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: 110
   MPH EXPOSURE CATEGORY, PARAGRAPH 1609.4.3: C
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
HORIZONTAL PRESSURES ON LEEWARD SURFACES =	16 PSF
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 =	.88
FOR ALLOWABLE STRESS DESIGN, APPLIED FACTOR =	.6

FOUNDATION DESIGN:

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

MISCELLANEOUS:

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 SPECIFIED.
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 FOLLOWING 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 VAPOR BARRIER.
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 HEIGHT.

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"

ALL MAY NOT APPLY

DESIGN LOADS:	
1. DEAD LOADS =	MEMBER SELF-WEIGHT
2. LIVE LOADS	
a. PRIMARY MEMBERS =	300 LB. VERT. LOAD
b. SECONDARY MEMBERS =	200 LB. VERT. LOAD
c. SCREEN ROOF =	5 PSF
d. SOLID ROOF =	20 PSF

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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RICHARD EDWARD WALKER LICENSE No. 61240 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Columbia County Building Department
Plans Reviewed for Code Compliance
State of Florida

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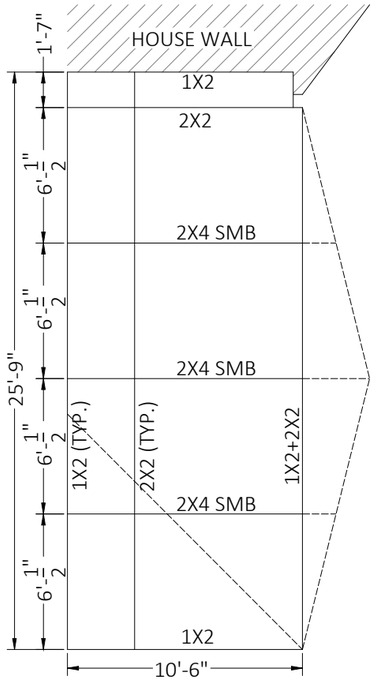
PROJECT NO. 2521338

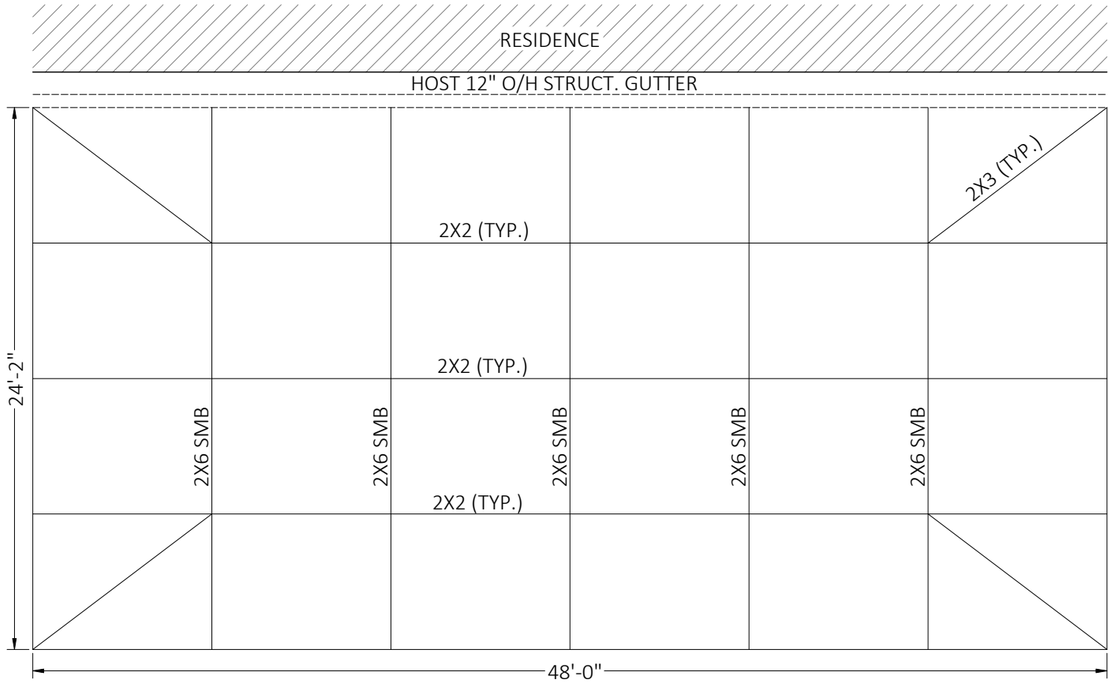
CONTRACTOR:
S P CRONIN ENTERPRISES, INC.
4887 N US HWY 441
LAKE CITY FL 32055

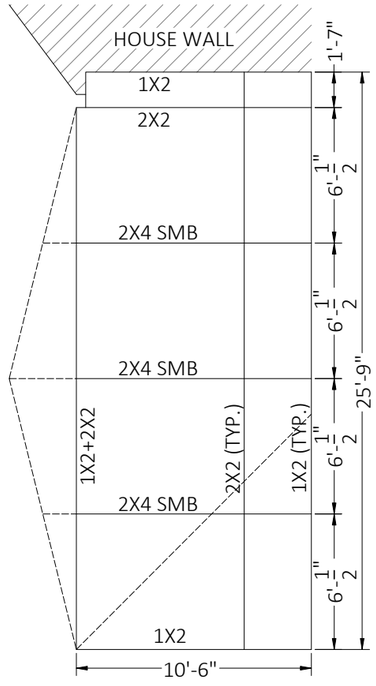
PROJECT ADDRESS:
KETCHER
173 SW MILKWEED CT
LAKE CITY FLORIDA, 32024

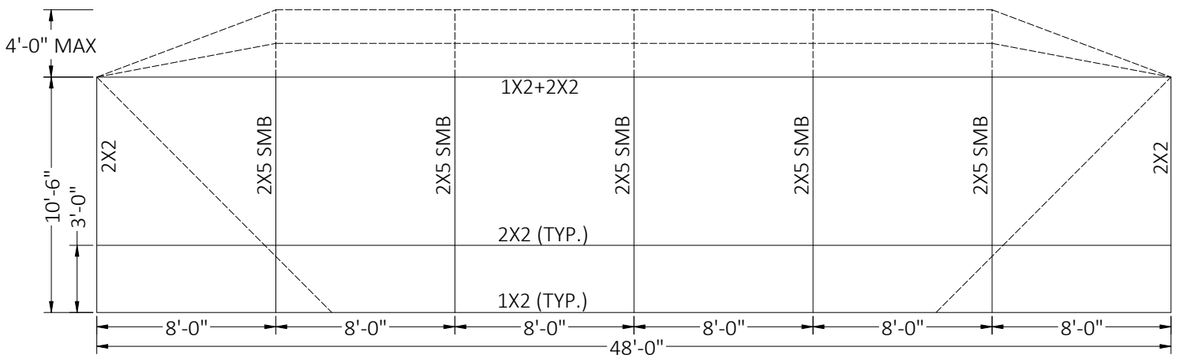
DESIGN DATE:	08/02/2025
REVISION 1:	DATE
REVISION 2:	DATE
DRAWN BY:	MBG
SCALE:	NTS
SHEET:	01

PROPOSED HIP SCREEN ENCLOSURE
PLAN/ ELEVATIONS SCALE: NTS









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Date: 2025.08.05 16:26:46-04'00'

HATCH/ SYMBOL LEGEND

HATCH	INDICATES
	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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NOTES:
1. FOR MOMENT CONNECTION SEE DETAIL "K" TABLE "B-1"

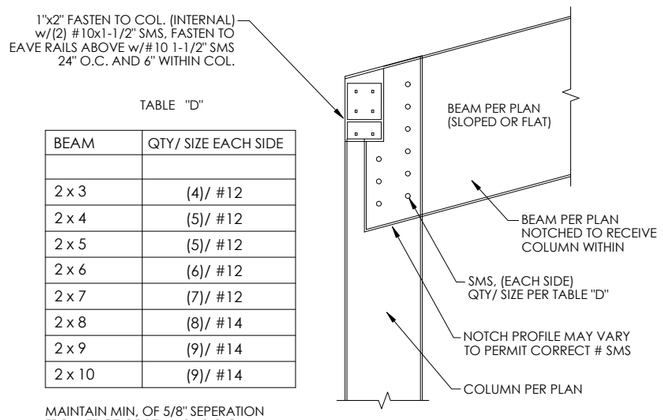
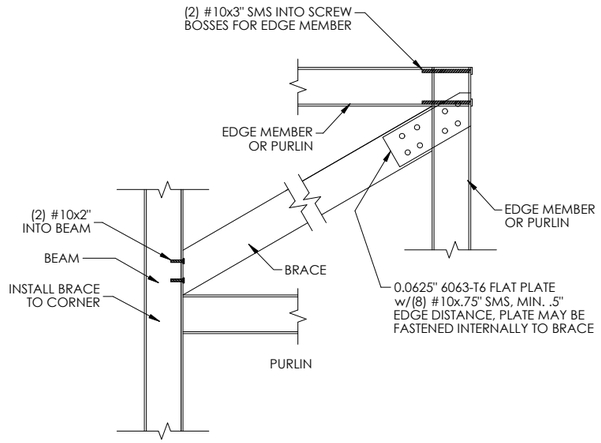


TABLE "D"

BEAM	QTY/ SIZE EACH SIDE
2 x 3	(4)/ #12
2 x 4	(5)/ #12
2 x 5	(5)/ #12
2 x 6	(6)/ #12
2 x 7	(7)/ #12
2 x 8	(8)/ #14
2 x 9	(9)/ #14
2 x 10	(9)/ #14

MAINTAIN MIN. OF 5/8" SEPERATION FROM EDGE OF BEAM SMS O.C.

DETAIL "E" - UPRIGHT TO BEAM CONNECTION SCALE: NTS



DETAIL "D" - ROOF BRACING CONNECTION SCALE: NTS

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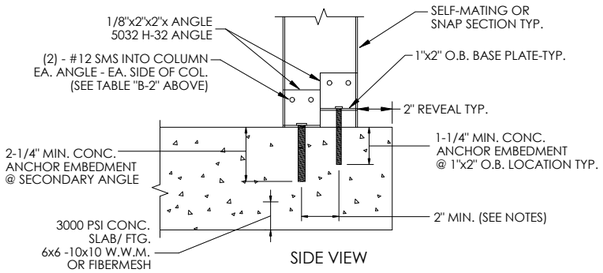
TABLE "B-2" 2"x4" OR LARGER SELF MATING UPRIGHT TO DECK DETAIL SPECFIFCATIONS

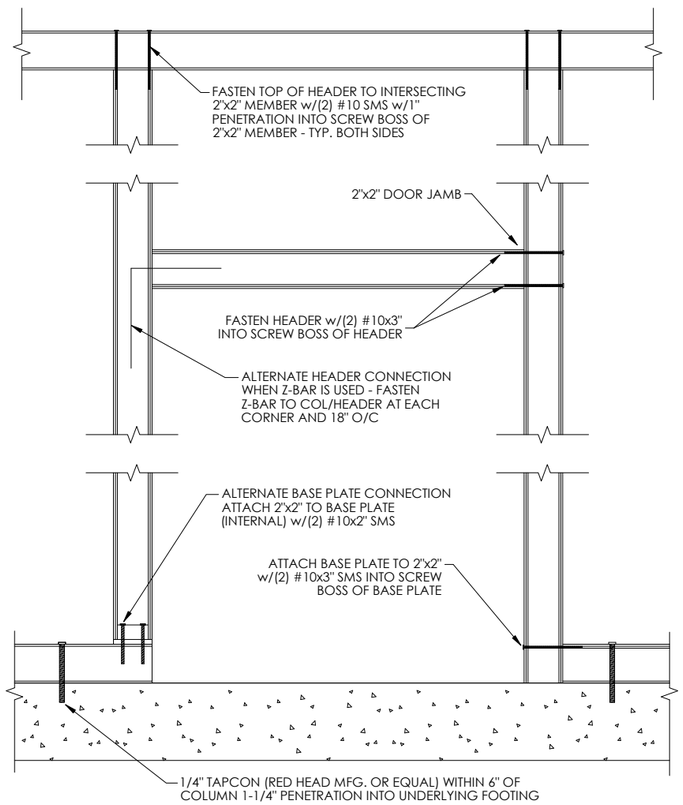
UPRIGHT SIZE	MIN. NUMBER OF TAPCONS INTO CONCRETE EA. SIDE TYP.	# 12 X 3/4" S.M.S. INTO UPRIGHT EA. SIDE TYP.
2 x 4	(2) 1/4" TAPCON	(2) #12 S.M.S
2 x 5	(2) 1/4" TAPCON	(4) #12 S.M.S
2 x 6	(3) 1/4" TAPCON	(5) #12 S.M.S
2 x 7	(3) 1/4" TAPCON	(6) #12 S.M.S
2 x 8	(4) 1/4" TAPCON	(7) #12 S.M.S
2 x 9	(4) 1/4" TAPCON	(8) #12 S.M.S
2 x 10	(5) 1/4" TAPCON	(9) #12 S.M.S

TABLE "B-2" NOTES

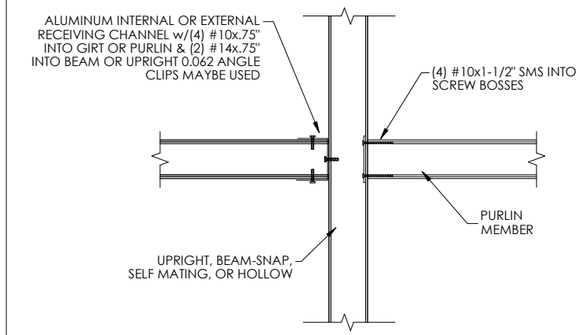
NOTES:
1. WHERE PAVERS ARE PRESENT USE 3/8" DIA. x 5"-7" LDT TO PENETRATE UNDERLYING CONCRETE FOOTING 2-1/4" (MIN.)
2. CONTRACTOR MAY UTILIZE EQUIVALENT ANCHORS IN LIEU OF TAPCONS
3. SPACING OF TAPCONS/ MASONRY ANCHORS PER MFG.
1/4" DIA. TAPCON MIN. 2" SPACING
3/8" DIA. LDT's MIN. 3" SPACING



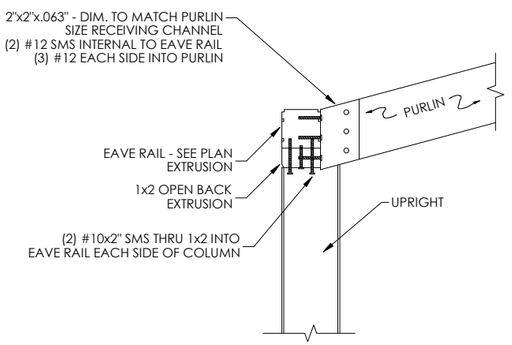
DETAIL "B" - 2"x4" OR LARGER SELF MATING UPRIGHT TO DECK DETAILS SCALE: NTS



DETAIL "F" - DOOR JAMB & HEADER CONNECTION SCALE: NTS



DETAIL "C" - GIRT OR PURLIN TO BEAM OR POST DETAIL SCALE: NTS



DETAIL "G" - SLOPED PURLIN CONNECTION SCALE: NTS

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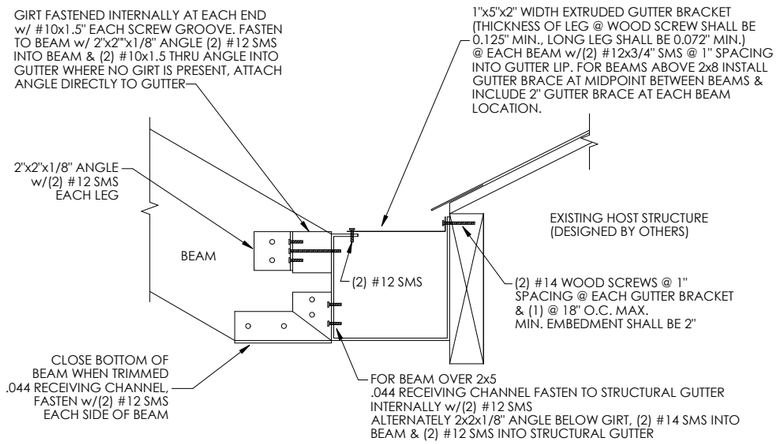
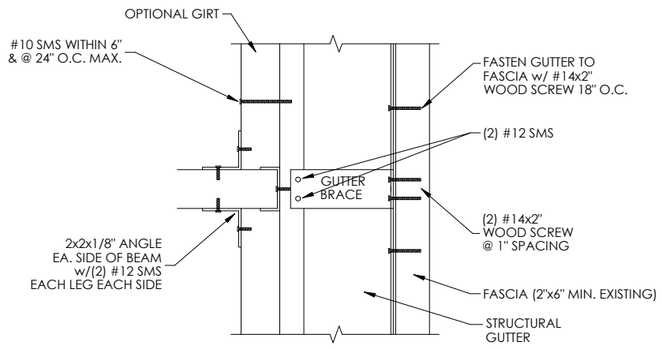
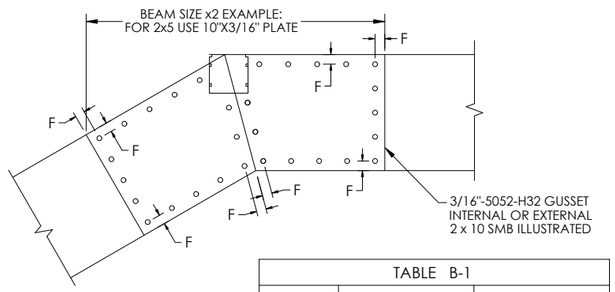


SIDE VIEW



TOP VIEW

DETAIL "H" BEAM TO GUTTER CONNECTION SCALE: NTS



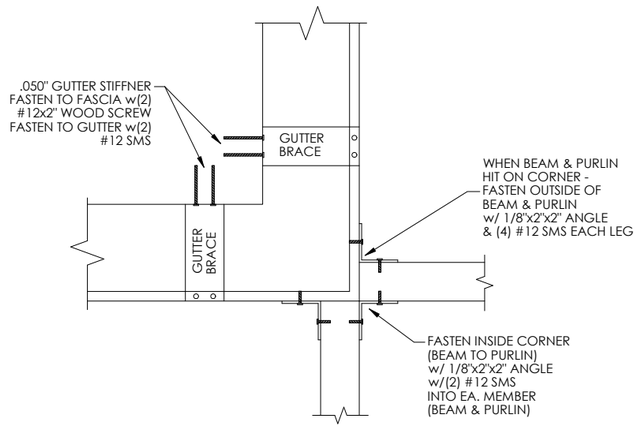
NOTE F
INSTALL FASTENERS ALONG PERIMETER OF GUSSET -BEAM JOINT 3/8" MIN. FROM EDGE. FASTENERS MAY BE STAGGERED TO INSURE PROPER QUANTITY PER TABLE B-1

FASTENER PATTERN MAY APPEAR DIFFERENT FROM ILLUSTRATION.
MAINTAIN 1/2" SEPARATION BETWEEN FASTENERS.
MAINTAIN 3/8" MIN. FASTENER SEPARATION FROM BEAM JOINT OR EDGE OF BEAM LAP
FASTENERS MAY BE EVENLY SPACED AROUND EDGE OF GUSSET WITHIN 3/8" OF BEAM JOINT.
FASTENERS MAY BE STAGGERED TO INSURE PROPER QUANTITY PER TABLE B-1

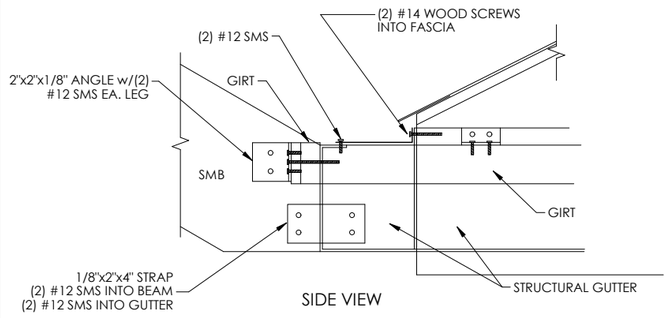
TABLE B-1

BEAM SIZE	COL. TO BEAM QTY SMS/ SIDE OF COL.	BEAM TO BEAM QTY SMS/ EA. FACE/SIDE
2 x 4	(5) #12	(9) #12
2 x 5	(5) #12	(9) #12
2 x 6	(7) #12	(9) #12
2 x 7	(10) #12	(10) #12
2 x 8	(12) #12	(14) #12
2 x 9	(14) #14	(14) #14
2 x 10	(16) #14	(15) #14

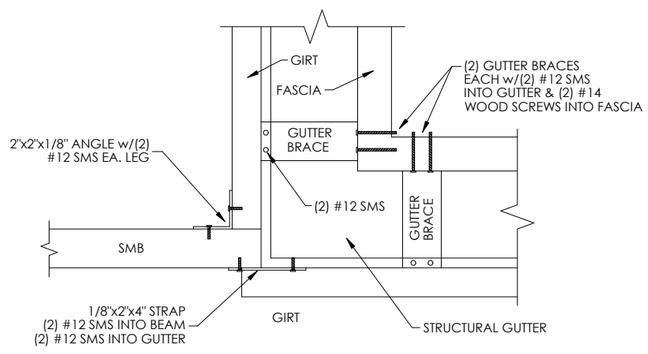
DETAIL "K" GUSSET CONNECTION SCALE: NTS



DETAIL "M" BEAM & PURLIN TO GUTTER CONNECTION SCALE: NTS

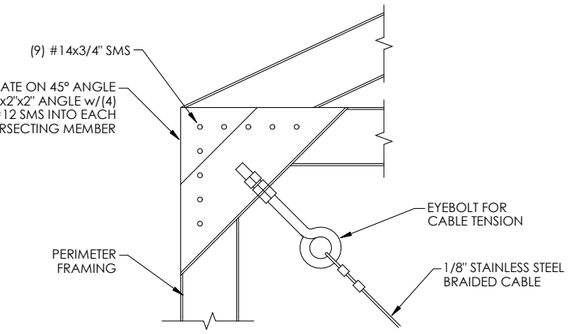


SIDE VIEW

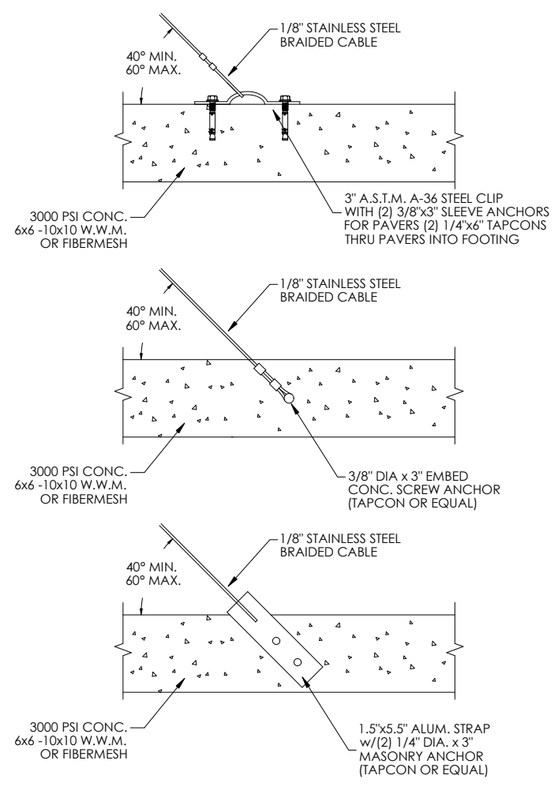


TOP VIEW

DETAIL "L" CORNER CONNECTION SCALE: NTS



DETAIL "I-2" CABLE CONNECTION AT CORNER SCALE: NTS



DETAIL "I-1" CABLE CONNECTION AT FOUNDATION SCALE: NTS

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RICHARD EDWARD WALKER LICENSE No. 61240 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DESIGN DATE:	08/02/2025
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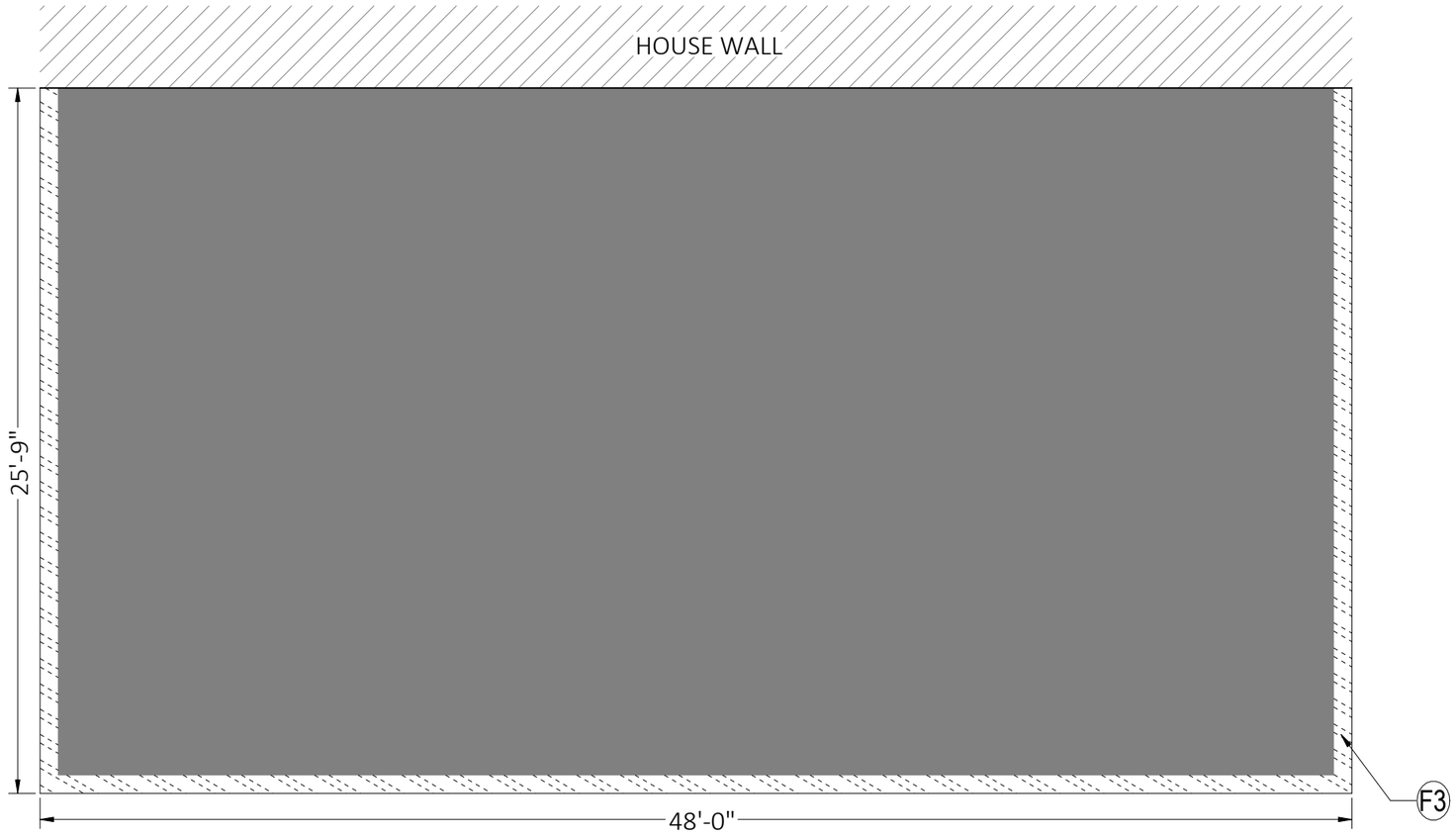
FOUNDATION PLAN
SCALE: NTS



This item has been digitally signed and sealed by Richard E. Walker, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

RICHARD EDWARD WALKER ★ LICENSE ★ No. 61240 ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER

Digitally signed by Richard E Walker
Date: 2025.08.05 16:26:48-04'00'

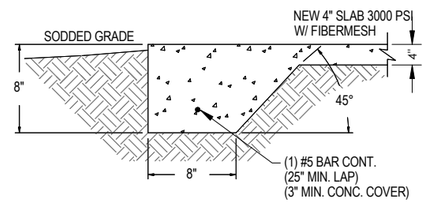
HATCH/ SYMBOL LEGEND

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)



8"x8" MONOLITHIC FOOTING DETAIL
SCALE: NTS

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PROJECT NO. 2521338

CONTRACTOR:
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4887 N US HWY 441
LAKE CITY FL 32055

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

DESIGN DATE:	08/02/2025
REVISION 1:	DATE
REVISION 2:	DATE
DRAWN BY:	MBG
SCALE:	NTS

SHEET: 05