

**LOCAL HISTORIC DISTRICT:** Wilmore

**PROPERTY ADDRESS:** 1818 Wickford Place, Lot 1

**SUMMARY OF REQUEST:** New Construction

**APPLICANT:** Craig Calcasola

### **Details of Proposed Request**

#### *Existing Conditions*

The existing structure is a one story single family house constructed in 1938 and located on the edge of the District. The HDC placed a 365-day Stay of Demolition on the property January 13, 2016. The parcel is zoned R-43 Multi-Family and is approximately .34 acres in size. The lot dimension is 150' x 100'. Adjacent uses are multi-family, industrial, commercial and single family. There are mature trees on the site. Trees to be saved, replaced or removed are identified on the plans. The parcel has been rezoned to Urban Residential-1 to construct four single family houses. The required minimum setback is 14', required minimum rear yard is 10' and required minimum lot width is 20'. The Floor Area Ratio (FAR) does not apply to single family structures on individual lots. 2019 Update: The structure has been demolished and all four parcels are currently vacant lots.

#### *Proposal*

The proposal is the construction of four single family structures with a focus on house plans for each lot and overall site layout for the four structures. Proposed lot dimensions are 37.5' x 100'. There are two models being proposed and will be identified as Lot/Plan 1, 2, 3 and 4. The setback of the proposed house for Lot 1 is the same as the existing structure which will set the location for Lots 1-4. All homes are 1.5 stories (approx. 23' to 28' in height), and feature front porches 8' in depth, wood siding, wood windows, brick foundations, and wood corner boards. The applicant is requesting cementitious siding for the porch columns and soffits.

The underlying zoning will require an 8' planting strip and 6' sidewalk. New landscaping and tree save opportunities are shown on the site plan. Included in the plan is a new private alley at the rear for the four houses. The revised plans also include numeric evidence of comparable lot coverages in the neighborhood, pervious area more clearly shown on the site plan and updated window design and placement.

### **Staff Recommendation**

1. The original project, voted on by the HDC in April 12, 2017, is considered null and void due to inactivity.
2. HDC 2016-321\_1816 Wickford Place (Lot 1) Motion, April 12, 2017: Approve with Conditions.

*"Based on compliance with **Policy & Design Guidelines – New Construction** Mr. Henningson made a **MOTION to APPROVE** this application with revised drawings to staff for probable approval. The revised drawings will include below for the lots - numbers one, two, and three.*

- *Miratek installed on columns, corners, fascia*
- *Windows– Take brick casing off, 4" wide non- tapered trim with 7/8 inch putty glaze*
- *Roof overhang extended to 24 inches at right angle to siding*
- *¾ individual V-groove bead board soffit*
- *2X8" barge rafters with bed mold installed base*
- *Tree protection plan*
- *Corner boards are to be equal to 5 ½ inches*



*Ms. Stephens seconded."*

3. Roof overhang not changed per condition.
4. V-groove bead board soffit not noted on plans.
5. Staff concern over Elevation Notes on A3.1 that German-style siding, door, and window styles to be selected by owner.
6. The project is not incongruous with the district and meets guidelines for New Construction.
7. Staff Recommends reinstating the **Approval with Conditions with Staff to work with applicant**, per 10.4.1 of the Rules for Procedure.
8. If requested by a Commission member, or if an interested party has signed up to speak in opposition, then the HDC shall open the application for a full hearing.





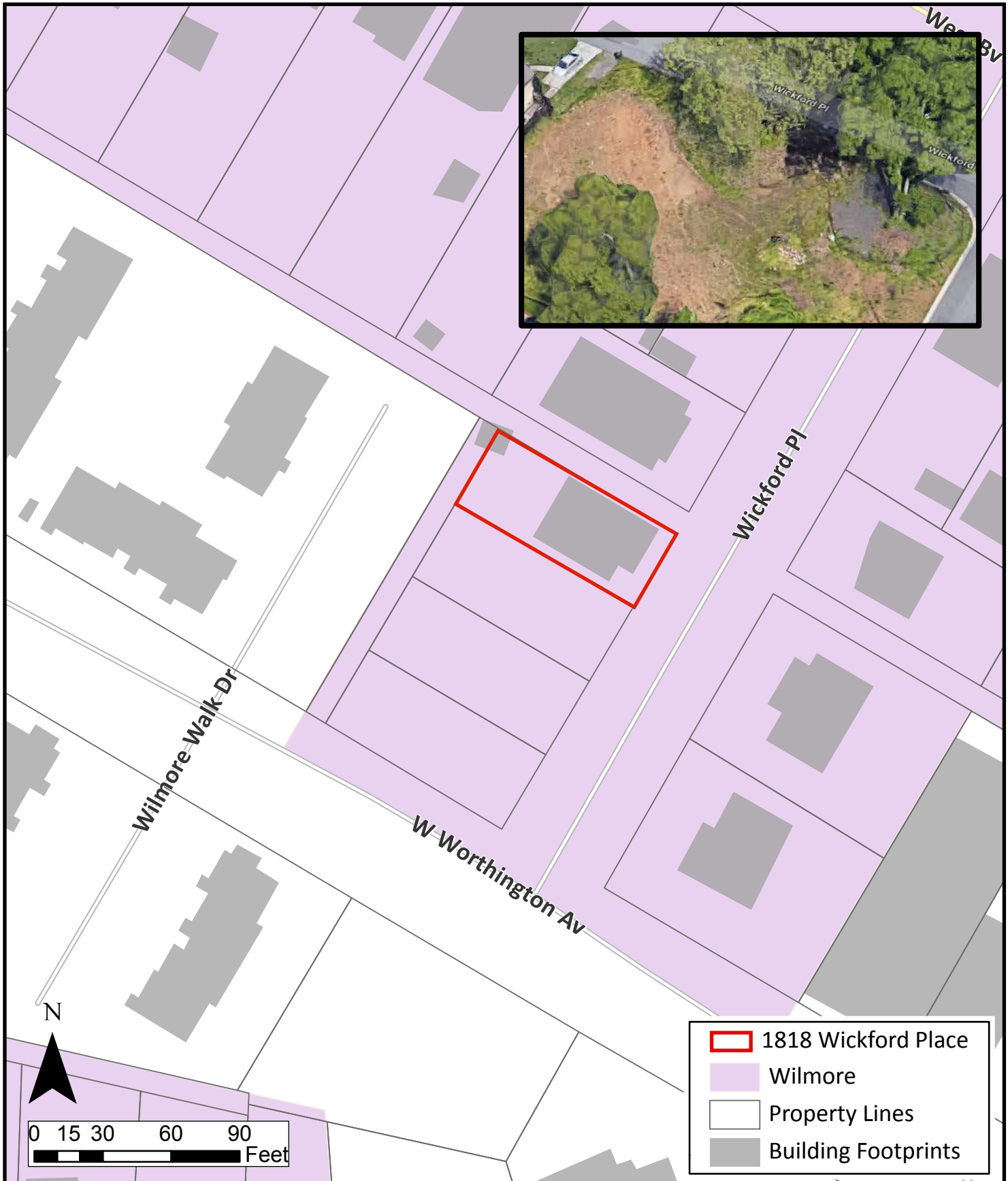
**HDC-2019-00363**

**PID: 11907749**

**LOCAL HISTORIC DISTRICT: WILMORE**

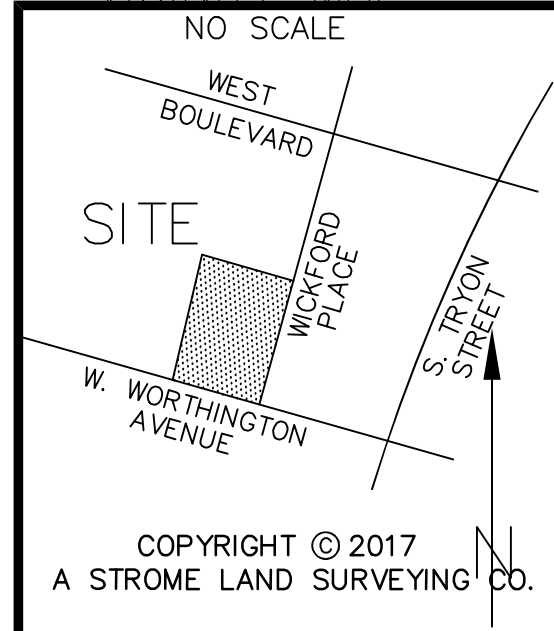
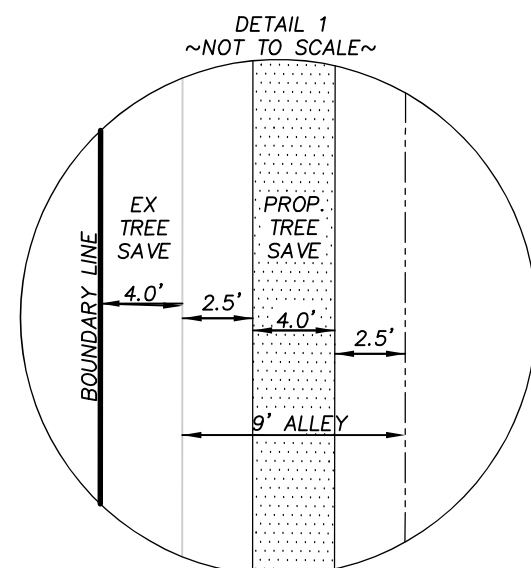
**PROPOSED PROJECT: CONSENT AGENDA**

July Meeting 2019





## VICINITY MAP

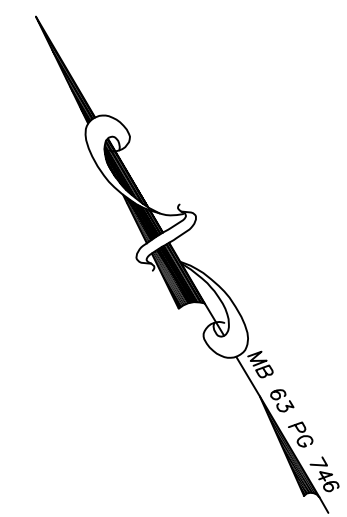
COPYRIGHT © 2017  
A STROME LAND SURVEYING CO.VICINITY MAP  
(Not to Scale)

## NOTES

1. AREA CALCULATED BY COORDINATE COMPUTATION.
2. ADJOINING PROPERTY OWNERS NAMES WERE TAKEN FROM MECKLENBURG COUNTY TAX OFFICE RECORDS, AND ARE CONSIDERED AS NOW OR FORMERLY.
3. IRON RODS AT ALL CORNERS UNLESS NOTED.
4. THIS MAP IS SUBJECT TO ANY AND ALL APPLICABLE DEED RESTRICTIONS, EASEMENTS, RIGHT-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS AND PRELIMINARY PLAN WHICH MAY BE OF RECORD.
5. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES, MEASURED WITH ELECTRONIC MEASURING DEVICES.
6. LOT SUBJECT TO ALL ZONING ORDINANCES OF CITY OF CHARLOTTE. BUILDER/OWNER MUST VERIFY THAT LOT IS IN COMPLIANCE WITH ALL COUNTY AND HOMEOWNERS ASSOCIATION ZONING ORDINANCES PRIOR TO ANY LAND DISTURBANCE OR CONSTRUCTION.
7. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE SEARCH.
8. NO NCGS MONUMENT FOUND WITHIN 2000 FEET.
9. OFF SITE RIGHT OF WAYS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
10. NO OBSERVED EVIDENCE OF CEMETERIES OR BURIAL GROUNDS NOR WERE ANY REPORTED TO THIS FIRM.
11. NO OBSERVED EVIDENCE OF SITE BEING USED AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL.
12. MAINTENANCE OF THE PRIVATE ALLEY AND TREE SAVE WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER OR ASSIGNS.
13. SIDEWALK AND UTILITY EASEMENT MEASURED FROM BACK OF SIDEWALK.
14. TREE SAVE AREA PER CITY TREE ORDINANCE

## LEGEND

RF	REBAR FOUND
RS	REBAR SET
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
MB	MAP BOOK
DB	DEED BOOK
PG	PAGE
BOUNDARY LINE	
ADJOINER LINE	
RIGHT OF WAY	
EASEMENT	
	TREE SAVE
#0000	LOT ADDRESS



FLOOD NOTE:  
NO PORTION OF THE SUBJECT PROPERTY SHOWN HEREON LIES WITHIN A SPECIAL FLOOD HAZARD AREA PER F.E.M.A. FLOOD INSURANCE RATE MAP, COMMUNITY PANEL 3710454300L, DATED: SEPTEMBER 02, 2015.

LINE	BEARING	DISTANCE
T1	N 32°21'43" E	12.95'
T2	N 30°35'30" E	113.62'
T3	S 59°24'30" E	4.00'
T4	S 30°35'30" W	113.68'
T5	S 32°21'43" W	12.83'
T6	N 60°19'53" W	4.00'
T7	N 89°12'16" E	7.03'

LINE	BEARING	DISTANCE
L1	N 30°24'00" E	10.29'
L2	N 33°20'25" E	10.05'

## GRAPHIC SCALE

( IN FEET )  
1 inch = 20 ft.CARLOS ORITZ &  
RACHEL ORITZ  
NOW OR FORMERLY  
LOT 3 BLOC 16  
DB 19362 PG 430  
MB 332 PG 96  
PARCEL ID # 119-077-12BRENDAN TINDALL &  
KARYN TINDALL  
NOW OR FORMERLY  
PART OF LOT 1 & LOT 2  
DB 32258 PG 689  
MB 332 PG 96  
PARCEL ID # 119-077-0910' ALLEY WAY per  
MB 332 PG 96  
(UNOPENED)10' ALLEY WAY per  
MB 332 PG 96  
(UNOPENED)EXISTING  
TREE SAVE PER  
MB 63 PG 746PROPOSED TREE SAVE  
506 SF  
IN MIDDLE OF CONCRETE  
DRIVEWAY STRIPS FOR  
PRIVATE ALLEY10' COMMON OPEN SPACE  
0.034 AC  
1,498 SF  
MB 63 PG 746  
TAX ID# 119-077-50PRIVATE 9'  
ALLEY EASEMENT  
SEE DETAIL #1WILMORE WALK  
CONDOMINIUM  
UNIT FILE # 749 PG 114' SETBACK FROM  
BACK OF CURB  
ALONG BACK OF  
PROPOSED WALKW WORTHINGTON AVENUE  
60' PUBLIC R/W  
per MB 63 PG 746

EXISTING CURB

-R/W-

"I, CHEVIS L. KING, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 32121, PAGE 927; THAT THE RATIO OF PRECISION AS CALCULATED IS 1: 10,000; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED. WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 17th DAY OF JULY, A.D., 2018.

**PRELIMINARY**  
NOT FOR SALES OR CONVEYANCES

PROFESSIONAL LAND SURVEYOR

L-5188

That this plat is of a survey that creates a subdivision of land within the area of a county or municipality that has an ordinance that regulates parcels of land.

STATE OF NORTH CAROLINA  
MECKLENBURG COUNTY

I, \_\_\_\_\_, REVIEW OFFICER OF MECKLENBURG COUNTY, N.C.  
CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS  
ALL STATUTORY REQUIREMENTS FOR RECORDING.

REVIEW OFFICER

DATE

APPROVED IN ACCORDANCE WITH THE PROVISIONS OF CH 20  
(SUBDIVISION ORDINANCE) OF THE CITY CODE OF THE CITY OF  
CHARLOTTE, NORTH CAROLINA  
CHARLOTTE-MECKLENBURG PLANNING DEPARTMENT

PLANNING DEPARTMENT STAFF

DATE

THIS PROPERTY IS LOCATED IN THE CHARLOTTE HISTORIC DISTRICT.

DEVELOPMENT DATA:  
PROPERTY AREA IS 15,029 SF, 0.345 AC

ZONING PER CASE 2017-162  
UR-1 (CD)  
MINIMUM LOT SIZE- 3,000 SF  
FRONT SETBACK- 21.5' FROM BACK OF CURB (WICKFORD PLACE)  
14' FROM EXISTING CURB ( WORTHINGTON AVENUE )  
SIDE- 5'  
REAR-10'  
MAXIMUM BUILDING HEIGHT- 40'  
MINIMUM LOT WIDTH- 35'

TREE SAVE AREA PROVIDED- 1,782 SF (11.8%)

## PURPOSE STATEMENT

THE PURPOSE OF THIS PLAT IS RELOCATE THE TREE SAVE FROM LOT 4 TO THE PRIVATE ALLEY AS SHOWN. ALSO, TO REVISE THE 2' SIDEWALK AND UTILITY EASEMENT TO 1'. THIS PLAT REPLACES AND SUPERCEDES MB 63 PG 746 AS RECORDED IN THE MECKLENBURG REGISTRY.

## REVISED FINAL PLAT

AT PROPERTY KNOWN AS  
LOTS 1-4, TREESAVE & COS  
WICKFORD PLACE  
MB 63 PG 746  
DB 30469 PG 385  
CITY OF CHARLOTTE, MECKLENBURG COUNTY, NC  
DATE: JUNE 8, 2019

Job No.:	Drawn:	Checked:	Date:
014-19-001	CLK	CLK	06/08/19

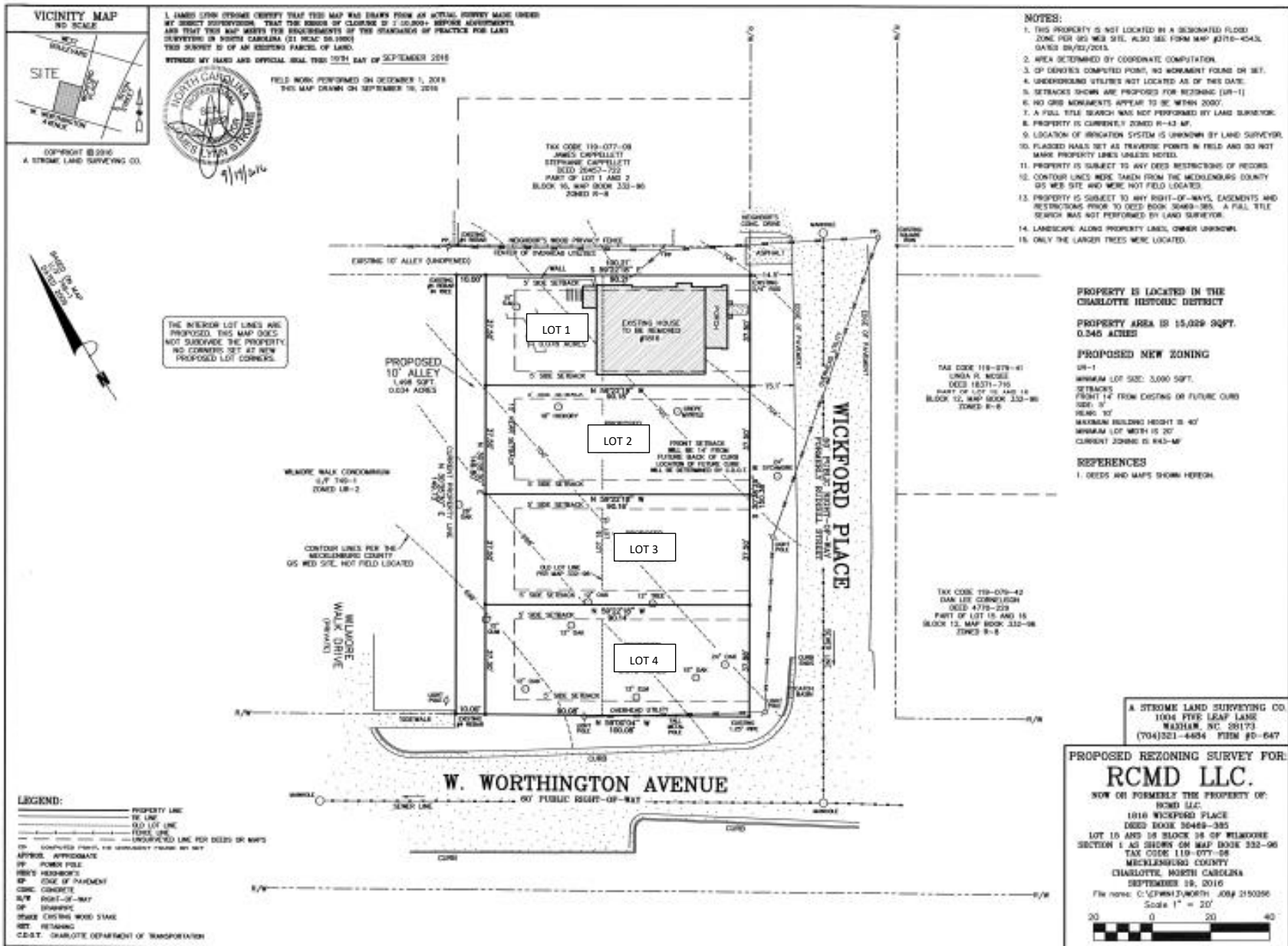
CAROLINA  
GEOMATICS  
PLLC3833 STREAMSIDE DR  
GASTONIA, NC 28056

P (980) 329-3382

CKING@CAROLINAGEOMATICS.COM  
NC #P-1965OWNER:  
RCMD, LLC  
15617 SULLIVAN RIDGE DRIVE  
CHARLOTTE, NC 28277



## SURVEY





NOTE: ALL HANGERS BY SIMPSON STRONG TIE CO., INC.  
( BRAND-NAME EQUIVALENTS ACCEPTABLE)

HEADER SIZE REQUIREMENTS			
SIZES	EXTERIOR SPANS	INTERIOR SPANS	JACK STUDS
(2) 2x6's	< 2'-0"	< 2'-6"	1
(2) 2x8's	2'-0" thru 3'-0"	2'-6" thru 3'-6"	2
(2) 2x10's	3'-0" thru 5'-0"	3'-6" thru 6'-6"	2
SEE PLAN	5'-0"<	6'-6"<	SEE PLAN

GENERAL PLAN NOTES

1. DRAWINGS ARE NOT TO BE SCALED. DIMENSIONS IN QUESTION SHALL BE CLARIFIED BY ARCHITECT.
2. ALL EXTERIOR DIMENSIONS ARE SHOWN TO THE OUTSIDE FACE OF STUD; UNLESS NOTED OTHERWISE.
3. ALL INTERIOR DIMENSIONS ARE SHOWN TO THE INSIDE FACE OF STUD; UNLESS NOTED OTHERWISE.
4. ALL INTERIOR WALLS ARE ASSUMED TO BE 5-1/2" WOOD STUDS; UNLESS NOTED OTHERWISE.
5. ALL EXTERIOR WALLS ARE ASSUMED TO BE 5-1/2" WOOD STUDS (+ 1/2" EXTERIOR WALL SHEATHING); UNLESS NOTED OTHERWISE.
6. ALL DOORS TO BE CENTERED; UNLESS NOTED OTHERWISE.
7. PROVIDE WOOD BLOCKING IN WALLS FOR MOUNTING OF ALL CABINETS, TOILET ACCESSORIES AND OTHER WALL MOUNTED ITEMS.
8. ALL CABINERY TO BE DESIGNED BY OTHERS AND SHALL MEET ALL APPLICABLE ACCESSIBILITY CODES (IF REQUIRED).
9. ALL FINISHES TO BE APPROVED BY ARCHITECT/G.C.
10. NUMBER OF EXTERIOR RISERS TO BE FIELD VERIFIED. AT LOCATIONS WHERE 4 OR MORE ARE REQUIRED A HANDRAIL WILL ALSO BE REQUIRED.
11. PROVIDE THERMATE CHAMBER AT FOUNDATION; AS REQUIRED.
12. MINIMUM 22-1/2" (w) x 54-1/2" (h) ATTIC ACCESS DOOR w/ PULL DOWN LADDER TO BE DETERMINED ON SITE AND WEATHERSTRIPPED AND INSULATED WITH MIN. R-5.
13. HVAC RETURN (S) TO BE DETERMINED ON SITE.
14. ALL COUNTERTOPS TO BE 36" A.F.F.; UNLESS NOTED OTHERWISE.
15. ALL DOOR HEIGHTS ARE SHOWN ON PLANS.

FRAMING CONSTRUCTION-OTHER THAN ROOF

1. STEEL BEAMS MUST HAVE # 2x4 STUD JACKS UNDER EACH END SUPPORT, UNLESS NOTED OTHERWISE.
2. MICRO-LAM BEAMS, SEE S01, CONSTRUCTION OTHER THAN ROOF, NOS. 7
3. ALL BRICK OVER LOWER ROOF MUST HAVE ANGLE WITH STOPS LAG SCREWS TO STUDS ABOVE AND ACCORDANCE WITH DETAIL.
4. ALL CONNECTION JOISTS MUST BE BRACED IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS PLUS DETAILS SHOWN ON PLANS.
5. ALL RAFTER BRACES MUST HAVE 2 STUDS FROM PLATE TO FOUNDATION OR BEAM BELOW THEM AT ALL FLOORS. NO BRACES ON CEILING PLANT WITHOUT STUDS DIRECTLY UNDER THEM.
6. WHERE PARTITIONS FALL BETWEEN FLOOR TRUSSES, 2"x4" LADDERS @ 60°C. MUST BE PLACED PERPENDICULAR TO THE TRUSSES TO SUPPORT THE PLYWOOD DECKING.
7. ALL OPEN RATED FLOOR TRUSSES OVER A 10' SPAN A MIN. SINGLE LINE OF 2"x4" SHALL BE NAILED TO DIAGONAL MEMBERS OR VERTICAL MEMBERS IN THE APPROXIMATE MID-SPAN AS A LOAD DISTRIBUTION MEMBER.
8. WHERE CEILING JOISTS ARE PARALLEL TO EXTERIOR WALLS AND RAFTERS BEAR ON STUD WALL TOP PLATE ADJACENT TO CEILING JOISTS, BRACE RAFTERS AND TOP PLATE TO 2x6 HGS 10" LONG (MIN) ON 6" CENTERS ALONG LENGTH OF CEILING JOISTS.
9. ALL 2-STORY OPEN GREAT ROOMS, LIVING ROOMS, WITH 2 OR MORE ADJACENT OPENINGS OF 3' OR LESS MUST USE A 1-3/2"x12"x12"x12" FLOOR ANGLE VERTICALLY FROM FLOOR TO TOP PLATE LAGGED WITH KING STUDS WITH 3" 6"x3" LAGS @ 24" C. VERTICALLY AND LAGGED TO STEEL AND STUD WITH 1/2" PLYWOOD. 1/2" PLYWOOD SHALL BE USED TO BRACE MULTIPLE OPENINGS WITH 3 OR LESS SPACE BETWEEN OPENINGS SHALL HAVE AT LEAST 1" STEEL ANGLE VERTICALLY IN EACH MULLION SPACE. THE SHEATHING ON THIS STEEL REINFORCED PARTITION SHALL BE 1/2" PLYWOOD. NO OTHER SHEATHING SHALL BE PERMITTED.

## STAIRWAYS

1. TREADS SHALL BE 9" DEEP PLUS A 1" NOSING
2. RISERS SHALL BE FIELD VERIFIED (NOT TO EXCEED 8-1/4")
3. STAIR SHALL BE 36" WIDE CLEAR MINIMUM AND SHALL HAVE A HANDRAIL AT A HEIGHT ABOVE THE NOSING OF 34"-38".
4. GUARD RAIL HEIGHT SHALL BE A MINIMUM OF 36" IN HEIGHT PER 312.12.2
5. GUARDS SHALL BE FIELD VERIFIED AND SHALL NOT HAVE OPENINGS SURFACING TO GUARD RAIL HEIGHT THAT ALLOW PASSAGE OF A 4" SPHERE.
6. GUARDS ON OPEN SIDES OF STAIRS SHALL NOT HAVE OPENINGS ALLOWING PASSAGE OF A 4.38" SPHERE.
7. TRIANGLE FORMED BY RISER, TREAD AND BOTTOM GUARD RAIL SHALL NOT ALLOW PASSAGE OF A 6" SPHERE.

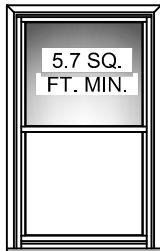
## EGRESS WINDOW REQUIREMENTS

NCRC 2018 310.2.1  
EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE EXTERIOR WINDOW OR EXTERIOR DOOR  
APPROVED FOR EMERGENCY EGRESS OR RESCUE. THE UNITS MUST BE OPERABLE FROM THE INSIDE TO A  
FULL CLEAR OPENING WITHOUT THE USE OF A KEY OR TOOL. WHERE WINDOWS ARE PROVIDED AS A  
MEANS OF EGRESS OR RESCUE, THEY SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44" ABOVE THE  
FLOOR.

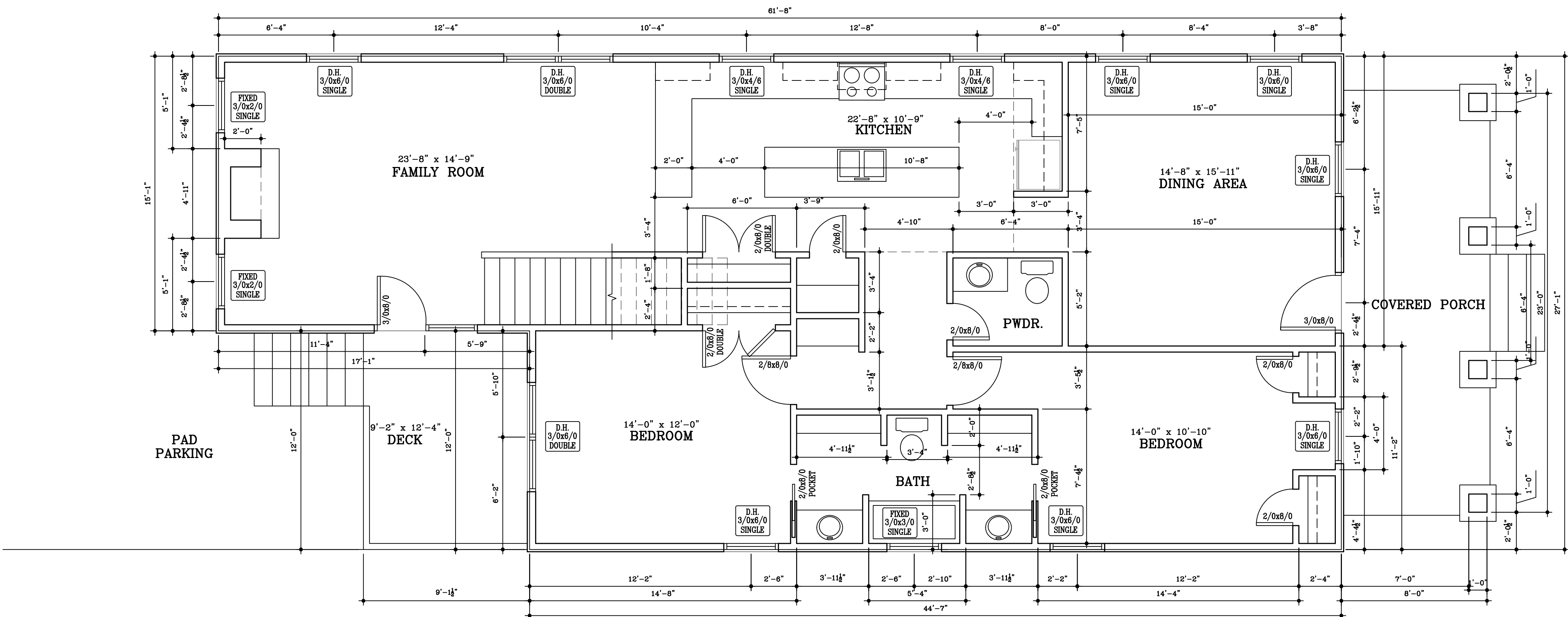
NCRC 310.2.1

THE MIN. NET CLEAR  
OPENING HEIGHT DIMENSION  
SHALL BE 22". THE MIN.  
NET CLEAR OPENING WIDTH  
DIMENSION SHALL BE 20".  
THE NET CLEAR OPENABLE  
AREA SHALL NOT BE LESS  
THAN 4 SQ. FT.

NCR 310.2.1  
EACH EGRESS WINDOW  
FROM SLEEPING ROOMS  
MUST HAVE A MIN. TOTAL  
GLASS AREA OF NOT LESS  
THAN 5 SQ. FT. IN THE  
CASE OF A GROUND FLOOR  
WINDOW AND NOT LESS  
THAN 5.7 SQ. FT. IN THE  
CASE OF A SECOND STORY  
WINDOW.



## LVL BOLTING PATTERN DETAIL



101 LOWER LEVEL PLAN

$$1/4'' = 1'-0''$$

MSJDRAFTING

---

1871 FOARCH ROAD LINCOLNTON, NORTH CAROLINA	TELEPHONE FAX	(704) 732-8844 (704) 736-1720
--	------------------	----------------------------------

R. ALLEN  
CONSTRUCTION

A NEW RESIDENCE AT:  
WILMORE #11

PROJECT NO. WILMORE01

DATE: **JUNE 21, 2016**

DRAWN BY: **MSB**

CHECKED BY: **MSB**

REVISIONS:

NO. DATE:




COMPUTER REFERENCE NUMBER  
WJLMORE0101 12

SHEET NO.

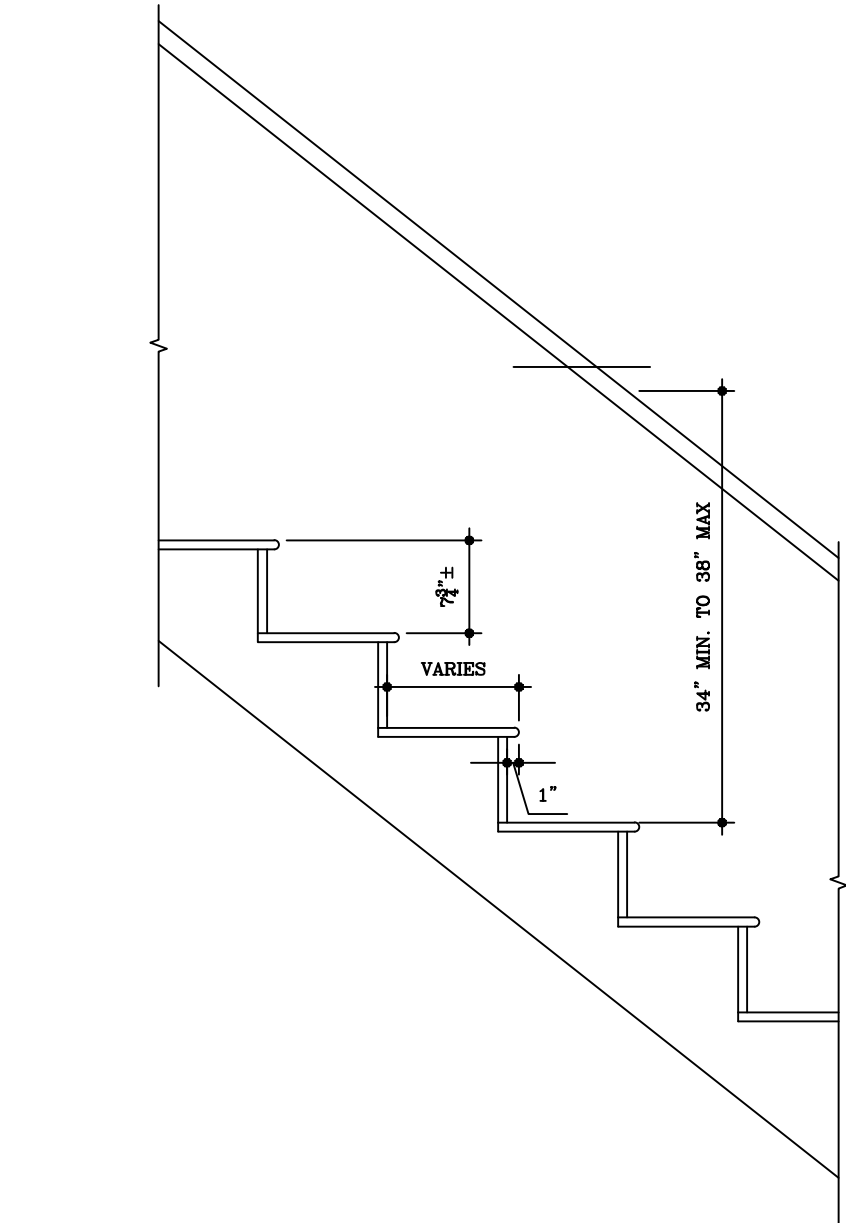
A1.0 OF



TYP. HANGERS FOR JOIST & BEAMS	
NOTE: ALL HANGERS BY SIMPSON STRONG TIE CO., INC. (BRAND-NAME EQUIVALENTS ACCEPTABLE)	
MEMBERS	HANGER
2x8	LUS28
2x10	LUS210
2x12	LUS210
(2) 2x8	HUS28-2
(2) 2x10	HUS210-2
(2) 2x12	HUS212-2
(3) 2x8	LUS28-3
(3) 2x10	LUS210-3
(3) 2x12	HUZ12-3 MIN.
(2) 1-3/4"x9-1/4" LVL	HGUS410
(2) 1-3/4"x9-1/2" LVL	HGUS410
(2) 1-3/4"x11-1/4" LVL	HGUS412
(2) 1-3/4"x11-7/8" LVL	HGUS412
(2) 1-3/4"x14" LVL	HGUS414
(2) 1-3/4"x16" LVL	HGUS414
(2) 1-3/4"x18" LVL	HGUS414
(3) 1-3/4"x9-1/4" LVL	HGUS5,50/10
(3) 1-3/4"x9-1/2" LVL	HGUS5,50/10
(3) 1-3/4"x11-1/4" LVL	HGUS5,50/12
(3) 1-3/4"x11-7/8" LVL	HGUS5,50/12
(3) 1-3/4"x14" LVL	HGUS5,50/14
(3) 1-3/4"x16" LVL	HGUS5,50/14
(3) 1-3/4"x18" LVL	HGUS5,50/14
(4) 1-3/4"x9-1/4" LVL	HGUS7,25/10
(4) 1-3/4"x9-1/2" LVL	HGUS7,25/10
(4) 1-3/4"x11-1/4" LVL	HGUS7,25/12
(4) 1-3/4"x11-7/8" LVL	HGUS7,25/12
(4) 1-3/4"x14" LVL	HGUS7,25/14
(4) 1-3/4"x16" LVL	HGUS7,25/14
(4) 1-3/4"x18" LVL	HGUS7,25/14

HEADER SIZE REQUIREMENTS			
SIZES	EXTERIOR SPANS	INTERIOR SPANS	JACK STUDS
(2) 2x6's	< 2'-0"	< 2'-6"	1
(2) 2x8's	2'-0" thru 3'-0"	2'-6" thru 3'-6"	2
(2) 2x10's	3'-0" thru 5'-0"	3'-6" thru 6'-6"	2
SEE PLAN	5'-0"	6'-6"	SEE PLAN

WALL STUD REQUIREMENTS	
EXTERIOR WALL HIEGHT	STUD SIZE AND SPACING
H < 10'-0"	2x4 @ 16" o.c.
10'-0" < H < 11'-0"	2x4 @ 12" o.c.
10'-0" < H < 11'-0"	2x6 @ 16" o.c.
H > 18'-0"	CONSULT ENGINEER



102 TYP. STAIR DTL. 3/4" = 1'-0"

#### GENERAL PLAN NOTES

- DRAWINGS ARE NOT TO BE SCALED; DIMENSIONS IN QUESTION SHALL BE CLARIFIED BY ARCHITECT.
- ALL EXTERIOR DIMENSIONS ARE SHOWN TO THE OUTSIDE FACE OF STUD, UNLESS NOTED OTHERWISE.
- ALL INTERIOR DIMENSIONS ARE SHOWN TO THE INSIDE FACE OF STUD, UNLESS NOTED OTHERWISE.
- ALL INTERIOR WALLS ARE ASSUMED TO BE 3-1/2" WOOD STUDS, UNLESS NOTED OTHERWISE.
- ALL EXTERIOR WALLS ARE ASSUMED TO BE 3-1/2" WOOD STUDS (PLUS 1/2" EXTERIOR WALL SHEATHING) ; UNLESS NOTED OTHERWISE.
- ALL DOORS TO BE CENTERED, UNLESS NOTED OTHERWISE.
- PROVIDE WOOD BLOCKING IN WALLS FOR MOUNTING OF ALL CABINETS, TOILET ACCESSORIES AND OTHER WALL MOUNTED ITEMS.
- ALL CABINETRY TO BE DESIGNED BY OTHERS AND SHALL MEET ALL APPLICABLE ACCESSIBILITY CODES (IF REQUIRED)
- ALL FINISH AND COLOR SELECTIONS TO BE APPROVED BY ARCHITECT/IG.C.
- NUMBER OF EXTERIOR RISERS TO BE FIELD VERIFIED; AT LOCATIONS WHERE 4 OR MORE ARE REQUIRED A HANDRAIL WILL ALSO BE REQUIRED.
- PROVIDE TERMITE CHEMICAL AT FOUNDATION, AS REQUIRED.
- MINIMUM 22-1/2" (w) x 54-1/2" (l) ATTIC ACCESS DOOR w/ PULL DOWN LADDER TO BE DETERMINED ON SITE AND WEATHERSTRIPPED AND INSULATED WITH MIN. R-5.
- HVAC RETURN (S) TO BE DETERMINED ON SITE.
- ALL COUNTERTOPS TO BE 3/4" A.F.F., UNLESS NOTED OTHERWISE.
- ALL DOOR HEIGHTS ARE SHOWN ON PLANS.

#### FRAMING CONSTRUCTION-OTHER THAN ROOF

- STEEL BEAMS MUST HAVE (5) 2x4 STUD JACKS UNDER EACH END SUPPORT; UNLESS NOTED OTHERWISE.
- MICRO-LAM BEAMS, SEE S0.1, CONSTRUCTION OTHER THAN ROOFS, NOS. 7
- ALL BRICK OVER LOWER ROOFS MUST HAVE ANGLE WITH STOPS LAG SCREWS TO STUDS ABOVE AND ACCORDANCE WITH DETAIL.
- ALL WOOD I-JOISTS AND OPEN JOISTS MUST BE BRACED IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS PLUS DETAILS SHOWN ON PLANS.
- ALL RAFTER BRACES MUST HAVE 2 STUDS FROM PLATE TO FOUNDATION OR BEAM BELOW THEM AT ALL FLOORS. NO BRACES ON CEILING PLATE WITHOUT STUDS DIRECTLY UNDER THEM.
- WHERE PARTITIONS FALL BETWEEN FLOOR TRUSSES, 2"x4" LADDERS @ 16"o.c. MUST BE PLACED PERPENDICULAR TO THE TRUSSES TO SUPPORT THE PLYWOOD DECKING.
- ON ALL OPEN WEB FLOOR TRUSSES OVER A 10' SPAN A MIN. SINGLE LINE OF 2"x4" SHALL BE NAILED TO DIAGONAL MEMBERS OR VERTICAL MEMBERS IN THE APPROXIMATE MID-SPAN AS A LOAD DISTRIBUTION MEMBER.
- WHERE CEILING JOISTS ARE PARALLEL TO EXTERIOR WALLS AND RAFTERS BEAR ON STUD WALL TOP PLATE ADJACENT TO CEILING JOISTS, BRACE RAFTERS AND TOP PLATE TO 2x6 HOGS 6' LONG (MIN.) ON 6' CENTERS ALONG LENGTH OF CEILING JOISTS.
- ALL 2-STORY OPEN GREAT ROOMS, LIVING ROOMS, WITH 2 OR MORE ADJACENT OPENINGS OF 3' OR LESS MUST USE A 3-1/2"x3-1/2"x1/2" STEEL ANGLE VERTICALLY FROM FLOOR TO TOP PLATE LAGGED TO KING STUDS WITH (3) 6"x3" LAGS @ 24"o.c. VERTICALLY AND LAGGED TO FLOOR AND TOP PLATE WITH (1) 3/16"x3" LAG THROUGH A 1/4" PLATE AT THE TOP AND BOTTOM. MULTIPLE OPENINGS WITH 3' OR LESS SPACE BETWEEN ROUGH OPENINGS SHALL HAVE AT LEAST (1) STEEL ANGLE VERTICALLY IN EACH MULLION SPACE. THE SHEATHING ON THIS STEEL REINFORCED PARTITION SHALL BE 1/2" PLYWOOD, NO OTHER SHEATHING SHALL BE PERMITTED.

#### STAIRWAYS

- TREADS SHALL BE 9" DEEP PLUS A 1" NOSING
- RISERS SHALL BE FIELD VERIFIED (NOT TO EXCEED 8-1/4")
- STAIR SHALL BE 36" WIDE CLEAR MINIMUM AND SHALL HAVE A HANDRAIL AT A HEIGHT ABOVE THE NOSING OF 34"-38".
- GUARD RAIL HEIGHT SHALL BE A MINIMUM OF 36" IN HEIGHT PER R312.1.2
- REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM WALKING SURFACE TO GUARD RAIL HEIGHT THAT ALLOW PASSAGE OF A 4" SPHERE.
- GUARDS ON OPEN SIDES OF STAIRS SHALL NOT HAVE OPENINGS ALLOWING PASSAGE OF A 4-3/8" SPHERE
- TRIANGLE FORMED BY RISER, TREAD AND BOTTOM GUARD RAIL SHALL NOT ALLOW PASSAGE OF A 6" SPHERE.

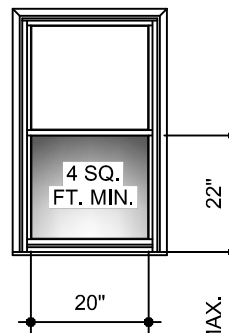
#### EGRESS WINDOW REQUIREMENTS

NCRC 2018 310.2.1

EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE EXTERIOR WINDOW OR EXTERIOR DOOR APPROVED FOR EMERGENCY EGRESS OR RESCUE. THE UNITS MUST BE OPERABLE FROM THE INSIDE TO A FULL CLEAR OPENING WITHOUT THE USE OF A KEY OR TOOL. WHERE WINDOWS ARE PROVIDED AS A MEANS OF EGRESS OR RESCUE, THEY SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR.

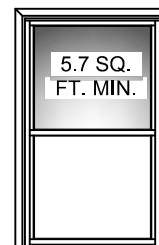
NCRC 310.2.1

THE MIN. NET CLEAR OPENING HEIGHT DIMENSION SHALL BE 22". THE MIN. NET CLEAR OPENING WIDTH DIMENSION SHALL BE 20". THE NET CLEAR OPENABLE AREA SHALL NOT BE LESS THAN 4 SQ. FT.



NCRC 310.2.1

EACH EGRESS WINDOW FROM SLEEPING ROOMS MUST HAVE A MIN. TOTAL GLASS AREA OF NOT LESS THAN 5 SQ. FT. IN THE CASE OF A GROUND FLOOR WINDOW AND NOT LESS THAN 5.7 SQ. FT. IN THE CASE OF A SECOND STORY WINDOW.



#### MAIN LEVEL

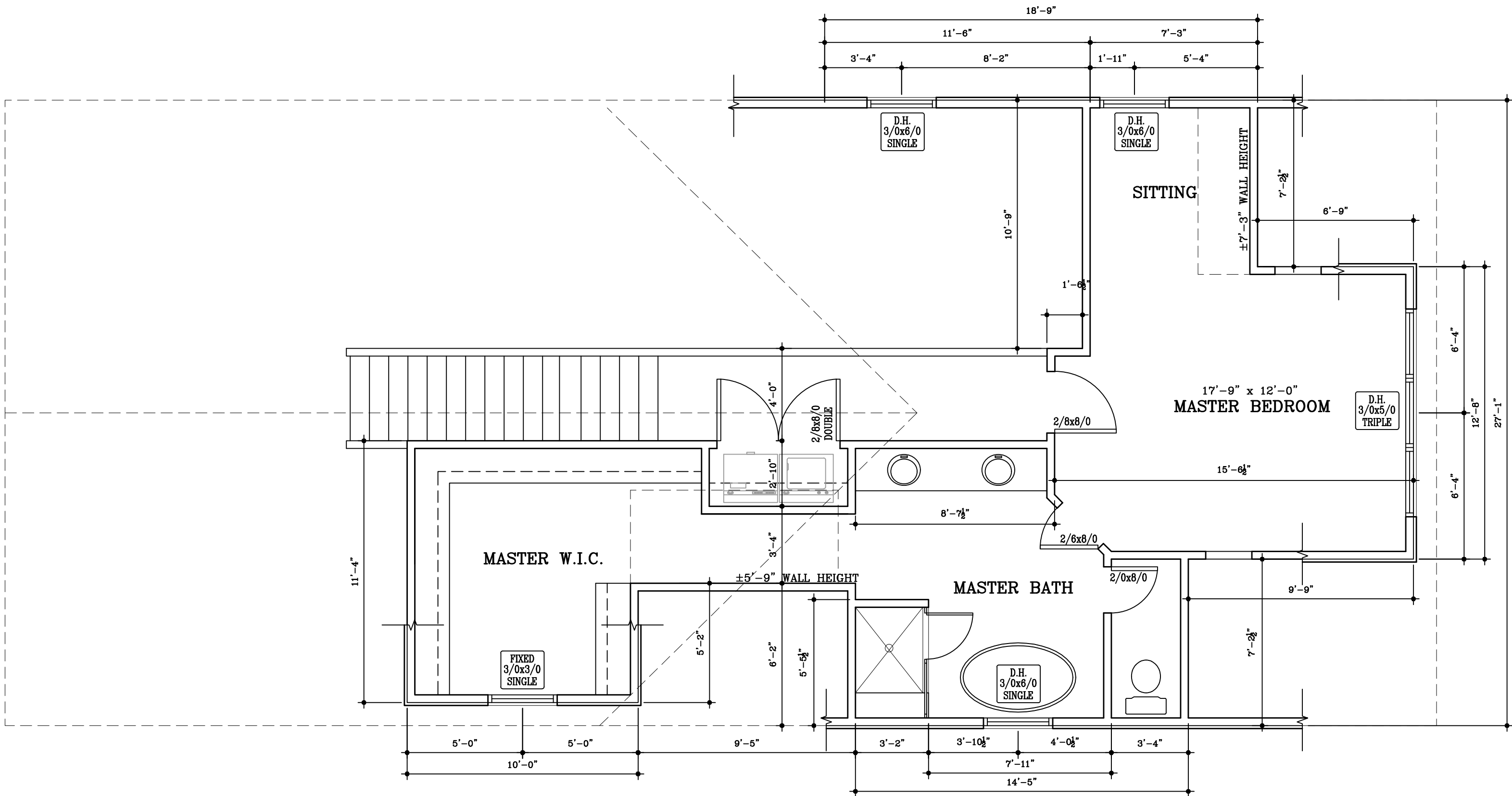
HEATED SQUARE FOOT 1,615 SQ. FT.  
DECK 112 SQ. FT.  
COVERED FRONT PORCH 185 SQ. FT.

#### UPPER LEVEL

HEATED SQUARE FOOT 647 SQ. FT.

#### TOTAL

HEATED SQUARE FOOT 2,262 SQ. FT.  
UNHEATED SQUARE FOOT 297 SQ. FT.



101 UPPER LEVEL PLAN

1/4" = 1'-0"

MSJDRAFTING  
1871 POARCH ROAD  
LINCOLTON, NORTH CAROLINA  
TELEPHONE (704) 735-8844  
FAX (704) 735-1720

R. ALLEN  
CONSTRUCTION

A NEW RESIDENCE AT:  
WILMORE #1  
CHARLOTTE, NC

PROJECT NO. WILMORE01

DATE: JUNE 21, 2016

DRAWN BY: MSB

CHECKED BY: MSB

REVISIONS:

NO. DATE: BY

COMPUTER REFERENCE NUMBER WILMORE01 .125

SHEET NO.

A1.1 OF 4



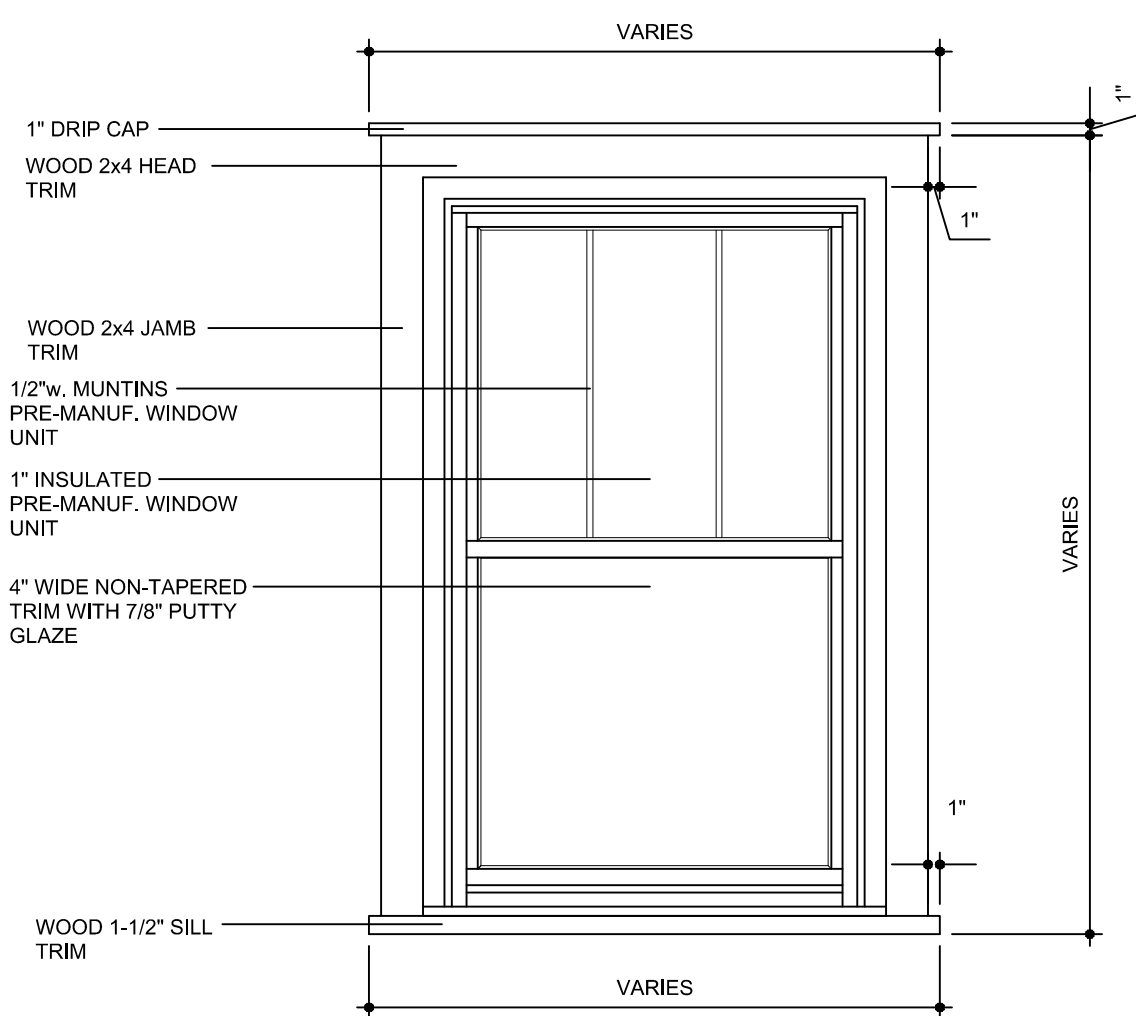


301 FRONT ELEVATION  
A3.0

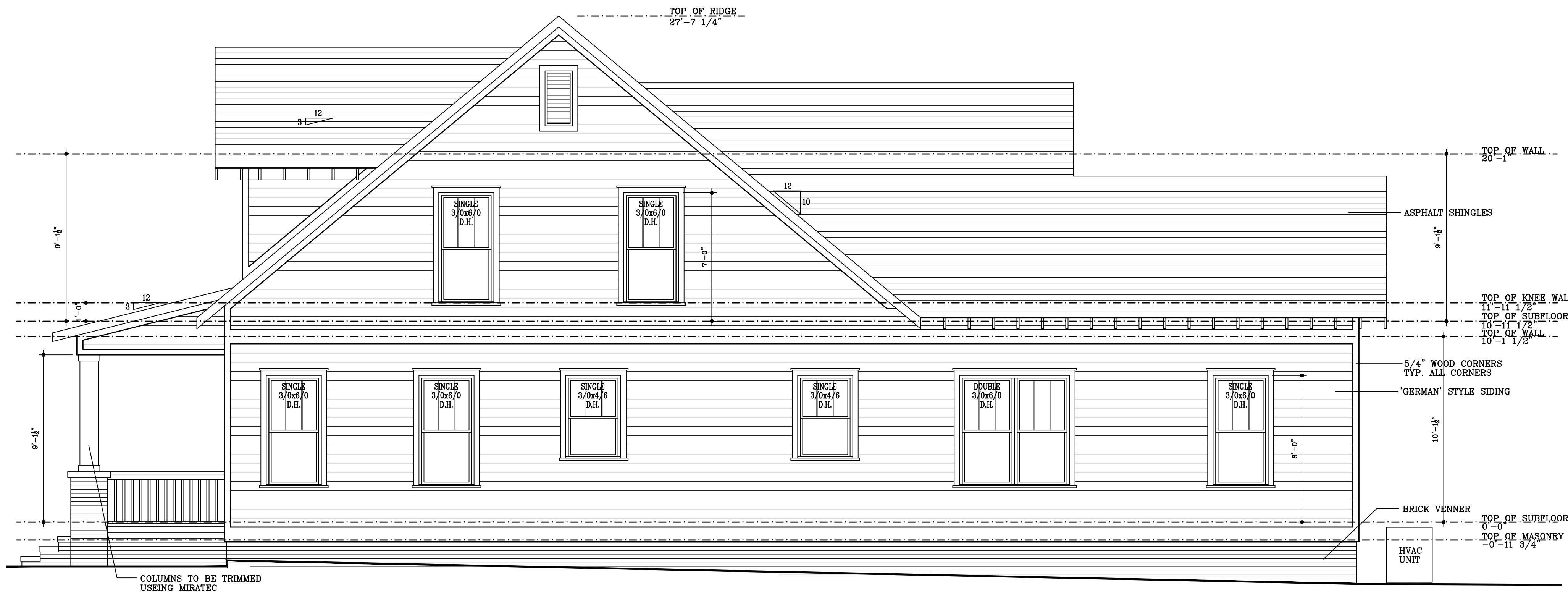
1/4" = 1'-0"

ELEVATION NOTES:

1. ALL SHINGLES ARE TO BE SELECTED BY OWNER
2. ALL BRICK VENEER IS TO BE SELECTED BY OWNER
3. ALL GERMAN STYLE SIDING IS TO BE SELECTED BY OWNER
4. ALL DOOR AND WINDOW STYLES ARE TO BE SELECTED BY OWNER
5. ALL GRADE SHOWN IS PROPOSED AND IS TO BE FIELD VERIFIED BY G.C.
6. ALL OVERHANGS ARE TO BE 1'-0" TYPICAL
7. ALL STEPS SHOWN ARE TO ADJUST TO GRADE AS NEEDED

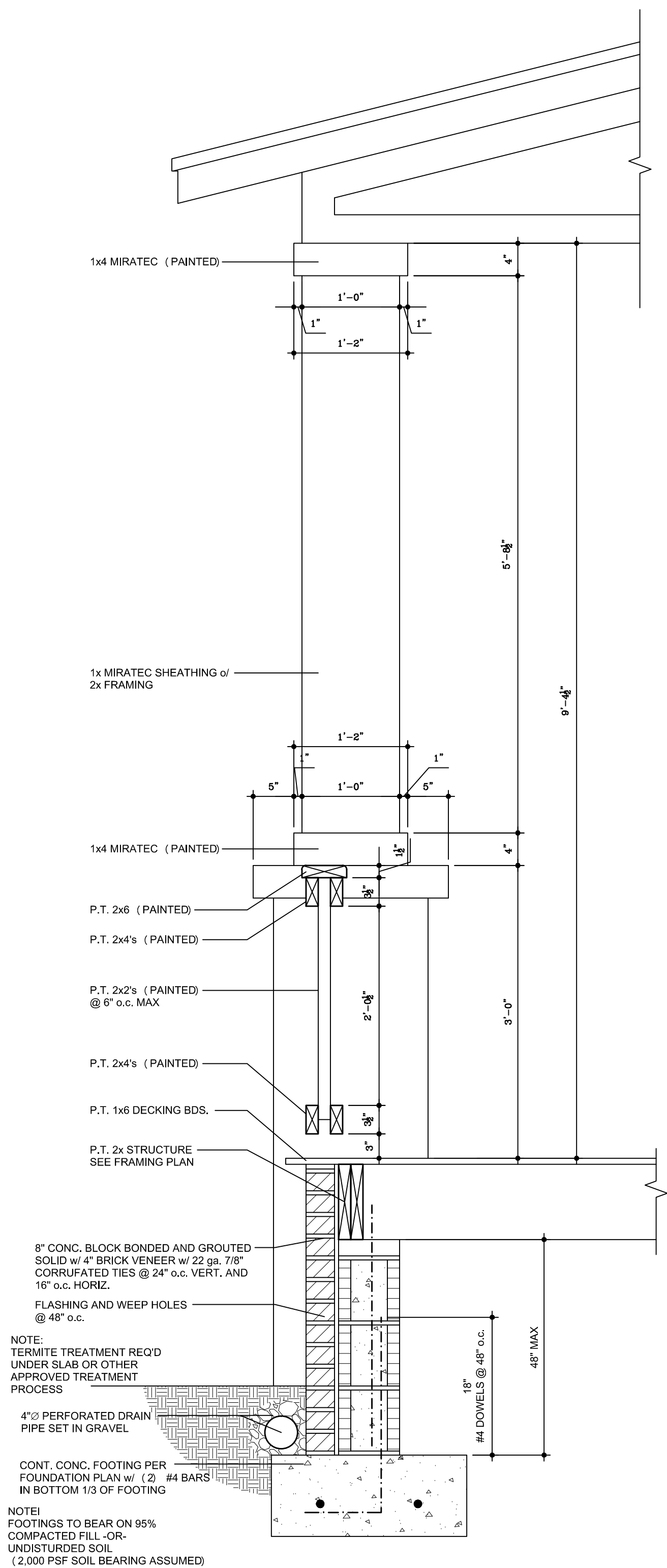


303 WINDOW TRIM DTL. TYP. 3/4" = 1'-0"  
A3.0



302 RIGHT SIDE ELEVATION  
A3.0

1/4" = 1'-0"



304 RAILING DETAILS  
A3.1

1" = 1'-0"

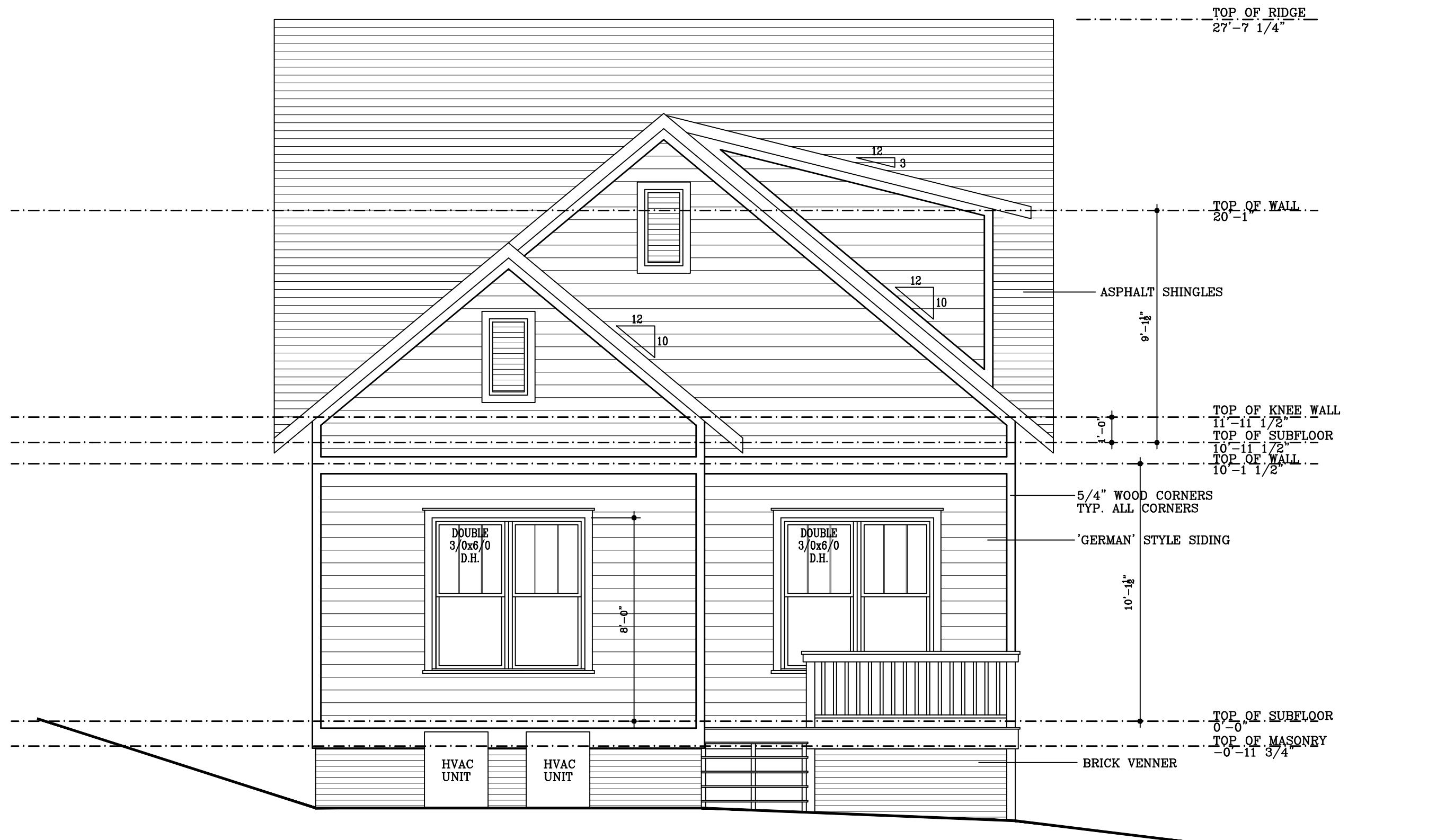
A NEW RESIDENCE AT:  
**WILMORE #1**  
CHARLOTTE, NC

PROJECT NO. **WILMORE01**  
DATE: **JUNE 21, 2016**  
DRAWN BY: **MSB**  
CHECKED BY: **MSB**  
REVISIONS:  
NO. DATE BY  
COMPUTER REFERENCE NUMBER  
**WILMORE01 .125**  
SHEET NO.  
**A3.0** OF 4

1871 POARCH ROAD  
LINCOLNTON, NORTH CAROLINA  
TELEPHONE (704) 735-8844  
FAX (704) 735-1720

**R. ALLEN**  
**MSJDRAFTING**  
**CONSTRUCTION**



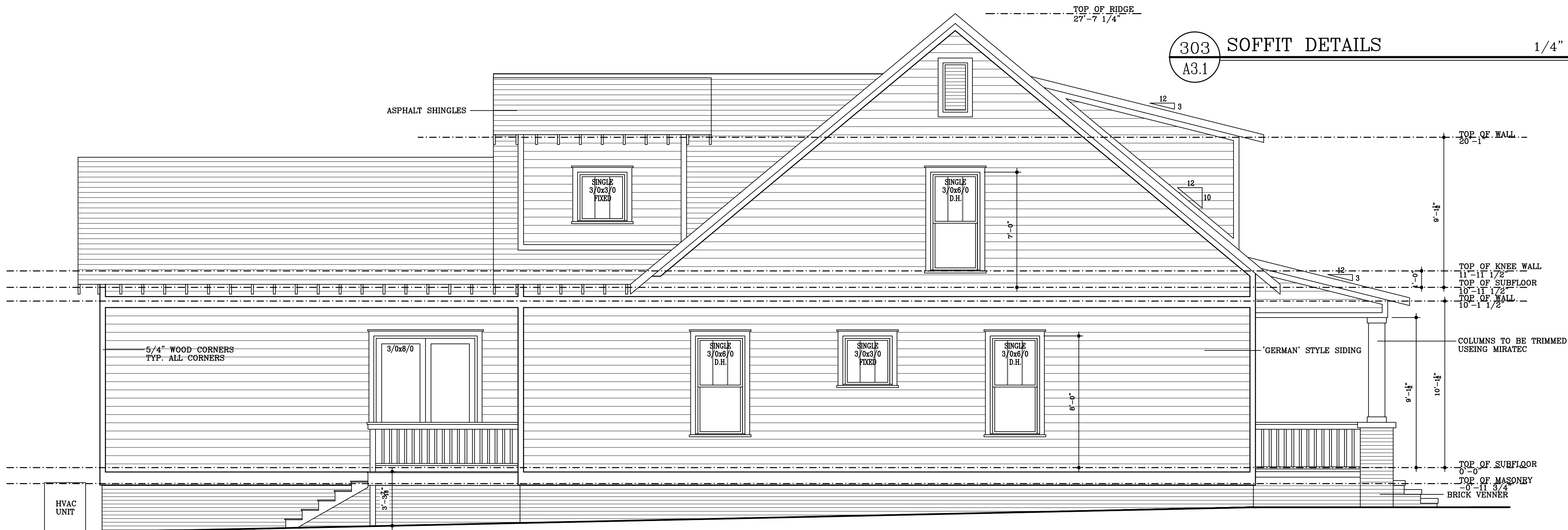


301 REAR ELEVATION  
A3.1

1/4" = 1'-0"

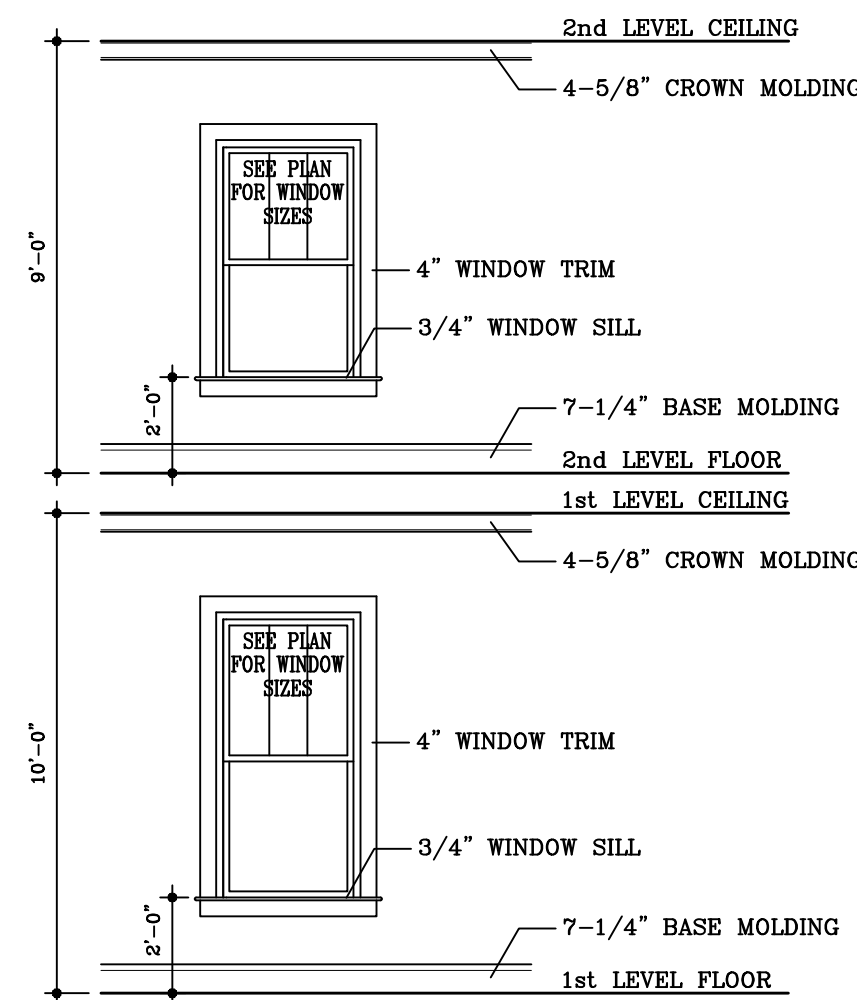
ELEVATION NOTES:

1. ALL SHINGLES ARE TO BE SELECTED BY OWNER
2. ALL BRICK VENEER IS TO BE SELECTED BY OWNER
3. ALL GERMAN STYLE SIDING IS TO BE SELECTED BY OWNER
4. ALL DOOR AND WINDOW STYLES ARE TO BE SELECTED BY OWNER
5. ALL GRADE SHOWN IS PROPOSED AND IS TO BE FIELD VERIFIED BY G.C.
6. ALL OVERHANGS ARE TO BE 1'-0" TYPICAL
7. ALL STEPS SHOWN ARE TO ADJUST TO GRADE AS NEEDED

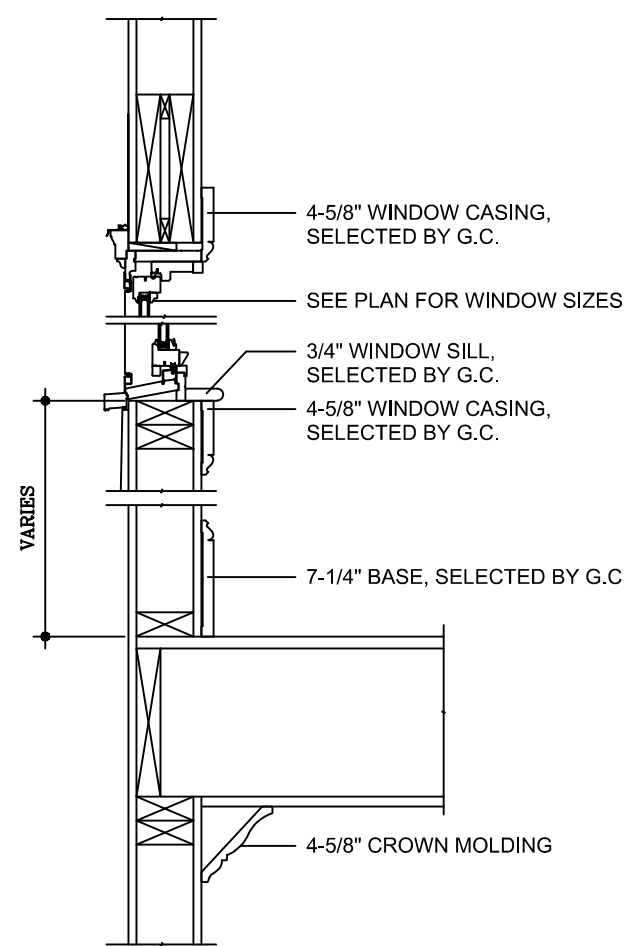


302 LEFT SIDE ELEVATION  
A3.1

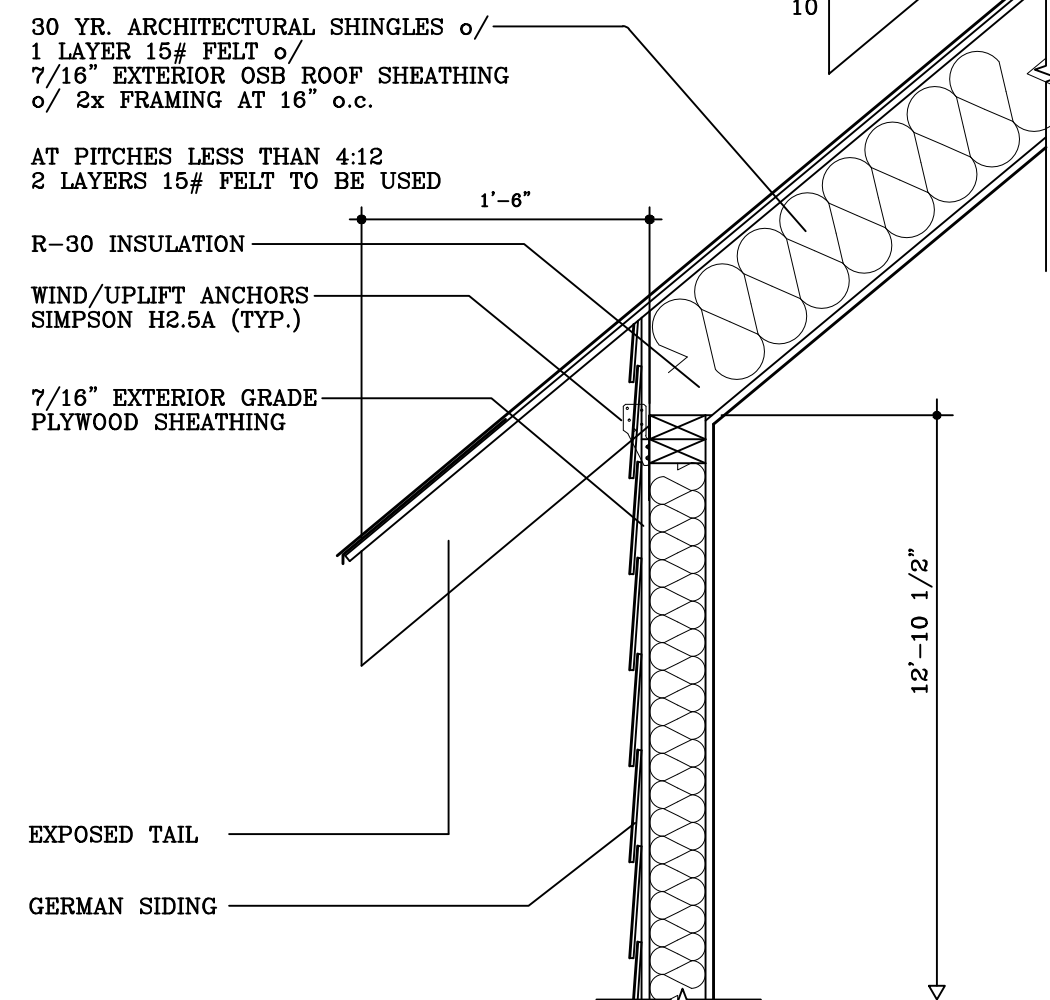
1/4" = 1'-0"



305 TRIM DETAILS  
A3.1 NTS



304 TRIM DETAILS  
A3.1 NTS



303 SOFFIT DETAILS  
A3.1

1/4" = 1'-0"



# GENERAL NOTES

## RESIDENTIAL STANDARD NOTES:

### DESIGN LOADS:

- Design loads are all dead loads plus:
    - Sleeping rooms: 30 PSF
    - All other floors: 40 PSF
    - Balconies: 60 PSF
  - Attic floor live loading with the following:
    - Area accessible by stairs: 30 PSF
    - Roof slopes >3:12 20 PSF
    - Roof slopes <3:12 10 PSF
  - Roof live load: 20 PSF, or as req'd by code
  - Wind load: 115 MPH, or as req'd by code
  - Snow load: 20 PSF, or as req'd by code
- All designs are in accordance with North Carolina Building Code, 2018 Edition and the International Residential Code. Refer to the relevant Code for any additional information not covered in these notes or designs.
- Engineering design is for structural information only. The Engineer of Record does not accept responsibility for dimension errors, architectural errors, detailing of waterproofing, plumbing, electrical, or mechanical information or any part of the plan not relevant to structural information.

### RESIDENTIAL FOUNDATIONS:

- All continuous wall footings are 8"x16" for one and two story houses. Footings for three story walls shall be 12"x24" unless otherwise noted otherwise. Reinforcing is to be as noted on plans. Footings on original soil do not need rebar. Rebar is required on any compacted fill regardless of compaction.
- All interior piers are 8"x16" CMU up to a maximum height of 32". All piers over 32" high must be filled with Type S mortar. Maximum height for 8"x16" filled pier is 6'-8". Piers larger than 8"x16" are noted on plans and must be filled with Type S mortar. For one-story structures, pier caps are to be 4" solid masonry. For two-story structures, pier caps are to be 8" of solid masonry.
- Footings for 8" x 16" piers are 24"x36"x10" unless noted otherwise. Reinforcing is to be as noted on plans.
- Interior thickened slab footings which occur in basements and "slab on grade" floors are 10" deep by 16" wide w/2-#4 reinforcing bars running continuously unless noted otherwise. Thickened footings are required under all bearing walls.
- All rebar splices shall be a minimum of 2'-0" lap unless otherwise noted.
- Shallow foundations are designed for an assumed soil bearing capacity of 2,000 psf. The contractor is responsible for notifying the Engineer of Record if any soils are found to be unsuitable for this bearing capacity. The contractor is responsible for obtaining soil testing to ensure that the bearing capacity of the soil meets or exceeds this value. All fill is to be compacted to 95% density as measured by the Standard Proctor Test (ASTM D-698).
- All soils and fill under floors and/or within or under buildings shall have preconstruction soil treatment for protection against termites. Certification of Compliance shall be issued to the Building Department by a licensed pest control company.
- All footing excavations shall be neat, straight, and level in the proper elevations to receive the concrete. Excessive variations in the dimensions of footings or slabs will not be permitted. Reinforcing steel and mesh shall be accurately placed and supported to maintain their position during the concrete pouring. Edge forms shall be used for concrete that will be exposed.
- All slab penetrations are to be the responsibility of the contractor. Penetrations interfering with reinforcing shall be approved by the Engineer of Record prior to the placement of concrete.
- Elevation differences between the bottoms of adjacent footings shall be less than their horizontal distance less one foot. Differential heights between footings can become excessive usually where a pier footing in a crawlspace or garage footing is next to a basement wall footing.

### SPECIAL FOUNDATION CONSIDERATIONS:

- Waffle labs are self-supporting slabs reinforced according to details and do not require firm soil for support. Soil must only be capable of supporting concrete until it hardens and develops strength.
- Caisson foundations shall be a minimum of 12" diameter drilled unreinforced concrete caissons. Caissons shall extend to a minimum depth providing 2' penetrations into good original ground. Depth of drilling is limited to 15'. Therefore, no poor material more than 13' deep or with water in drilled caisson hole. A caisson cannot be used if water rises immediately into a drilled hole. Piles will have to be used in such cases.
- Treated wood piles with a minimum diameter of 6" and a minimum design load of six tons are used for all foundations with unsuitable soil deeper than 13' or with water in drilled caisson holes. Drive per North Carolina or South Carolina Code.
- Sizes and reinforcing for footing caps over caissons or piles shall be as shown on plans.
- Chimney footings are to be 12" larger than the chimney footprint and a minimum of 12" thick.
- Foundation wall backfilled with dirt which support structural framing shall be constructed as follows:
  - For earth fill up to maximum height of 4': Use 8" CMU or 8" Brick with Bituthene membrane waterproofing on exterior. Footings noted on the plan.
  - For earth fill 4' to a maximum height of 9': Use 8" x 24" footing with #4 at 16" dowels hooked in footing and projecting 18" above footings. Use 12" CMU walls with #4 at 16" vertical bars located 4" from non-dirt fill face, lap all splices 12" and use Dur-o-wall horizontal reinforcing every 8" in CMU joints. Install 1-#3 1-bar with 24" legs in every other joint horizontally at all corners, i.e., #3 corner bars at 16" O.C. vertically. Fill all open cells of CMU with either Type S or M mortar or fill with 3,000 psi concrete. Install waterproof Bituthene membrane or equal.
  - In lieu of the preceding design, basement walls may be constructed in accordance with R404.1 of the Code. However, 24"x24"x3' foundation walls shall be installed at 16" O.C. vertically regardless of the wall height. ERECT ALL FRAMING BEFORE BACKFILLING.
- For retaining walls without framing see special design drawings.

### FRAMING CONSTRUCTION - OTHER THAN ROOF

- See Table R602.3(1) of the Code for a fastener schedule for structural members
- Wood beams shall be supported by metal hangers of adequate capacity where framing into beams or ledgers. The allowable load capacity of the hanger shall be equal or greater than the load specified on the plan. Where no load is specified, the "lightest" available hanger for the application is acceptable.
- Crawl girders and band with 4" curtain wall and pier construction shall be 2-2x10 Southern Pine #1 unless noted otherwise. Maximum spacing of piers shall be 8'-0" O.C. spacing of piers). To avoid objectionable cracking in finished hardwood floors over any girders, use the following procedure:
  - Nailing
    - All floor joists must be toe-nailed to their support girders with a minimum of 3-8d nails at each end. Ledger nails will split and render the toe-nail ineffective. No end nailing through the girder or band is permitted.
    - If dropped girders are used, end lap all joists and side nail each with a minimum of 3-16d nails at each end of the each joist. Ledger strips should be spaced 3" apart and nailed with 3-16d nails at each joist end.
    - Nail multiple member built-up girders with two rows of 16d nails staggered at 32" O.C., 2" down from the top and 2" up from the bottom with 3-16d nails at each end of each piece in the joist through the members making up the multiple member girder.
    - This nailing pattern will ensure a tight floor from the outside of the house to outside so that when the framing shrinks during the first heating season the shrinkage will be uniformly distributed over the entire floor. If the girder nailing pattern is omitted, then the shrinkage will accumulate over the girders and an objectionable crack will develop in the finished hardwood floor over the girder line.
  - At all girders where the joists change direction, install bridging at 6' O.C. for a minimum of six joist spacings beyond any joist direction change. This will ensure shrinkage distribution over the floor and not let it accumulate at the girder.
  - There must be wood blocking thru-bolted to the steel beam with joists toe-nailed or attached to the beam with metal hangers under any hardwood floors that pass over a steel beam supporting floor joists. This condition often exists over basement areas.
- All other lumber may be Spruce #2 unless noted otherwise.
- Steel beams must have 5-2x4 stud jacks under each end support unless noted otherwise.
- "Lam" beams must have 3-2x4 stud jacks under each end support unless noted otherwise.
- Masonry lintel:
  - For spans up to 6', use 3½"x3½"x1/4" steel angles.
  - For spans from 6' to 10', use 5"x3½"x5/16" steel angles.
  - For spans from 9' to 18': Use a pair of 9-gauge wires in each of the first 3 courses of brick on a 5"x3½" x 5/16" steel angle. Lap all 9-gauge wire splices a minimum of 12" and extend wires a minimum of 12" into joints. Temporarily support the steel angles before laying masonry. The shoring may be removed five days following the installation of masonry.
  - When structural steel beams with bottom plates are used to support masonry, the bottom plate must extend the full length of the steel beam. This provides support to the ends of the plate by bearing on the adjacent masonry joints. The beams should be temporarily shored prior to laying the masonry. The shoring may be removed five days after laying the masonry.
- All brick veneer over lower roofs (brick climbs) must have a structural angle lag screwed to an adjacent stud wall in accordance with detail, with steel brick straps to prevent sliding of brick.
- All rafter braces must have two studs from plate through all floors to the foundation or supporting beam below. No braces shall be attached to top wall plate without studs directly under them.
- Where partition falls between floor joists or trusses, 2x4 ladders at 16" O.C. must be placed perpendicular to the joist to support the plywood decking. The ladders shall be supported with Simpson "Z" Clips or similar device.

- All wood 1-Joists and open joists must be braced in accordance with the manufacturer's directions plus details shown on the plans. Load-bearing partitions, beams and column supports must be solid blocked through the foundation. Trusses and plywood shall not carry concentrated point loads. 1-Joist material should not be used as blocking under concentrated point loads. All point loads must be carried to foundations with adequate blocking and/or beams.
- All steel columns where steel columns over concrete or masonry, unless otherwise noted, a 5/8"x6½"x6½" or 5/8"x3½"x8" base plate shall be used to spread the column load across the bearing surface. Base plates shall be bolted with at least two ½" diameter anchor bolts or expansion bolts to concrete or masonry.
- Unless noted otherwise on plans, all exterior facing wall studs taller than 10' shall be constructed as follows:
  - Walls 10' to 12' high: Balloon frame 2 x 4 studs at 12" o/c with ½" OSB sheathing and 3 king studs on each side of each opening nailed securely to the header.
  - Walls 12' to 20' high: Balloon frame 2 x 6 studs at 16" o/c (½" OSB sheathing required for wall heights > 17'). Provide 2-1 3/8" x 5 ½" LVL king studs on each side of openings 3' to 6' wide and 2-2 x 6 king studs for openings less than 3' wide. Fasten king studs securely to all headers with a minimum of 12-16d nails or 4-3/8" diameter lag screws embedded a minimum of 4" into the header.
  - Gable end walls or rooms with vaulted ceiling joists: Balloon frame wall and provide triple king stud on each side of openings, nailed securely to the header.
  - Two-story high foyer walls less than 9' wide: Extend 3 ½" x 9 ¾" PSL member with 3-2 x 4 flat plates across the entire wall. Locate the beam near mid-height of the wall at or near first floor top plate.
- NOTE: SEE SPECIAL DESIGN OR ENGINEER FOR WALLS TALLER THAN 20', WHEN OPENINGS IN HIGH WALLS EXCEED 6' IN WIDTH, OR IF THE WALL CANNOT BE CONSTRUCTED USING ANY OF THE METHODS MENTIONED.
- Continuous 2x6 bridging shall be nailed to diagonal or vertical web members of all open-web floors trusses spaced 10' on center. The studs shall be installed over mid-span or in a distribution member. If the 2x6 bridging is not continuous, lap ends of bridging one truss space.
- Lower stud walls for building over two stories, but not more than three stories:
  - Interior walls:
    - Load bearing: 2x4 @ 12" O.C.
    - Non-load bearing: 2x4 @ 12" O.C.
  - Exterior walls: 2x6 @ 16" O.C. w/Continuous ½"x4"x8" Plywood Sheathing

- Headers shall per the list unless noted otherwise on the plans:
  - Interior and exterior:
    - Spans up to 2'-6": 2-2x6
    - Spans from 2'-6"-3'-6": 2-2x8
    - Spans from 3'-6"-6'-6": 2-2x10
    - Spans 6'-6" or more: See Plan
  - Headers wider than 5'-0" shall have a minimum of three (3) king studs at each end unless noted otherwise.
- When ceiling joists are parallel to an exterior wall, tie the rafters near the top plate to ceiling joists with a 2 x 6 strong-back a minimum of 6'-0" long at 4 feet on center across the top of the ceiling joists. 2 x 4 rafter ties shall be fastened to the side of the rafter and the strong-back.
- At all exterior diagonal wall panels, each panel shall be nailed to each adjacent panel with 5-16d nails or tied together with metal stripping nailed at four locations between floors with a minimum of 2-16d nails into each panel at each strap. This will avoid vertical cracking in panel joints due to horizontal oscillating panels.
- At all stairs, every stud at each stringer must be nailed to each stringer with a minimum of 2-16d nails. This will avoid cracking between wallboard and top of base molding due to vertical oscillation of stair stringers.
- Roof trusses that have non-bearing partitions passing under them should be nailed to the partition plates to avoid ceiling-wall cracking.
- Roof trusses close to side walls framing and used as dead wood for sheetrock boards should be nailed to the wall framing to prevent ceiling-wall cracking.
- All structural framing lumber exposed directly to the weather or bearing directly on exterior masonry piers or concrete shall be treated. All wood in contact with the ground is to be ground-contact approved. All wood exposed directly to the weather shall be protected to prevent the occurrence of rot.
- Unless otherwise detailed, all stick-built "false chimneys" shall be constructed with 2 x 4 studs at 12" o/c, balloon-framed from attic ceiling or floor. Fasten 15/32" CDX plywood on all sides of the chimney along the full length of the studs. Fasten each stud to the supporting beam or ceiling joist with a 1 ½" x 24", 18-gauge metal strap, or a similar connector.
- Item unchanged, but moved from #14 on old Page 2:
  - ALL POINT LOADS FROM ROOF BRACES, JACK STUDS, BEAM SUPPORTS - WHETHER WOOD OR STEEL - CANNOT BEAR ON SHEATHING. BLOCKING EQUAL TO OR BETTER THAN THE POINT LOAD SUPPORTS ABOVE MUST BE CARRIED THROUGH ALL CONSTRUCTION TO THE FOUNDATION.
- Note to apply to all hard coat stucco exterior finishes:
  - Joints are necessary at the following locations:
    - Horizontally at each floor line.
    - No areas larger than 144 S.F. surface exposed.
    - No dimensions longer than 18'
    - No dimensions longer than 2 1/2 times the shortest dimension.
  - Drip screed required at the bottom of all walls 2" above paved areas and 4" above grade.
  - See ASTM 926 and 1065 for further information.
  - Application of an approved chemical curing compound.
  - The curing shall continue until the cumulative number or days when the ambient temperature above 50°F has totaled seven. During curing, the concrete shall be protected from any mechanical injury, load stresses, shock, vibrations, or damage to finished surface.

### ROOF CONSTRUCTION:

- All roof trusses must be built in accordance with truss manufacturers' requirements. Tie-down connections to resist uplift shall be installed where required. When roof truss manufacturers do not provide the required connectors, it is the responsibility of the contractor to notify the roof truss engineer or the Engineer of Record to provide an adequate connector.
- In addition to these noted details, the Engineer's fastener schedule, unless otherwise on the plan, roof members shall be tied down with additional metal connectors as follows:
  - Stick-framed rafter members exceeding 10' in length, as measured from their horizontal projection, and all roofs over unenclosed areas such as porches use Simpson H2.5 connectors every 4' or at every third rafter to fasten the lower end of the rafter to the top plate.
  - All lower ends of valley and hip members which bear on a top plate use a Simpson HCP or equivalent connector.
- Rafters shall be 2 x 6 at 16" o/c spruce-pine-fir #2 for shingles except as noted. They are to be cut into hips, ridges, etc., unless noted otherwise. Tile, slate and other heavy roof coverings shall use 2 x 8 at 40" o/c spruce-pine-fir #2 rafters unless noted otherwise.
- Collar ties shall be 2 x 6 at 48" o/c at all ridges unless noted otherwise and located a nominal 3' below the ridge. Vaulted ceilings require special collar tie or ridge beam details. See the end of Table R602.5.1, of the Code unless otherwise detailed on the plan.
- A minimum of three collar ties shall be used at all ridges even if two ties must be put on one set of rafters.
- All hips and ridges are a size larger than rafters unless noted otherwise. Rafters may be spliced over hogs. Splice rafter hogs only at a roof brace.
- Gable end framing must be braced parallel to ridges with a minimum of 2 x 6 diagonal braces at 6' o/c along the gable wall to interior ceiling joists. Braces to bear on 2 x 6 hogs and to the gable wall at approximately mid-height of gable walls. Braces shall be at an angle of approximately 45°. Other bracing may be used with the design engineer's approval.
- Gable end framing must be braced parallel to ridges with a minimum of 2 x 6 diagonal braces at 6' o/c along the gable wall to interior ceiling joists. Braces to bear on 2 x 6 hogs and to the gable wall at approximately mid-height of gable walls. Braces shall be at an angle of approximately 45°. Other bracing may be used with the design engineer's approval.
- Ceiling joists when erected parallel to rafters must be sistered to rafters and nailed with 3-16d nails at each rafter. If a knee-wall is used and ceiling joists cannot touch rafters, then rafters must be tied to the ceiling joists using 2 x 4 or 1 x 6 rafter ties spaced no more than 4" on center.
- Roof Plan Legend:
  - Indicates location of roof brace point at rafter level.
  - ➔ Arrow away from the brace point indicates direction of roof brace to partition, beam, or other brace point below.
  - ⊙➔ Arrow into brace point indicates a vertical or almost vertical roof brace to partition, beam, or other brace point below.
  - All roof braces are 2-2 x 4 nailed with 16 penny nails at 9" o/c vertically from top to bottom. Braces longer than 10' must be braced horizontally in two directions at mid-height.
  - Maximum spacing of roof braces is to be as follows:
    - For 2 x 6 Hog 6'-0" O.C.
    - For 2 x 8 Hog 7'-6" O.C.

### MATERIAL SPECIFICATIONS

#### CONCRETE GENERAL NOTES:

- Except where otherwise noted, for all concrete, the proportions of cement, aggregate, and water to attain required plasticity and compressive strength shall be in accordance with ACI 318 Code. Concrete shall be 2,500 psi in 28 days for footings and 3,000 psi for walls, beams, and columns, unless noted otherwise.
- Before placing concrete, all debris, water and other deleterious material shall be removed from the places to be occupied by the concrete. The placing of all concrete shall be in accordance with ACI 318 and ASTM C94 requirements. Pumping of concrete will be permitted only with the Engineer of Record's approval of proposed concrete mix and method of pumping. Concrete shall be rapidly handled from the mixer to forms and deposited as nearly as possible to its final position to avoid segregation due to rehandling. Concrete to be spaded and worked by hand and vibrated to assure close contact with all surfaces of forms and reinforcing steel and leveled off at proper grade to receive finish. All concrete shall be placed upon clean, damp surfaces.

Vibration shall be applied directly to the concrete and shall be sufficient to cause flow of settlement but not long enough to cause segregation of the mix.

- Construction joints shall be located in accordance with ACI 301. All reinforcing steel shall be continuous across joints. In slabs on grade, saw contraction joints shall not be over 20 feet center to center each way. Joints shall be sawn a depth of one-third of the slab thickness. Sawing of the joints shall commence as soon as the concrete has hardened sufficiently to permit sawing without excessive raveling. Fill the saw cuts with approved joint filler after the concrete has cured.
- Concrete, when deposited, shall have a temperature not below 50°F and not above 90°F. The methods and recommended practices as described in ACI 306 shall be followed for cold weather concreting and ACI 305 for hot weather concreting.
- Freshly placed concrete shall be protected from premature drying by one of the following methods:
  - Ponding or continuous sprinkling.
  - Absorptive mat or fabric kept continuously wet.
  - Waterproof paper conforming to ASTM C171
  - Application of an approved chemical curing compound
  - The curing shall continue until the cumulative number or days when the ambient temperature above 50°F has totaled seven. During curing, the concrete shall be protected from any mechanical injury, load stresses, shock, vibration, or damage to finished surfaces.
- Reinforcing steel bars shall be deformed in accordance with ASTM A305 and or A408 and formed of ASTM A615-78 Grade 60 steel. Welded wire fabric reinforcing to be ASTM A165 steel wire. Accessories shall conform to the CRSI "Manual of Standard Practice." The following minimum concrete cover shall be provided over reinforcing bars:
  - Exposed to Earth 3"
  - Exposed to Weather 1½"
  - Slabs not Exposed to Weather 3"
  - Beams and Columns 1½"

#### MASONRY GENERAL NOTES:

- Masonry walls are to be of the sizes and in the locations shown on the plans and shall be constructed in accordance with the provisions of ACI 530.
- Hollow Load Bearing Units: ASTM C90 made with lightweight or normal weight aggregates. Grade N-1 units shall be provided for exterior and foundation walls. Grade N-1 or S-1 units shall be provided for other load-bearing walls or partitions.
- Concrete Building Brick: ASTM C55 made with lightweight or normal aggregates. Grade N-1 or S-1 except that brick exposed to weather shall be N-1.
- Mortar: ASTM C270-95, Type S prepackaged mortar mix which shall not contain any non-cementitious fillers combined with not more than three parts sand per on part mix.
- Reinforcing Steel: ASTM A615 Grade 60 steel deformed bars where indicated on the plans. Where reinforcing bars are installed in the cells of concrete masonry units, they shall be secured with wire ties at intervals not exceeding 24" o/c to maintain the bars location in the cell. The tolerance for spacing of vertical bars is ± 2 inches along the length of the wall. The tolerance for the distance between the face of the concrete masonry unit and the center of the bar shall not exceed ± ½".
- Mortar protrusion shall be less than ½". A protrusion of ½" or greater must be removed before grouting.
- Horizontal Joint Reinforcement: ASTM A82 fabricated from cold drawn steel wire and hot dip zinc coated (ASTM A153). It shall consist of two or more parallel, longitudinal wires 0.1875" in diameter with weld-connected cross wires 0.1483" in diameter at a minimum of 16" o/c. Joint reinforcement is to be installed in every other course and in the first two courses at the bottom and top of wall openings and shall extend not less than 24" past the opening. Splices shall overlap not less than 12".
- Execution: Masonry units shall be laid in a running bond pattern unless noted otherwise. The walls shall be carried up level and plumb within the tolerances specified in ACI 530.1-88, Section 2.3.3.2. If nonstandard dimensions are encountered, block shall be cut with a masonry saw to fit, not by stretching or shrinking joints. Unfinished work shall be stepped back for joining with new work. Toothing will not be permitted except where specifically approved. Damaged units are to be cut out and new units set in place.
- The filled cells and bond beam blocks of reinforced masonry walls are to be filled with ASTM C476-91 Grout for Masonry with minimum compressive stress of 2,000 psi and slump range or 8" to 11". The outside face of the bottom block of each cell is to be broken out for inspection of reinforcing and clean out of mortar droppings in cell. The grout is to be pumped into the cell in maximum five foot lifts and immediately vibrated to minimize any voiding of the grout. Reconsolidate each lift by vibrating several inches into the preceding lift before plasticity is lost. Reconsolidate the top lift and fill with grout any space left by settlement shrinkage.

#### LUMBER GENERAL NOTES:

- All common framing lumber is to meet the following minimum specifications at 19% moisture content:

MATERIAL	Fb (PSI)	FL (PSI)	Fc (PSI/Perp)	E (PSI)
#2 Spruce Pine Fir	875	450	425	1,400,000
Southern Pine	750	450	565	1,400,000
- All structural composite lumber (LVL, LSL, PSL) is to meet the following minimum specifications:

APPLICATION	Fb (PSI)	Fc (PSI/Parallel)	Fc (PSI/Perp)	E (PSI)
Girders & Beams	2,600	2,310	650	1,900,000
Columns (LSL) & Rimboard	1,700	1,400	400	1,300,000
- All glue-laminated timber (Glu-Lam) is to meet the following minimum specifications:

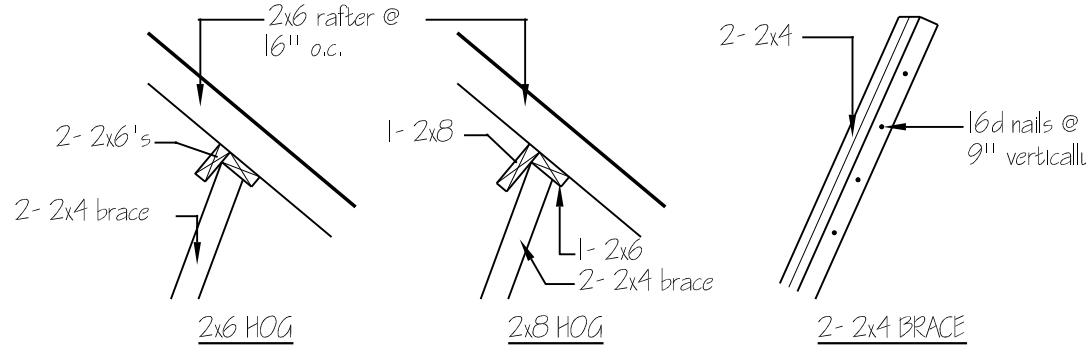
APPLICATION	Fb (PSI)	Fc (PSI/Parallel)	Fc (PSI/Perp)	E (PSI)
Girders & Beams	2,400	1,700	740	1,700,000
Columns (LSL) & Rimboard	1,600	1,550	560	1,500,000
- Open web floor trusses:

APPLICATION	Fb
Top & Bottom Chord	2,500
Column (LSL) & Rimboard	950
- Where three or four-ply "Lam" beams are side-loaded (joists frame into the side at the outside plies), fasten all plies together with two rows of ½" diameter bolts at 16" o/c. The bolts shall be located a minimum of 2 ½" and a maximum of 3 ½" from the top or bottom of the beam.
- Built-up wood columns consisting of multiple studs shall have each lamination nailed with 16d nails at 9" o/c.

#### STEEL GENERAL NOTES:

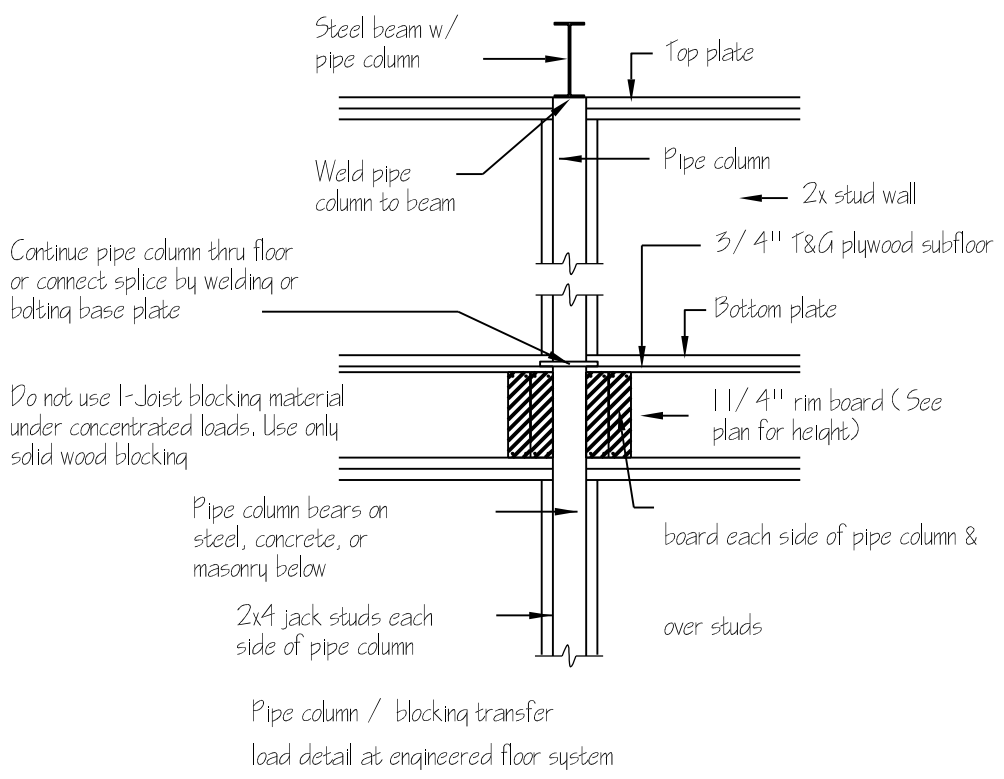
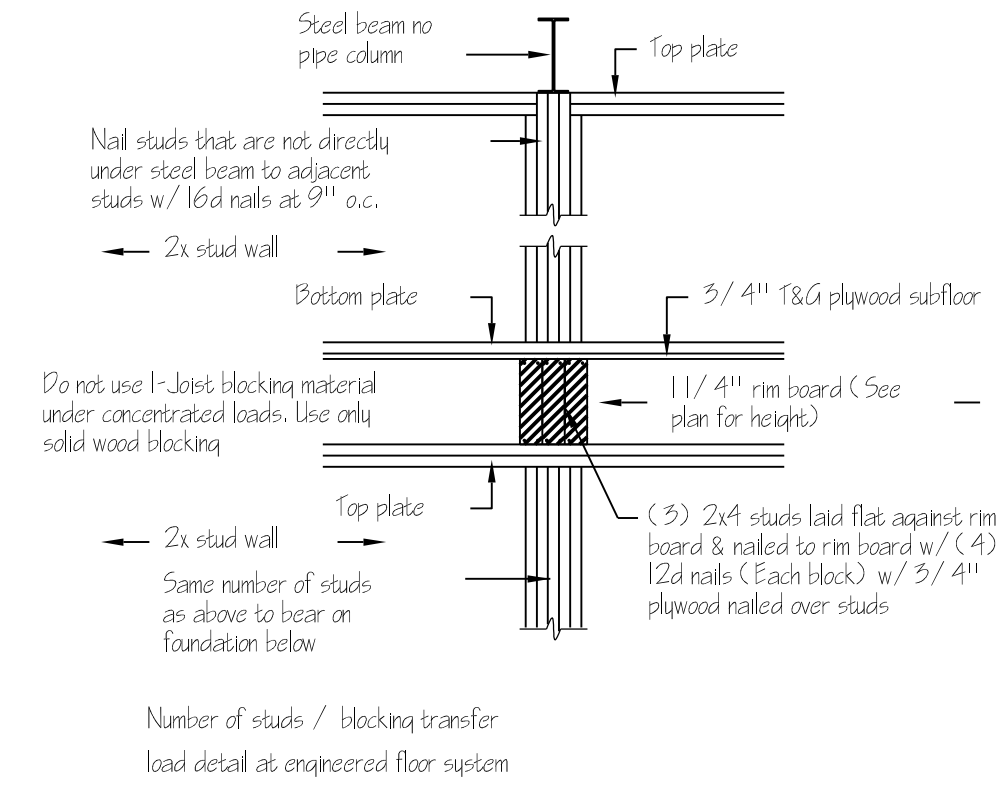
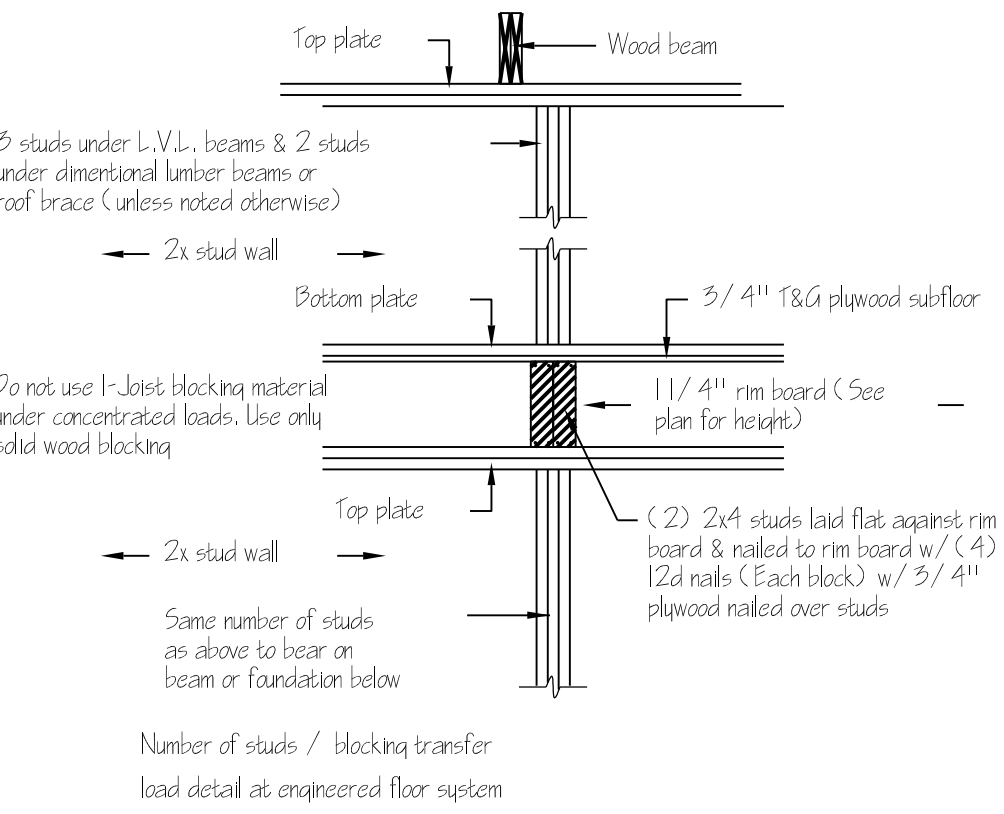
- All steel wide flange beams shall conform to ASTM A572 having a minimum yield stress of 50,000 psi.
- All steel pipes shall be Schedule 40 or better with a minimum yield stress of 35,000 psi.
- All steel tubes shall conform to ASTM A500, Grade B, having a minimum yield stress of 46,000 psi.
- All other shapes not listed above shall conform to ASTM A36 having a minimum yield stress of 36,000 psi.
- Unless otherwise noted, all welds shall be fillet type with a minimum 3/16" leg. Welding electrodes shall be E70xx type having a minimum yield strength of 70,000 psi. Welding work and materials shall conform to the American Welding Society Code (AWS D.1).
- Bolted connections shall include high strength bolts conforming to ASTM A325. Foundation anchor bolts or tie rods shall conform to ASTM A36 having a minimum yield strength of 36,000 psi.

#### II. Details:



#### Stucco Code Requirements

- A. Joints are necessary at the following locations:
  - Horizontally at each floor line
  - No areas larger than 144 sq.ft. exposed
  - No dimension longer than 18'-0"
  - No dimension shorter than 2 1/2 times the shortest dimension
- B. Drip screed required at the bottom of all walls 2" above paved areas and 4" above grade.
- C. See ASTM 926 and 1065 for further information.



#### Typical Point Load Details



**Residential Structures, P.C.**  
Engineering and Design  
Charlotte: 704-332-5460  
Charlotte: 843-402-7174  
Myrtle Beach/Florence: 704-301-9521  
www.residentialstructurespc.com



RESIDENTIAL STRUCTURES, P.C.  
3410 N. Davidson St.  
Charlotte, NC 28205  
Seal For Structural Only

A NEW RESIDENCE AT:  
**WILMORE #1**  
CHARLOTTE, NC

REV.	DATE	DESCRIPTION
DESIGNER:		PRS
SCALE:		
DATE:		
GENERAL NOTES		
SHEET:		
GN1/S1		




$$1'' = 1' - 0''$$

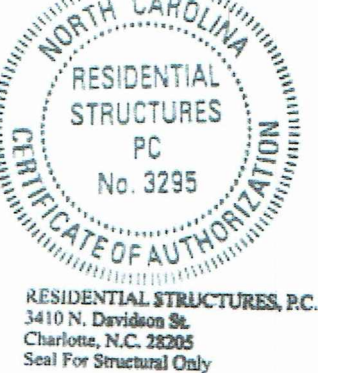
$$1'' = 1' - 0''$$

4" CONCRETE SLAB (3000 PSI) W/6x6-10/10 W.W.M. OR FIBERMESH REINFORCEMENT OVER 6MIL P.V.B., ON TERMITE TREATED SOIL W/MIN BEARING CAPACITY (2000 PSF)

DJ - DOUBLE JOIST (TYP BELOW PARALLEL WALLS OF 5FT LENGTH OR GREATER (SEE SEPARATION DETAIL FOR TRADE CLEARANCES))


$$1/4'' = 1'-0''$$

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Charleston: 843-406-7174  
Myrtle Beach/Florence: 704-301-  
www.residentialstrucurespc.com



## A NEW RESIDENCE AT:

# #1 WILMORE CHARLOTTE, NC


REV.	DATE	DESCRIPTION
DESIGNER:		PRS

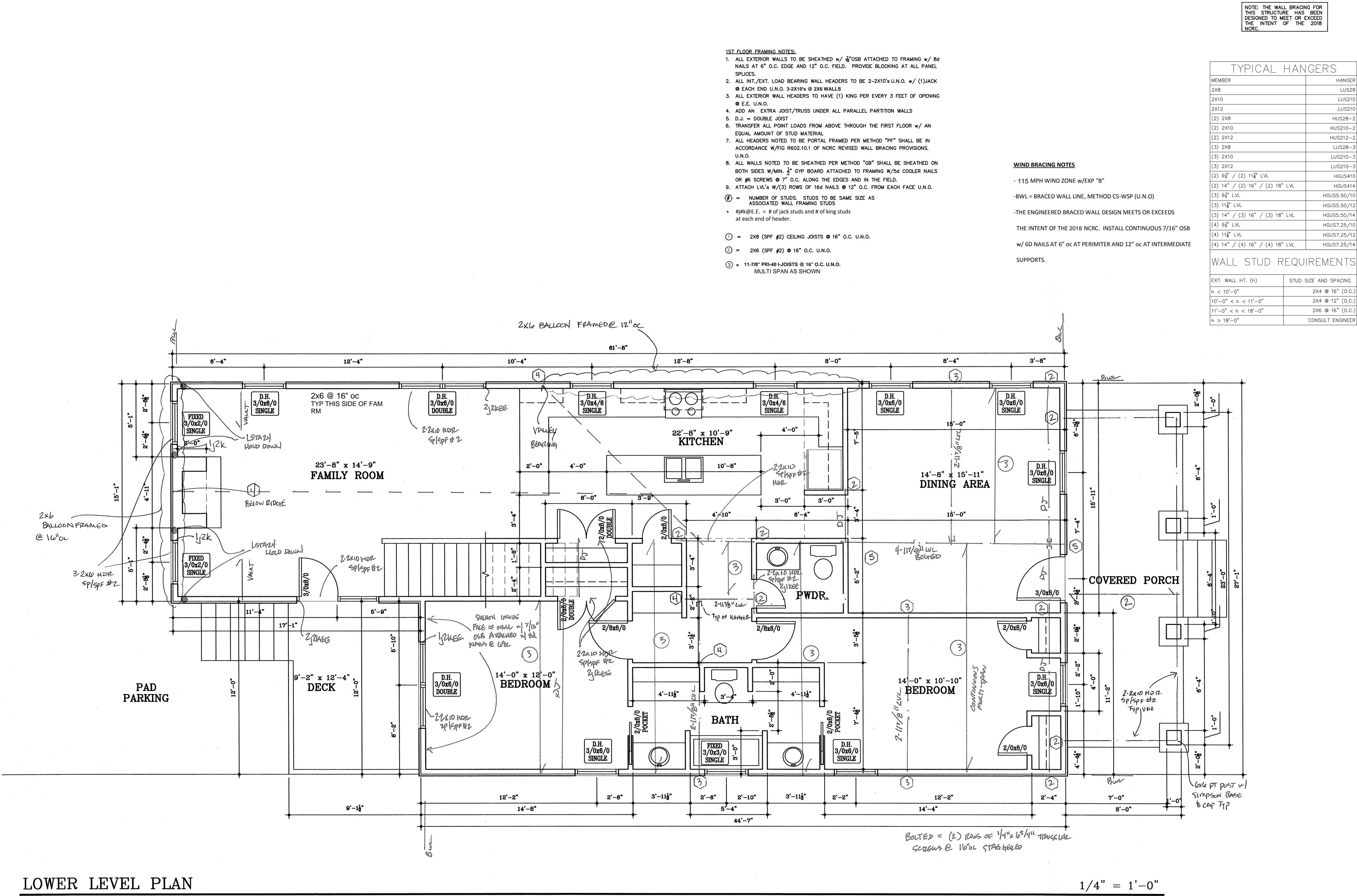
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DATE: \_\_\_\_\_

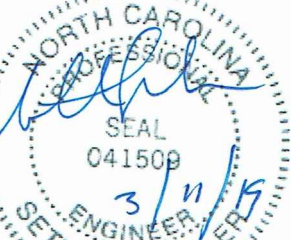
SHEET:

# S2





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Engineering and Design  
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Charlotte: 843-406-7174  
Myrtle Beach/Florence: 704-301-9521  
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Charlotte, N.C. 28205  
Seal For Structural Only

A NEW RESIDENCE AT:  
**WILMORE #1**  
CHARLOTTE, NC

REV.	DATE	DESCRIPTION
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DESIGNER: PRS

SCALE:

DATE:

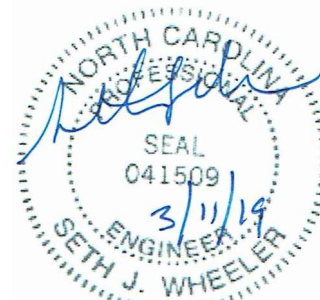
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S3





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A NEW RESIDENCE AT:  
**WILMORE #1**  
CHARLOTTE, NC


REV.	DATE	DESCRIPTION
		PR

SCALE:

DATE:

SHEET:

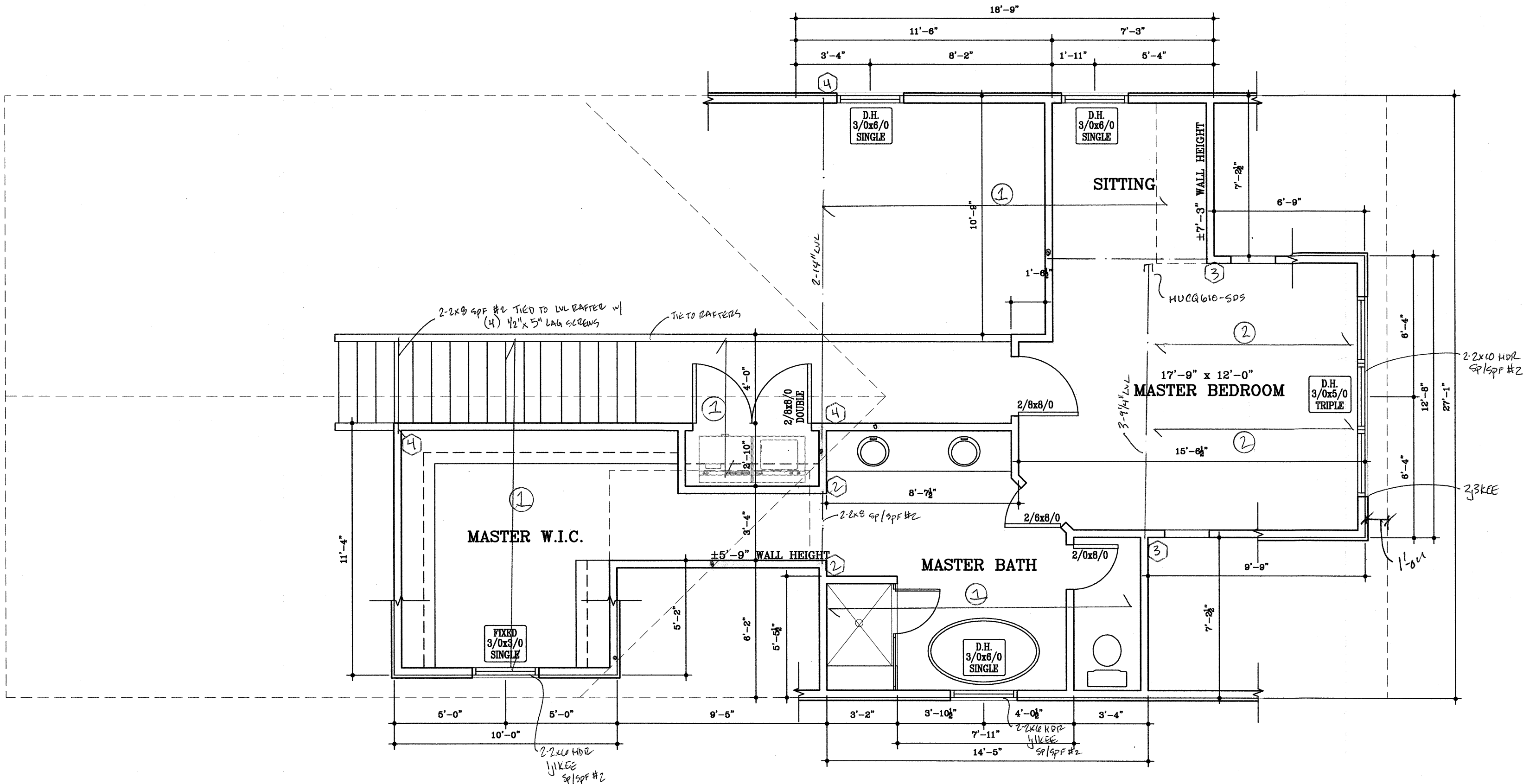
S4

- 2ND FLOOR CEILING FRAMING NOTES:
- ALL EXTERIOR WALLS TO BE SHEATHED w/ 5/8" OSB ATTACHED TO FRAMING w/ 8d NAILS AT 6" O.C. EDGE AND 12" O.C. FIELD. PROVIDE BLOCKING AT ALL PANEL SPICES.
  - ALL INT./EXT. LOAD BEARING HEADERS TO BE 2-2X8'S U.N.O w/ (1) JACK AT EACH END U.N.O.
  - ALL EXTERIOR HEADERS TO HAVE (1) KING PER EVERY 3 FEET OF OPENING @ EACH END.
  - AT CLIP LINES, CEILING JOISTS TO BE NAILED TO RAFTERS w/ (8) 10d NAILS U.N.O.
- ⑦ = NUMBER OF STUDS. STUDS TO BE SAME SIZE AS ASSOCIATED WALL FRAMING STUDS
- #JACK@E.E. = # of jack studs and # of king studs at each end of header.
- ① = 2X8 (SPF #2) CEILING JOISTS @ 16" O.C. U.N.O.
- ② = 2X6 (SPF #2) @ 16" O.C. U.N.O.

NOTE: THE WALL BRACING FOR THIS STRUCTURE HAS BEEN DESIGNED TO MEET OR EXCEED THE INTENT OF THE 2018 NCBC.

TYPICAL HANGERS	
MEMBER	HANGER
2X8	LUS28
2X10	LUS210
2X12	LUS210
(2) 2X8	HUS28-2
(2) 2X10	HUS210-2
(2) 2X12	HUS212-2
(3) 2X8	LUS28-3
(3) 2X10	LUS210-3
(3) 2X12	LUS210-3
(2) 9L / (2) 11L LVL	HQUS410
(2) 14" / (2) 16" / (2) 18" LVL	HQUS414
(3) 9L LVL	HQUS5.50/10
(3) 11L LVL	HQUS5.50/12
(3) 14" / (3) 16" / (3) 18" LVL	HQUS5.50/14
(4) 9L LVL	HQUS7.25/10
(4) 11L LVL	HQUS7.25/12
(4) 14" / (4) 16" / (4) 18" LVL	HQUS7.25/14

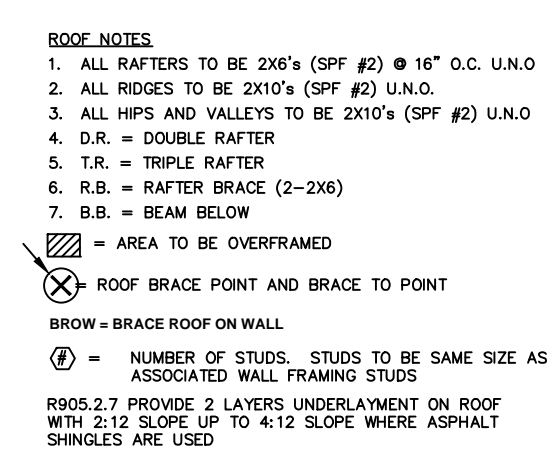
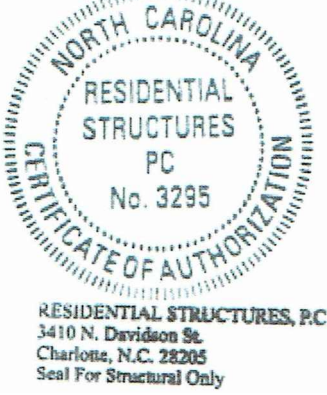
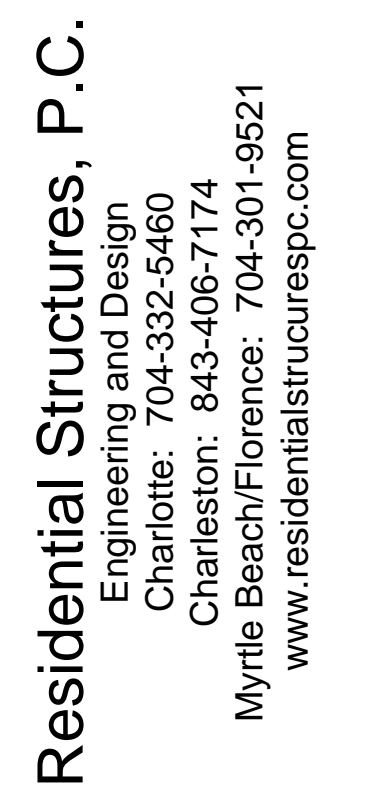
WALL STUD REQUIREMENTS	
EXT. WALL HT. (h)	STUD SIZE AND SPACING
h < 10'-0"	2X4 @ 16" (O.C.)
10'-0" < h < 11'-0"	2X4 @ 12" (O.C.)
11'-0" < h < 18'-0"	2X6 @ 16" (O.C.)
h > 18'-0"	CONSULT ENGINEER



UPPER LEVEL PLAN

1/4" = 1'-0"




$$1/4'' = 1'-0''$$


A NEW RESIDENCE AT:  
WILMORE #1  
CHARLOTTE, NC

REV.	DATE	DESCRIPTION
DESIGNER:		PRS

SCALE:

DATE: \_\_\_\_\_

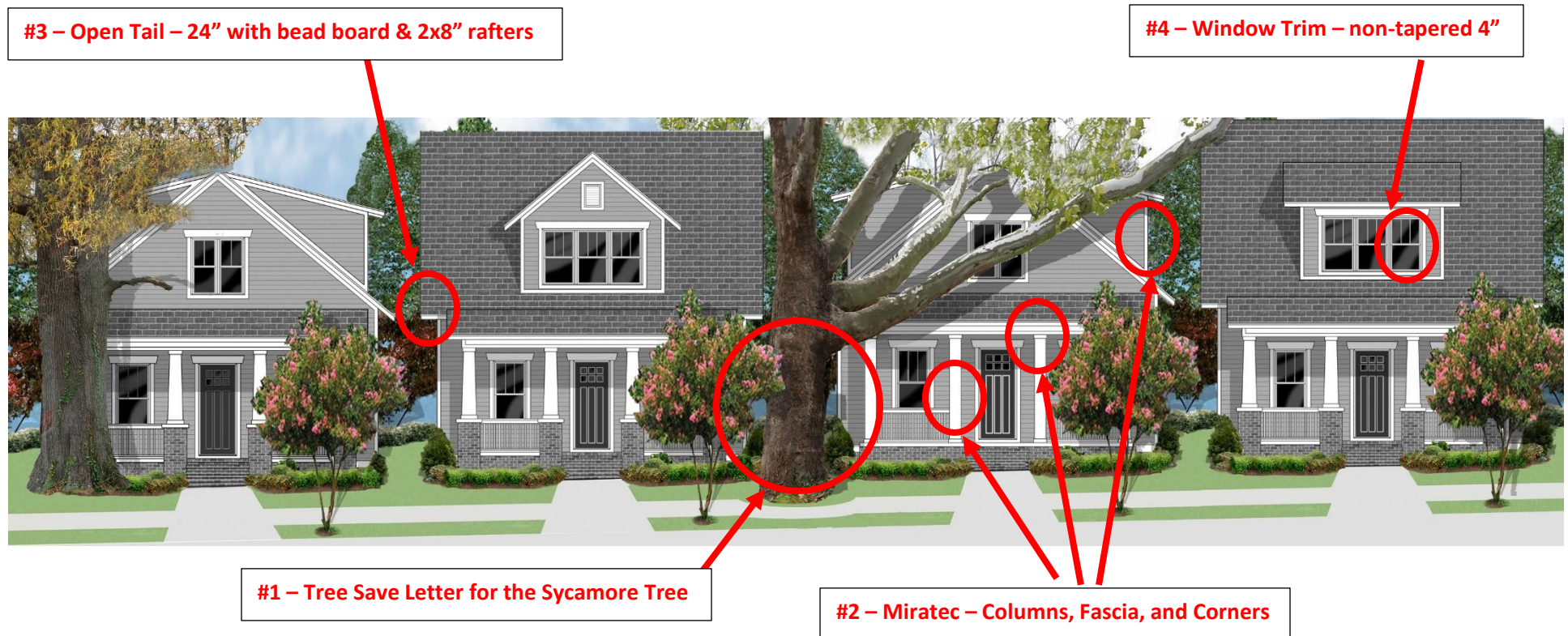
SHEET:

# S5



## UPDATED ITEMS FOR LOT 1 - 3

1. **TREE SAVE** – attached is a letter from Barry Gemberling (Arborguard) in regard to his recommendations on how to keep the LOT 4 (Willow Oak) tree safe prior and during construction.
2. **MIRATEC** – to be installed on all columns, corners and fascia with corner boards being 5.5 inches
3. **OPEN TAILS / SOFFITS** – roof to extend 24 inches at right angle to siding, with  $\frac{3}{4}$  v-groove bead board and 2x8" rafters with bed mold installed base
4. **WINDOWS** – 4" wide non-tapered trim with 7/8 putty glaze, removed brick casing





## HOUSE VARIATION STREETSCAPE

LOT 4

LOT 3

LOT 2

LOT 1

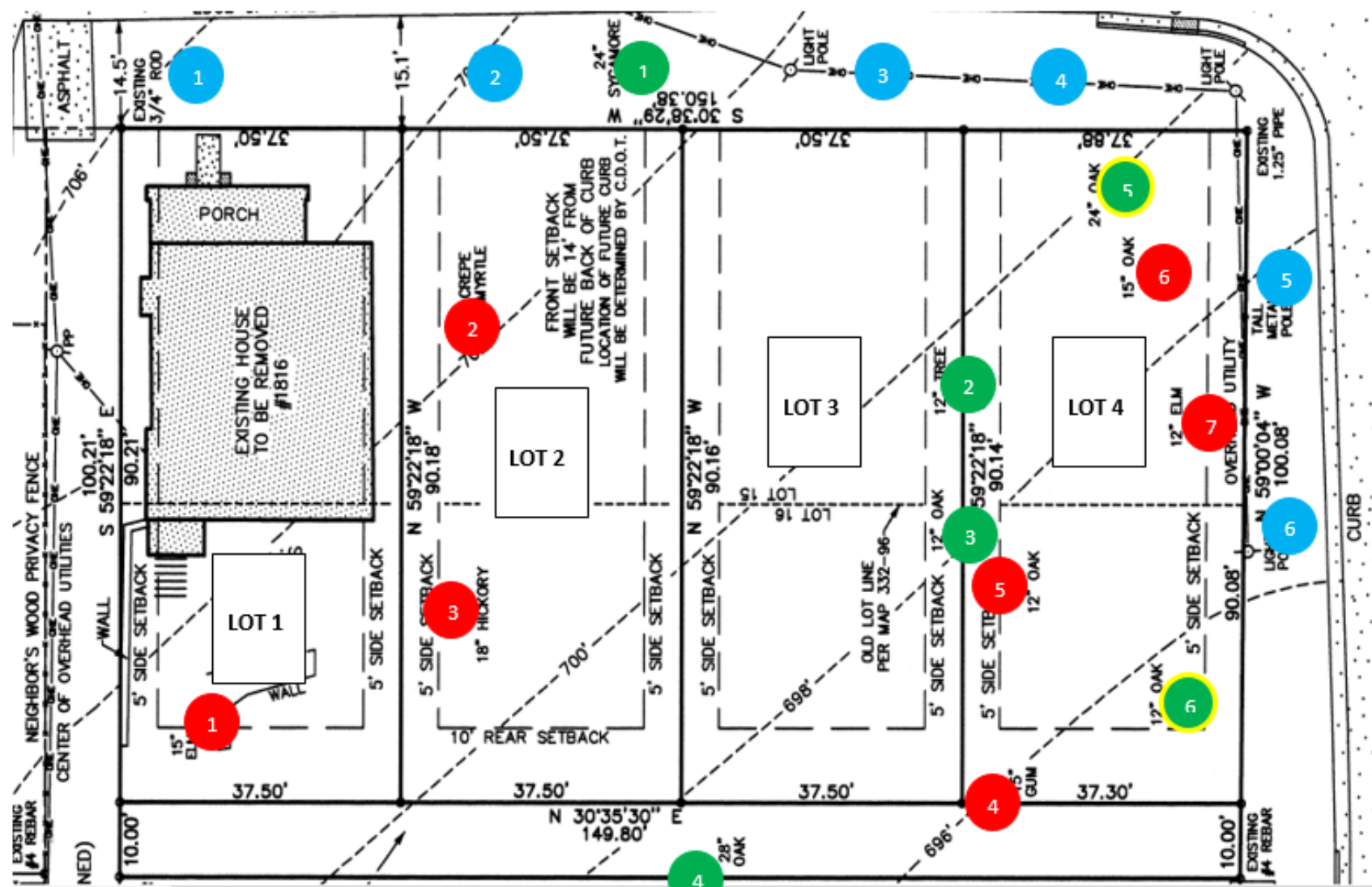


- LOT 1 - stays the same but we have taken the roofline down 1 ft.
- LOT 2 - stays the same but we have taken the roofline down 1 ft.
- LOT 3 – the front dormer has a gable above it, and the roofline came down 1 ft.
- LOT 4 – the front porch wraps-around along Worthington and is positioned for us to save the Oak Tree





TREE SAVE - (UPDATED)



- KEEP**
- 1. 24" Sycamore
  - 2. 12" Oak
  - 3. 12" Oak
  - 4. 28" Oak
  - 5. 24" Oak
  - 6. 12" Oak

- ADD**
- (6) Medium Size Oak Trees

- REMOVE**
- 1. 15" Elm
  - 2. Crepe Myrtle
  - 3. 18" Hickory
  - 4. 15" Gum
  - 5. 12" Oak
  - 6. 15" Oak
  - 7. 12" Elm



## LOT 1 - HEIGHT / MASSING

- We have reduced the roofline by 1 foot to 27' 7.25", by making the 2<sup>nd</sup> Floor 9' ceiling height.





# LOT 1 – (UPDATED)

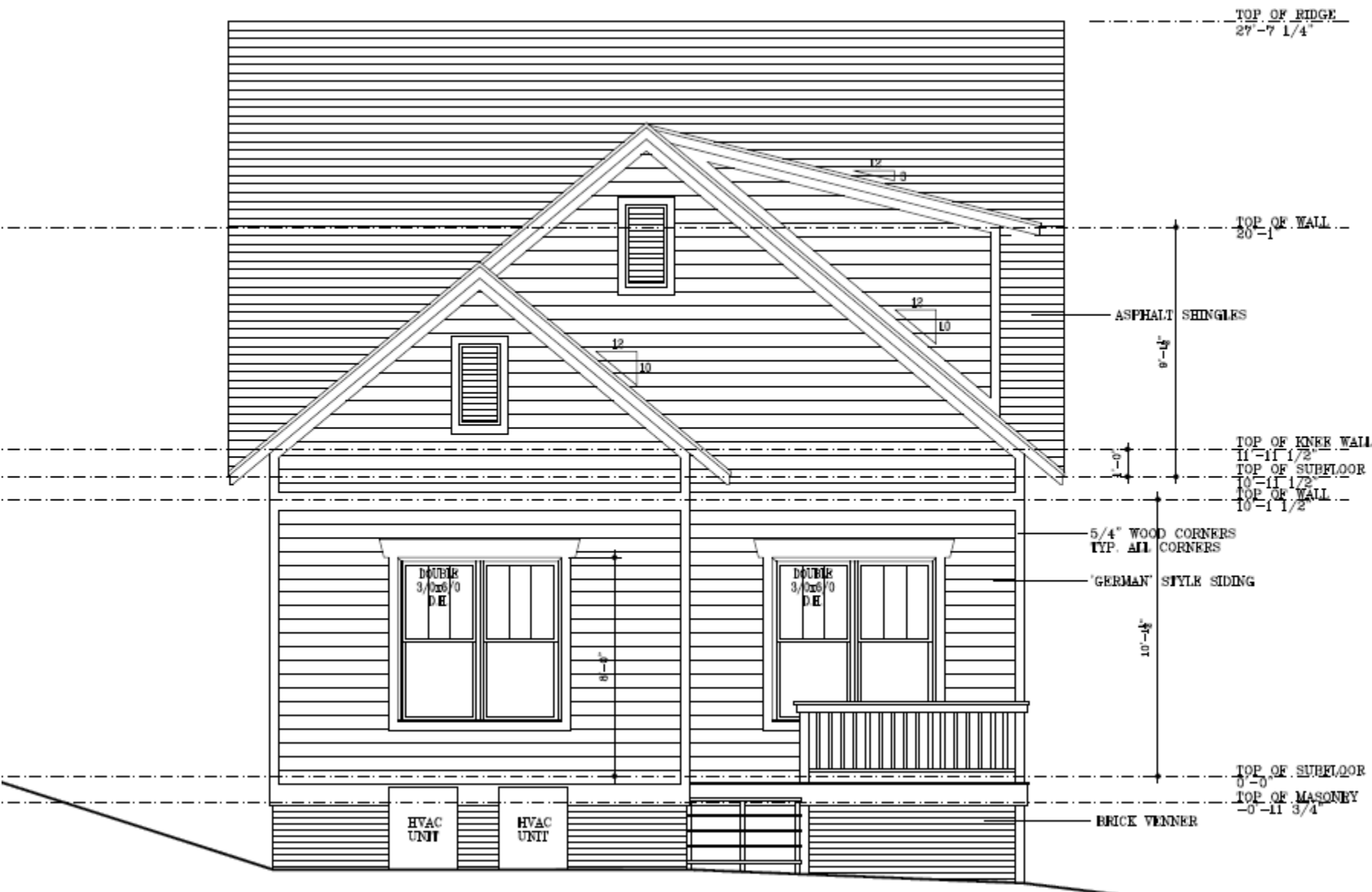




Architectural elevation drawing of the front of a two-story house. The drawing shows horizontal siding, a gabled roof with a dormer, and several windows. Annotations include 'TOP OF ROOF' at 17'-0", 'TOP OF SECOND FLOOR' at 11'-0", 'TOP OF FIRST FLOOR' at 0'-0", and 'FINISH GRADE' at -1'-0". A small porch is visible on the right side.

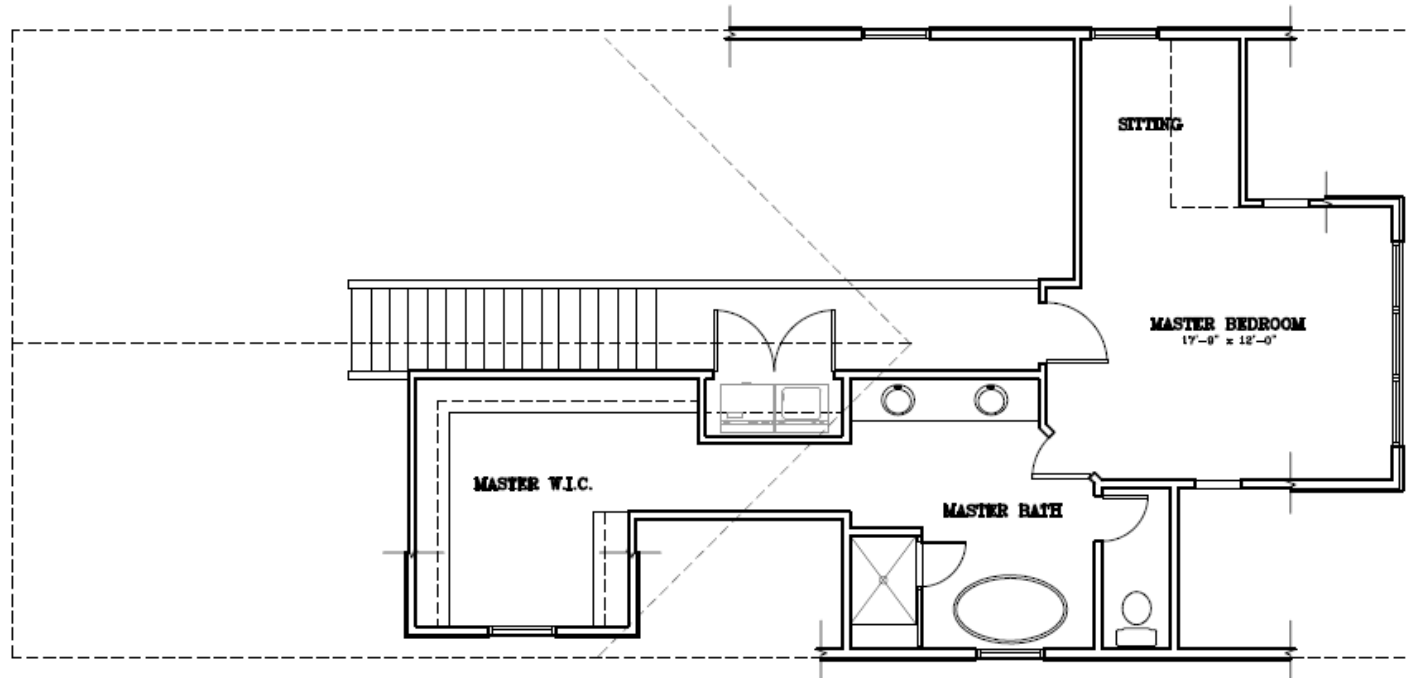
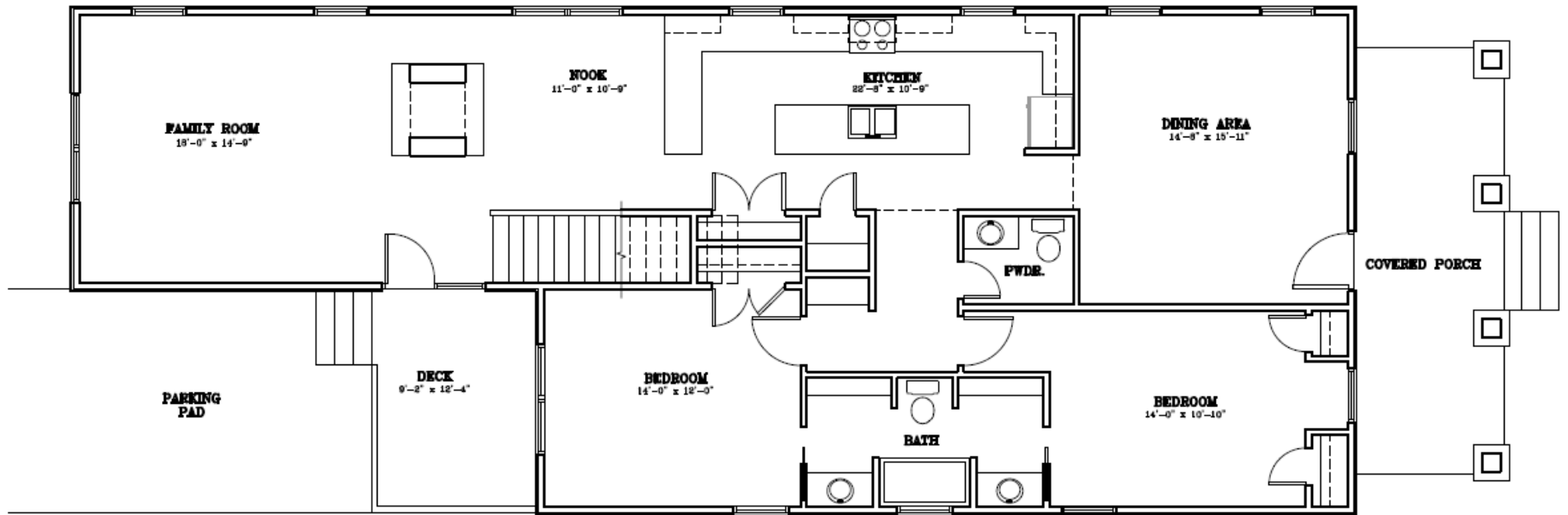


REAR (UPDATED)





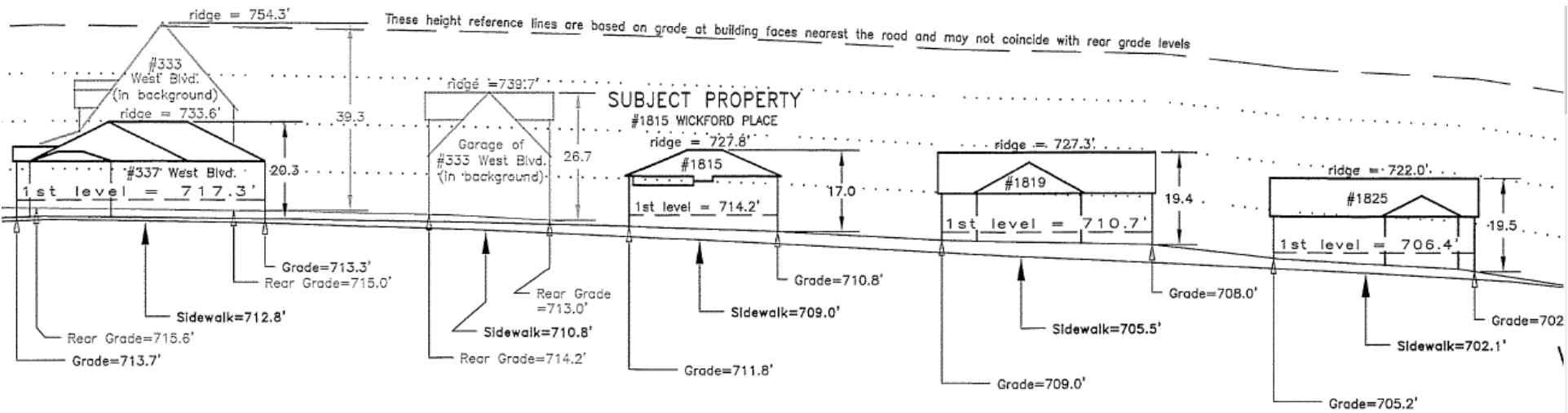
# LOT 1 FLOORPLAN



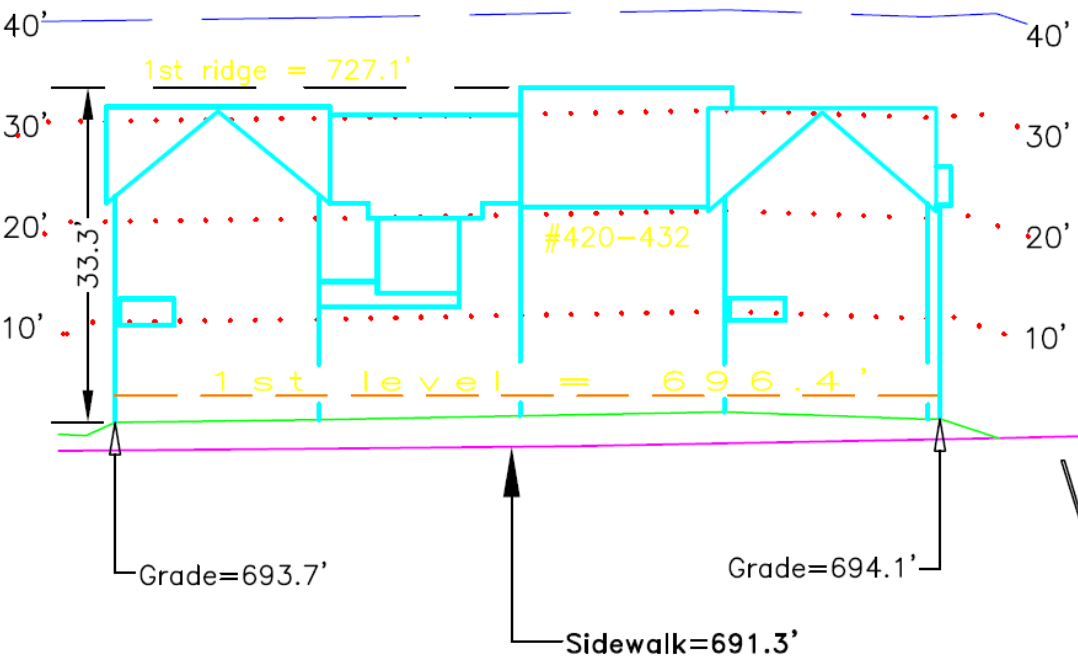


STREET SURVEYS

Wickford Place (across the Street – from West Blvd. to Worthington)



Worthington Ave (Wickford Place)

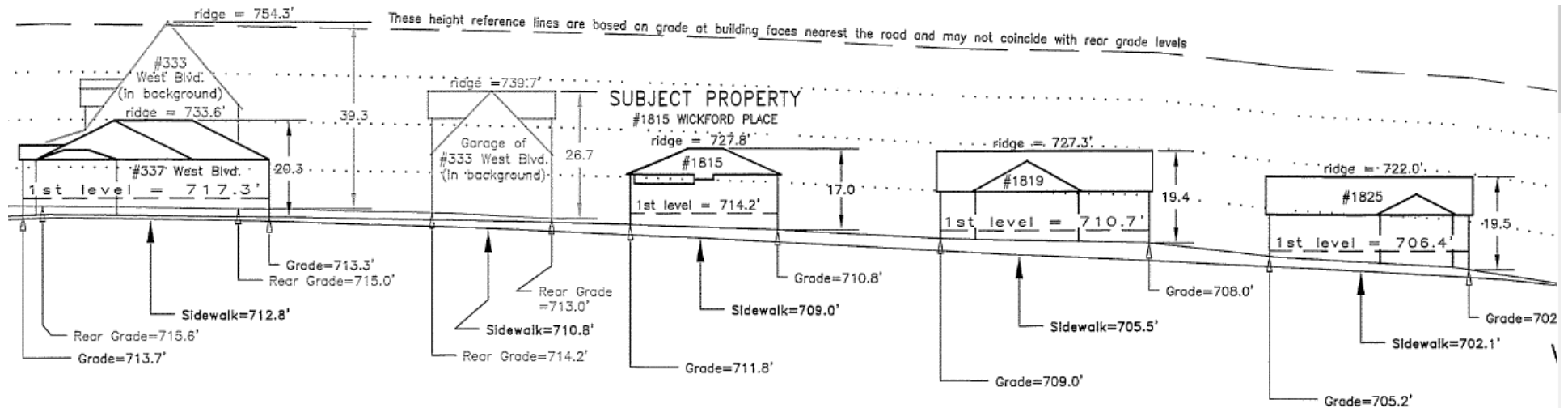


1816 Wickford Place		
LOT #	Roofline	Elevation to Grade
1	27' 7.25"	730.3'
2	23' 11.5"	728.6'
3	27' 7.25"	730.8'
4	23' 11.5"	724.8'

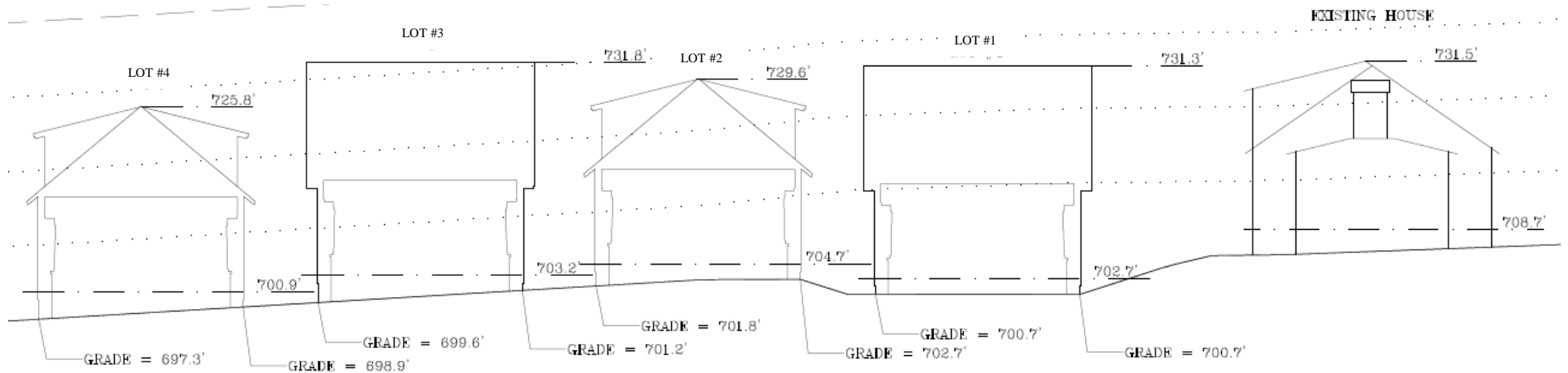


## HEIGHT / STREETScape / SCALE

### Wickford Place (across the Street – from West Blvd. to Worthington)



### Wickford Place (our side including the neighbor's house to the right of our property)

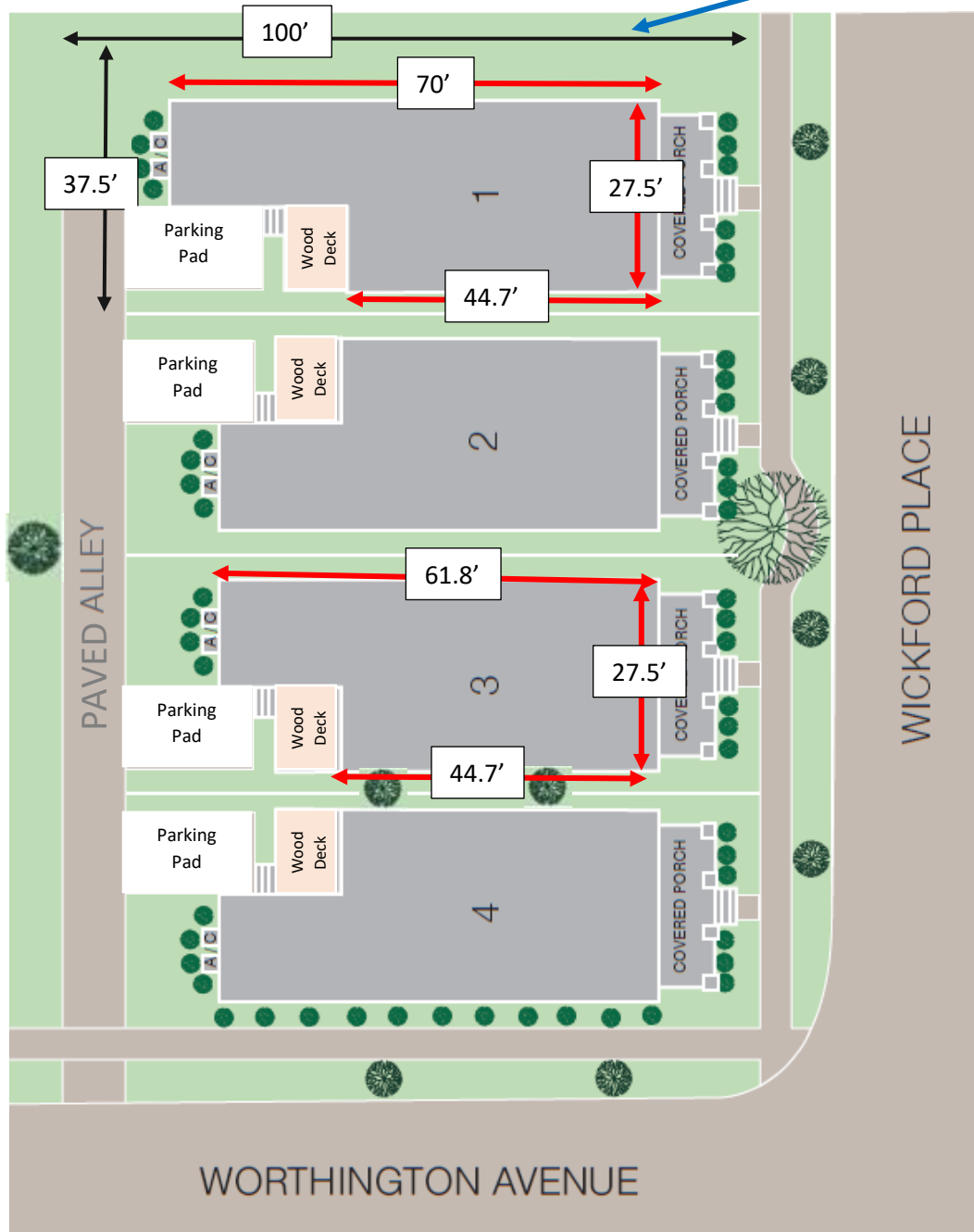


- Our Hip Roof Houses are within 3 inches of our neighbor's roofline and within 4 feet of the roofline across the street.
- Our Gable Style Houses are 2 feet lower than our neighbor's roofline and between 2-3 feet of across the street.



## FOOTPRINT / LOT DIMENSIONS / RATIO

There is an additional 10' green space (Unopened Alley) that runs between our property and the neighbor to our



### LOT 1 Footprint

- Depth of 70' & 44.7' heated square feet
- Width of 27.5' heated square feet
- Total 1,615 heated sq. ft. Footprint
- 184' sq. ft. covered porch

### LOT 2 – 4 Footprint

- Depth of 61.8' & 44.7' heated square feet
- Width of 27.5' heated square feet
- Total 1,487 heated sq. ft. Footprint
- 184' sq. ft. covered porch

### LOT Size 1 – 4

- Depth 100' / 37.5'
- Total Lot Size 3,750 sq. ft.

### Footprint % to Lot Size / % of Lot that's Permeable

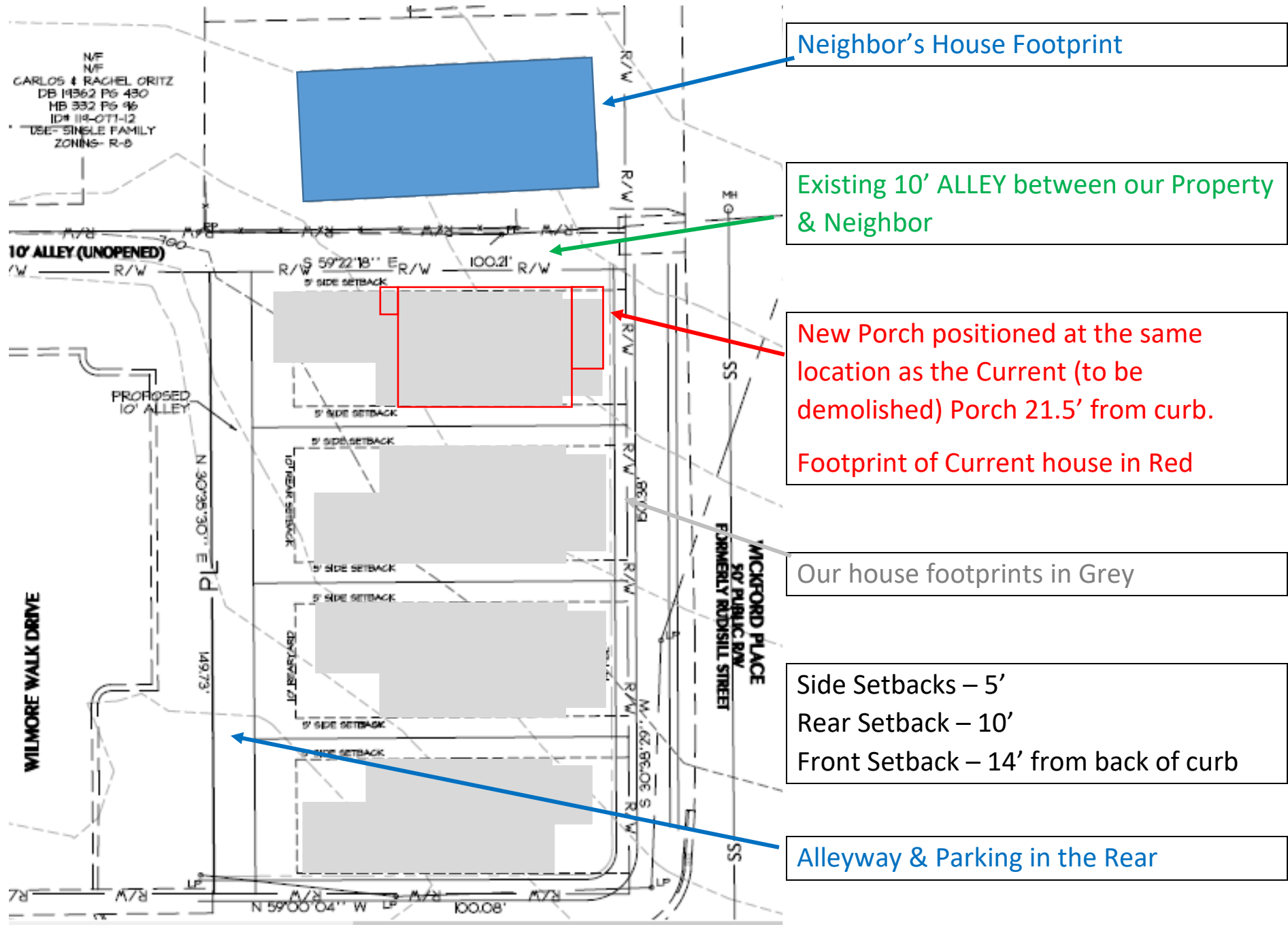
Lot 1 43% heat sq. ft. / 48% is Permeable\*

Lot 2-4 39% heat sq. ft. / 45% is Permeable\*

\*Paved Alley is included as Non-Permeable

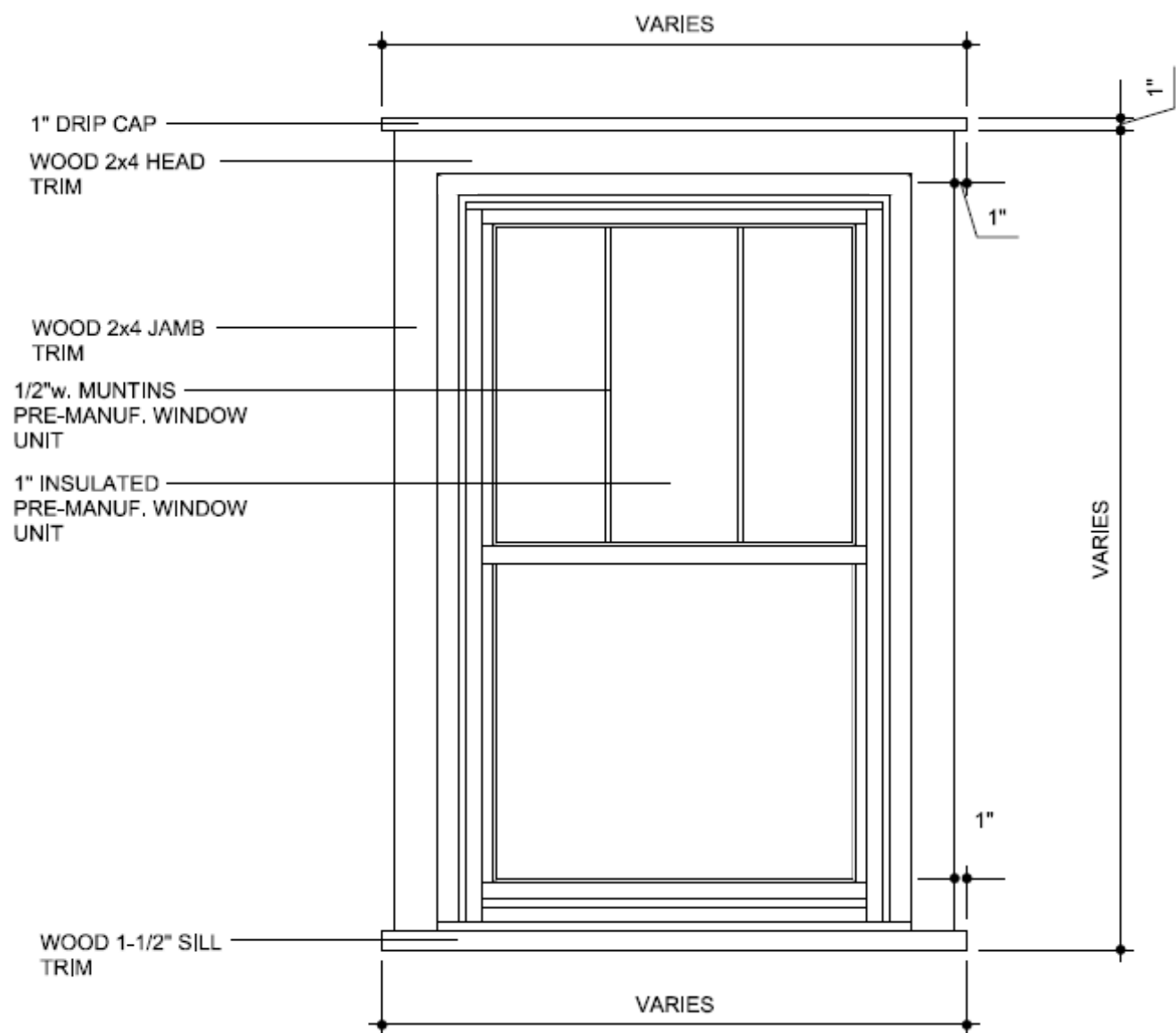


## SITE PLAN ZOOM-IN



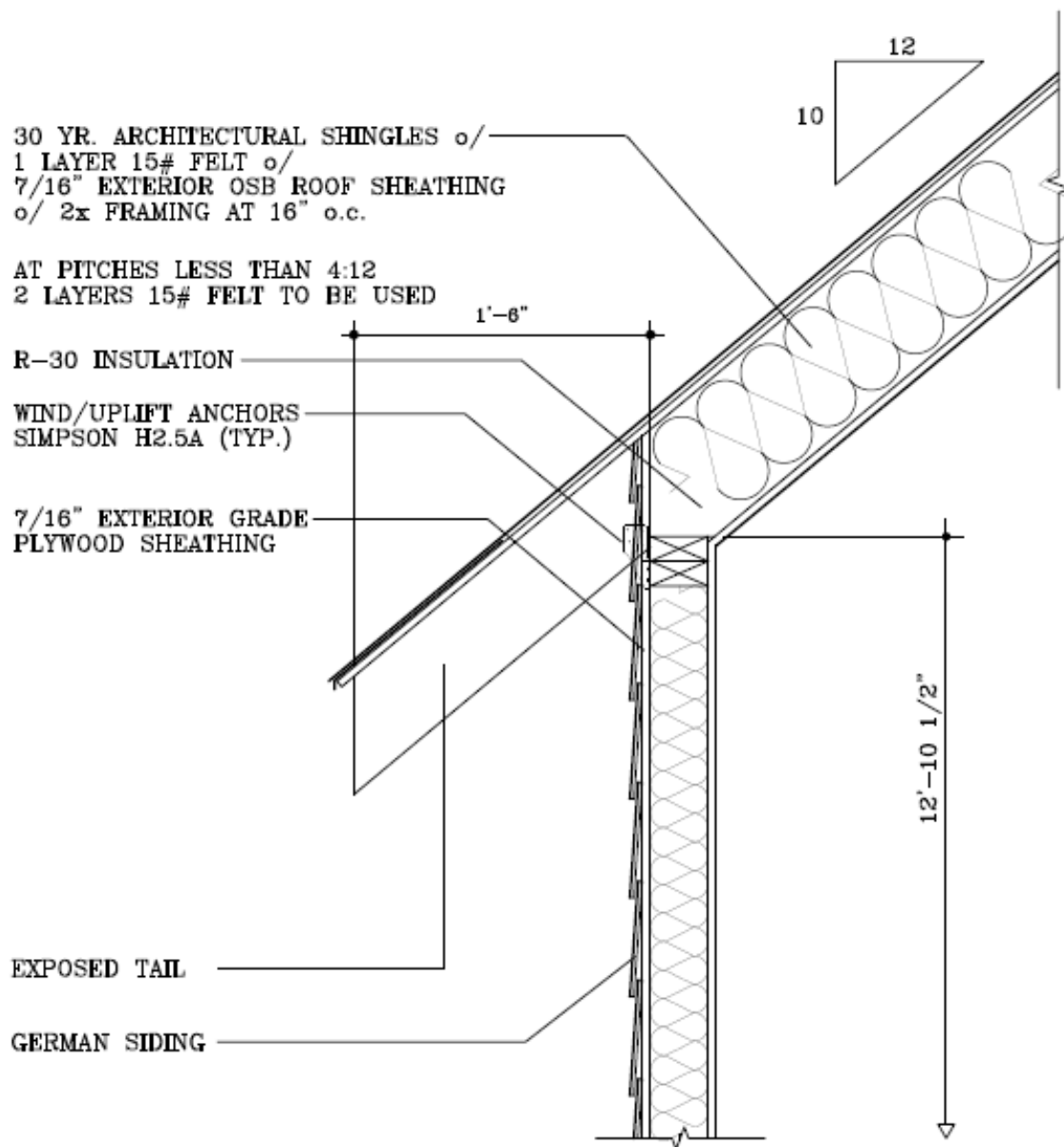


WINDOW DETAIL – **UPDATED**



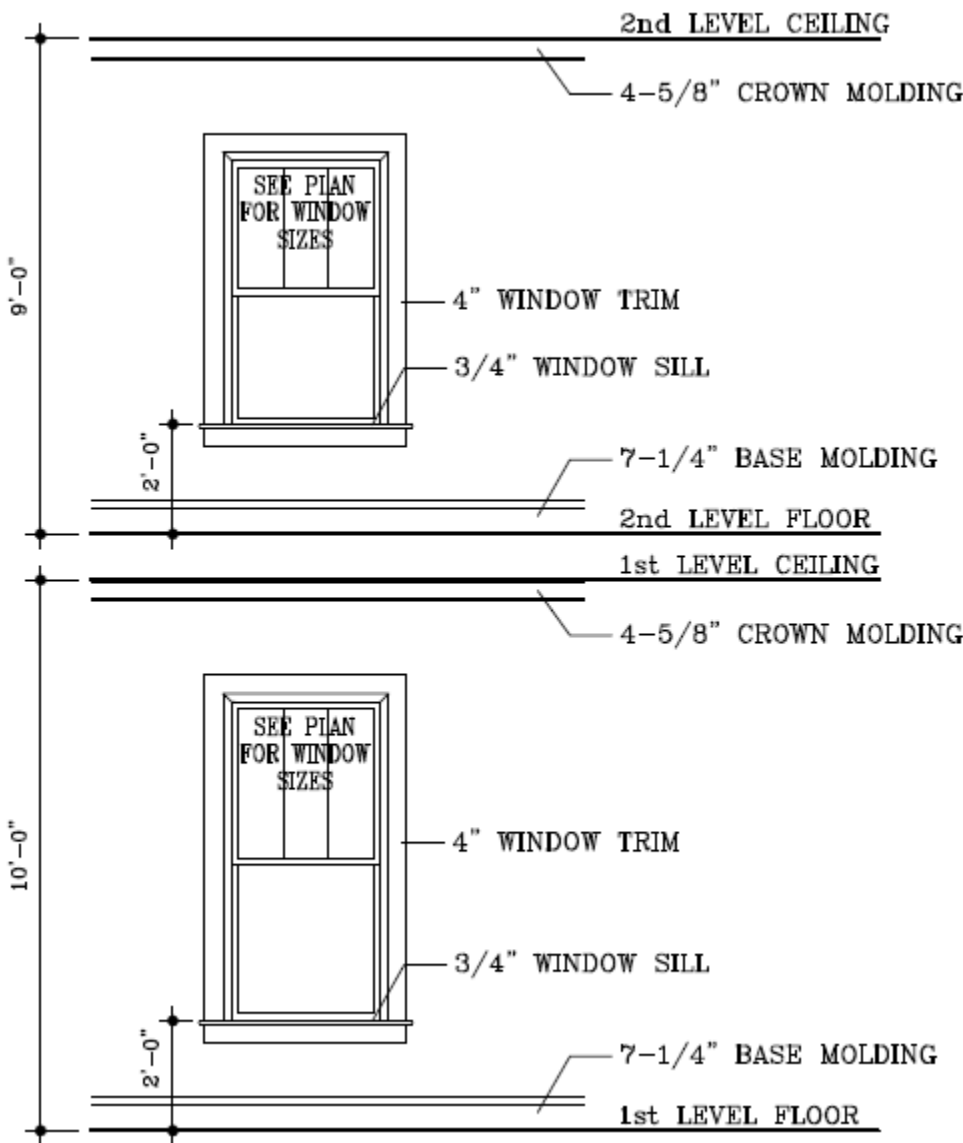


## SOFFIT DETAIL – UPDATED OPEN TAIL

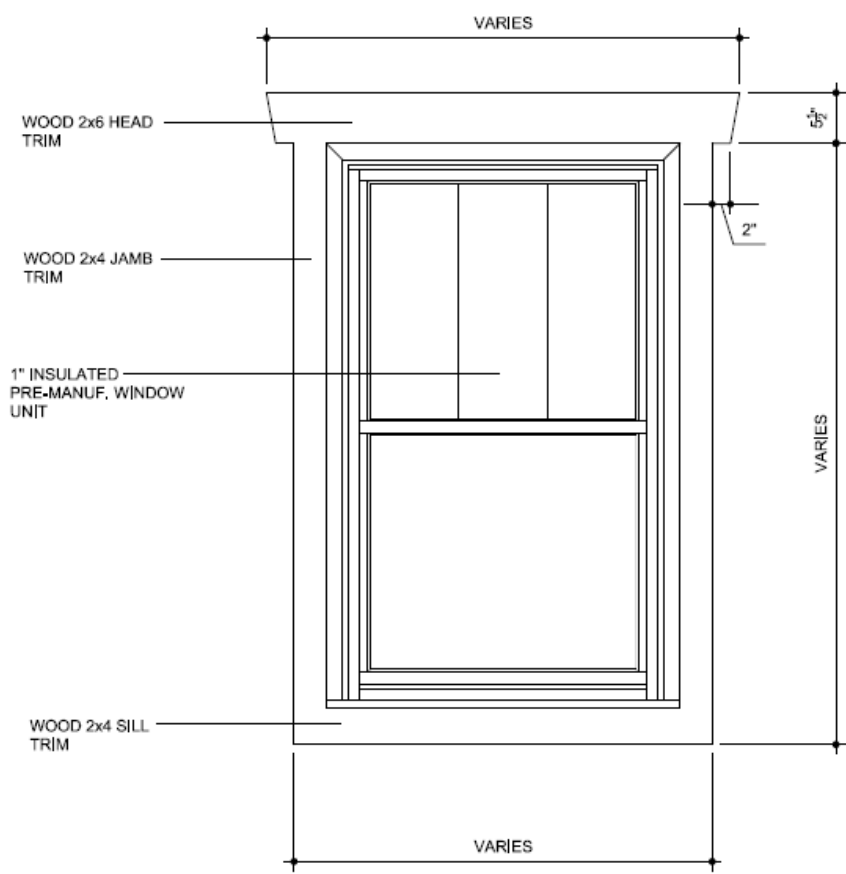




INTERIOR WINDOW HEIGHTS, TRIM, & CROWN



EXTERIOR WINDOW DETAIL





# PORCH RAILING & COLUMN DETAIL

