
- 2. WHEN PAVERS ARE UNDER ALUMINUM MEMBERS, CONTRACTOR
- SHALL EPOXY TO DECK OR GROUT TO DECK w/ 3000 PSI GROUT WITH BONDING AGENT
- 6. MINIMUM CONCRETE STRENGTH 3000 PSI UNLESS OTHERWISE NOTED

MASONRY SPECIFICATIONS:

- 1. CONCRETE MASONRY UNITS (CMU) SHALL BE STANDARD HOLLOW UNITS AND SHALL BE 1900 PSI MINIMUM BASED ON TYPE M OR S MORTAR.
- 2. ALL MORTAR SHALL BE TYPE M OR S.
- 3. ALL GROUT SHALL BE 1800 PSI MINIMUM AND HAVE MAXIMUM COARSE AGGREGATE SIZE OF 3/8".
- 4. PROVIDE CLEAN-OUTS FOR REINFORCED CELLS CONTAINING REINFORCEMENT WHEN GROUT POUR EXCEEDS 5'-0" IN

FOOTER SPECIFICATIONS:

- 1. PROVIDE 1-1/2" COVERAGE TOP, SIDES, BOTTOM AND 1" BETWEEN ADJACENT REBAR LAPS.
- 2. PROVIDE MIN. 3" COVERAGE OF REBAR FOR ALL CONCRETE IN CONTACT WITH THE EARTH.
- 3. FOOTING CONCRETE SHALL BE MIN. 3000 PSI AT 28 DAYS
- 4. FOOTING REINFORCEMENT SHALL BE MIN. GRADE 60
- 5. MINIMUM REBAR LAP SPLICE (40d) d= DIAMETER OF REBAR 6. PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURE TO
- CITY / CO. REQUIREMENTS 7. PROVIDE 2000 PSF BEARING (TYPICAL) UNDER FOUNDATION

DETAIL "A" MEMBER DIMENSIONS

HOLLOW SECTIONS

2 x 2: 2" x 2" x 0.050" 2 x 3: 2" x 3" x 0.050" 2 x 4: 2" x 4" x 0.050"

2 x 5: 2" x 5" x 0.050"

OPEN BACK SECTIONS

1 x 2: 1" x 2" x 0.044" 1 x 3: 1" x 3" x 0.045"

SNAP SECTIONS

2 x 2 SNAP: 2" x 2" x 0.045" 2 x 3 SNAP: 2" x 3" x 0.050' 2 x 4 SNAP: 2" x 4" x 0.045"

SELF MATING (SMB)

2 x 4 SMB: 2" x 4" x 0.046" x 0.100" 2 x 5 SMB: 2" x 5" x 0.050" x 0.116" 2 x 6 SMB: 2" x 6" x 0.050" x 0.120" 2 x 7 SMB: 2" x 7" x 0.055" x 0.120" 2 x 8 SMB: 2" x 8" x 0.072" x 0.224" 2 x 9 SMB: 2" x 9" x 0.072" x 0.224" 2 x 9(H) SMB: 2" x 9" x 0.082" x 0.306" 2 x 10 SMB: 2" x 10" x 0.092" x 0.374"

MEMBER SELF-WEIGHT

300 LB. VERT. LOAD

200 LB. VERT. LOAD

20 PSF

ALL MAY NOT APPLY

DESIGN LOADS:

1. DEAD LOADS =

a. PRIMARY MEMBERS =

c. SCREEN ROOF =

d. SOLID ROOF =

b. SECONDARY MEMBERS =

2. LIVE LOADS

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SHEET NO. DRAWING INDEX S/01 **GENERAL NOTES** S/02 PLAN/ ELEVATIONS S/03 **DETAILS** S/04 DETAILS S/05 FOUNDATION PLAN

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S P CRONIN ENTERPRISES, 4887 N US HWY 441 LAKE CITY FL 32055

KETCHER 173 SW MILKWEED CT LAKE CITY FLORIDA, 32024 PROJECT ADDRESS

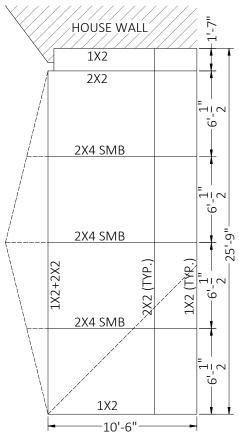
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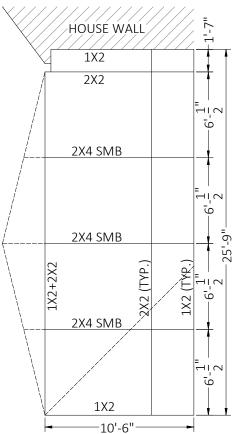
PROPOSED HIP SCREEN ENCLOSURE PLAN/ ELEVATIONS SCALE: NTS

HATCH/ SYMBOL LEGEND HATCH

EXIST. STRUCTURE NOTE: ALL MAY NOT APPLY

FOUNDATION NOTES:
PROPOSED 8"X8" DEEP MONOLITHIC FOOTER
W/ (1) #5 REBAR CONT. W/ 4" SLAB 3000 PSI CONC. (MIN.)





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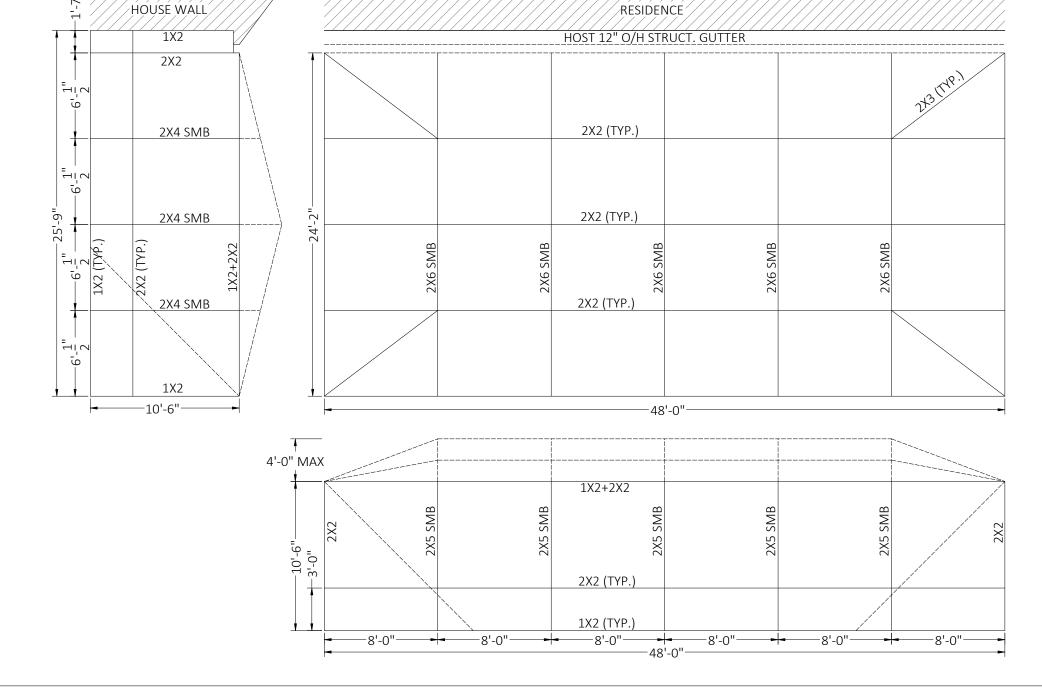
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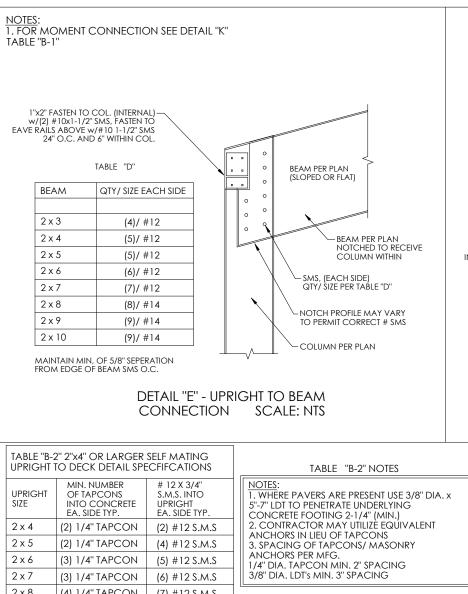
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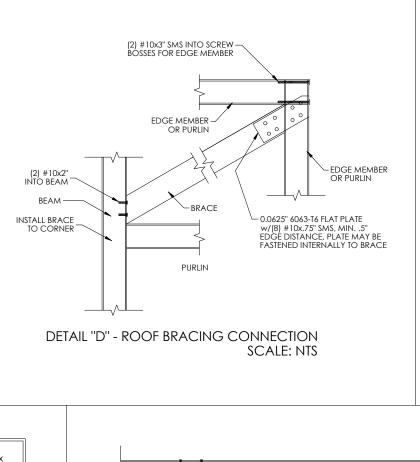
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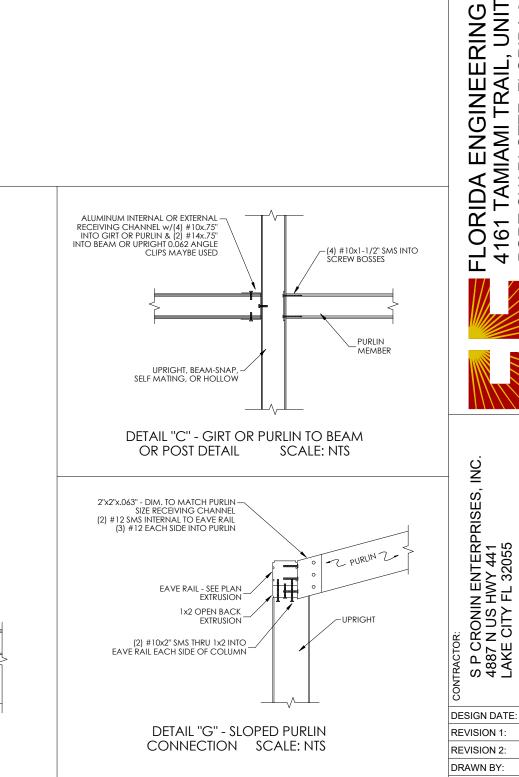
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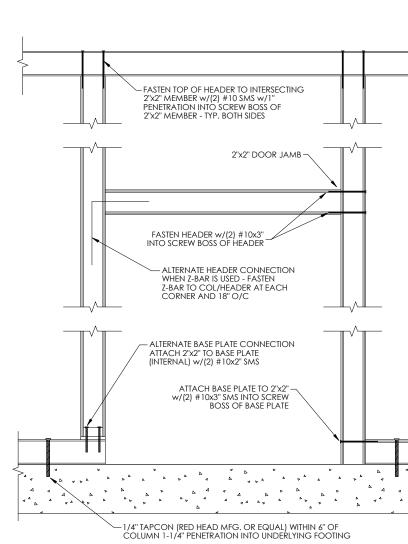
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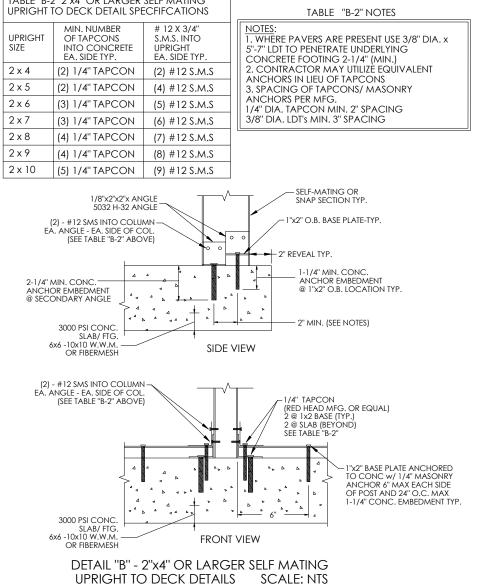
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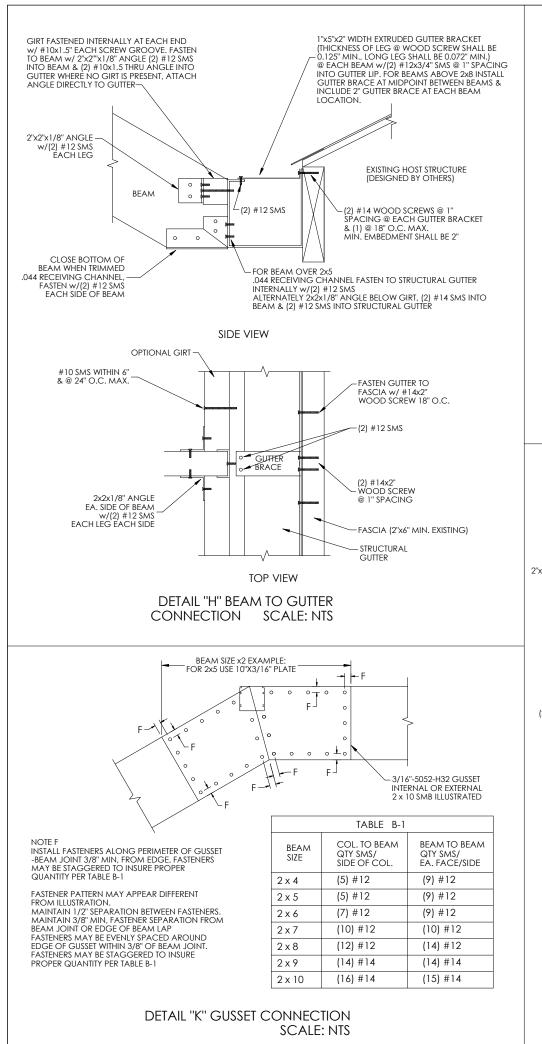


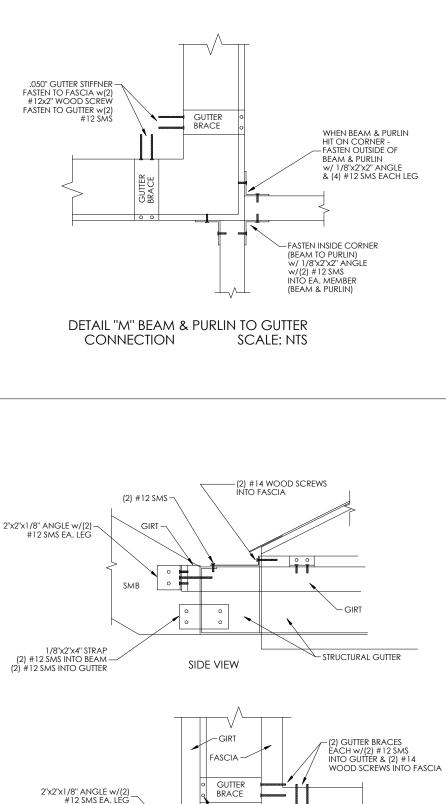
DETAIL "F" - DOOR JAMB & HEADER

SCALE: NTS

CONNECTION







-(2) #12 SMS

SCALE: NTS

STRUCTURAL GUTTER

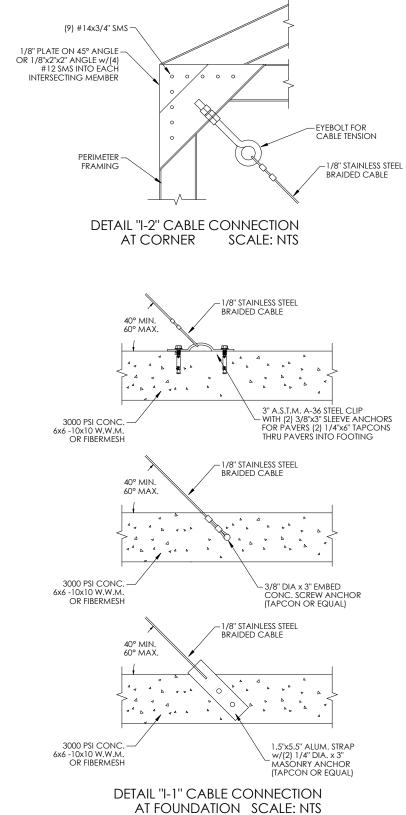
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DETAIL "L" CORNER CONNECTION

TOP VIEW

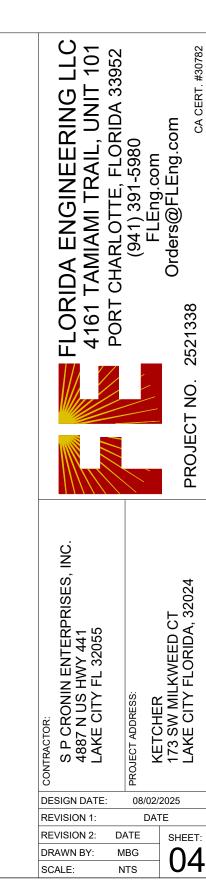
SMB

1/8"x2"x4" STRAP (2) #12 SMS INTO BEAM — (2) #12 SMS INTO GUTTER

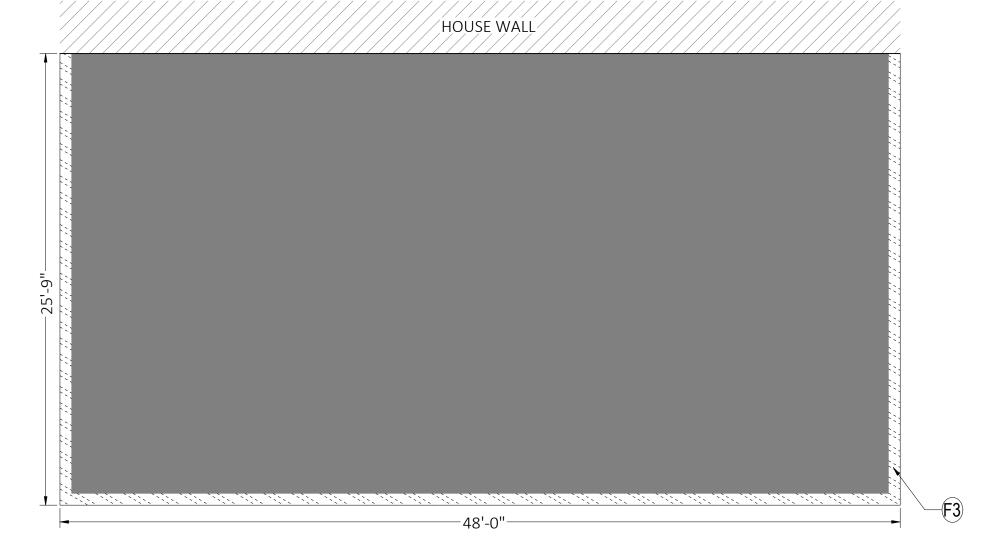


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FOUNDATION PLAN SCALE: NTS



HATCH/ SYMBOL LEGEND HATCH **INDICATES** EXIST. STRUCTURE NEW FOOTING **NEW SLAB AREA**

NOTE: ALL MAY NOT APPLY

FOOTER SCHEDULE	
MARK	DESCRIPTION
(F1)	8" X 8" DEEP RIBBON FOOTER W/ (1) #5 REBAR. CONT. (25" MIN. LAP)
(F2)	12" X 12" DEEP RIBBON FOOTER W/ (2) #5 REBAR. CONT. (25" MIN. LAP)
F3	8" X 8" DEEP MONO. FOOTER W/ (1) #5 REBAR. CONT. (25" MIN. LAP)
(F4)	12" X 12" DEEP MONO. FOOTER W/ (2) #5 REBAR. CONT. (25" MIN. LAP)



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