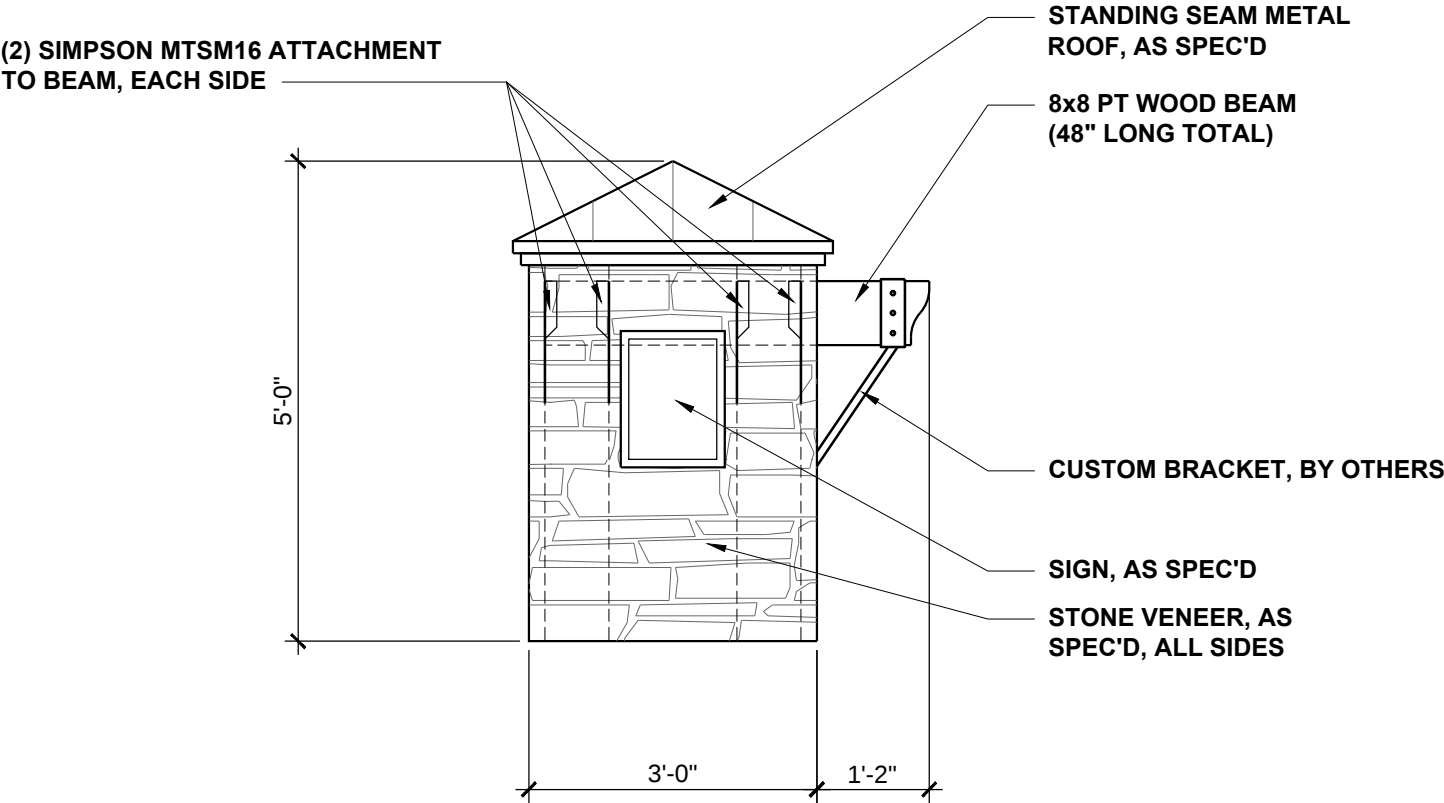
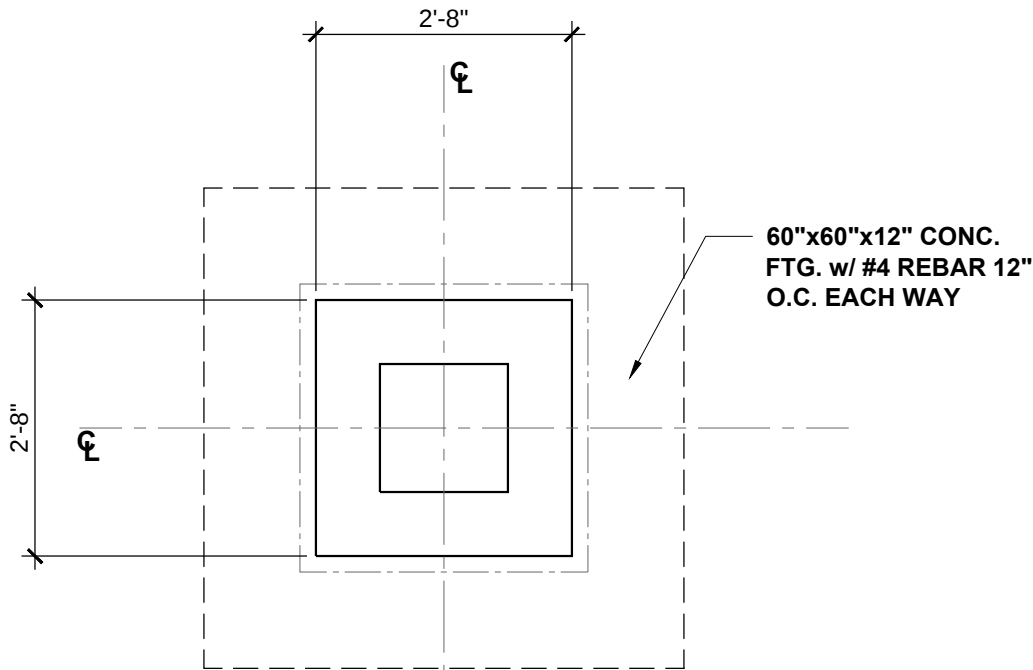




FRONT ELEVATION

SCALE: 1/2" = 1'-0"



FOUNDATION PLAN

SCALE: 1/2" = 1'-0"

NOTES:

1. CONSTRUCT COLUMN FROM 8" CMU, UNO.
2. PROVIDE LADDER WIRE EVERY OTHER COURSE.
3. SOLID GROUT COLUMN CORNERS W/ (2) #4 REBAR.
4. EMBED COLUMN REBAR 12" INTO BASE FOOTING.
5. PROVIDE MINIMUM 2" C.C. FOR ALL REBAR
6. ALL MASONRY ALLOWS FOR 2" OF STONE AND 4" OF BRICK ON ALL SIDES, AS NOTED.
7. CONCRETE COMPRESSIVE STRENGTH TO BE 3ksi MIN.

ENGINEER OF RECORD

JDS Consulting, PLLC
DESIGN · ENGINEERING · SURVEYING · ENERGY
8600 'D' JERSEY COURT
RALEIGH, NC 27617
FIRM LIC. NO: P-0961
PROJECT REFERENCE: 21901945



P-0961



JDS Consulting PLLC · 8600 'D' JERSEY CT · RALEIGH, NC 27617 919.480.1075
INFO@JDSCONSULTING.NET; WWW.JDSCONSULTING.NET

JDS Consulting, PLLC IS NOT LIABLE FOR CHANGES MADE TO PLANS DUE TO CONSTRUCTION METHODS OR ANY CHANGES TO PLANS MADE IN THE FIELD BY CONTRACTOR OR BY OTHERS. DRAWINGS ARE PROVIDED TO CLIENT FOR THE LOT NUMBER, PROPERTY, OR AS A MASTER PLAN AS SPECIFIED ON TITLE SHEET. DIMENSIONS SHALL GOVERN OVER SCALE, AND CODE SHALL GOVERN OVER DIMENSIONS ON DRAWINGS.

CLIENT:	GRAND ENTRANCE GROUP
PROJECT:	BIRCHWOOD GROVE ENTRY MONUMENT
LOCATION:	FUQUAY VARINA, NORTH CAROLINA
SCALE: 1/4" = 1'-0" FOR 11x17 PAPER, 1/2" = 1'-0" FOR 22x34 PAPER, OR AS NOTED	

PROJECT NO.:	
21901945	
DATE:	DRAWN BY:
09/13/2021	TDE
COLUMN ELEVATION AND FOUNDATION	
2.0	

NOTE: ALL CHAPTERS, SECTIONS, TABLES, AND FIGURES CITED WITHOUT A PUBLICATION TITLE ARE FROM THE APPLICABLE RESIDENTIAL CODE (SEE TITLE SHEET).

GENERAL

1.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. FURTHERMORE, CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, AND SAFETY ON SITE. NOTIFY JDS CONSULTING, PLLC IMMEDIATELY IF DISCREPANCIES ON PLAN EXIST.
2.

BRACED-WALL DESIGN IS BASED ON SECTION R602.10 - WALL BRACING. PRIMARY PRESCRIPTIVE METHOD TO BE CS-WSP. SEE WALL BRACING PLANS AND DETAILS FOR ADDITIONAL INFORMATION.

ALL NON-PRESCRIPTIVE SOLUTIONS ARE BASED ON GUIDELINES ESTABLISHED IN THE AMERICAN SOCIETY OF CIVIL ENGINEERS PUBLICATION *ASCE 7* AND THE *NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC*.

3.

SEISMIC DESIGN SHALL BE PER SECTION R301.2.2 - SEISMIC PROVISIONS, INCLUDING ASSOCIATED TABLES AND FIGURES, BASED ON LOCAL SEISMIC DESIGN CATEGORY.
- DESIGN LOADS
- | | |
|---|----------------------------|
| ASSUMED SOIL BEARING-CAPACITY | 2,000 PSF |
| | LIVE LOAD |
| ULTIMATE DESIGN WIND SPEED | 115 MPH, EXPOSURE B |
| GROUND SNOW | 15 PSF |
| ROOF | 20 PSF |
| <u>RESIDENTIAL CODE TABLE R301.5</u> | <u>LIVE LOAD (PSF)</u> |
| DWELLING UNITS | 40 |
| SLEEPING ROOMS | 30 |
| ATTICS WITH STORAGE | 20 |
| ATTICS WITHOUT STORAGE | 10 |
| STAIRS | 40 |
| DECKS | 40 |
| EXTERIOR BALCONIES | 60 |
| PASSENGER VEHICLE GARAGES | 50 |
| FIRE ESCAPES | 40 |
| GUARDS AND HANDRAILS | 200 (pounds, concentrated) |
| COMPONENT AND CLADDING LOADS, INCLUDING THOSE FOR DOORS AND WINDOWS, SHALL BE DERIVED FROM <u>TABLES R301.2(2)</u> AND <u>R301.2(3)</u> FOR A BUILDING WITH A MEAN ROOF HEIGHT OF 35 FEET, LOCATED IN EXPOSURE B. | |
- ABBREVIATIONS
- | | | | |
|------|-----------------------|--------|-------------------------|
| ABV | ABOVE | KS | KING STUD COLUMN |
| AFF | ABOVE FINISHED FLOOR | LVL | LAMINATED VENEER LUMBER |
| ALT | ALTERNATE | MAX | MAXIMUM |
| BRG | BEARING | MECH | MECHANICAL |
| BSMT | BASEMENT | MFR | MANUFACTURER |
| CANT | CANTILEVER | MIN | MINIMUM |
| CJ | CEILING JOIST | NTS | NOT TO SCALE |
| CLG | CEILING | OA | OVERALL |
| CMU | CONCRETE MASONRY UNIT | OC | ON CENTER |
| CO | CASED OPENING | PT | PRESSURE TREATED |
| COL | COLUMN | R | RISER |
| CONC | CONCRETE | REF | REFRIGERATOR |
| CONT | CONTINUOUS | RFG | ROOFING |
| D | CLOTHES DRYER | RO | ROUGH OPENING |
| DBL | DOUBLE | RS | ROOF SUPPORT |
| DIAM | DIAMETER | SC | STUD COLUMN |
| DJ | DOUBLE JOIST | SF | SQUARE FOOT (FEET) |
| DN | DOWN | SH | SHELF / SHELVES |
| DP | DEEP | SHTG | SHEATHING |
| DR | DOUBLE RAFTER | SHW | SHOWER |
| DSP | DOUBLE STUD POCKET | SIM | SIMILAR |
| EA | EACH | SJ | SINGLE JOIST |
| EE | EACH END | SP | STUD POCKET |
| EQ | EQUAL | SPEC'D | SPECIFIED |
| EX | EXTERIOR | SQ | SQUARE |
| FAU | FORCED-AIR UNIT | T | TREAD |
| FDN | FOUNDATION | TEMP | TEMPERED GLASS |
| FF | FINISHED FLOOR | THK | THICK(NESS) |
| FLR | FLOOR(ING) | TJ | TRIPLE JOIST |
| FP | FIREPLACE | TOC | TOP OF CURB / CONCRETE |
| FTG | FOOTING | TR | TRIPLE RAFTER |
| HB | HOSE BIBB | TYP | TYPICAL |
| HDR | HEADER | UNO | UNLESS NOTED OTHERWISE |
| HGR | HANGER | W | CLOTHES WASHER |
| JS | JACK STUD COLUMN | WH | WATER HEATER |
| | | WWF | WELDED WIRE FABRIC |
| | | XJ | EXTRA JOIST |
- MATERIALS
1.

INTERIOR / TRIMMED FRAMING LUMBER SHALL BE #2 SPRUCE PINE FIR (SPF) WITH THE FOLLOWING DESIGN PROPERTIES (#2 SOUTHERN YELLOW PINE MAY BE SUBSTITUTED):

Fb = 875 PSI

Fv = 70 PSI

E = 1.4E6 PSI

2.

FRAMING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, CONCRETE, OR MASONRY SHALL BE PRESSURE TREATED #2 SOUTHERN YELLOW PINE (SYP) WITH THE FOLLOWING DESIGN PROPERTIES:

Fb = 975 PSI

Fv = 95 PSI

E = 1.6E6 PSI

3.

LVL STRUCTURAL MEMBERS TO BE LAMINATED VENEER LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:

Fb = 2600 PSI

Fv = 285 PSI

E = 1.9E6 PSI

4.

PSL STRUCTURAL MEMBERS TO BE PARALLEL STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:

Fb = 2900 PSI

Fv = 290 PSI

E = 2.0E6 PSI

5.

LSL STRUCTURAL MEMBERS TO BE LAMINATED STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:

Fb = 2250 PSI

Fv = 400 PSI

E = 1.55E6 PSI

6.

STRUCTURAL STEEL WIDE-FLANGE BEAMS SHALL CONFORM TO ASTM A992. Fy = 50 KSI

7.

REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615, GRADE 60.

8.

POURED CONCRETE COMPRESSIVE STRENGTH TO BE A MINIMUM 3,000 PSI AT 28 DAYS. MATERIALS USED TO PRODUCE CONCRETE SHALL COMPLY WITH THE APPLICABLE STANDARDS LISTED IN AMERICAN CONCRETE INSTITUTE STANDARD ACI 318 OR ASTM C1157.

9.

CONCRETE SUBJECT TO MODERATE OR SEVERE WEATHERING PROBABILITY PER TABLE R301.2(1) SHALL BE AIR-ENTRAINED WHEN REQUIRED BY TABLE R402.2.

10.

CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE PUBLICATION 530: *BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES AND COMPANION COMMENTARIES* AND THE MASONRY SOCIETY PUBLICATION TMS 402/602: *BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES*.

11.

MORTAR SHALL COMPLY WITH ASTM INTERNATIONAL STANDARD C270.

12.

INDICATED MODEL NUMBERS FOR ALL METAL HANGERS, STRAPS, FRAMING CONNECTORS, AND HOLD-DOWNS ARE SIMPSON STRONG-TIE BRAND. EQUIVALENT USP BRAND PRODUCTS ARE ACCEPTABLE.

13.

REFER TO I-JOIST EQUIVALENCE CHART ON I-JOIST DETAIL SHEET FOR SUBSTITUTION OF MANUFACTURER SERIES.
- FRAMING
1.

ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY. LARGER MEMBERS MAY SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.

2.

STRUCTURAL COLUMNS TO BE 4x4 MINIMUM PRESSURE-TREATED LUMBER.

A.

ATTACH PORCH COLUMNS TO SLAB / FDN WALL USING ABA, ABU, ABW, OR CPT SIMPSON POST BASES TO FIT COLUMN SIZES NOTED ON PLAN -OR- ANY OTHER COLUMN CONNECTION WITH 500# UPLIFT CAPACITY.

B.

ATTACH PORCH COLUMNS TO PORCH BEAMS USING AC OR BC SIMPSON POST CAPS TO FIT COLUMN SIZES NOTED ON PLAN -OR- ANY OTHER COLUMN CONNECTION WITH 500# UPLIFT CAPACITY.

C.

TRIM OUT COLUMN(S) AND BEAM(S) PER BUILDER AND DETAILS.
- FOUNDATION
1.

MINIMUM ALLOWABLE SOIL BEARING CAPACITY IS ASSUMED TO BE 2,000 PSF. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SOIL BEARING CAPACITY IF UNSATISFACTORY CONDITIONS EXIST.

2.

CONCRETE FOUNDATION WALLS TO BE SELECTED AND CONSTRUCTED PER SECTION R404 OR AMERICAN CONCRETE INSTITUTE STANDARD ACI 318.

3.

MASONRY FOUNDATION WALLS TO BE SELECTED AND CONSTRUCTED PER SECTION R404 AND/OR AMERICAN CONCRETE INSTITUTE PUBLICATION 530: *BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES AND COMPANION COMMENTARIES* AND/OR THE MASONRY SOCIETY PUBLICATION TMS 402/602: *BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES*.

4.

CONCRETE WALL HORIZONTAL REINFORCEMENT TO BE PER TABLE R404.1.2(1) OR AS NOTED OR DETAILED. CONCRETE WALL VERTICAL REINFORCEMENT TO BE PER TABLES R404.1.2(3 AND 4) OR AS NOTED OR DETAILED. ALL CONCRETE WALLS SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 6.

A.

TABLES ASSUME THAT WALLS HAVE PERMANENT LATERAL SUPPORT AT THE TOP AND BOTTOM.

B.

FOUNDATION DRAINS ARE ASSUMED AT ALL WALLS PER SECTION R405.

6.

WOOD SILL PLATES TO BE ANCHORED TO THE FOUNDATION WITH 1/2" DIAMETER ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM OF 6'-0" OC AND WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. INSTALL MINIMUM (2) ANCHOR BOLTS PER SECTION. SEE SECTION R403.1.6 FOR SPECIFIC CONDITIONS.

7.

THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIERS SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION. UNFILLED, HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION.

8.

CENTERS OF PIERS TO BEAR IN THE MIDDLE THIRD OF THE FOOTINGS, AND GIRDERS SHALL CENTER IN THE MIDDLE THIRD OF THE PIERS.

9.

ALL FOOTINGS TO HAVE MINIMUM 2" PROJECTION ON EACH SIDE OF FOUNDATION WALLS (SEE DETAILS).

10.

ALL REBAR NOTED IN CONCRETE TO HAVE AT LEAST 2" COVER FROM EDGE OF CONCRETE TO EDGE OF REBAR.

11.

FRAMING TO BE FLUSH WITH FOUNDATION WALLS.

12.

WITH CLASS 1 SOILS, VAPOR BARRIER AND CRUSHED STONE MAY BE OMITTED.
-
- P-0961
- JDS Consulting

DESIGN • ENGINEERING • SURVEYING • ENERGY

JDS Consulting PLLC, 8600 D JERSEY CT, RALEIGH, NC 27617 919.480.1075

INFO@JDSCONSULTING.NET; WWW.JDSCONSULTING.NET

JDS Consulting, PLLC IS NOT LIABLE FOR CHANGES MADE TO PLANS DUE TO CONSTRUCTION METHODS OR ANY CHANGES TO PLANS MADE IN THE FIELD BY CONTRACTOR OR BY OTHERS. DRAWINGS ARE PROVIDED TO CLIENT FOR THE LOT NUMBER, PROPERTY, OR AS A MASTER PLAN AS SPECIFIED ON TITLE SHEET. DIMENSIONS SHALL GOVERN OVER SCALE, AND CODE SHALL GOVERN OVER DIMENSIONS ON DRAWINGS.
- CLIENT:

PROJECT:

LOCATION:

SCALE: 1/4" = 1'-0" FOR 11x17 PAPER, 1/2" = 1'-0" FOR 22x34 PAPER, OR AS NOTED

PROJECT NO.:

21901945

DATE:

09/13/2021

DRAWN BY:

TDE

GENERAL NOTES

GN1.0