

GENERAL NOTES

- THE CONTRACTOR AND ALL SUB CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND 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.
- 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.
- 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.
- DETAILS NOTED AS TYPICAL SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE.
- 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.
- WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF 6TH EDITION FLORIDA BUILDING CODE.
- IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON STRUCTURAL DRAWINGS.
- 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 4000 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.O.

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" HOLLOW 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 DOWELS IN FOOTINGS FOR ALL VERTICAL REINFORCING ABOVE LAP SPLICES 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 THE BEAMS SHALL BE POURED AFTER THE MASONRY BLOCK WALLS BELOW ARE IN PLACE CONFINEMENT 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 COURSE 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.

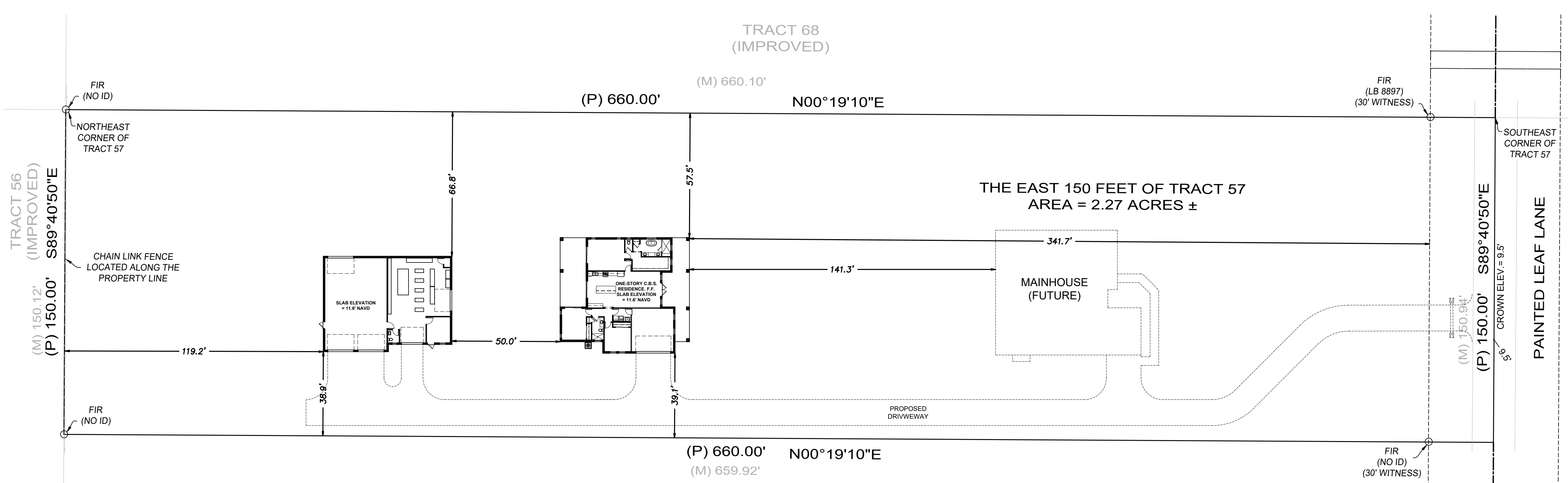
APPLICABLE CODES

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

PROJECT INFORMATION

ALLOWED	PROVIDED
• OCCUPANCY/CLASSIFICATION	RESIDENTIAL R-3
• TYPE OF CONSTRUCTION:	TYPE V (B) - UNSPRINKLERED.
• BUILDING AREA: MAIN HOUSE: GARAGE:	TOTAL UNDER ROOF: 3,041 SF. TOTAL UNDER ROOF: 2,513 SF. TOTAL: 5,554 SF.
• HEIGHT OF BUILDING: MAIN HOUSE: GARAGE:	18'-0" MEAN HEIGHT OF ROOF 19'-4" MEAN HEIGHT OF ROOF
• BUILDING HEIGHT IN STORIES:	1 STORY PROVIDED
• FLOOD ZONE:	ZONE AH-10.5'
• DESIGN CRITERIA - BASIC WIND SPEED: WIND IMPORTANCE FACTOR (Iw): BUILDING CATEGORY: EXPOSURE CATEGORY:	160 MPH 1.0 LOW-RISE BUILDING, ENCLOSED C

SINGLE FAMILY RESIDENCE "SANTIAGO" RESIDENCE NAPLES, FL (PARCEL No. 38165000001)



SITE PLAN

SCALE: 1"=30'

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GARAGE & WORK AREA

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REV.	DESCRIPTION

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THE OWNER OR CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT AND SHALL FOLLOW THE LOCAL BUILDING CODES AND ORDINANCES, THE STATE BUILDING CODES AND ORDINANCES, THE NATIONAL BUILDING CODES AND ORDINANCES, THE INTERNATIONAL BUILDING CODES AND ORDINANCES, AND ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS IN THE CONSTRUCTION OF THE PROJECT.

PROJ. NAME: **SINGLE FAMILY RESIDENCE "SANTIAGO RESIDENCE"**
NAPLES, FL (PARCEL No. 38165000001)

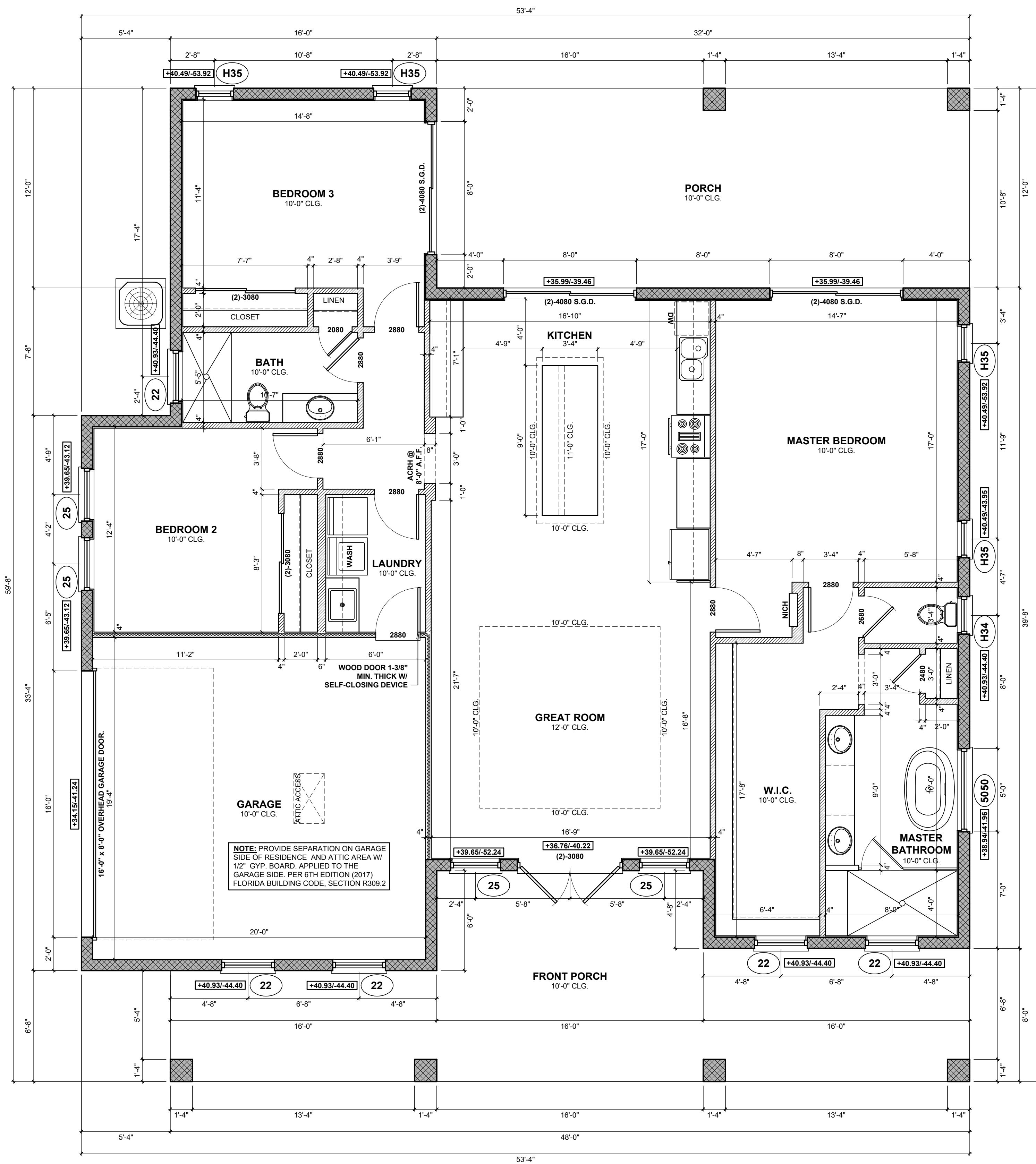
DATE: **JUNE 12, 2018**

DESCRIPTION: **COVER SHEET**

CRONIN ENGINEERING, INC.
CERTIFICATE OF AUTHORIZATION NUMBER: 6597
6627 WILLOW PARK DRIVE
PHONE: 563-2157 FAX: 563-9820

DEREK P. CRONIN
FLORIDA PE # 65382

SHEET No:



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

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'-6" (54")	2-7/32" wire	2-#3 rebar
4'-8" (56")	2-7/32" wire	2-#3 rebar
5'-4" (64")	2-7/32" wire	2-#3 rebar
5'-10" (70")	2-7/32" wire	2-#3 rebar
6'-0" (72")	2-7/32" wire	2-#4 rebar
6'-6" (78")	2-7/32" wire	2-#4 rebar
6'-8" (80")	2-7/32" wire	2-#4 rebar
7'-4" (88")	2-7/32" wire	2-#4 rebar
7'-6" (90")	2-7/32" wire	2-#4 rebar
8'-0" (96")	2-#3 rebar	2-#4 rebar
8'-8" (104")	2-#3 rebar	2-#4 rebar
9'-4" (112")	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'-8" (128")	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

Additional lengths available for special order.

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")	2-7/32" wire	2-7/16 strand
21'-4" (256")	2-7/32" wire	2-7/16 strand
22'-0" (264")	2-7/32" wire	2-#4 rebar
24'-0" (288")	2-7/32" wire	2-7/16 strand 2-#4 rebar

Additional lengths available for special order.

Rebar: ASTM A615 Grade 60
Wire: ASTM A510
Strand: 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	1,803 SQ FT
GARAGE	417 SQ FT
FRONT PORCH	437 SQ FT
REAR PORCH	384 SQ FT
TOTAL NON-A/C	1,238 SQ FT
TOTAL UNDER ROOF	3,041 SQ FT

WINDOW SCHEDULE

WINDOW MARK	WINDOW SIZE	TYPE	REMARK
(H33)	26-1/2" x 38-3/8"	FIXED WINDOW	IMPACT RESISTANT
(H34)	26-1/2" x 50-5/8"	SINGLE HUNG	IMPACT RESISTANT
(H35)	26-1/2" x 63"	SINGLE HUNG	IMPACT RESISTANT
(22)	37" x 26"	SINGLE HUNG	IMPACT RESISTANT
(25)	37" x 63"	SINGLE HUNG	IMPACT RESISTANT
(6050)	60" x 60"	FIXED WINDOW	IMPACT RESISTANT

NOTE: ALL EXTERIOR DOORS & WINDOWS TO BE 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.

CRONIN ENGINEERING, INC.
CERTIFICATE OF AUTHORIZATION NUMBER: 6957
6827 WILLOW PARK DRIVE
PHONE: 563-2157 FAX: 563-9820
FLORIDA PE # 65382

SINGLE FAMILY RESIDENCE "SANTIAGO RESIDENCE"
NAPLES, FL (PARCEL NO. 38165000001)

FLOOR PLAN

DATE: JUNE 12, 2018

DESCRIPTION:

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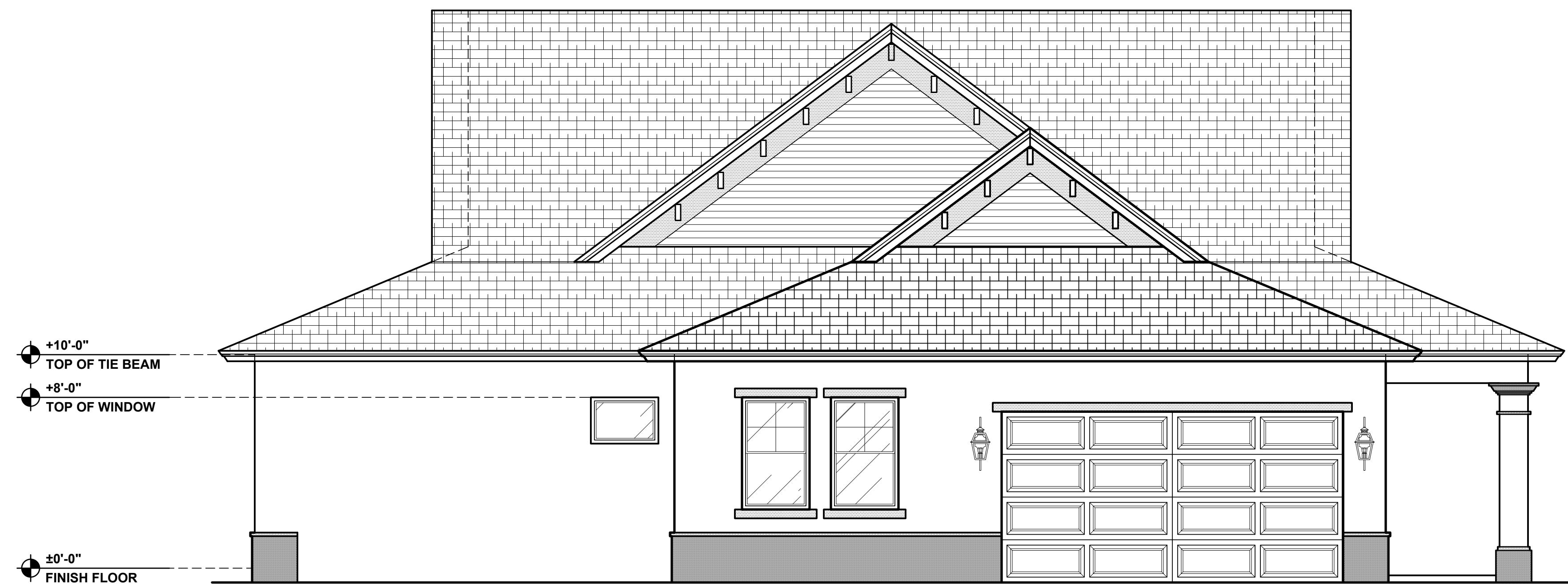
WE ARE NOT RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT AND SHALL FOLLOW THE LOCAL BUILDING CODES AND ALL APPLICABLE REGULATIONS AND ORDINANCES IN THE CONSTRUCTION DOCUMENTS PART TO COMPLETION OF CONSTRUCTION.

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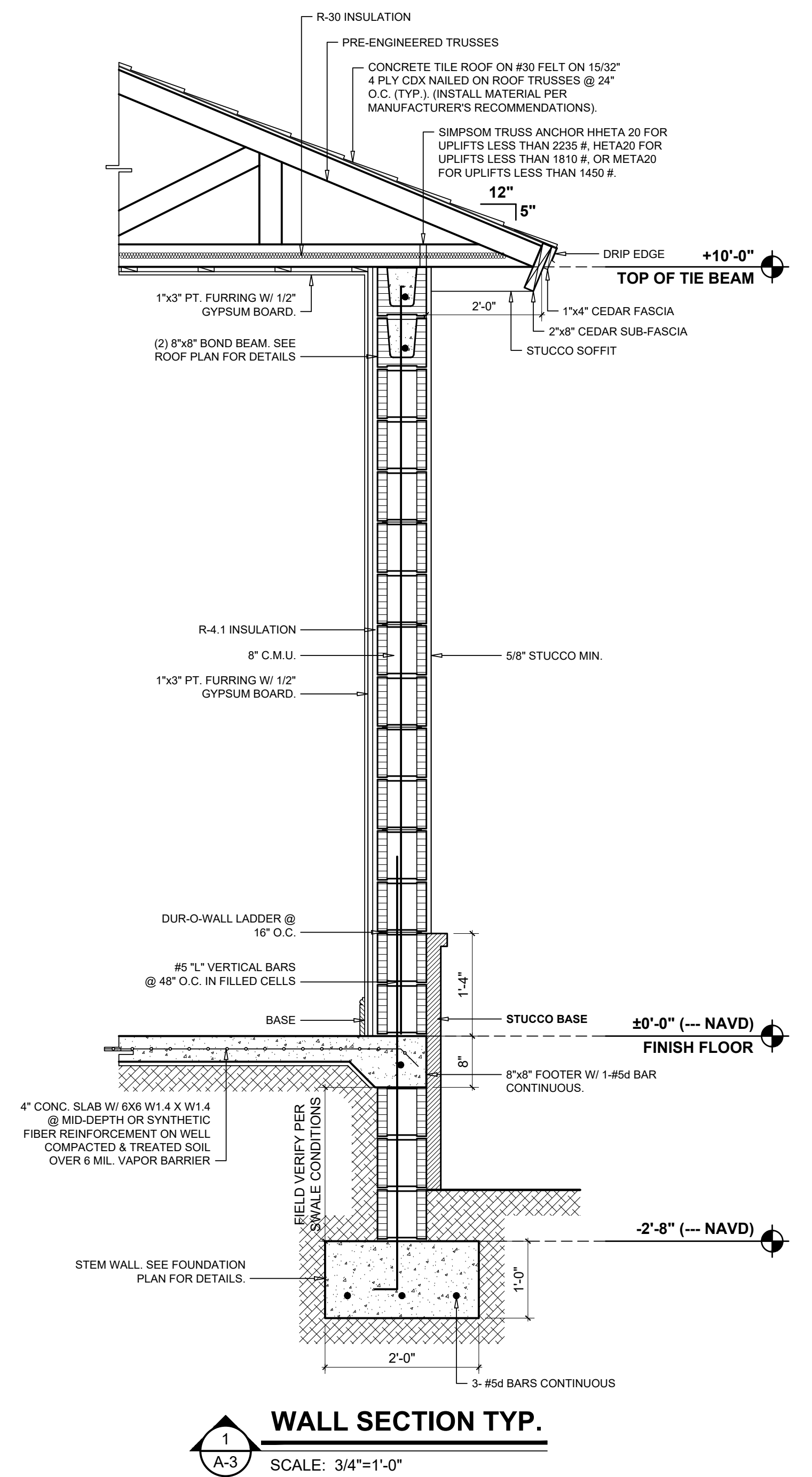
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FRONT ELEVATION
 SCALE: 1/4"=1'-0"



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



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

REV.	DESCRIPTION

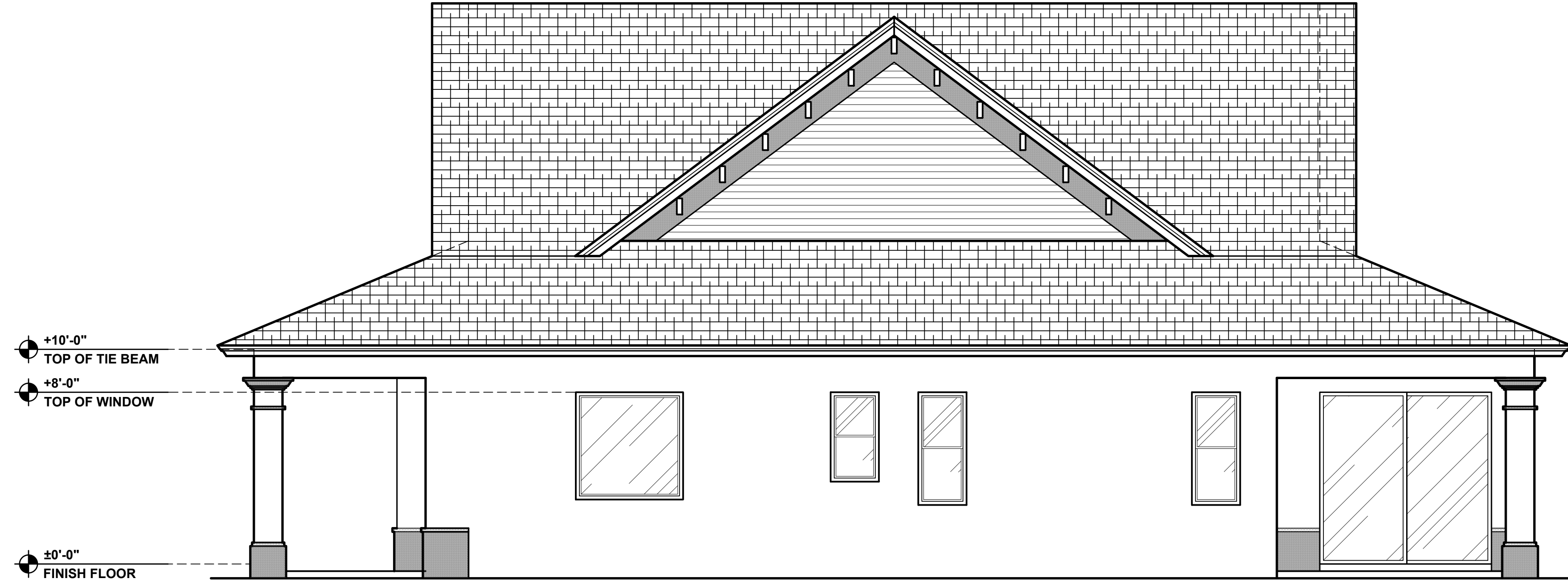
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THE OWNER OR CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR THE CONSTRUCTION AND SHALL FOLLOW THE LOCAL BUILDING CODES AND REGULATIONS, ORDINANCES, AND DECREES IN THE CONSTRUCTION DOCUMENTS PART TO COMMENCEMENT OF CONSTRUCTION.

PROJ. NAME: **SINGLE FAMILY RESIDENCE "SANTIAGO RESIDENCE"**
 NAPLES, FL (PARCEL No. 38165000001)
 DATE: **JUNE 12, 2018**

CRONIN ENGINEERING, INC.
 CERTIFICATE OF AUTHORIZATION NUMBER: 6597
 6827 WILLOW PARK DRIVE
 NAPLES, FL 34109
 PHONE: 563-2157 FAX: 563-9820
 FLORIDA PE # 65382

DESIGNED BY: DEREK P. CRONIN
 CHECKED BY: DEREK P. CRONIN
 FLORIDA PE # 65382



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



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

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THE OWNER OR CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT AND STRICTLY FOLLOW THE LOCAL BUILDING CODES AND REGULATIONS AND OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL BUILDING DEPARTMENT OF JURISDICTION.

PROJ. NAME	DESCRIPTION
SINGLE FAMILY RESIDENCE "SANTIAGO RESIDENCE" NAPLES, FL (PARCEL No. 38165000001)	ELEVATIONS
DATE: JUNE 12, 2018	

CRONIN ENGINEERING, INC.
CERTIFICATE OF AUTHORIZATION NUMBER: 6957
6827 WILLOW PARK DRIVE
NAPLES, FL 34109
PHONE: 583-2157 FAX: 583-8820

REGISTERED PROFESSIONAL ENGINEER
FLORIDA REG. NO. 12583
DEREK P. CRONIN
FLORIDA PE # 63382

MASONRY WALL REINFORCEMENT NOTES

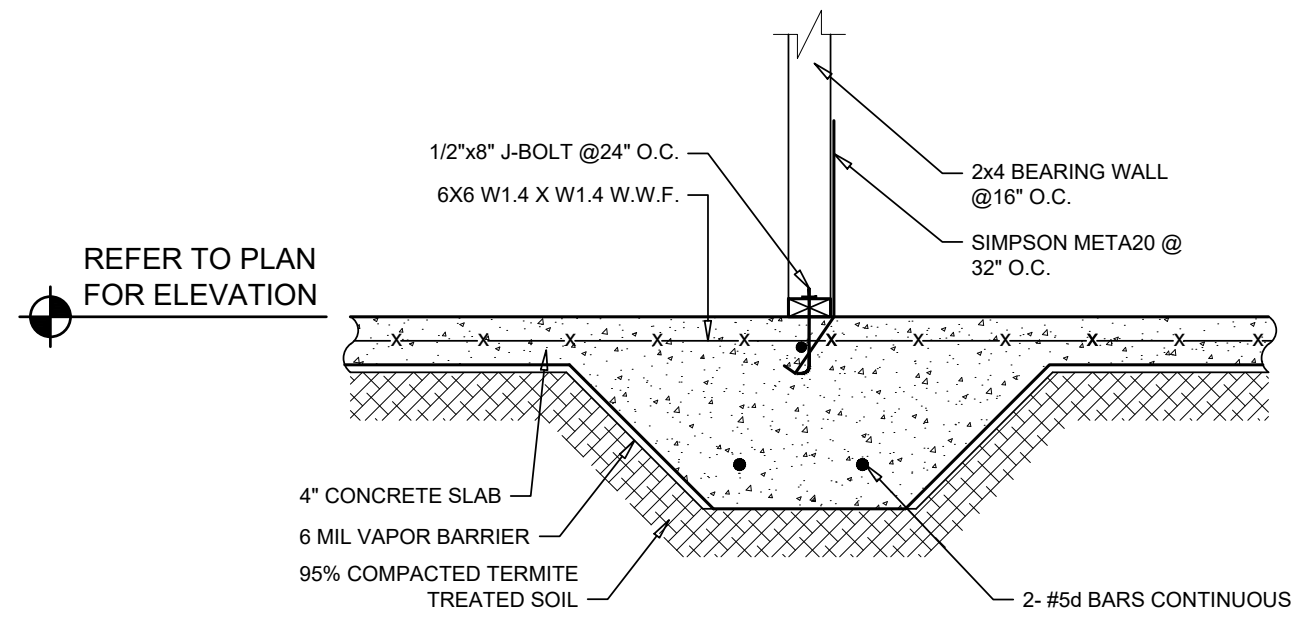
1. WALL REINFORCEMENT SHALL BE DOWELED FROM FOUNDATION AND BE CONTINUOUS THROUGH SOLID GROUTED CELLS AND BE HOOKED OVER TOP REINFORCEMENT OF UPPER BEAMS. MINIMUM LAP SPLICE SHALL BE 48 BAR DIAMETERS. FOR HORIZONTAL WALL REINFORCEMENT, @ EVERY OTHER COURSE.
2. WALL REINFORCEMENT IS AS FOLLOWS: #5 @ 48" O.C. PROVIDE 1 #5 AT ALL WALL INTERSECTIONS, CORNERS, & EACH SIDE OF OPENINGS AND 2 #5 EACH SIDE OF OPENINGS LARGER THAN 8'-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.

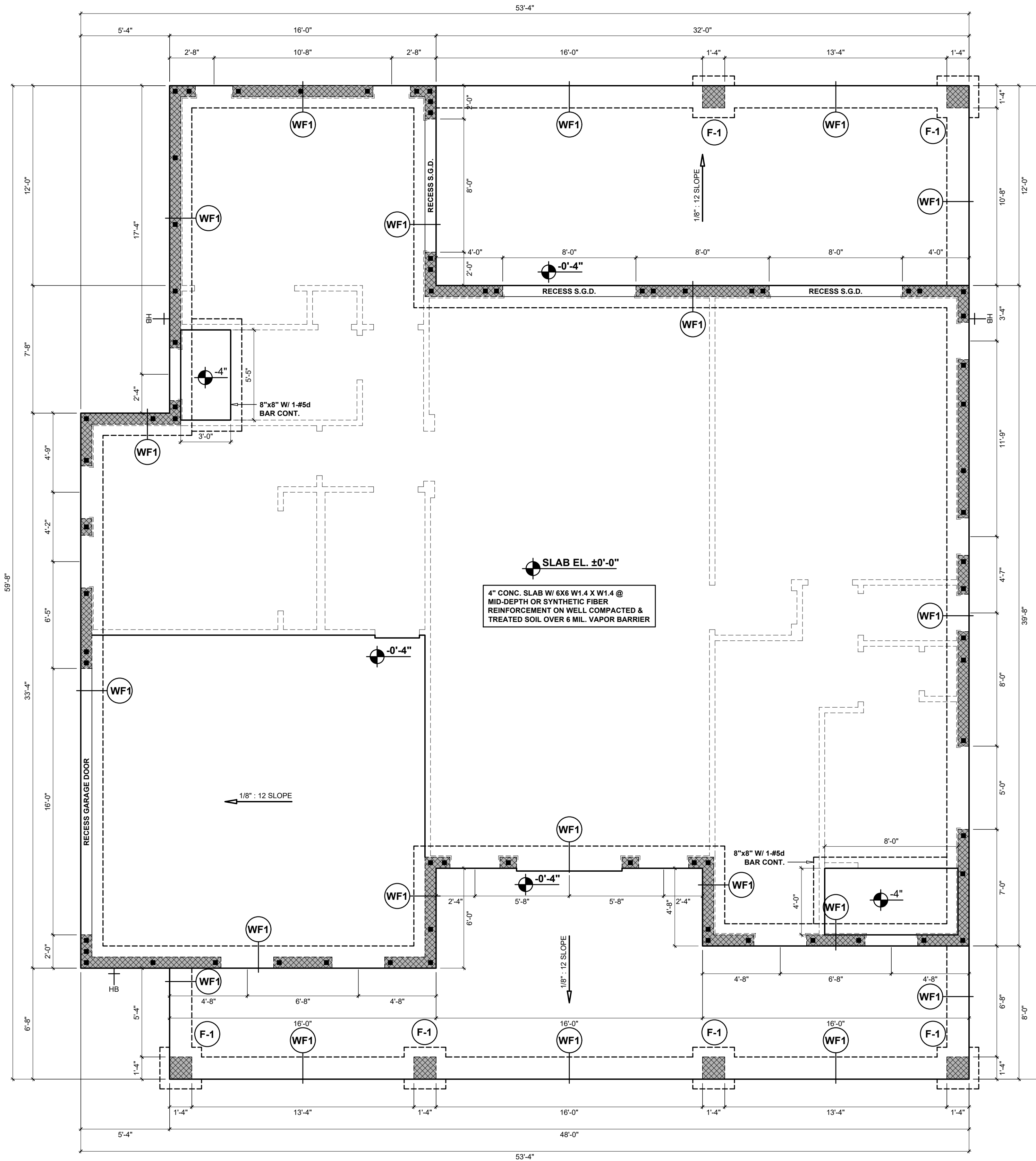
FOOTING SCHEDULE

MARK	SIZE	REINFORCEMENT	REMARKS
WF1	2'-0" x 1'-0" x CONT. STEM WALL	3- #5d BARS CONTINUOUS	TOP OF FOOTING MUST VARY. STEM WALL TO BE ADJUSTED PER SWALE CONDITIONS (TYP.)
F-1	3'-0" x 3'-0" x 1'-4"	CONCRETE PAD W/ #5d BARS @ 6" O.C. EACH WAY, 3" OFF OF BOTTOM OF FOUNDATION	



FOOTING DETAIL @ BEARING WALL

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



FOUNDATION PLAN

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

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THE OWNER OR CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR THE CONSTRUCTION OF THE FOUNDATION AND SHALL VERIFY THAT THE FOUNDATION IS CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS AND DEMANDS IN THE CONSTRUCTION DOCUMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

CRONIN ENGINEERING, INC.
"SANTIAGO RESIDENCE"
 NAPLES, FL (PARCEL No. 38165000001)
 DESCRIPTION: **FOUNDATION PLAN**

DATE: **JUNE 12, 2018**

CRONIN ENGINEERING, INC.
 AUTHORIZATION NUMBER: 6597
 6627 WILLOW PARK DRIVE
 NAPLES, FL 34109
 PHONE: 583-2157 FAX: 583-8820

DEREK P. CRONIN
 FLORIDA PE # 56382



COMPONENT AND CLADDING DESIGN PRESSURES		
Vult = 160 MPH ULTIMATE DESIGN WIND SPEED COMPONENT AND CLADDING (BASED ON Vult) EXPOSURE C ULTIMATE DESIGN PRESSURES (LRFD) 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
	100 SF	+26.2 / -58.9 PSF
ZONE 2	10 SF	+37.1 / -108.2 PSF
	20 SF	+33.9 / -96.6 PSF
	50 SF	+29.5 / -83.6 PSF
	100 SF	+26.2 / -75.5 PSF
ZONE 3	10 SF	+37.1 / -162.8 PSF
	20 SF	+33.9 / -142.0 PSF
	50 SF	+29.5 / -128.9 PSF
	100 SF	+26.2 / -119.1 PSF
WALL ZONE	AREA	APPLIED DESIGN PRESSURE
ZONE 4	10 SF	+64.5 / -70.0 PSF
	20 SF	+61.6 / -67.1 PSF
	50 SF	+57.7 / -63.1 PSF
	100 SF	+54.9 / -60.3 PSF
ZONE 5	10 SF	+64.5 / -86.4 PSF
	20 SF	+61.6 / -80.5 PSF
	50 SF	+57.7 / -72.8 PSF
	100 SF	+54.9 / -67.1 PSF

COMPONENT AND CLADDING DESIGN PRESSURES		
Vasd = 124 MPH NOMINAL DESIGN WIND SPEED (Vult = 160 MPH) COMPONENT AND CLADDING (BASED ON Vasd) EXPOSURE C DOORS & WINDOWS INCLUDED PRESSURES CALCULATED USING (Vult x 0.6) WHICH IS EQUIVALENT TO Vasd 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

Vasd = 124 MPH NOMINAL DESIGN WIND SPEED
COMPONENT AND CLADDING (BASED ON Vasd) EXPOSURE C
GARAGE DOORS DESIGN PRESSURE
ALLOWABLE STRESS DESIGN PRESSURE (ASD) PSF

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

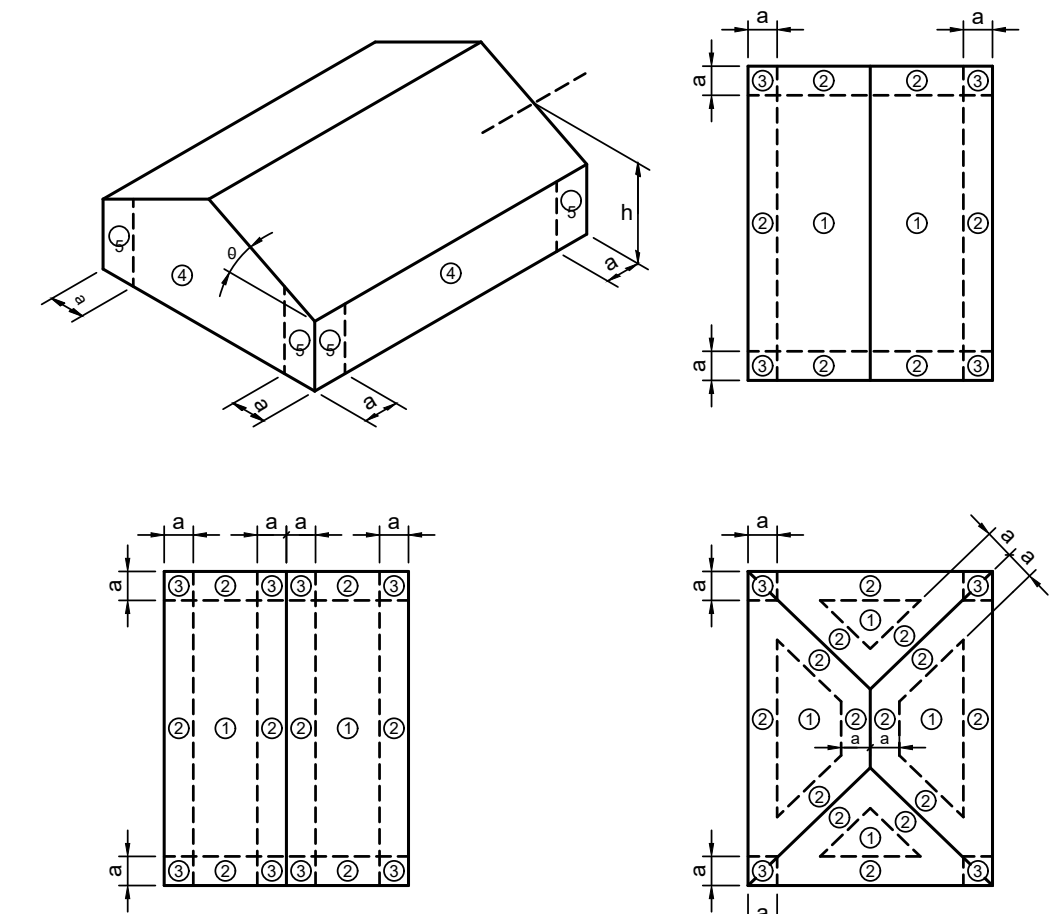
WIND LOAD REQUIREMENTS

1. THE STRUCTURAL SYSTEMS FOR THE DRAWINGS PRESENTED WERE
DESIGNED PER THE LOADINGS PRESENTED IN THE FLORIDA BUILDING
CODE 6TH EDITION. THE DESIGN WIND SPEED IS (Vult = 170 MPH.) AND
(Vasd = 132 MPH).

2. IMPORTANCE FACTOR Iw = 1.0 OF THE FLORIDA BUILDING CODE 6TH
EDITION.

3. EXPOSURE CATEGORY C.

4. 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 LOADING
DIAGRAM FIGURE 1

ROOF TRUSSES NOTES

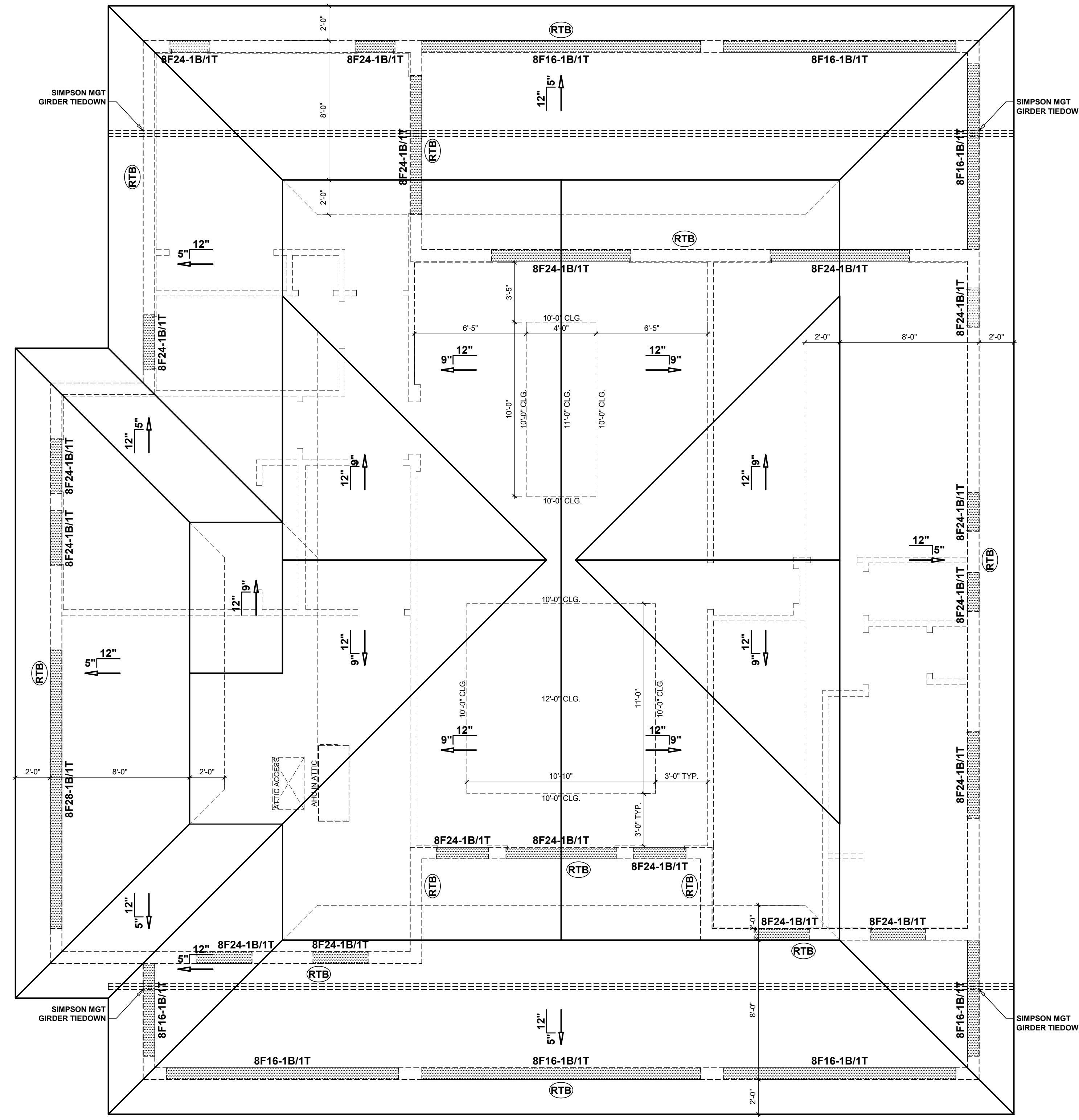
- ROOF TRUSSES SHALL BE DESIGNED BY TRUSS MANUFACTURER. SHOP DRAWINGS SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO PRODUCTION.
- TRUSS MANUFACTURER SHALL PROVIDE UPLIFT & REACTION VALUES FOR INDIVIDUAL TRUSSES. REFER TO THE TRUSS DRAWING FOR LAYOUT.
- ROOF SHEATHING SHALL CONSIST OF 1/2" MIN. PLYWOOD, 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/ 10d COMMONS.
- BRACE TRUSSES PER T.P.I. H.I.B.-91, AS REVISED
- THE TRUSS LAYOUT BY RAYMOND BUILDING SUPPLY. (JOB: _____ DATE: _____) HAS BEEN COORDINATED WITH THE FOUNDATION AND ROOF PLAN.
- PROVIDE SIMPSON HETA20 W/16 10d X 1 1/2" FOR UPLIFTS UP TO 1800 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 160 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 12" TO 58" 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.

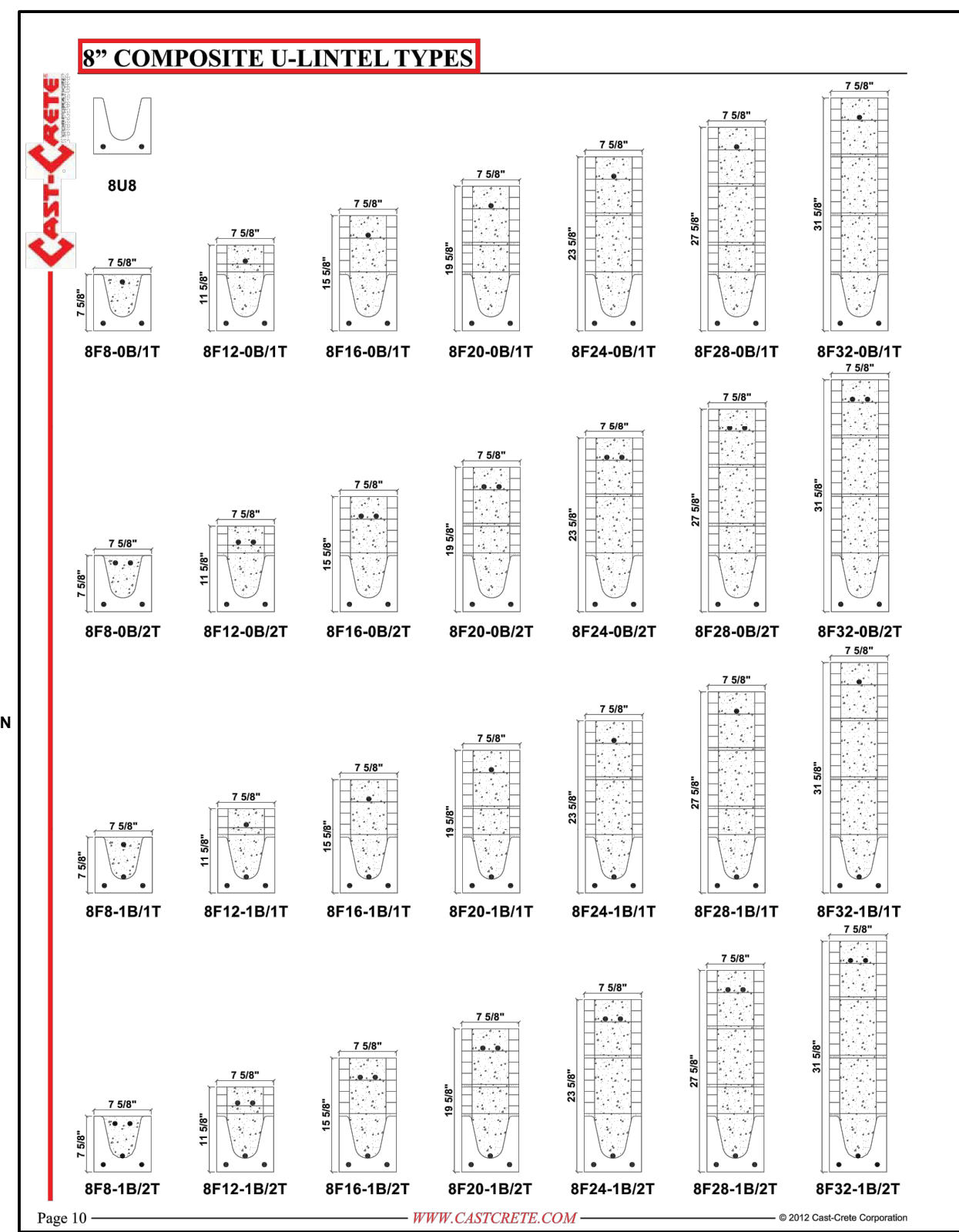
BEAM SCHEDULE

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



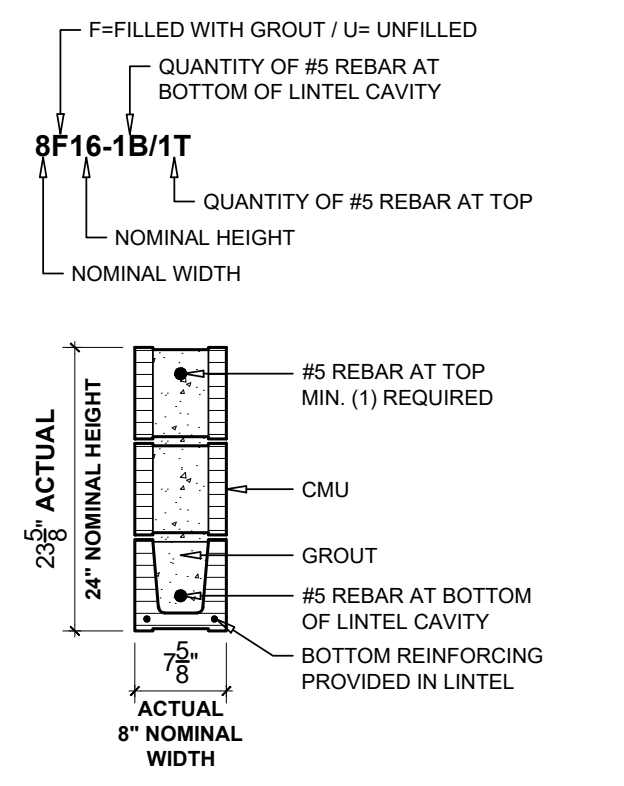
ROOF PLAN

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



LINTEL & BOND BEAM LEGEND

- BOND BEAM IS TO BE 8" KNOCK OUT BLOCK U.O. WITH # 5 BAR GROUT SOLID CONTINUOUS AROUND PERIMETER OF STRUCTURE.
- MINIMUM 4" BEARING PER END AT LINTELS.



BEARING LEGEND

DESCRIPTION	ELEVATION	SYMBOL
TOP OF BEARING	10'-0"	



REV.	DESCRIPTION

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CRONIN ENGINEERING, INC.
NAPLES, FL (PARCEL No. 38165000001)

PROJ. NAME: SINGLE FAMILY RESIDENCE "SANTIAGO RESIDENCE"
DESCRIPTION: ROOF PLAN

DATE: JUNE 12, 2018

CRONIN ENGINEERING, INC.
AUTHORIZATION NUMBER: 6597
6627 WILLOW PARK DRIVE
NAPLES, FL 34109
PHONE: 563-2157 FAX: 563-9820

DEREK P. CRONIN
FLORIDA PE # 56382

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

SHEET No: A-6

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 #1 FOR DEFORMED BILLET STEEL WITH 60,000 PSI MINIMUM YIELD STRENGTH. PROVIDE DOWELS 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 10¹⁰ PSI

LAMINATED VENEER LUMBER:

L.V.L. & P.S.L. INDICATES LAMINATED LUMBER AS MANUFACTURED BY "TRUSS JOIST McILLAN" 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 BEAM, OR SLAB. ADD 2# BARS TO EVERY 9" 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 6" 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" BLK. 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 & TIE 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 (1E) 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.

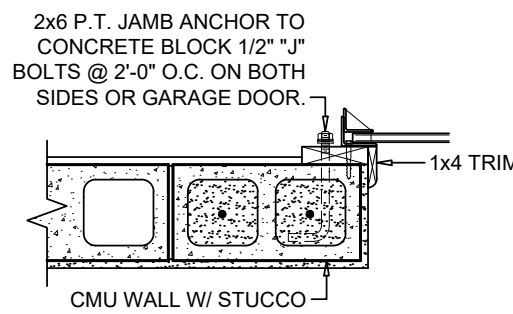
FORM WORK AND SHORING:

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:

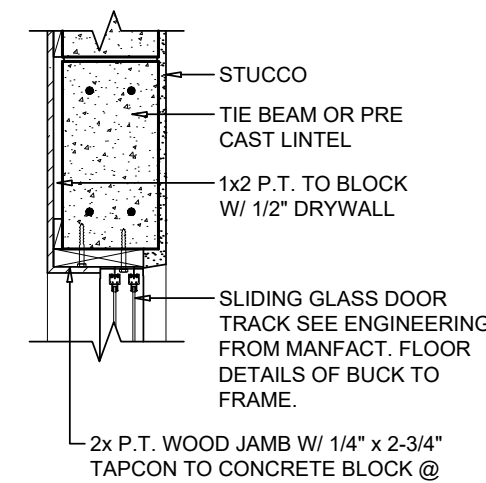
EXTERIOR SLABS ON FILL SHALL BE 4" THICK, UNLESS OTHERWISE NOTED ON PLANS. REINFORCED WITH 6 X 6 W/14 X W/14 W.W.M. FILL MATERIAL UNDER SLAB SHALL BE CLEAN SAND AND/OR ROCK AND SHALL BE COMPACTED TO 95% (MIN.) OF ASTM D 1557 IN LIFTS NOT TO EXCEED 12" IN DEPTH. SLAB ON FILL SHALL BE POURED AGAINST APPROVED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



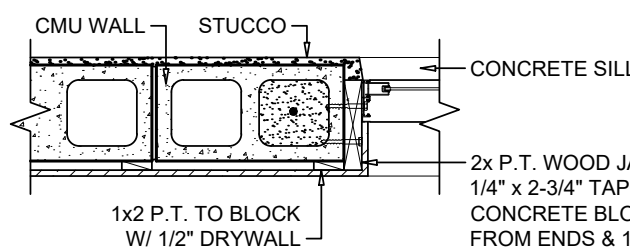
GARAGE DOOR JAMB DETAIL

SCALE: N.T.S.



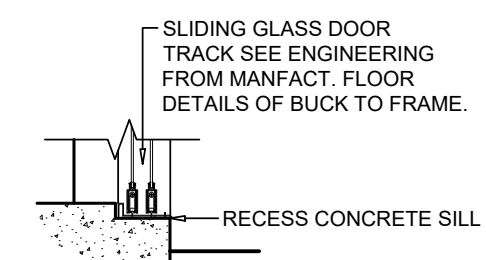
SLIDING GLASS DOOR HEAD DETAIL

SCALE: N.T.S.



SLIDING GLASS DOOR JAMB DETAIL

SCALE: N.T.S.



SLIDING GLASS DOOR SILL DETAIL

SCALE: N.T.S.

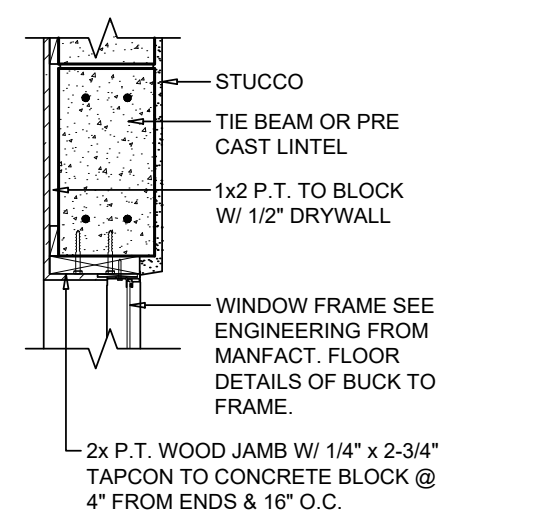
ALTERNATE WINDOW / DOOR JAM ATTACHMENT

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 1/4" X 3 1/2" AT 16" O.C. FOR 2X BUCKS.

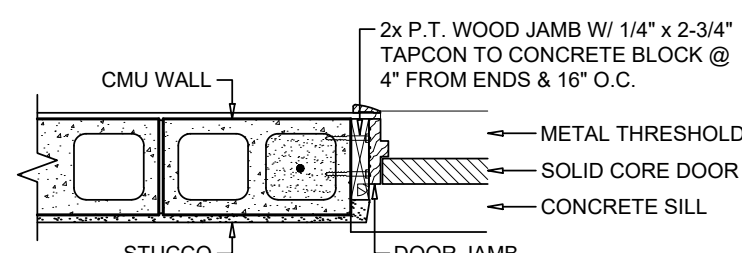
WINDOW ATTACHMENT SHALL BE PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE ATTACHED DIRECTLY TO THE MASONRY WALL THROUGH THE BUCKING IF USING 1" THICK BUCKSTRIPS.

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



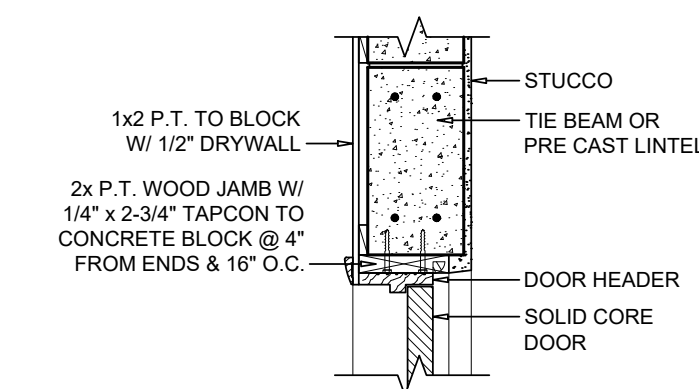
WINDOW HEAD DETAIL

SCALE: N.T.S.



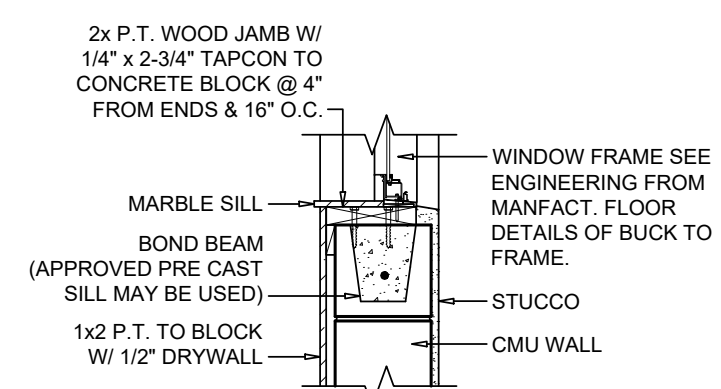
DOOR JAMB TO BLOCK DETAIL

SCALE: N.T.S.



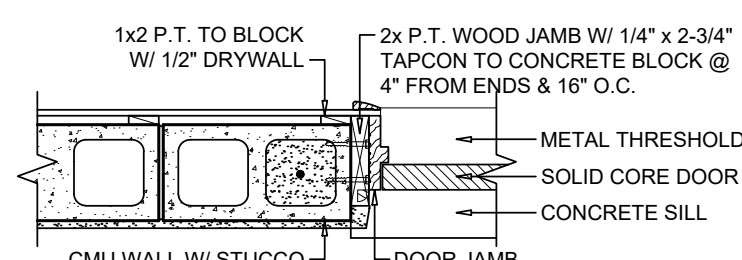
DOOR HEAD DETAIL

SCALE: N.T.S.



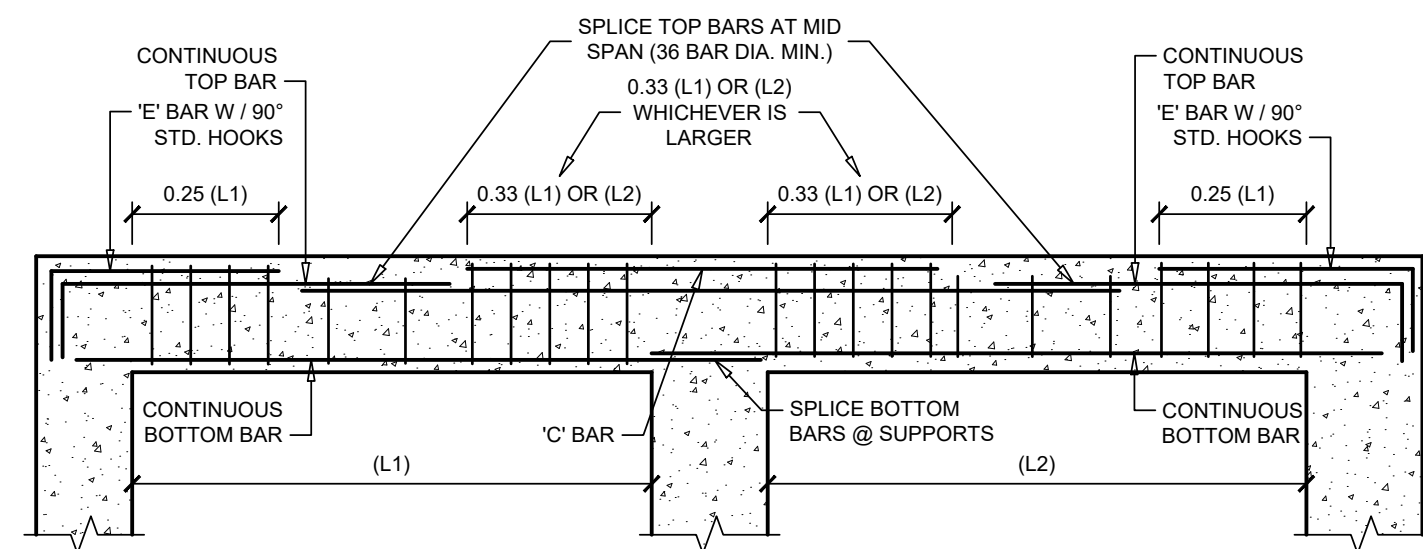
WINDOW JAMB DETAIL

SCALE: N.T.S.



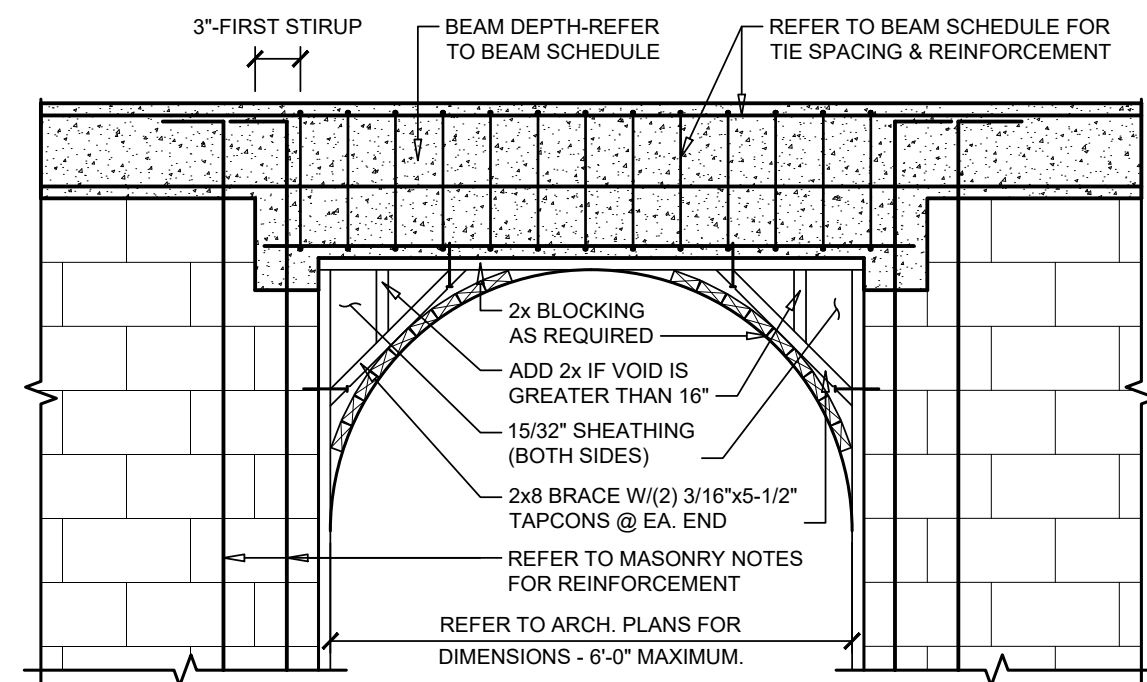
DOOR JAMB TO BLOCK DETAIL

SCALE: N.T.S.



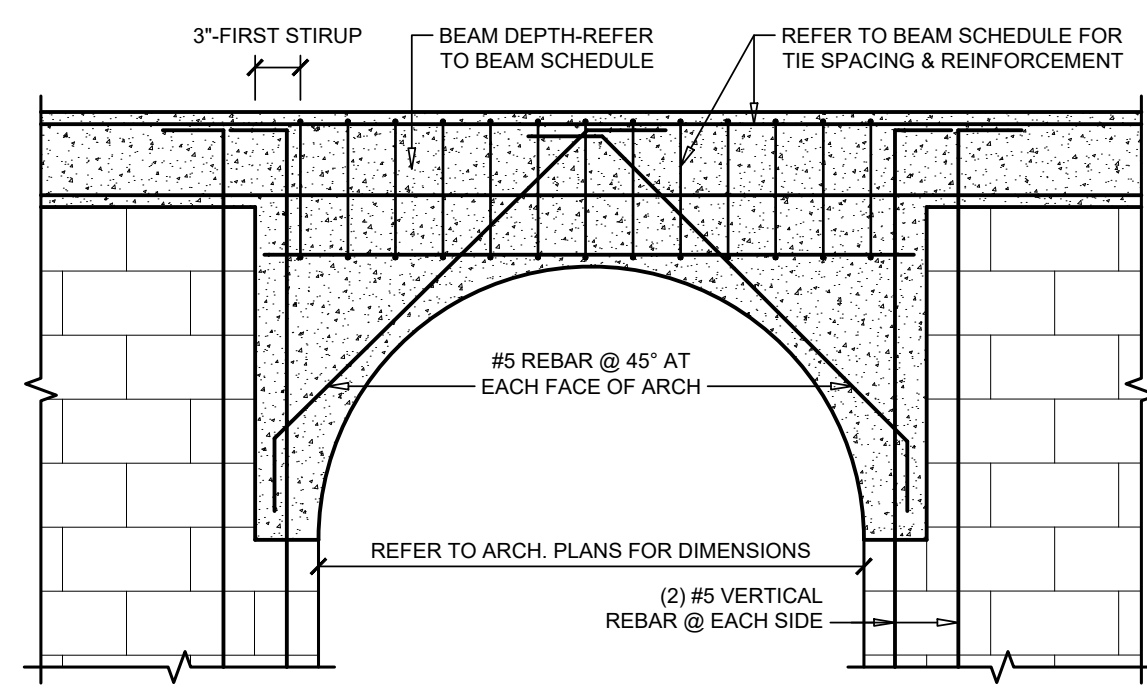
BEAM BAR DIAGRAM

SCALE: N.T.S.



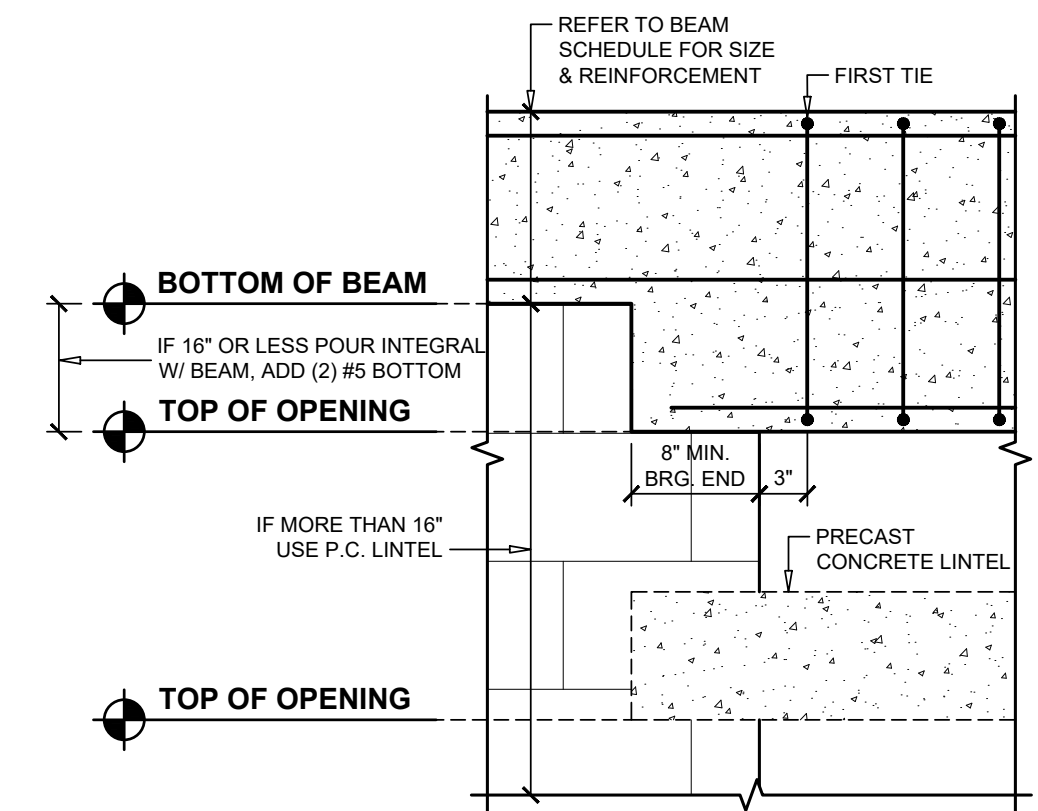
TYPICAL WOOD FRAME ARCH DETAIL

SCALE: N.T.S.



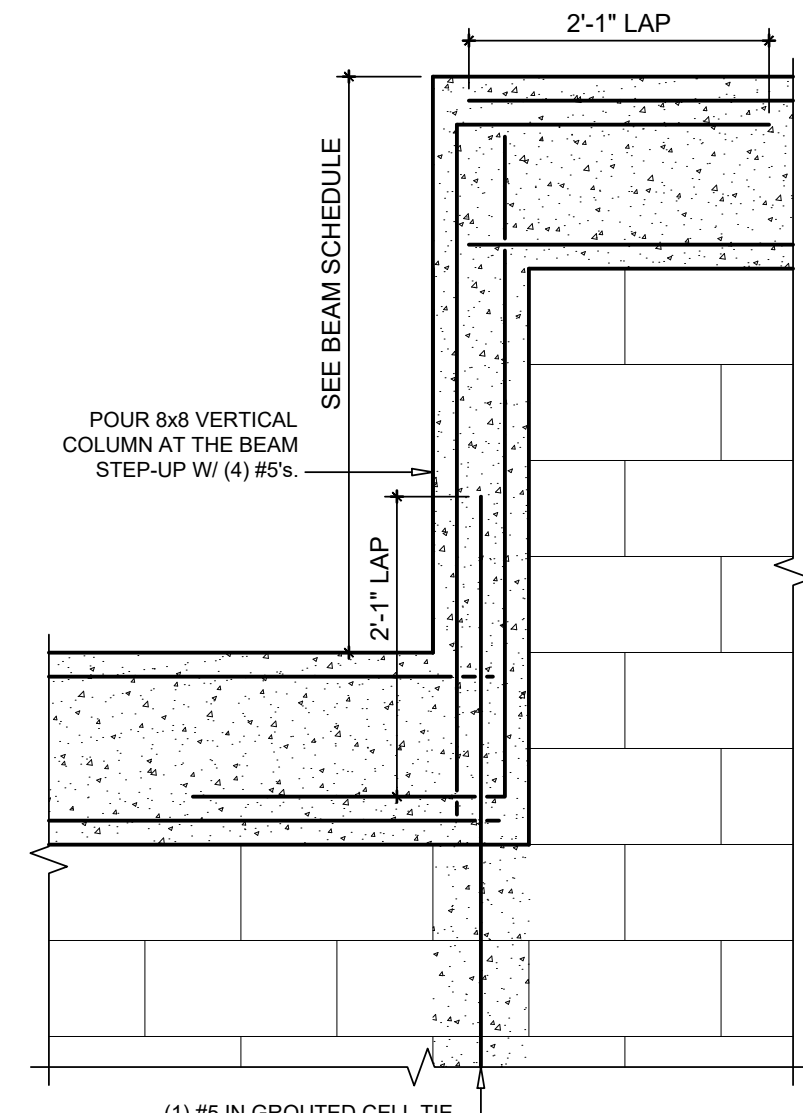
TYPICAL ARCH DETAIL

SCALE: N.T.S.



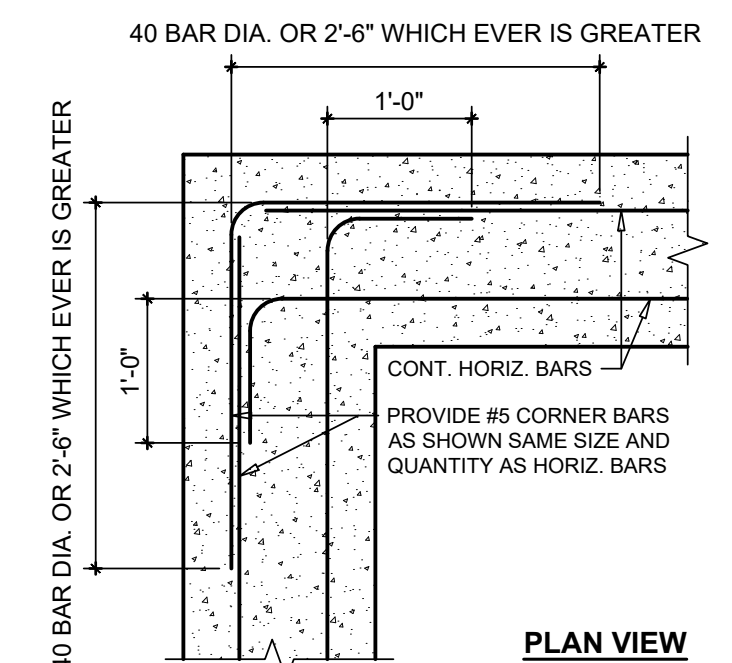
TYPICAL BEAM / LINTEL OVER OPENING

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"

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CRONIN ENGINEERING, INC. PROJECT NAME: SINGLE FAMILY RESIDENCE "SANTIAGO RESIDENCE" NAPLES, FL (PARCEL No. 38165000001)

DATE: JUNE 12, 2018

DESCRIPTION:

PROJ. NO.:

6827 WILLOW PARK DRIVE
NAPLES, FL 34109
PHONE: 583-2157 FAX: 583-9820

DEREK P. CRONIN
FLORIDA PE # 55382

SHEET No:

REV.	DESCRIPTION

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CRONIN ENGINEERING, INC.
 PROJECT NAME: **SINGLE FAMILY RESIDENCE "SANTIAGO RESIDENCE"**
 NAPLES, FL (PARCEL No. 38165000001)
 DESCRIPTION: **ELECTRICAL PLAN**

DATE: **JUNE 12, 2018**

CRONIN ENGINEERING, INC.
 CERTIFICATE OF AUTHORIZATION NUMBER: 6597
 627 N. WILLOW PARK DRIVE
 NAPLES, FL 34102
 PHONE: 239-415-1571 FAX: 239-415-4841

DEREK P. CRONIN
 FLORIDA PE # 56382

SHEET No:

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
⌚	2x4 ACRYLIC RECESSED LIGHTING FIXTURE
⌚	2x4 ACRYLIC RECESSED LIGHTING FIXTURE
⌚	2x4 ACRYLIC RECESSED LIGHTING FIXTURE
⌚	CEILING FAN WITH LIGHT KIT
⌚	CEILING FAN
⌚	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" Q0142M200** VOLTAGE: **120/240V, 1Ø, 3W**

TYPE: **LOADCENTER** PANEL "A" MAINS: **200A**

MOUNTING: **FLUSH** 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"	3/4"	8	2	50	-	-	RANGE	2
3	* AHU-1	-	-	60	-	6	-	-	8	-	50	-	-	RANGE	4
5	* CL-1 (3.5 TON)	-	-	40	2	8	3/4"	1/2"	10	2	30	-	-	DRYER	6
7	* CL-1	-	-	40	-	8	-	-	10	-	30	-	-	DRYER	8
9	REFRIGERATOR	-	-	20	1	12	1/2"	1/2"	12	1	20	-	-	WASHER	10
11	DISPOSAL	-	-	20	1	12	1/2"	1/2"	12	1	20	-	-	LAUNDRY	12
13	KITCHEN RECEPTACLES	-	-	20	1	12	1/2"	1/2"	12	1	20	-	-	DISHWASHER	14
15	KITCHEN RECEPTACLES	-	-	20	1	12	1/2"	1/2"	12	1	20	-	-	GARAGE	16
17	MICROWAVE	-	-	20	1	12	1/2"	1/2"	12	1	20	-	-	BATHROOM	18
19	** BEDROOM 2	-	-	15	1	14	1/2"	1/2"	10	2	30	-	-	WATER HEATER	20
21	** BEDROOM 3	-	-	15	1	14	1/2"	1/2"	10	-	30	-	-	WATER HEATER	22
23	MASTER BATH RECEPTACLES	-	-	20	1	12	1/2"	1/2"	14	1	15	-	-	** MASTER BEDROOM	24
25	GREAT ROOM	-	-	15	1	14	1/2"	1/2"	12	1	20	-	-	LANAI RECEPTACLES	26
27	** MASTER BEDROOM	-	-	15	1	14	1/2"	1/2"	14	1	15	-	-	GENERAL LIGHTING	28
29	GENERAL LIGHTING	-	-	15	1	14	1/2"	1/2"	14	1	15	-	-	GENERAL LIGHTING	30
31	GENERAL LIGHTING	-	-	15	1	14	1/2"	1/2"	14	1	15	-	-	GENERAL LIGHTING	32
33		-	-									-	-		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.

Residential Standard Calculation

Version 7.28 9/25/1997

ARCHITECTURAL EDGE, INC.
 3010 Scott Blvd. Suite 102
 Temple, Texas 76704
 P. 254.771.2054 F. 254.773.2144
 3/2/2018 11:19

STEP 1 Article 220.42 & 220.52

1803	General Lighting load	5,409 VA
2	Small Appliance	3,000 VA
1	Laundry circuit	1,500 VA
Gen Lgt., Sm App & Laun. Load		9,909 VA
	100% =	3,000 VA
	35% =	2,418 VA
	25% =	VA

General Lighting Demand Load 5,418 VA

STEP 2 Article 220.50 & 220.51

3.5 ton	AHU 1 7.5kW	8,300 VA
A/C #2	AHU 2 Select	VA
A/C #3	AHU 3 Select	VA
A/C #4	AHU 4 Select	VA
A/C #5	AHU 5 Select	VA

Total Heat Load 8,300 VA
Total CU Load 5,800 VA
Greater of Heat @ 100% vs. A/C @ 100% 8,300 VA

STEP 3 Article 220.53

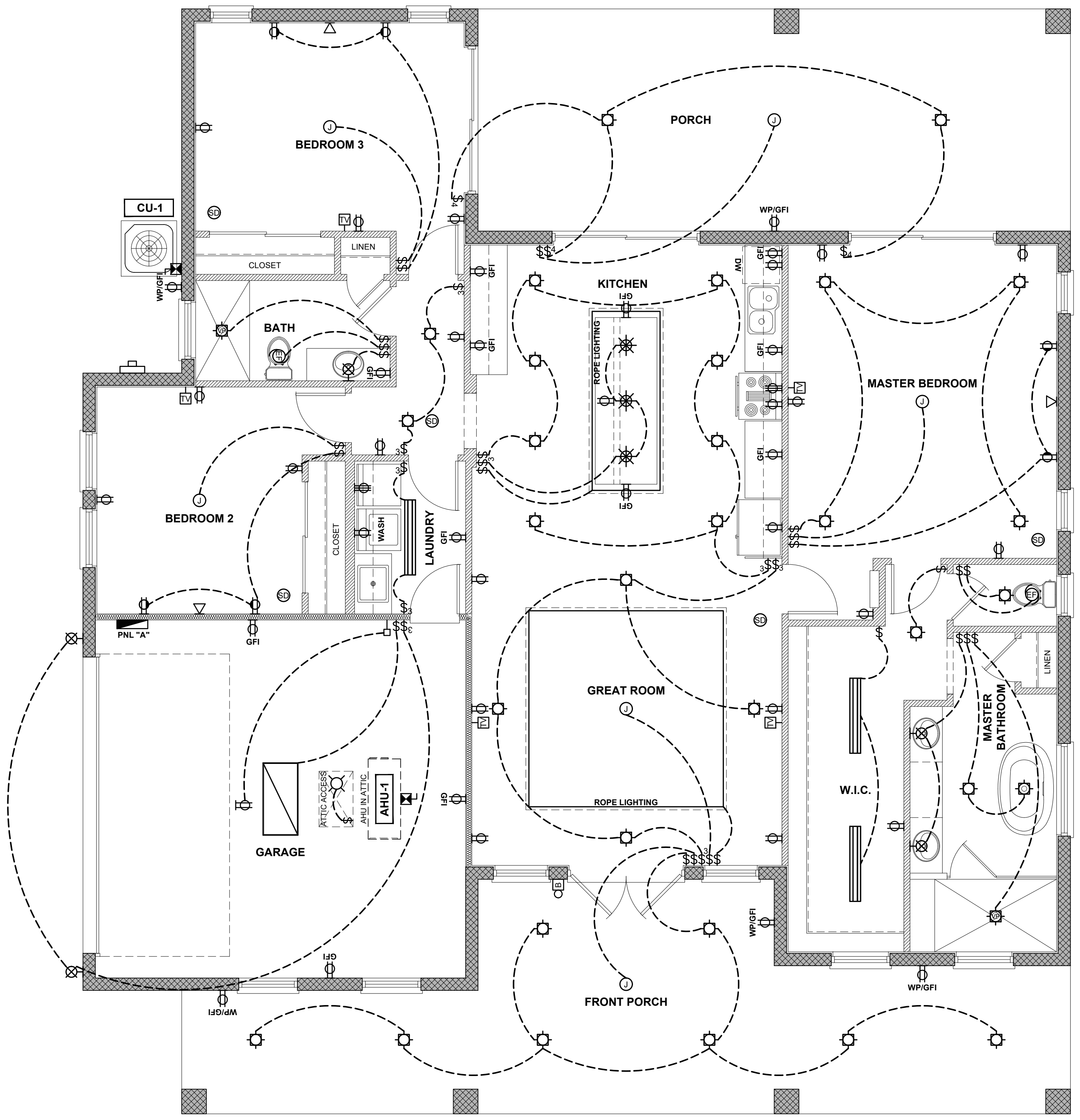
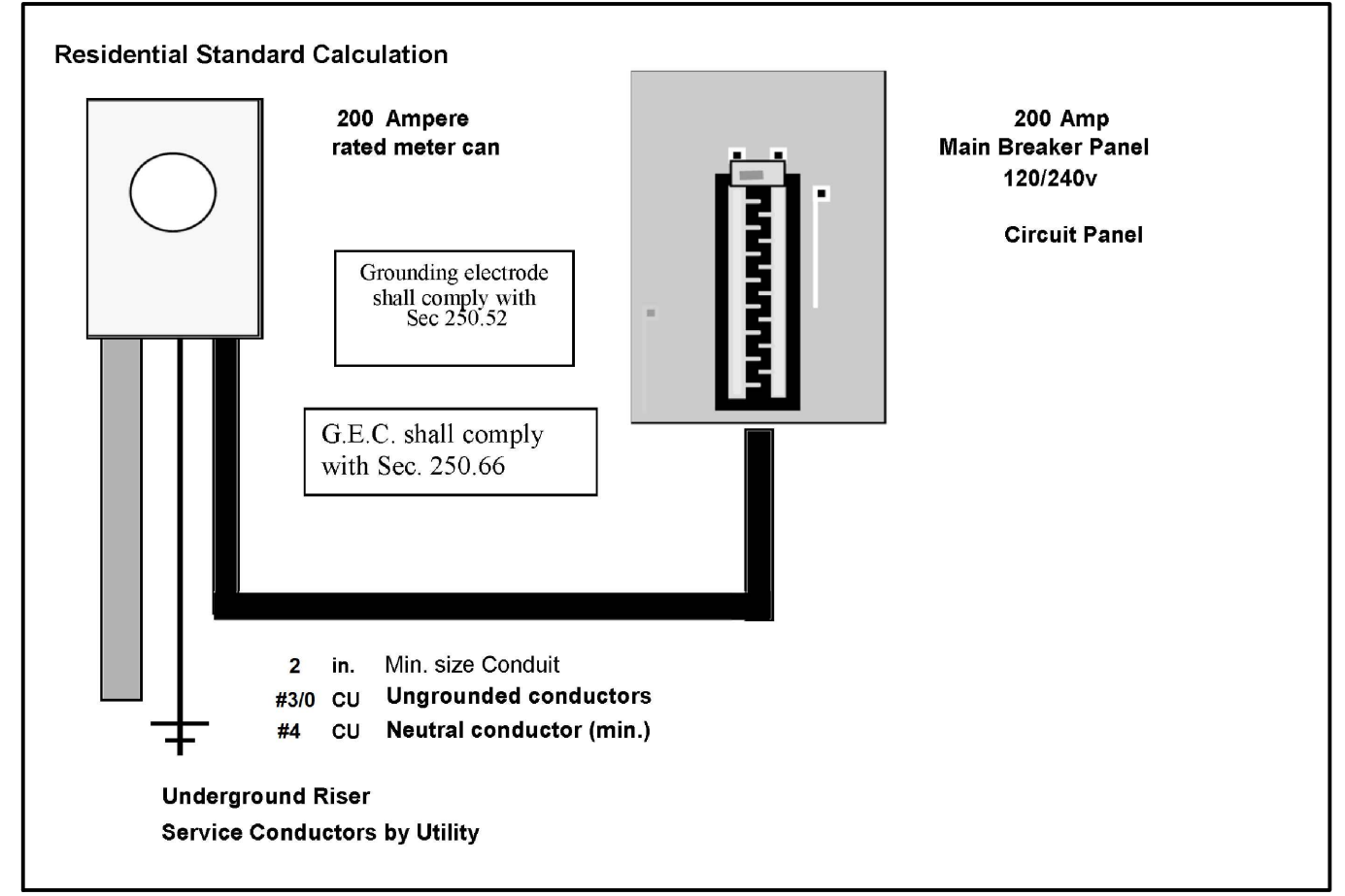
4,500 VA	1	Water Heater	4,500 VA
1,400 VA	1	Refrigerator	1,400 VA
600 VA		Freezer	VA
1,030 VA	1	Dishwasher	1,030 VA
690 VA	1	Disposal	690 VA
780 VA		Trash Compactor	VA
1,630 VA	1	Microwave	1,630 VA
		Central Vac	VA
		Mini Refrigerator	VA
		Range hood	VA
		Wine Cooler	VA
		Ironing Center	VA
		Jacuzzi Tub	VA
		Sprinkler Pump	VA
		Well Pump	VA
		Fountain Pump	VA
		Elevator	VA
		Pool Equip. Panel	VA 100% Demand
		U.C. Ice Maker	VA No Demand
			VA No Demand
Total Appliance Load		9,250 VA	
4 or more demand @ 75% plus 100% demand loads		6,938 VA	

Appliance Demand Load 6,938 VA
Dryer Demand Load 5,000 VA
Range Demand Load 8,000 VA
Service Demand 33,656 VA
Demand Load 140 A
Neutral Demand 75 A
See Service Riser

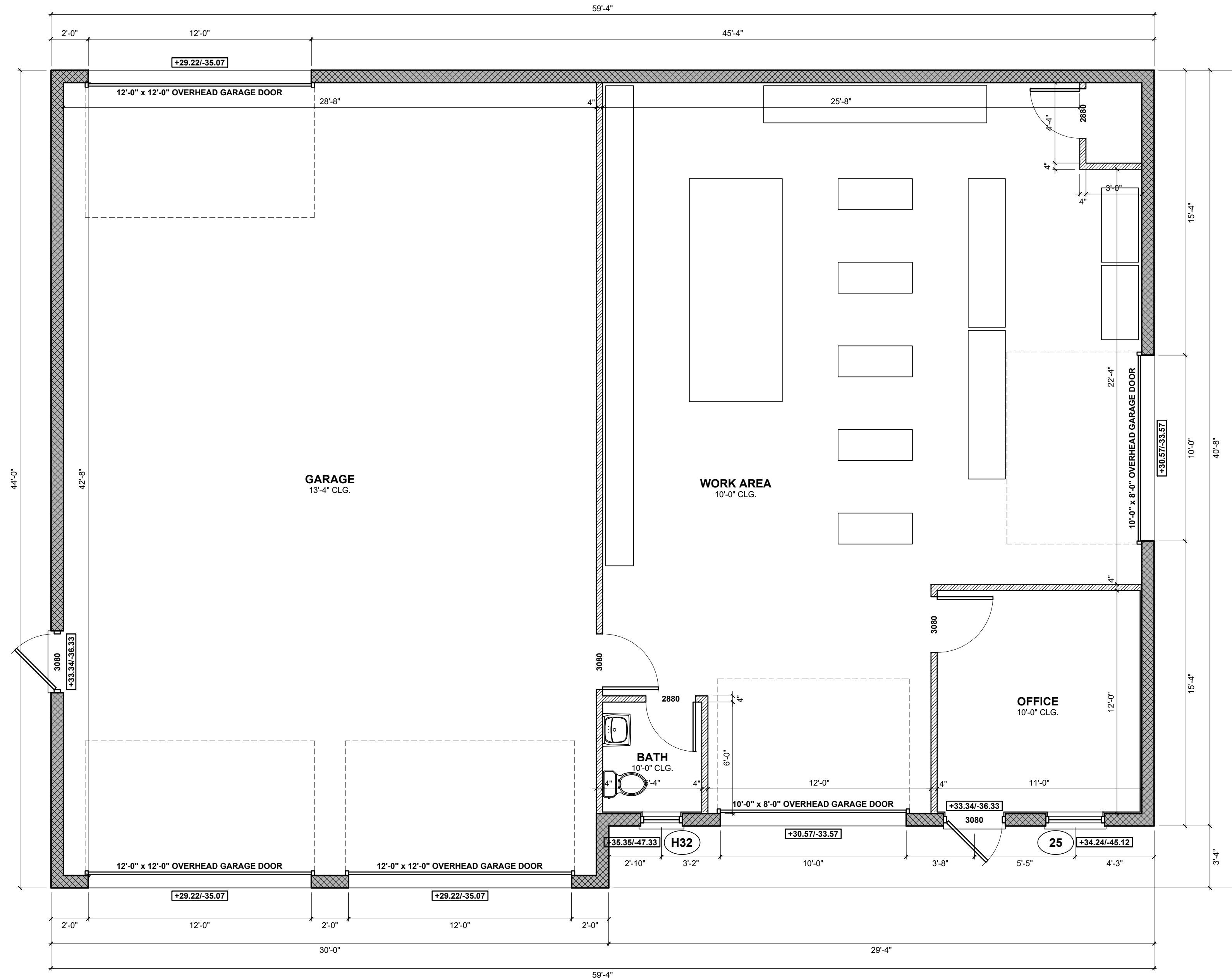
STEP 4 Article 220.54
 Electric Clothes Dryers 5,000 VA

STEP 5 Article 220.55
 Electric Ranges 11,600 W Col C demand 8,000 W

Number of appliances 2
 Check Box for Gas Range
 Cooktop W Col B demand
 Oven(s) W Col B demand
 Oven(s) Col B demand
 Number of appliances 2 Dem. Factor 65%
 Cooktop & Oven Demand Load W



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



FLOOR PLAN

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

8" PRECAST U-INTELS 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'-6" (54")	2-7/32" wire	2-#3 rebar
4'-8" (56")	2-7/32" wire	2-#3 rebar
5'-4" (64")	2-7/32" wire	2-#3 rebar
5'-10" (70")	2-7/32" wire	2-#3 rebar
6'-0" (72")	2-7/32" wire	2-#4 rebar
6'-6" (78")	2-7/32" wire	2-#4 rebar
6'-8" (80")	2-7/32" wire	2-#4 rebar
7'-4" (88")	2-7/32" wire	2-#4 rebar
7'-6" (90")	2-7/32" wire	2-#4 rebar
8'-0" (96")	2-#3 rebar	2-#4 rebar
8'-8" (104")	2-#3 rebar	2-#4 rebar
9'-4" (112")	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'-8" (128")	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

8" PRESTRESSED U-INTELS 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")	2-7/32" wire	2-7/16 strand
21'-4" (256")	2-7/32" wire	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
Concrete Strength: 3500 psi
Average Self Weight: 33 plf
Finish: Grey Block

GARAGE SQUARE FOOTAGE

TABULATION	
TOTAL A/C LIVING AREA	0 SQ FT
GARAGE BUILDING	2,513 SQ FT
TOTAL NON-A/C	2,513 SQ FT
TOTAL UNDER ROOF	2,513 SQ FT

WINDOW SCHEDULE

WINDOW MARK	WINDOW SIZE	TYPE	REMARK
(H32)	26-1/2" x 26"	SINGLE HUNG	IMPACT RESISTANT
(25)	37" x 63"	SINGLE HUNG	IMPACT RESISTANT

NOTE: ALL EXTERIOR DOORS & WINDOWS TO BE IMPACT RESISTANT.
NOTE: USE "DuPont FlexWrap NP" 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.



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PROJ. NAME: GARAGE BUILDING
"SANTIAGO RESIDENCE"
NAPLES, FL (PARCEL NO. 38165000001)
DESCRIPTION: FLOOR PLAN
DATE: JUNE 12, 2018

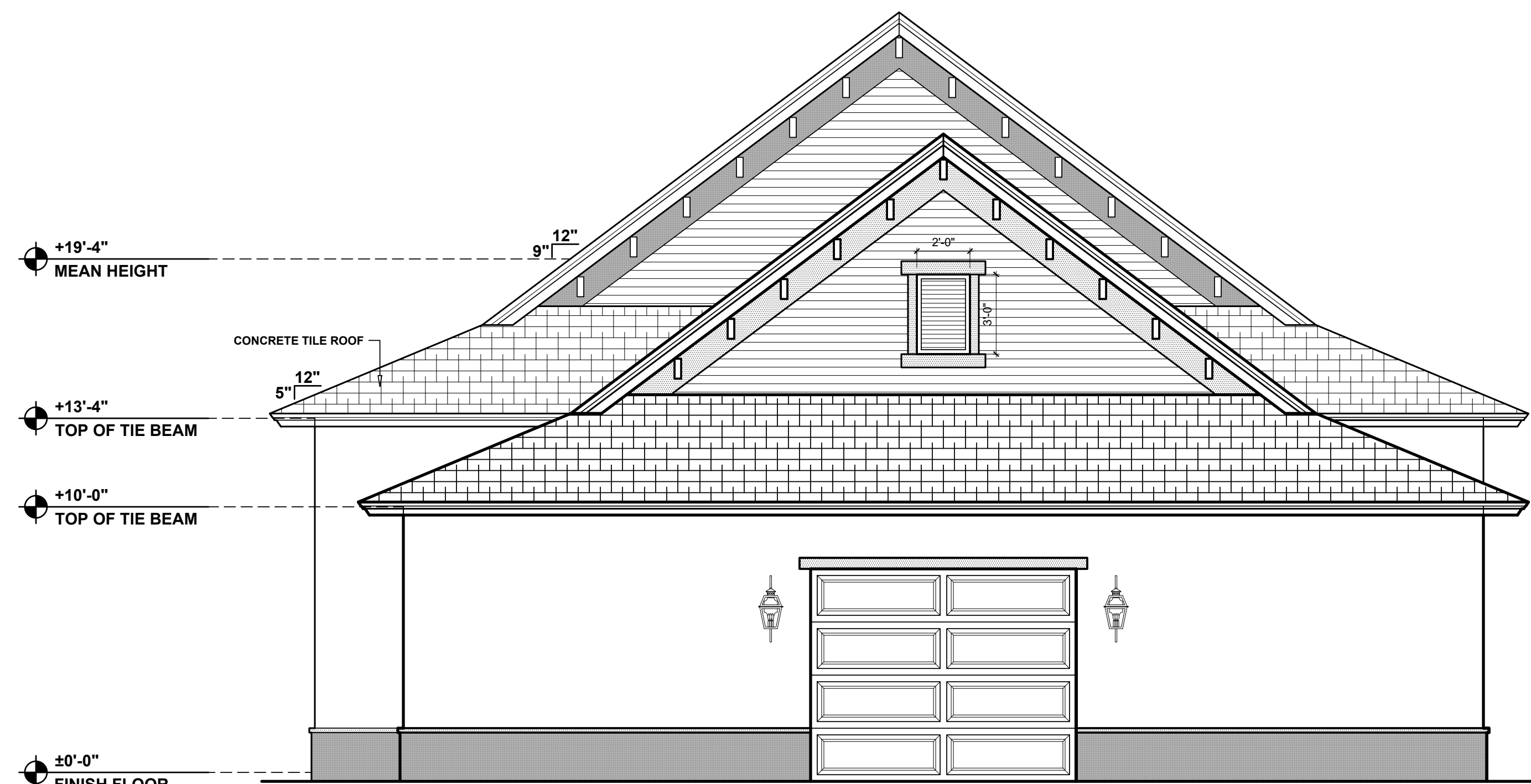
CRONIN ENGINEERING, INC.
CERTIFICATE OF AUTHORIZATION NUMBER: 6597
6827 WILLOW PARK DRIVE
PHONE: 563-2157 FAX: 563-9820
FLORIDA PE # 65382

CRONIN ENGINEERING, INC. SHALL BE TOTALLY RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT AND SHALL FOLLOW THE LOCAL BUILDING CODES AND ALL APPLICABLE REGULATIONS, ORDINANCES, AND DECREES IN THE CONSTRUCTION DOCUMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION.



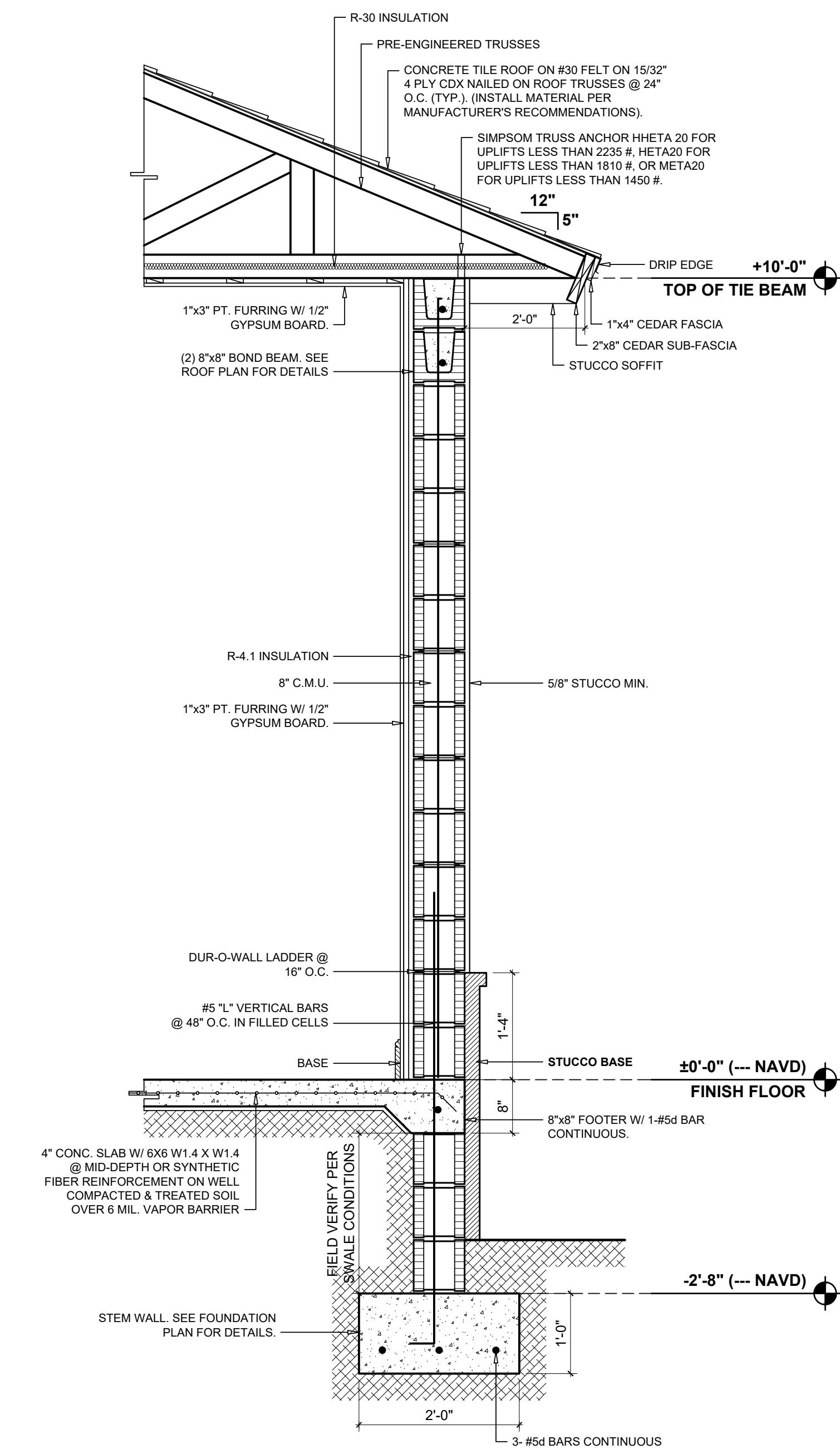
LEFT SIDE ELEVATION

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



FRONT ELEVATION

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



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

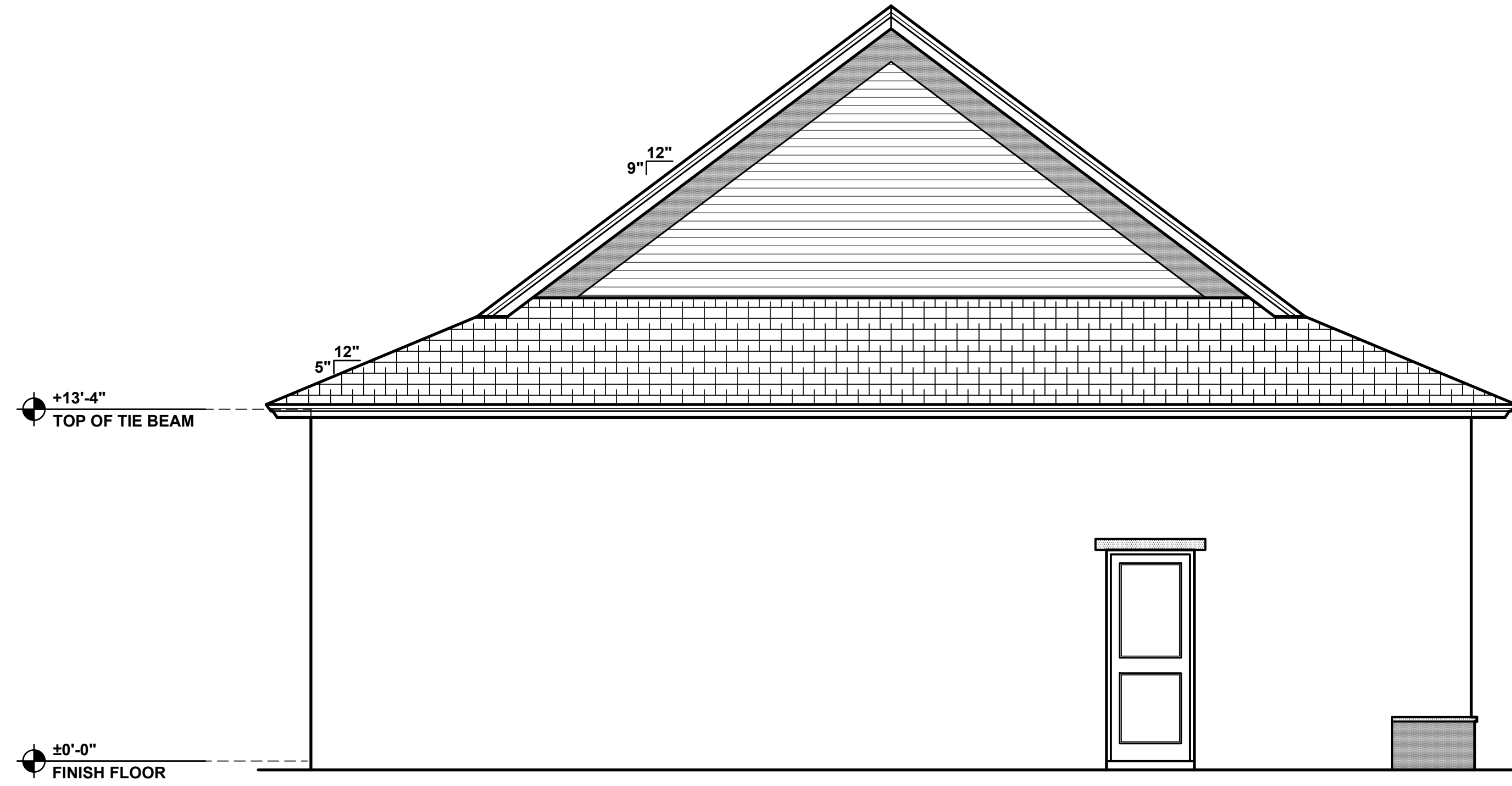
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PROJ. NAME:	DESCRIPTION:
GARAGE BUILDING "SANTIAGO RESIDENCE" NAPLES, FL (PARCEL No. 38165000001)	ELEVATIONS
DATE: JUNE 12, 2018	

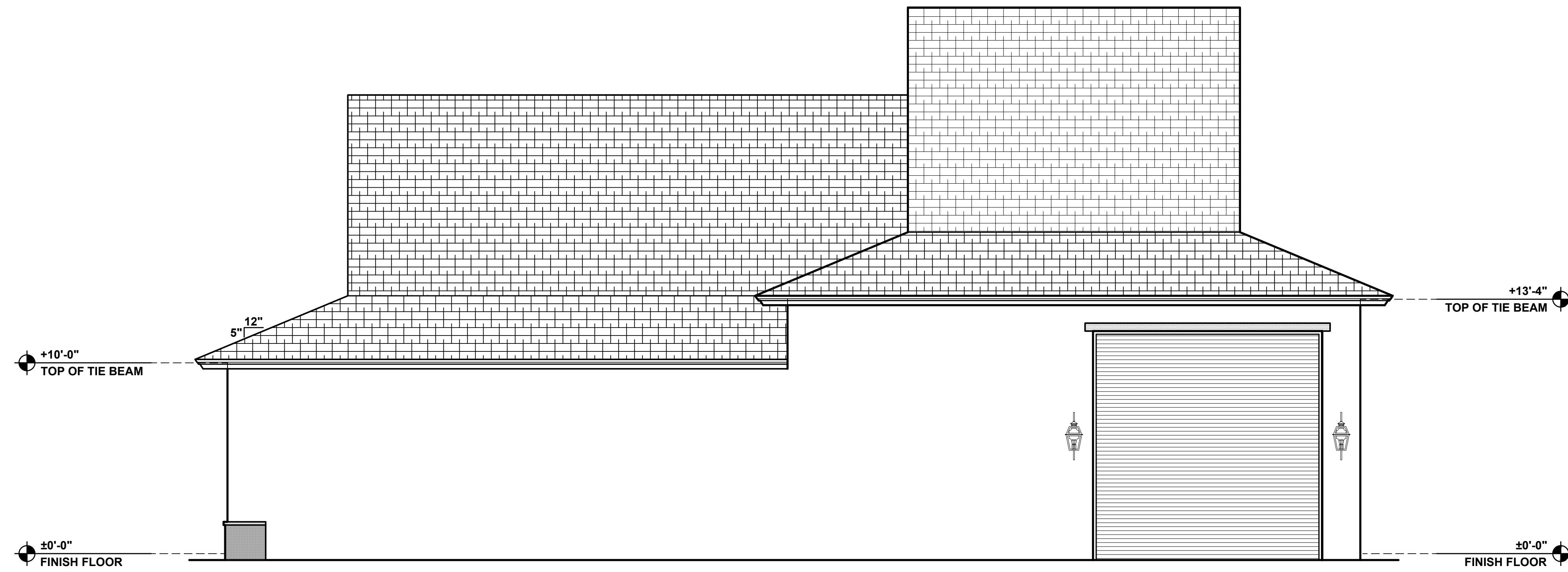
CRONIN ENGINEERING, INC.
 CERTIFICATE OF AUTHORIZATION NUMBER: 6597
 6827 WILLOW PARK DRIVE
 NAPLES, FL 34109
 PHONE: 563-2157 FAX: 563-9820
 FLORIDA PE # 65382

DESIGNED BY: DEREK P. CRONIN
 CHECKED BY: DEREK P. CRONIN
 DATE: 6/12/18
 SHEET No: A-10



RIGHT SIDE ELEVATION

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



REAR ELEVATION

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

REV.	DESCRIPTION

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PROJ. NAME:	DESCRIPTION:
GARAGE BUILDING "SANTIAGO RESIDENCE" NAPLES, FL (PARCEL No. 38165000001)	ELEVATIONS

DATE: JUNE 12, 2018

CRONIN ENGINEERING, INC.
 CERTIFICATE OF AUTHORIZATION NUMBER: 6597
 6627 WILLOW PARK DRIVE
 NAPLES, FL 34109
 PHONE: 583-2157 FAX: 583-8820

DEREK P. CRONIN
 FLORIDA PE # 63382

SHEET No:

MASONRY WALL REINFORCEMENT NOTES

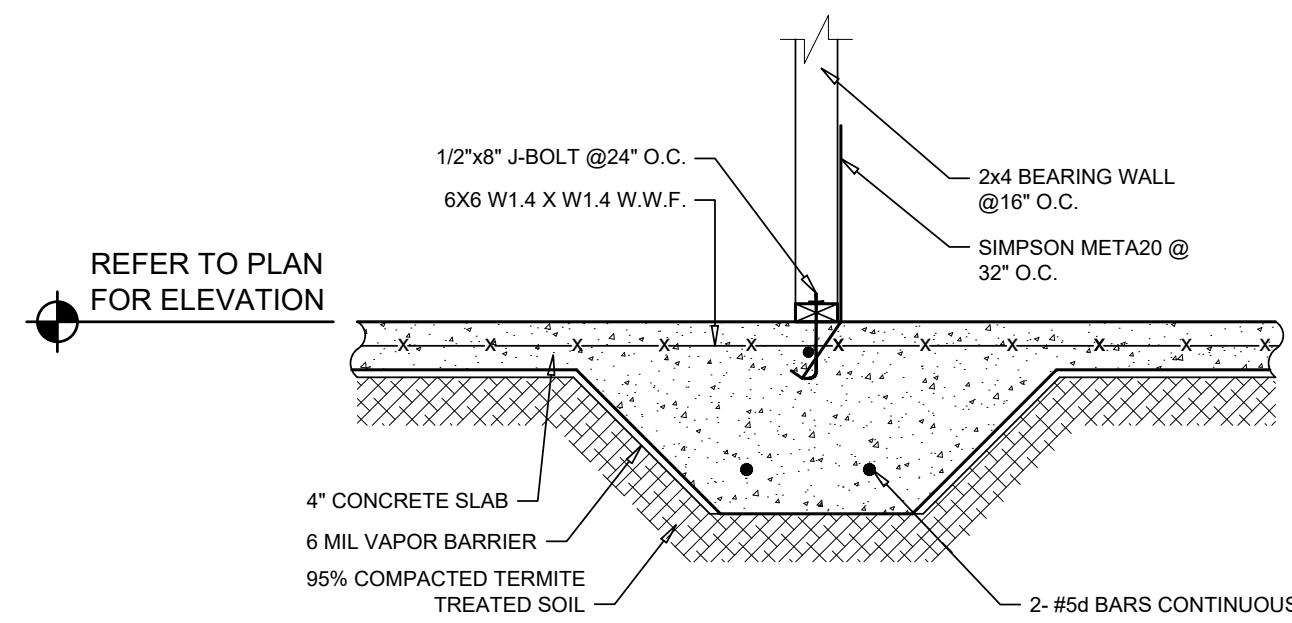
1. WALL REINFORCEMENT SHALL BE DOWELED FROM FOUNDATION AND BE CONTINUOUS THROUGH SOLID GROUTED CELLS AND BE HOOKED OVER TOP REINFORCEMENT OF UPPER BEAMS. MINIMUM LAP SPLICE SHALL BE 48 BAR DIAMETERS. FOR HORIZONTAL WALL REINFORCEMENT, @ EVERY OTHER COURSE.
2. WALL REINFORCEMENT IS AS FOLLOWS: #5 @ 48" O.C. PROVIDE 1 #5 AT ALL WALL INTERSECTIONS, CORNERS, & EACH SIDE OF OPENINGS AND 2 #5 EACH SIDE OF OPENINGS LARGER THAN 8'-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 fm=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 (fc=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.

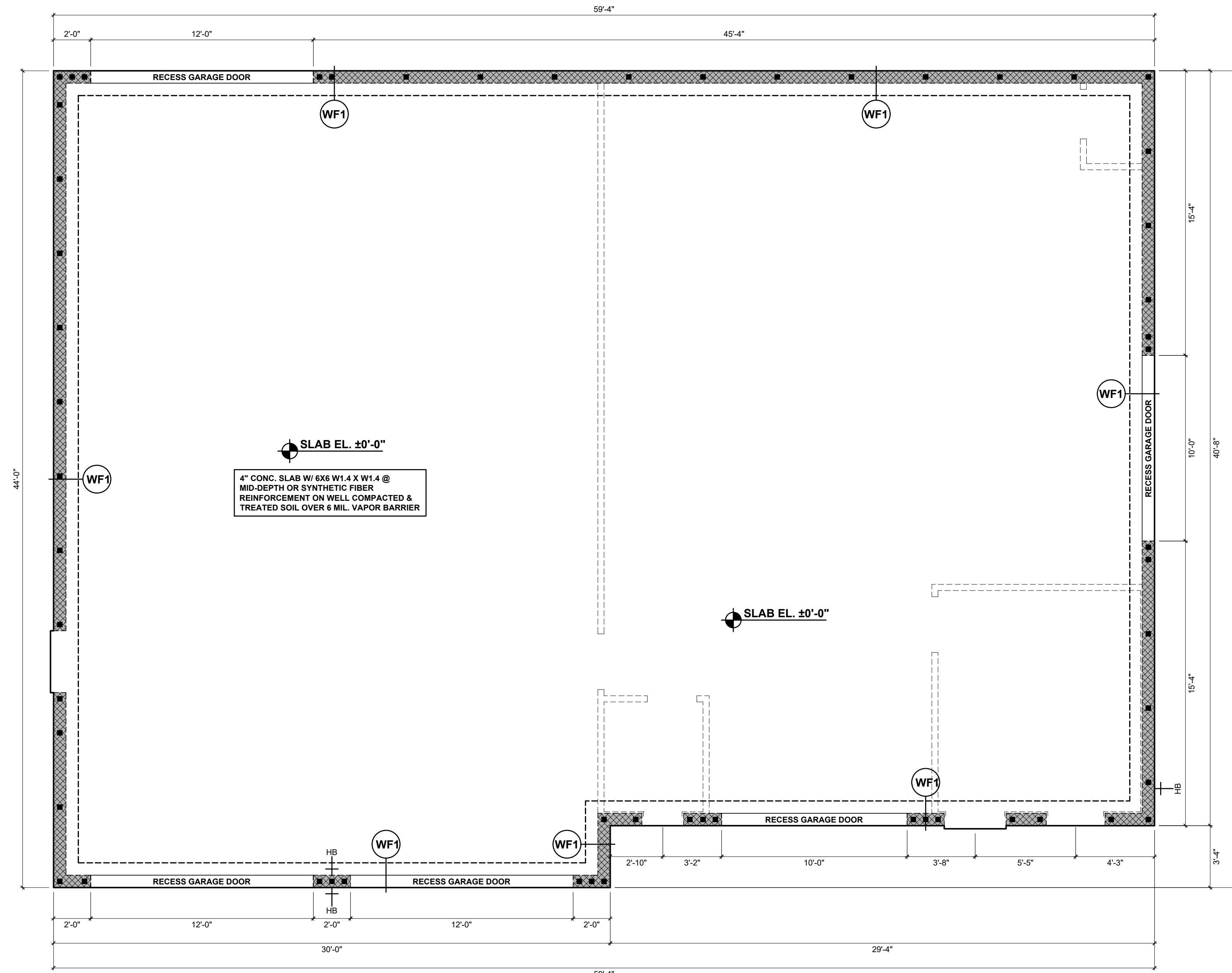
FOOTING SCHEDULE

MARK	SIZE	REINFORCEMENT	REMARKS
WF1	2'-0" x 1'-0" x CONT. STEMWALL	3- #5d BARS CONTINUOUS	TOP OF FOOTING MUST VARYES. STEMWALL TO BE ADJUSTED PER SWALE CONDITIONS (TYP.)



FOOTING DETAIL @ BEARING WALL

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



FOUNDATION PLAN

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

REV.	DESCRIPTION

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PROJ. NAME: GARAGE BUILDING "SANTIAGO RESIDENCE"
 NAPLES, FL (PARCEL No. 38165000001)

DESCRIPTION: FOUNDATION PLAN

DATE: JUNE 12, 2018

CRONIN ENGINEERING, INC.
 AUTHORIZATION NUMBER: 6597
 6627 WILLOW PARK DRIVE
 NAPLES, FL 34109
 PHONE: 583-2157 FAX: 583-8820

DESIGNED BY: DEREK P. CRONIN
 SPECIALTY: COMMERCIAL AND RESIDENTIAL DESIGN
 BUILDING CODE REQUIREMENTS

DEREK P. CRONIN
 FLORIDA PE # 65382



COMPONENT AND CLADDING DESIGN PRESSURES			
Vult = 160 MPH ULTIMATE DESIGN WIND SPEED COMPONENT AND CLADDING (BASED ON Vult) EXPOSURE C ULTIMATE DESIGN PRESSURES (LRFD) 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	
	100 SF	+26.2 / -58.9 PSF	
ZONE 2	10 SF	+37.1 / -108.2 PSF	
	20 SF	+33.9 / -96.6 PSF	
	50 SF	+29.5 / -83.6 PSF	
	100 SF	+26.2 / -75.5 PSF	
ZONE 3	10 SF	+37.1 / -162.8 PSF	
	20 SF	+33.9 / -142.0 PSF	
	100 SF	+26.2 / -119.1 PSF	
WALL ZONE			
AREA	APPLIED DESIGN PRESSURE		
ZONE 4	10 SF	+64.5 / -70.0 PSF	
	20 SF	+61.6 / -67.1 PSF	
	50 SF	+57.7 / -63.1 PSF	
	100 SF	+54.9 / -60.3 PSF	
ZONE 5	101 + SF	+48.0 / -53.5 PSF	
	10 SF	+64.5 / -86.4 PSF	
	20 SF	+61.6 / -80.5 PSF	
ZONE 5	50 SF	+57.7 / -72.8 PSF	
	100 SF	+54.9 / -67.1 PSF	
	101 + SF	+48.0 / -53.5 PSF	

COMPONENT AND CLADDING DESIGN PRESSURES		
Vasd = 124 MPH NOMINAL DESIGN WIND SPEED (Vult = 160 MPH) COMPONENT AND CLADDING (BASED ON Vasd) EXPOSURE C DOORS & WINDOWS INCLUDED PRESSURES CALCULATED USING (Vult x 0.6) WHICH IS EQUIVALENT TO Vasd 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

Vasd = 124 MPH NOMINAL DESIGN WIND SPEED
COMPONENT AND CLADDING (BASED ON Vasd) EXPOSURE C
GARAGE DOORS DESIGN PRESSURE
ALLOWABLE STRESS DESIGN PRESSURE (ASD) PSF

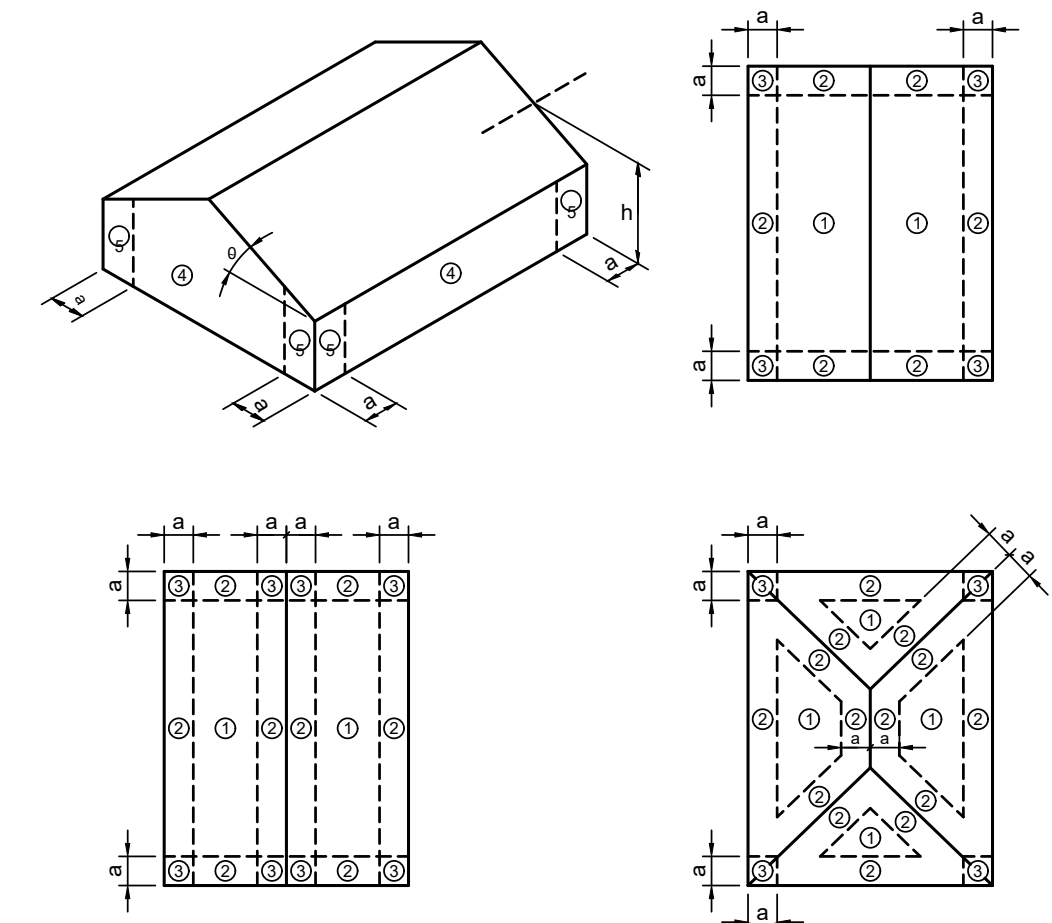
AREA OPENING	INTERIOR ZONE	END ZONE
0 - 110 SF	+41.6 / -46.5 PSF	
111 + SF	+38.6 / -43.4 PSF	

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 LOADINGS PRESENTED IN THE FLORIDA BUILDING CODE 6TH EDITION. THE DESIGN WIND SPEED IS (Vult = 170 MPH) AND (Vasd = 132 MPH).
- IMPORTANCE FACTOR Iw = 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.

NOTE: ALL DOORS & WINDOWS ARE TO BE PROTECTED WITH A APPROVED IMPACT RESISTANT GLASS OR SHUTTERS.
* FOR WOOD FRAME DOUBLE TOP PLATE, TOP PLATE SPLICE REQUIREMENT MINIMUM LAP IS 36". FASTEN LAPS WITH (2) ROWS 1/4"x3" SCREWS AT 6" O.C.

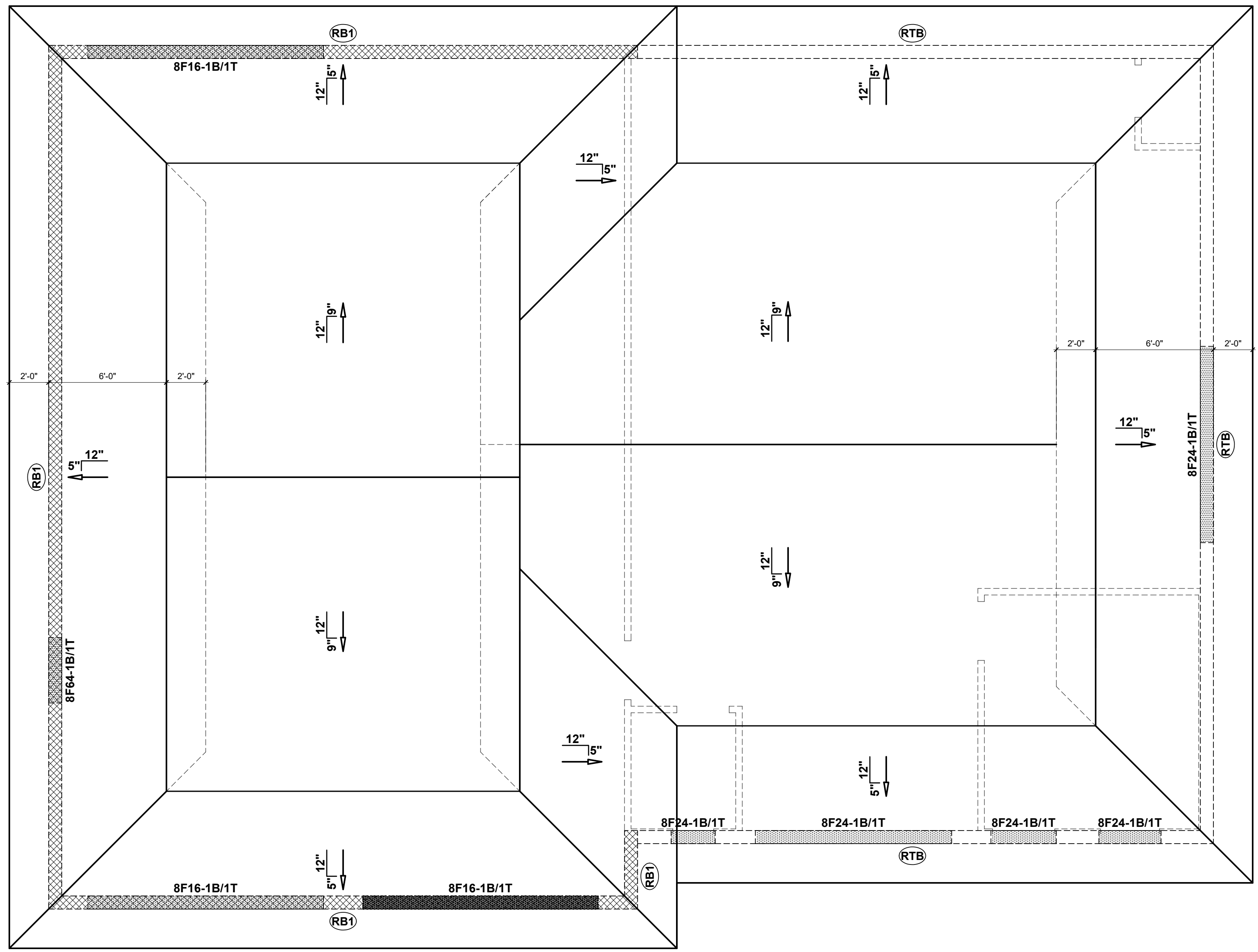


**COMPONENT AND CLADDING LOADING
DIAGRAM FIGURE 1**

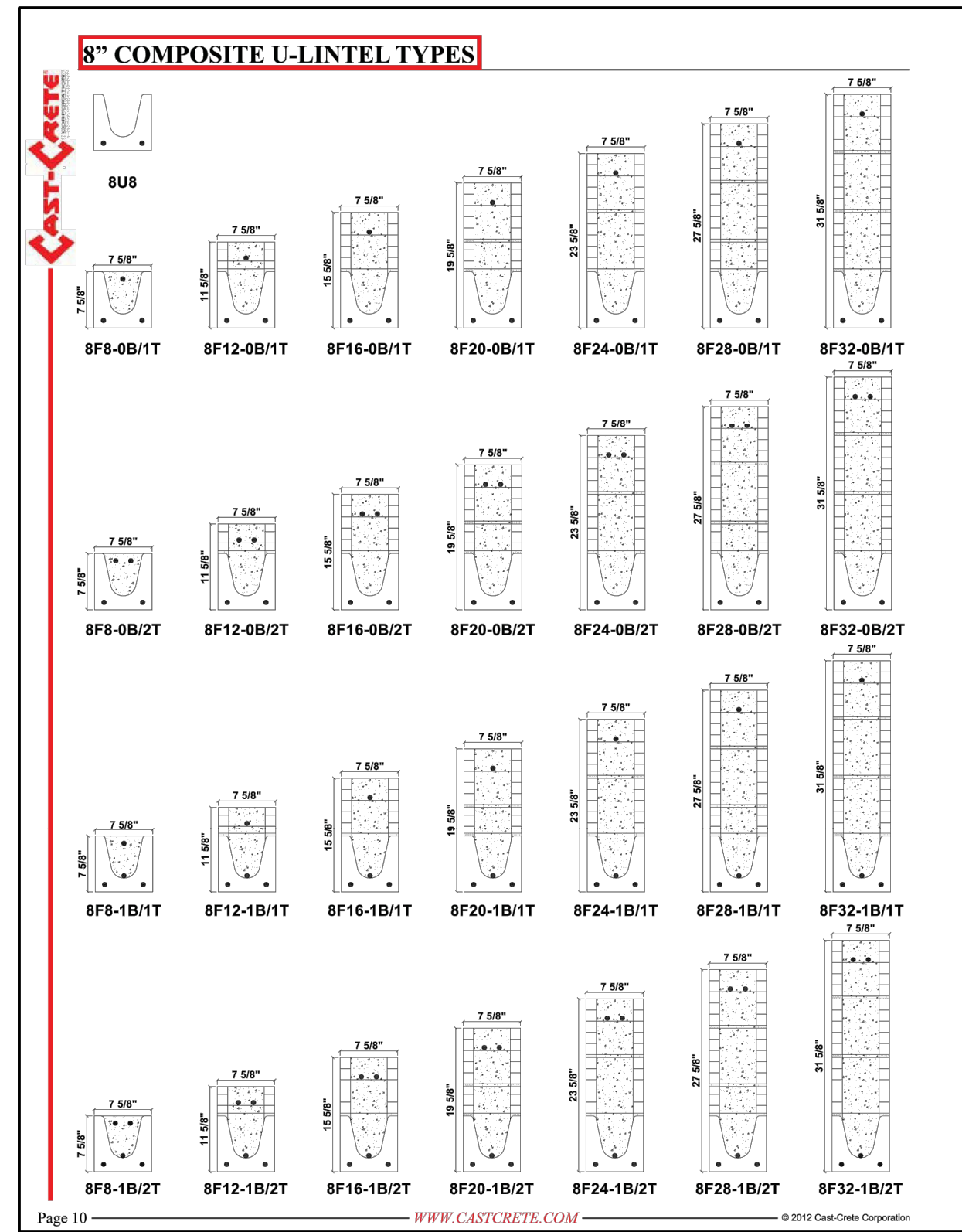
- ROOF TRUSSES NOTES**
- ROOF TRUSSES SHALL BE DESIGNED BY TRUSS MANUFACTURER. SHOP DRAWINGS SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO PRODUCTION.
 - TRUSS MANUFACTURER SHALL PROVIDE UPLIFT & REACTION VALUES FOR INDIVIDUAL TRUSSES. REFER TO THE TRUSS DRAWING FOR LAYOUT.
 - ROOF SHEATHING SHALL CONSIST OF 1/2" MIN. PLYWOOD, 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/ 10d COMMONS.
 - BRACE TRUSSES PER T.P.I. H.I.B-91, AS REVISED.
 - THE TRUSS LAYOUT BY RAYMOND BUILDING SUPPLY. (JOB: _____ DATE: _____) HAS BEEN COORDINATED WITH THE FOUNDATION AND ROOF PLAN.
 - PROVIDE SIMPSON HETA20 W/16 104 X 1 1/2" FOR UPLIFTS UP TO 1800 LBS.
 - ALL CHANGES TO THE TRUSS LAYOUT SHALL BE APPROVED BY THE ENGINEER.
 - IMPROPERLY LOCATED OR MISSING TRUSS THE 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 160 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 12" TO 58" 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.

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	13'-4"	(2)- 8" x 8" BOND BEAM W/ 1- #5d CONT. EACH				

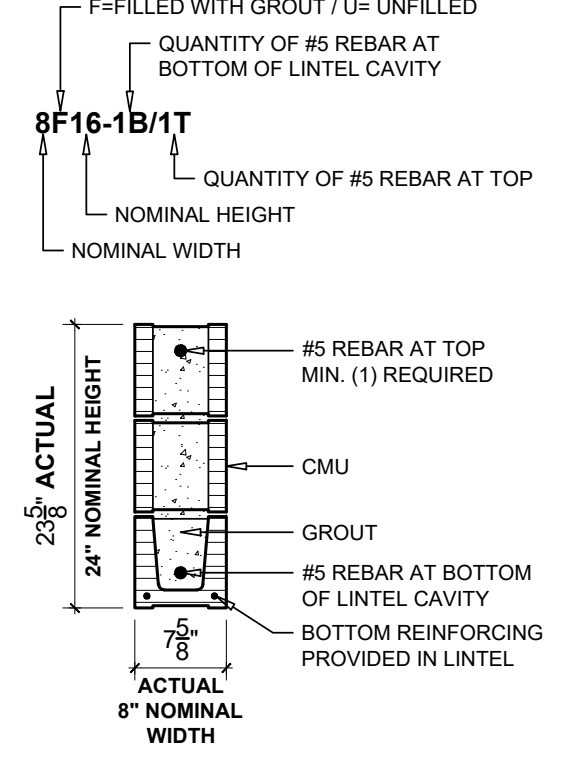


ROOF PLAN
SCALE: 1/4"=1'-0"



LINTEL & BOND BEAM DESIGN

- BOND BEAM IS TO BE 8" KNOCK OUT BLOCK U.N.O. WITH # 5 BAR GROUT SOLID CONTINUOUS AROUND PERIMETER OF STRUCTURE.
- MINIMUM 4" BEARING PER END AT LINTELS.



BEARING LEGEND		
DESCRIPTION	ELEVATION	SYMBOL
TOP OF BEARING	10'-0"	[Symbol]
TOP OF BEARING	13'-4"	[Symbol]



REV.	DESCRIPTION

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PROJ. NAME: **GARAGE BUILDING**
DESCRIPTION: **"SANTIAGO RESIDENCE"**
NAPLES, FL (PARCEL No. 38165000001)

DATE: **JUNE 12, 2018**

CRONIN ENGINEERING, INC.
AUTHORIZATION NUMBER: 6597
6627 WILLOW PARK DRIVE
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DESIGNED BY THE ENGINEER IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND SECTION 1609 FOR DESIGN PRESSURES GENERATED BY A DESIGN WIND VELOCITY OF 160 MPH.

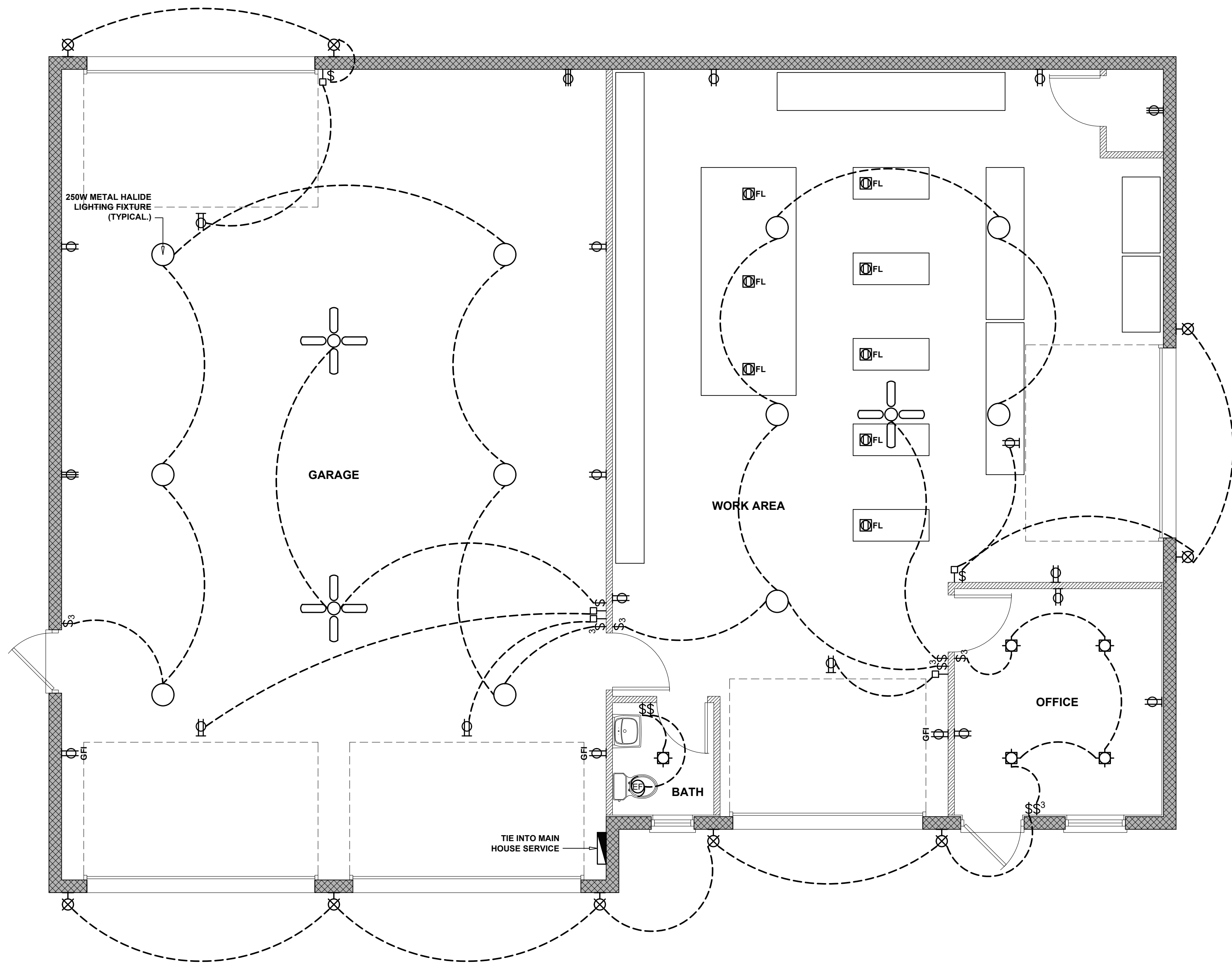
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ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
⌚	SWITCH SINGLE POLE
⌚₃	3 WAY SWITCH
⌚₄	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
ⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂ	2'X2' PARABOLIC RECESSED LIGHTING FIXTURE
ⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂ	2'X2' ACRYLIC RECESSED LIGHTING FIXTURE
ⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂ	2'X4' PARABOLIC RECESSED LIGHTING FIXTURE
ⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂⓂ	2'X4' 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.
1. ALL EXTERIOR OUTLETS AND OUTLETS IN KITCHEN, BATHROOMS AND UTILITY TO BE ON GFI CIRCUITS.
 2. VERIFY POWER HOOK UP LOCATION AND TYPE OF SERVICE (UNDERGROUND OR OVERHEAD) WITH RESPECT TO SUBDIVISION REQUIREMENTS.
 3. ALL SMOKE DETECTORS ARE TO BE HARD WIRED AND INTERCONNECTED WITH BATTERY BACKUP.
 4. ALL FIXTURES SHALL BE APPROVED BY THE OWNER PRIOR TO PURCHASE AND INSTALLATION.
 5. 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



ELECTRICAL PLAN

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

REV.	DESCRIPTION

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PROJ. NAME:	DESCRIPTION:
GARAGE BUILDING "SANTIAGO RESIDENCE" NAPLES, FL (PARCEL No. 38165000001)	ELECTRICAL PLAN
DATE:	JUNE 12, 2018

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