Charlotte Historic District Commission	***Application for a Certificate of Appropriateness***
Staff Review	***Date: July 10, 2019***
HDC 2019-00366	***PID# 11907746***

LOCAL HISTORIC DISTRICT:	Wilmore
PROPERTY ADDRESS:	1830 Wickford Place, Lot 4 (corner)
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. HDC 2016-324_1816 Wickford Place (Lot 4) Motion, June 14, 2017: Approve with Conditions.
   "Based on the need for a Certified Arborist's letter on tree protection relative to the revised plans – address dirt pile up and the footings/foundation -Mr. Rumsch made a MOTION for staff to review the additional information for probable approval. Mr. Henningson seconded."
2. Arborist Letter for the Willow Oak and Sycamore provided in attached submittal.
3. The project is not incongruous with the district and meets guidelines for New Construction.
4. Staff Recommends reinstating the **Approval with Conditions with Staff to work with applicant**, per 10.4.1 of the Rules for Procedure.
5. 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.

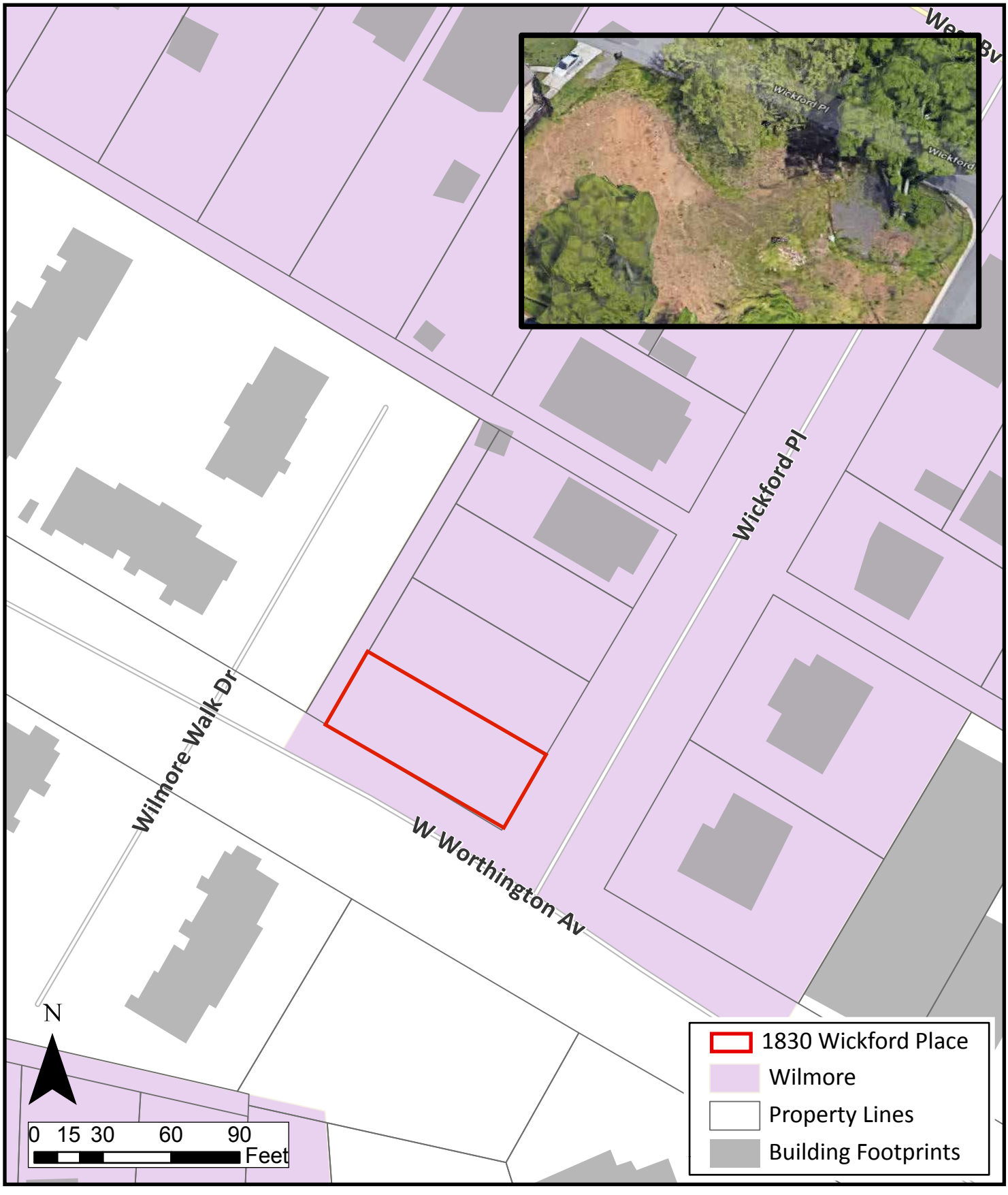
HDC-2019-00366

PID: 11907746

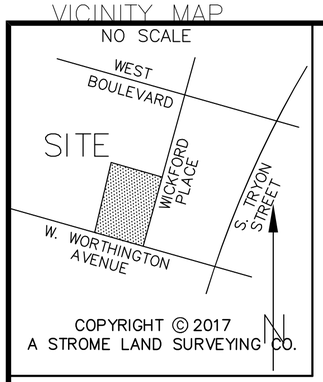
LOCAL HISTORIC DISTRICT: WILMORE

PROPOSED PROJECT: CONSENT AGENDA

July Meeting 2019



VICINITY MAP
NO SCALE



VICINITY MAP
(Not to Scale)

CARLOS ORITZ &
RACHEL ORITZ
NOW OR FORMERLY
LOT 3 BLCOK 16
DB 19362 PG 430
MB 332 PG 96
PARCEL ID # 119-077-12

BRENDAN TINDALL &
KARYN TINDALL
NOW OR FORMERLY
PART OF LOT 1 & LOT 2
DB 32258 PG 689
MB 332 PG 96
PARCEL ID # 119-077-09

1"IPF

S 30°22'20" W 49.99' (TIE)

10' ALLEY WAY per MB 332 PG 96 (UNOPENED)

L2 (TIE) #4RF

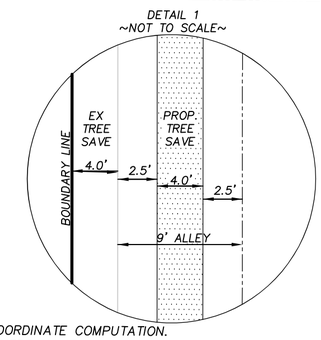
#5 RF CONTROL CORNER

S 59°22'18" E 100.21' (TOTAL)

10' ALLEY WAY per MB 332 PG 96 (UNOPENED)

L1 (TIE) #4RF

DETAIL 1
~NOT TO SCALE~



EXISTING TREE SAVE PER MB 63 PG 746

TREESAVE EXTENDS 0.50' PAST 10' RY

#1818
LOT 1
0.078 ACRE
3,382 SF
TAX ID# 119-077-49

PROPOSED TREE SAVE
506 SF
IN MIDDLE OF CONCRETE DRIVEWAY STRIPS FOR PRIVATE ALLEY

10' COMMON OPEN SPACE
0.034 AC
1,498 SF
MB 63 PG 746
TAX ID# 119-077-50

PRIVATE 9' ALLEY EASEMENT SEE DETAIL #1

#1822
LOT 2
0.078 ACRE
3,381 SF
TAX ID# 119-077-48

21.5' FS FROM PROPOSED BACK OF CURB (TYPCIAL)

#1826
LOT 3
0.078 ACRE
3,380 SF
TAXD ID# 119-077-47

430 SF TREE SAVE PER MB 63 PG 746 TO BE RELOACTED TO ALLEY

#1830
LOT 4
0.078 ACRE
3,387 SF
TAX ID# 119-077-46

1' SUE

WILMORE WALK CONDOMINIUM
UNIT FILE # 749 PG 1

30" OAK

24" OAK

14' SETBACK FROM BACK OF CURB ALONG BACK OF PROPOSED WALK

T7 (TIE)

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'

N 30°35'30" E 149.73'
N 30°35'30" E 149.80' (TOTAL)

S 59°22'18" E 90.21'
S 59°22'18" E 90.18'
S 59°22'18" E 90.16'
S 59°22'18" E 90.14'

37.50'
37.30'
37.88'

S 30°38'29" W 150.38' (TOTAL)

10' RY
5' SY

PROPOSED CURB
PROPOSED 6' WALK
PROPOSED 8' PLANTING STRIP

10.00'
90.08' PROPOSED 6' WALK
N 59°00'04" W 100.08'

#4RF
1.25" PIPE

EXISTING CURB TO BE REPLACED WITH 2'6" CURB

R/W

EDGE OF PAVEMENT

WICKFORD PLACE
50' PUBLIC R/W
per MB 63 PG 746

W WORTHINGTON AVENUE
60' PUBLIC R/W
per MB 63 PG 746

EXISTING CURB

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 AN 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 ILLRUSTRATIVE 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 AS 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 ASSIGN.
13. SIDEWALK AND UTILITY EASEMENT MEASURED FROM BACK OF SIDEWALK.
14. TREE SAVE AREA PER CITY TREE ORIDANCE

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

MB 63 PG 746

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

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.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

OWNER:
RCMD, LLC
15617 SULLIVAN RIDGE DRIVE
CHARLOTTE, NC 28277

"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

NORTH CAROLINA PROFESSIONAL SEAL L-5188 LAND SURVEYOR CHEVIS L. KING

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 PRODIVED- 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.

CAROLINA GEOMATICS PLLC
3833 STREAMSIDE DR
GASTONIA, NC 28056
P (980) 329-3382
CKING@CAROLINAGEOMATICS.COM
NC #P-1965

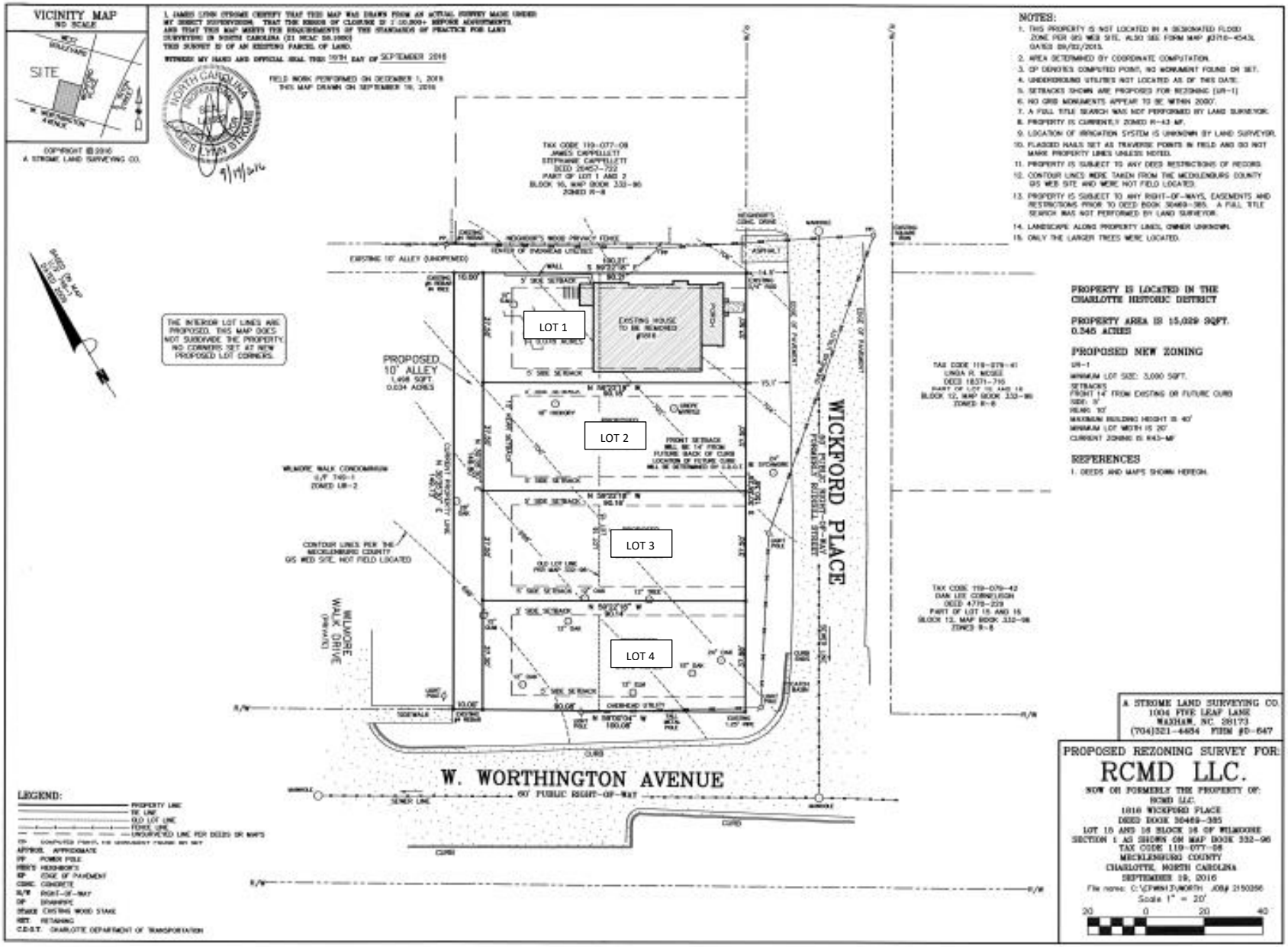
REVISED FINAL PLAT

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

F:\2019 CLK SURVEY\JOBS\14 BOSTON PROPERTIES\014-19-001 WICKFORD PLACE\1818 WICKFORD PLACE REPLAT.dwg

SURVEY


VICINITY MAP
NO SCALE
SITE
W. WORTHINGTON AVENUE
NOTES:
1. THIS PROPERTY IS NOT LOCATED IN A DESIGNATED FLOOD ZONE PER QS WEB SITE, #L30 SEE FIRM MAP #3710-4543L DATED 09/02/2015.
2. AREA DETERMINED BY COORDINATE COMPUTATION.
3. CP DENOTES COMPUTED POINT, NO MONUMENT FOUND OR SET.
4. UNDERGROUND UTILITIES NOT LOCATED AS OF THIS DATE.
5. SETBACKS SHOWN ARE PROPOSED FOR REZONING (UR-1)
6. NO GPS MONUMENTS APPEAR TO BE WITHIN 2000'.
7. A FULL TITLE SEARCH WAS NOT PERFORMED BY LAND SURVEYOR.
8. PROPERTY IS CURRENTLY ZONED R-43 MF.
9. LOCATION OF IRRIGATION SYSTEM IS UNKNOWN BY LAND SURVEYOR.
10. FLAGGED NAILS SET AS TRAVERSE POINTS IN FIELD AND DO NOT MARK PROPERTY LINES UNLESS NOTED.
11. PROPERTY IS SUBJECT TO ANY DEED RESTRICTIONS OF RECORD.
12. CONTOUR LINES WERE TAKEN FROM THE MECKLENBURG COUNTY GIS WEB SITE AND WERE NOT FIELD LOCATED.
13. PROPERTY IS SUBJECT TO ANY RIGHT-OF-WAYS, EASEMENTS AND RESTRICTIONS PRIOR TO DEED BOOK 30469-385. A FULL TITLE SEARCH WAS NOT PERFORMED BY LAND SURVEYOR.
14. LANDSCAPE ALONG PROPERTY LINES, OWNER UNKNOWN.
15. ONLY THE LARGER TREES WERE LOCATED.
PROPERTY IS LOCATED IN THE CHARLOTTE HISTORIC DISTRICT
PROPERTY AREA IS 15,029 SQFT. 0.345 ACRES
PROPOSED NEW ZONING
UR-1
REFERENCES
1. DEEDS AND MAPS SHOWN HEREON.
LOT 1
LOT 2
LOT 3
LOT 4
EXISTING HOUSE TO BE REMOVED
PROPOSED 10' ALLEY
WICKFORD PLACE
WILMORE DRIVE
EXISTING 10' ALLEY (UNOPENED)
THE INTERIOR LOT LINES ARE PROPOSED. THIS MAP DOES NOT SUBDIVIDE THE PROPERTY. NO CORNERS SET AT NEW PROPOSED LOT CORNERS.
CONTOUR LINES PER THE MECKLENBURG COUNTY GIS WEB SITE, NOT FIELD LOCATED
WILMORE WALK CONDOMINIUM
LEGEND:
A STROME LAND SURVEYING CO.
1004 PINE LEAF LANE
WAXHAW, NC 28173
(704)321-4484 FIRM #C-647
PROPOSED REZONING SURVEY FOR:
RCMD LLC.
NOW OR FORMERLY THE PROPERTY OF:
RCMD LLC.
1010 WICKFORD PLACE
DEED BOOK 30469-385
LOT 15 AND 16 BLOCK 10 OF WILMORE
SECTION 1 AS SHOWN ON MAP BOOK 332-98
TAX CODE 119-077-08
MECKLENBURG COUNTY
CHARLOTTE, NORTH CAROLINA
SEPTEMBER 19, 2016
Scale 1" = 20'

1. DESIGN LOADS:

1.1 Design loads are all dead loads plus:

- A. Main floor live loads (kitchen level) .... 40 PSF
- B. All other floors .... 40 PSF
- C. Balconies .... 60 PSF
- D. Decks .... 50 PSF
- E. Suspended Garages .... 50 PSF
  and 2000 Pound Point Load at any Location
- F. Attic floor live loading with the following:
  - i. Areas accessible by permanent stairs .... 30 PSF
  - ii. With Storage .... 20 PSF
  - iii. Without Storage .... 10 PSF
- G. Roof live load .... 20 PSF
- H. Wind load .... 115 MPH (3 Second Gust)
- I. Conforms with Seismic Design Criteria for Zone C.
- J. Snow load .... 20 PSF

1.2 All designs are in accordance with the 2018 North Carolina Residential Building Code, designed using ASD 2301.2.1 for all wood and steel structural elements and LRFD 2301.2.2 for all concrete structural elements..

2. FOOTINGS AND FOUNDATIONS:

2.1 Soil bearing capacity assumed as 2000 PSF unless noted otherwise or as determined by standard penetrometer test.

2.2 All continuous wall footings for one or two-story houses are 10" thick x 20" wide. Reinforcing in footings should be two (2) #4 bars if not noted on the plans. Reinforcement not required by Code, unless footings are on disturbed soil or compacted fill.

2.3 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'-4". Piers larger than 8"x16" are noted on the plans or as required by height. Pier cap blocks should be 8" of solid masonry.

2.4 Footings for 8"x16" piers are 20"x30"x10" unless noted otherwise. Reinforcing to be as noted on plans.

2.5 Concrete shall have a compressive strength of 3000 PSI in 28 days unless noted otherwise. No concrete shall be poured in temperatures below 40° Fahrenheit unless heat to be provided during curing for two days. The bottom of all footings must be a minimum of 12" below grade.

2.6 All rebar splices shall be a minimum of 2'-0" unless otherwise noted.

2.7 Any special foundations for structures shall be designed by a Licensed Professional Engineer upon receiving soil capacity specifications for all soil considered to affect the structure.

2.8 Chimney footing sizes are shown on the structural design drawings. Masonry or Isokern style chimney footings must be a minimum of 12" thick with 12" projection on all sides.

2.9 Foundation walls back-filled with soil and supporting structural framing shall be constructed as shown on detail sheet.

2.10 Special retaining wall designs to be shown on detail sheet.

NOTE: ALL POINT LOADS FROM ROOF BRACES, JACK STUDS, AND BEAM SUPPORTS - WHETHER WOOD OR STEEL - CANNOT BEAR ON SHEATHING ALONE. BLOCKING EQUAL TO OR BETTER THAN THE SPECIFIED STUDS OR COLUMN PROVIDED FOR POINT LOAD SUPPORT MUST BE CARRIED THROUGH ALL CONSTRUCTION TO THE FOUNDATION.

3. FRAMING CONSTRUCTION - OTHER THAN ROOF:

3.1 Crawlspace girders and band as noted on plans. Maximum clear span to be 4'-8" (6'-0" o/c spacing of piers) unless noted otherwise.

To avoid most cracking in finished hardwood floors over any girders, use the following procedure:

A. Nailing Patterns

- i. All floor joists must be toe-nailed to their support girders with a minimum of 3-8d nails at each end from each side. Larger nails will split and render the toe-nail ineffective. No end-nailing through the girder or band is permitted except for temporary construction purposes.
- ii. If dropped girders are used, end-lap all joists 12" minimum and side-nail each with a minimum of 3-16d nails at each end of each joist. Ledger strips should be nailed with 3-16d nails at each joist end, with nails spaced 3" apart.
- iii. Nail multiple-member built-up girders with three rows of 16d nails staggered at 32" o/c, 2" down from the top, 2" up from the bottom, and at mid-depth. Use 3-16d nails at each end of each piece in the joints through the members making up the multiple-girder. This nailing pattern will insure a tight floor from outside of 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.

B. 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 insure shrinkage distribution over the floor and not let it accumulate at the girder.

C. There must be wood blocking through-bolted to the steel beam with joist toe-nailed and attached to the beam with metal hangers under any hardwood floors that pass over a steel beam supporting floor joists.

3. FRAMING CONSTRUCTION - OTHER THAN ROOF (CONTINUED):

3.2 All crawlspace framing lumber must be Spruce Pine Fir #2 unless noted otherwise.

3.3 Steel beams must have 5-2x4 jack studs under each end support unless noted otherwise on the structural plans. All studs must be nailed together with two (2) vertical rows of 16d nails at 8" o/c, unless noted otherwise.

3.4 LVL beams must have 3-2x4 jack studs under each end support unless noted otherwise on the structural plans. All studs must be nailed together with two (2) vertical rows of 16d nails at 8" o/c, unless noted otherwise.

3.5 Masonry lintels:

- A. For spans up to 6 ft: Use 3½"x3½"x¼" steel angles.
- B. For spans from 6 ft to 10 ft: Use 5"x3½"x5/16" steel angles.
- C. For spans from 9 ft to 18 ft: Use a pair of 9 gauge wires in each of the first 3 courses of brick on a 5"x3½"x5/16" steel angle. Lap all 9 gauge wire splices 12" minimum and extend wires 12" minimum into jambs. Temporarily support steel angle before laying masonry. Shoring may be removed seven days following the installation of masonry.
- D. 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 jambs. The beam should be temporarily shored prior to laying the masonry. The shoring may be removed five days after laying the masonry.

3.6 All masonry or stone veneer over lower roofs must have a structural steel angle lag bolted to the adjacent wall studs to prevent sliding of the veneer. A minimum of a triple rafter must be installed below masonry climbs. Thin-set veneer attachments provided by the contractor may supercede this specification. Please verify the alternative attachment procedure with the Engineer of Record.

3.7 All rafter braces must have 2 studs from the wall top plate through all floors solid to the foundation or supporting beam below. No braces shall be attached to the top wall plate without studs directly under them.

3.8 Where non-bearing parallel partitions fall between floor joists, 2x4 ladders @ 16" o/c must be placed perpendicular to the joists to support the plywood decking or double joist installed directly below wall.

3.9 All wood I-joists must be braced in accordance with the manufacturer's directions plus any details shown on the plans. Load bearing partitions, jacks, beams and column supports must be solidly blocked through the floor as the joists and plywood may not be able to carry the concentrated point loads. All point loads must be carried to the foundations with blocking and/or beams. **(NOTE: All beams and double joists, etc., have been shown for a load bearing purpose. Placement of the load carrying members shown in the plans in locations other than under the structural element they are intended to carry is the responsibility of the contractor. Exact beam locations are not to be scaled from the framing plans.)**

3.10 All two-story open rooms with full height openings must be braced to resist pressure resulting from 90 MPH design fastest-mile wind speed or as prescribed for specified wind zones per ASCE 7-98. Any special wall reinforcing shall be shown on the plans provided. Two-story open rooms must be balloon-framed with 2x6s @ 16" o/c as a minimum (no exceptions.)

3.11 Stud walls to be listed below unless otherwise noted on the structural plans:

- A. Interior One & Two Story Walls (with intermediate floors)
  - i. Load bearing .... 2x4 @ 16" o/c
  - ii. Non load bearing .... 2x4 @ 16" o/c
- B. Interior Three Story Walls
  - i. Load bearing (2nd & 3rd Floor) .... 2x4 @ 16" o/c
  - ii. Load bearing (1st Floor) .... 2x4 @ 12" o/c or 2x6 @ 16" o/c
  - iii. Non-load bearing .... 2x4 @ 16" o/c
- C. Basement Walls
  - i. Load bearing .... 2x4 @ 12" o/c
  - ii. Non-load bearing .... 2x4 @ 16" o/c
- D. Exterior Walls
  Exterior walls for three stories shall be 2x6 @ 16" o/c with ½"x4'x8' OSB sheathing or C-DX plywood over entire exterior.

3.12 Headers shall be as shown on the plans.

3.13 When ceiling joists are parallel to an exterior wall and rafters bear on the exterior stud wall's top plate, tie the rafters near the top plate to the ceiling joists with 6' long 2x6 runners at 4' o/c across the top of the ceiling joists.

3.14 At all bay windows, each panel shall be nailed to each adjacent panel with 5-16d nails tied together with metal strapping nailed at four locations between floors with a minimum of 2-16d nails in each panel at each strap. This will help prevent vertical cracking in the panel joints due to horizontal oscillation of the panels.

3.15 At all stairs, every stud at each stringer must be nailed to each stringer with a minimum of 2-16d nails. This will help prevent cracking between the wallboard and the top of the base molding due to vertical oscillation of the stair stringers.

3.16 Steel pipe columns must be in contact with the supported member and continue solid to the supporting masonry or concrete foundation. No intermediate wood blocking should be used as it will crush.

4. FOUNDATION WALLS

4.1 All full height foundation walls are shown on structural detail sheet.

4.2 All masonry or concrete basement wall construction must be inspected by the County Building Official, Architect, or Engineer for compliance with structural specifications.

4.3 Where full-height foundation or basement walls run parallel to floor framing, blocking must be provided between joists at 3'-0" o/c for not less than six joist spacings out from wall.

4.4 Details of any earth retaining structures not attached to the house structure will be shown on separate details. (These walls may be designed only after grade conditions are known.)

5. ROOF CONSTRUCTION

5.1 Rafters shall be 2x6 SPF #2 @ 16" o/c for standard weight shingles except as noted. They are to be cut into hips, ridges, etc., unless noted as over-built.

5.2 Collar ties shall be 2x6 @ 48" o/c at all ridges unless noted otherwise and located a minimum 3' below the ridge. Collar ties may be closer to ridge if alternate bracing provided. Vaulted ceilings require special collar tie details or structural ridge beam. See plans as required.

5.3 A minimum of three collar ties shall be used at all ridges even if two ties must be put on one set of rafters.

5.4 All hips and ridges are a size larger than the rafters framing into them unless noted otherwise.

5.5 All hogs on ceiling joists or rafters are 8' long 2-2x6 hog troughs unless noted otherwise. Rafters may be spliced over hogs.

5.6 Gable end framing must be braced parallel to ridges with a minimum of 2x6 diagonal braces @ 6' o/c along the gable wall to the interior ceiling joists. Braces are to bear on 2-2x6 hogs and to gable wall at approximately mid-height of gable wall. Braces shall be at approximately a 45° angle. Other bracing may be used if it meets the Engineer's approval.

5.7 Carry braces to partitions or beams below. Never brace rafter hogs to 2-2x6 hogs on ceiling joists, unless shown on plans.

5.8 Ceiling joists when erected parallel to rafters must be sistered to rafters and nailed with 3-16d nails at each rafter. If a kneewall is used and ceiling joists cannot touch rafters, then rafters must be braced to the ceiling joists with 2x4 diagonal rafter ties spaced @ 48" o/c. Reverse collar ties may be used behind kneewalls.

5.9 Roof Plan Legend:

- A. ⊗ or ○ Indicates location of roof brace at rafter level.
- B. ⊗→ Arrow away from brace point indicates direction of roof brace to partition, beam or other brace point below.
- C. ⊗← Arrow into brace point indicates a vertical or almost vertical roof brace to partition, beam or other brace point below.
- D. All roof braces are 2-2x4 "T" nailed with 16d nails @ 9" o/c vertically from top to bottom. All braces longer than 10' must be braced horizontally in two directions at mid-height or be increased to 2-2x6s.
- E. Maximum spacing of roof braces is to be as follows:
  - i. For 2-2x6 hog .... 6'-0" o/c
  - ii. For 2-2x8 hog .... 7'-6" o/c

6. WALL BRACING PER R 602.10

This structure has been analyzed by the professional engineer of record for lateral loading. It has been designed using continuous sheathing fastened to the exterior wall framing with 8d nails at 6" on center on edge and 12" on center in the field, to meet and exceed the intent of The 2018 North Carolina Residential Building Code. Where braced wall lines require additional reinforcing, engineered walls sections and hold downs have been provided.

All 800# hold downs are to be Simpson LSTA15 or MSTA15 vertical straps fastened to a minimum of a two stud pocket and the floor band.

EMF- Engineered Moment Frame

NORTH CAROLINA PROFESSIONAL SEAL 32138 ENGINEER MATTHYS N. BARKER

REVISED 1/21/19

STRUCTURAL ENGINEER:
SUSTAINABLE ENGINEERING & EFFICIENT DESIGNS, PLLC.
PO BOX 691071
CHARLOTTE, NC 28227-7018
SEAL FOR STRUCTURE ONLY

BUILDER:
ALLEN DESIGN ASSOCIATES, INC.

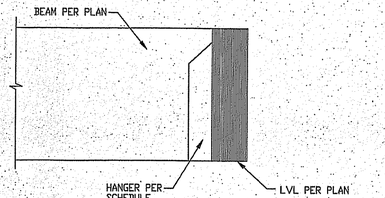
PROJECT NAME AND ADDRESS:
WILMORE #4
CHARLOTTE, NC

SEED
SUSTAINABLE ENGINEERING & EFFICIENT DESIGNS, PLLC.

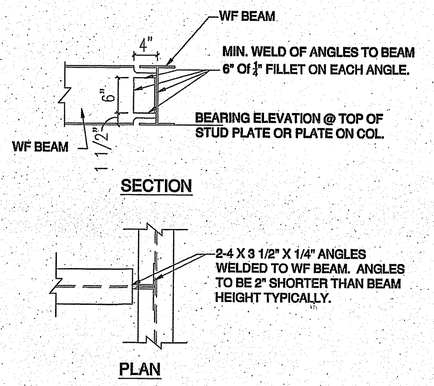
DRAWING TITLE:
GENERAL NOTES

DATE:
JUNE 8, 2017

SHEET NO:
SGN

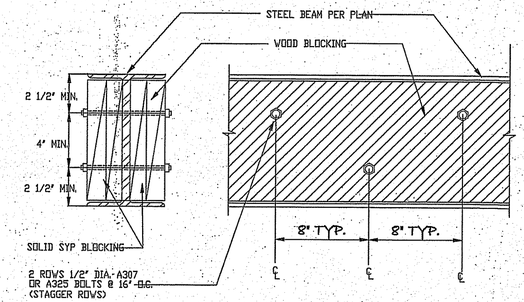


1 SD1 BEAM TO LVL CONNECTION DETAIL
SCALE= NTS



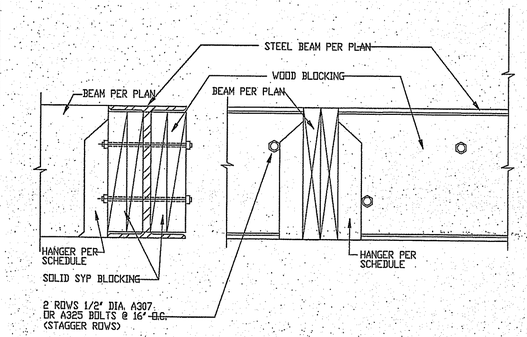
2 SD1 STEEL TO STEEL CONNECTION DETAIL
SCALE= NTS

N/A



3 SD1 STEEL BEAM WEB BLOCKING DETAIL
SCALE= NTS

N/A

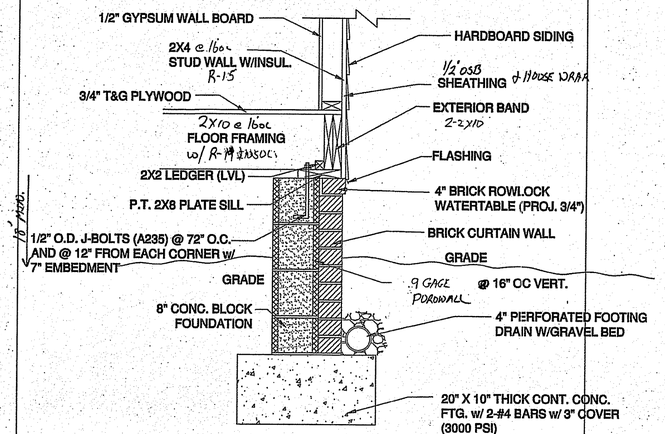


4 SD1 BEAM TO STEEL BEAM CONNECTION DETAIL
SCALE= NTS

N/A

TYPICAL HANGERS FOR JOISTS AND BEAMS	
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	HU212-3 MIN
2-1 3/4" x 9 1/4" LVL	HGUS410
2-1 3/4" x 11 7/8" LVL	HGUS412
2-1 3/4" x 14" LVL	HGUS414
2-1 3/4" x 16" LVL	HGUS414
2-1 3/4" x 18" LVL	HGUS414
3-1 3/4" x 9 1/4" LVL	HGUS5.50/10
3-1 3/4" x 11 7/8" LVL	HGUS5.50/12
3-1 3/4" x 14" LVL	HGUS5.50/14
3-1 3/4" x 16" LVL	HGUS5.50/14
3-1 3/4" x 18" LVL	HGUS5.50/14
4-1 3/4" x 9 1/4" LVL	HGUS7.25/10
4-1 3/4" x 11 7/8" LVL	HGUS7.25/12
4-1 3/4" x 14" LVL	HGUS7.25/14
4-1 3/4" x 16" LVL	HGUS7.25/14
4-1 3/4" x 18" LVL	HGUS7.25/14

5 SD1 HANGER SCHEDULE
SCALE= NTS



6 SD1 CRAWLSPACE FOUNDATION DETAIL
SCALE= NTS

NORTH CAROLINA PROFESSIONAL SEAL 32138 ENGINEER MARTIN N. BARKER

REVISED 1/21/19

STRUCTURAL ENGINEER:
SUSTAINABLE ENGINEERING & EFFICIENT DESIGNS, PLLC.
PO BOX 551171
CHARLOTTE, NC 28227-7018
SEAL FOR STRUCTURES ONLY

BUILDER:
ALLEN DEBON ASSOCIATES, INC.

PROJECT NAME AND ADDRESS:
WILMORE #4
CHARLOTTE, NC

SUSTAINABLE ENGINEERING & EFFICIENT DESIGNS, PLLC.

DRAWING TITLE:
STANDARD DETAILS

DATE:
JUNE 8, 2017

SHEET NO.:
SD1

GENERAL PLAN NOTES

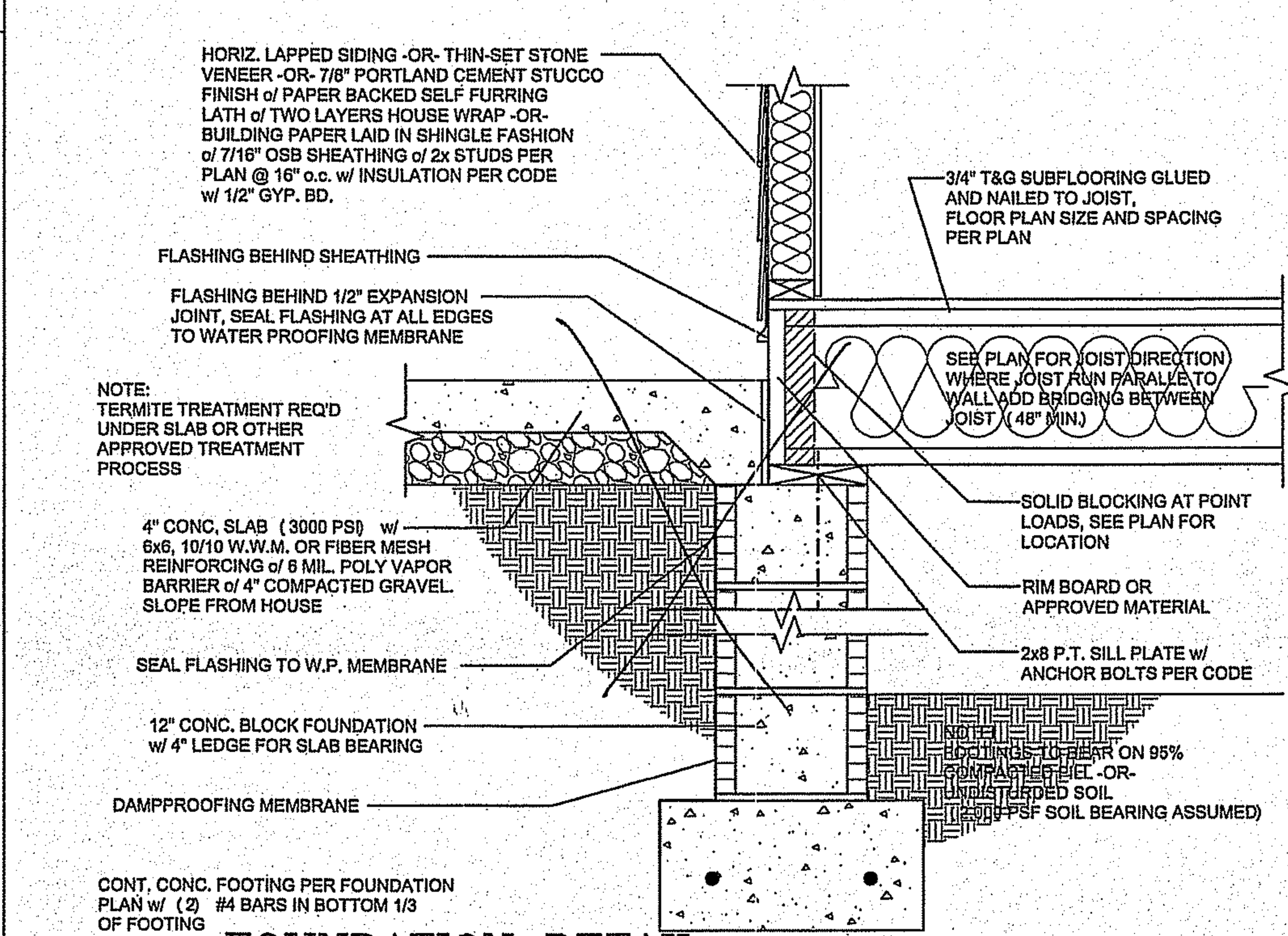
1. DRAWINGS ARE NOT TO BE SCALED; DIMENSIONS IN QUESTION SHALL BE CLARFIFIED BY ARCHITECT.
2. ALL EXTERIOR DIMENSIONS ARE SHOWN TO THE OUTSIDE FACE OF STUD; UNLESS NOTED OTHERWISE.
3. ALL INTERIOR DIMENSIONS ARE SHOWN TO THE INSIDE FACE OF STUD; UNLESS NOTED OTHERWISE.
4. ALL INTERIOR WALLS ARE ASSUMED TO BE 3-1/2" WOOD STUDS; UNLESS NOTED OTHERWISE.
5. ALL EXTERIOR WALLS ARE ASSUMED TO BE 3-1/2" WOOD STUDS (PLUS 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 CABINETRY TO BE DESIGNED BY OTHERS AND SHALL MEET ALL APPLICABLE ACCESSIBILTY CODES (IF REQUIRED)
9. ALL FINISH AND COLOR SELECTIONS 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 TERMITE CHEMICAL AT FOUNDATION; AS REQUIRED.
12. MINIMUM 22-1/2" (w) x 54-1/2" (l) ATTIC ACCESS DOOR w/ PULL DOWN LADDER TO BE DETERMINED ON SITE.
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

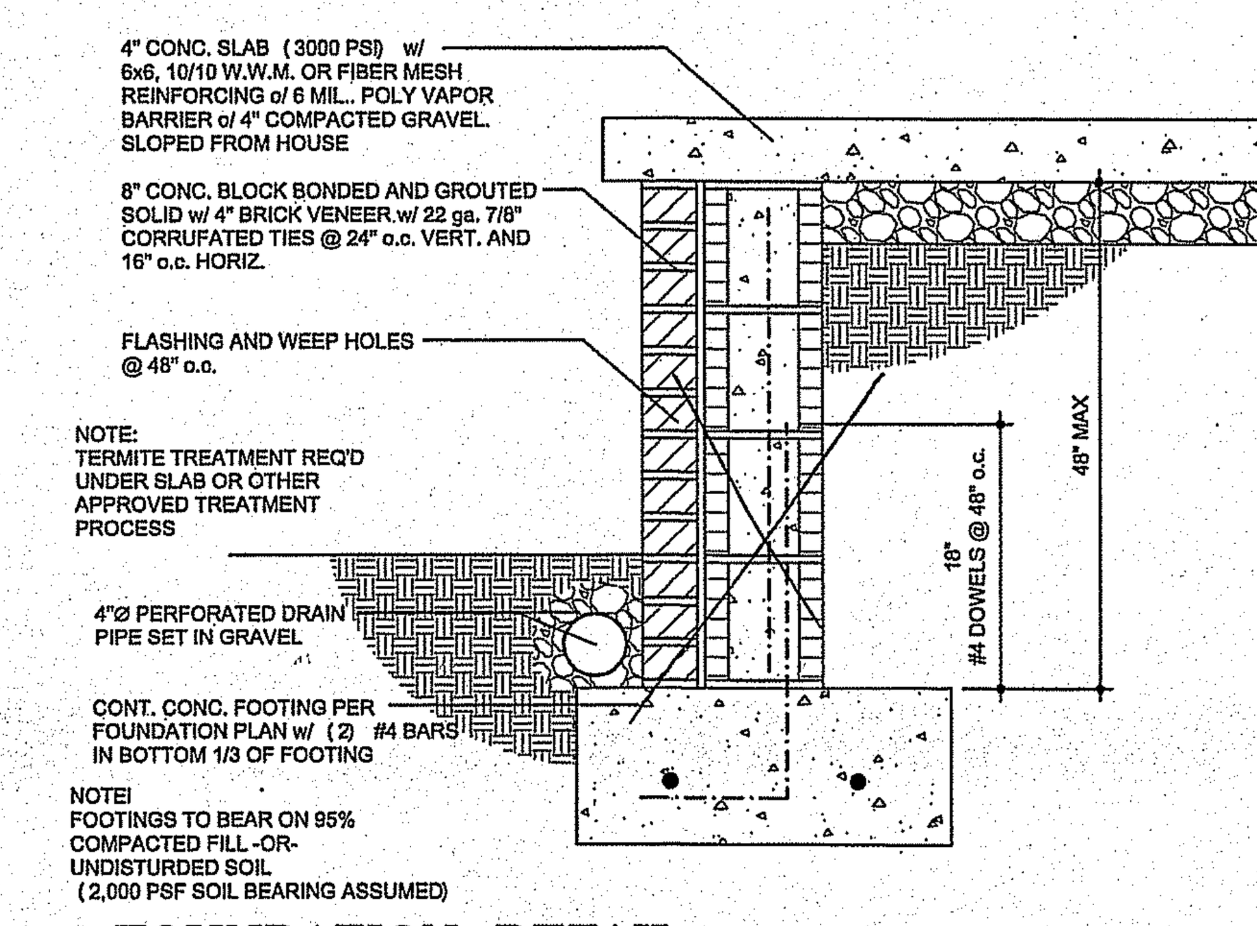
1. STEEL BEAMS MUST HAVE (5) 2x4 STUD JACKS UNDER EACH END SUPPORT; UNLESS NOTED OTHERWISE.
2. MICRO-LAM BEAMS MUST HAVE (3) 2x4 STUD JACKS UNDER EACH END SUPPORT; UNLESS NOTED OTHERWISE.
3. ALL BRICK OVER LOWER ROOFS MUST HAVE ANGLE WITH STOPS LAG SCREWS TO STUDS ABOVE AND ACCORDANCE WITH DETAIL.
4. ALL WOOD I-JOISTS AND OPEN 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 PLATE WITHOUT STUDS DIRECTLY UNDER THEM.
6. WHERE PARTITIONS FALL BETWEEN FLOOR TRUSSES, 2"x4" LADDERS @ 16"o.c. MUST BE PLACED PERPENDICULAR TO THE TRUSSES TO SUPPORT THE PLYWOOD DECKING.
7. 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.
8. WHERE CILING 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 ALONF 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 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

1. TREADS SHALL BE 9" WIDE 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 36".



204 / A2.0 FOUNDATION DETAIL @ HOUSE TO COVERED ENTRY N/A 1" = 1'–0"



205 / A2.0 FOUNDATION DETAIL @ COVERED ENTRY END N/A 1" = 1'–0"

NORTH CAROLINA PROFESSIONAL SEAL 32138 ENGINEER MATTHYS N. BARKER

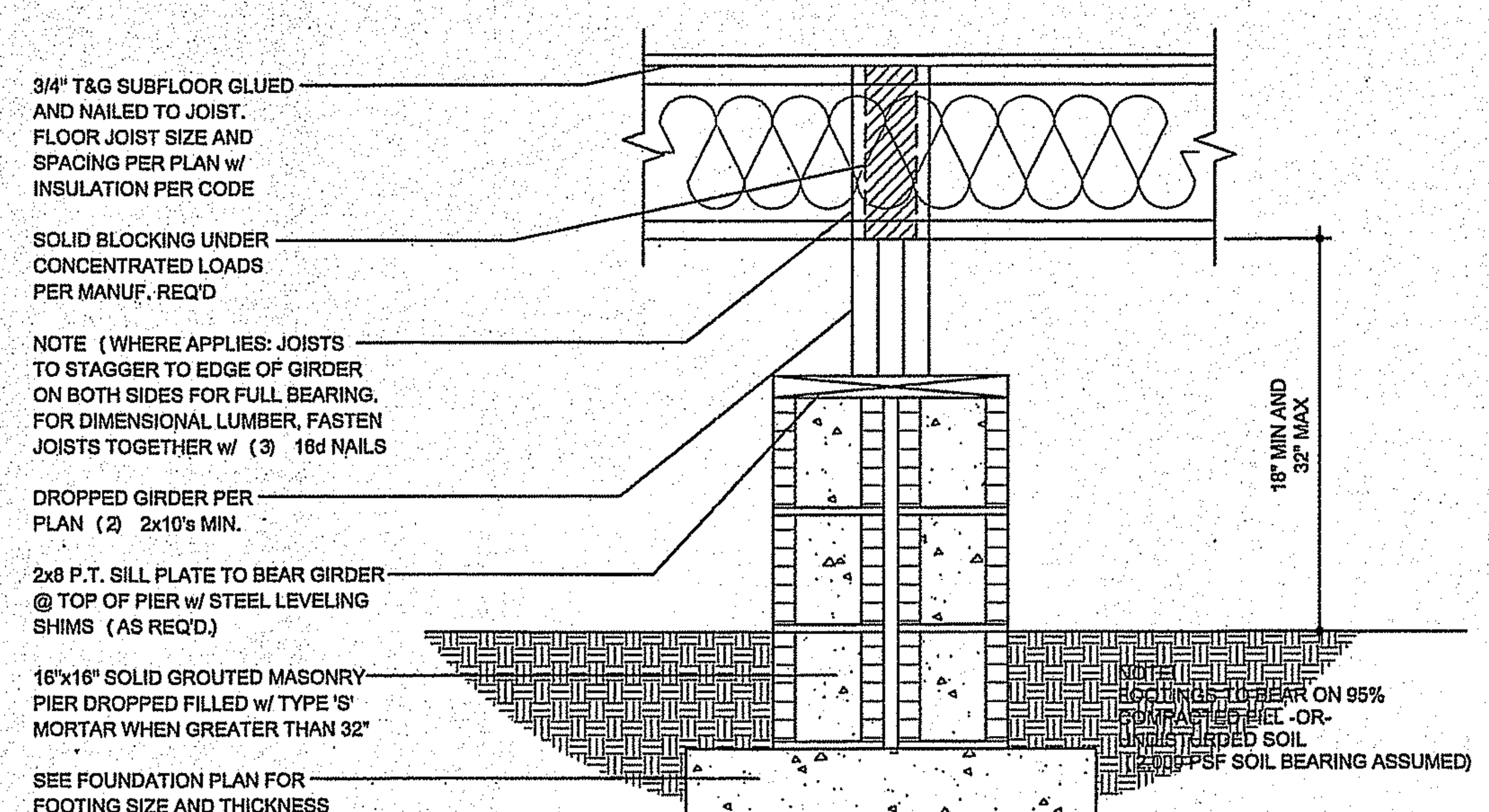
REVISED 1/21/19

Sustainable Engineering & Efficient Designs, P.L.L.C.
PO Box 691071
Charlotte, NC 28227-7018
SEAL FOR STRUCTURAL ONLY

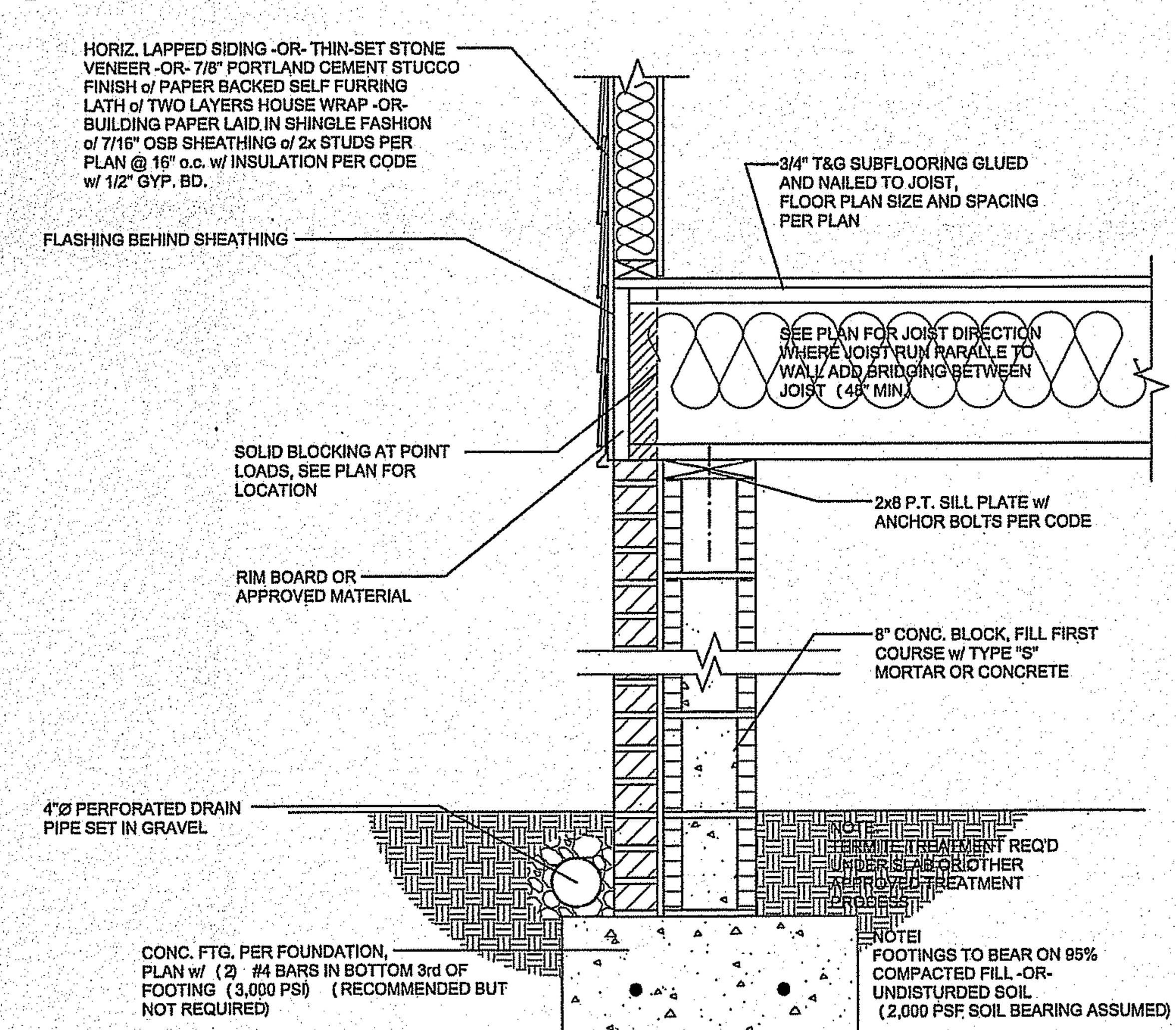
* ALL FIRST FLOOR FRAMING IS 2X10@16"o.c. UNO
DJ = DOUBLE JOIST
PROVIDE SOLID WOOD BLOCKING UNDER ALL PT LOADS UNO
ALL HAND DRAWN DIMENSIONS ARE SCALED & ROUNDED TO THE NEAREST 1/4 FOOT UNO
PROVIDE MIN 18"X24" CRAWLSPACE ACCESS

FOUNDATION KEY

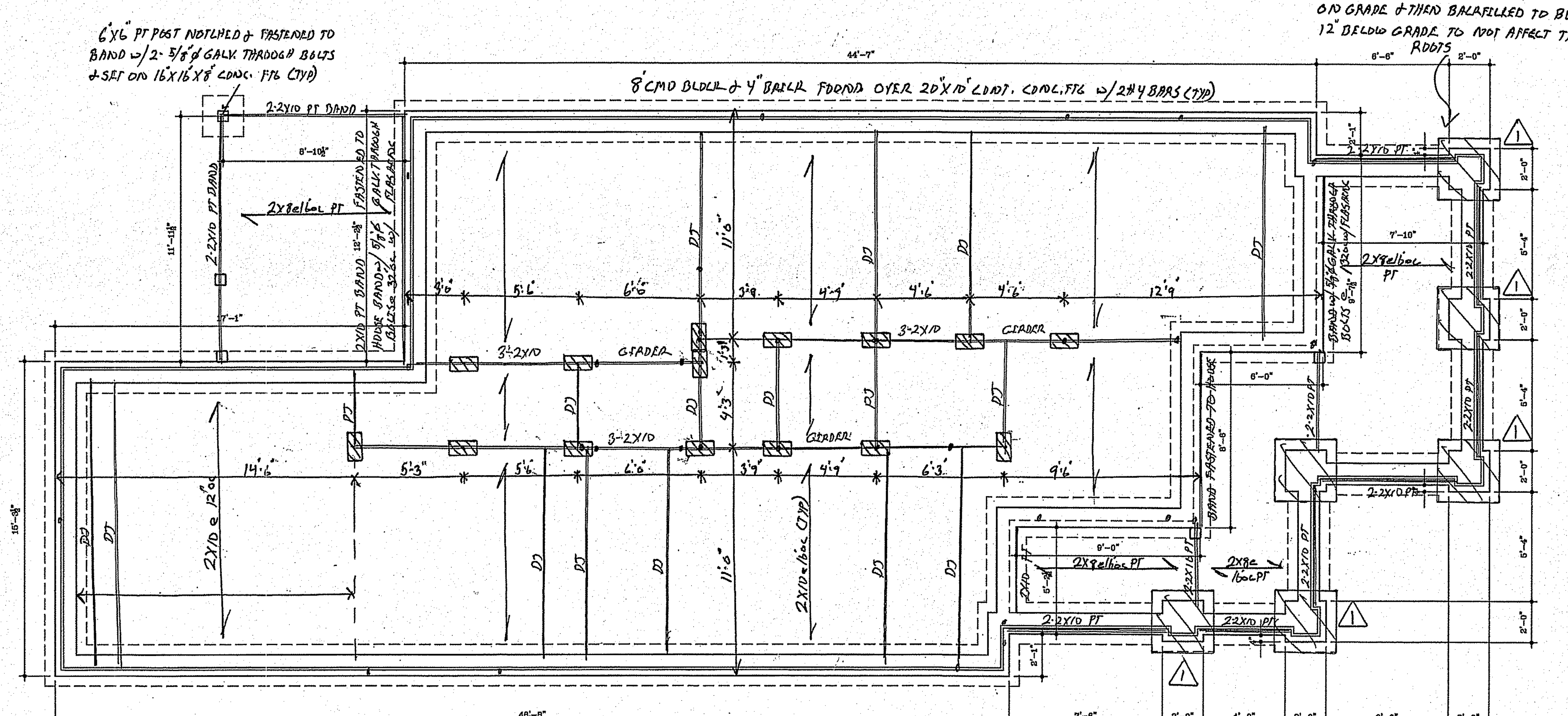
(hatched pier) – 8"X16" CMU PIER OVER 24"X36"X10" CONC. FTG
(1) – 36"X36"X10" CONC. FTG w/ 4#4 BARS EW



202 / A2.0 FOUNDATION DETAIL @ DROPPED GIRDER 1" = 1'–0"



203 / A2.0 FOUNDATION DETAIL @ TYP. EXTERIOR WALL 1" = 1'–0"



201 / A2.0 FOUNDATION PLAN 1/4" = 1'–0"

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

R. ALLEN CONSTRUCTION

A NEW RESIDENCE AT: WILMORE #4 CHARLOTTE, NC

PROJECT NO.	WILMORE04
DATE:	NOVEMBER 21, 216
DRAWN BY:	MSB
CHECKED BY:	MSB

REVISIONS:

NO.	DATE:	BY

COMPUTER REFERENCE NUMBER WILMORE0401 .125

SHEET NO. S2.0 OF 4

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	HU212-3 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'-5"	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'-5"	2
SEE PLAN	5'-0"<	6'-5"<	SEE PLAN

WALL STUD REQUIREMENTS

EXTERIOR WALL HIEGHT	STUD SIZE AND SPACING
H < 10'-0"	2x6 @ 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

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 3-1/2" WOOD STUDS; UNLESS NOTED OTHERWISE.
5. ALL EXTERIOR WALLS ARE ASSUMED TO BE 3-1/2" WOOD STUDS (PLUS 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 CABINETRY TO BE DESIGNED BY OTHERS AND SHALL MEET ALL APPLICABLE ACCESSIBILTY CODES (IF REQUIRED)
9. ALL FINISH AND COLOR SELECTIONS 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 TERMITE CHEMICAL AT FOUNDATION; AS REQUIRED.
12. MINIMUM 22-1/2" (w) x 54-1/2" (l) ATTIC ACCESS DOOR w/ PULL DOWN LADDER TO BE DETERMINED ON SITE.
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 (S) 2x4 STUD JACKS UNDER EACH END SUPPORT; UNLESS NOTED OTHERWISE.
2. MICRO-LAM BEAMS MUST HAVE (3) 2x4 STUD JACKS UNDER EACH END SUPPORT; UNLESS NOTED OTHERWISE.
3. ALL BRICK OVER LOWER ROOFS MUST HAVE ANGLE WITH STOPS LAG SCREWS TO STUDS ABOVE AND ACCORDANCE WITH DETAIL.
4. ALL WOOD I-JOISTS AND OPEN 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 PLATE WITHOUT STUDS DIRECTLY UNDER THEM.
6. WHERE PARTITIONS FALL BETWEEN FLOOR TRUSSES, 2'x4" LADDERS @ 16"o.c. MUST BE PLACED PERPENDICULAR TO THE TRUSSES TO SUPPORT THE PLYWOOD DECKING.
7. 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.
8. WHERE CILING 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 ALONF 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 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.

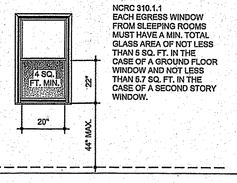
STAIRWAYS

1. TREADS SHALL BE 9" WIDE 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 36".

EGRESS WINDOW REQUIREMENTS

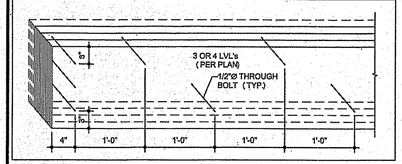
NCRC 2012 310.1
EVERY SLEEPING WOOM SHALL HAVE AT LEAST ONE OPERABLE EXTERIOR WINDOW OR EXTERIOR DOOR APPOVED FOR EMERGENCY EGRESS OR RESCUE. THE UNITS MUST BE OPERABLE FROM THE INSIDE TO A FULL CLEAR OPENING WITHOUT THE USE OF A KEY OR TOOL. WHERE WINDOWS ARE PROVIDED AS A MEANS OF EGRESS OR RESCUE, THEY SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR.

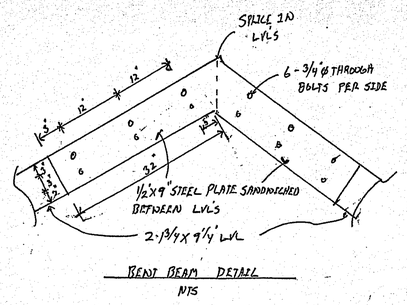
NCRC 310.1.1
THE MIN. NET CLEAR OPENING HEIGHT DIMENSION SHALL BE 22". THE MIN. NET CLEAR OPENING WIDTH DIMENSION SHALL BE 20". THE NET CLEAR OPENING AREA SHALL NOT BE LESS THAN 4 SQ. FT.



NCRC 310.1.1
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.

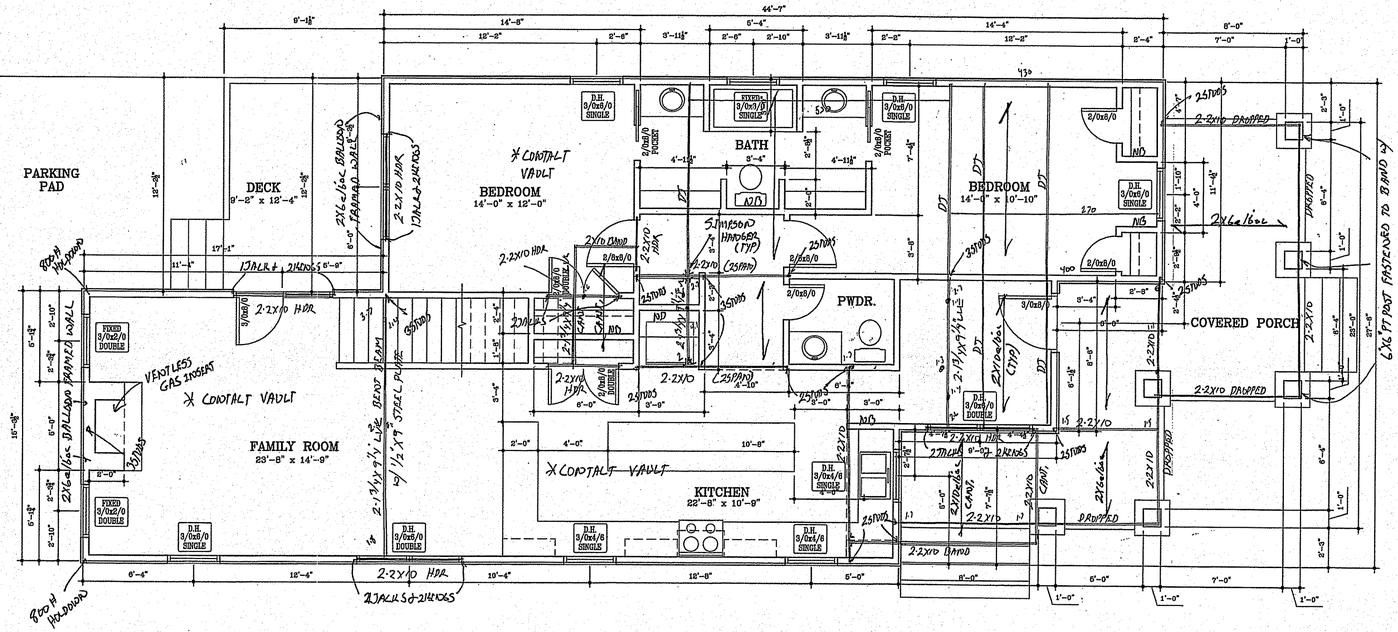
LVL BOLTING PATTERN DETAIL





BEAM BEAM DETAIL
NTS

* ALL SECOND FLOOR FRAMING IS 2X10 @ 16" O.C. U.N.O.
DJ = DOUBLE JOIST
CANT= CANTILEVERED
ALL FIRST FLOOR HDR'S ARE 2-2X10 W/ JACK & KING STUDS U.N.O.
PROVIDE SOLID WOOD BLOCKING & STUDS UNDER ALL FT LOADS U.N.O.
PROVIDE 2 STUDS UNDER ALL DJ U.N.O.
NB = NOT TO BEARING
WALL BRACING PROVIDED BY CONT. SHEATHING FASTENED W/ 8d NAILS @ 6" O.C. O.N. EDGE & 12" O.C. IN THE FIELD TO MEET & EXCEED THE INTENT OF SECTION R602.10 U.N.O.



101 / A1.0 LOWER LEVEL PLAN

1/4" = 1'-0"

MAIN LEVEL	
HEATED SQUARE FOOT	1,322 SQ. FT.
DECK	112 SQ. FT.
COVERED FRONT PORCH	185 SQ. FT.
UPPER LEVEL	
HEATED SQUARE FOOT	575 SQ. FT.
TOTAL	
HEATED SQUARE FOOT	1,897 SQ. FT.
UNHEATED SQUARE FOOT	297 SQ. FT.

REVISED 1/21/19

Sustainable Engineering &
Efficient Designs, P.L.L.C.
PO Box 691071
Charlotte, NC 28227-7018
SEAL FOR STRUCTURAL ONLY

R. ALLEN MSJI DRAFTING CONSTRUCTION
1571 POARCH ROAD
LINCOLNTON, NORTH CAROLINA
TELEPHONE (704) 735-8944
FAX (704) 736-1729

A NEW RESIDENCE AT:
WILMORE #4
CHARLOTTE, NC

PROJECT NO.	WILMORE04
DATE:	NOVEMBER 21, 216
DRAWN BY:	MSB
CHECKED BY:	MSB

REVISIONS:

NO.	DATE:	BY

COMPUTER REFERENCE NUMBER
WILMORE0401 .125

SHEET NO.
S1.0 OF 6

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	HU212-3 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 > 16'-0"	CONSULT ENGINEER

GENERAL PLAN NOTES

1. DRAWINGS ARE NOT TO BE SCALED; DIMENSIONS IN QUESTION SHALL BE CLARFIFIED 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 3-1/2" WOOD STUDS; UNLESS NOTED OTHERWISE.
5. ALL EXTERIOR WALLS ARE ASSUMED TO BE 3-1/2" WOOD STUDS (PLUS 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 CABINETRY TO BE DESIGNED BY OTHERS AND SHALL MEET ALL APPLICABLE ACCESSIBILTY CODES (IF REQUIRED)
9. ALL FINISH AND COLOR SELECTIONS 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 TERMITE CHEMICAL AT FOUNDATION; AS REQUIRED.
12. MINIMUM 22-1/2" (w) x 54-1/2" (l) ATTIC ACCESS DOOR w/ PULL DOWN LADDER TO BE DETERMINED ON SITE.
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 (5) 2x4 STUD JACKS UNDER EACH END SUPPORT; UNLESS NOTED OTHERWISE.
2. MICRO-LAM BEAMS MUST HAVE (3) 2x4 STUD JACKS UNDER EACH END SUPPORT; UNLESS NOTED OTHERWISE.
3. ALL BRICK OVER LOWER ROOFS MUST HAVE ANGLE WITH STOPS LAG SCREWS TO STUDS ABOVE AND ACCORDANCE WITH DETAIL.
4. ALL WOOD I-JOISTS AND OPEN 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 PLATE WITHOUT STUDS DIRECTLY UNDER THEM.
6. WHERE PARTITIONS FALL BETWEEN FLOOR TRUSSES, 2"x4" LADDERS @ 16"o.c. MUST BE PLACED PERPENDICULAR TO THE TRUSSES TO SUPPORT THE PLYWOOD DECKING.
7. 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.
8. WHERE CILING 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 ALONF 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 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.

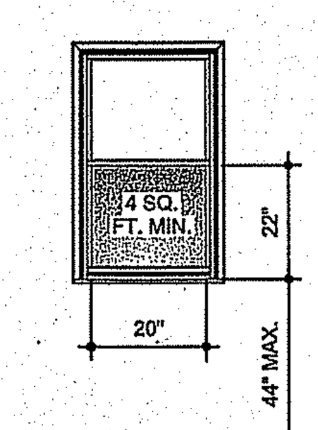
STAIRWAYS

1. TREADS SHALL BE 9" WIDE 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 36".

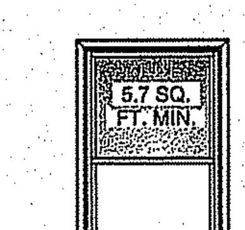
EGRESS WINDOW REQUIREMENTS

NCRC 2012 310.1
EVERY SLEEPING WOOM SHALL HAVE AT LEAST ONE OPERABLE EXTERIOR WINDOW OR EXTEROR DOOR APPOVED 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.

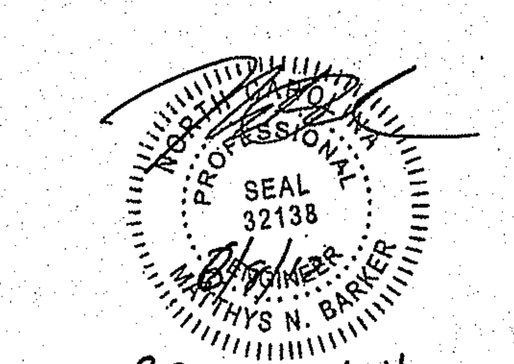
NCRC 310.1.1
THE MIN, NET CLEAR OPENING HEIGHT DIMENSION SHALL BE 22". THE MIN. NET CLEAR OPENING WIDTH DIMENSION SHALL BE 20". THE NET CLEAR OPENING AREA SHALL NOT BE LESS THAN 4 SQ. FT.



NCRC 310.1.1
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	1,322 SQ. FT.
	DECK	112 SQ. FT.
	COVERED FRONT PORCH	185 SQ. FT.
UPPER LEVEL		
	HEATED SQUARE FOOT	575 SQ. FT.
TOTAL		
	HEATED SQUARE FOOT	1,897 SQ. FT.
	UNHEATED SQUARE FOOT	297 SQ. FT.



REVISED 1/21/19

Sustainable Engineering &
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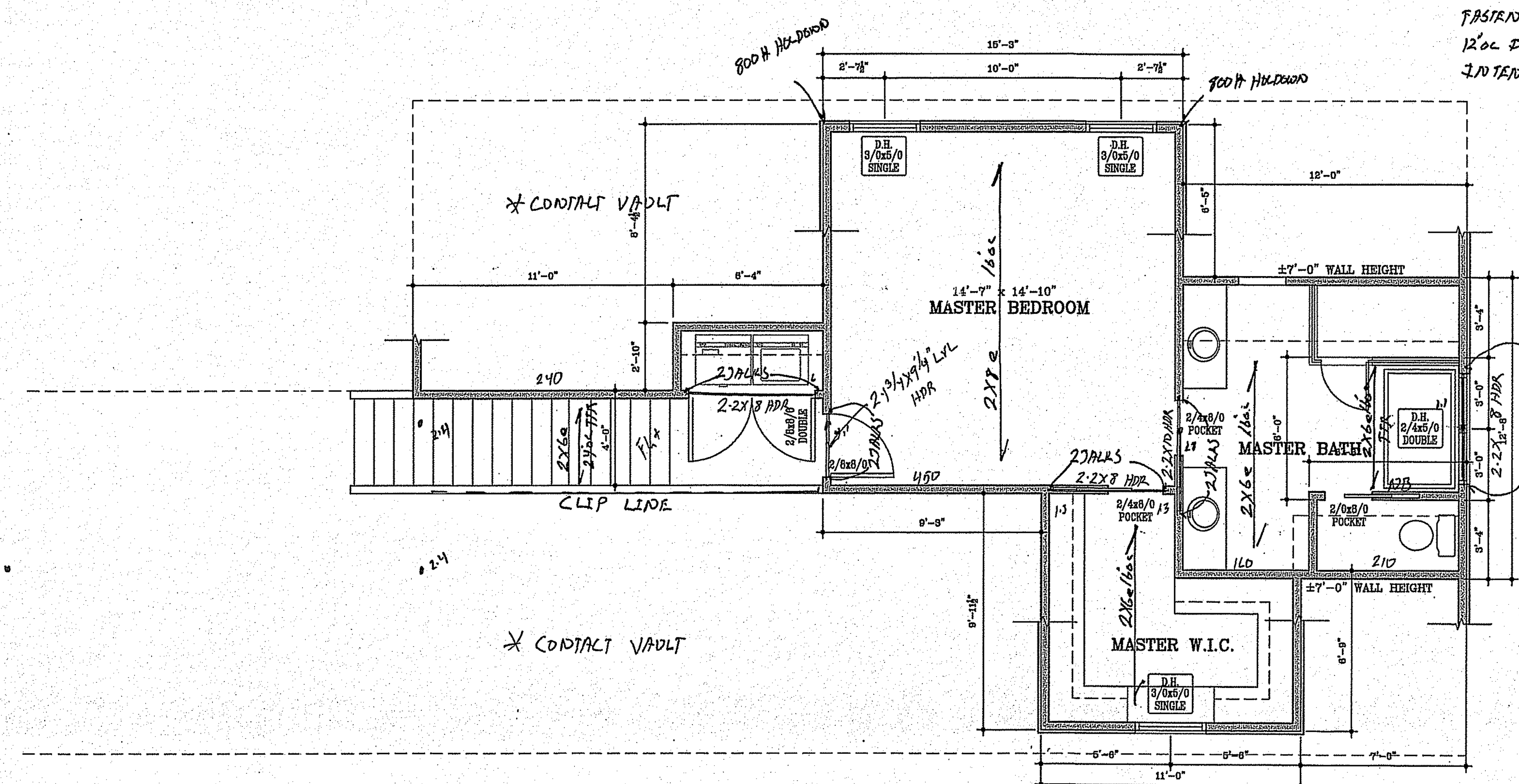
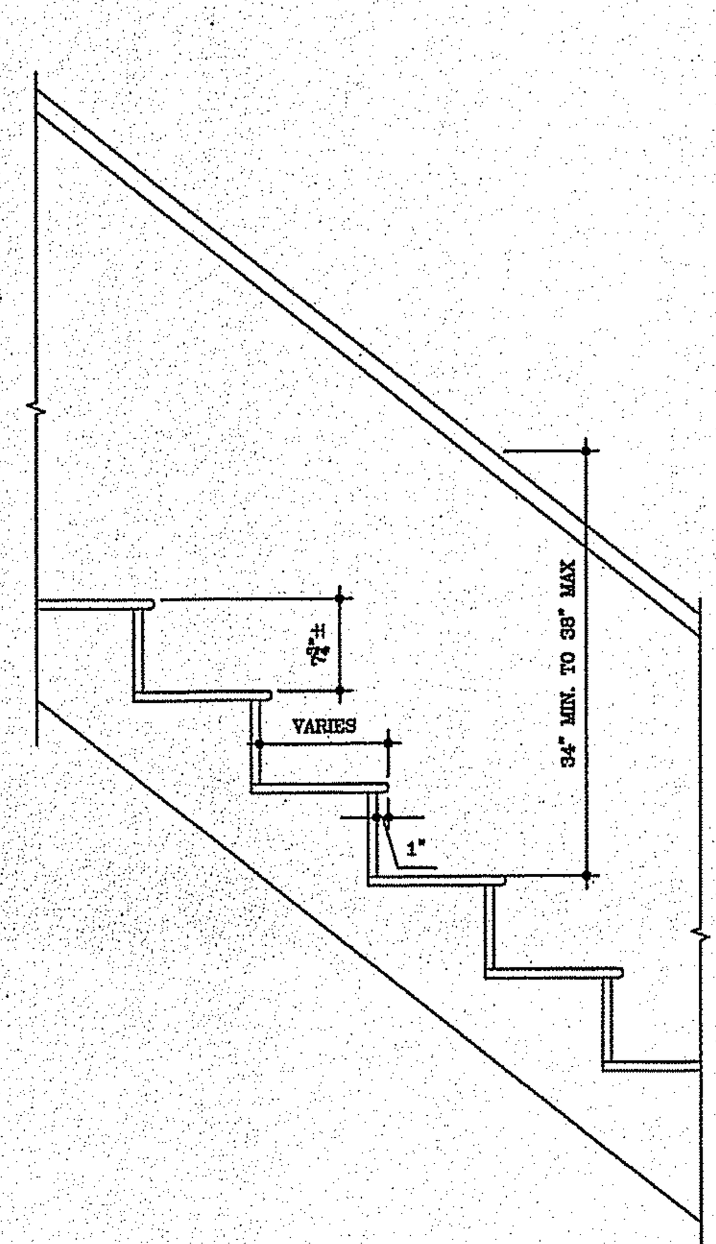
PO Box 691071
Charlotte, NC 28227-7018
SEAL FOR STRUCTURAL ONLY

*ALL ATTIC FRAMING IS 2X8@16"oc UNO
TTR= TIED TO RAFTERS
ALL SECOND FLOOR HDRS ARE 2-2X8 w/ 1JACK & 1KING STUD UNO
FURR DOWN CONTACT RAFTERS FOR INSULATION OR SPRAY FOAM UNO
FASTEN CONTACT RAFTERS TO EXTERIOR WALL TOP PLATES w/ SIMPSON H2.5A HURRICANE STRAPS @ 16"oc UNO
NB= NON-BEARING
WALL BRACING PROVIDED BY CONT. SHEATHING FASTENED w/ 8d NAILS @ 6"oc ON EDGE & 12"oc IN THE FIELD TO MEET & EXCEED THE INTENT OF SECTION R602.10 UNO





102 / A1.1 TYP. STAIR DTL. 3/4" = 1'-0"

101 / A1.1 UPPER LEVEL PLAN 1/4" = 1'-0"

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

R. ALLEN CONSTRUCTION

A NEW RESIDENCE AT:
WILMORE #4
CHARLOTTE, NC

PROJECT NO.	WILMORE04
DATE:	NOVEMBER 21, 216
DRAWN BY:	MSB
CHECKED BY:	MSB

REVISIONS:

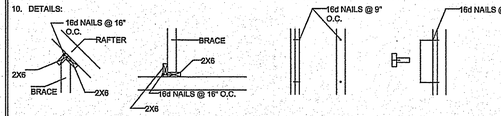
NO.	DATE:	BY

COMPUTER REFERENCE NUMBER
WILMORE0401 .125

SHEET NO.
S1.1 OF 4

ROOF FRAMING RESIDENTIAL PLAN NOTES

1. RAFTERS TO BE 2x8's @ 16" o.c. UNLESS NOTED OTHERWISE.
2. ROOF SHEATHING OVER RAFTERS TO BE 1/2" NOMINAL ORIENTED STRAND BOARD (OSB). ROOF SHEATHING OVER TRUSSES TO BE 5/8" NOMINAL (OSB). NAIL PER MANUFACTURER'S RECOMMENDATIONS.
3. COLLAR (WIND) TIES TO BE 2X4 @ 4'-0" O/C AT ALL RIDGES. THREE COLLAR (WIND) TIES MINIMUM AT ALL RIDGES, EVEN IF TWO TIES MUST BE PUT ON ONE SET OF RAFTERS.
4. ⊗ -INDICATES LOCATION OF RAFTER BRACE AT RAFTER LEVEL.
5. ⊗ -INDICATES DIRECTION OF BRACE TO PARTITION / BEAM BELOW.
6. ⊗ -INDICATES VERTICAL OR ALMOST VERTICAL BRACE TO PARTITION / BEAM BELOW.
7. ALL BRACES TO BE 2-2X4 T-BRACES NAILED W/ 16d NAILS AT 9 INCHES O/C FULL LENGTH. BRACES LONGER THAN 10'-0" MUST BE BRACED HORIZONTALLY IN TWO OPPOSING DIRECTIONS U.N.O.
8. ALL HOGS ON CEILING JOISTS TO BE 2-2X6. NAIL VERTICAL HOG ON CEILING JOIST TO 2-2X4 BRACE WITH 2-16d NAILS.
9. MAXIMUM SPANNING OF RAFTER BRACES FOR 2X6 HOG IS 4'-0" O/C. RAFTERS CAN BE SPLICED OVER HOGS WITH 2-2X4 BRACES.
10. DETAILS:



2X6 HOG - ROOF | 2X6 HOG - CEILING | 2-2X4'S BRACE | T- BRACE

11. BRACE TOP OF ALL ROOF RAFTER KNEE WALLS TO CEILING JOISTS WITH DIAG. 2X4 AT 4'-0" O/C WITH 7 16d NAILS EACH END OF DIAGONAL BRACE.
12. ROOF TRUSSES TO BE BUILT AND DESIGNED PER MANUFACTURER'S RECOMMENDATIONS. SUBMIT TRUSS LAYOUT TO ENGINEER FOR REVIEW PRIOR TO FABRICATION.

ROOF NOTES

- RAFTERS ARE 2X8 @ 16" O.C. (U.N.O.)
- HIPS AND RIDGES ARE 2X10 (U.N.O.)
- VALLEYS ARE 2X10 (U.N.O.)
- SHADED AREAS ARE OVERBUILT
- INSTALL A MINIMUM OF (2) STUDS UNDER ALL ROOF BRACES THAT BEAR ON WALLS

NOTE:

BUILDER TO CONFIRM THE SQ. IN./FT. VENTED AREA w/ THEIR MANUF. OF VENTING PRODUCTS USED FOR THIS CONSTRUCTION SO THEY WILL COMPLY w/ THE CALCULATED SQ. IN./FT. OF VENTED AREA REQUIRED.

PROVIDE 16" OVERHANG THROUGHOUT U.N.O.

ROOF VENTILATION CALCULATIONS

2" CONT. ALUM. SOFFIT VENT = 8 SQ. IN./FT. OF VENT AREA
RIDGE VENT = 12.5 SQ. IN./FT. OF VENT AREA

MAIN BUILDING (AS PERSECTION R806.2 OF 2009 NCRC) :

ATTIC VENTILATED AREA: 2,032 S.F. x 144 SQ. IN. x 1/300 = 975 SQ. IN. VENT REQUIRED

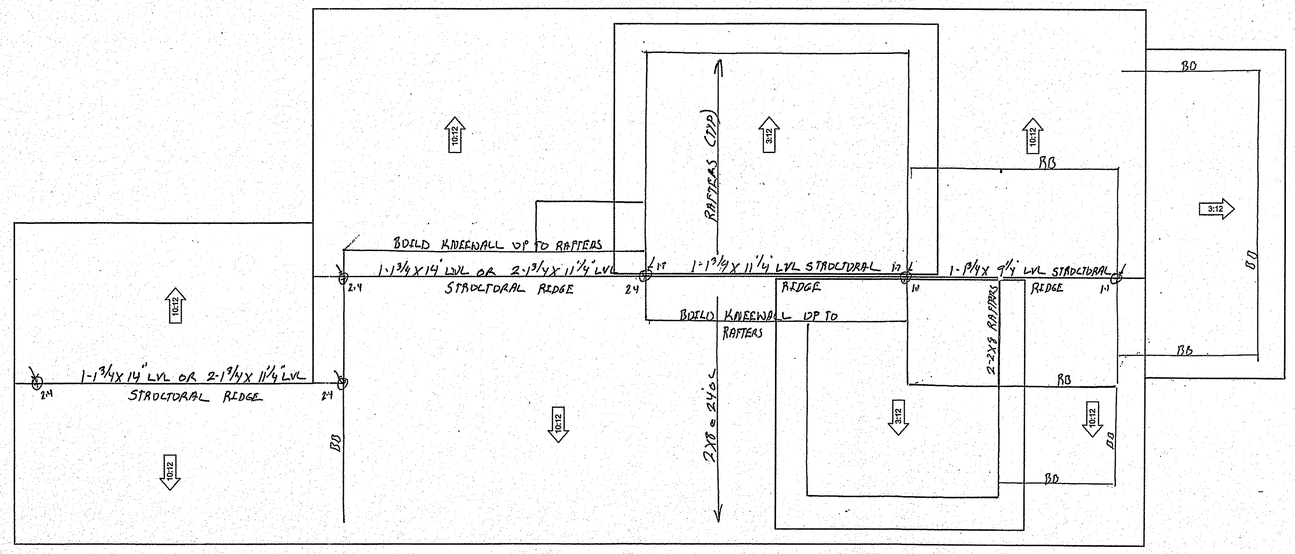
60% OF 976 SQ. IN. = 585 SQ. IN. OF SOFFIT VENTILATION (73.125)
40% OF 824 SQ. IN. = 390 SQ. IN. OF RIDGE VENTILATION (31.2)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 32138 MATTHYS N. BARKER

REVISED 1/21/19

Sustainable Engineering & Efficient Designs, P.L.L.C.
PO Box 691071
Charlotte, NC 28227-7018
SEAL FOR STRUCTURAL ONLY

* ALL RAFTERS ARE 2X8 @ 24" O.C. U.N.O.
BB = BEAM BELOW
RB = RAFTERS BEAR



402 / A4.1 ROOF PLAN

1/4" = 1'-0"

R. ALLEN MSJI DRAFTING CONSTRUCTION
1871 POARCH ROAD
LINCOLNTON, NORTH CAROLINA
TELEPHONE (704) 732-6544
FAX (704) 732-1720

A NEW RESIDENCE AT:
WILMORE #4
CHARLOTTE, NC

PROJECT NO. WILMORE04
DATE: NOVEMBER 21, 216
DRAWN BY: MSB
CHECKED BY: MSB

REVISIONS:

NO.	DATE:	BY

COMPUTER REFERENCE NUMBER WILMORE0401 .125

SHEET NO. S4.1 OF 4

UPDATED ITEMS (JUNE MEETING)

1. **FLOATING FOUNDATION** – provided is documentation from our engineer Matthys Barker (President, Sustainable Engineering and Efficient Designs, PLLC).

SUSTAINABLE ENGINEERING & EFFICIENT DESIGNS, PLLC
PO Box 691071
Charlotte, NC 28227-7018
Phone: 704.239.0478 Fax: 704.973.9276

June 12, 2017

Allen Design Associates, Inc.
Attn: Robert Allen
5601 Camilla Dr.
Charlotte, NC 28226

Re: Wilmore #4

Dear Robert:

You contacted SEED, PLLC in reference to the design provided to protect the tree roots on the front side of the house. The new porch footings will be formed and poured on grade without digging. Then the footings will be backfilled to meet the code required footing depth of 12" below grade after the foundations are built up off the footings. This design will effectively limit the potential for damaging the trees root system and will effectively support the imposed porch loads to meet the structural requirements of The 2012 North Carolina Residential Building Code.

This report represents our opinions based on calculations and our experience. The scope of our evaluation was limited to the content of this report. Therefore, this report should not be construed as an implication that there are no deficiencies or defects at other locations in this structure.

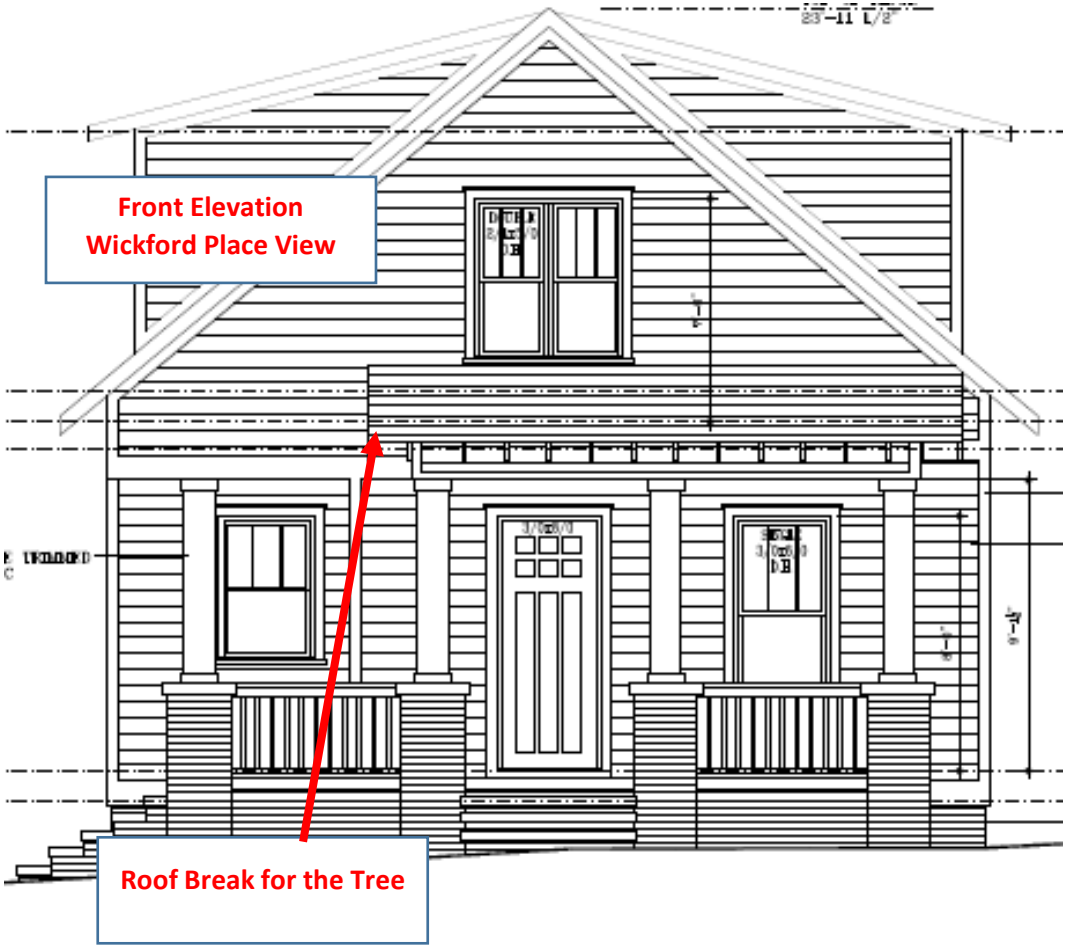
If I can be of any further assistance to you with regards to this report, please do not hesitate to contact me at 704.239.0478.

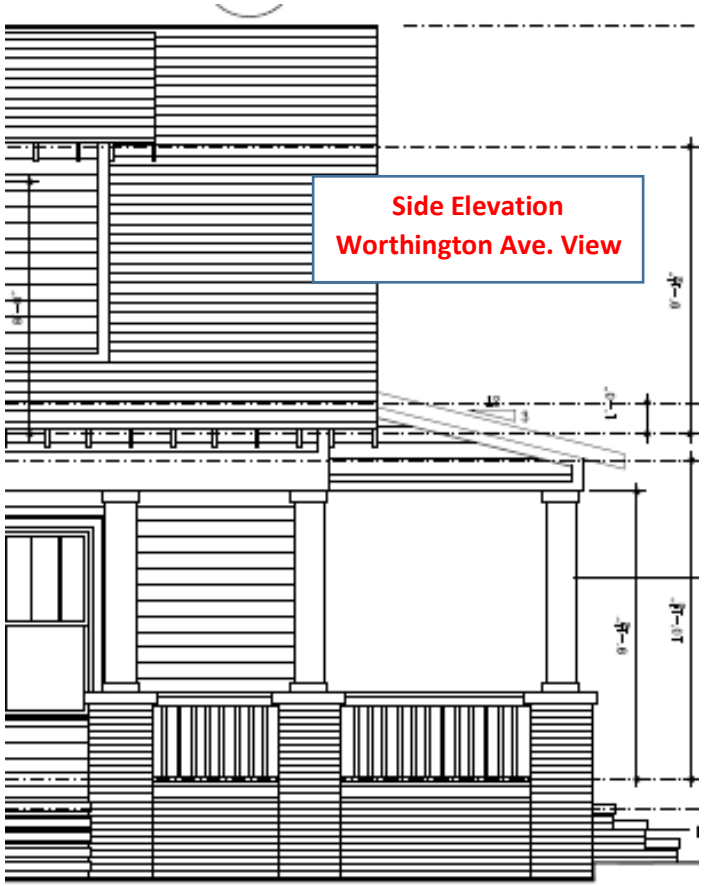
Sincerely,

Matthys N. Barker, PE
NC License No. 32138

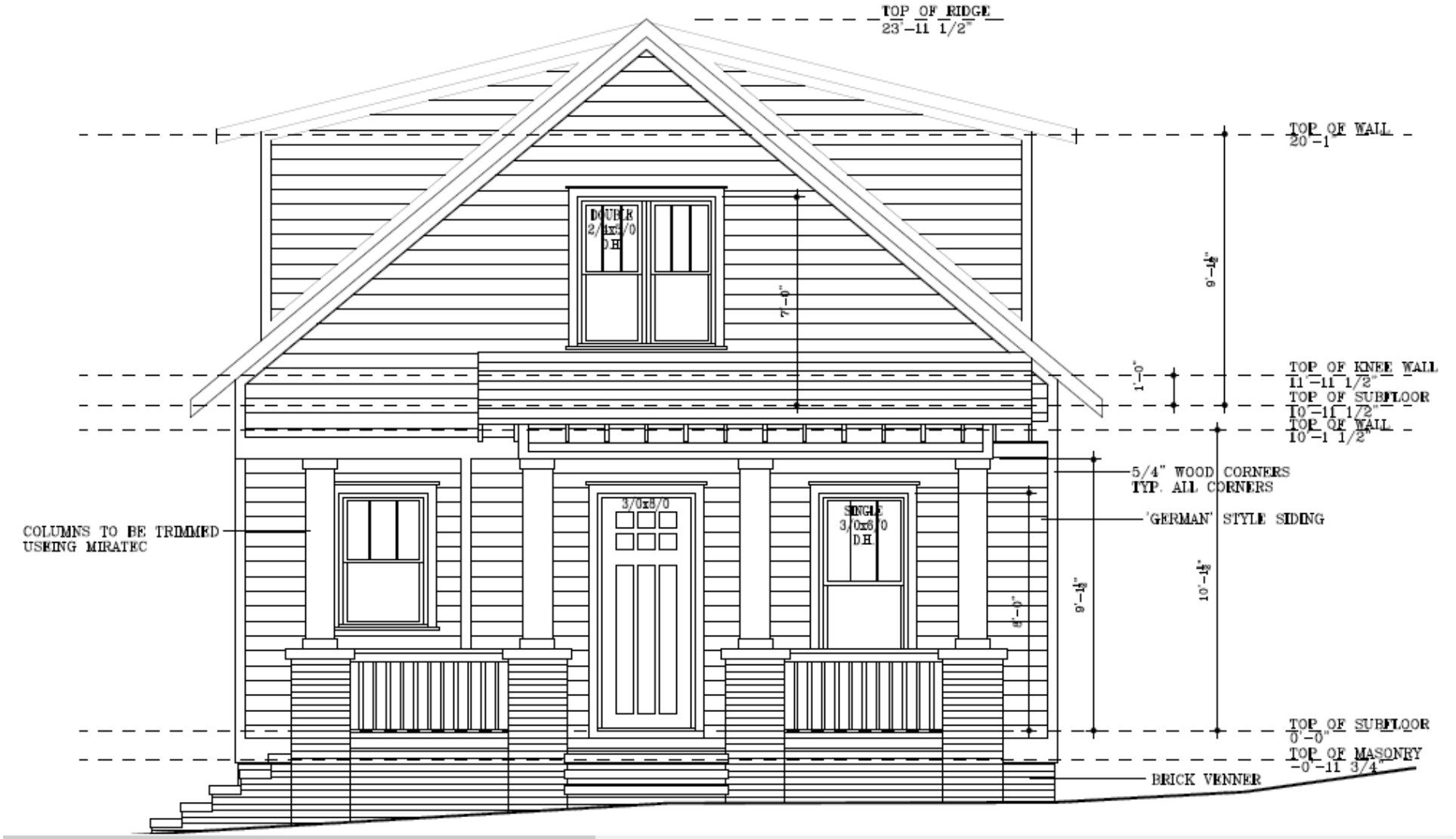
2. **TREE PRESERVATION**– the corner Willow Oak Tree will have a protection fence the duration of construction and the fence will be located one (1’) foot from the positioning of the foundation / house.

3. **UPDATED FRONT ELEVATION** – the roofline of the front porch has been updated.

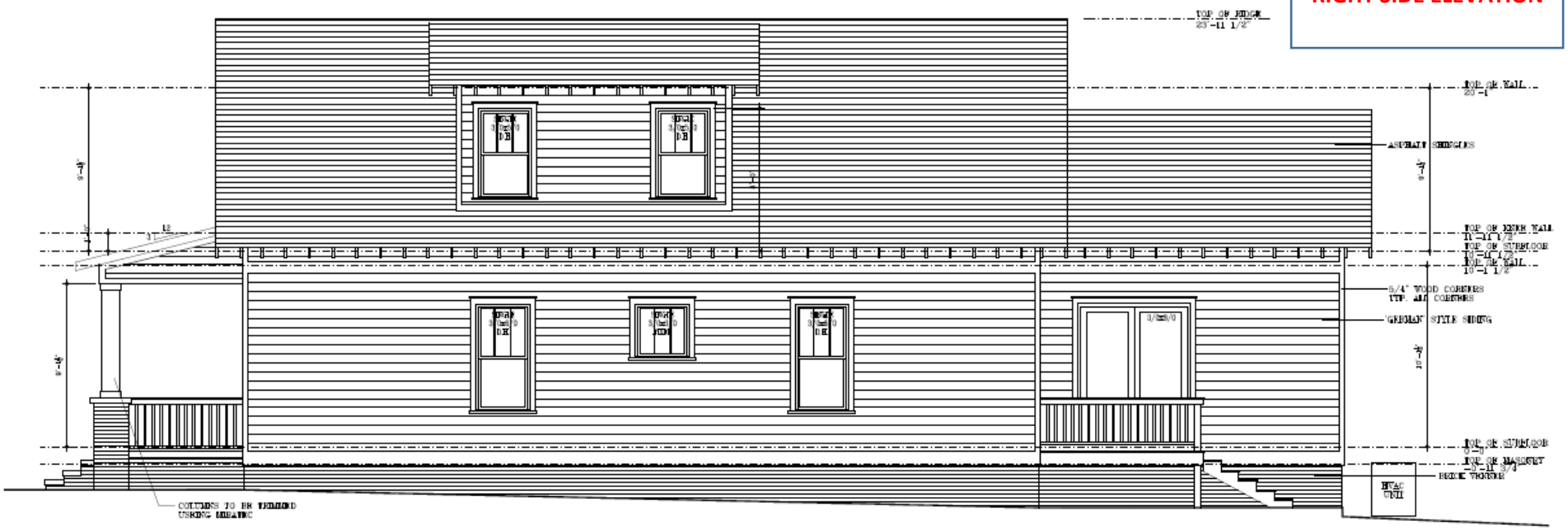




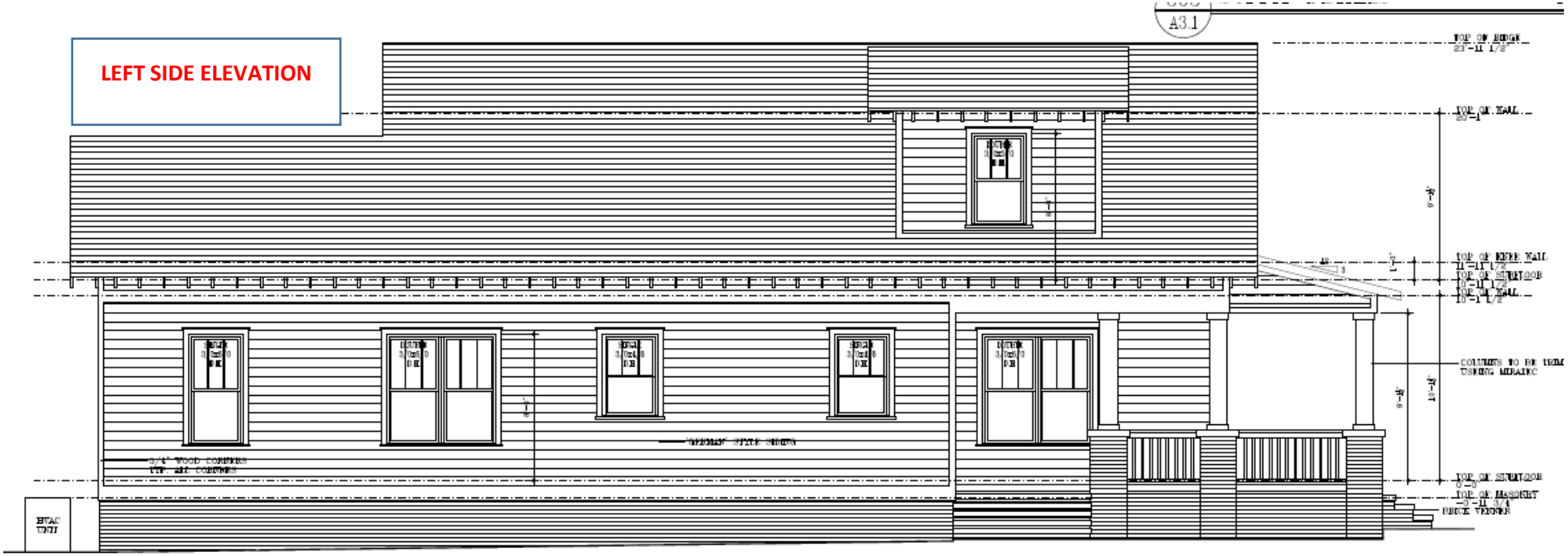
FRONT ELEVATION



RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION



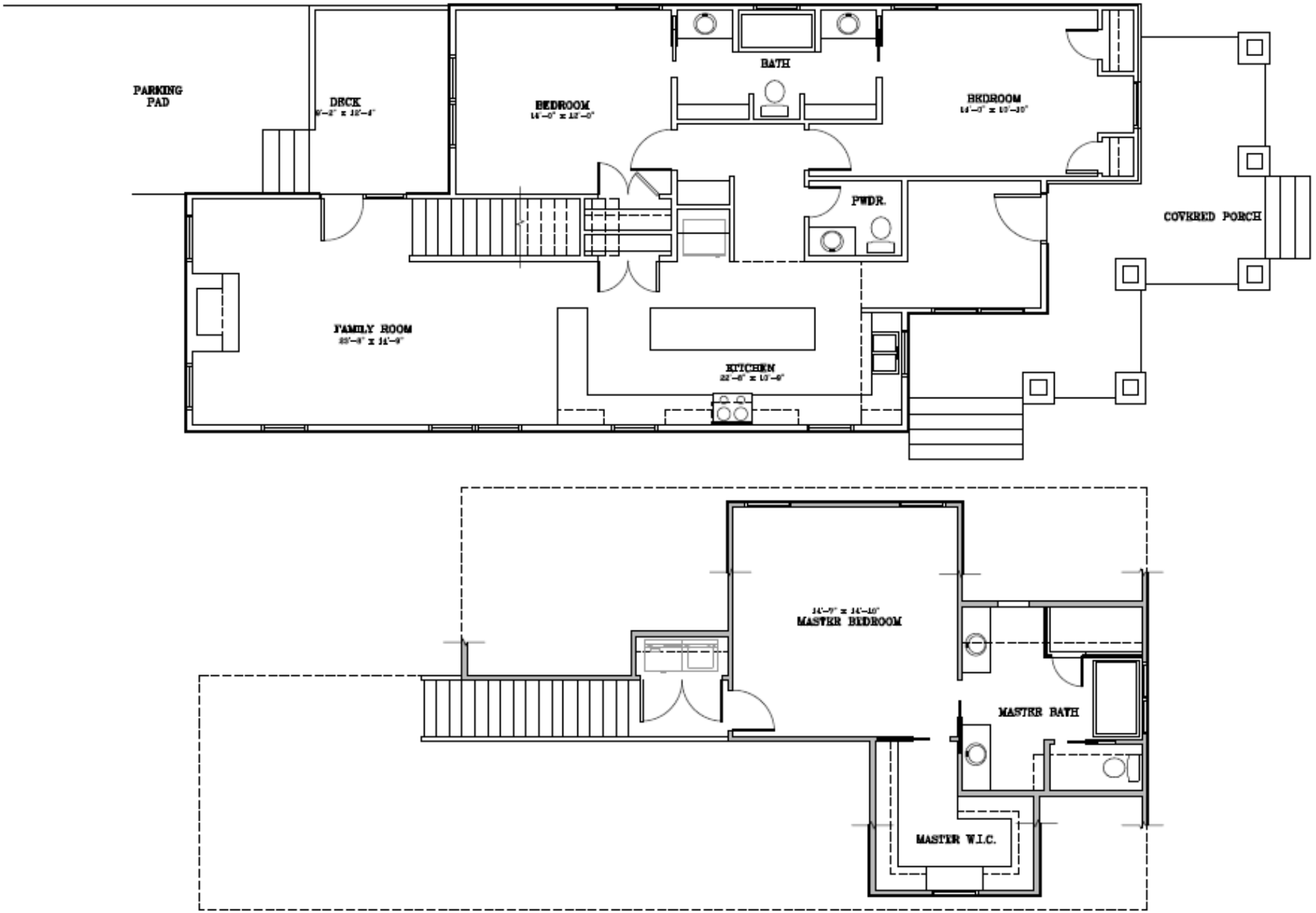
REAR ELEVATION

301
A3.1

REAR ELEVATION

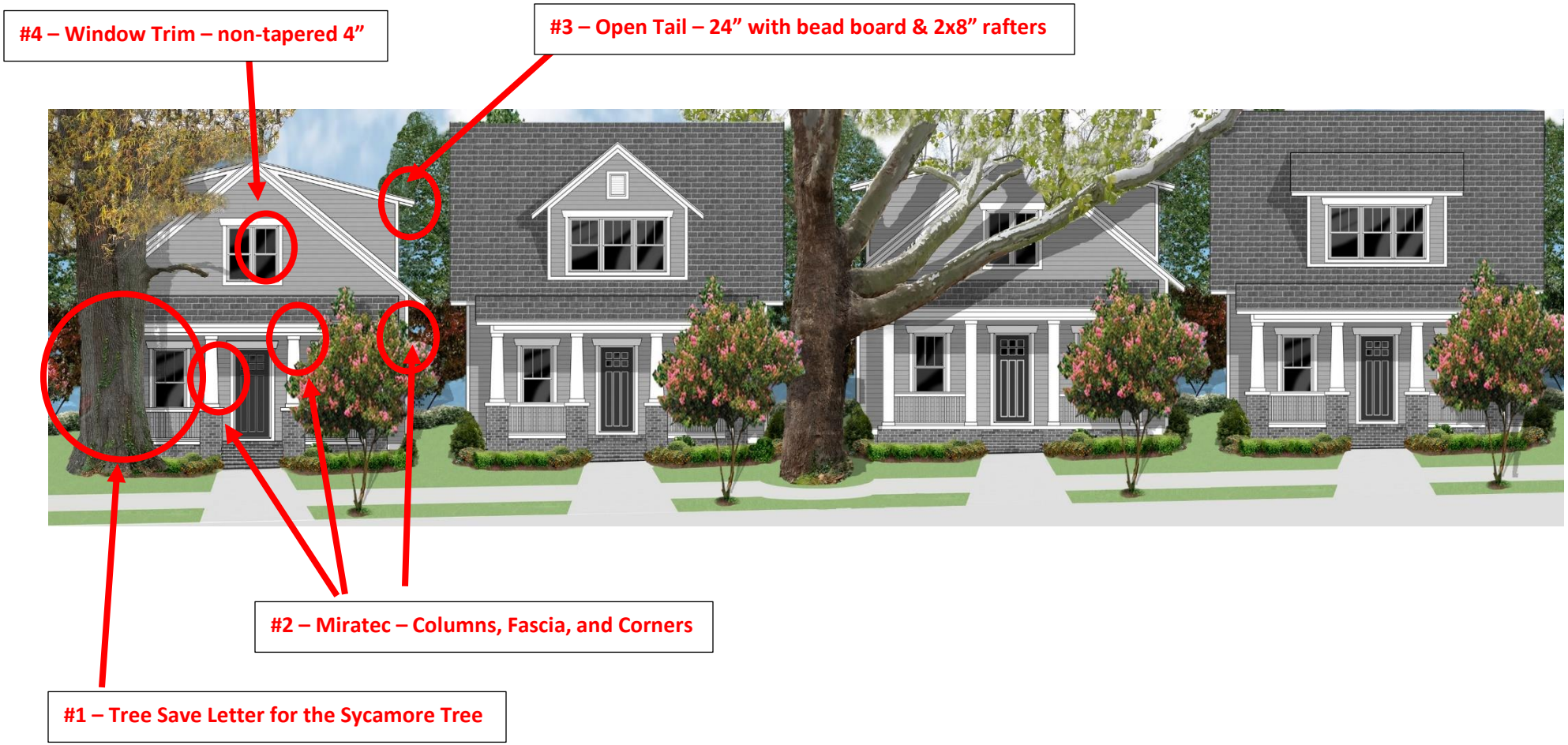
1/4" = 1'-0"

LOT 4 FLOORPLAN



PRIOR MEETING (MAY) - OVERVIEW OF UPDATED ITEMS on LOT 4:

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. **MIRATEK –** 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 ¾ 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



STREETSCAPE

UPDATED – LOT 2 added columns from ceiling to floor on the front porch

LOT 4 **LOT 3** **LOT 2** **LOT 1**

PREVIOUS

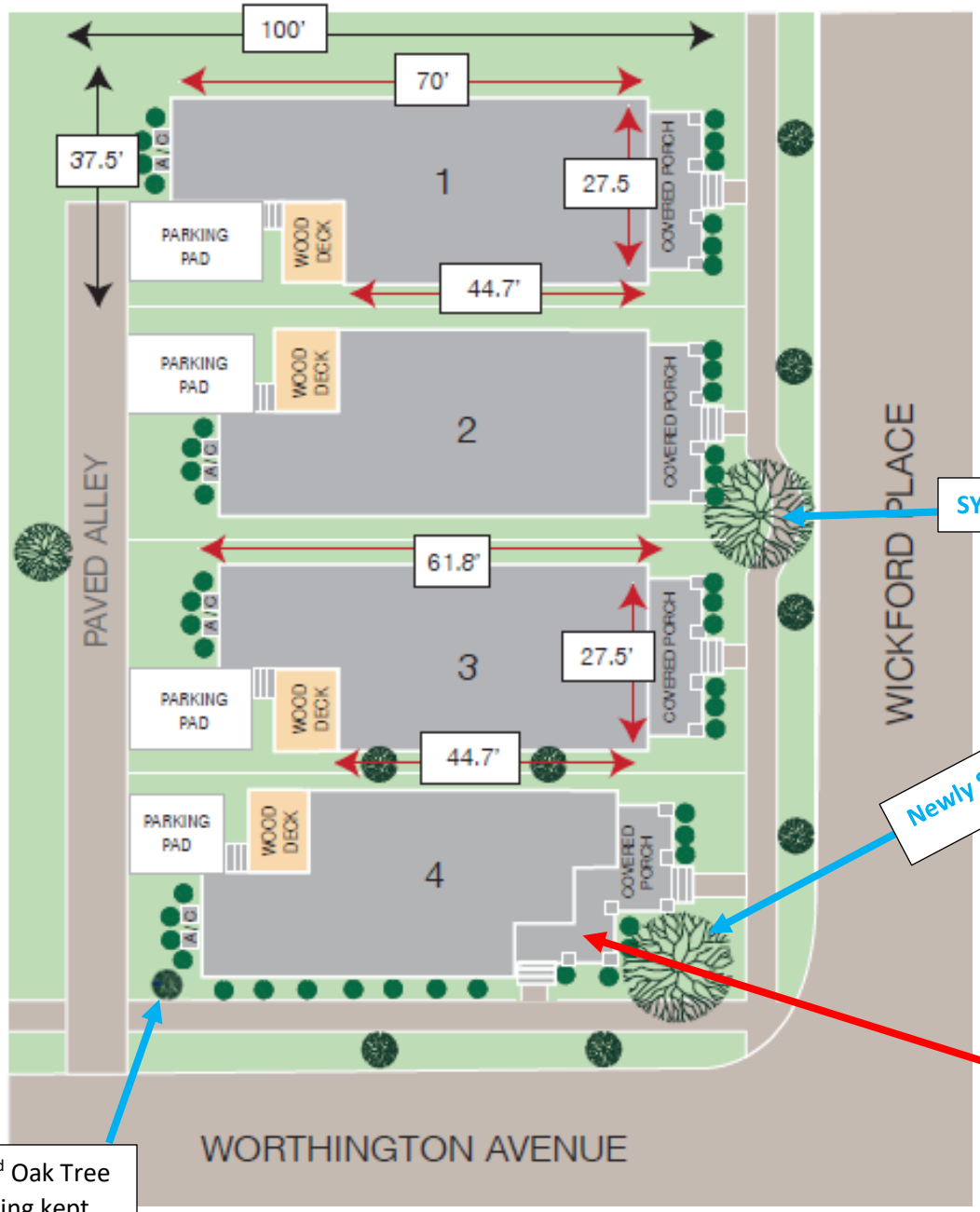
MATERIAL DETAIL – EXAMPLE OF OPEN TAIL, COLUMNS, & BAND

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**

SITE PLAN – (UPDATED)



SYCAMORE Tree

Newly Saved OAK Tree

2nd Oak Tree being kept

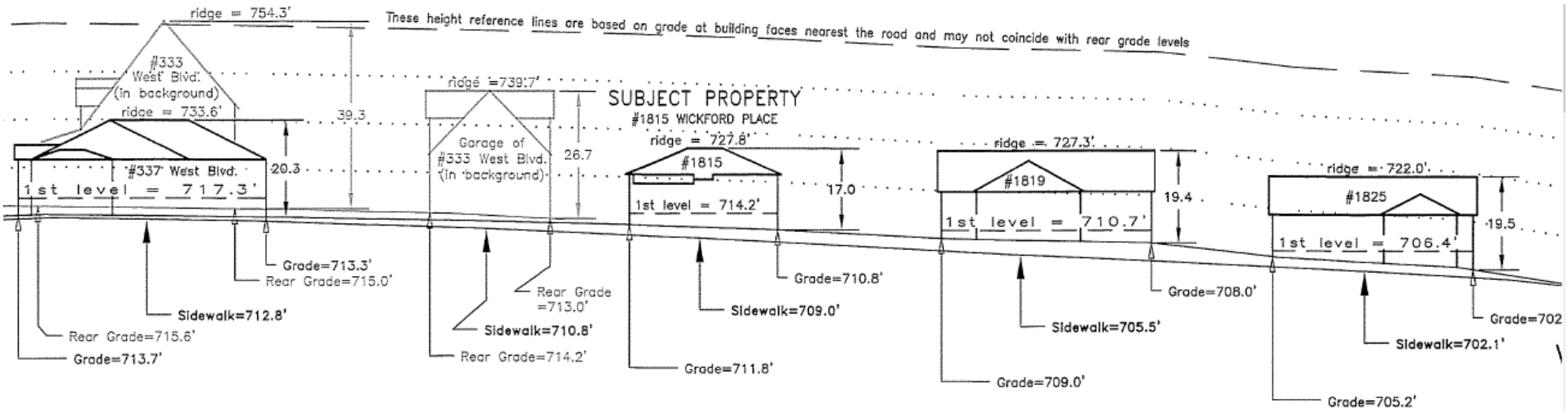
LOT 4 – created a wrap-around porch that runs along Worthington Ave for more curb appeal at the Worthington & Wickford corner. Added stairs on the Worthington Ave. side as well. Pushed the house slightly back to be able to keep the Oak Tree.

LOT 4 - HEIGHT / MASSING

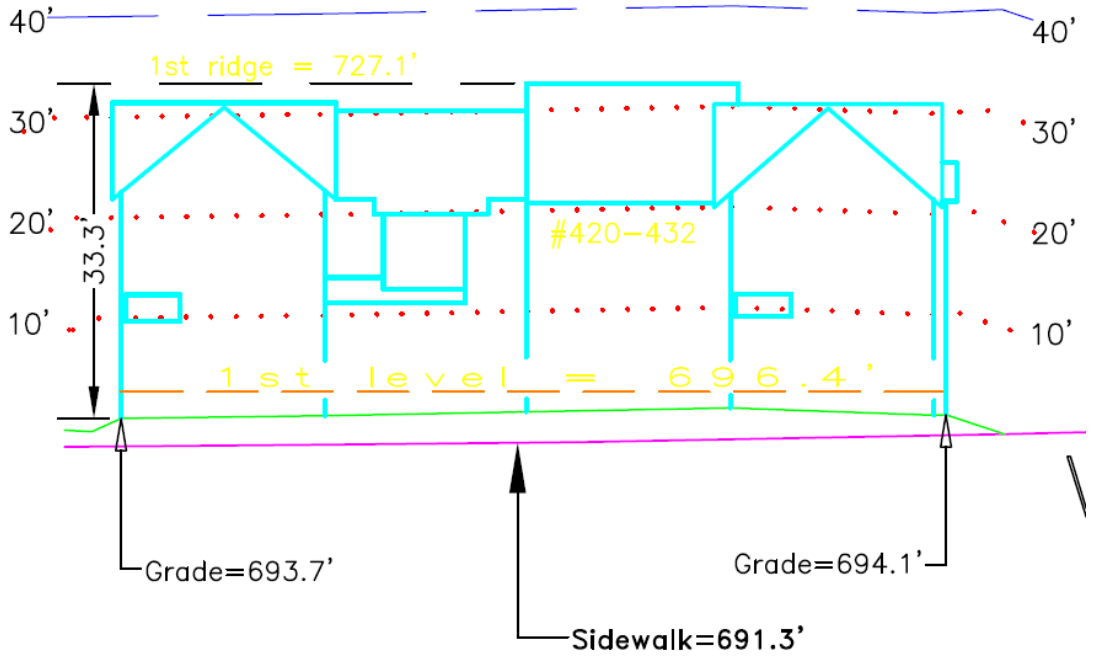
- We have reduced the roofline by 1 foot to 23’ 11.5”, by making the 2nd Floor 9’ ceiling height.

STREET SURVEYS

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



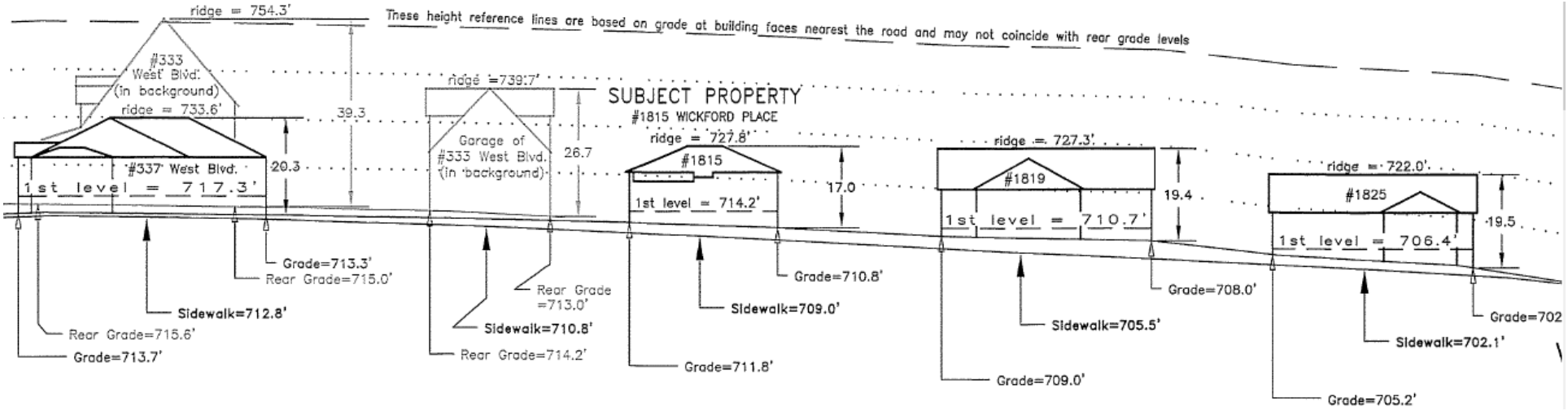
Worthington Ave (Wickford Place)



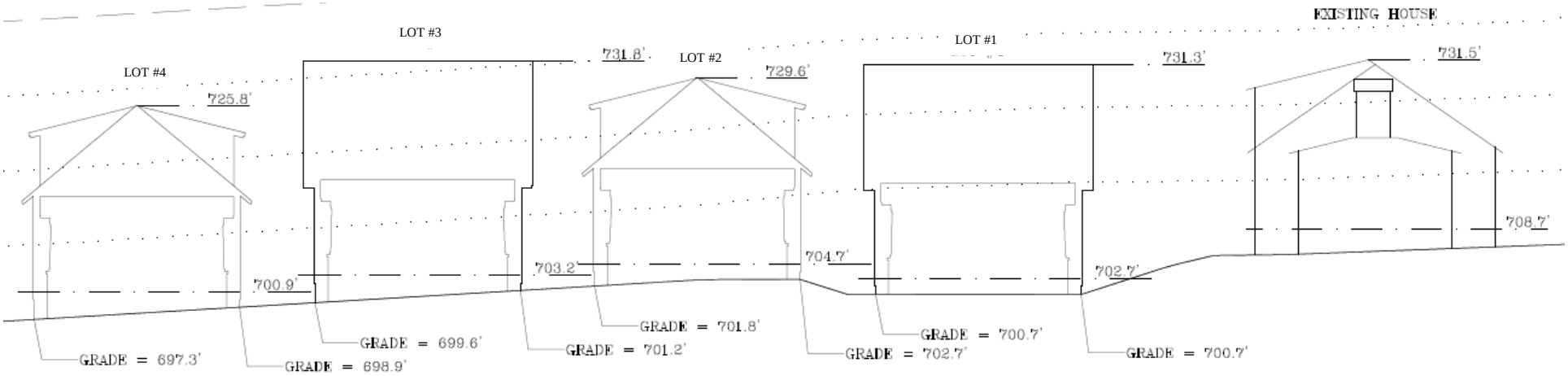
1816 Wickford Place		
LOT #	**Roofline**	**Elevation to Grade**
1	27' 7.25"	730.3'
2	23' 11.5"	728.6'
3	27' 7.25"	730.8'
4	23' 11.5"	724.8'

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)

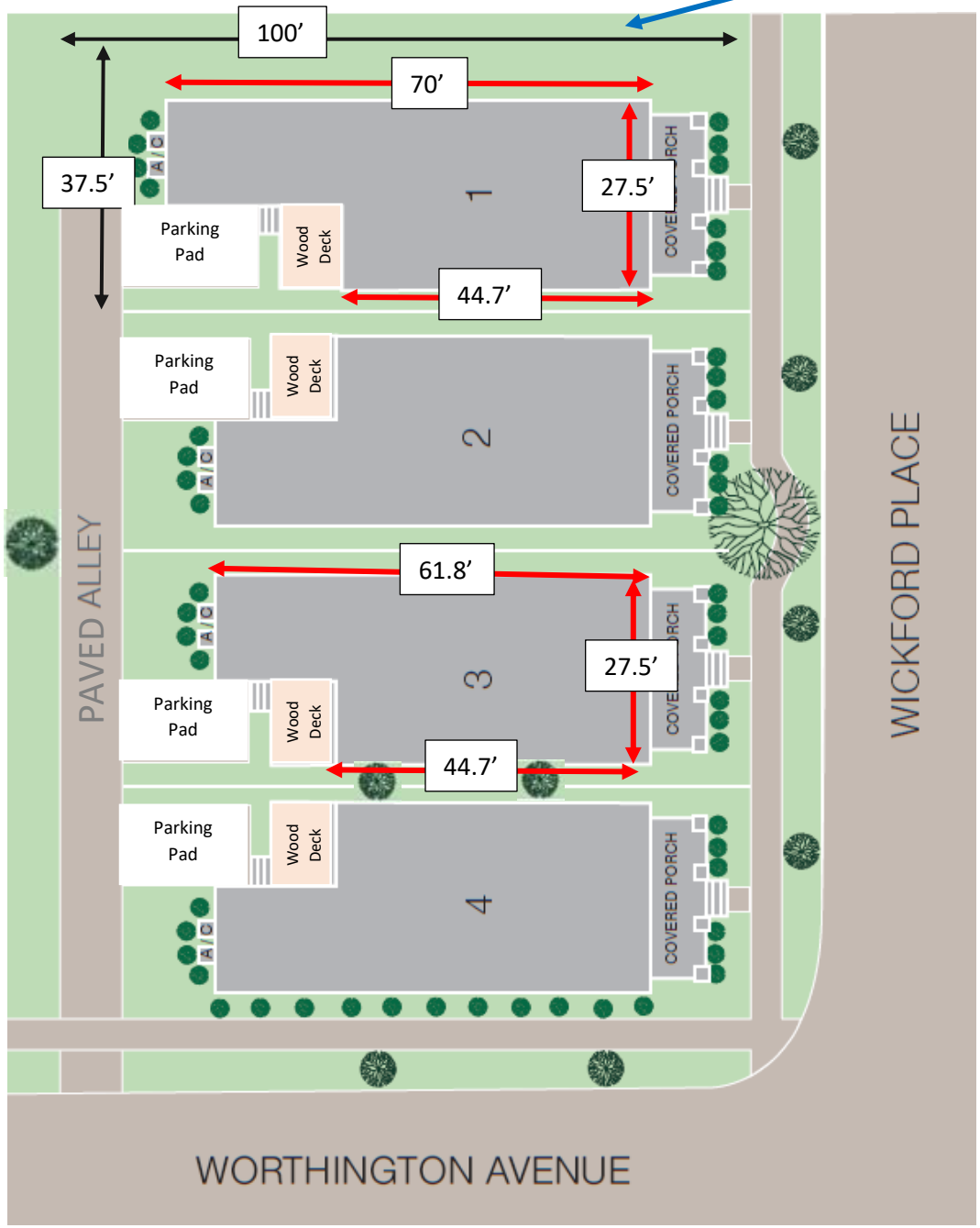


- Our <u>Hip Roof Houses</u> are within 3 inches of our neighbor's roofline and within 4 feet of the roofline across the street.
- Our <u>Gable Style Houses</u> are 2 feet lower than our neighbor's roofline and between 2-3 feet of across the street.

EXISTING CONDITIONS – LOT 2 & 4

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.

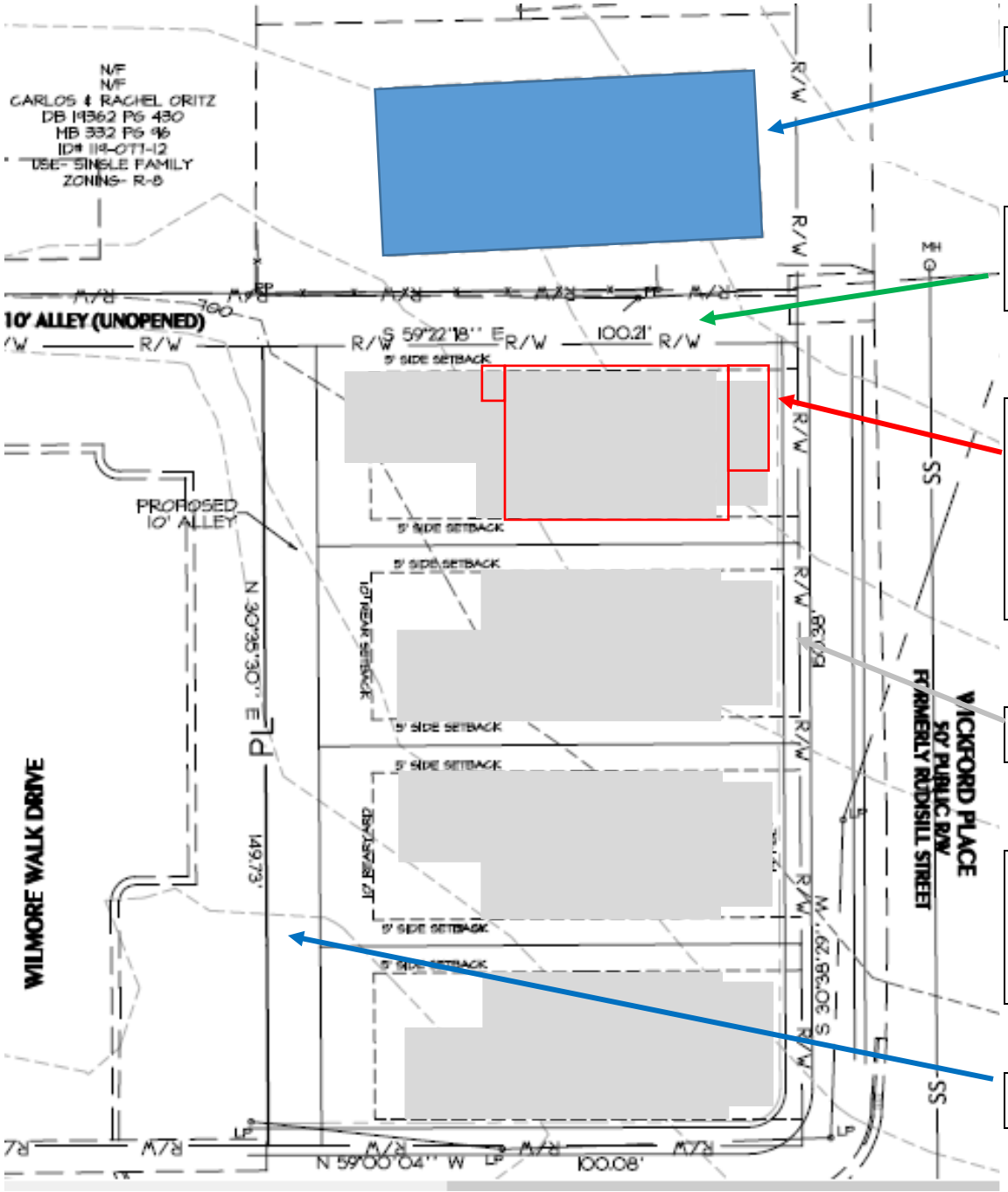
Footprint % to Lot Size / % of Lot that’s Permeable

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



Neighbor's House Footprint

Existing 10' ALLEY between our Property & Neighbor

New Porch positioned at the same location as the Current (to be demolished) Porch 21.5' from curb.

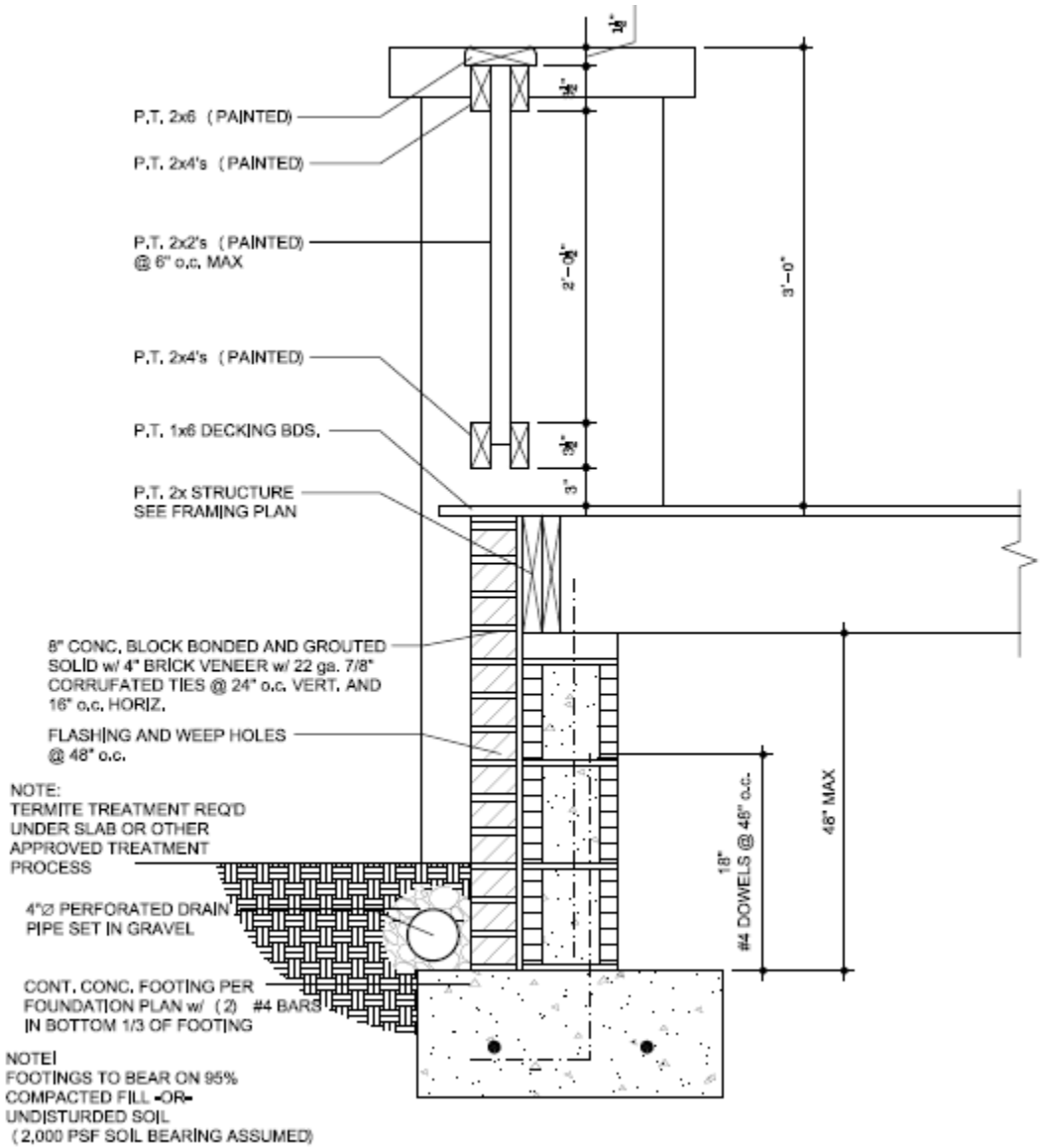
Footprint of Current house in Red

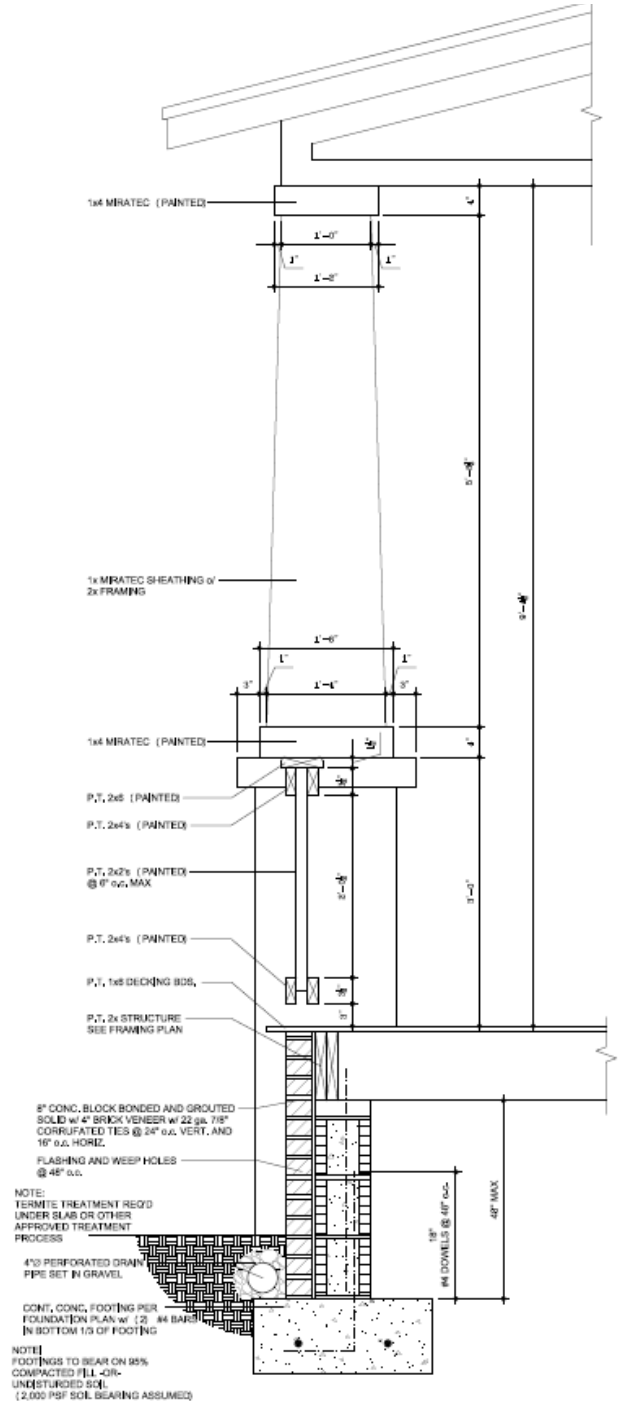
Our house footprints in Grey

Side Setbacks – 5'
Rear Setback – 10'
Front Setback – 14' from back of curb

Alleyway & Parking in the Rear

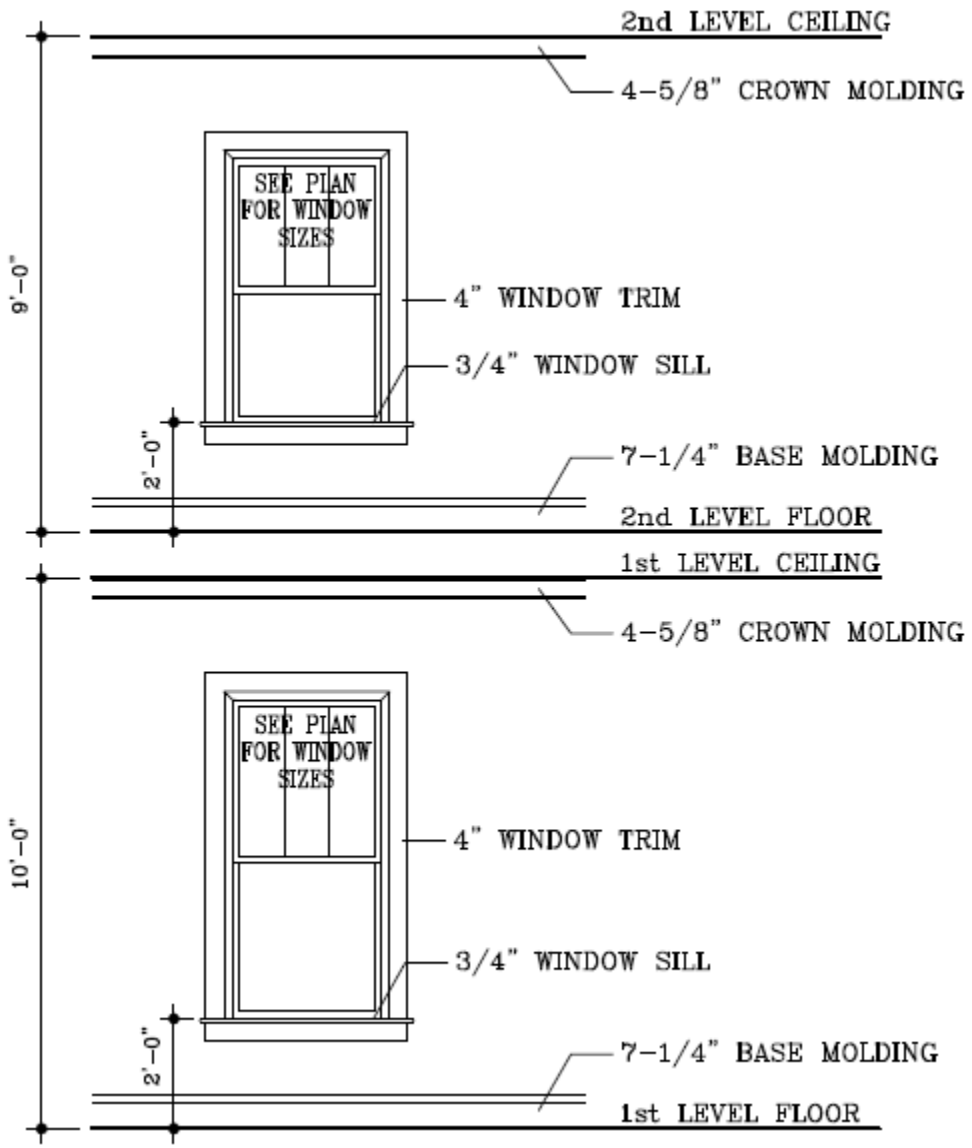
PORCH RAILING & COLUMN DETAIL



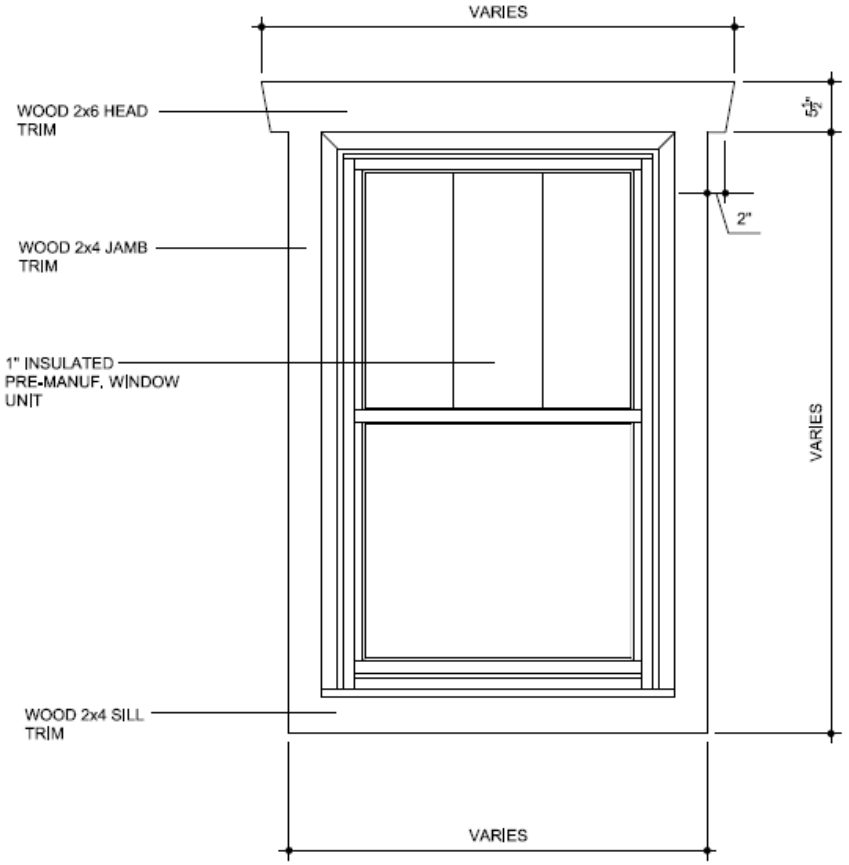


304 / A3.1 RAILING DETAILS 1" = 1'-0"

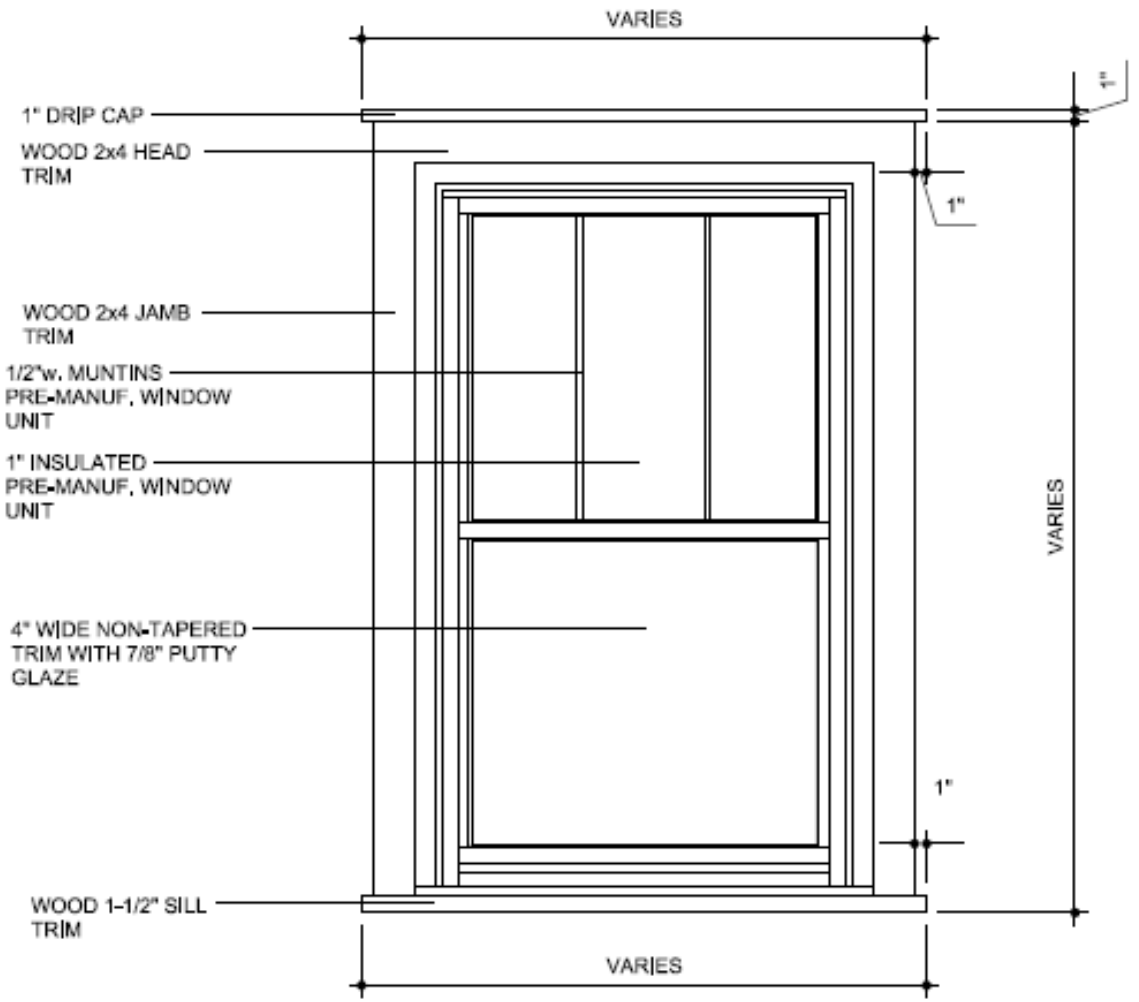
INTERIOR WINDOW HEIGHTS, TRIM, & CROWN



EXTERIOR WINDOW DETAIL

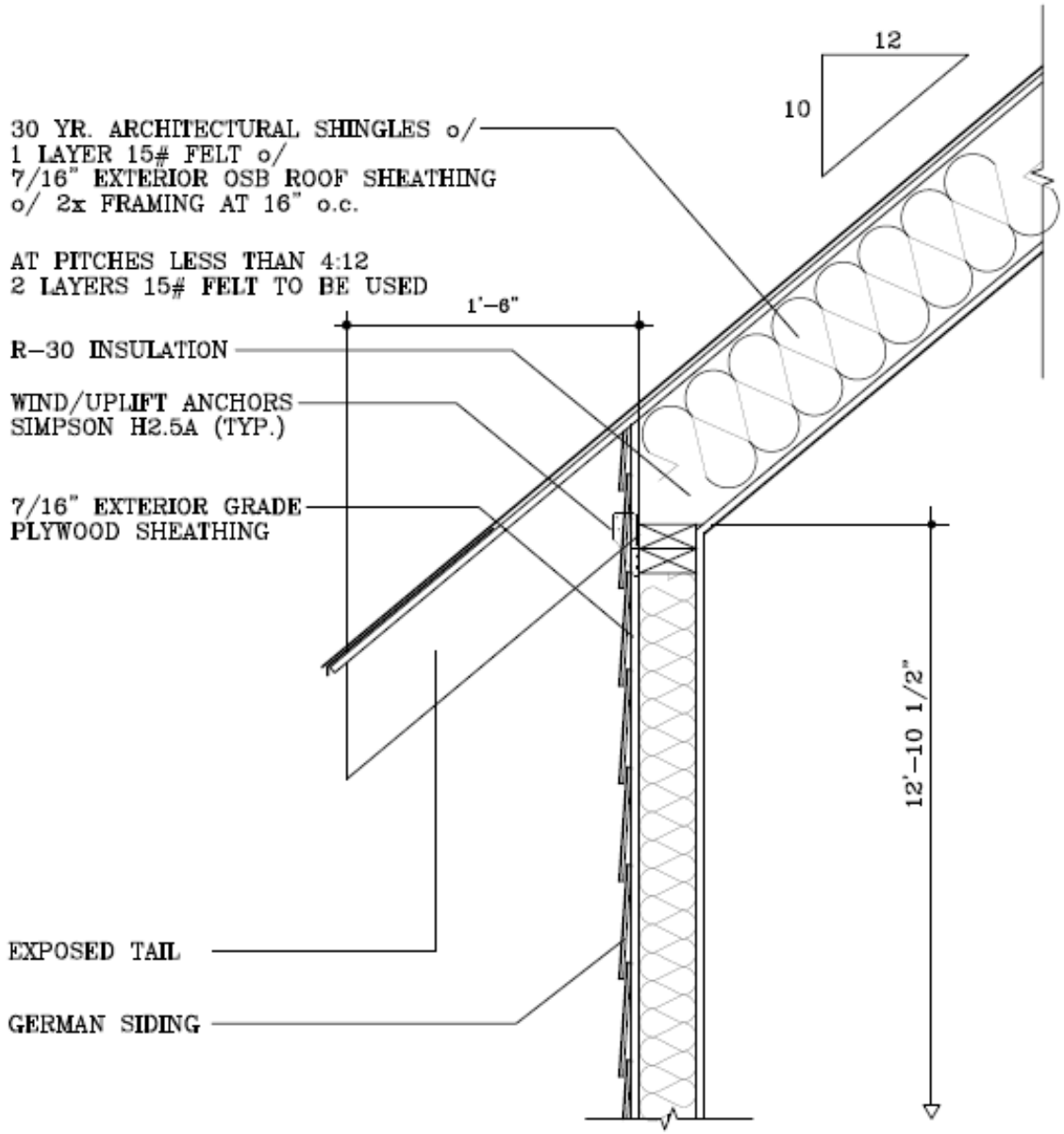


4. WINDOW DETAIL – the window casing and trim design was added to all of the elevations.

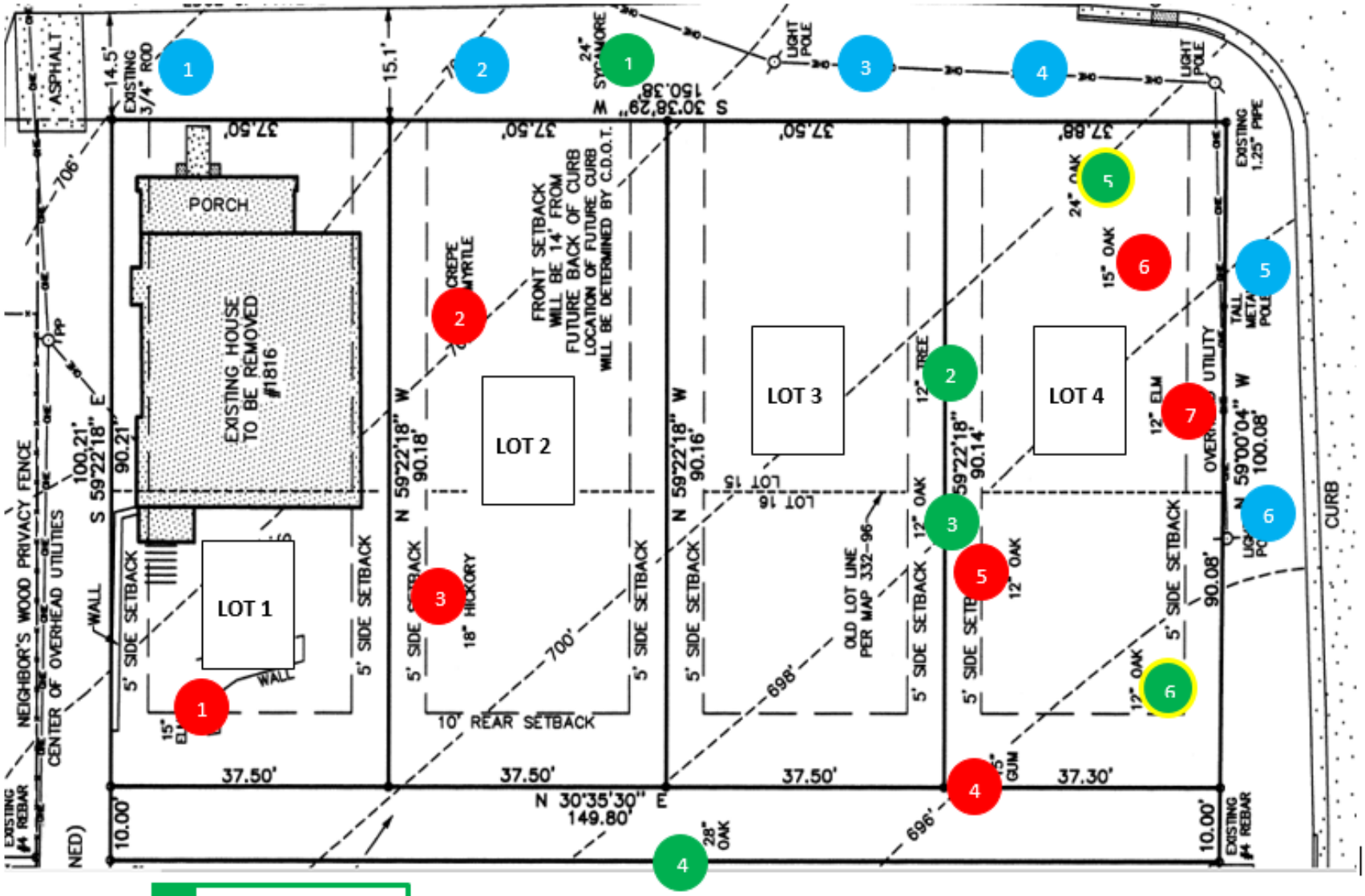


303 / A3.0 WINDOW TRIM DTL. TYP. 3/4" = 1'-0"

SOFFIT DETAIL – UPDATED OPEN TAIL



TREE SAVE - (UPDATED)



KEEP

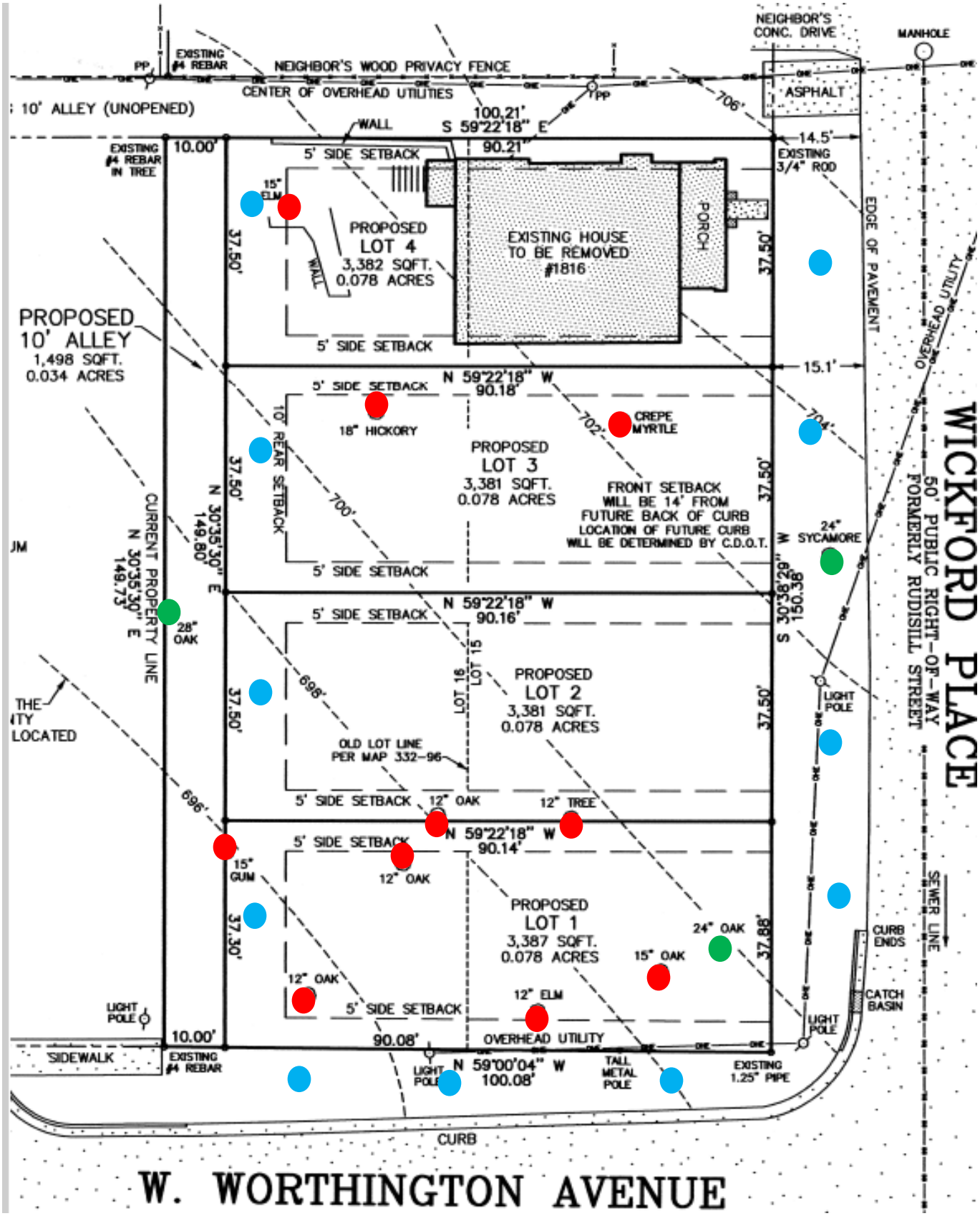
1. 24" Sycamore
2. 12" Oak
3. 12" Oak
4. 28" Oak
5. 24" Oak
6. 12" Oak

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



KEEP

- 24" OAK
- 28" OAK
- 24" SYCAMORE

ADD

- (11) Medium Size Oak Trees

REMOVED

- (5) Oak
- (1) Crepe Myrtle
- (1) Gum
- (1) Hickory
- (1) Elm

KEEP – 24” OAK in foreground & 24” SYCAMORE in background

Arborguard The Tree Specialists that find Solutions Naturally®

FROM: Arborguard Tree Specialists
PO Box 26767
Charlotte, NC 28221

FOR: RCMD, LLC
Craig Calcasola
11050 Dundarrach Lane
Charlotte, NC 28277

SUBJECT: ***1816 Wickford Place, Charlotte, NC 28203 – SYCAMORE***

Dear Mr. Calcasola:

Thank you for this opportunity.

As per your request; we visited the property at 1816 Wickford Place, Charlotte, NC 28203 to examine 2 trees you specified and, based on this; submit the following observations, discussion and recommendations are in reference to the **Sycamore** (located on Wickford).

Large **Sycamore** closest to the next residence on Wickford Place; currently in fair to good condition, if the intent is to preserve this tree, the following procedures must be performed –

1. Soil injection therapy treatment with our organic material, same as above, once each in spring, summer and fall - $250 per treatment, total $750 for all 3
2. Trunk insecticide and fungicide treatments, same as above, once each in spring, summer and fall - $75 per treatment, total $225 for all 3
3. Trunk injection with systemic, long residual fungicide to prevent Sycamore Anthracnose in spring - $275
4. Complete and thorough pruning to provide crown cleaning for dead limbs, plus selective thinning of the extremities to reduce weight - $475
5. Erect barricade fencing beneath the drip-line, same as above - $550
6. Distribute a 4-6 inch layer of organic bark mulch beneath the canopy from drip-line to drip-line to protect the root zone areas - $450
7. Visit once per month during the construction project, same as above - $75
8. Re-visit to re-examine in Late Fall 2017, same as above – NO CHARGE

Sincerely,

Barry Gemberling
ISA Certified Arborist, ASCA Consulting Arborist
Senior Corporate Arborist – The Carolinas
Vice President & Branch Manager
Arborguard Tree Specialists
704-578-5662

Arborguard The Tree Specialists that find *Solutions Naturally*®

FROM: Arborguard Tree Specialists
PO Box 26767
Charlotte, NC 28221

FOR: RCMD, LLC
Craig Calcasola
11050 Dundarrach Lane
Charlotte, NC 28277

SUBJECT: ***1816 Wickford Place, Charlotte, NC 28203 – WILLOW OAK – Lot 4***

Dear Mr. Calcasola:

Thank you for this opportunity.

As per your request; we visited the property at 1816 Wickford Place, Charlotte, NC 28203 to examine 2 trees you specified and, based on this; submit the following observations, discussion and recommendations are in reference to the **Willow Oak** (located at the corner of Wickford & Worthington – LOT 4).

Large, double-stemmed Willow Oak closest to the intersection of West Worthington Avenue and Wickford Place; currently in fair to good condition, but with a defective crown structure associated with the weak "V" crotch of the double stem union.

With a planned Floating Foundation for near or over the root system of the Willow Oak on the new home side, if no building activities are planned for the root zone areas beneath the canopy of the Willow Oak on the street sides or sides away from the new home, and if all of the outlined preservation procedures recommended for the Willow Oak are implemented; it should be OK to build within 11 feet of the trunk on the new home side as planned and we should be able to preserve this tree. Floating Foundation for the covered porch to be between the trunk of the Willow Oak to at least 11 feet with the closest footer being 11 feet and going further from there.

1. Perform soil injection therapy treatment now in Spring 2017 for the root zone areas beneath the canopy with our organic matter to strengthen the root system and improve vigor to prepare for the stresses of the construction project - $275
2. Treat the trunk areas with insecticide and fungicide now in Spring 2017 for suppression of and protection against secondary, predatory, invasive pests and diseases due to potentially weakened and vulnerable condition - $75
3. Perform complete and thorough pruning to provide crown cleaning for dead limbs, plus light thinning of the extremities to reduce density and weight; but minimize live wood removal to minimize stress - $575 + prior arrangements must be made to drop the utility line in front
4. Install 1 flexible, steel cable in the upper crown between the split stems to support the defective, weak stem union beneath to reduce the risk of splitting or breakage from future wind, snow or ice storm events - $325

5. Install a new, all copper lightning protection system due to height, exposure, location and importance - $1,100
6. Erect a barricade fence beneath the drip-line and allow no traffic or storage of materials or equipment on the root zone areas beneath the canopy from drip-line to drip-line - $550
7. Distribute a 1 foot layer of expanded slate aggregate or Stalite over the root zone areas beneath the canopy from drip-line to drip-line to prevent root system damage from soil compaction - $1,950
8. Visit once per month during the construction project to monitor the health and progress of the tree and assure the barricade fence is still erect and there are no activities on the root zone areas - $75 per visit
9. Repeat the soil injection therapy and trunk insecticide/fungicide treatments once each in summer and fall - $275 + $75 + $275 + $75 = total $700
10. Re-visit to re-examine in Late Fall 2017 to monitor the progress of the tree, then prescribe the appropriate course of action for the 2018 season – NO CHARGE for inspection and report with the above Program

Consulting Fee for visit to examine the above trees and prepare the above report with recommendations - $360 as previously agreed upon; but we will offer to waive if the above Program of recommended procedures is approved.

Please advise us how to proceed.

Sincerely,

Barry Gemberling
ISA Certified Arborist, ASCA Consulting Arborist
Senior Corporate Arborist – The Carolinas
Vice President & Branch Manager
Arborguard Tree Specialists
704-578-5662