

GENERAL NOTES

1. THE CONTRACTOR AND ALL SUB CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE OWNER OF ANY DISCREPANCY THE CONTRACTOR AND SUBCONTRACTORS SHALL VERIFY DRAWINGS AND DIMENSIONS SHOWN ON THE STRUCTURAL WITH RELATED REQUIREMENTS ON THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND CIVIL DRAWINGS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WITHIN 10 DAYS RECEIPT OF DRAWINGS.
2. FLOOR AND WALL OPENINGS, SLEEVES, VARIATION IN STRUCTURAL SLAB ELEVATIONS, DEPRESSED AREA SAND ALL OTHER ARCHITECTURAL, MECHANICAL, ELECTRICAL AND CIVIL REQUIREMENTS MUST BE COORDINATED BEFORE CONTRACTOR PROCEEDS.
3. IN ALL CASES WHERE A CONFLICT MAY OCCUR SUCH AS BETWEEN ITEMS COVERED BY SPECIFICATIONS AND NOTES ON THE DRAWINGS, OR BETWEEN GENERAL NOTES AND SPECIFIC DETAILS THE OWNER SHALL BE NOTIFIED AND HE WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS.
4. DETAILS NOTED AS TYPICAL SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE.
5. WHERE NO SPECIFIC DETAIL IS SHOWN THE FRAMING OR CONSTRUCTION SHALL BE IDENTICAL SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION ON THIS PROJECT.
6. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF 6TH EDITION (2017) FLORIDA BUILDING CODE.
7. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON STRUCTURAL DRAWINGS.
8. THE PRECISE DIMENSIONS AND LOCATIONS OF DOORS AND WINDOWS OPENINGS SHALL BE DETERMINED FROM ARCHITECTURAL PLANS AND DETAILS COORDINATED WITH OWNERS SELECTIONS AND MANUFACTURERS SPECS OTHER WALL AND FLOOR OPENINGS SHALL BE ALSO REQUIRED BY MECHANICAL, ELECTRICAL OR SIMILAR REQUIREMENTS SHALL BE VERIFIED FROM SHOP DRAWINGS, EQUIPMENT DATA, DIMENSIONS, ETC., AS REQUIRED.

STRUCTURAL NOTES.-

FOUNDATIONS.-
THE FOUNDATIONS ARE DESIGNED FOR ALLOWABLE SOIL BEARING PRESSURE OF 2000 POUNDS PER SQUARE FOOT FILL MATERIAL UP TO FINISH GRADE SHALL BE PLACED WITH MAXIMUM LIFTS OF 12 INCHES. SUBGRADE AND EACH LIFT OF MATERIAL SHALL BE COMPACTED TO 95 PROCTOR DENSITY DETERMINED IN ACCORDANCE WITH ASTM D-1557.

CONCRETE.-
CONCRETE SHALL ACHIEVE A STRENGTH AT 28 DAYS OF 3000 PSI FOR FOOTINGS SLABS ON GRADE, AND GROUTED MASONRY CELLS. TIE BEAMS AND C.I.P. SLABS SHALL BE 40-3000 PSI. CONCRETE SHALL BE A MIX DESIGNED BY A RECOGNIZED TESTING LABORATORY AND SHALL BE PLACED, CURED AND TESTED ACCORDING TO ACI AND ASTM STANDARDS AND SPECIFICATIONS.

FORMWORK AND SHORING.-
STRUCTURAL CONCRETE SHALL NOT BE STRIPPED UNTIL IT HAS REACHED AT LEAST TWO-THIRDS OF THE 28 DAY DESIGN STRENGTH. ERECTION AND REMOVAL OF ALL FORMWORK SHORES AND RESHORES SHALL MEET THE REQUIREMENTS OF THE ACI STANDARDS AND SPECIFICATIONS.

REINFORCING STEEL.-
TO BE ASTM GRADE 60 DEFORMED BARS FREE FROM OIL AND RUST STEEL SHALL BE BENT AND PLACED ACCORDING TO THE ACI STANDARDS AND SPECIFICATIONS. SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION. #5 BARS SHALL BE LAPPED 2'-0" U.N.C.

WELDED WIRE FABRIC (WWF).-
TO CONFORM TO ASTM A-185 FREE FROM OIL AND RUST AND SHALL BE PLACED ACCORDING TO THE ACI STANDARDS AND SPECIFICATIONS. MINIMUM LAP SHALL BE ONE FOOT.

MISC STEEL.-
ALL NEW STEEL TO BE ASTM A-36 STRUCTURAL STEEL, 36 KSI MIN CONNECTIONS PER MIN. CONNECTIONS PER AISC STANDARDS DETAILS. BOLTS TO BE ASTM A307, WELDED TO BE PER AWS SPEC.

MASONRY WALLS.-
8" FOLLOW MASONRY UNITS SHALL MEET ASTM C-90 FOR LOAD BEARING TYPE MASONRY. MORTAR SHALL BE TYPE "M" OR "S" AND MEET C-270. GROUT SHALL BE 3000 PSI FEA GRAVEL CONCRETE AND MEET ASTM C-476. PROVIDE HOOKED DOVELS IN FOOTINGS FOR ALL VERTICAL REINFORCING ABOVE LAP SPICES TO BE A MINIMUM 2'-1". EXTEND VERTICAL REINFORCING INTO HIGHEST CONCRETE BEAM ABOVE. MASONRY BLOCK CELLS AT WALL ENDS, CORNERS, INTERSECTIONS AND ADJACENT TO OPENINGS SHALL BE GROUT FILLED WITH ONE #5 VERTICAL REINFORCING BAR TIE BEAMS SHALL BE POURED AFTER THE MASONRY BLOCK WALLS BELOW ARE IN PLACE CONFINE CONCRETE IN THE TIE BEAMS TO AREA REQUIRED. DO NOT USE SOLID METAL OR FELT CAVITY CAPS. MASONRY WALLS BELOW THE SOIL LINE SHALL HAVE GALVANIZED 9 GAUGE TRUSS TYPE HORIZONTAL JOINT REINFORCEMENT AT EACH COURSING AND WALLS ABOVE THE SOIL LINE SHALL HAVE THE HORIZONTAL JOINT REINFORCING SPACED AT 16" ON CENTER.

PENETRATIONS.-
NO PENETRATIONS OR OPENINGS SHALL BE MADE IN ANY STRUCTURAL MEMBERS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS OR WITHOUT PREVIOUS APPROVAL OF THE ENGINEER

WOOD.-
WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PROTECTED OR PRESSURE TREATED IN ACCORDANCE WITH AITC-109

APPLICABLE CODES

6TH EDITION (2017) FLORIDA BUILDING CODES
6TH EDITION (2017) FLORIDA BUILDING CODE: RESIDENTIAL
2014 NFPA-70 NATIONAL ELECTRICAL CODE

MINIMUM VENT AREA:
ENCLOSED ATTIC AREA: 3,274 SF.
TOTAL NET FREE VENTILATION AREA 1/150 = 3,274 SF. / 150 = 21.83 SF. (3,143 SQ.IN.) REQUIRED ROOF VENTING.
16 IN. FULL VENTED SOFFIT PANELS TO BE INSTALLED = 13.2 SQ.IN. PER L.F.
290 FT. PERIMETER OF THE BUILDING
290 x 13.2 = 3,828 SQ.IN. PROVIDED.

PROJECT INFORMATION

ALLOWED

- OCCUPANCY/ CLASSIFICATION
- TYPE OF CONSTRUCTION:
- BUILDING AREA:
- HEIGHT OF BUILDING:
- BUILDING HEIGHT IN STORIES:
- FLOOD ZONE:
- DESIGN CRITERIA -
BASIC WIND SPEED:
WIND IMPORTANCE FACTOR (I_w):
BUILDING CATEGORY:
EXPOSURE CATEGORY:

PROVIDED

RESIDENTIAL R-3
TYPE V (B) - UNSPRINKLERED.
TOTAL UNDER ROOF: 3,274 SF.
16'-0" MEAN HEIGHT OF ROOF
1 STORY PROVIDED
160 MPH
1.0
LOW-RISE BUILDING, ENCLOSED
C

SINGLE FAMILY RESIDENCE

XXXX DOGWOOD WAY

NAPLES, FL



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ARCHITECTURAL

- A-1 COVER SHEET
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- A-5 FOUNDATION SLAB
- A-6 ROOF PLAN
- A-7 DETAILS

ELECTRICAL

- E-1 ELECTRICAL PLAN
- E-2 SCHEDULES, NOTES & DETAILS.



REV.	DESCRIPTION

THIS DRAWING AND OTHER RELATED DOCUMENTS ARE THE PROPERTY OF iCRobalino, INC. FOR USE SOLELY WITH RESPECT TO THIS PROJECT AND UNLESS OTHERWISE PROVIDED, THE DESIGNER SHALL BE DEEMED THE AUTHOR OF THESE DRAWINGS AND SHALL OWN ALL COMMON LAW, STATUTORY, AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT.

THE OWNER OR CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT AND SHALL FOLLOW THE LOCAL BUILDING CODES AND REGULATIONS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT AND SHALL FOLLOW THE LOCAL BUILDING CODES AND REGULATIONS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT AND SHALL FOLLOW THE LOCAL BUILDING CODES AND REGULATIONS.

PROJ. NAME: **SINGLE FAMILY RESIDENCE
XXXX DOGWOOD WAY
NAPLES, FL**

DESCRIPTION: **COVER SHEET**

DATE: **SEPTEMBER 25, 2020**

CRONIN ENGINEERING, INC.
CERTIFICATE OF AUTHORIZATION NUMBER: 6597
6827 WILLOW PARK DRIVE
PHONE: 563-2157 FAX: 563-9820

REGISTERED PROFESSIONAL ENGINEER
DEREK P. CRONIN
FLORIDA PE # 65382

8" PRECAST U-LINTELS STANDARD LENGTHS		
OVERALL LENGTH	TOP STEEL	BOTTOM STEEL
3'-0" (36")	2-7/32" wire	2-#3 rebar
3'-4" (40")	2-7/32" wire	2-#3 rebar
3'-8" (44")	2-7/32" wire	2-#3 rebar
4'-0" (48")	2-7/32" wire	2-#3 rebar
4'-4" (52")	2-7/32" wire	2-#3 rebar
4'-8" (56")	2-7/32" wire	2-#3 rebar
5'-0" (60")	2-7/32" wire	2-#3 rebar
5'-4" (64")	2-7/32" wire	2-#3 rebar
5'-8" (68")	2-7/32" wire	2-#3 rebar
6'-0" (72")	2-7/32" wire	2-#4 rebar
6'-4" (76")	2-7/32" wire	2-#4 rebar
6'-8" (80")	2-7/32" wire	2-#4 rebar
7'-0" (84")	2-7/32" wire	2-#4 rebar
7'-4" (88")	2-7/32" wire	2-#4 rebar
7'-8" (92")	2-7/32" wire	2-#4 rebar
8'-0" (96")	2-#3 rebar	2-#4 rebar
8'-4" (100")	2-#3 rebar	2-#4 rebar
8'-8" (104")	2-#3 rebar	2-#4 rebar
9'-0" (108")	2-#3 rebar	2-#4 rebar
10'-0" (120")	2-#3 rebar	2-#4 rebar
10'-6" (126")	2-#3 rebar	2-#4 rebar
10'-12" (132")	2-#3 rebar	2-#5 rebar
11'-4" (136")	2-#3 rebar	2-#5 rebar
12'-0" (144")	2-#3 rebar	2-#5 rebar
13'-4" (160")	2-#3 rebar	2-#5 rebar
14'-0" (168")	2-#3 rebar	2-#5 rebar

Rebar: ASTM A615 Grade 60
 Wire: ASTM A510
 Concrete Strength: 3500 psi
 Average Self Weight: 33 plf
 Finish: Grey Block

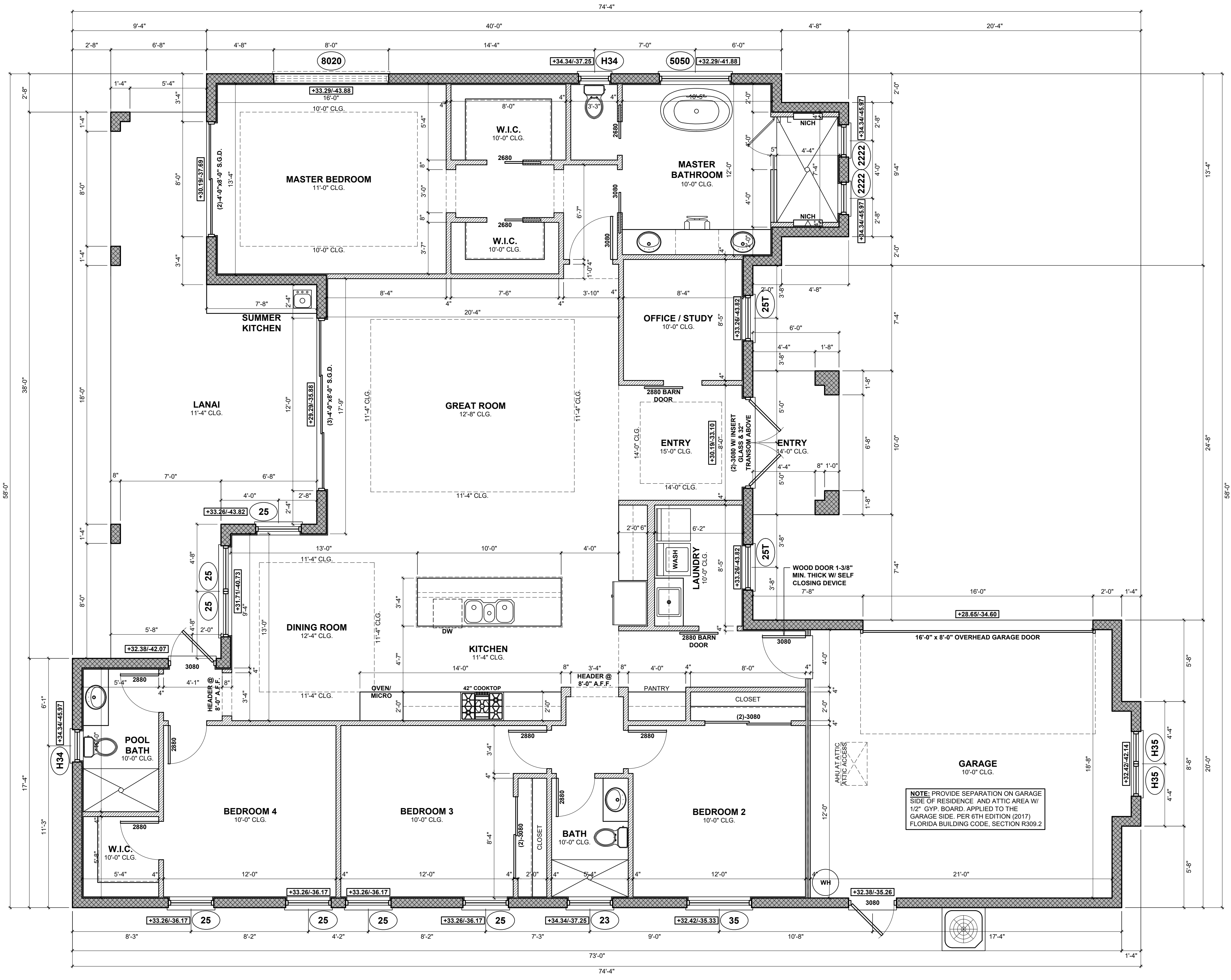
8" PRESTRESSED U-LINTELS STANDARD LENGTHS		
OVERALL LENGTH	TOP STEEL	BOTTOM STEEL
14'-8" (176")	NONE	2-7/16 strand
15'-4" (184")	NONE	2-7/16 strand
17'-4" (208")	NONE	2-7/16 strand
19'-4" (232")	2-#3 rebar	2-7/16 strand
21'-4" (256")	2-#3 rebar	2-7/16 strand
22'-0" (264")	2-7/32" wire	2-7/16 strand
24'-0" (288")	2-7/32" wire	2-7/16 strand

Rebar: ASTM A615 Grade 60
 Wire: ASTM A510
 Strands: ASTM A416 Grade 270
 Concrete Strength: 6000 psi
 Synthetic Fibers: 2.5 lbs/yd
 Average Self Weight: 37 plf
 Finish: Grey Smooth Form

BUILDING SQUARE FOOTAGE	
TABULATION	
TOTAL A/C LIVING AREA	2,379 SQ FT
GARAGE	445 SQ FT
ENTRY	60 SQ FT
LANAI	390 SQ FT
TOTAL NON-A/C	895 SQ FT
TOTAL UNDER ROOF	3,274 SQ FT

WINDOW SCHEDULE			
WINDOW MARK	WINDOW SIZE	TYPE	REMARK
(H34)	26-1/2" x 50-5/8"	SINGLE HUNG	IMPACT RESISTANT
(H35)	26-1/2" x 63"	SINGLE HUNG	IMPACT RESISTANT
(23)	37" x 38-3/8"	SINGLE HUNG	IMPACT RESISTANT
(25)	37" x 63"	SINGLE HUNG	IMPACT RESISTANT
(251)	37" x 63" w/ 18" TRANSOM ABOVE	SINGLE HUNG W/ FIXED WINDOW	IMPACT RESISTANT
(35)	53-1/8" x 63"	SINGLE HUNG	IMPACT RESISTANT
(222)	26" x 26"	FIXED WINDOW	IMPACT RESISTANT
(5050)	60" x 60"	FIXED WINDOW	IMPACT RESISTANT
(8020)	96" x 24"	FIXED WINDOW	IMPACT RESISTANT

NOTE: ALL EXTERIOR DOORS & WINDOWS TO BE WINGUARD IMPACT RESISTANT.
 NOTE: USE "DuPont FlexWrap NF" SELF ADHERED FLASHING (OR SIMILAR) AROUND WINDOWS AND DOORS PER MANUFACTURER RECOMMENDATIONS. SELF-ADHERED MEMBRANE USED AS FLASHING SHALL COMPLY WITH AAMA 711. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH.



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

REV.	DESCRIPTION

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PROJ. NAME: **SINGLE FAMILY RESIDENCE**
XXXX DOGWOOD WAY
 NAPLES, FL

DATE: **SEPTEMBER 25, 2020**

CRONIN ENGINEERING, INC.
 AUTHORIZATION NUMBER: 6597
 6827 WILLOW PARK DRIVE
 NAPLES, FL 34109
 PHONE: 561-2157 FAX: 561-593-9820

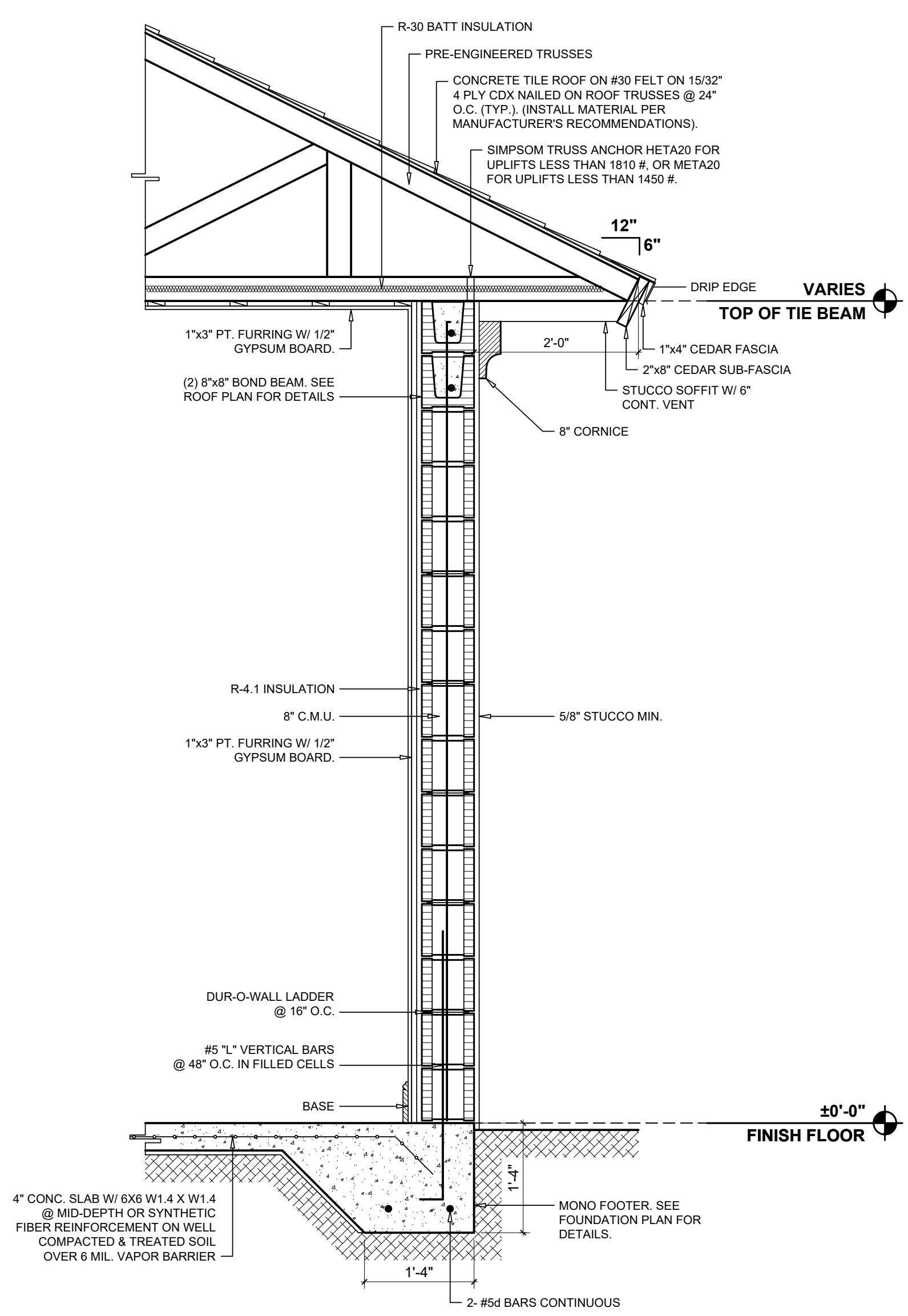
DESIGNED BY: DEREK P. CRONIN
 LICENSED PROFESSIONAL ENGINEER
 FLORIDA PE # 65382



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



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



WALL SECTION TYP.
 SCALE: 3/4"=1'-0"

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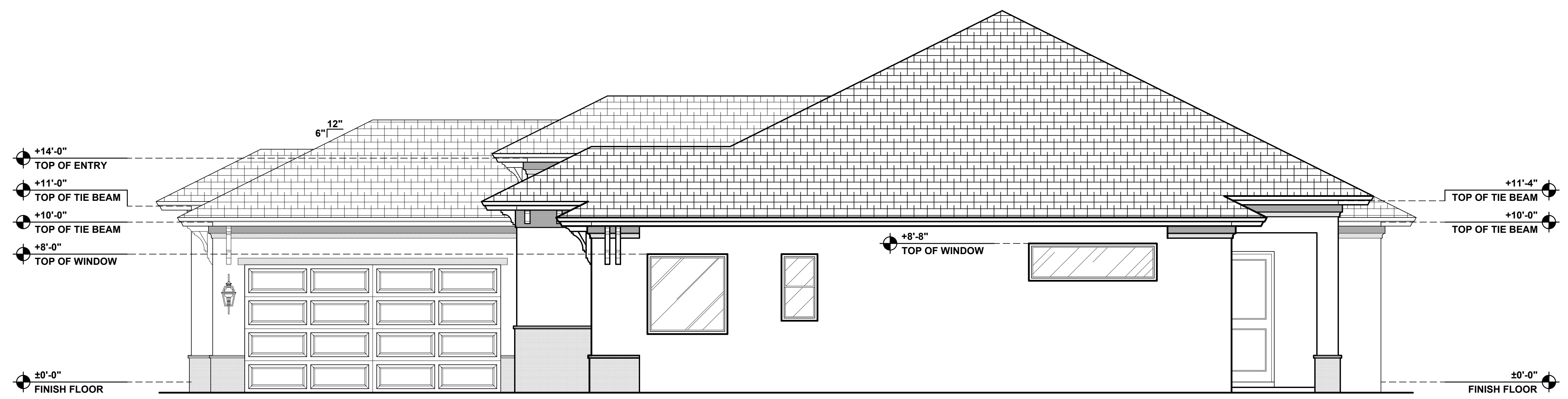
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PROJ. NAME: **SINGLE FAMILY RESIDENCE
 xxxx DOGWOOD WAY
 NAPLES, FL**

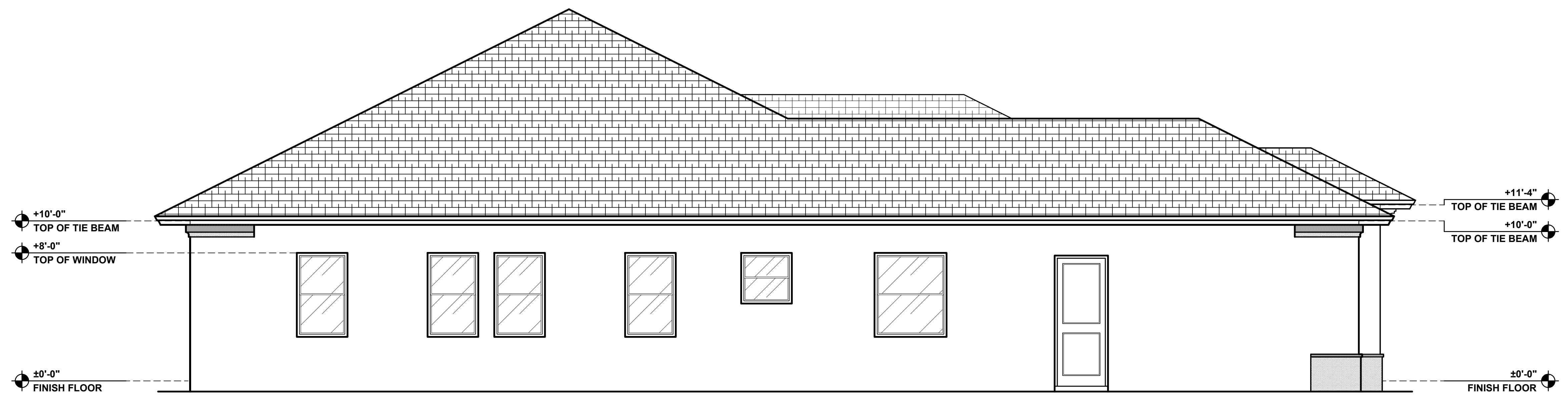
DATE: **SEPTEMBER 25, 2020**

CRONIN ENGINEERING, INC.
 CERTIFICATE OF AUTHORIZATION NUMBER: 6597
 6827 WILLOW PARK DRIVE
 NAPLES, FL 34109
 PHONE: 563-2157 FAX: 563-9820

DEREK P. CRONIN
 FLORIDA PE # 63382



RIGHT SIDE ELEVATION
SCALE: 1/4"=1'-0"



LEFT SIDE ELEVATION
SCALE: 1/4"=1'-0"

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THESE CONSTRUCTION DOCUMENTS WERE PREPARED FOR THE SOLE PURPOSE OF OBTAINING A PERMIT AND SHALL BE SEaled IN THE SPACE PROVIDED.

PROJ. NAME: **SINGLE FAMILY RESIDENCE
xxxx DOGWOOD WAY
NAPLES, FL**

DATE: **SEPTEMBER 25, 2020**

DESCRIPTION: **ELEVATIONS**

CRONIN ENGINEERING, INC.
CERTIFICATE OF AUTHORIZATION NUMBER: 6957
6627 WILLOW PARK DRIVE
PHONE: 563-2157 FAX: 563-9820

LOCATED IN THE STATE OF FLORIDA AND IN ACCORDANCE WITH THE FLORIDA PROFESSIONAL SEAL AND BUILDING CODE REQUIREMENTS

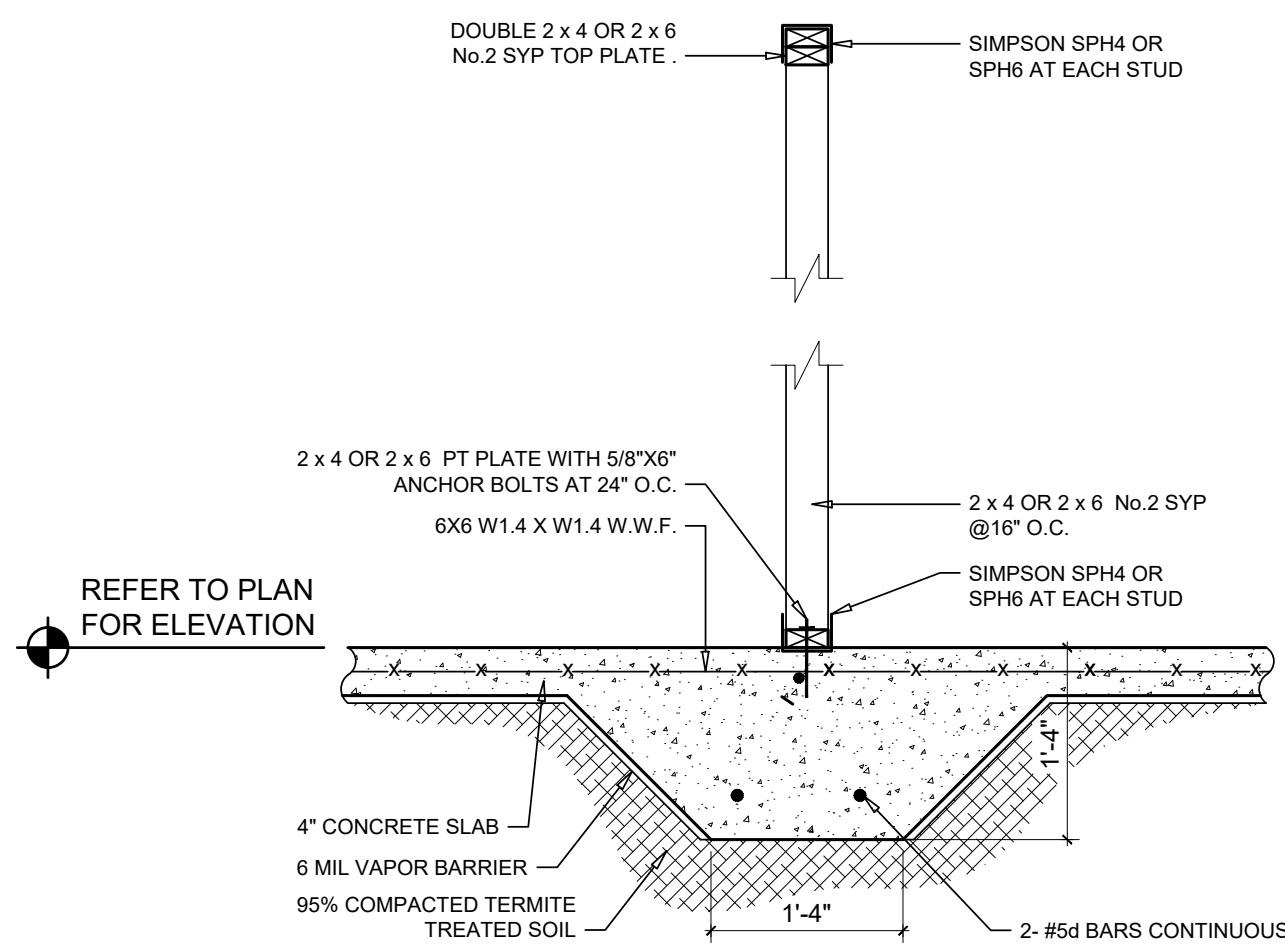
DEREK P. CRONIN
FLORIDA PE # 63382

MASONRY WALL REINFORCEMENT NOTES

1. WALL REINFORCEMENT SHALL BE DOWELED FROM FOUNDATION AND BE CONTINUOUS THROUGH SOLID GROUTED CELLS AND BE HOOKED OVER TOP REINFORCEMENT OF UPPER BEAMS. MINIMUM LAP SPLICE SHALL BE 48 BAR DIAMETERS. FOR HORIZONTAL WALL REINFORCEMENT, @ EVERY OTHER COURSE.
2. WALL REINFORCEMENT IS AS FOLLOWS: #5 @ 48" O.C. PROVIDE 1 #5 AT ALL WALL INTERSECTIONS, CORNERS, & EACH SIDE OF OPENINGS AND 2 #5 EACH SIDE OF OPENINGS LARGER THAN 6'-0".
3. WALL SEGMENTS BELOW AND ABOVE THE OPENINGS SHALL BE REINFORCED SAME AS WALL.
4. MASONRY GROUT = 2000 PSI.
5. MASONRY WALL COMPRESSIVE STRENGTH OF $f_m = 1500$ PSI.
6. MORTAR TYPE M OR S WITH 1900 PSI COMPRESSIVE STRENGTH.

FOUNDATION/GROUND FLOOR NOTES

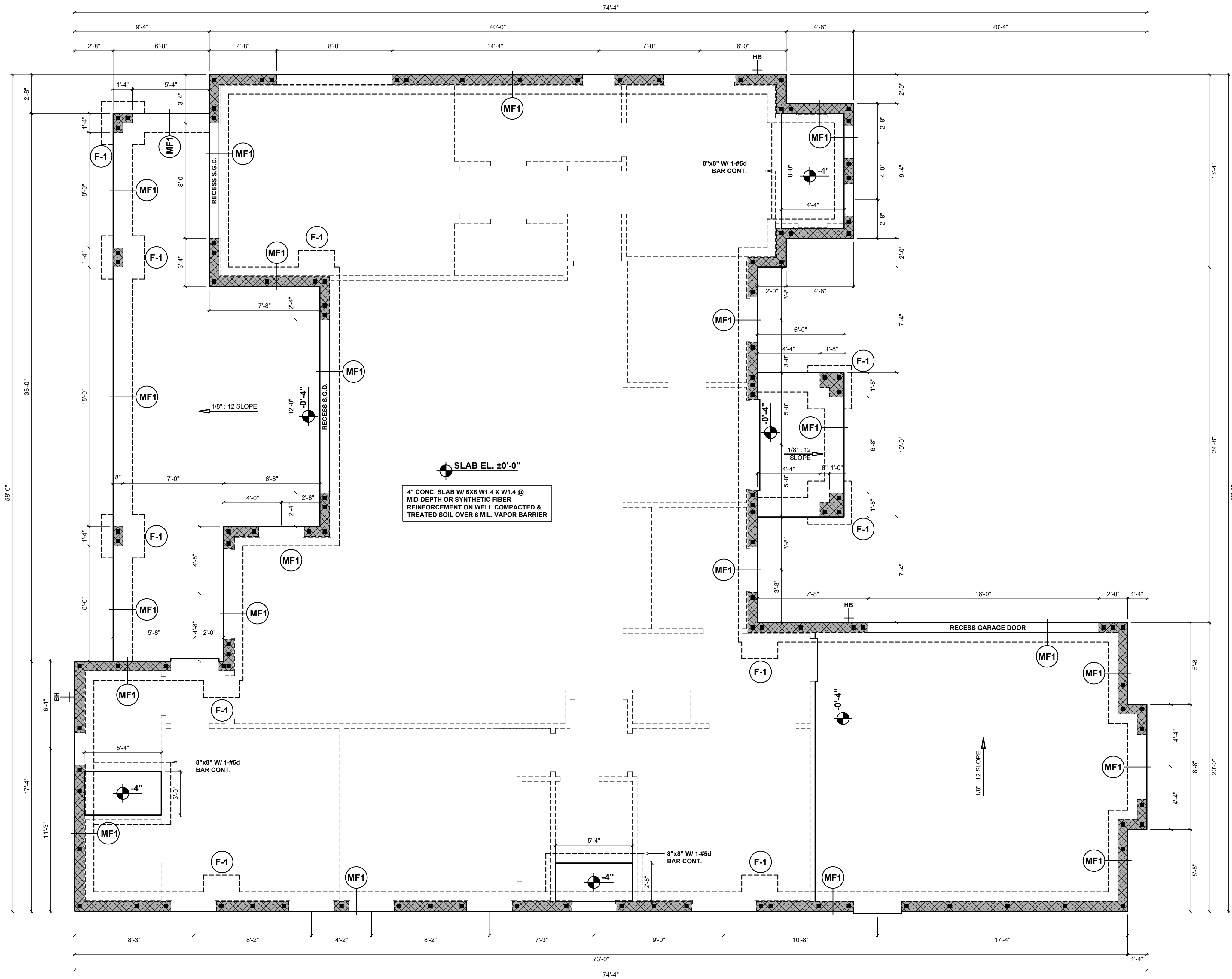
1. FLOOR SLAB IS A 4" CONC. SLAB-ON-GRADE ($f_c = 3000$ psi) WITH 6 X 6 W1.4 X W1.4 W.W.F. @ MID-DEPTH OR SYNTHETIC FIBER REINFORCEMENT (NOT SHOWN) ON WELL COMPACTED & TREATED SOIL OVER 6 MIL. VAPOR BARRIER. REFER TO DETAIL. SOIL SHALL BE COMPACTED TO 95% MODIFIED PROCTOR PER ASTM D 1557 IN LIFTS NOT TO EXCEED 12".
2. FOUNDATIONS ARE DESIGNED FOR 2000 PSF. GENERAL CONTRACTOR SHALL VERIFY THE VALIDITY OF THIS ASSUMPTION.
3. CENTER OF LOAD SHALL COINCIDE WITH CENTER OF FOOTING U.N.O.
4. ALL CONCRETE TO HAVE A MINIMUM 3000 PSI COMPRESSIVE STRENGTH WITH THE WATER/CEMENT RATIO OF 0.5 MAXIMUM.
5. ■ INDICATES ADDITIONAL #5 IN CMU WALLS.
6. ALL REINFORCEMENT SHALL BE GRADE 60.



FOOTING DETAIL @ BEARING WALL

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

MARK	SIZE	REINFORCEMENT	REMARKS
MF1	1'-4" x 1'-4" x CONT. MONO FOOTER	2-#5d BARS CONTINUOUS	
F-1	2'-8" x 2'-8" x 1'-4"	CONCRETE PAD W/ #5d BARS @ 6" O.C. EACH WAY, 3" OFF OF BOTTOM OF FOUNDATION	



FOUNDATION PLAN

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

REV.	DESCRIPTION

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PROJ. NAME: **SINGLE FAMILY RESIDENCE**
xxxx DOGWOOD WAY
 NAPLES, FL

DESCRIPTION: **FOUNDATION PLAN**

DATE: **SEPTEMBER 25, 2020**

CRONIN ENGINEERING, INC.
 AUTHORIZATION NUMBER: 6597
 6827 WILLOW PARK DRIVE
 NAPLES, FL 34109
 PHONE: 583-2157 FAX: 583-8820

DESIGNED BY: [Name] CHECKED BY: [Name] DRAWN BY: [Name] DATE: [Date]
 ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN FEET AND INCHES.
 ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE SPECIFIED.
 ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE SPECIFIED.
 ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE SPECIFIED.

BEAM SCHEDULE						
MARK	ELEVATION	SIZE	BOTTOM	TOP	INTERMEDIATE	SPACING #3 TIES
RTB	10'-0"	(2)- 8" x 8" BOND BEAM W/ 1- #5d CONT. EACH				
RB1	11'-0"	(2)- 8" x 8" BOND BEAM W/ 1- #5d CONT. EACH				
RB2	11'-4"	(2)- 8" x 8" BOND BEAM W/ 1- #5d CONT. EACH				
RB3	14'-0"	(2)- 8" x 8" BOND BEAM W/ 1- #5d CONT. EACH				

BEARING LEGEND		
DESCRIPTION	ELEVATION	SYMBOL
TOP OF BEARING	10'-0"	[Symbol]
TOP OF BEARING	11'-0"	[Symbol]
TOP OF BEARING	11'-4"	[Symbol]
TOP OF ENTRY BEARING	14'-0"	[Symbol]

- ### ROOF TRUSSES NOTES
- ROOF TRUSSES SHALL BE DESIGNED BY TRUSS MANUFACTURER. SHOP DRAWINGS SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO PRODUCTION.
 - TRUSS MANUFACTURER SHALL PROVIDE UPLIFT & REACTION VALUES FOR INDIVIDUAL TRUSSES. REFER TO THE TRUSS DRAWING FOR LAYOUT.
 - ROOF SHEATHING SHALL CONSIST OF 15/32" MIN. PLYWD. 4-PLY CDX LAID PERPENDICULAR TO TRUSSES NAILED @ 4" O.C. ALONG BOUNDARY EDGES. 4" O.C. ALONG EDGES AND 6" O.C. INTERMEDIATE W/ 8d COMMONS.
 - BRACE TRUSSES PER T.P.I. H.B-91, AS REVISED
 - THE TRUSS LAYOUT BY RAYMOND BUILDING SUPPLY. (JOB: 190028907 DATE: 11.05.19). HAS BEEN COORDINATED WITH THE FOUNDATION AND ROOF PLAN.
 - PROVIDE SIMPSON HETA20 W/16 10d x 1 1/2" FOR UPLIFTS UP TO 1890 LBS.
 - ALL CHANGES TO THE TRUSS LAYOUT SHALL BE APPROVED BY THE ENGINEER.
 - IMPROPERLY LOCATED OR MISSING TRUSS TIE DOWNS USE SIMPSON HTSM20 TWIST STRAPS AT EACH LOCATION AS REQUIRED.

- ### ROOF NOTES
- THIS BUILDING/STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH 6TH EDITION (2017) FLORIDA BUILDING CODE AND SECTION 1609 FOR DESIGN PRESSURES GENERATED BY A DESIGN WIND VELOCITY OF 150 MPH.
 - THE SEPARATION OF THE GARAGE AND ITS ATTIC AREA SHALL BE NOT LESS THAN 1/2 INCH GYPSUM BOARD APPLIED TO THE GARAGE SIDE. GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8 INCH TYPE "X" GYPSUM BOARD OR EQUIVALENT WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY. THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 1/2" INCH GYPSUM BOARD OR EQUIVALENT PER FBC R309.1, R309.2.
 - PROVIDE GYPSUM BOARD 1/2" MIN FOR 16" O.C. FRAMING AND FROM 1/2" TO 5/8" FOR 24" O.C. FRAMING OR 1/2" SAG-RESISTANT GYPSUM CEILING BOARD PER FBC R702.5.
 - LANAI & ENTRY CEILINGS SHALL HAVE A 1/2" CD EXTERIOR PLYWOOD LAID PERPENDICULAR TO TRUSS BOTTOM CHORDS AND NAILED W/ 10d NAILS @ 6" O.C.

COMPONENT AND CLADDING DESIGN PRESSURES

V_{ult} = 160 MPH ULTIMATE DESIGN WIND SPEED
COMPONENT AND CLADDING (BASED ON V_{asd}) EXPOSURE C
ULTIMATE DESIGN PRESSURES (LRF) PSF

ROOF ZONE	AREA	APPLIED DESIGN PRESSURE
ZONE 1	10 SF	+39.9 / -64.5 PSF
	20 SF	+33.9 / -62.9 PSF
	50 SF	+29.5 / -60.6 PSF
ZONE 2	100 SF	+26.2 / -58.9 PSF
	10 SF	+37.1 / -108.2 PSF
	20 SF	+33.9 / -96.6 PSF
ZONE 3	50 SF	+29.5 / -83.6 PSF
	100 SF	+26.2 / -75.5 PSF
	10 SF	+37.1 / -162.8 PSF
ZONE 4	20 SF	+33.9 / -142.0 PSF
	50 SF	+29.5 / -128.9 PSF
	100 SF	+26.2 / -119.1 PSF
ZONE 5	10 SF	+64.5 / -70.0 PSF
	20 SF	+61.6 / -67.1 PSF
	50 SF	+57.7 / -63.3 PSF
WALL ZONE	100 SF	+54.9 / -60.3 PSF
	101 + SF	+48.0 / -53.5 PSF
	10 SF	+29.5 / -86.4 PSF
ZONE 5	20 SF	+61.6 / -80.5 PSF
	50 SF	+57.7 / -72.8 PSF
	100 SF	+54.9 / -67.1 PSF
101 + SF	+48.0 / -53.5 PSF	

NOTE: ALL DOORS & WINDOWS ARE TO BE PROTECTED WITH A APPROVED IMPACT RESISTANT GLASS OR SHUTTERS.

WIND LOAD REQUIREMENTS

- THE STRUCTURAL SYSTEMS FOR THE DRAWINGS PRESENTED WERE DESIGNED PER THE LOADING PRESENTED IN THE FLORIDA BUILDING CODE 6TH EDITION. THE DESIGN WIND SPEED IS (V_{ult} = 170 MPH) AND (V_{asd} = 132 MPH).
- IMPORTANCE FACTOR I_w = 1.0 OF THE FLORIDA BUILDING CODE 6TH EDITION.
- EXPOSURE CATEGORY C.
- INTERNAL PRESSURE COEFFICIENT (ASCE 7-10) +0.18 / -0.18

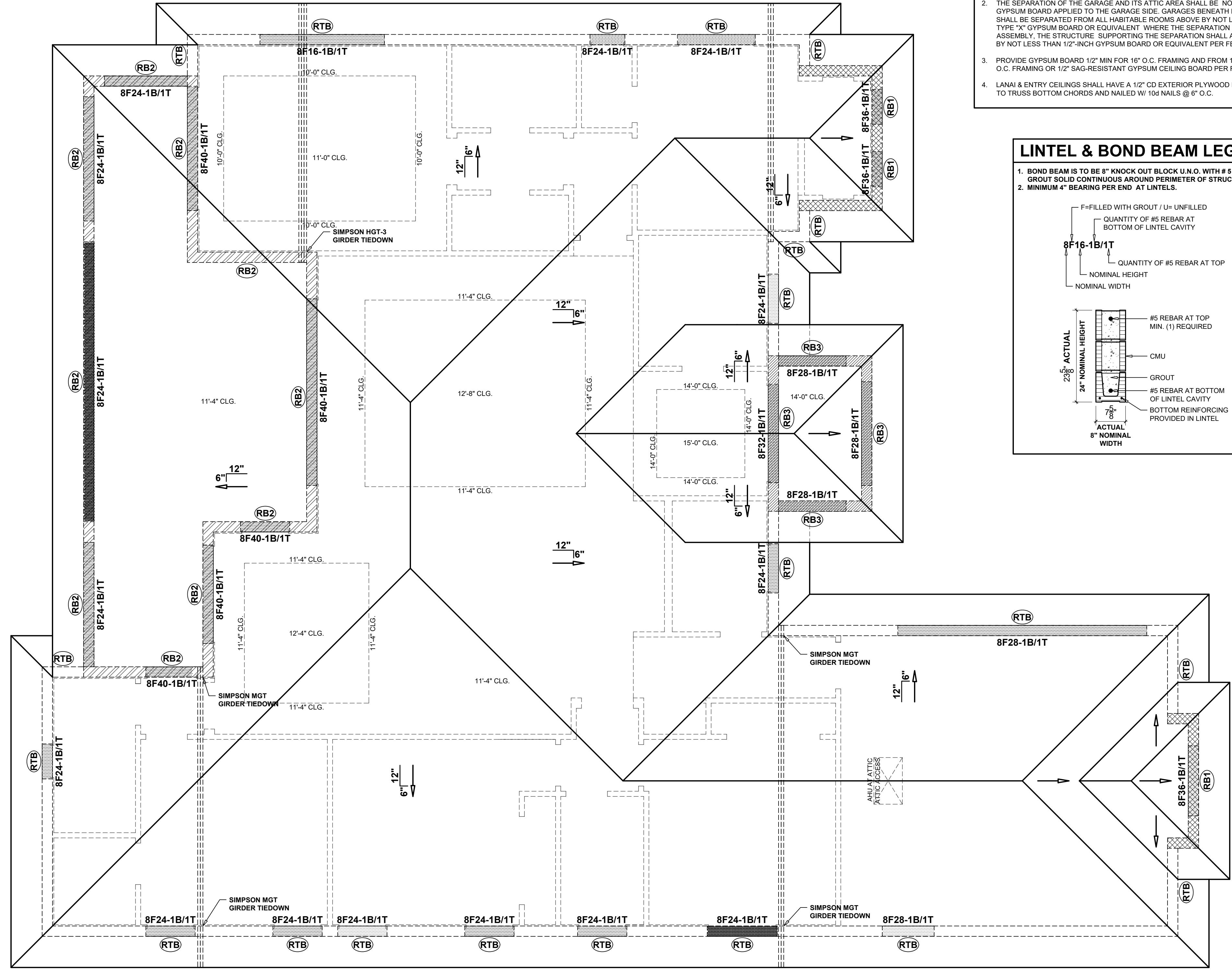
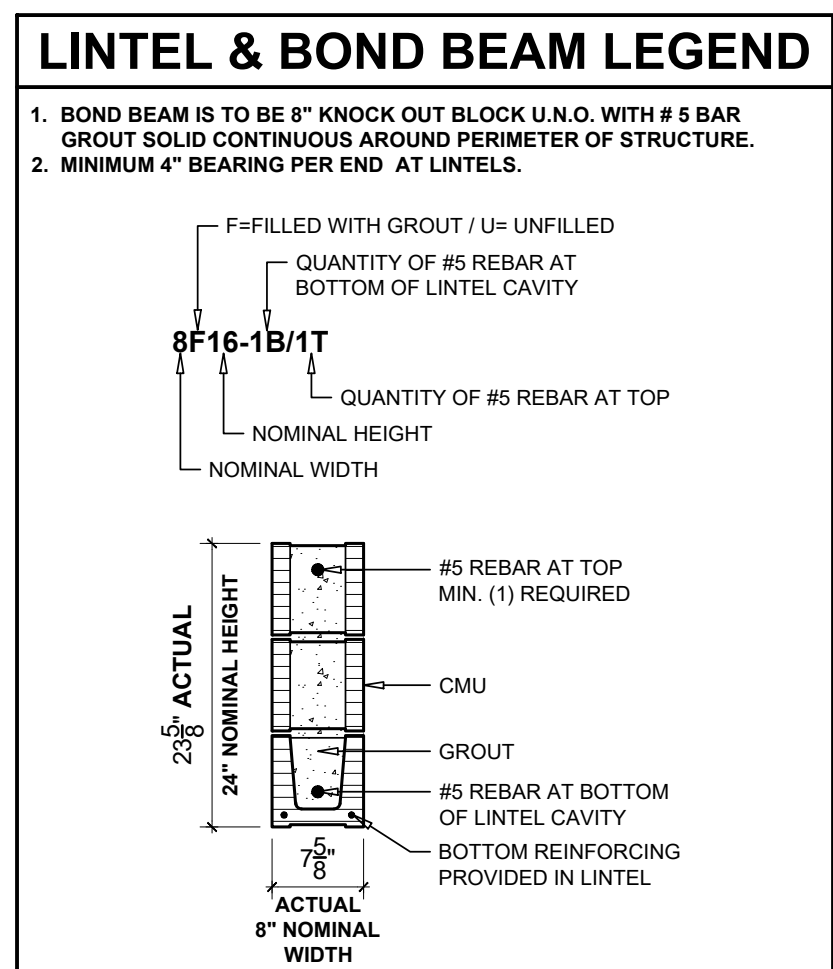
ENCLOSED BUILDING OPENINGS ARE PROTECTED FROM FLYING DEBRIS WITH IMPACT GLASS AND/OR SHUTTERS.

COMPONENT AND CLADDING DESIGN PRESSURES

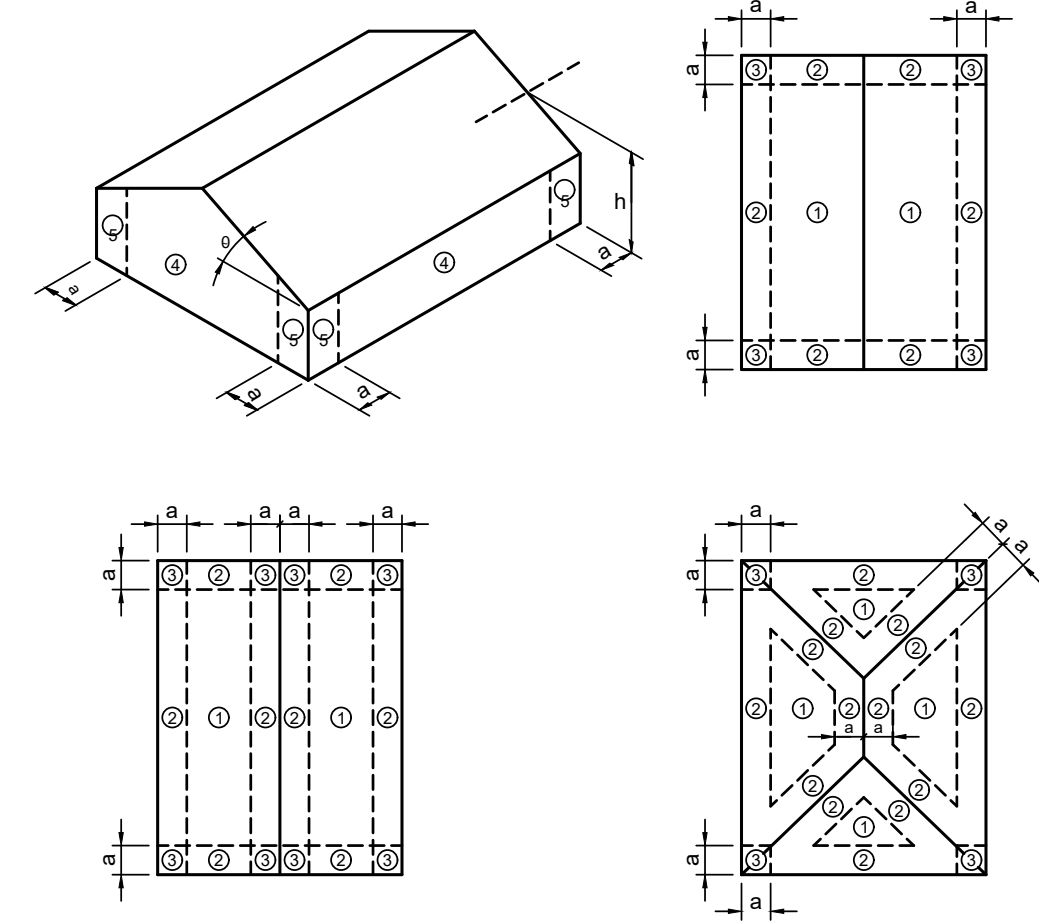
V_{asd} = 124 MPH NOMINAL DESIGN WIND SPEED (V_{ult} = 160 MPH)
COMPONENT AND CLADDING (BASED ON V_{asd}) EXPOSURE C
DOORS & WINDOWS INCLUDED
PRESSURES CALCULATED USING (V_{ult} x 0.6) WHICH IS EQUIVALENT TO V_{asd}
ALLOWABLE STRESS DESIGN PRESSURE (ASD) PSF

AREA OPENING	INTERIOR ZONE	END ZONE
0 - 10 SF	+38.8 / -42.0 PSF	+38.8 / -51.8 PSF
11 - 20 SF	+37.0 / -40.2 PSF	+37.0 / -48.3 PSF
21 - 50 SF	+34.6 / -37.8 PSF	+34.6 / -43.7 PSF
51 - 100 SF	+32.9 / -36.3 PSF	+32.9 / -40.2 PSF
101 + SF	+28.8 / -32.1 PSF	+28.8 / -32.1 PSF

NOTE: ALL DOORS & WINDOWS ARE TO BE PROTECTED WITH A APPROVED IMPACT RESISTANT GLASS OR SHUTTERS.



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



COMPONENT AND CLADDING LOADING DIAGRAM FIGURE 1

8" COMPOSITE U-LINTEL TYPES

U-Profile	8"8	8"12	8"16	8"20	8"24	8"28	8"32
OB/1T	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]
OB/2T	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]
1B/1T	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]
1B/2T	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]



REV.	DESCRIPTION

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CRONIN ENGINEERING, INC.
SINGLE FAMILY RESIDENCE
xxxx DOGWOOD WAY
NAPLES, FL

DESCRIPTION: **ROOF PLAN**

DATE: SEPTEMBER 25, 2020

AUTHORIZATION NUMBER: 6597
6627 WILLOW PARK DRIVE
PHONE: 563-2157 FAX: 563-8820

DEREK P. CRONIN
FLORIDA PE # 55382

STRUCTURAL NOTES

DESIGN CRITERIA:
THE MAIN WIND/FORCE RESISTANCE SYSTEM AND COMPONENTS AND CLADDING HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, 6TH EDITION (2017) TO WITHSTAND WIND PRESSURES GENERATED BY A MINIMUM BASIC WIND SPEED OF 160 M.P.H.

FOUNDATION:
THE FOUNDATION HAS BEEN DESIGNED FOR A SAFE LOAD BEARING CAPACITY OF 2000 PSF . THE CONTRACTOR SHALL VERIFY SOIL BEARING PRESSURES.

CONCRETE:
ALL CONCRETE WORK SHALL CONFORM TO SPECIFICATIONS FOR ALL STRUCTURAL CONCRETE FOR BUILDINGS (A.C.I.-301). CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS.

CONCRETE CLEAR COVER:
FOUNDATIONS: 3"
BEAMS: 1.50" TO STIRRUP
SLABS NOT EXPOSED TO THE WEATHER: 0.75"
SLABS EXPOSED TO THE WEATHER: 1.50"

REINFORCING STEEL:
ALL REINFORCING STEEL BARS SHALL CONFORM TO ASTM 615 SPECIFICATIONS AND SUPPLEMENTARY REQUIREMENTS 51 FOR DEFORMED BILLET STEEL WITH 60,000 PSI MINIMUM YIELD STRENGTH. PROVIDE DWELLS IN FOUNDATIONS TO MATCH REINFORCING ABOVE.

PRE-ENGINEERED WOOD ROOF TRUSSES:
PRE-ENGINEERED WOOD ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS:
L.L. TOP CHORD 20 PSF
D.L. TOP CHORD 20 PSF
D.L. BOTTOM CHORD 10 PSF

TRUSS MANUFACTURER SHALL SUBMIT SIGNED AND SEALED PLAN VIEW SHOP DRAWINGS W/ ENGINEERED PROFILES AND CALCULATIONS SHOWING ALL REQUIRED TIE DOWNING TO GENERAL CONSTRUCTION. ALL ROOF TRUSSES SHALL BE DESIGNED FOR A MIN. BASIC WIND SPEED OF 160 M.P.H PER THE FLORIDA BUILDING CODE, 6TH EDITION (2017).

MASONRY:
SHALL CONFORM TO ASTM C-90. UNITS SHALL BE ERECTED IN INTERLOCKED RUNNING BOND PATTERN. MORTAR SHALL BE TYPE "N" OR "S" AND MEET ASTM C-270. PROVIDE GAUGE 9 HORIZONTAL JOINT REINFORCEMENT EVERY OTHER COURSE. f'm = 1500 PSI. GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI & CONFORM TO ASTM C-476.

SOLID SAWN LUMBER:
TOP AND BOTTOM PLATES, SAWN LUMBER, BEAMS, HEADERS, SOLID AND BUILT UP POSTS SHALL BE #2 SOUTHERN YELLOW PINE WITH THE FOLLOWING MINIMUM PROPERTIES:
Fb = 1200 PSI
Fv = 90 PSI
E = 1.5 X 10 PSI

LAMINATED VENEER LUMBER:
L.V.L. & P.S.L. INDICATES LAMINATED LUMBER AS MANUFACTURED BY "TRUSS JOIST McMillan" CORPORATION. ALL DESIGN DATA FOR THIS MATERIAL DIVISION SHALL BE AS SPECIFIED BY THE MANUFACTURER - ALL ATTACHMENTS, FILLERS ETC. AND INSTALLATION PROCEDURES SHALL IN STRICT ACCORDANCE W/ THE MANUFACTURERS SPECS.

LINTELS:
DOOR OR WINDOW OPENINGS IN MASONRY WALLS SHALL HAVE CONCRETE LINTELS. WHERE THE HEAD OF THE OPENING IS WITHIN 16" OF THE TIE BEAM, OR SLAB, LINTELS SHALL BE POURED INTEGRAL WITH THE TIE BEAMS, OR SLAB. ADD 2# BARS PER EVERY 4" DROP OF THE TIE BEAM. WHERE PRECAST LINTELS ARE USED, THEY SHALL BEAR MINIMUM OF 8" ON THE SUPPORT AND HAVE THE FOLLOWING SIZE AND REINFORCEMENT:
• SPANS UP TO 6'-0" USE 8" X 8" PRECAST U LINTELS
• SPANS UP TO 12'-0" USE 8" X 8" PRE-STRESSED U LINTELS
• REINFORCE AS SHOWN

ROOF SHEATHING:
WOOD STRUCTURAL ROOF SHEATHING DIAPHRAGM SHALL BE 15/32" THICK (A.P.A. RATED) C. D. EXTERIOR INSTALLED PERPENDICULAR TO SUPPORTS AND SECURED W/ 10d NAILS AT 4" O.C. ALL PANEL EDGES AND AT 6" O.C. ALONG ALL INTERMEDIATE SUPPORTS - (4) PLY MATERIAL TO BE USED - SPAN RATING SHALL BE 32/16.

WALL SHEATHING:
WALL SHEATHING DIAPHRAGM SHALL BE 15/32" TH. (A.P.A. RATED) C. D. EXT. INSTALLED PERPENDICULAR TO SUPPORTS AND SECURED W/ 8d NAILS AT 6" O.C. ALL PANEL EDGES - PROVIDE 2" X 4" BLKG. BETWEEN STUDS W/ 3-1/2" FACE SET VERTICAL AT ALL PANEL EDGES - ALL INTERMEDIATE SUPPORTS SHALL BE NAILED W/ 8d NAILS AT 12" O.C. - SPAN RATING SHALL BE 32/16.

METAL FASTENERS / CONNECTORS:
ALL HANGERS, CLIPS, STRAPS, TO BE MANUFACTURED BY "SIMPSON STRONG TIE" (UNLESS NOTED OTHERWISE) - REFER TO PLAN & THE DOWN SCHEDULE. FOR ALL SPECIFIED FASTENER NUMBERS - CONSULT MFGS. CATALOG #C "WOOD CONSTRUCTION CONNECTORS" AND "HIGH WIND-RESISTANT CONST. CONNECTORS" CATALOG # C-HW - INSTALL ALL STRAPS PER MFGS. SPECIFICATIONS WITH DISTANCE OF STRAP BEING EQUAL FROM POINT OF CONN. ALL STRAPS SHALL BE 2-MAX.

BELOW CONNECTION (IE) BEAM TO POST INTERFACE) ALL CONNECTORS SHALL HAVE ALL NAIL HOLES FILLED WITH APPROPRIATE SIZE NAILS PER SIMPSON'S SPECS.

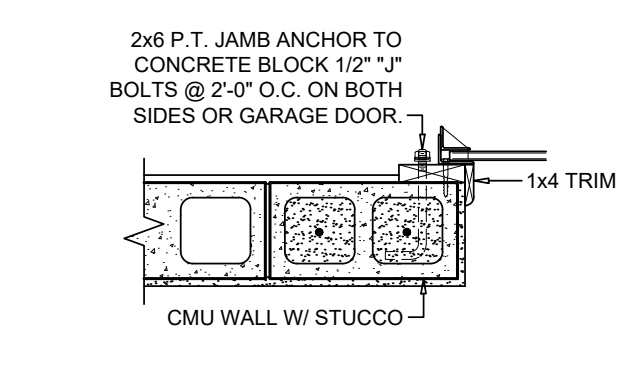
ALL FLAT STRAPS OR TWIST STRAPS SHALL BE APPLIED WITH EQUAL LENGTHS OF STRAP TO HEADER OR BEAM AND COLUMN, ETC. WHERE (2) STRAPS ARE INDICATED, APPLY ONE (1) AT EACH SIDE OF CONNECTION, FILL ALL HOLES WITH SPECIFIED NAIL COUNT.

GENERAL:
CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCING WITH CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY FIELD CONDITION WHICH MAY NOT BE IN ACCORDANCE WITH DESIGN CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE JOB SITE CONSTRUCTION SAFETY. FOR FINISHED FLOOR ELEVATIONS, SLOPES, STEPS AND RECESSES, REFER TO ARCHITECTURAL PLANS. FOR SIZE AND LOCATION OF MECHANICAL SLEEVES AND OPENINGS, REFER TO MECHANICAL AND ARCHITECTURAL PLANS.

FORM WORK AND SHORING:
SHORES AND RE-SHORES SHALL MEET THE REQUIREMENTS AS SET FORTH IN THE CURRENT A.C.I. 347 AND A.C.I. 301 LATEST EDITIONS. FORM WORK AND SHORING SHALL BE DESIGNED BY A FLORIDA REGISTERED ENGINEER.

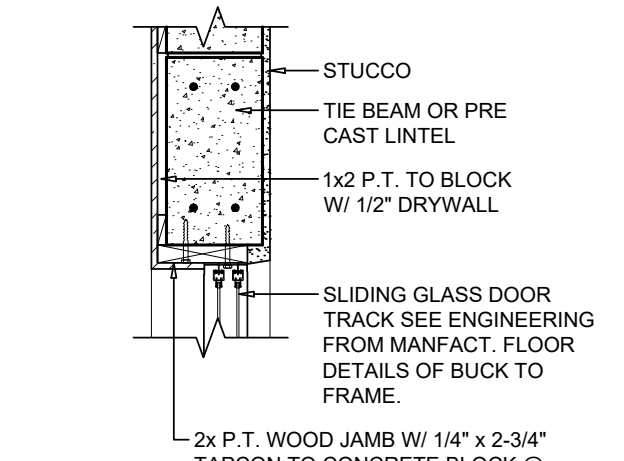
SLABS ON FILL:
EXTERIOR SLABS ON FILL SHALL BE 4" THICK, UNLESS OTHERWISE NOTED ON PLANS. REINFORCED WITH 6 X 6 W/14 X W/14 W.W.M. FILL MATERIAL UNDER SLAB SHALL BE CLEAN SAND AND/OR ROCK AND SHALL BE COMPACTED TO 95% (MIN.) OF ASTM D 1557 IN LIFTS NOT TO EXCEED 12" IN DEPTH. SLAB ON FILL SHALL BE POURED AGAINST APPROVED VAPOR BARRIER

FIBER REINFORCED CONCRETE SLABS SHALL CONTAIN SYNTHETIC FIBER REINFORCEMENT. FIBER LENGTH SHALL BE 1/2" TO 2". DOSAGE AMOUNTS SHOULD BE FROM 0.75 TO 1.5 LBS PER CUBIC YARD IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SYNTHETIC FIBERS SHALL COMPLY WITH ASTM C1116.



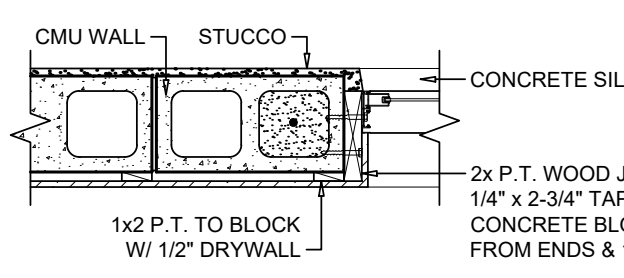
GARAGE DOOR JAMB DETAIL

SCALE: N.T.S.



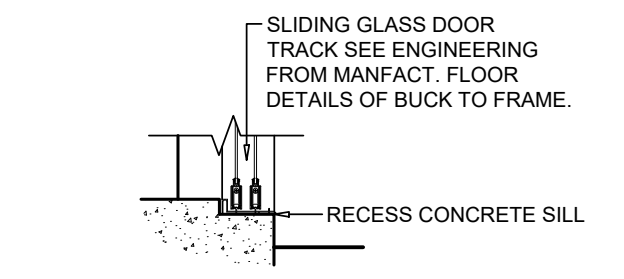
SLIDING GLASS DOOR HEAD DETAIL

SCALE: N.T.S.



SLIDING GLASS DOOR JAMB DETAIL

SCALE: N.T.S.



SLIDING GLASS DOOR SILL DETAIL

SCALE: N.T.S.

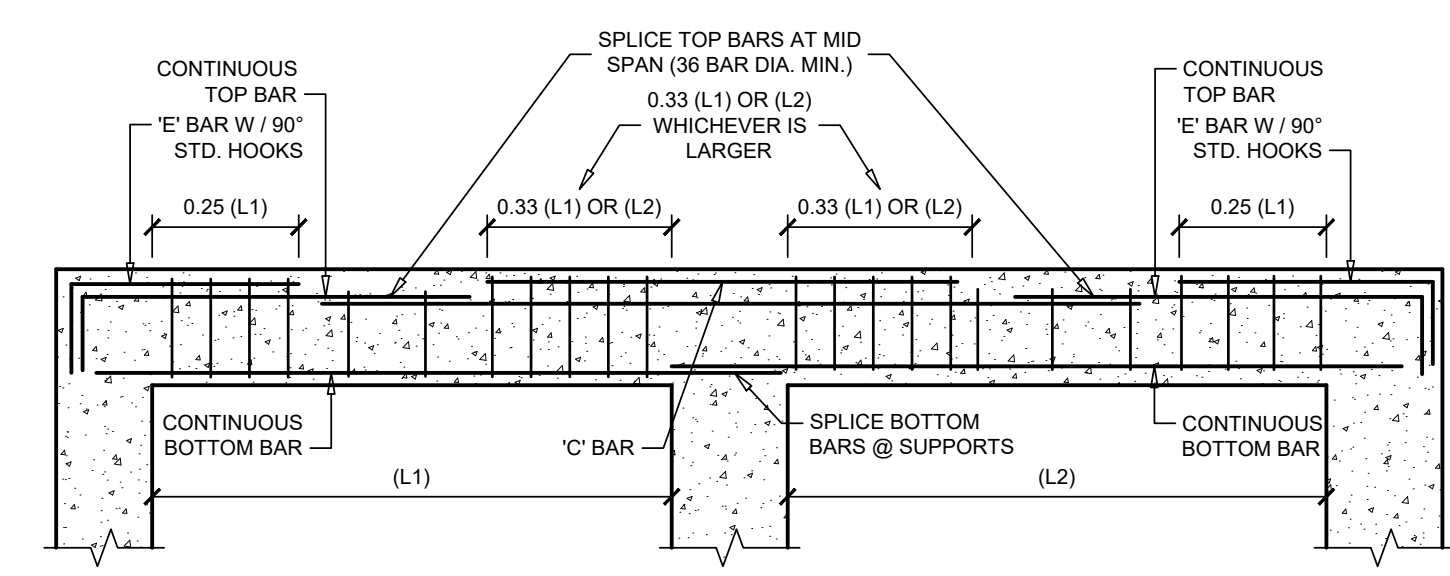
ALTERNATE WINDOW / DOOR JAM ATTACHMENT

WINDOW JAMS SHALL CONSIST OF 1X3 (MIN.) PRESSURE TREATED ATTACHED TO MASONRY WITH 3/16" X 2 1/2" TAPCONS AT 4" FROM EA. END AND 16" O.C. FOR OPENINGS UP TO 6'-0". PROVIDE 3/16" X 2 1/2" TAPCONS AT 12" O.C. FOR OPENINGS GREATER THAN 6'-0" TO 5'-0" HIGH. ANCHORS SHALL NOT BE IN THE BEVELED AREA.

SLIDING DOORS OR WINDOWS UP TO 8'-0" HIGH REQUIRING BUCKING WIDER THAN 4" UP TO 8" SHALL BE ATTACHED TO THE MASONRY WALL WITH (2) ROWS OF 3/16" X 2 1/2" AT 16" O.C. FOR 1X BUCKS AND 1/4" X 3 1/2" AT 16" O.C. FOR 2X BUCKS.

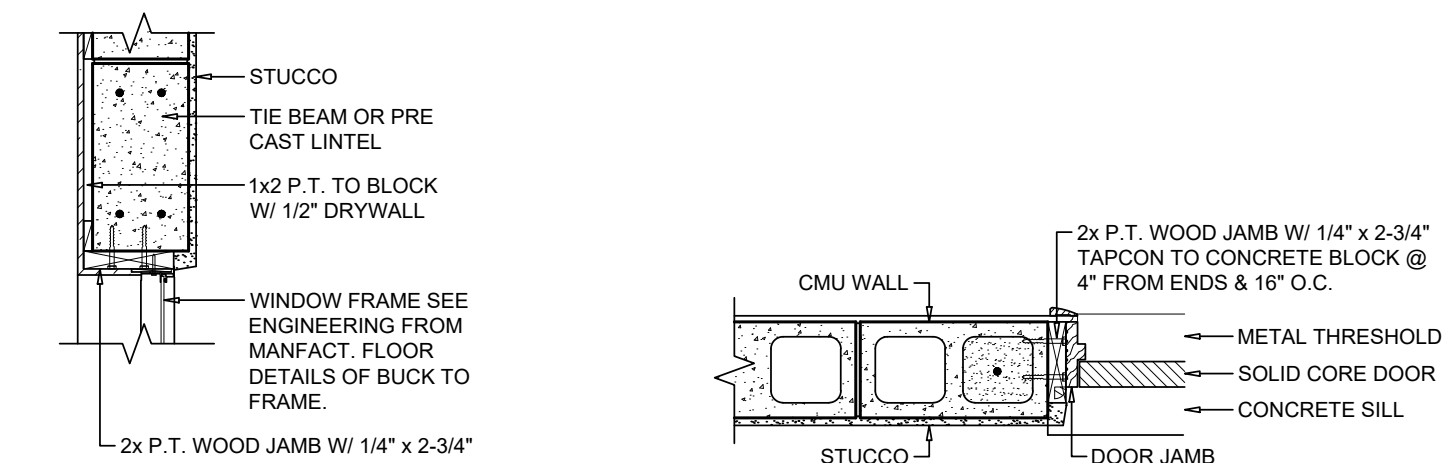
WINDOW ATTACHMENT SHALL BE PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE ATTACHED DIRECTLY TO THE MASONRY WALL THROUGH THE BUCKING IF USING 1" THICK BUCKSTRIPS.

MASONRY CELLS ON EACH SIDE OF THE OPENING SHALL BE FILLED SOLID WITH #5 REBAR EACH CELL IN ACCORDANCE WITH THE MASONRY NOTES.



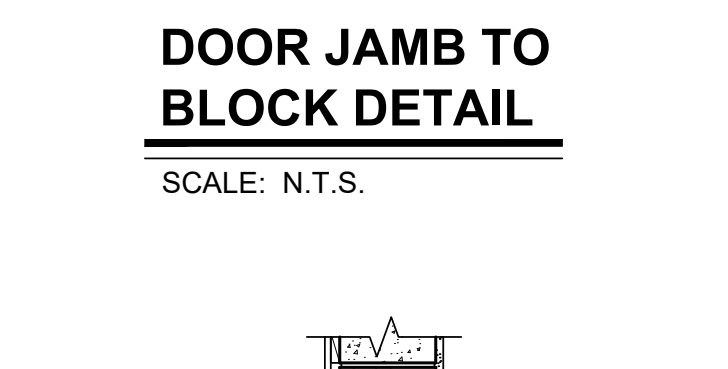
BEAM BAR DIAGRAM

SCALE: N.T.S.



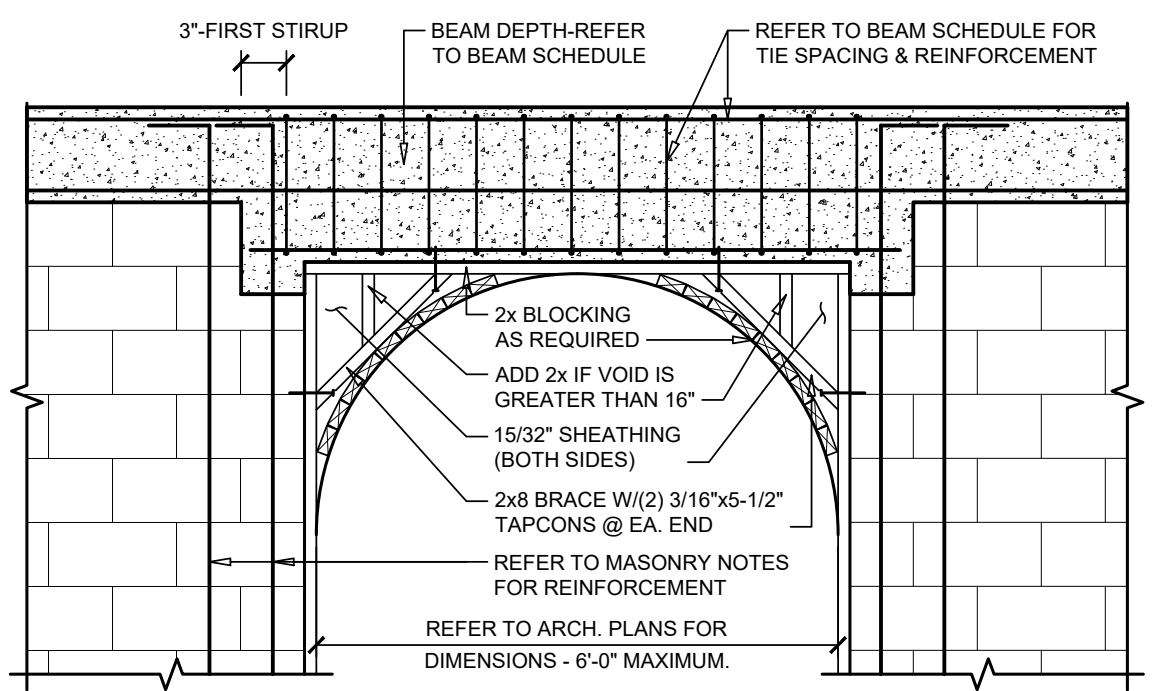
WINDOW HEAD DETAIL

SCALE: N.T.S.



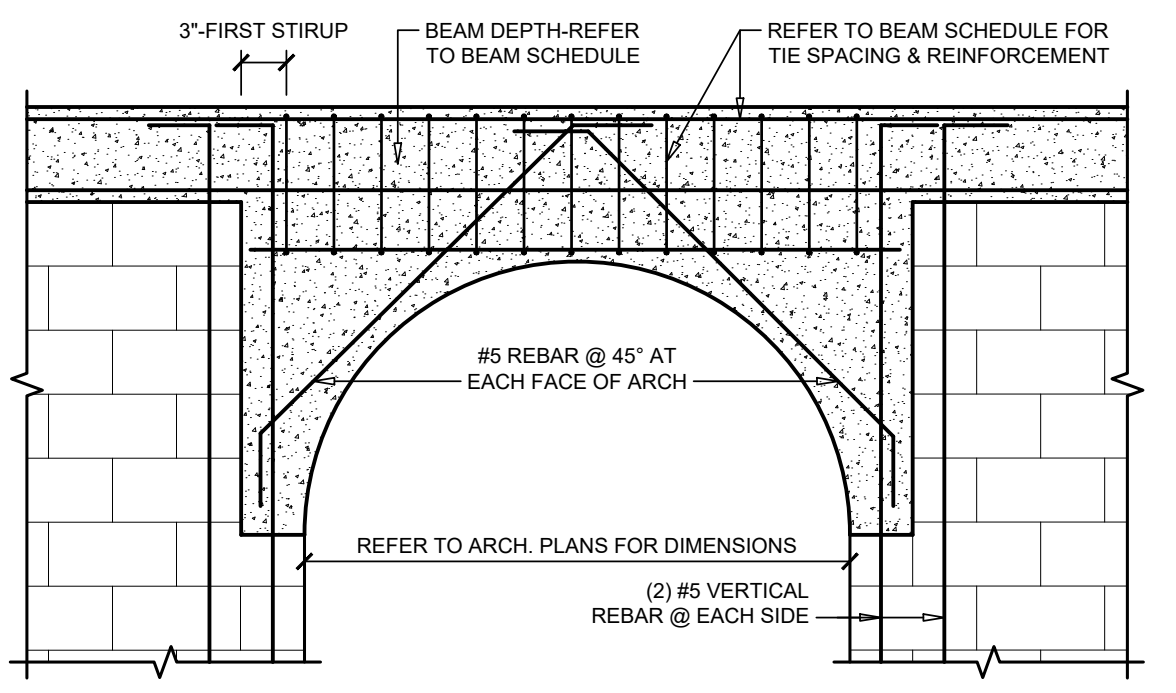
DOOR JAMB TO BLOCK DETAIL

SCALE: N.T.S.



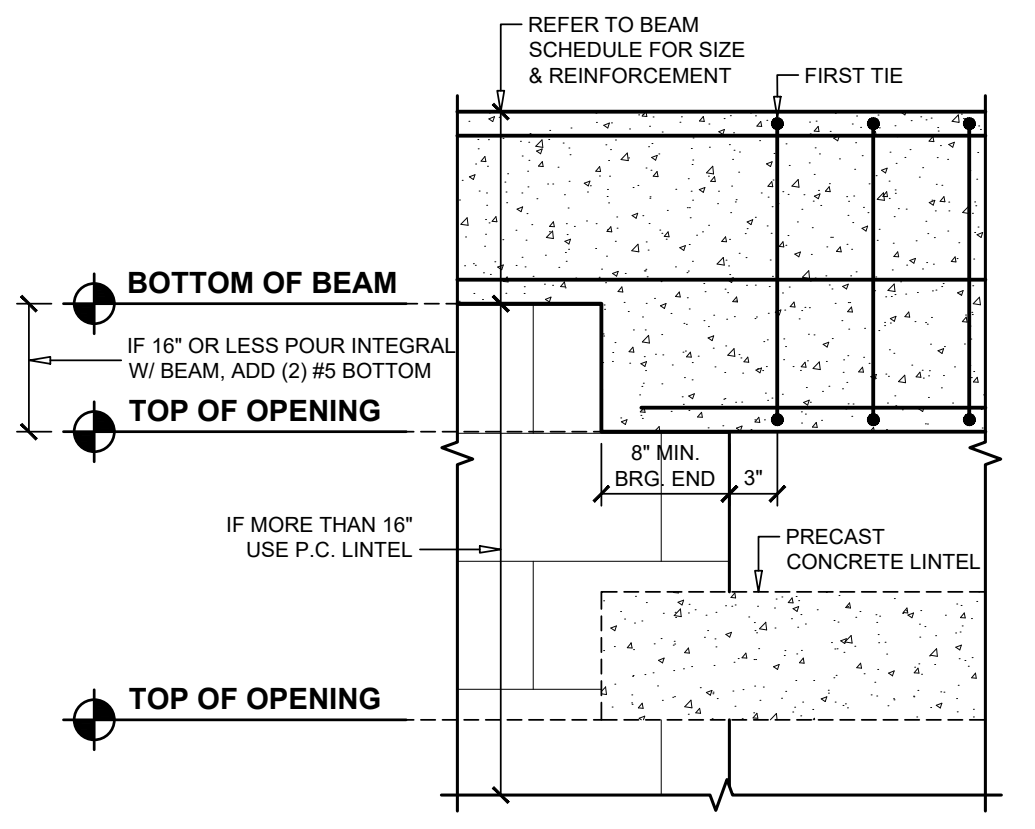
TYPICAL WOOD FRAME ARCH DETAIL

SCALE: N.T.S.



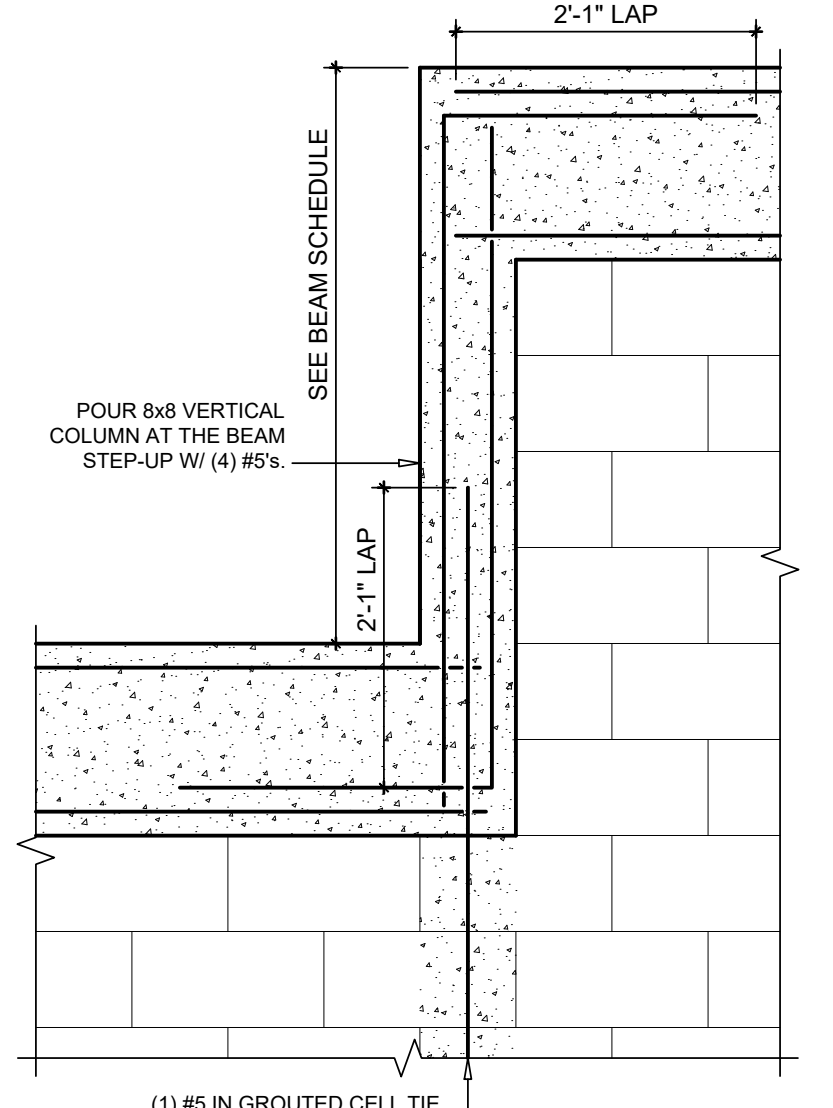
TYPICAL ARCH DETAIL

SCALE: N.T.S.



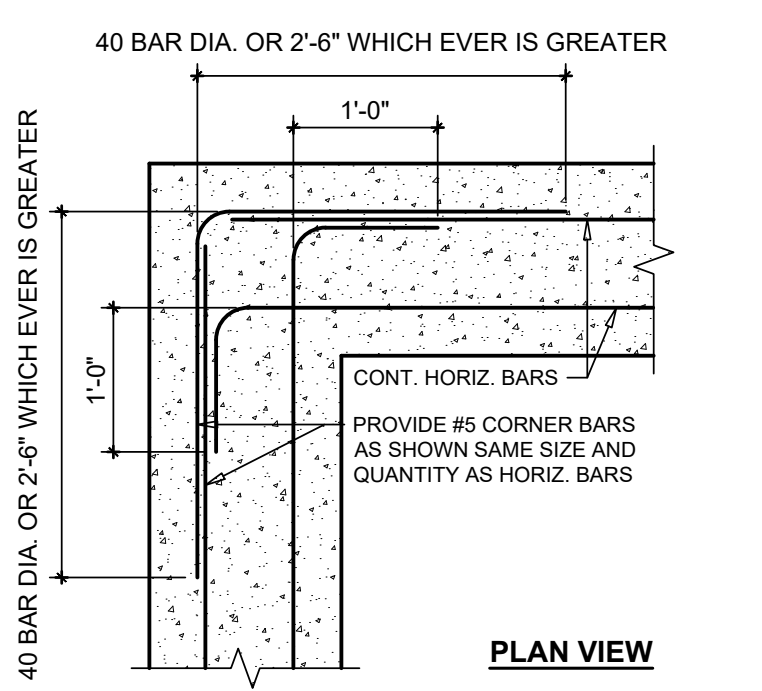
TYPICAL BEAM / LINTEL OVER OPENING

SCALE: N.T.S.



STEP-UP TIE BEAM DETAIL

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



DETAIL FOR FOOTINGS, TIE BEAMS, AND WALLS (TYP.)

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

REV.	DESCRIPTION

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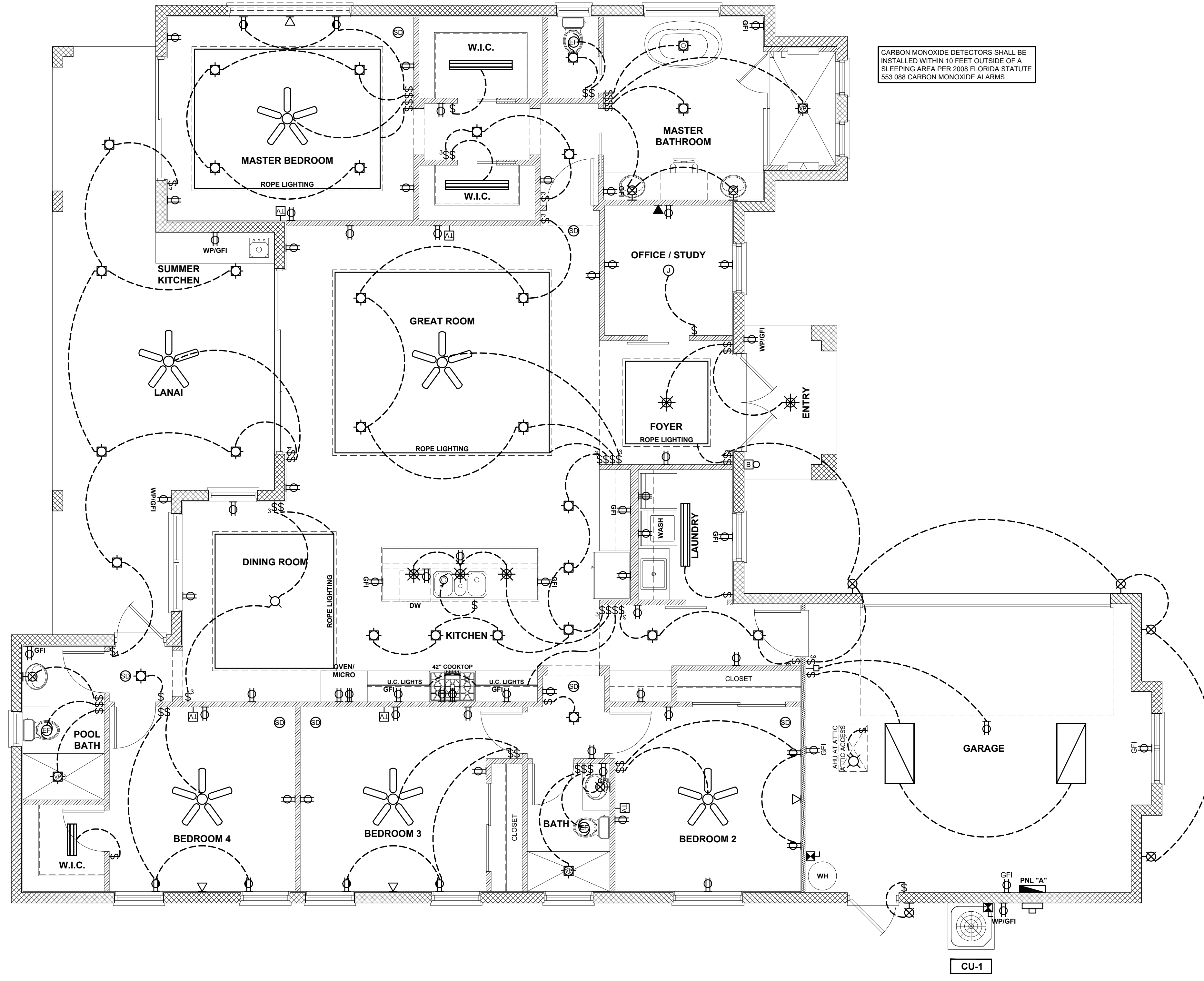
PROJ. NAME: **SINGLE FAMILY RESIDENCE xxx DOGWOOD WAY NAPLES, FL**

DATE: **SEPTEMBER 25, 2020**

DESCRIPTION:

CRONIN ENGINEERING, INC.
AUTHORIZATION NUMBER: 6597
627 W. HILL OW PARK DRIVE
NAPLES, FL 34109
PHONE: 561-251-5157 FAX: 593-9820

DEREK P. CRONIN
FLORIDA PE # 65382



ELECTRICAL PLAN

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

DESIGNED BY: DEREK P. CRONIN
 LICENSED PROFESSIONAL ELECTRICAL ENGINEER
 FLORIDA LICENSE # 56382

CRONIN ENGINEERING, INC.
 CERTIFICATE OF AUTHORIZATION NUMBER: 6957
 6627 WILLOW PARK DRIVE
 NAPLES, FL 34109
 PHONE: 563-2157 FAX: 563-9820

DATE: SEPTEMBER 25, 2020

PROJ. NAME: **SINGLE FAMILY RESIDENCE**
XXXX DOGWOOD WAY
 NAPLES, FL
 DESCRIPTION: **ELECTRICAL PLAN**

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REV.	DESCRIPTION

THE OWNER OR CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT AND SHALL FOLLOW THE LOCAL BUILDING CODES AND REGULATIONS AND ALL APPLICABLE ELECTRICAL, MECHANICAL, AND PLUMBING CODES AND ORDINANCES IN THE COMMUNITY OF CONSTRUCTION.

ELECTRICAL SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	SWITCH SINGLE POLE
	3 WAY SWITCH
	4 WAY SWITCH
	INCANDESCENT LIGHT DIMMER AND SWITCH
	MOTION DETECTOR SENSOR
	RECESSED RESTROOM EXHAUST FAN
	WALL MOUNT LIGHTING FIXTURE
	SURFACE MOUNTED WALL SCONCE LIGHT
	CEILING MOUNT LIGHTING FIXTURE
	HANGING CEILING LIGHTING FIXTURE
	RECESSED LIGHTING FIXTURE
	VAPOR PROOF RECESSED LIGHTING FIXTURE
	EXTERIOR FLOOD LIGHT FIXTURE
	FLUORESCENT LIGHTING STRIP FIXTURE
	FLUORESCENT WRAP AROUND LIGHTING FIXTURE
	2X2 PARABOLIC RECESSED LIGHTING FIXTURE
	2X2 ACRYLIC RECESSED LIGHTING FIXTURE
	2X4 PARABOLIC RECESSED LIGHTING FIXTURE
	2X4 ACRYLIC RECESSED LIGHTING FIXTURE
	CEILING FAN
	CEILING FAN WITH LIGHT KIT
	EXIT LIGHTING FIXTURE
	EMERGENCY LIGHTING FIXTURE
	EXIT & EMERGENCY COMBINATION LIGHTING FIXTURE
	EXIT LIGHTING FIXTURE DIRECTIONAL CHEVRONS
	CEILING MOUNTED COMBINATION SMOKE/CARBON MONOXIDE ALARM
	ELECTRICAL PANEL SURFACE MOUNT
	DUPLEX RECEPTACLE 125V 20A
	1/2 SWITCHED DUPLEX RECEPTACLE 125V 15A (RESIDENTIAL)
	DUPLEX RECEPTACLE 125V 20A GROUND FAULT CIRCUIT INTERRUPT & WATERPROOF COVER
	DUPLEX RECEPTACLE 125V 20A GROUND FAULT CIRCUIT INTERRUPT
	DUPLEX FLOOR RECEPTACLE 125V 20A
	DUPLEX CEILING MOUNTED RECEPTACLE 125V 20A
	208/240 VOLT RECEPTACLE 4WIRE
	CEILING MOUNTED JUNCTION / OUTLET BOX
	TELEPHONE OUTLET
	DATA OUTLET
	TELEVISION OUTLET
	DOOR BELL
	MOTOR
	MOTOR DISCONNECT SWITCH
	ELECTRICAL METER

- ### ELECTRICAL NOTES
- IT IS THE INTENT OF THE DESIGNER THAT THE ELECTRICAL SUBCONTRACTOR IS TO BID AND INSTALL ALL ELECTRICAL ITEMS AS REQUIRED PER APPLICABLE ELECTRICAL BUILDING CODES.
- ALL EXTERIOR OUTLETS AND OUTLETS IN KITCHEN, BATHROOMS AND UTILITY TO BE ON GFI CIRCUITS.
 - VERIFY POWER HOOK UP LOCATION AND TYPE OF SERVICE (UNDERGROUND OR OVERHEAD) WITH RESPECT TO SUBDIVISION REQUIREMENTS.
 - ALL SMOKE DETECTORS ARE TO BE HARD WIRED AND INTERCONNECTED WITH BATTERY BACKUP.
 - ALL FIXTURES SHALL BE APPROVED BY THE OWNER PRIOR TO PURCHASE AND INSTALLATION.
 - ALL 120V, SINGLE PHASE, 15 AND 20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN ALL LIVING AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT

EQUAL TO: SQ. "D" Q0142M250
 TYPE: LOADCENTER
 MOUNTING: FLUSH

PANEL "A"

VOLTAGE: 120/240V, 1Ø, 3W
 MAINS: 250A
 TYPE MAINS: MB

CIR. NO.	IDENTIFICATION	"A" VA	"B" VA	TRIP AMPS	POLE	WIRE	COND	COND	WIRE	POLE	TRIP AMPS	"A" VA	"B" VA	IDENTIFICATION	CIR. NO.	
1	* AHU-1	-	60	2	6	1"	1/2"	14	1	15	-	-	-	GENERAL LIGHTING	2	
3	* AHU-1	-	60	-	6	-	1/2"	14	1	15	-	-	-	GENERAL LIGHTING	4	
5	* CU-1 (4 TON)	-	40	2	8	3/4"	1/2"	14	1	15	-	-	-	GENERAL LIGHTING	6	
7	* CU-1	-	40	-	8	-	1/2"	14	1	15	-	-	-	GENERAL LIGHTING	8	
9	COOKTOP	-	50	2	8	3/4"	1/2"	10	2	30	-	-	-	DRYER	10	
11	COOKTOP	-	50	-	8	-	-	10	-	30	-	-	-	DRYER	12	
13	REFRIGERATOR	-	-	60	-	6	-	-	-	-	-	-	-	WASHER	14	
15	DISPOSAL	-	20	1	12	1/2"	1/2"	12	1	20	-	-	-	LAUNDRY	16	
17	KITCHEN RECEPTACLES	-	20	1	12	1/2"	1/2"	12	1	20	-	-	-	DISHWASHER	18	
19	KITCHEN RECEPTACLES	-	20	1	12	1/2"	1/2"	12	1	20	-	-	-	GARAGE	20	
21	MICROWAVE	-	20	1	12	1/2"	1/2"	12	1	20	-	-	-	BATHROOM	22	
23	** BEDROOM 2	-	15	1	14	1/2"	1/2"	10	2	30	-	-	-	WATER HEATER	24	
25	** BEDROOM 3	-	15	1	14	1/2"	-	10	-	30	-	-	-	WATER HEATER	26	
27	** BEDROOM 4	-	15	1	14	1/2"	1/2"	12	1	20	-	-	-	LANAI RECEPTACLES	28	
29	MASTER BATH RECEPTACLES	-	20	1	12	1/2"	1/2"	14	1	15	-	-	-	** MASTER BEDROOM	30	
31	GREAT ROOM	-	15	1	14	1/2"	1/2"	14	1	15	-	-	-	OFFICE / STUDY	32	
33	DINING ROOM	-	15	1	14	1/2"	-	-	-	-	-	-	-	-	-	34
35																36
37																38
39																40
41																42
SUB-TOTAL KVA/Ø															SUB-TOTAL KVA/Ø	

* VERIFY SIZE OF O.C.P. DEVICE W/ MANUFACTURER, MECHANICAL DRAWINGS AND FIELD VERIFICATION.
 ** INDICATES ARC FAULT BREAKER.
 *** VIA TIME SWITCH.

EQUAL TO: SQ. "D" Q0112L100GR
 TYPE: LOADCENTER
 MOUNTING: SURFACE MOUNTED

PANEL "P" POOL

VOLTAGE: 120/240V, 1Ø, 3W
 MAINS: 100A
 TYPE MAINS: MAIN LUG RAINPROOF

CIR. NO.	IDENTIFICATION	"A" VA	"B" VA	TRIP AMPS	POLE	WIRE	COND	COND	WIRE	POLE	TRIP AMPS	"A" VA	"B" VA	IDENTIFICATION	CIR. NO.
1	* POOL HEATER #1	-	35	2	8	3/4"	1/2"	12	2	20	-	-	-	POOL PUMP #1	2
3	* POOL HEATER #1	-	35	-	8	-	-	12	-	20	-	-	-	POOL PUMB #1	4
5	* BLOWER	-	20	2	12	1/2"	1/2"	20	1	12	-	-	-	POOL LIGHTING	6
7	* BLOWER	-	20	-	12	-	-	-	-	-	-	-	-	SPACE	8
9	SPACE	-	-	-	-	-	-	-	-	-	-	-	-	SPACE	10
11	SPACE	-	-	-	-	-	-	-	-	-	-	-	-	SPACE	12
SUB-TOTAL KVA/Ø															SUB-TOTAL KVA/Ø

* VERIFY SIZE OF O.C.P. DEVICE W/ MANUFACTURER, MECHANICAL DRAWINGS AND FIELD VERIFICATION.
 ** INDICATES ARC FAULT BREAKER.
 *** VIA TIME SWITCH.

Residential Standard Calculation Version 7.28

STEP 1 Article 220.42 & 220.52
 2379 General Lighting load 7,137 VA
 2 Small Appliance 3,000 VA
 1 Laundry circuit 1,500 VA
 Gen.Lgt., Sm App & Laun. Load 11,637 VA
 8,637 VA @ 100% = 3,000 VA
 @ 35% = 3,023 VA
 @ 25% =

General Lighting Demand Load 6,023 VA

STEP 2 Article 220.50 & 220.51
 4 ton 6,300 VA AHU 1 7.5W 8,300 VA
 A/C #2 VA AHU 2 Select VA
 A/C #3 VA AHU 3 Select VA
 A/C #4 VA AHU 4 Select VA
 A/C #5 VA AHU 5 Select VA

Total Heat Load 8,300 VA
 Total CU Load 6,300 VA
 Greater of Heat @ 100% vs. A/C @ 100% 8,300 VA

STEP 3 Article 220.53
 4500 VA 1 Water Heater 4,500 VA
 1400 VA 1 Refrigerator 1,400 VA
 600 VA Freezer VA
 1030 VA 1 Dishwasher 1,030 VA
 690 VA 1 Disposal 690 VA
 790 VA 1 Trash Compactor VA
 1630 VA 1 Microwave 1,630 VA
 340 VA 0 Mini Refrigerator VA
 400 VA 1 Range hood VA
 540 VA 1 Wine Cooler VA
 1500 VA 1 Ironing Center VA
 select Jacuzzi Tub VA
 select Sprinkler Pump VA
 select Well Pump VA
 select Fountain Pump VA
 select Elevator VA
 Pool Equip. Panel VA
 U.C. Ice Maker VA

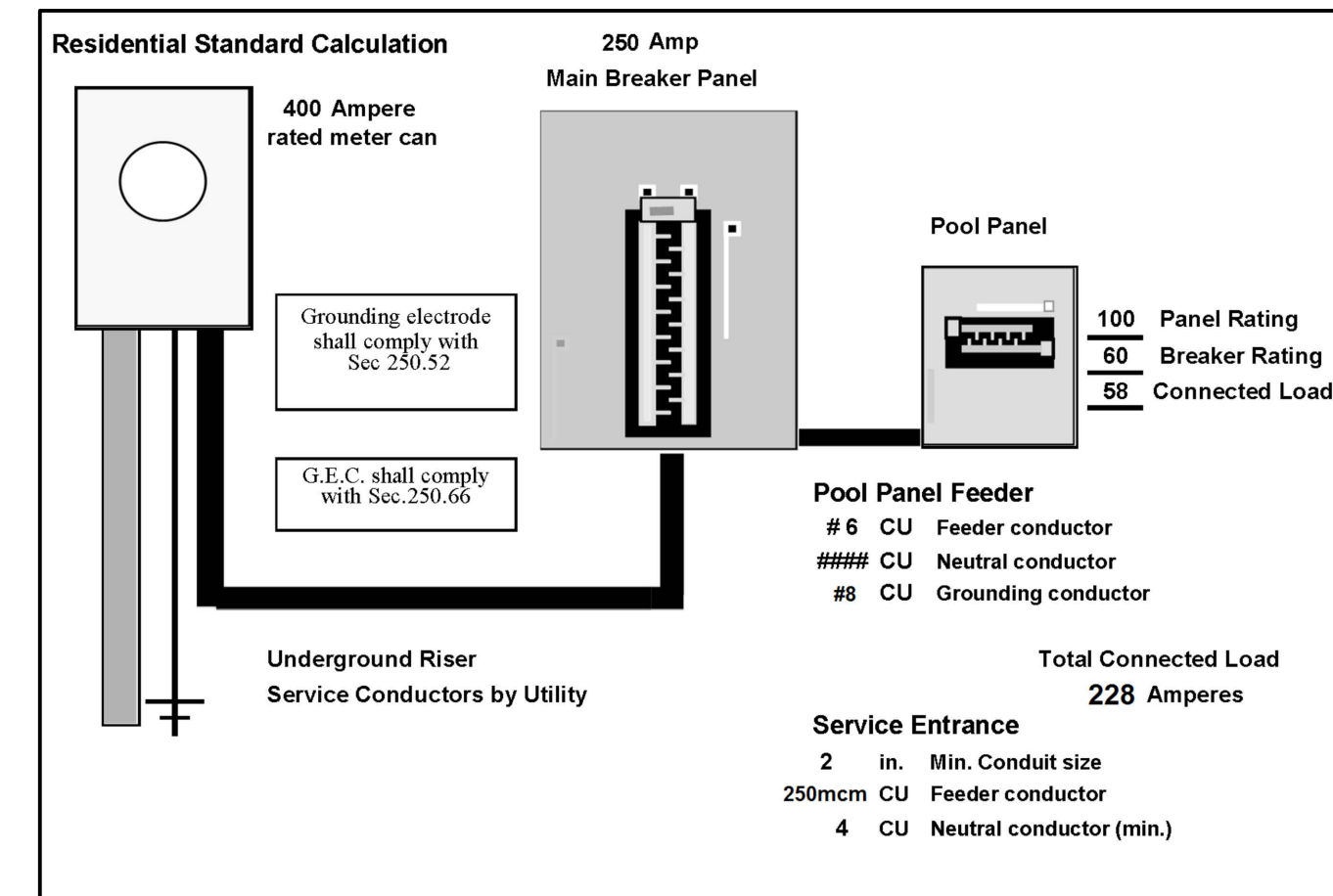
Appliance Demand Load 21,243 VA
 Dryer Demand Load 5,000 VA
 Range Demand Load 7,735 VA
 Service Demand 48,300 VA
 Demand Load 201 A
 Neutral Demand 77 A
 Min. Service Req. 225 A
 Min. Feeder size 3/0
 Min. Neutral size 4
 Eq. Grding Cond. 6
 Copper

STEP 4 Article 220.54
 Electric Clothes Dryers 5,000 VA

STEP 5 Article 220.55
 Electric Ranges W Col C demand W
 0

Number of appliances 2 Dem. Factor 65%
 Cooktop & Oven Demand Load 7,735 W

Pool Panel Feeder Calculation (See Note)
 Continuous Motors 1,840 920 920 0
 Non-continuous 0 0 0 0
 Spa heater 11 kVA 0 0 0
 Pool heater 3.5 ton 0 0 0
 Pool heater 5 ton 1 5063 5063 0
 Pool Light 2000 0 100 100 100
 Blower 1 hp 1840 920 920 0
 Boat Lift 0 0 0 0
 other load 0 240v 0 0 0
 Copper Pool Feeder 58,924,167 58 A 58 A 1 A
 Phase Amperes Neut. load



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PROJ. NAME: SINGLE FAMILY RESIDENCE
 XXXX DOGWOOD WAY
 NAPLES, FL

DESCRIPTION: SCHEDULES, NOTES & DETAILS

DATE: SEPTEMBER 25, 2020

DESIGNED BY: DEREK P. CRONIN
 SPECIFIED BY: DEREK P. CRONIN
 CHECKED BY: DEREK P. CRONIN
 BUILDING CODE REQUIREMENTS

SHEET No: