

LANCASTER

DUNCANS CROSSING
LOT 76



QUALITY | INTEGRITY | VALUE

PLAN ID: 120121

110 VILLAGE TRAIL SUITE 215
WOODSTOCK, GA. 30188

DRAWING INDEX	
A0.0	COVER SHEET
A1.1	FRONT ELEVATION
A2.1	SIDE & REAR ELEVATIONS
A3.1	SLAB FOUNDATION
A5.1	FIRST FLOOR PLAN & DETAILS
A6.1	ROOF PLAN
A7.2	ELECTRICAL PLANS

AREA TABULATION	
FIRST FLOOR	2015
TOTAL	2015
GARAGE	402
REAR PATIO (COVERED)	112
FRONT PORCH (COVERED)	105

PLAN REVISIONS			
DATE	BY	REVISION	PAGE #
12/7/2018	AW	Option for patio door from Owner's was removed	A5.1
2/27/2019	AW	PCR #2843 when HVAC platform is above Pwdr Rm added note to furr down ceiling as needed for insulation above	A5.1.1
3/27/2019	MM	Added callout for detail 3/D5.1 on C Mass	A1.3-A1.9.1
6/3/2019	MM	Added coffered clg. option to Living/Dining/Study	A5.1, A7.2
6/5/2019	AW	PCR #3029 swing door to HVAC platform on second floor into landing	A5.2, A5.2.1, A7.3, A7.3.1
10/3/2019	AW	Revised Ranch plan version to relocate PDS to hall and scuttle hole to Owner's W.I.C. and removed header & wall adjacent to the Family Rm and hall to Mud Room and header in hall by Pwdr. Changed wall behind water heater to 2x6.	A5.2, A6.1, A6.2, A6.3, A7.2, A8.1
9/1/2020	MM	PCR #3865 Removed HVAC platform and access door on optional 2nd floor. Relocated AC pad to left side of house.	A5.1, A5.2, A5.2.1, A6.1-A6.3.1, A7.3, A7.4, A7.4.1
11/1/2020	MM	Removed decorative corbels from elevations A, D, & G elevations when second floor is chosen.	A1.1.1, A1.4.1, A1.7.1
5/1/2021	MM	Removed unfinished 2nd flr option	A5.2.1, A7.5.1
12/1/2021	AW	Noted applicable 2x6 walls on 2nd flr to be built into trusses	A5.2

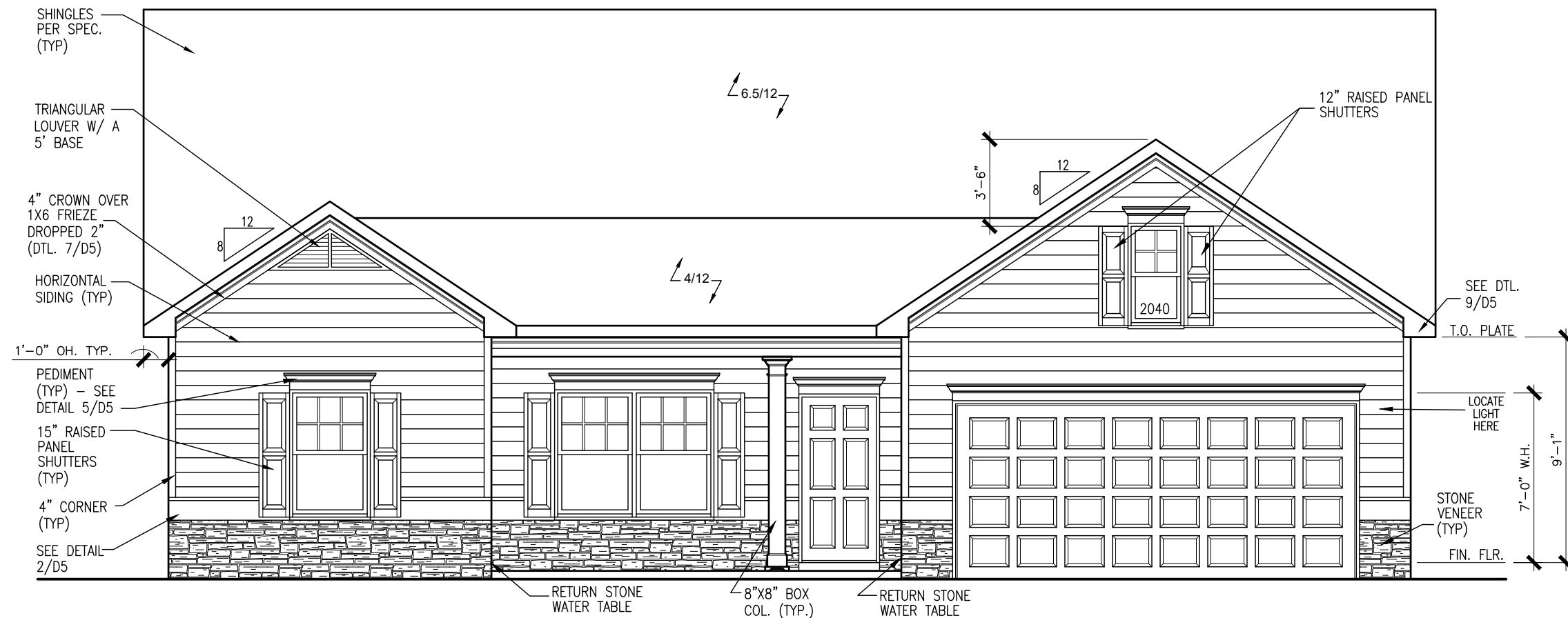
GOVERNMENTAL CODES & STANDARDS
HOME TO BE BUILT TO CONFORM TO ALL APPLICABLE LOCAL CODES, PRACTICES AND STANDARDS
BUILDING CODE ANALYSIS / DESIGN CRITERIA
HOME TO BE BUILT TO MEET OR EXCEED ALL LOCAL CODES AND DESIGN CRITERIA

ALL NON-MASONRY RETURNS TO BE HORIZONTAL SIDING

SEE SHEET D3 OF SDH TYPICAL DETAILS FOR SOFFIT DETAILS PER SOFFIT MATERIAL

DUNCANS CROSSING LOT 76

DATE	BY	REVISION
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FRONT ELEVATION "D"

SCALE: 3/16" = 1'-0"

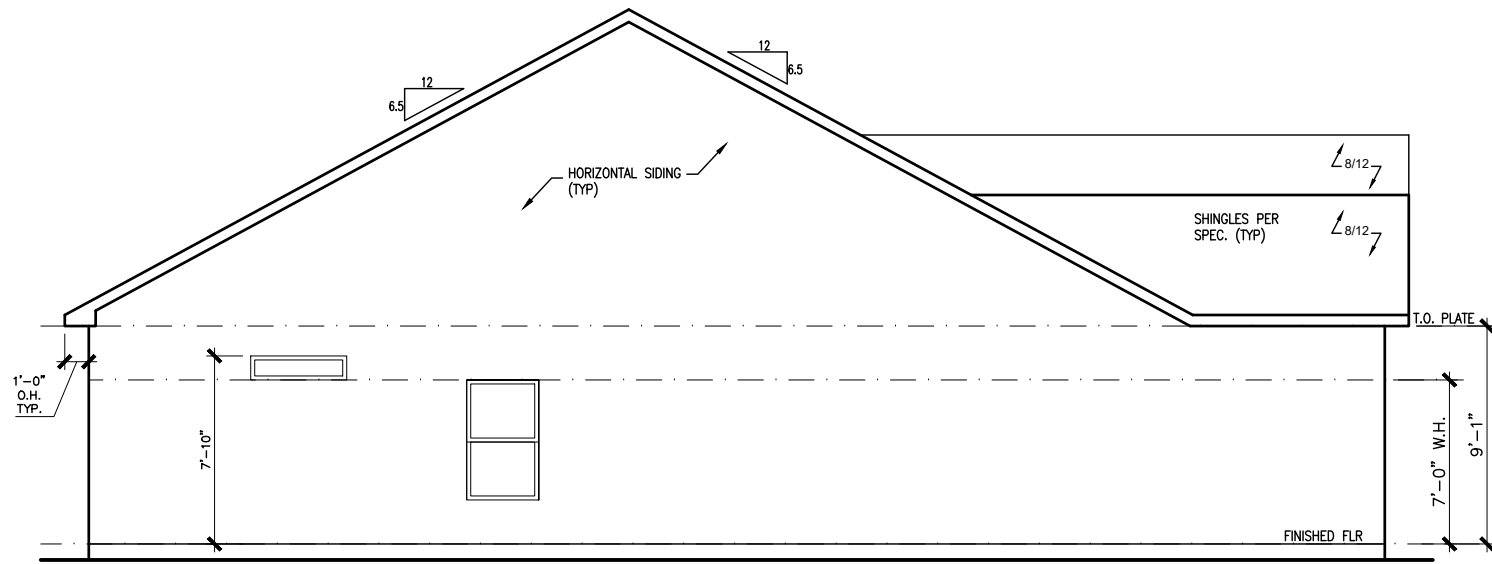
ELEVATIONS
FRONT ELEVATION
LANCASTER

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SUITE 115
WOODSTOCK, GA 30188
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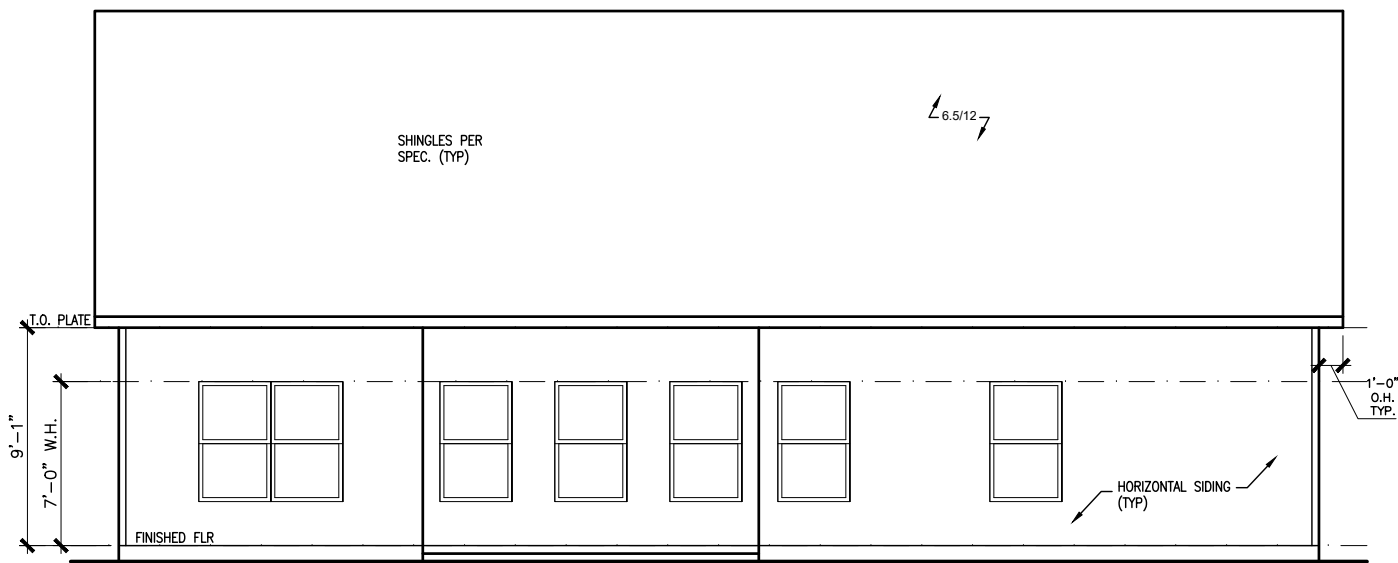
BY: CLJ	CHK: AW
DATE: 10-05-22	
FACADE OPT: A	
PLAN ID:	
FND: ALL	ELEV: D
PAGE NO: A1.1	

DUNCANS CROSSING LOT 76



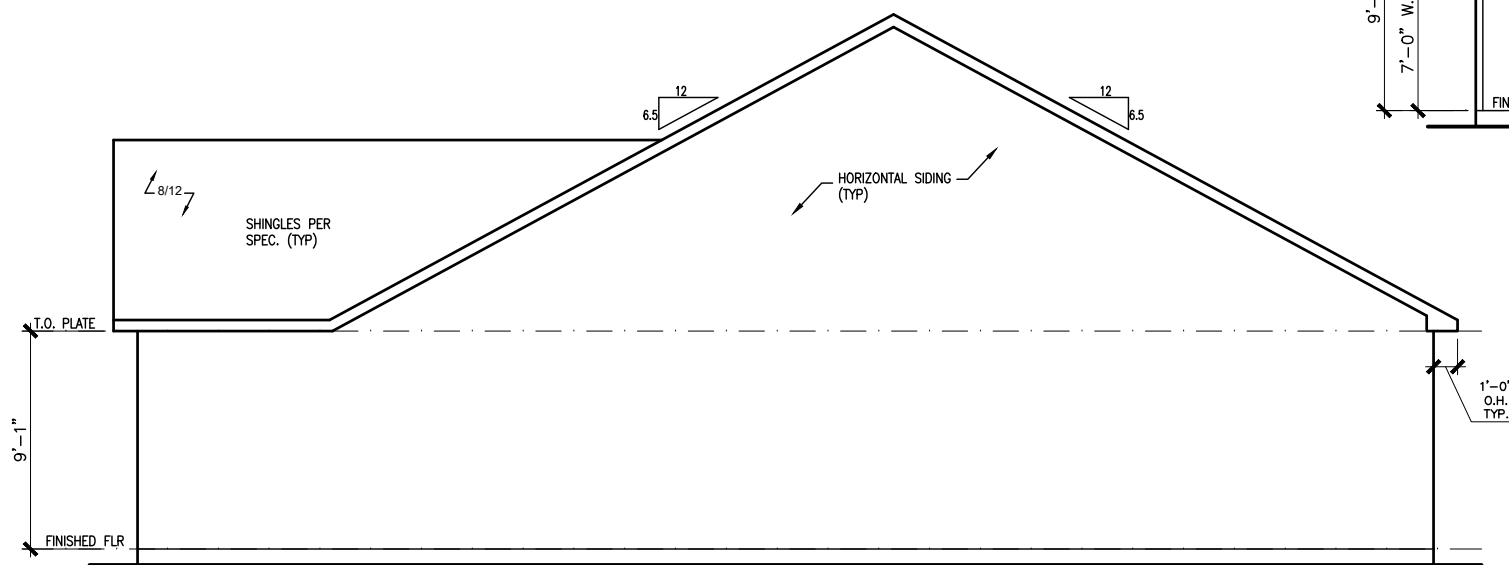
LEFT ELEVATION "D"

SCALE: 1/8" = 1'-0"



REAR ELEVATION "D"

SCALE: 1/8" = 1'-0"



RIGHT ELEVATION "D"

SCALE: 1/8" = 1'-0"

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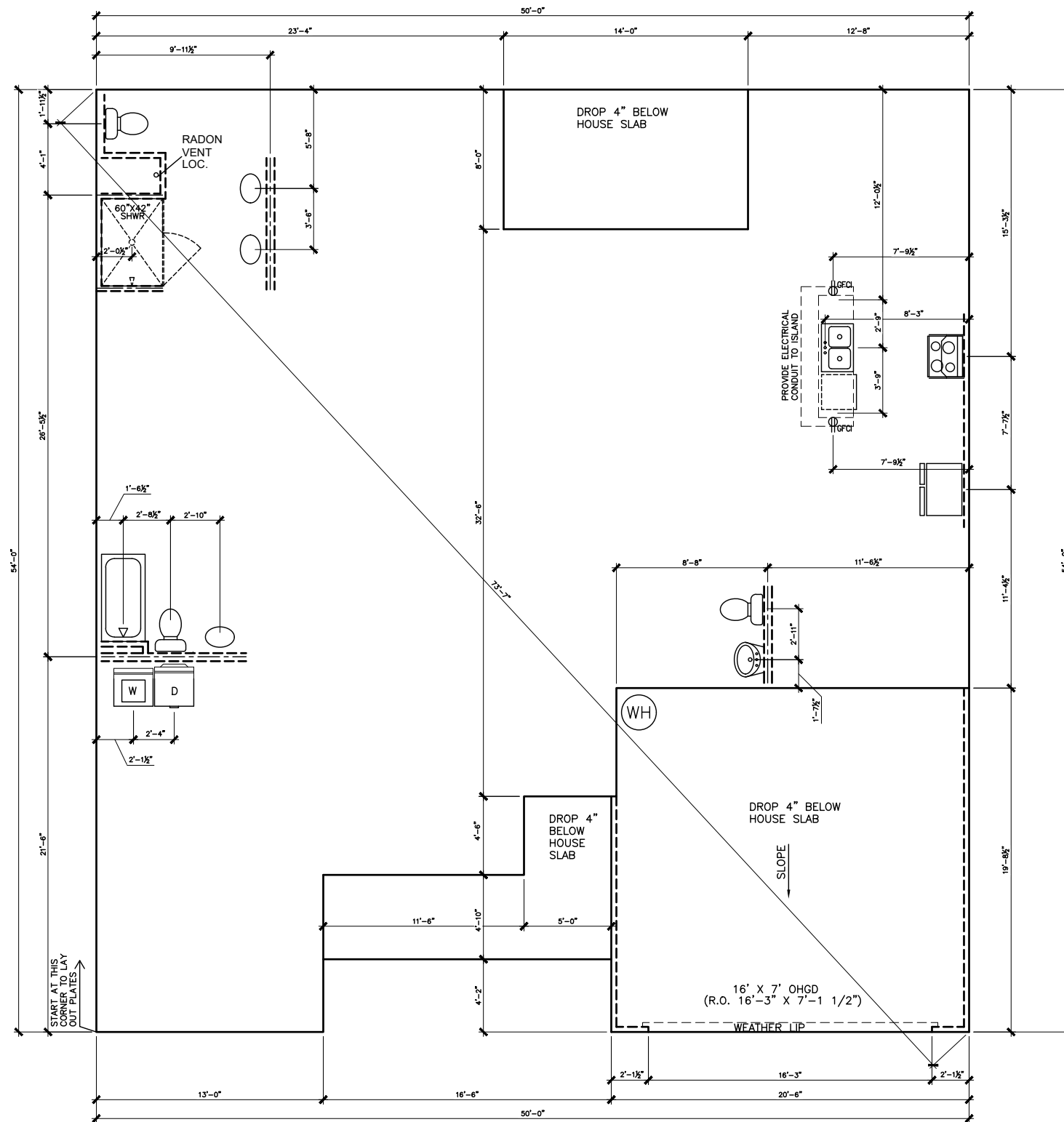
ELEVATIONS
SIDES AND REAR
LANCASTER

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PLAN ID:	
FND: ALL	ELEV: D
PAGE NO: A2.1	

DUNCANS CROSSING LOT 76



SLAB PLAN

SCALE: 1/8" = 1'-0"

*RADON VENT PROVIDED PER LOCAL CODE

REFER TO DETAIL 3/D1 FOR BRICK LEDGE DETAIL WHEN BRICK VENEER IS CHOSEN

DATE	REVISION	BY	#

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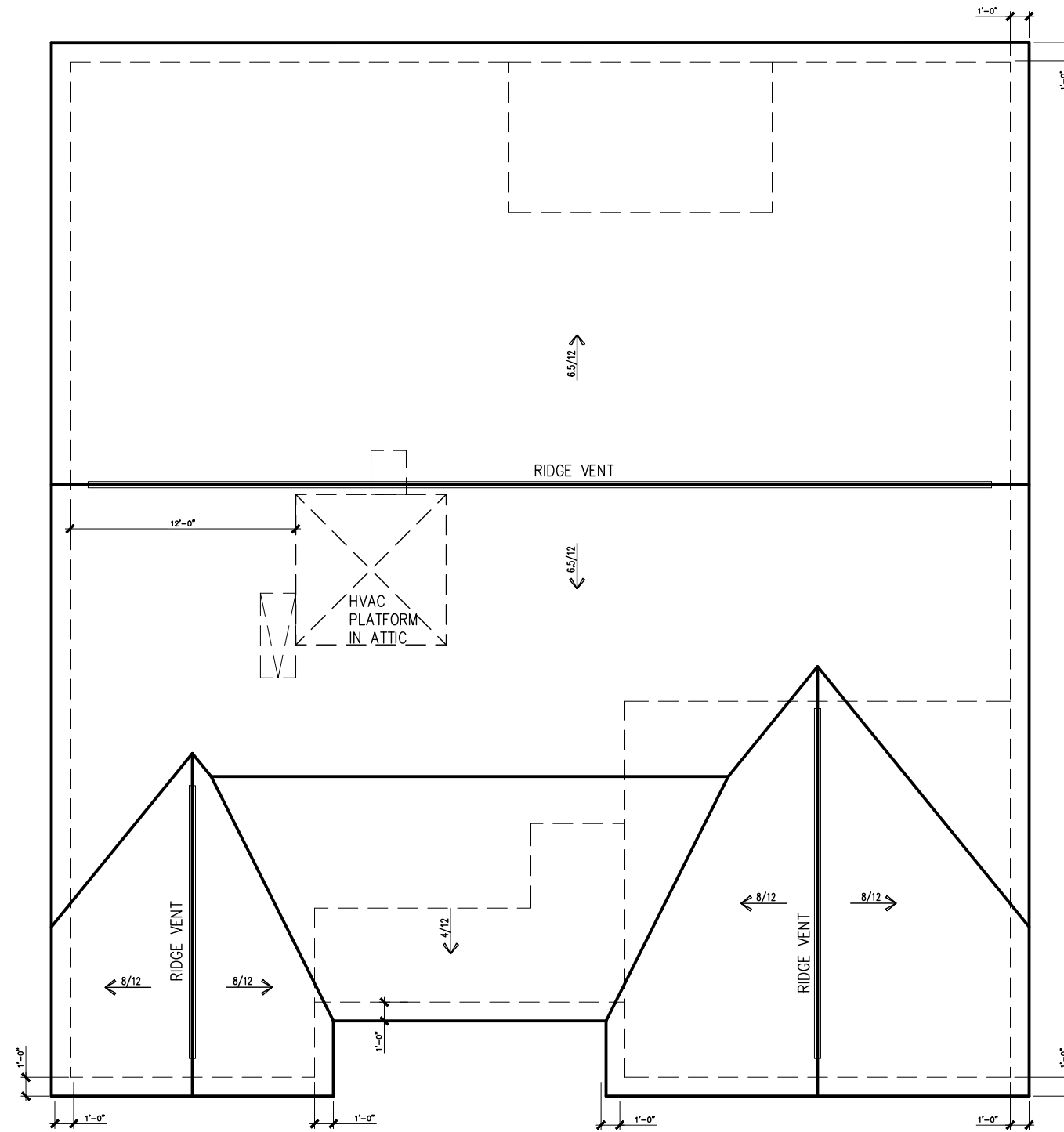
FOUNDATION PLAN
SLAB PLAN
LANCASTER

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DATE: 10-05-22
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PLAN ID:
FND: ALL ELEV: D
PAGE NO: A3.1

DUNCANS CROSSING LOT 76



ROOF PLAN "D"
SCALE : 1/8" = 1'-0"

DATE	REVISION	BY
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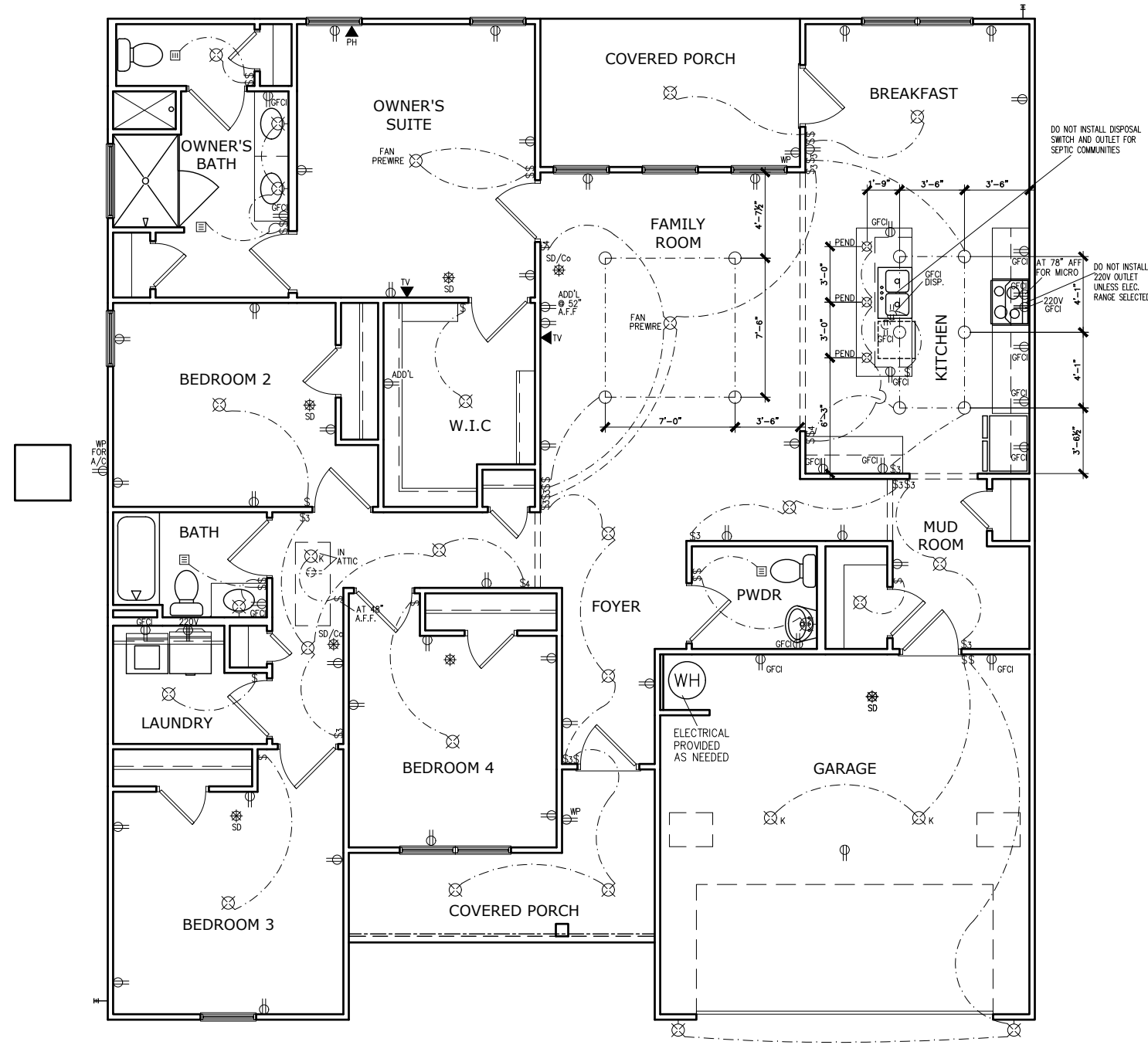
ROOF PLAN
ROOF PLAN
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DATE: 10-05-22	
FACADE OPT: A	
PLAN ID:	
FND: ALL	ELEV: D
PAGE NO: A6.1	

DUNCANS CROSSING LOT 76



FIRST FLOOR ELECTRICAL PLAN
SCALE: 1/8" = 1'-0"

ELECTRICAL LEGEND

\$	SWITCH	TV	TV
\$3	3 WAY SWITCH	⊕	120V RECEPTACLE
\$4	4 WAY SWITCH	⊕	120V SWITCHED RECEPTACLE
⊗	CEILING FIXTURE	⊕	220V RECEPTACLE
⊕	KEYLESS	⊕	GFCI OUTLET
⊕	WALL MOUNT FIXTURE	⊕	ARCH FAULT CIRCUIT INTERRUPTER
○	CEILING FIXTURE	†	GAS LINE
●	FLEX CONDUIT	†	WATER LINE
CH	CHIMES	⊥	HOSE BIBB
PH	TELEPHONE	⊕	FLOOD LIGHT
SD/Co	SMOKE DETECTOR & CARBON MONOXIDE	⊕	1x4 LUMINOUS FIXTURE
SO	SECURITY OUTLET	⊕	CEILING FAN
□	GARAGE DOOR OPENER	—	ELECTRICAL WIRING
⊕	EXHAUST FAN	⊕	CEILING FIXTURE
⊕	FAN/LIGHT		

ELECTRICAL PLANS TO FOLLOW ALL LOCAL CODES

APPROX. FIXTURE HGTS (MEASURED FROM BOTTOM OF FIXTURE)

BREAKFAST/DINING ROOM	63" ABOVE FINISHED FLOOR
KITCHEN PENDANT LIGHTS	33" ABOVE COUNTER TOP
TWO STORY FOYER FIXTURE	96" ABOVE FINISHED FLOOR
CEILING FAN	96" ABOVE FINISHED FLOOR

NOTE: FINAL PLACEMENT OF PHONE/CABLE T.B.D. ON SITE BY THE BUILDER

BY	#	#	#	#	#
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ELECTRICAL PLAN
FIRST FLOOR
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FACADE OPT:	A		
PLAN ID:			
FND:	ALL	ELEV:	D
PAGE NO:	A7.2		

DUNCANS CROSSING LOT 76

Lot Definition

Project: Duncans Crossing	Community: Duncans Crossing
Building: 000	Builder: Thomas Kenneth Barlow
Unit: 0076	Status: Sold
Plan: Lancaster D Ranch	RTeam: Raleigh West
Orientation: Garage Right Sq. Ft: 2,015	Slot: 3765
Bedrooms: 3 Bathrooms: 2.5	Permit:
Address: 94 Bonnie Girl Court	Notes:
Lillington NC 27546	
CAD Version: 120121	CAD Notes:

Sales Data	Dates
Contract: 107574	Ratified: 09/29/2022
Buyer: Hilario Juarez	Original Start: 11/07/2022
Sales Agent: Christopher Matthew Beatty	Start: 11/07/2022
	Scheduled Complete: 03/13/2023

User Name: Jennifer Davis 1 of 2 10/04/2022
 Database: SmithDouglasCommunities 08:23:12 AM

Lot Definition

Option	Description	Quantity
36" Cabinet 2nd Upgr w/ Hardware	Includes hardware - knobs, pulls, or knob/pull combo. Note: Bath cabinets to match	1
Add'l Standard Interior Electric Outlet	Standard Interior Duplex Outlet. This is not an exterior weather proof outlet or a GFCI protected outlet. A quantity of 1 gives you one additional outlet.	2
Automatic Garage Door Opener	Garage Door Opener - Per Door	1
Bedroom ILO Living Room		1
Blinds for Base House	Includes blinds for all standard windows on front, sides, and rear that are operational and accessible. Does not include blinds for any optional windows, including windows for optional second floors.	1
Cabinet Bump above Microwave (Cab Only)	Cabinet Bump above Microwave	1
Chrome Interior Finish Color Package	Includes chrome kitchen faucet, bath faucets, & fixtures, brushed nickel door hardware (hinges, bumps, knobs/levers, deadbolts), Pkg1 (bn) lighting fixtures, & pewter oval mirror (if applies). Separate options also affected: shower door, bath hardware (towel bar/ing, tp holder), shower grab bar, cabinet hardware (to be chrome)	1
Crown Molding on Kitchen Cabinets		1
Family/Great Room Ceiling Fixture Lights	Family/Great Room Lights - Low Profile Flush Mount LED Lights per plan.	1
FIPkg 7E-EVP1, NoCpt (1Pkg1)	Flooring Package 7E - Enhanced Vinyl Plank 1, No Carpet (from Package 1).	1
FIPkg W1-OwnerBath Tile 1	Flooring Package - Owner Bath Tile 1	1
Granite-Kitchen Countertops - Lvl 1 (I)	Kitchen Granite Countertops - Level 1-where Laminite is Std.	1
Granite-Kitchen Sink Level 1	Level 1 Undermount rectangular stainless steel sink upgrade for kitchen granite.	1
Hall Bath Granite 1 Single Ilo LamSgl	Hall Bath Granite Vanity Top (Single Bowl) - Level 1-Where Laminite is Std	1
Kitchen Ceiling Fixture Lights ILO Std	Kitchen Lights - Low Profile Flush Mount LED Lights per Plan ILO Standard Light.	1
Kitchen Faucet - Level 2 (G)	Upgrade to Level 2 Pulldown Kitchen Sink Faucet From Level 1 Faucet on Granite OR Solid Surface	1
Owner Bath Granite 1 Double Ilo LamSgl	Owner's Bath Granite Vanity Top (Double Bowl) - Level 1-Where laminite is std ***Includes Vanity Double Bowl Option Do Not Select Both***	1
Pendant Lights per Plan	Pendant Lights above Island/Bar Top per plan electrical diagram. To match lighting package selected. NOTE: Choose this option only once.	1
Shwr Only Wall T1 Large Pan FD OBATHA	Large shower with level 1 tile walls and framed clear glass door ILO of standard bath. Prefab pan per plan. (obatha)	1
Stone 24 A ExtCoPkg(v)		1
Tile - Kit Backsplash LVL 1 Diagonal		1

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 Database: SmithDouglasCommunities 08:23:12 AM

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DETAILS
 LOT DEFINITION
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FND: ALL	ELEV: D
PAGE NO: A9.1	

GENERAL STRUCTURAL NOTES:

- The design professional whose seal appears on these drawings is the structural engineer of record (SER) for this project. The SER bears the responsibility of the primary structural elements and the performance of this structure. No other party may revise, alter, or delete any structural aspects of these construction documents without written permission of SUMMIT Engineering, Laboratory & Testing, P.C. (SUMMIT) or the SER. For the purposes of these construction documents the SER and SUMMIT shall be considered the same entity.
- The structure is only stable in its completed form. The contractor shall provide all required temporary bracing during construction to stabilize the structure.
- The SER is not responsible for construction sequences, methods, or techniques in connection with the construction of this structure. The SER will not be held responsible for the contractor's failure to conform to the contract documents, should any non-conformities occur.
- Any structural elements or details not fully developed on the construction drawings shall be completed under the direction of a licensed professional engineer. These shop drawings shall be submitted to SUMMIT for review before any construction begins. The shop drawings will be reviewed for overall compliance as it relates to the structural design of this project. Verification of the shop drawings for dimensions, or for actual field conditions, is not the responsibility of the SER or SUMMIT.
- Verification of assumed field conditions is not the responsibility of the SER. The contractor shall verify the field conditions for accuracy and report any discrepancies to SUMMIT before construction begins.
- The SER is not responsible for any secondary structural elements or non-structural elements, except for the elements specifically noted on the structural drawings.
- This structure and all construction shall conform to all applicable sections of the international residential code.
- This structure and all construction shall conform to all applicable sections of the 2018 North Carolina Residential Code (NCRC) and any local codes or restrictions.

FOUNDATIONS:

- Foundations shall be constructed in accordance with chapter 4 of the 2018 NC Residential Building Code (Special consideration shall be given to Chapter 45 in wind zones above 130mph)
- Footing sizes based on a presumptive soil bearing capacity of 2000 PSF. Contractor is solely responsible for verifying the suitability of the site soil conditions at the time of construction
- Maximum depth of unbalanced fill against masonry walls to be as specified in section R404.1 of the 2018 NCRC
- The structural engineer has not performed a subsurface investigation. Verification of this assumed value is the responsibility of the owner or the contractor. Should any adverse soil condition be encountered the SER must be contacted before proceeding.
- The bottom of all footings shall extend below the frost line for the region in which the structure is to be constructed. However, the bottom of all footings shall be a minimum of 12" below grade.
- Any fill shall be placed under the direction or recommendation of a licensed professional engineer. The resulting soil shall be compacted to a minimum of 95% maximum dry density.
- Excavations of footings shall be lined temporarily with a 6 mil polyethylene membrane if placement of concrete does not occur within 24 hours of excavation.
- No concrete shall be placed against any subgrade containing water, ice, frost, or loose material.
- Each crawl space pier shall bear in the middle third of its respective footing and each girder shall bearing in the middle third of the piers. Pilasters to be bonded to perimeter foundation wall
- Crawl spaced to be graded level and clear of all debris
- Provide foundation waterproofing and drain with positive slope to outlet as required by site conditions
- Energy efficiency compliance and insulation of the structure to be in accordance with chapter 11 of the 2018 NCRC

CONCRETE:

- Concrete shall have a normal weight aggregate and a minimum compressive strength (f'c) at 28 days of 3000 psi, unless otherwise noted on the plan.
- Concrete shall be proportioned, mixed, and placed in accordance with the latest editions of ACI 318: "Building Code Requirements for Reinforced Concrete" and ACI 301: "Specifications for Structural Concrete for Buildings".
- Air entrained concrete must be used for all structural elements exposed to freeze/thaw cycles and deicing chemicals. Air entrainment amounts (in percent) shall be within -1% to +2% of target values as follows:
 - Footings: 5%
 - Exterior Slabs: 5%
- No admixtures shall be added to any structural concrete without written permission of the SER
- Concrete slabs-on-grade shall be constructed in accordance with ACI 302.1R-96: "Guide for Concrete Slab and Slab Construction".
- The concrete slab-on-grade has been designed using a subgrade modulus of k=250 pci and a design loading of 200 psf. The SER is not responsible for differential settlement, slab cracking or other future defects resulting from unreported conditions not in accordance with the above assumptions.
- Control or saw cut joints shall be spaced in interior slabs-on-grade at a maximum of 15'-0" O.C. and in exterior slabs-on-grade at a maximum of 10'-0" unless otherwise noted.
- Control or saw cut joints shall be produced using conventional process within 4 to 12 hours after the slab has been finished
- Reinforcing steel may not extend through a control joint. Reinforcing steel may extend through a saw cut joint.
- All welded wire fabric (WWF) for concrete slabs-on-grade shall be placed at mid-depth of slab. The WWF shall be securely supported during the concrete pour. Fiberglass may be used in lieu of WWF.

CONCRETE REINFORCEMENT:

- Fibrous concrete reinforcement, or fiberglass, specified in concrete slabs-on-grade may be used for control of cracking due to shrinkage and thermal expansion/contraction, lowered water migration, an increase in impact capacity, increased abrasion resistance, and residual strength.
- Fiberglass reinforcing to be 100% virgin polypropylene fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement.
- Application of fiberglass per cubic yard of concrete shall equal a minimum of 0.1% by volume (15 pounds per cubic yard)
- Fiberglass shall comply with ASTM C1116, any local building code requirements, and shall meet or exceed the current industry standard.
- Steel Reinforcing bars shall be new billet steel conforming to ASTM A615, grade 60.
- Detailing, fabrication, and placement of reinforcing steel shall be in accordance with the latest edition of ACI 315: "Manual of Standard Practice for Detailing Concrete Structures"
- Horizontal footing and wall reinforcement shall be continuous and shall have 90° bends, or corner bars with the same size/spacing as the horizontal reinforcement with a class B tension splice.
- Lap reinforcement as required, a minimum of 40 bar diameters for tension or compression unless otherwise noted. Splices in masonry shall be a minimum of 48 bar diameters.
- Where reinforcing dowels are required, they shall be equivalent in size and spacing to the vertical reinforcement. The dowel shall extend 48 bar diameters vertically and 20 bar diameters into the footing.
- Where reinforcing steel is required vertically, dowels shall be provided unless otherwise noted.

WOOD FRAMING:

- Solid sawn wood framing members shall conform to the specifications listed in the latest edition of the "National Design Specification for Wood Construction" (NDS). Unless otherwise noted, all wood framing members are designed to be Spruce-Pine-Fir (SPF) #2.
- LVL or PSL engineered wood shall have the following minimum design values:
 - E = 1,900,000 psi
 - Fb = 2600 psi
 - Fv = 285 psi
 - Fc = 100 psi
- Wood in contact with concrete, masonry, or earth shall be pressure treated in accordance with AWPA standard C-15. All other moisture exposed wood shall be treated in accordance with AWPA standard C-2
- Nails shall be common wire nails unless otherwise noted.
- Lag screws shall conform to ANSI/ASME standard B18.2.1-1981. Lead holes for lag screws shall be in accordance with NDS specifications.
- All beams shall have full bearing on supporting framing members unless otherwise noted.
- Exterior and load bearing stud walls are to be 2x4 SPF#2 @16" O.C. unless otherwise noted. Studs shall be continuous from the sole plate to the double top plate. Studs shall only be discontinuous at headers for window/door openings. A minimum of one king stud shall be placed at each end of the header. King studs shall be continuous.
- Individual studs forming a column shall be attached with one 10d nail @6" O.C. staggered. The stud column shall be fully blocked at all floor levels to ensure proper load transfer.
- Multi-ply beams shall have each ply attached with (3)10d nails @ 24" O.C.
- Flitch beams and four and five ply beams shall be bolted together with (2) rows of 1/2" dia. through bolts staggered @24" O.C. w/ 2" edge distance and (2) bolts located at 6" from each end, unless noted otherwise.

WOOD TRUSSES:

- The wood truss manufacturer/fabricator is responsible for the design of the wood trusses. Submit sealed shop drawings and supporting calculations to the SER for review prior to fabrication. The SER shall have a minimum of five (5) days for review. The review by the SER shall review for overall compliance with the design documents. The SER shall assume no responsibility for the correctness for the structural design for the wood trusses.
- The wood trusses shall be designed for all required loadings as specified in the local building code, the ASCE Standard "Minimum Design Loads for Buildings and Other Structures" (ASCE 7-10), and the loading requirements shown on these specifications. The truss drawings shall be coordinated with all other construction documents and provisions provided for loads shown on these drawings including but not limited to HVAC equipment, piping, and architectural fixtures attached to the trusses.
- The trusses shall be designed, fabricated, and erected in accordance with the latest edition of the "National Design Specification for Wood Construction" (NDS) and "Design Specification for Metal Plate Connected Wood Trusses."
- The truss manufacturer shall provide adequate bracing information in accordance with "Commentary and Recommendations for Handling, Installing, and Bracing Metal Plate Connected Wood Trusses" (HIB-91). This bracing, both temporary and permanent, shall be shown on the shop drawings. Also, the shop drawings shall show the required attachments for the trusses.
- Any chords or truss webs shown on these drawings have been shown as a reference only. The final design of the trusses shall be per the manufacturer.

WOOD STRUCTURAL PANELS:

- Fabrication and placement of structural wood sheathing shall be in accordance with the APA Design/Construction Guide "Residential and Commercial," and all other applicable APA standards.
- All structurally required wood sheathing shall bear the mark of the APA.
- Wood wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information. Sheathing shall be applied with the long direction perpendicular to framing, unless noted otherwise.
- Roof sheathing shall be APA rated sheathing exposure 1 or 2. Roof sheathing shall be continuous over two supports and attached to its supporting roof framing with (1)-8d CC nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied with the long direction perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of plywood clips or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- Wood floor sheathing shall be APA rated sheathing exposure 1 or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshank nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of T&G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.

STRUCTURAL FIBERBOARD PANELS:

- Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable APA standards.
- Fiberboard wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information.
- Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.

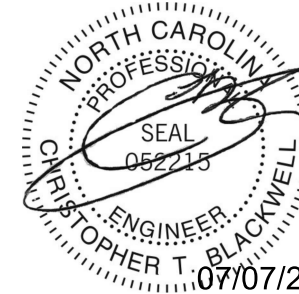
EXTERIOR WOOD FRAMED DECKS:

- Decks are to be framed in accordance with local building codes and as referenced on the structural plans, either through code references or construction details.

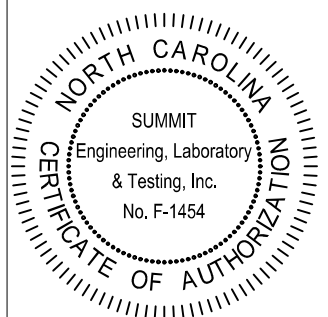
STRUCTURAL STEEL:

- Structural steel shall be fabricated and erected in accordance with the American Institute of Steel Construction "Code of Standard Practice for Steel Buildings and Bridges" and of the manual of Steel Construction "Load Resistance Factor Design" latest editions.
- All steel shall have a minimum yield stress (Fy) of 36 ksi unless otherwise noted.
- Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D11. Electrodes for shop and field welding shall be class E70XX. All welding shall be performed by a certified welder per the above standards.

Duncans Crossing Lot 76



STRUCTURAL MEMBERS ONLY



PROJECT: Lancaster (RH) Coversheet
CLIENT: Smith Douglas Homes - Raleigh
2520 Reliance Ave
Apex, NC 27539

CURRENT DRAWING
DATE: 7/6/2021
SCALE: 1/8"=1'-0"
PROJECT #: 3832.303R
DRAWN BY: JV
CHECKED BY: BCP

ORIGINAL DRAWING
DATE PROJECT #
11/6/2018 3832.115

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET
CS2

FOUNDATION NOTES:

- FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- STRUCTURAL CONCRETE TO BE $F_c = 3000$ PSI, PREPARED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318.
- FOOTINGS TO BE PLACED ON UNDISTURBED EARTH BEARING A MINIMUM OF 12" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE CODE ENFORCEMENT OFFICIAL.
- FOOTING SIZES BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION.
- FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE ELEMENTS. PROVIDE 2" MINIMUM FOOTING PROJECTION FROM THE FACE OF MASONRY.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN SECTION R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- FILASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
- PROVIDE FOUNDATION WATERPROOFING, AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
- PROVIDED PERIMETER INSULATION FOR ALL FOUNDATIONS PER 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- CORBEL FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK VENEERS.
- CRAIL SPACE TO BE GRADED LEVEL, AND CLEARED OF ALL DEBRIS.
- FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- ABBREVIATIONS:

DJ = DOUBLE JOIST	SJ = SINGLE JOIST
GT = GIRDER TRUSS	FT = FLOOR TRUSS
SC = STUD COLUMN	DR = DOUBLE RAFTER
EE = EACH END	TR = TRIPLE RAFTER
TJ = TRIPLE JOIST	OC = ON CENTER
CL = CENTER LINE	PL = POINT LOAD

- ALL PIERS TO BE 16"x16" MASONRY AND ALL FILASTERS TO BE 8"x16" MASONRY, TYPICAL (UNO).
- WALL FOOTINGS TO BE CONTINUOUS CONCRETE, SIZES PER STRUCTURAL PLAN.
- A FOUNDATION EXCAVATION OBSERVATION SHOULD BE CONDUCTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER OR HIS QUALIFIED REPRESENTATIVE. IF ISOLATED AREAS OF YIELDING MATERIALS AND/OR POTENTIALLY EXPANSIVE SOILS ARE OBSERVED IN THE FOOTING EXCAVATIONS AT THE TIME OF CONSTRUCTION, SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. MUST BE PROVIDED THE OPPORTUNITY TO REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT.
- ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.

REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLDINGS. ADDITIONAL INFO PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NCRC.

NOTE: ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO FRAMING AND NOT BRICK VENEER UNO.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY SMITH DOUGLAS HOMES COMPLETED/REVISED ON 02/02/2020. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

NOTE: A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED WHEN SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1 PER TABLE R402.1.

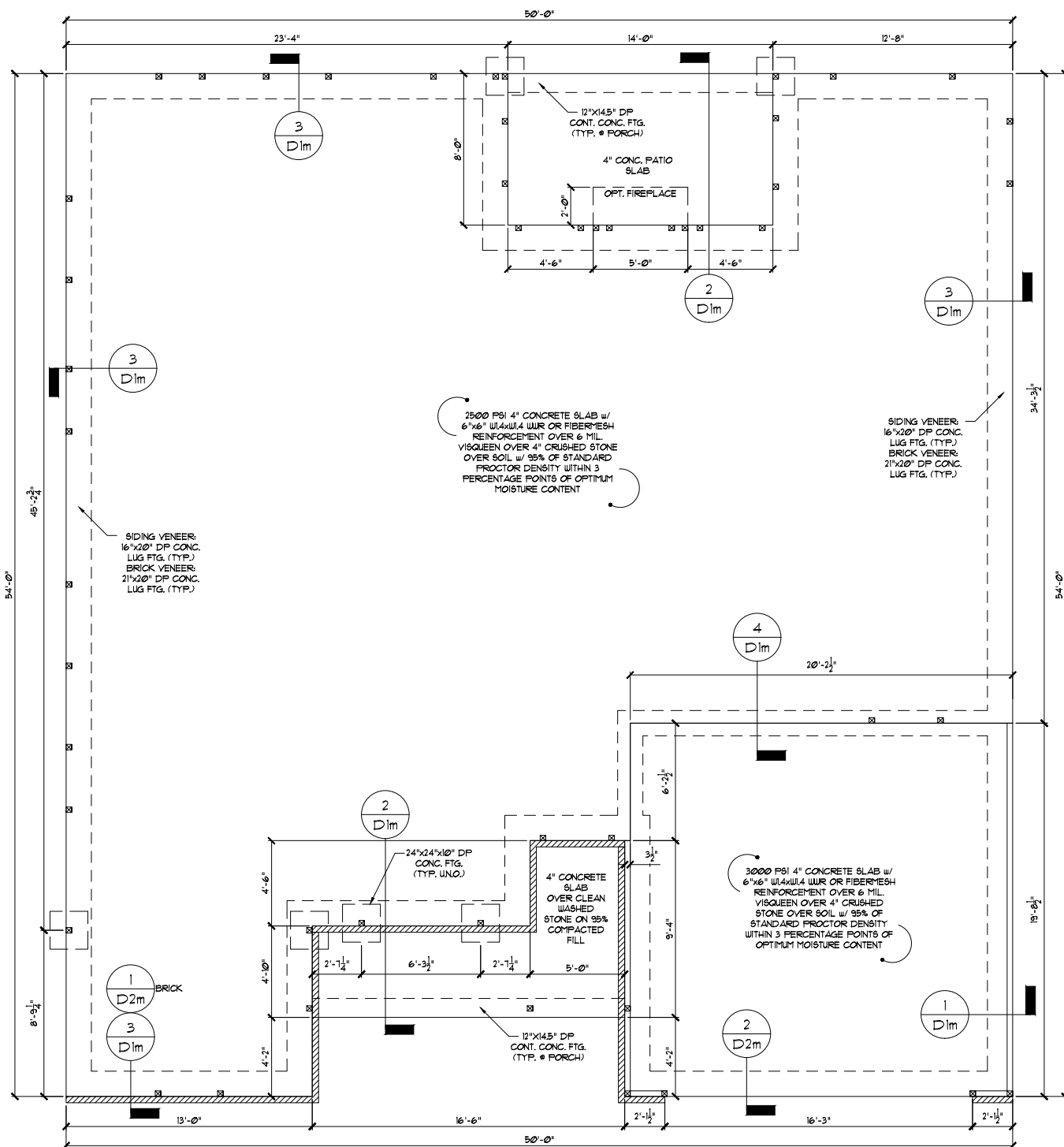
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STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

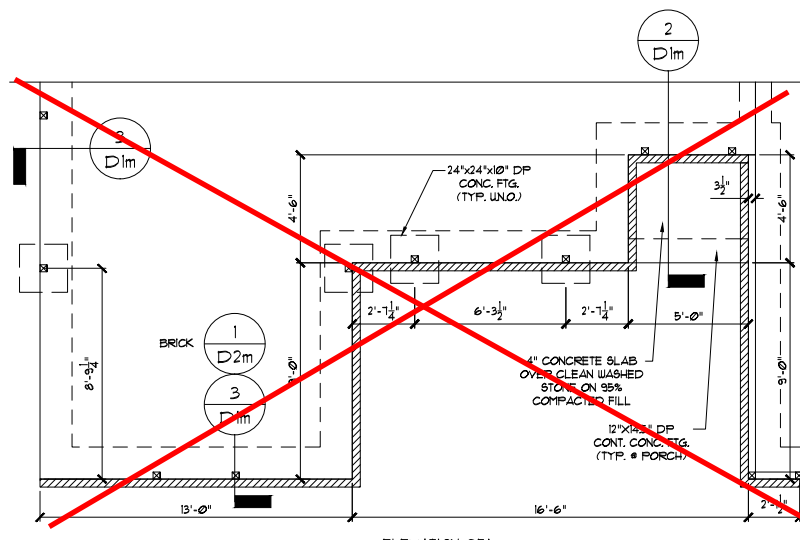
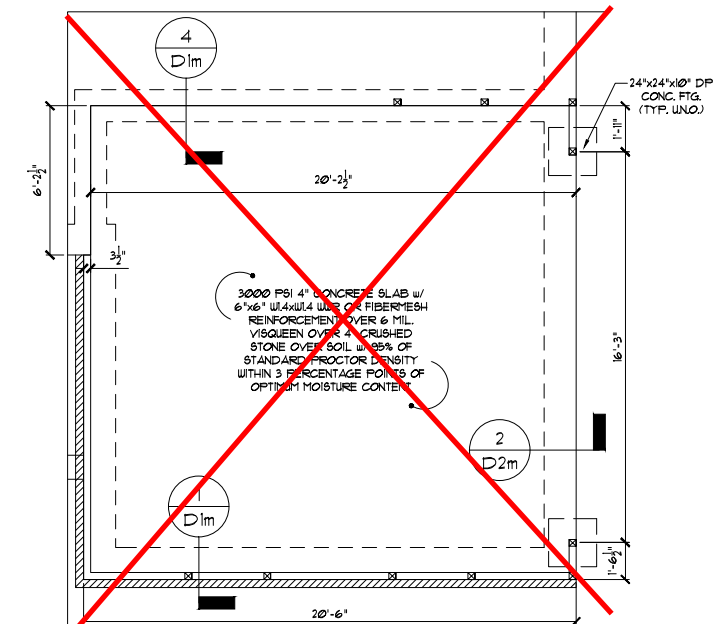
MONOLITHIC SLAB FOUNDATION

SCALE: 1/8"=1'

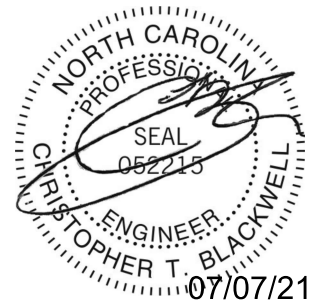


ELEVATION ADG & PERM

OPT. SIDE LOAD



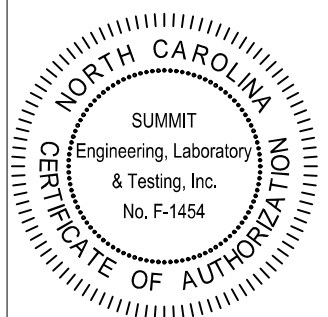
ELEVATION CE1



Duncans Crossing Lot 76

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Suite 171, RALEIGH, NC 27603
OFFICE: 919.380.9991
FAX: 919.380.9993
WWW.SUMMIT-COMPANIES.COM



PROJECT
Lancaster (RH)
Monolithic Slab Fnd.
CLIENT
Smith Douglas Homes - Raleigh
2520 Reliance Ave
Apex, NC 27539

CURRENT DRAWING
DATE: 7/16/2021
SCALE: 1/8"=1'-0"
PROJECT #: 3832.303R
DRAWN BY: JV
CHECKED BY: BCP
ORIGINAL DRAWING
DATE PROJECT #
1/16/2018 3832.175

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET
S1.0m

- GENERAL STRUCTURAL NOTES:**
- CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
 - CONTRACTOR SHALL VERIFY ALL DIMENSIONS. CONTRACTOR SHALL COMPLY WITH THE CONTENTS OF THE DRAWING FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN.
 - CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING REQUIRED TO RESIST ALL FORCES ENCOUNTERED DURING ERECTION.
 - PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS:
MICROLAM (LVL): $F_b = 2600$ PSI, $F_v = 285$ PSI, $E = 1.9 \times 10^6$ PSI
PARALLAM (PSL): $F_b = 2300$ PSI, $F_v = 230$ PSI, $E = 1.25 \times 10^6$ PSI
 - ALL WOOD MEMBERS SHALL BE #2 SYP UNLESS NOTED ON PLAN. ALL STUD COLUMNS AND JOISTS SHALL BE #2 SYP (UNO).
 - ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 #2 SYP STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
 - ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3".
 - FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.6. MINIMUM 10" DIA BOLTS SPACED AT 6'-0" ON CENTER WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
 - CONTRACTOR TO PROVIDE LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
 - FLITCH BEAMS, 4-PLY LVL6 AND 3-PLY SIDE LOADED LVL6 SHALL BE BOLTED TOGETHER WITH 1/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL 1031. MIN. EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM.
 - ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP #2, DROPPED, FOR NON-LOAD BEARING HEADERS EXCEEDING 8'-0" IN WIDTH AND/OR WITH MORE THAN 2'-0" OF CRIPPLE WALL ABOVE, SHALL BE (2) FLAT 2x4 SYP #2, DROPPED. (UNLESS NOTED OTHERWISE)
 - ABBREVIATIONS:
DJ = DOUBLE JOIST
GT = GIRDER TRUSS
SC = STUD COLUMN
EE = EACH END
TJ = TRIPLE JOIST
CL = CENTER LINE
SU = SINGLE JOIST
FT = FLOOR TRUSS
DR = DOUBLE RAFTER
TR = TRIPLE RAFTER
OC = ON CENTER
PL = POINT LOAD

STUD COLUMN (S.C.) CALLOUTS ON PLAN OVERRIDE JACK STUD COUNT SHOWN IN BEAM/HEADER SCHEDULE. KING STUDS TO BE INSTALLED PER APPLICABLE BUILDING CODE.

NOTE: DASHED LINE DESIGNATES JOIST SUPPORTED LOAD BEARING WALL ABOVE. PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

NOTE: SHADED WALLS INDICATE LOAD BEARING WALLS.

JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

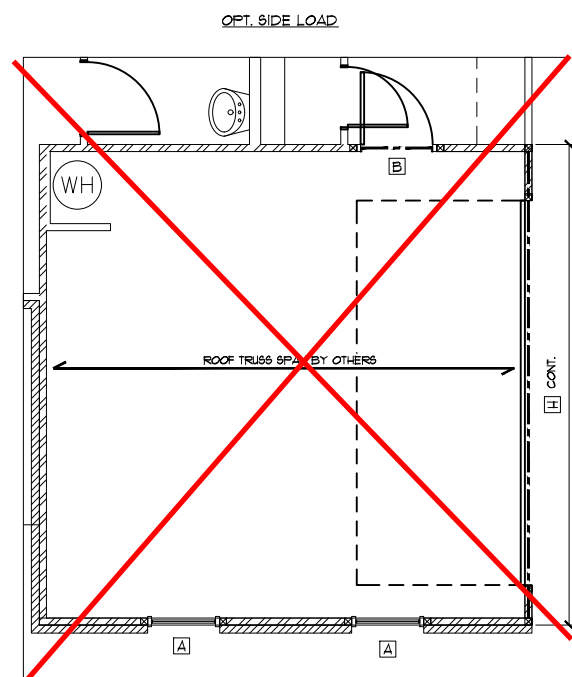
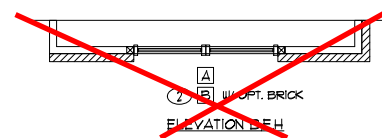
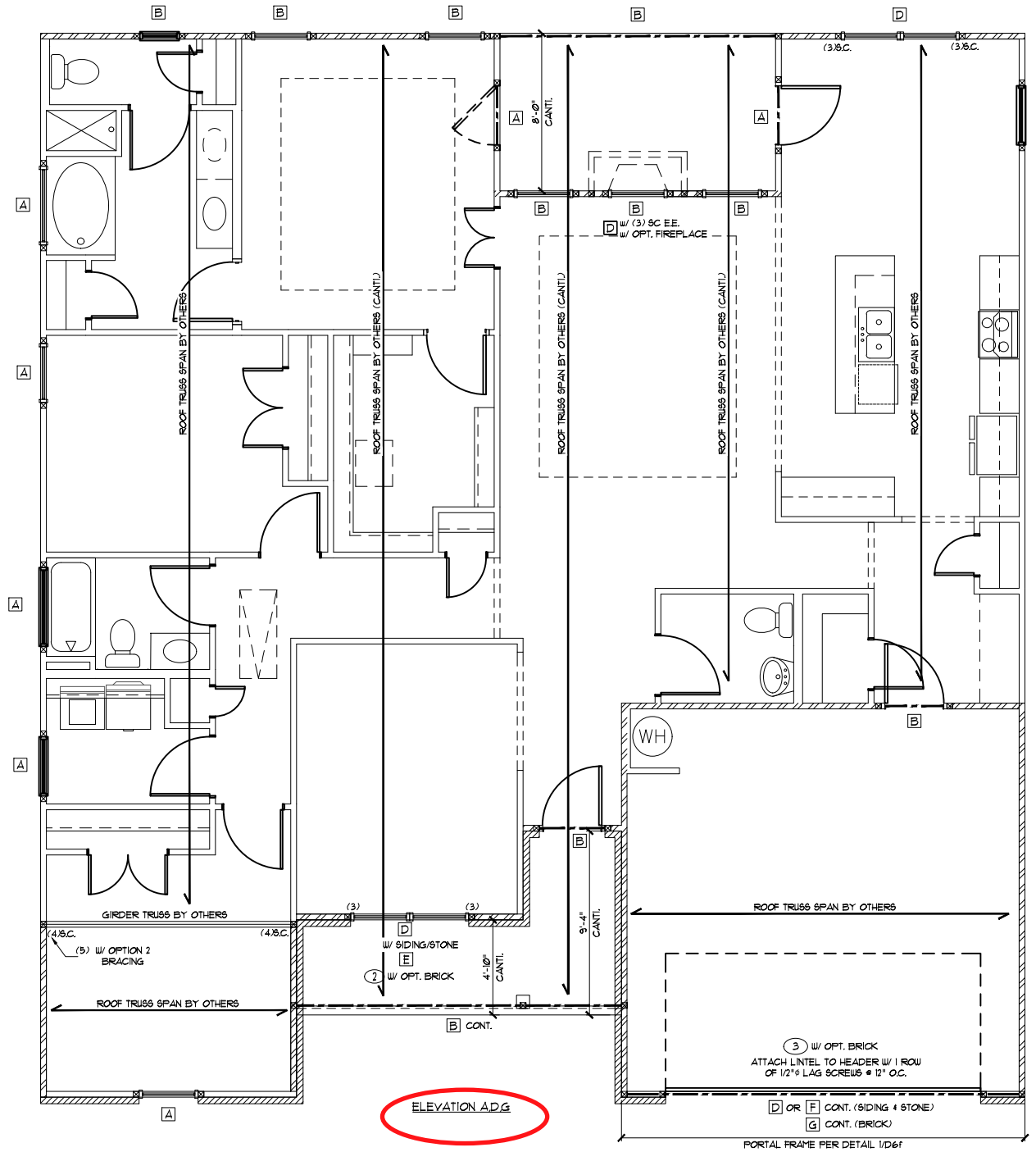
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STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

FIRST FLOOR FRAMING PLAN
SCALE: 1/8"=1'



HEADER/BEAM SCHEDULE

HEADER TAG	BEAM TAG	SIZE	JACKS (EACH END)
-	B1	(1) 14" FLOOR JOIST	(2)
-	B2	(2) 14" FLOOR JOIST	(2)
A	B3	(2) 2x6	(1)
B	B4	(2) 2x8	(2)
C	B5	(2) 2x10	(2)
D	B6	(2) 2x12	(2)
E	B7	(2) 9-1/4" LVL	(3)
F	B8	(2) 11-7/8" LVL	(3)
G	B9	(2) 14" LVL	(3)
H	B10	(2) 16" LVL	(3)
I	B11	(2) 18" LVL	(3)
J	B12	(2) 24" LVL	(4)
K	B13	(3) 9-1/4" LVL	(3)
L	B14	(3) 11-7/8" LVL	(3)
M	B15	(3) 14" LVL	(3)
N	B16	(3) 16" LVL	(3)
O	B17	(3) 18" LVL	(3)
P	B18	(3) 24" LVL	(4)

HEADER/BEAM SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER/BEAM SIZES MAY BE USED FOR EASE OF CONSTRUCTION. ALL HEADERS TO BE DROPPED UNLESS NOTED OTHERWISE. ALL BEAMS TO BE FLUSH UNLESS NOTED OTHERWISE.

LINTEL SCHEDULE

TAG	SIZE	OPENING SIZE
①	L3x3x1/4"	LESS THAN 6'-0"
②	L5x3x1/4"	6'-0" TO 10'-0"
③	L5x3-1/2"x5/16"	GREATER THAN 10'-0"
④	L5x3-1/2"x5/16"	ALL ARCHED OPENINGS ROLLED OR EQUIV.

SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED • 16" O.C. (TYP FOR ③)

ALL HEADERS WITH BRICK ABOVE: ① (UNO)

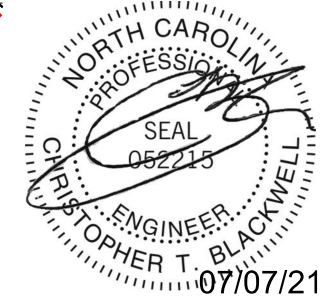
WALL STUD SCHEDULE

1ST & 2ND FLOOR LOAD BEARING STUDS:
2x4 STUDS • 16" O.C. OR 2x6 STUDS • 24" O.C.
1ST FLOOR LOAD BEARING STUDS w/ WALK-UP ATTIC:
2x4 STUDS • 12" O.C. OR 2x6 STUDS • 16" O.C.
BASEMENT LOAD BEARING STUDS:
2x4 STUDS • 12" O.C. OR 2x6 STUDS • 16" O.C.
NON-LOAD BEARING STUDS (ALL FLOORS):
2x4 STUDS • 24" O.C.
TWO STORY WALLS:
2x4 STUDS • 12" O.C. OR 2x6 STUDS • 16" O.C. BALLOON FRAMED w/ CROSS BRACING • 6'-0" O.C. VERTICALLY

KING STUD REQUIREMENTS

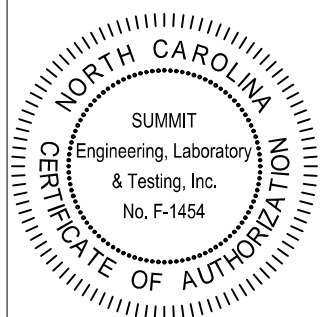
OPENING WIDTH	KINGS (EACH END)
LESS THAN 3'-0"	(1)
3'-0" TO 4'-0"	(2)
4'-0" TO 8'-0"	(3)
8'-0" TO 12'-0"	(5)
12'-0" TO 16'-0"	(6)

KING STUD REQUIREMENTS ABOVE DO NOT APPLY TO PORTAL FRAMED OPENINGS



Duncans Crossing Lot 76

STRUCTURAL MEMBERS ONLY



PROJECT
Lancaster (RH)
First Floor Framing
CLIENT
Smith Douglas Homes - Raleigh
2520 Reliance Ave
Apex, NC 27539

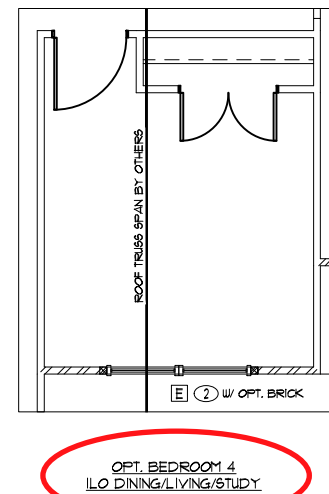
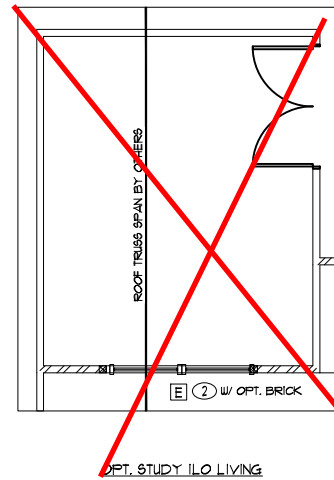
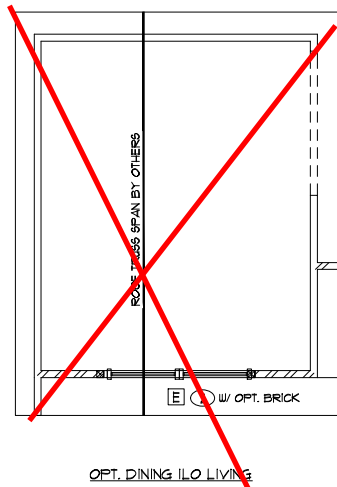
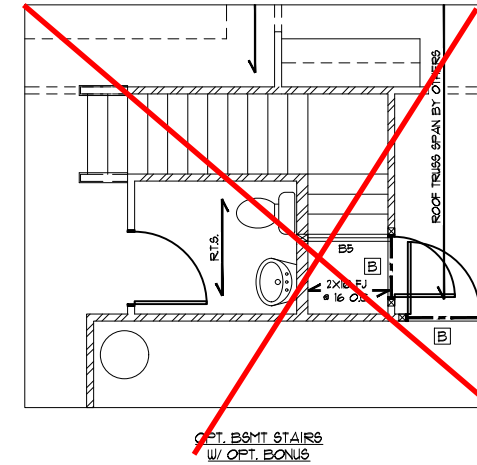
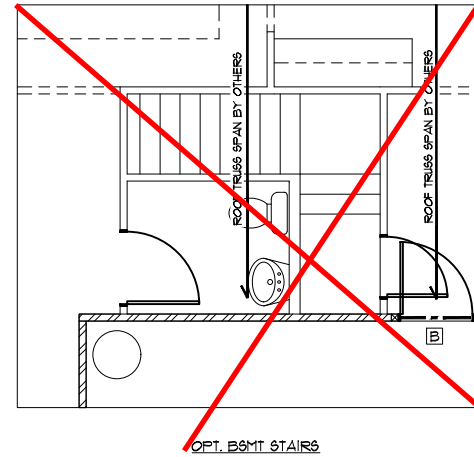
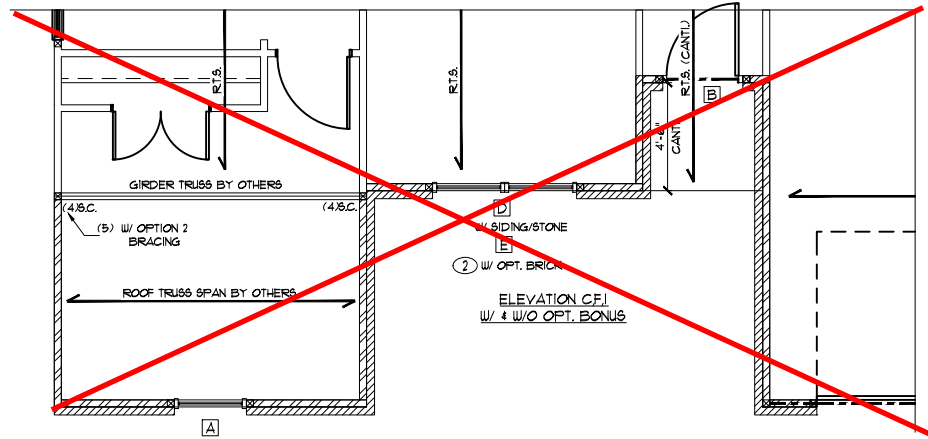
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SCALE: 1/8"=1'-0"
PROJECT #: 3832.303R
DRAWN BY: JV
CHECKED BY: BCP

ORIGINAL DRAWING
DATE PROJECT #
11/16/2018 3832.115

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET
S3.0

SEE SHEET S3.0 FOR NOTES AND MORE INFORMATION



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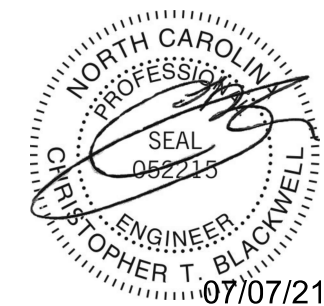
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STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

FIRST FLOOR FRAMING PLAN

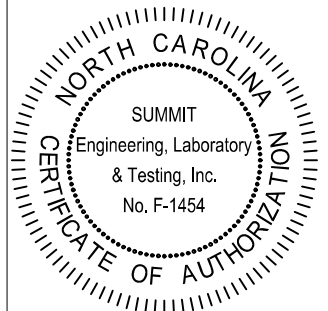
SCALE: 1/8"=1'

Duncans Crossing Lot 76



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3070 Hammond Business Place
Suite 171, RALEIGH, NC 27603
OFFICE: 919.380.9991
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WWW.SUMMIT-COMPANIES.COM



PROJECT
Lancaster (RH)
First Floor Framing
CLIENT
Smith Douglas Homes - Raleigh
2520 Reliance Ave
Apex, NC 27539

CURRENT DRAWING
DATE: 7/16/2021
SCALE: 1/8"=1'-0"
PROJECT #: 3832.303R
DRAWN BY: JV
CHECKED BY: BCP

ORIGINAL DRAWING
DATE PROJECT #
1/16/2018 3832.175

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S3.2

TRUSS UPLIFT CONNECTOR SCHEDULE

MAX. UPLIFT	ROOF TO WALL	FLOOR TO FLOOR	FLOOR TO FND
600 LBS	H2.5A	PER WALL SHEATHING & FASTENERS	
1200 LBS	(2) H2.5A	C916 (END + 11")	DTT2Z
1450 LBS	HT620	C916 (END + 11")	DTT2Z
2000 LBS	(2) HT620	(2) C916 (END + 11")	DTT2Z
2900 LBS	(2) HT620	(2) C916 (END + 11")	HTT4
3600 LBS	LGT3-SD62.5	MSTC52	HTT4

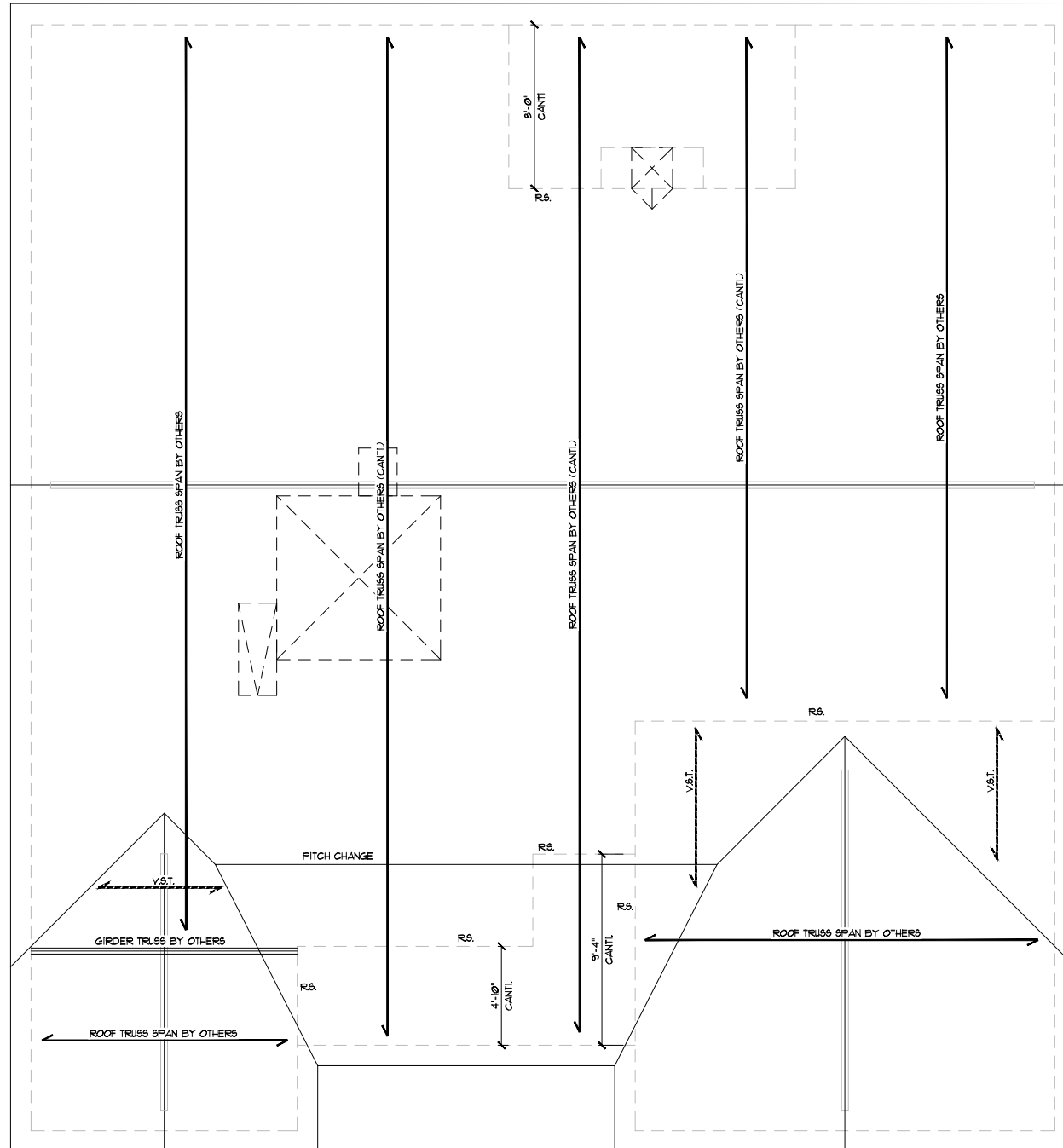
- ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.
- UPLIFT VALUES LISTED ARE FOR 91P 12 GRADE MEMBERS.
- REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS MANUFACTURER OVERRIDE THOSE LISTED ABOVE.
- CONTACT SUMMIT FOR REQUIRED CONNECTORS WHEN LOADS EXCEED THOSE LISTED ABOVE.

NOTE: 1ST FLY OF ALL SHOWN GIRDER TRUSSES TO ALIGN WITH INSIDE FACE OF WALL (TYP, UNO)

NOTE: ROOF TRUSSES SHALL BE SPACED TO SUPPORT FALSE FRAMED DORMER WALLS (TYP, UNO)

NOTE: TRUSS UPLIFT LOADS SHALL BE DETERMINED PER TRUSS MANUFACTURER IN ACCORDANCE WITH SECTION R602.11.1 WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.3.5 OF THE 2018 NCRC. REFER TO BRACED WALL PLANS FOR SHEATHING AND FASTENER REQUIREMENTS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY SMITH DOUGLAS HOMES COMPLETED/REVISED ON 09/22/2020. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.



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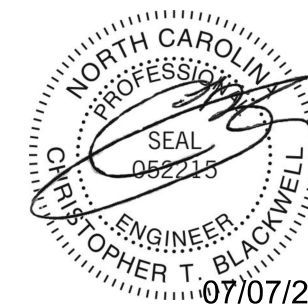
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STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

ROOF FRAMING PLAN

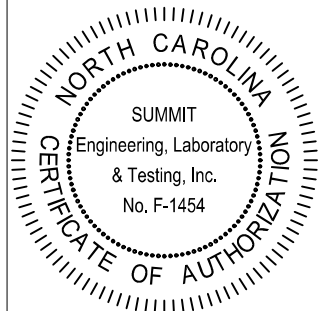
SCALE: 1/8"=1'

Duncans Crossing Lot 76



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WWW.SUMMIT-COMPANIES.COM



PROJECT
Lancaster (RH)
Roof Framing Plan
CLIENT
Smith Douglas Homes - Raleigh
2520 Reliance Ave
Apex, NC 27539

CURRENT DRAWING
DATE: 7/6/2021
SCALE: 1/8"=1'-0"
PROJECT #: 3832.303R
DRAWN BY: JV
CHECKED BY: BCP

ORIGINAL DRAWING
DATE PROJECT #
11/6/2018 3832.175

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S5.0

REQUIRED BRACED WALL PANEL CONNECTIONS				
METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION	
			• PANEL EDGES	• INTERMEDIATE SUPPORTS
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS • 6" O.C.	6d COMMON NAILS • 12" O.C.
GB	GYPSUM BOARD	1/2"	5d COOLER NAILS** • 1" O.C.	5d COOLER NAILS** • 1" O.C.
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS • 6" O.C.	6d COMMON NAILS • 12" O.C.
FF	WOOD STRUCTURAL PANEL	1/16"	PER FIGURE R602.10.1	PER FIGURE R602.10.1

**OR EQUIVALENT PER TABLE R102.3.5

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 NORTH CAROLINA RESIDENTIAL CODE.
- WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE WIND SPEEDS UP TO 130 MPH.
- REFER TO ARCHITECTURAL PLAN FOR DOOR/WINDOW OPENING SIZES. BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN ACCORDANCE WITH TABLE R602.10.1.
- ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1.
- THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD (UNO).
- FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING HILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
- FLOORS SHALL NOT BE CANTILEVERED MORE THAN 24" BEYOND THE FOUNDATION OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- A BRACED WALL PANEL SHALL BE LOCATED WITHIN 10 FEET OF EACH END OF A BRACED WALL LINE.
- THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 21 FEET.
- MASONRY OR CONCRETE STEM WALLS WITH A LENGTH OF 48" OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2018 NCR.
- BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4.
- BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5.
- CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10.4.6.
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO).
- ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS.
- ABBREVIATIONS:

GB = GYPSUM BOARD WSP = WOOD STRUCTURAL PANEL
CS-XXX = CONT. SHEATHED ENG = ENGINEERED SOLUTION
FF = PORTAL FRAME FF-ENG = ENG. PORTAL FRAME

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY SMITH DOUGLAS HOMES COMPLETED/REVISED ON 02/02/2020. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

INSTALL HOLD-DOWNS PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NCR.

FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD ELEV ADG 4 CH		
	REQUIRED	PROVIDED
FRONT	8.8	222
LEFT	8.4	40.0
REAR	8.8	212
RIGHT	8.4	51.0

FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD - ELEV BEH		
	REQUIRED	PROVIDED
FRONT	8.8	192
LEFT	8.4	40.0
REAR	8.8	212
RIGHT	8.4	51.0

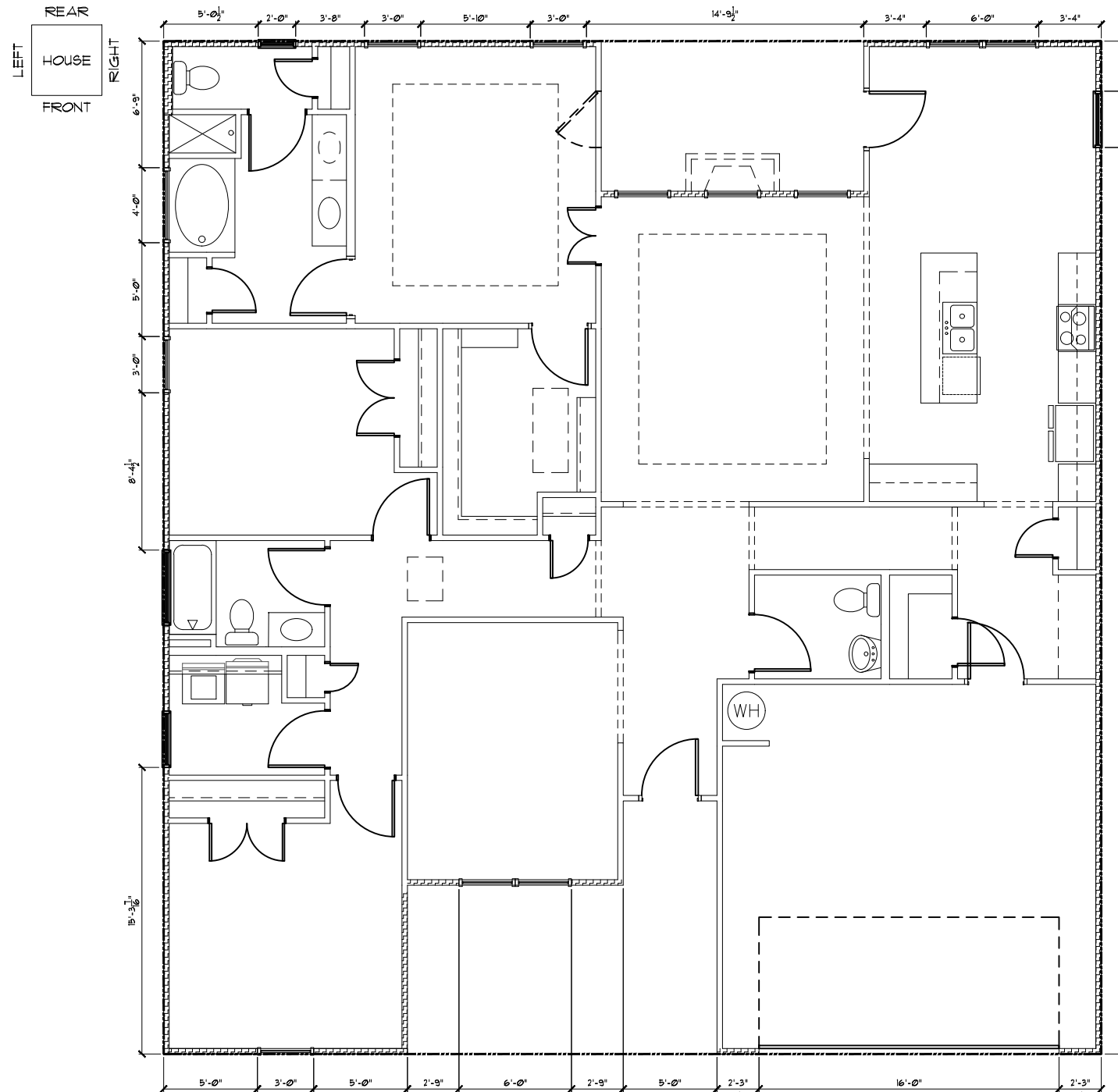
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCR.

FIRST FLOOR BRACING PLAN

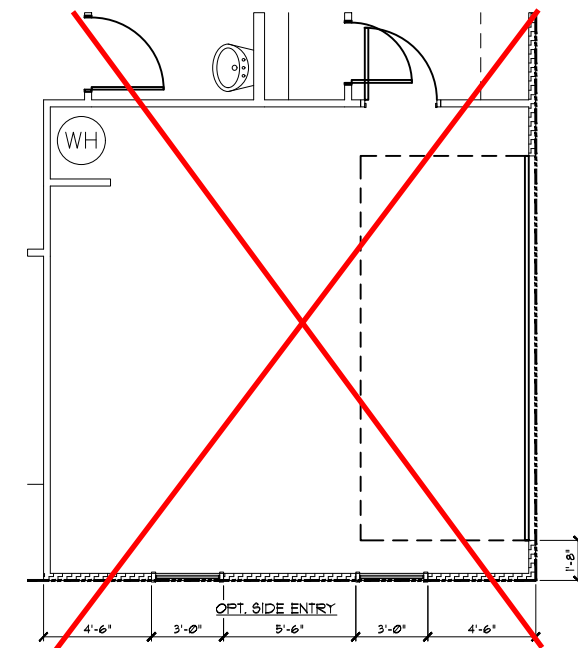
SCALE: 1/8"=1'



ELEVATION ADG 4 CH

BRACING OPTION 1

FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
FRONT	8.8	30.0
LEFT	8.4	40.0
REAR	8.8	212
RIGHT	8.4	35.8

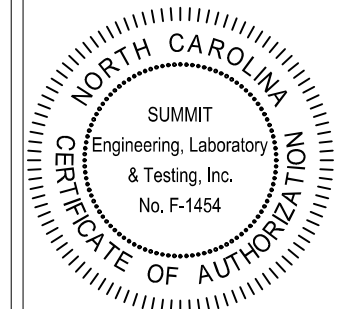


Duncans Crossing Lot 76



STRUCTURAL MEMBERS ONLY

SUMMIT
ENGINEERING LABORATORY TESTING
3070 Hammond Business Place
Suite 171, RALEIGH, NC 27603
OFFICE: 919.380.9991
FAX: 919.380.9993
WWW.SUMMIT-COMPANIES.COM



PROJECT
Lancaster (RH)
First Floor Bracing
CLIENT
Smith Douglas Homes - Raleigh
2520 Reliance Ave
Apex, NC 27539

CURRENT DRAWING
DATE: 7/16/2021
SCALE: 1/8"=1'-0"
PROJECT #: 3832.303R
DRAWN BY: JV
CHECKED BY: BCP

ORIGINAL DRAWING
DATE PROJECT #
11/16/2018 3832.175

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

S7.0

REQUIRED BRACED WALL PANEL CONNECTIONS					
METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION		
			# PANEL EDGES	# INTERMEDIATE SUPPORTS	
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS • 6" O.C.	6d COMMON NAILS • 12" O.C.	
GB	GYPSUM BOARD	1/2"	5d COOLER NAILS** • 1" O.C.	5d COOLER NAILS** • 1" O.C.	
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS • 6" O.C.	6d COMMON NAILS • 12" O.C.	
FF	WOOD STRUCTURAL PANEL	1/16"	PER FIGURE R602.10.1	PER FIGURE R602.10.1	

**OR EQUIVALENT PER TABLE R102.3.5

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 NORTH CAROLINA RESIDENTIAL CODE.
- WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE WIND SPEEDS UP TO 150 MPH.
- REFER TO ARCHITECTURAL PLAN FOR DOOR/WINDOW OPENING SIZES.
- BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN ACCORDANCE WITH TABLE R602.10.1.
- ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1.
- THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD (LNO).
- FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING INFILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
- FLOORS SHALL NOT BE CANTILEVERED MORE THAN 24" BEYOND THE FOUNDATION OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- A BRACED WALL PANEL SHALL BE LOCATED WITHIN 12 FEET OF EACH END OF A BRACED WALL LINE.
- THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 21 FEET.
- MASONRY OR CONCRETE STEM WALLS WITH A LENGTH OF 48" OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2018 NRC.
- BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4.
- BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5.
- CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10.4.6.
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (LNO).
- ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS.
- ABBREVIATIONS:

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INSTALL HOLD-DOWNS PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NRC.

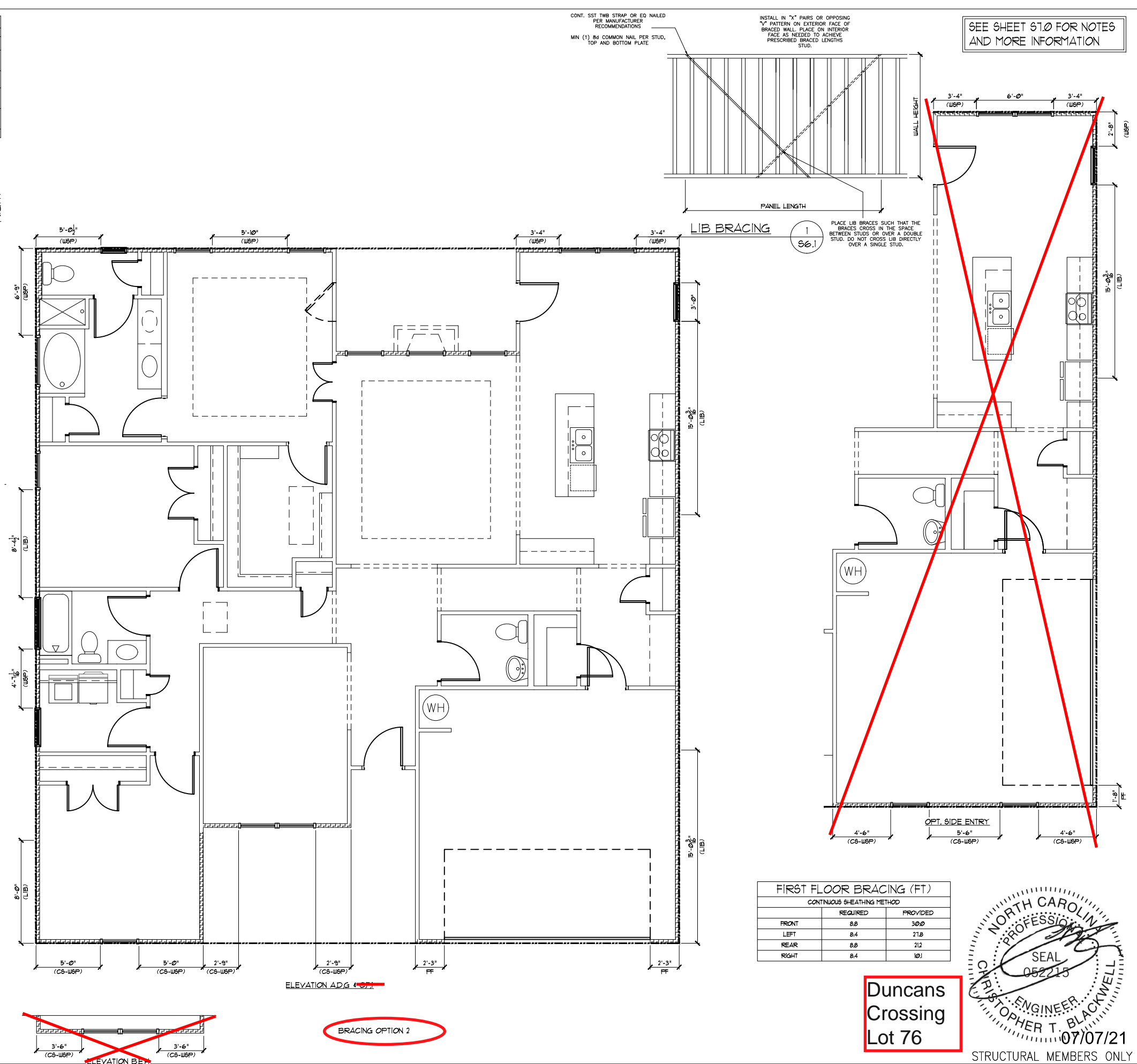
FIRST FLOOR BRACING (FT)			
CONTINUOUS SHEATHING METHOD - ELEV ADG 4 CFI			
	REQUIRED	PROVIDED	
FRONT	8.8	222	
LEFT	8.4	15.8	
REAR	8.8	11.5	
RIGHT	8.4	15.5	

FIRST FLOOR BRACING (FT)			
CONTINUOUS SHEATHING METHOD - ELEV BEH			
	REQUIRED	PROVIDED	
FRONT	8.8	192	
LEFT	8.4	15.8	
REAR	8.8	11.5	
RIGHT	8.4	15.5	

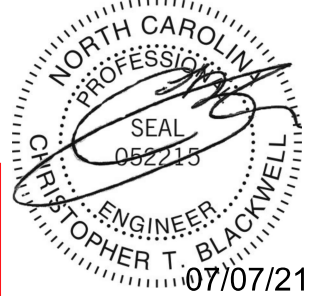
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STRUCTURAL ANALYSIS BASED ON 2018 NRC.

FIRST FLOOR BRACING PLAN
SCALE: 1/8"=1'



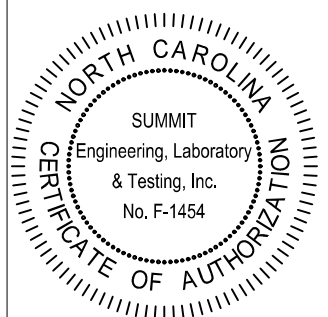
FIRST FLOOR BRACING (FT)			
CONTINUOUS SHEATHING METHOD			
	REQUIRED	PROVIDED	
FRONT	8.8	300	
LEFT	8.4	21.8	
REAR	8.8	21.2	
RIGHT	8.4	10.1	



Duncans Crossing Lot 76

STRUCTURAL MEMBERS ONLY

SUMMIT
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3070 Hammond Business Place
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FAX: 919.380.9993
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PROJECT
Lancaster (RH)
First Floor Bracing

CLIENT
Smith Douglas Homes - Raleigh
2520 Reliance Ave
Apex, NC 27539

CURRENT DRAWING
DATE: 7/16/2021
SCALE: 1/8"=1'-0"
PROJECT #: 3832.303R
DRAWN BY: JY
CHECKED BY: BCP

ORIGINAL DRAWING
DATE PROJECT #
11/16/2018 3832.175

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET
7.1

GENERAL STRUCTURAL NOTES:

- The design professional whose seal appears on these drawings is the structural engineer of record (SER) for this project. The SER bears the responsibility of the primary structural elements and the performance of this structure. No other party may revise, alter, or delete any structural aspects of these construction documents without written permission of SUMMIT Engineering, Laboratory & Testing, P.C. (SUMMIT) or the SER. For the purposes of these construction documents the SER and SUMMIT shall be considered the same entity.
- The structure is only stable in its completed form. The contractor shall provide all required temporary bracing during construction to stabilize the structure.
- The SER is not responsible for construction sequences, methods, or techniques in connection with the construction of this structure. The SER will not be held responsible for the contractor's failure to conform to the contract documents, should any non-conformities occur.
- Any structural elements or details not fully developed on the construction drawings shall be completed under the direction of a licensed professional engineer. These shop drawings shall be submitted to SUMMIT for review before any construction begins. The shop drawings will be reviewed for overall compliance as it relates to the structural design of this project. Verification of the shop drawings for dimensions, or for actual field conditions, is not the responsibility of the SER or SUMMIT.
- Verification of assumed field conditions is not the responsibility of the SER. The contractor shall verify the field conditions for accuracy and report any discrepancies to SUMMIT before construction begins.
- The SER is not responsible for any secondary structural elements or non-structural elements, except for the elements specifically noted on the structural drawings.
- This structure and all construction shall conform to all applicable sections of the international residential code.
- This structure and all construction shall conform to all applicable sections of the 2018 North Carolina Residential Code (NCRC) and any local codes or restrictions

FOUNDATIONS:

- Foundations shall be constructed in accordance with chapter 4 of the 2018 NC Residential Building Code (Special consideration shall be given to Chapter 45 in wind zones above 130mph)
- Footing sizes based on a presumptive soil bearing capacity of 2000 PSF. Contractor is solely responsible for verifying the suitability of the site soil conditions at the time of construction
- Maximum depth of unbalanced fill against masonry walls to be as specified in section R404.1 of the 2018 NCRC
- The structural engineer has not performed a subsurface investigation. Verification of this assumed value is the responsibility of the owner or the contractor. Should any adverse soil condition be encountered the SER must be contacted before proceeding.
- The bottom of all footings shall extend below the frost line for the region in which the structure is to be constructed. However, the bottom of all footings shall be a minimum of 12" below grade.
- Any fill shall be placed under the direction or recommendation of a licensed professional engineer. The resulting soil shall be compacted to a minimum of 95% maximum dry density.
- Excavations of footings shall be lined temporarily with a 6 mil polyethylene membrane if placement of concrete does not occur within 24 hours of excavation.
- No concrete shall be placed against any subgrade containing water, ice, frost, or loose material.
- Each crawl space pier shall bear in the middle third of its respective footing and each girder shall bearing in the middle third of the piers. Pilasters to be bonded to perimeter foundation wall
- Crawl spaced to be graded level and clear of all debris
- Provide foundation waterproofing and drain with positive slope to outlet as required by site conditions
- Energy efficiency compliance and insulation of the structure to be in accordance with chapter 11 of the 2018 NCRC

CONCRETE:

- Concrete shall have a normal weight aggregate and a minimum compressive strength (f'c) at 28 days of 3000 psi, unless otherwise noted on the plan.
- Concrete shall be proportioned, mixed, and placed in accordance with the latest editions of ACI 318: "Building Code Requirements for Reinforced Concrete" and ACI 301: "Specifications for Structural Concrete for Buildings".
- Air entrained concrete must be used for all structural elements exposed to freeze/thaw cycles and deicing chemicals. Air entrainment amounts (in percent) shall be within -1% to +2% of target values as follows:
 - Footings: 5%
 - Exterior Slabs: 5%
- No admixtures shall be added to any structural concrete without written permission of the SER
- Concrete slabs-on-grade shall be constructed in accordance with ACI 302.1R-96: "Guide for Concrete Slab and Slab Construction".
- The concrete slab-on-grade has been designed using a subgrade modulus of k=250 pci and a design loading of 200 psf. The SER is not responsible for differential settlement, slab cracking or other future defects resulting from unreported conditions not in accordance with the above assumptions.
- Control or saw cut joints shall be spaced in interior slabs-on-grade at a maximum of 15'-0" O.C. and in exterior slabs-on-grade at a maximum of 10'-0" unless otherwise noted.
- Control or saw cut joints shall be produced using conventional process within 4 to 12 hours after the slab has been finished
- Reinforcing steel may not extend through a control joint. Reinforcing steel may extend through a saw cut joint.
- All welded wire fabric (W.W.F.) for concrete slabs-on-grade shall be placed at mid-depth of slab. The W.W.F. shall be securely supported during the concrete pour. Fibermesh may be used in lieu of W.W.F.

CONCRETE REINFORCEMENT:

- Fibrous concrete reinforcement, or fibermesh, specified in concrete slabs-on-grade may be used for control of cracking due to shrinkage and thermal expansion/contraction, lowered water migration, an increase in impact capacity, increased abrasion resistance, and residual strength.
- Fibermesh reinforcing to be 100% virgin polypropylene fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement.
- Application of fibermesh per cubic yard of concrete shall equal a minimum of 0.1% by volume (1.5 pounds per cubic yard)
- Fibermesh shall comply with ASTM C1116, any local building code requirements, and shall meet or exceed the current industry standard.
- Steel Reinforcing bars shall be new billet steel conforming to ASTM A615, grade 60.
- Detailing, fabrication, and placement of reinforcing steel shall be in accordance with the latest edition of ACI 315: "Manual of Standard Practice for Detailing Concrete Structures"
- Horizontal footing and wall reinforcement shall be continuous and shall have 90° bends, or corner bars with the same size/spacing as the horizontal reinforcement with a class B tension splice.
- Lap reinforcement as required, a minimum of 40 bar diameters for tension or compression unless otherwise noted. Splices in masonry shall be a minimum of 48 bar diameters.
- Where reinforcing dowels are required, they shall be equivalent in size and spacing to the vertical reinforcement. The dowel shall extend 48 bar diameters vertically and 20 bar diameters into the footing.
- Where reinforcing steel is required vertically, dowels shall be provided unless otherwise noted.

WOOD FRAMING:

- Solid sawn wood framing members shall conform to the specifications listed in the latest edition of the "National Design Specification for Wood Construction" (NDS). Unless otherwise noted, all wood framing members are designed to be Spruce-Pine-Fir (SPF) #2.
- LVL or PSL engineered wood shall have the following minimum design values:
 - E = 1,900,000 psi
 - Fb = 2600 psi
 - Fv = 285 psi
 - Fc = 700 psi
- Wood in contact with concrete, masonry, or earth shall be pressure treated in accordance with AWPA standard C-15. All other moisture exposed wood shall be treated in accordance with AWPA standard C-2
- Nails shall be common wire nails unless otherwise noted.
- Lag screws shall conform to ANSI/ASME standard B18.2.1-1981. Lead holes for lag screws shall be in accordance with NDS specifications.
- All beams shall have full bearing on supporting framing members unless otherwise noted.
- Exterior and load bearing stud walls are to be 2x4 SPF#2 @16" O.C. unless otherwise noted. Studs shall be continuous from the sole plate to the double top plate. Studs shall only be discontinuous at headers for window/door openings. A minimum of one king stud shall be placed at each end of the header. King studs shall be continuous.
- Individual studs forming a column shall be attached with one 10d nail @6" O.C. staggered. The stud column shall be continuous to the foundation or beam. The column shall be fully blocked at all floor levels to ensure proper load transfer.
- Multi-ply beams shall have each ply attached with (3)10d nails @ 24" O.C.
- Fitch beams and four and five ply beams shall be bolted together with (2) rows of 1/2" dia. through bolts staggered @24" O.C. w/ 2" edge distance and (2) bolts located at 6" from each end, unless noted otherwise.

WOOD TRUSSES:

- The wood truss manufacturer/fabricator is responsible for the design of the wood trusses. Submit sealed shop drawings and supporting calculations to the SER for review prior to fabrication. The SER shall have a minimum of five (5) days for review. The review by the SER shall review for overall compliance with the design documents. The SER shall assume no responsibility for the correctness for the structural design for the wood trusses.
- The wood trusses shall be designed for all required loadings as specified in the local building code, the ASCE Standard "Minimum Design Loads for Buildings and Other Structures." (ASCE 7-10), and the loading requirements shown on these specifications. The truss drawings shall be coordinated with all other construction documents and provisions provided for loads shown on these drawings including but not limited to HVAC equipment, piping, and architectural fixtures attached to the trusses.
- The trusses shall be designed, fabricated, and erected in accordance with the latest edition of the "National Design Specification for Wood Construction." (NDS) and "Design Specification for Metal Plate Connected Wood Trusses."
- The truss manufacturer shall provide adequate bracing information in accordance with "Commentary and Recommendations for Handling, Installing, and Bracing Metal Plate Connected Wood Trusses" (HIB-91). This bracing, both temporary and permanent, shall be shown on the shop drawings. Also, the shop drawings shall show the required attachments for the trusses.
- Any chords or truss webs shown on these drawings have been shown as a reference only. The final design of the trusses shall be per the manufacturer.

WOOD STRUCTURAL PANELS:

- Fabrication and placement of structural wood sheathing shall be in accordance with the APA Design/Construction Guide "Residential and Commercial," and all other applicable APA standards.
- All structurally required wood sheathing shall bear the mark of the APA.
- Wood wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information. Sheathing shall be applied with the long direction perpendicular to framing, unless noted otherwise.
- Roof sheathing shall be APA rated sheathing exposure 1 or 2. Roof sheathing shall be continuous over two supports and attached to its supporting roof framing with (1)-8d CC nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied with the long direction perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of plywood clips or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- Wood floor sheathing shall be APA rated sheathing exposure 1 or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshank nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of T&G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.

STRUCTURAL FIBERBOARD PANELS:

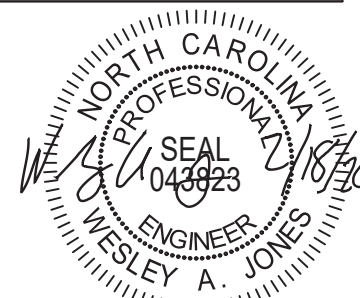
- Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards.
- Fiberboard wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information.
- Sheathing shall have a 1/8" gap at panel ends and edges are recommended in accordance with the AFA.

EXTERIOR WOOD FRAMED DECKS:

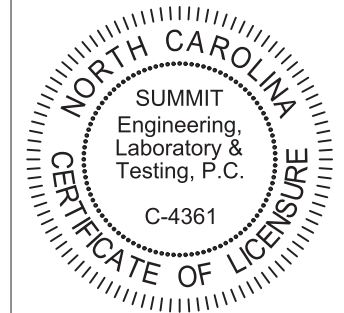
- Decks are to be framed in accordance with local building codes and as referenced on the structural plans, either through code references or construction details.

STRUCTURAL STEEL:

- Structural steel shall be fabricated and erected in accordance with the American Institute of Steel Construction "Code of Standard Practice for Steel Buildings and Bridges" and of the manual of Steel Construction "Load Resistance Factor Design" latest editions.
- All steel shall have a minimum yield stress (Fy) of 36 ksi unless otherwise noted.
- Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D1.1. Electrodes for shop and field welding shall be class E70XX. All welding shall be performed by a certified welder per the above standards.



STRUCTURAL MEMBERS ONLY



PROJECT
Standard Details
Notes and Specifications
 CLIENT
Smith Douglas Homes
110 Village Trail, Suite 215
Woodstock, GA 30188

CURRENT DRAWING

DATE: 2/18/20
 SCALE: NTS
 PROJECT #: 3832
 DRAWN BY: LBV
 CHECKED BY: WAJ

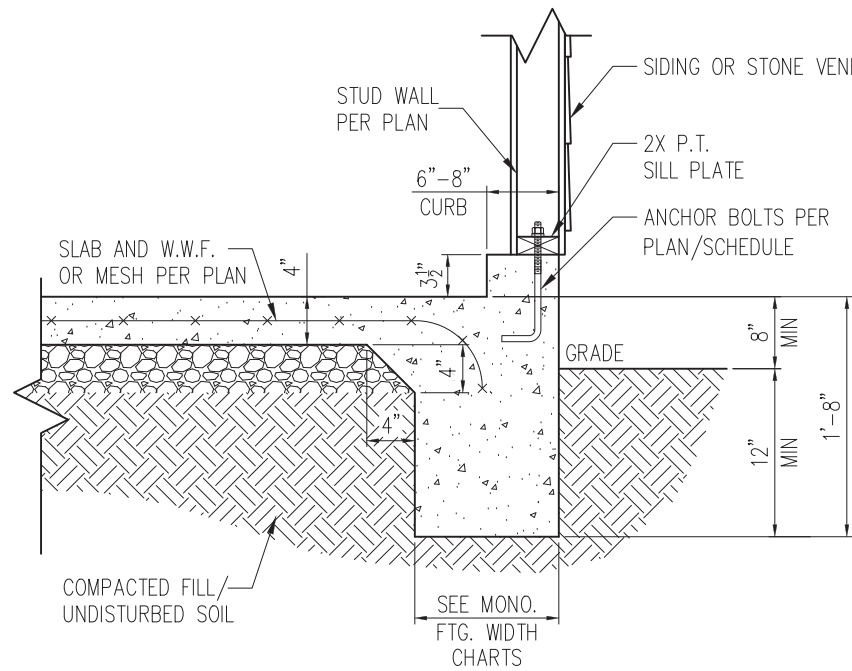
ORIGINAL DRAWING

NO.	DATE	PROJECT #
0	1/7/16	3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

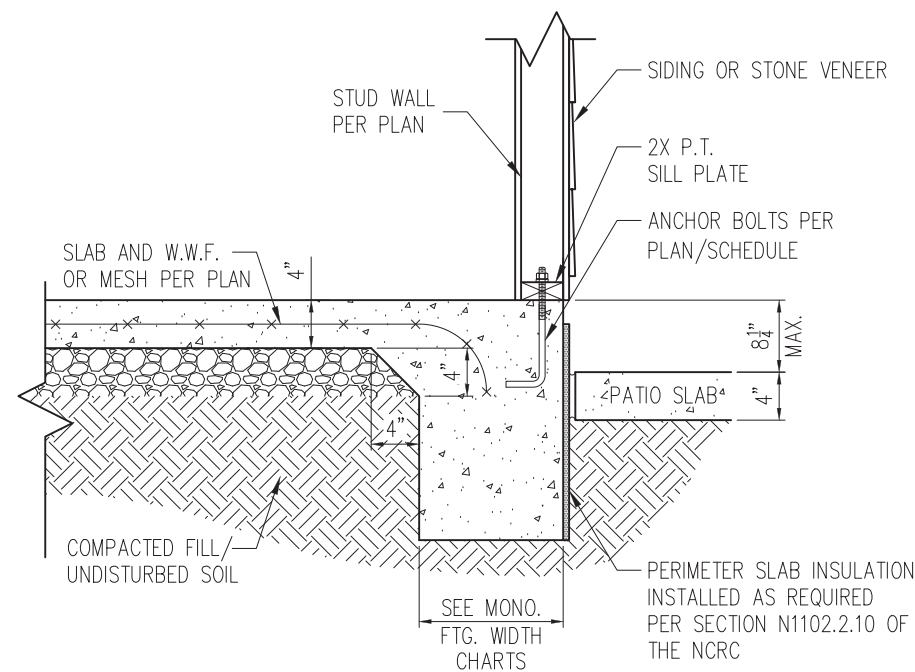
SHEET

CS2



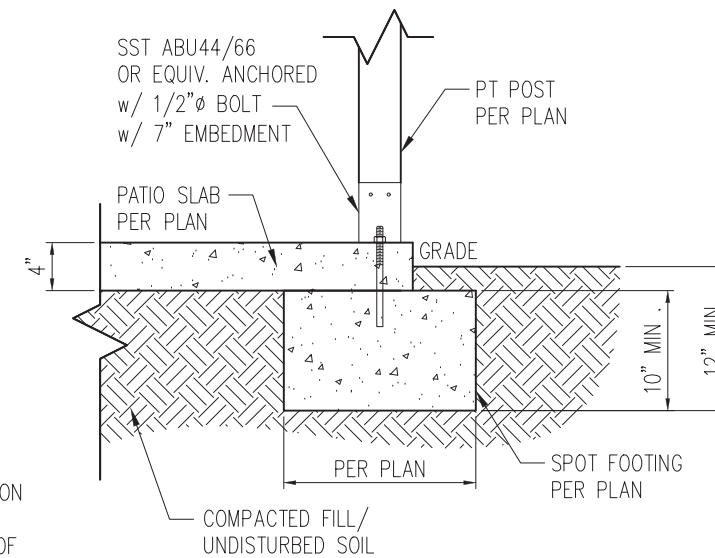
STANDARD - SIDING/STONE

1 TYP. GARAGE CURB DETAIL
D1m 3/4" = 1'-0"

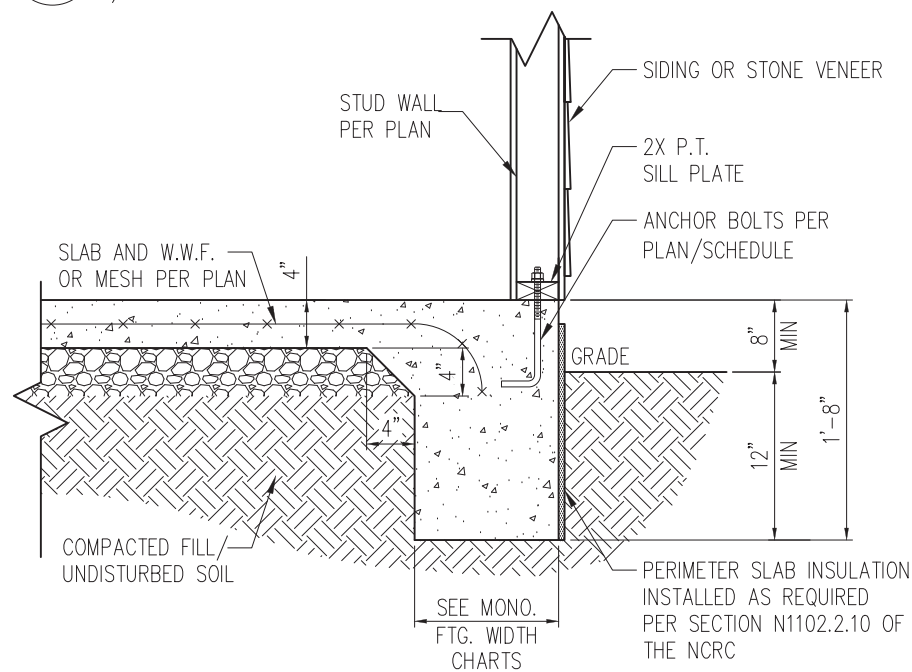


STANDARD - SIDING/STONE

2 PATIO SLAB DETAIL
D1m 3/4" = 1'-0"

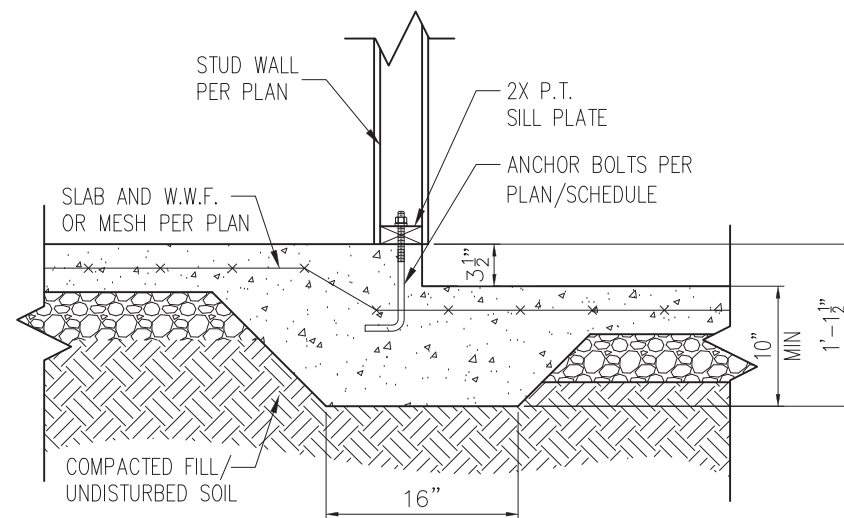


2A COVERED PATIO DETAIL
D1m 3/4" = 1'-0"



STANDARD - SIDING/STONE

3 TYP. SLAB DETAIL
D1m 3/4" = 1'-0"



4 STEP IN GARAGE
D1m 3/4" = 1'-0"

WALL ANCHOR SCHEDULE

TYPE OF ANCHOR	MIN. CONC. EMBEDMENT	SPACING EMBEDMENT	INTERIOR WALL	EXTERIOR WALL
1/2" Ø A307 BOLTS w/ STD. 90° BEND	7"	6'-0"	YES	YES
SST - MAS	4"	5'-0"	NO	YES
HILTI KWIK BOLT KBI 1/2-2-3/4	2-1/4"	6'-0"	YES	NO
1/2" Ø HILTI THREADED ROD w/ HIT HY150 ADHESIVE	7"	6'-0"	YES	YES

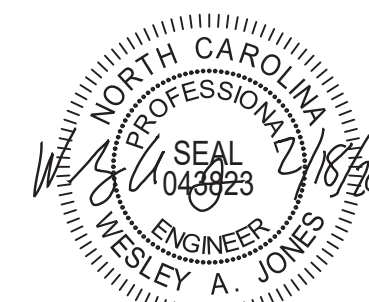
NOTE: INSTALL ALL ANCHORS 12" MAX. FROM ALL BOTTOM PLATE ENDS AND JOINTS.

MONOLITHIC FOOTING WIDTH

# OF STORIES	WIDTH BASED ON SOIL BEARING CAPACITY		
	1500 PSF	2000 PSF	2500 PSF
1 STORY - STD.	16"	16"	16"
1 STORY - BRICK VENEER	21"	21"	21"
2 STORY - STD.	20"	16"	16"
2 STORY - BRICK VENEER	25"	21"	21"

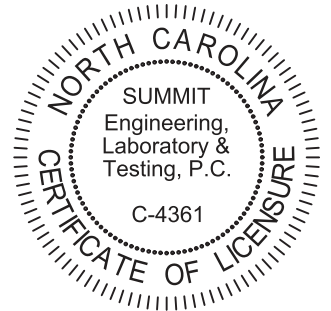
*5" BRICK LEDGE HAS BEEN ADDED TO THE MONOLITHIC FOOTING WIDTH FOR BRICK SUPPORT

- NOTES:
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 - SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.



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PROJECT
Standard Details
Monolithic Slab Details
CLIENT
Smith Douglas Homes
110 Village Trail, Suite 215
Woodstock, GA 30188

CURRENT DRAWING
DATE: 2/18/20
SCALE: NTS
PROJECT #: 3832
DRAWN BY: LBV
CHECKED BY: WAJ

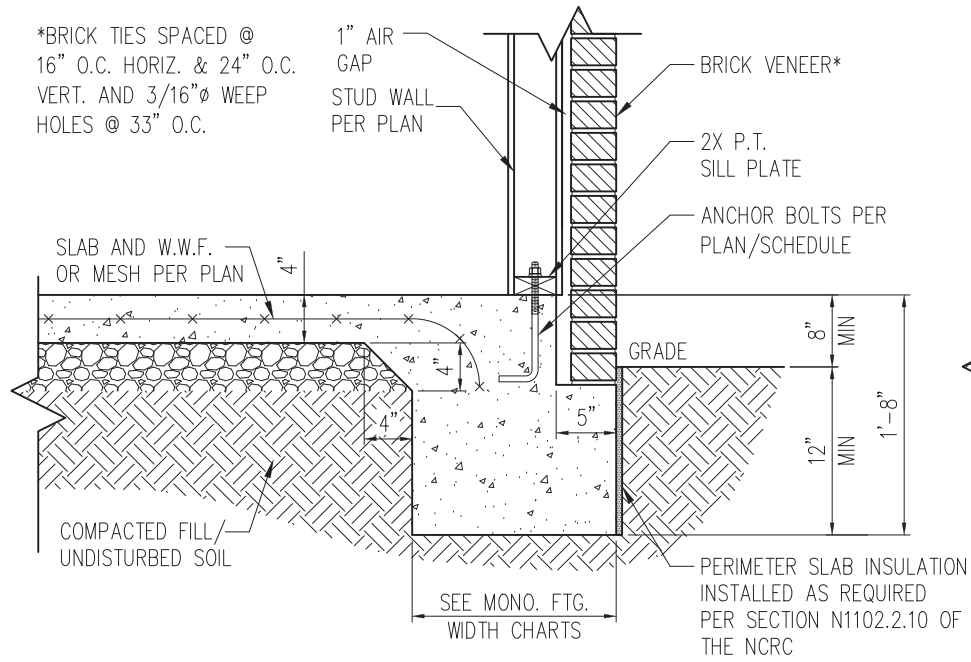
ORIGINAL DRAWING
NO. DATE PROJECT #
0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

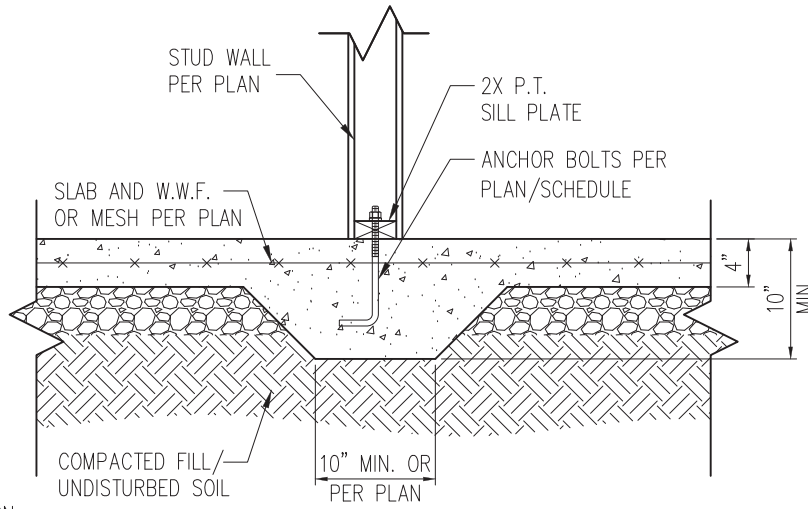
D1m

*BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT. AND 3/16" Ø WEEP HOLES @ 33" O.C.



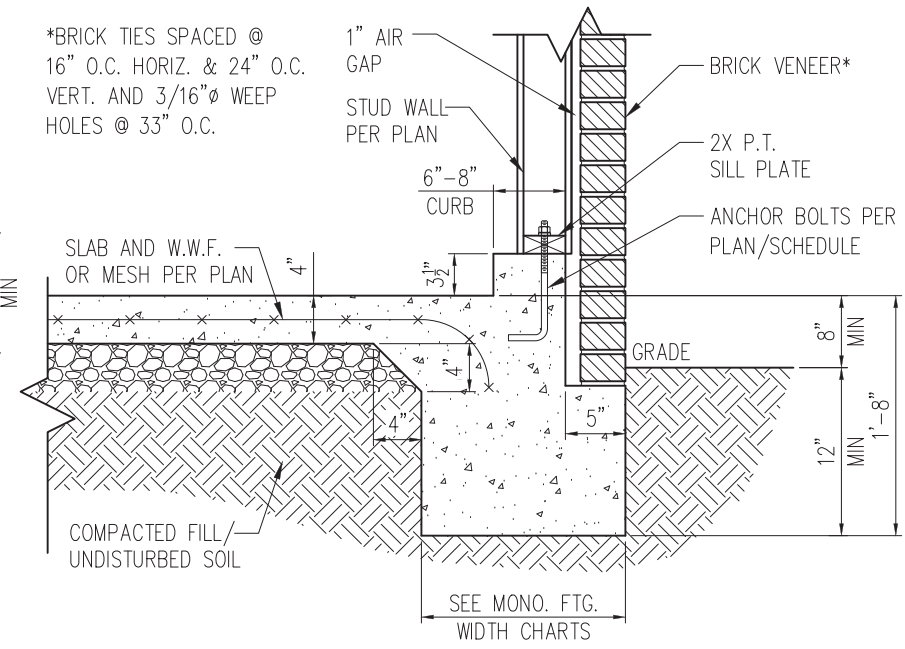
STANDARD - BRICK

1 TYP. SLAB DETAIL W/ BRICK VENEER
D2m 3/4" = 1'-0"



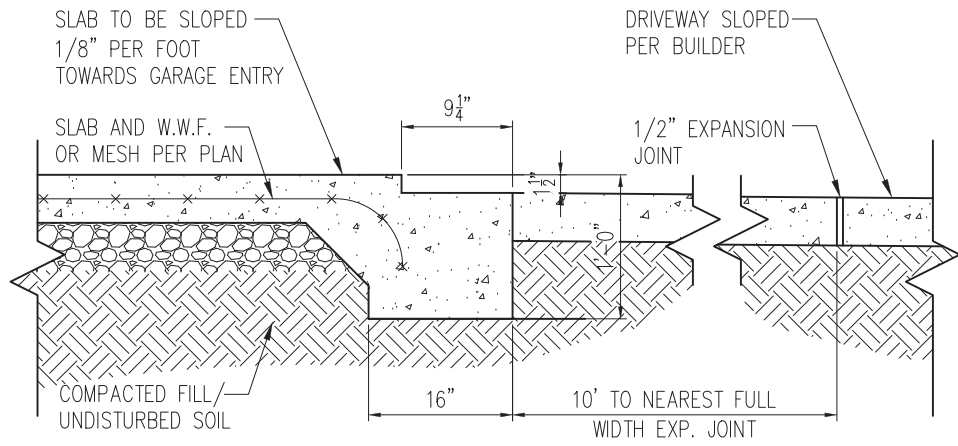
3 TYP. THICKENED SLAB DETAIL
D2m 3/4" = 1'-0"

*BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT. AND 3/16" Ø WEEP HOLES @ 33" O.C.

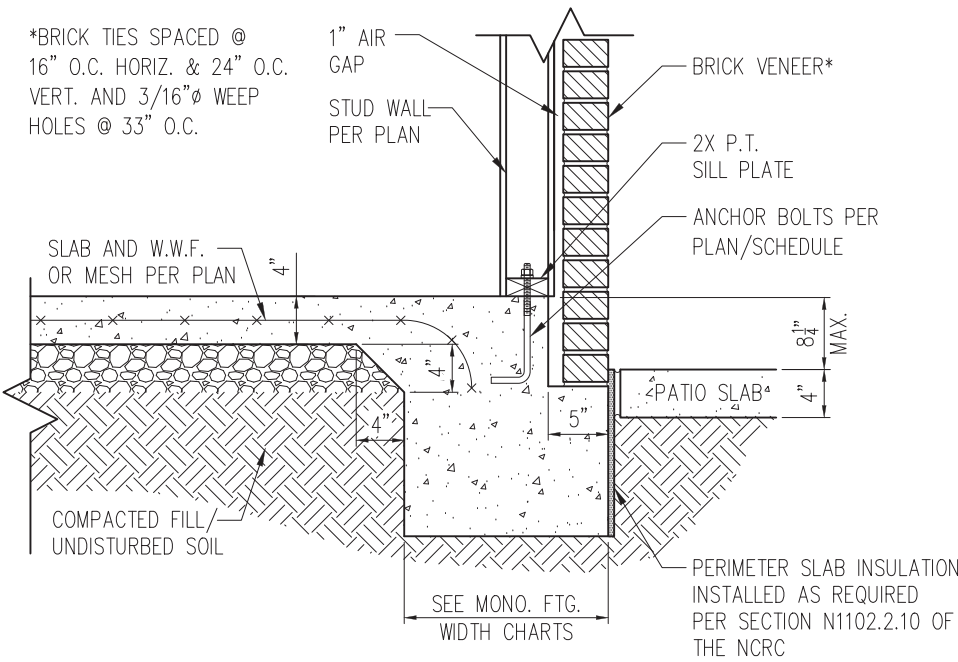


STANDARD - BRICK

5 TYP. GARAGE CURB DETAIL W/ BRICK VENEER
D2m 3/4" = 1'-0"



2 SLAB AT GARAGE DOOR
D2m 3/4" = 1'-0"



STANDARD - BRICK

4 PATIO SLAB DETAIL W/ BRICK VENEER
D2m 3/4" = 1'-0"

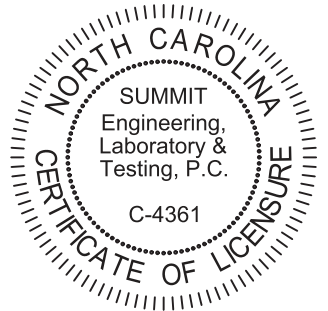
NOTES:

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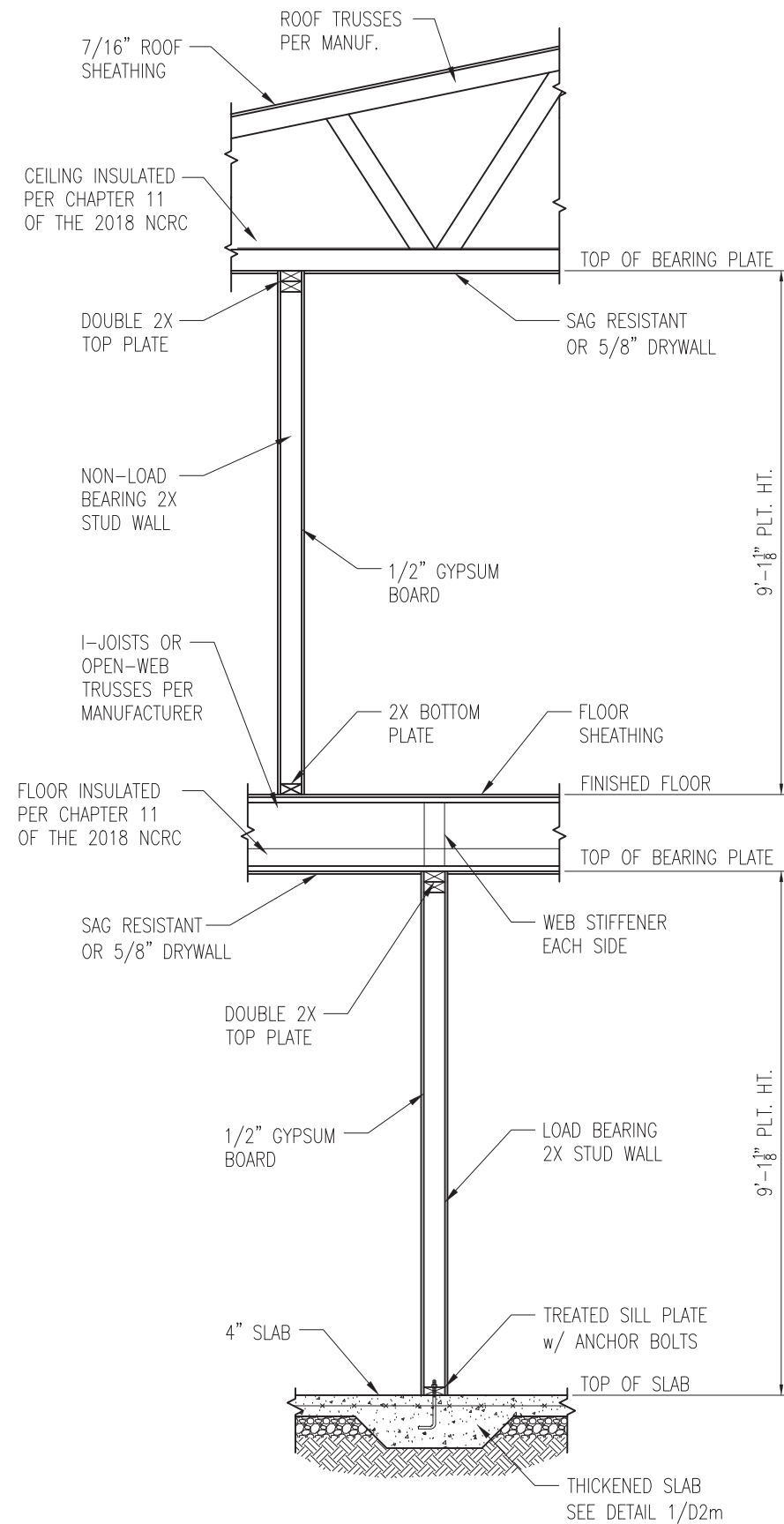
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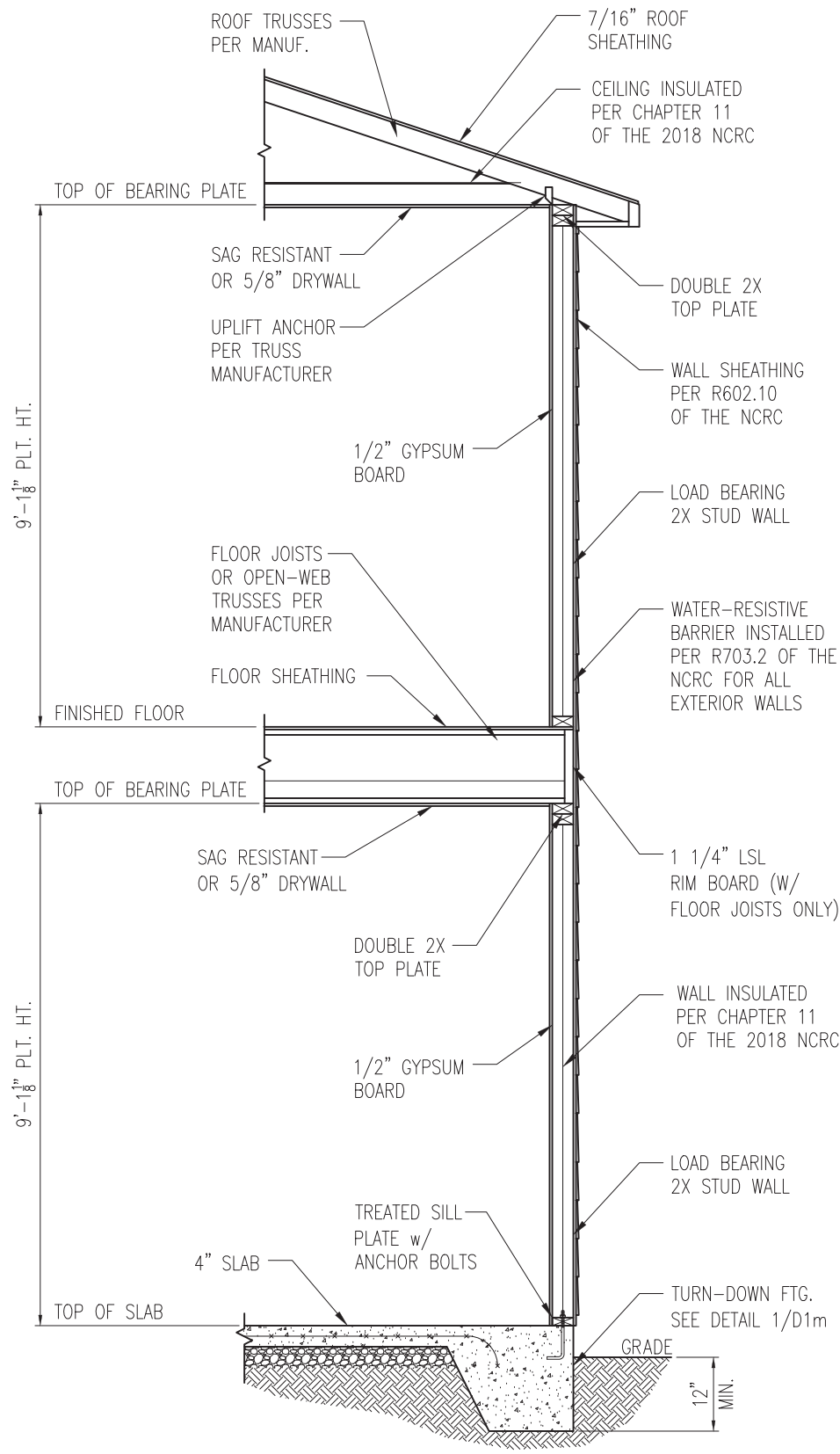
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NO. DATE PROJECT #
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REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET
D2m



1 TYP. INTERIOR LOAD BEARING WALL SECTION
 D3m 3/4" = 1'-0"

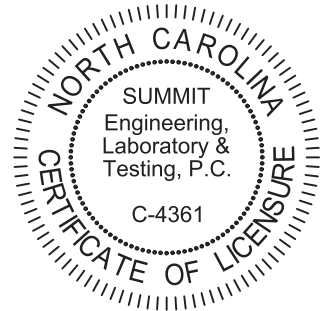


2 TYP. EXTERIOR LOAD BEARING WALL SECTION
 D3m 3/4" = 1'-0"
 -SIMILAR w/ BRICK AND STONE
 -BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT.
 -MIN. 3/16" Ø WEEP HOLES @ 33" O.C.

- NOTES:
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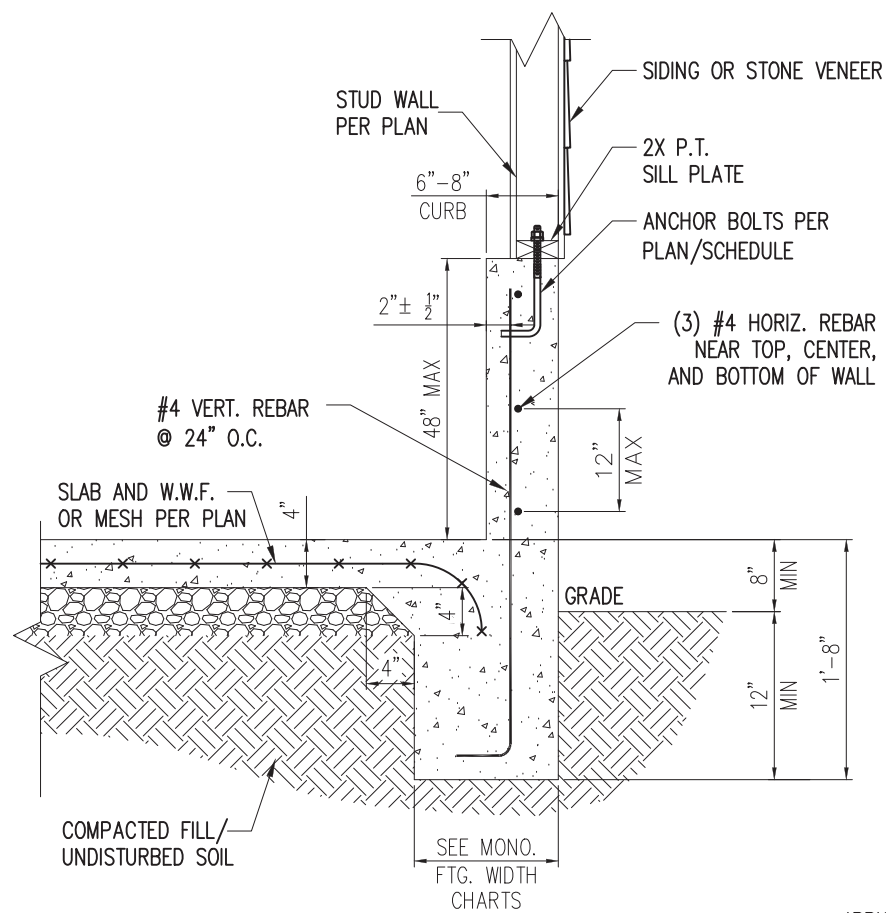
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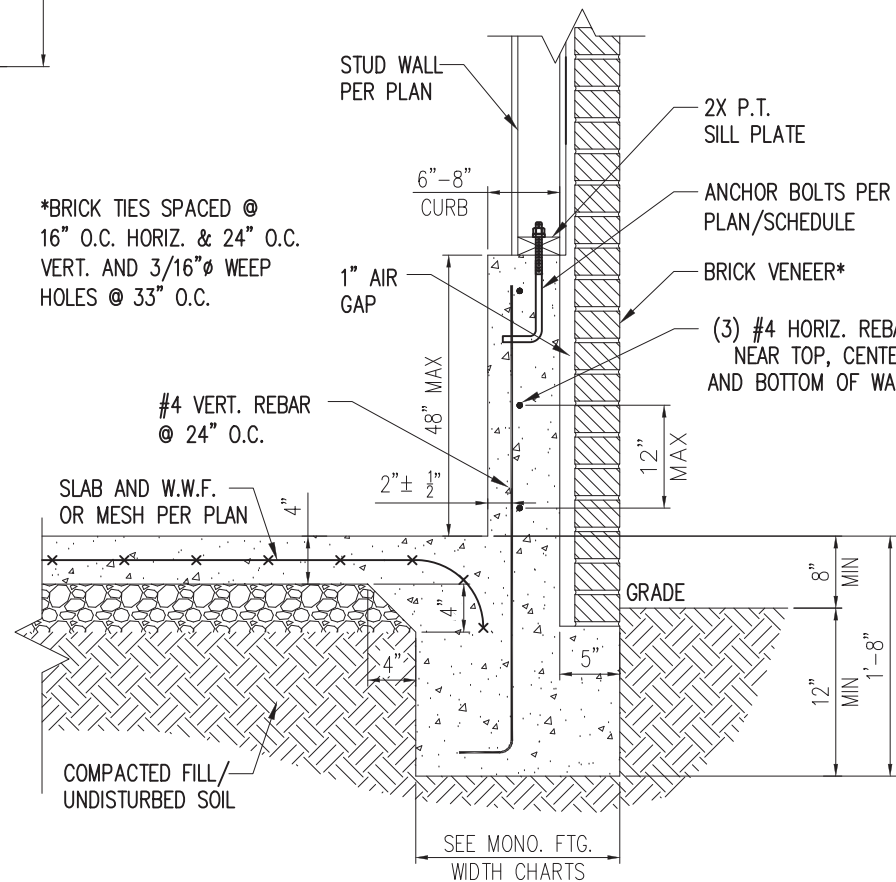
SHEET
D3m



STANDARD - SIDING/STONE

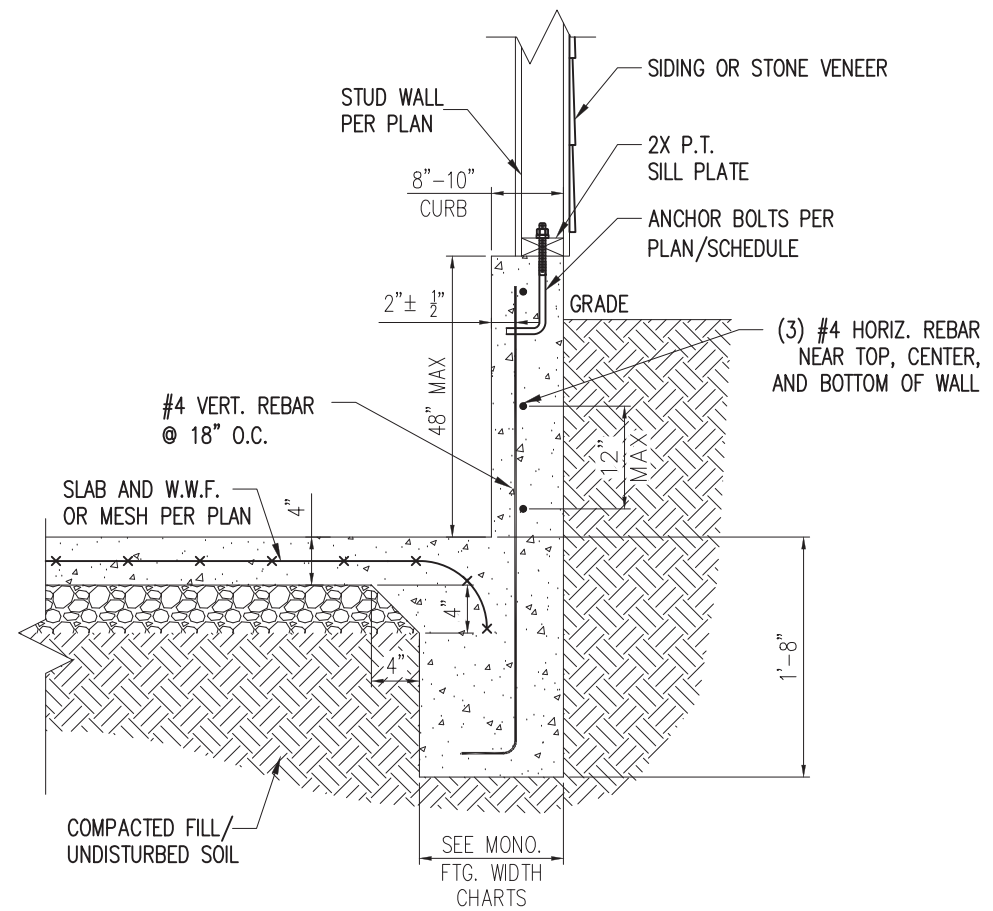
1 EXTENDED GARAGE CURB DETAIL
D4m NTS

*BRICK TIES SPACED @
16" O.C. HORIZ. & 24" O.C.
VERT. AND 3/16" Ø WEEP
HOLES @ 33" O.C.



STANDARD - BRICK

3 EXTENDED GARAGE CURB DETAIL
W/ BRICK VENEER
D4m NTS



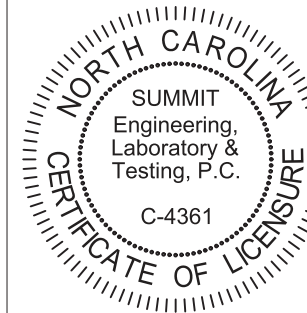
STANDARD - SIDING/STONE

2 EXTENDED GARAGE CURB DETAIL
W/ UNBALANCED FILL
D4m NTS



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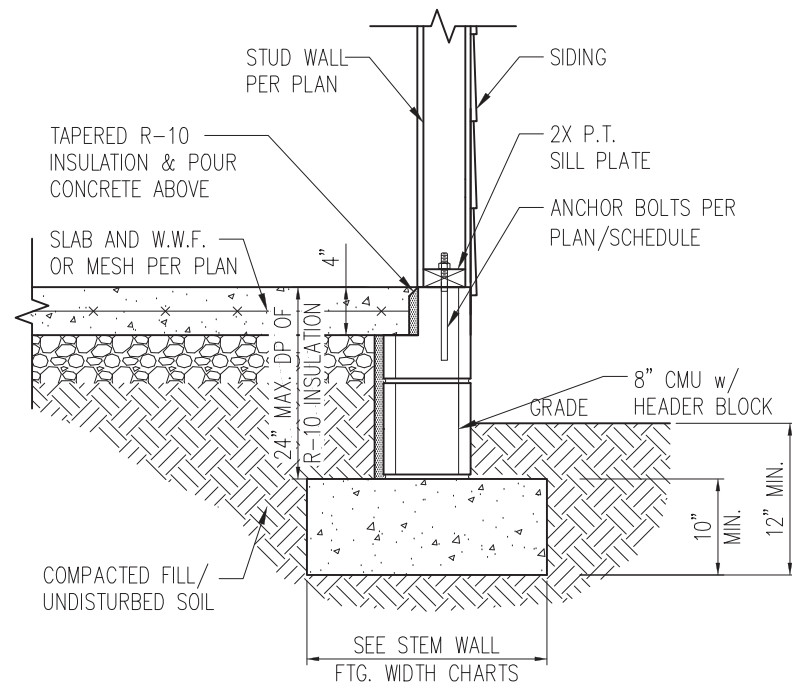
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NO. DATE PROJECT #
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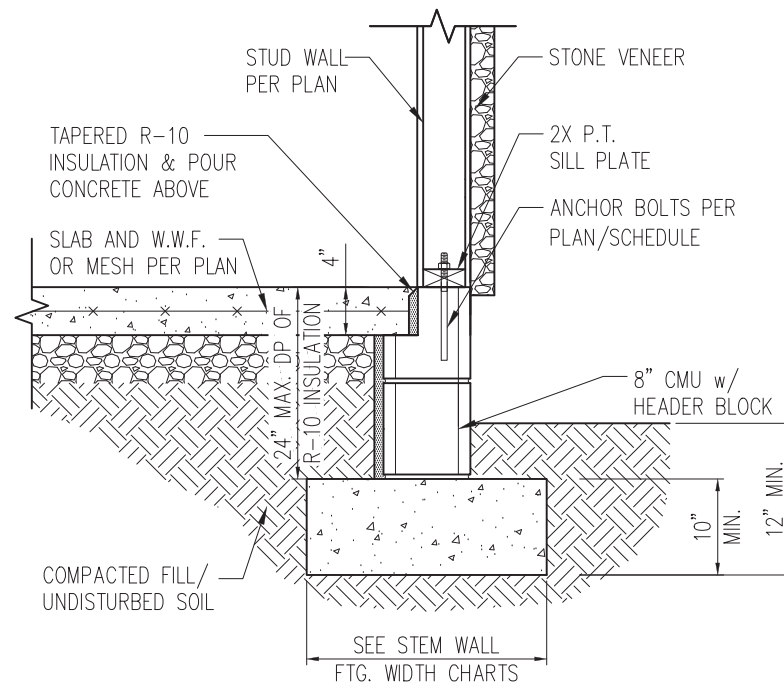
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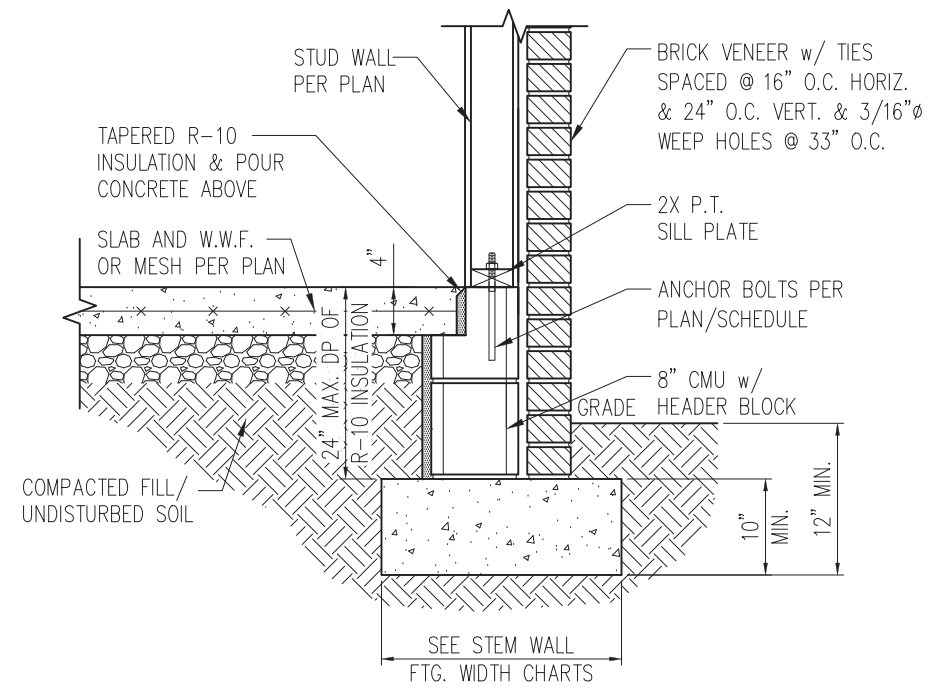
D4m



STANDARD - SIDING

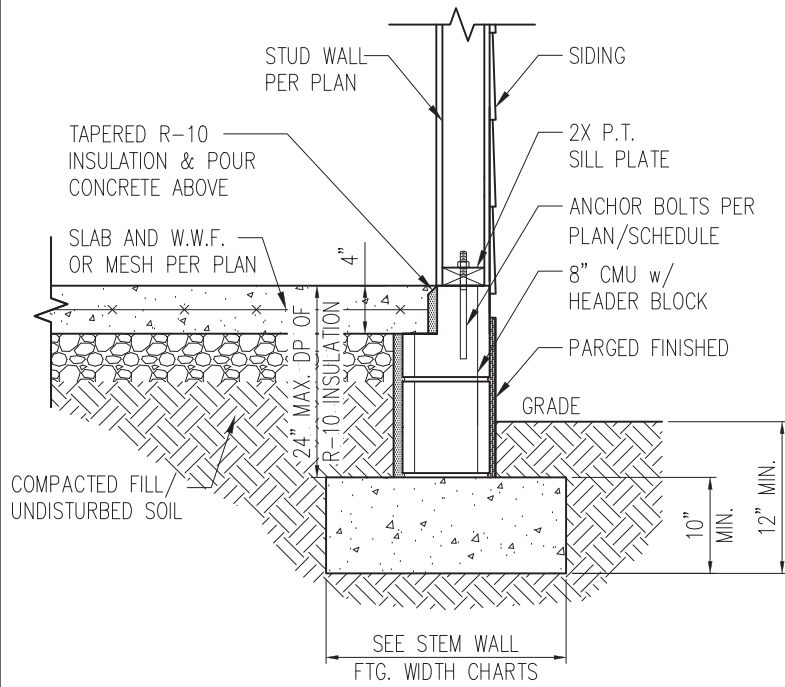


STANDARD - STONE

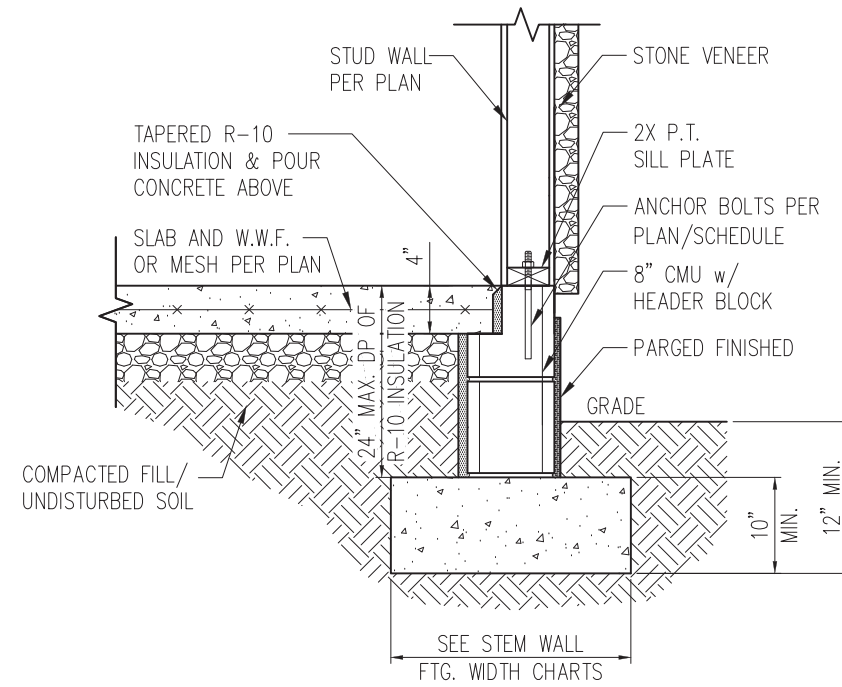


STANDARD - BRICK

1 TYP. STEM WALL DETAIL
D1s 3/4" = 1'-0"



STANDARD - SIDING



STANDARD - STONE

1a STEM WALL DETAIL w/ PARGED FINISH
D1s 3/4" = 1'-0"

STEM WALL FOOTING WIDTH

# OF STORIES	WIDTH BASED ON SOIL BEARING CAPACITY		
	1500 PSF	2000 PSF	2500 PSF
1 STORY - STD.	16"	16"	16"
1 STORY - BRICK VENEER	21"*	21"*	21"*
2 STORY - STD.	20"	16"	16"
2 STORY - BRICK VENEER	25"*	21"*	21"*

*5" BRICK LEDGE HAS BEEN ADDED TO THE STEM WALL FOOTING WIDTH FOR BRICK SUPPORT

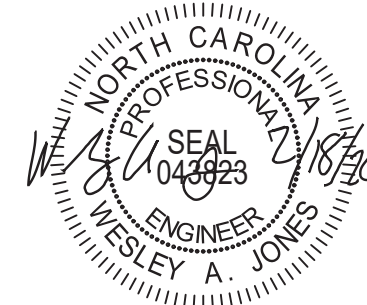
WALL ANCHOR SCHEDULE

TYPE OF ANCHOR	MIN. CONC. EMBEDMENT	SPACING EMBEDMENT	INTERIOR WALL	EXTERIOR WALL
1/2" A307 BOLTS w/ STD. 90° BEND	7"	6'-0"	YES	YES
SST - MAS	4"	5'-0"	NO	YES
HILTI KWIK BOLT KBI 1/2-2-3/4	2-1/4"	6'-0"	YES	NO
1/2" HILTI THREADED ROD w/ HIT HY150 ADHESIVE	7"	6'-0"	YES	YES

NOTE: INSTALL ALL ANCHORS 12" MAX. FROM ALL BOTTOM PLATE ENDS AND JOINTS.

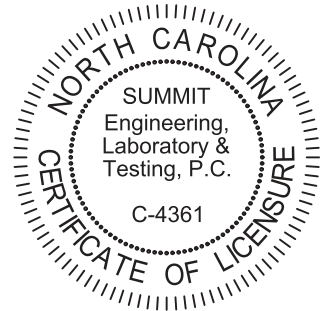
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PROJECT
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Stemwall Details
CLIENT
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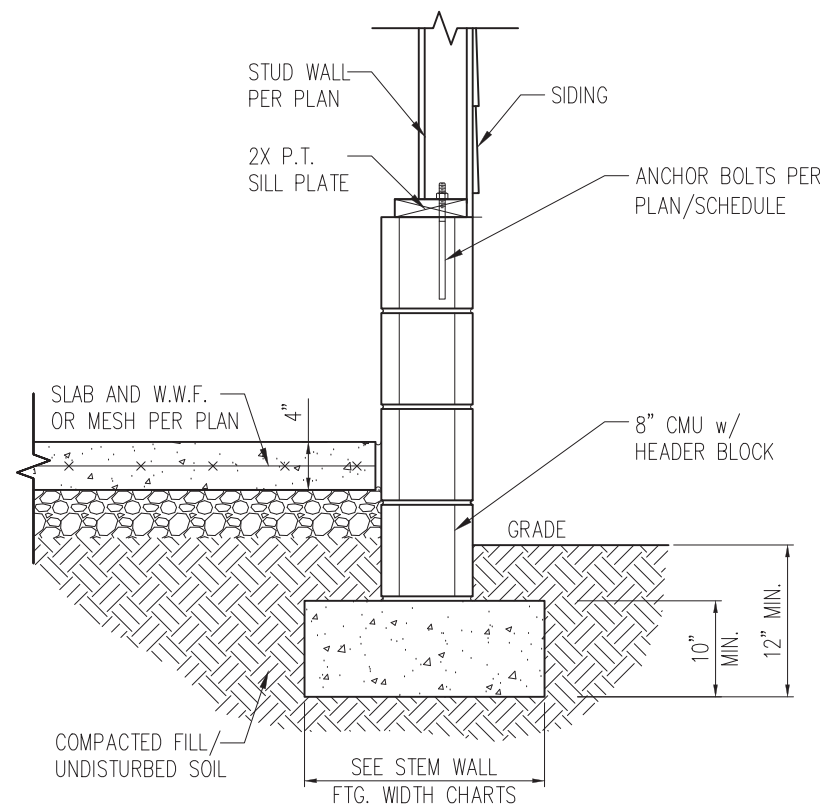
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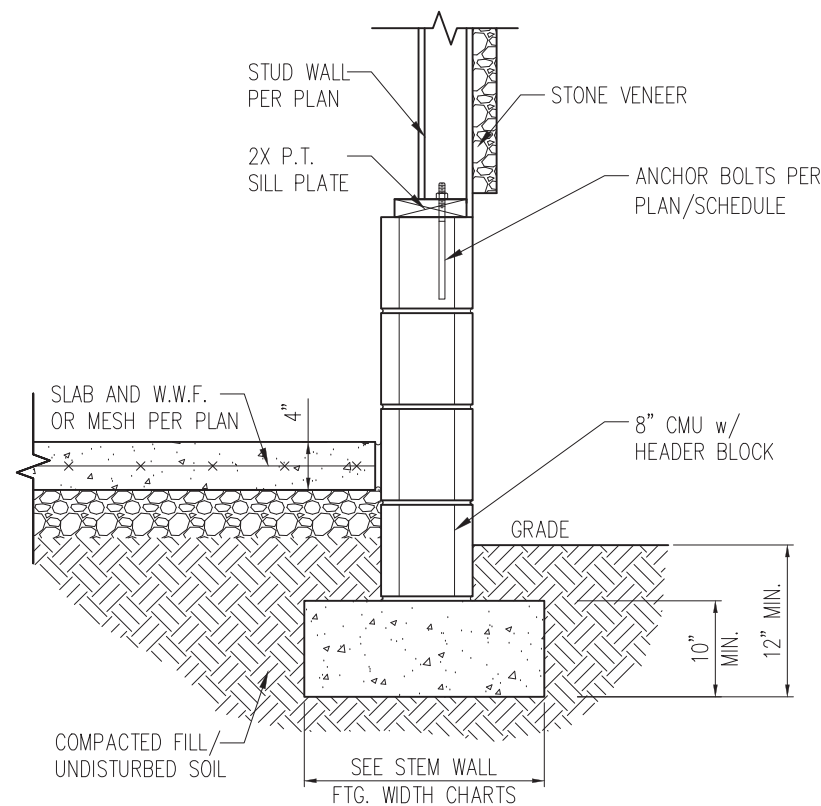
REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

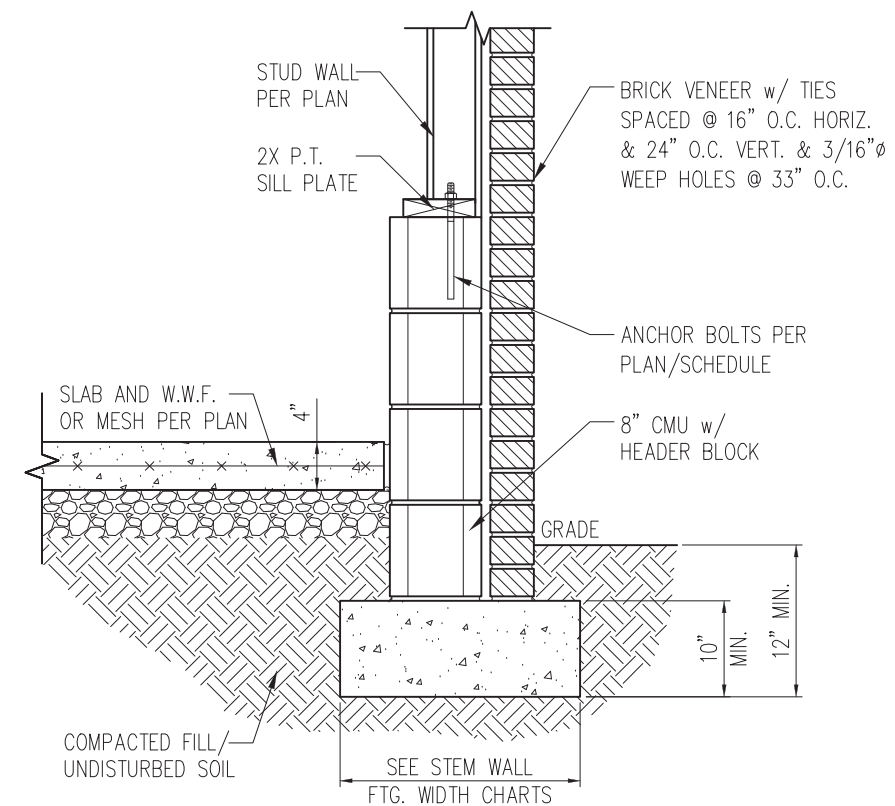
D1s



STANDARD - SIDING

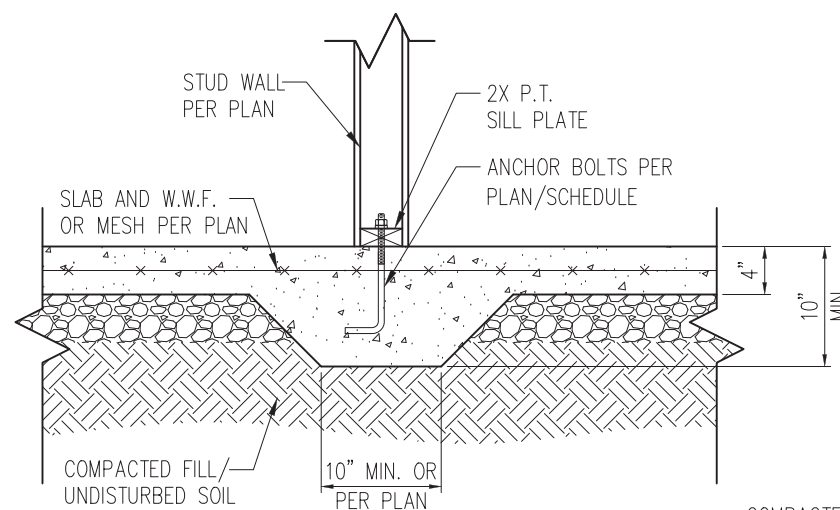


STANDARD - STONE

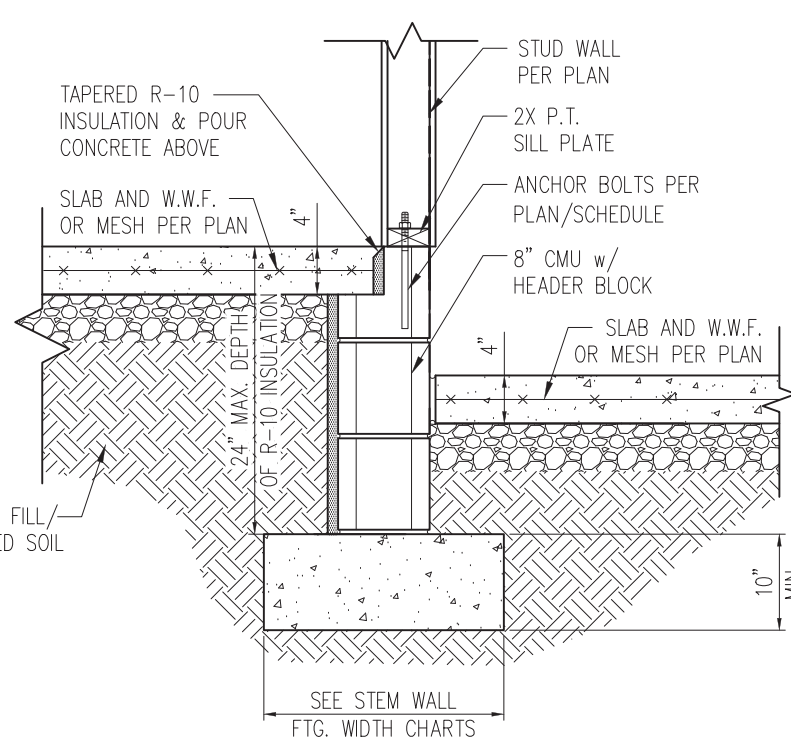


STANDARD - BRICK

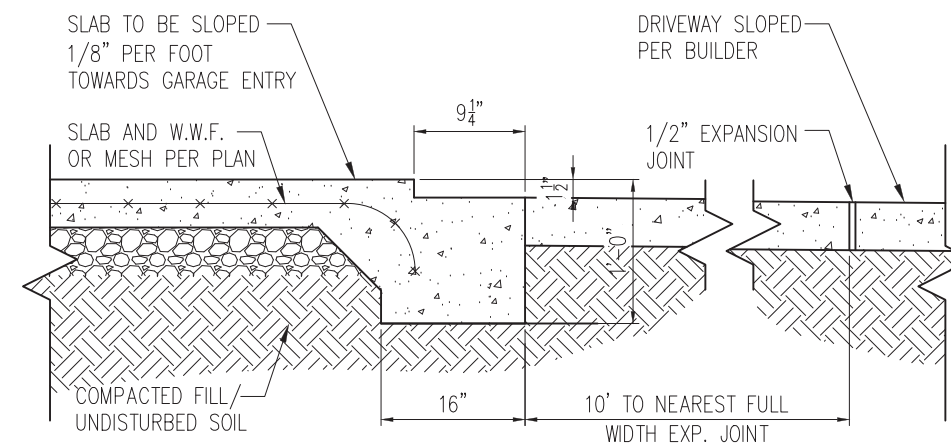
1 TYP. GARAGE CURB DETAIL
D2s 3/4" = 1'-0"



2 TYP. THICKENED SLAB DETAIL
D2s 3/4" = 1'-0"



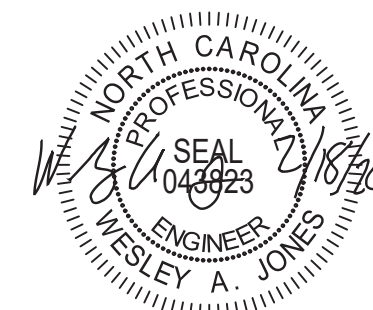
3 HOUSE/GARAGE WALL DETAIL
D2s 3/4" = 1'-0"



4 SLAB AT GARAGE DOOR
D2s 3/4" = 1'-0"

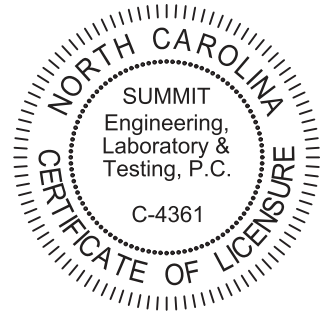
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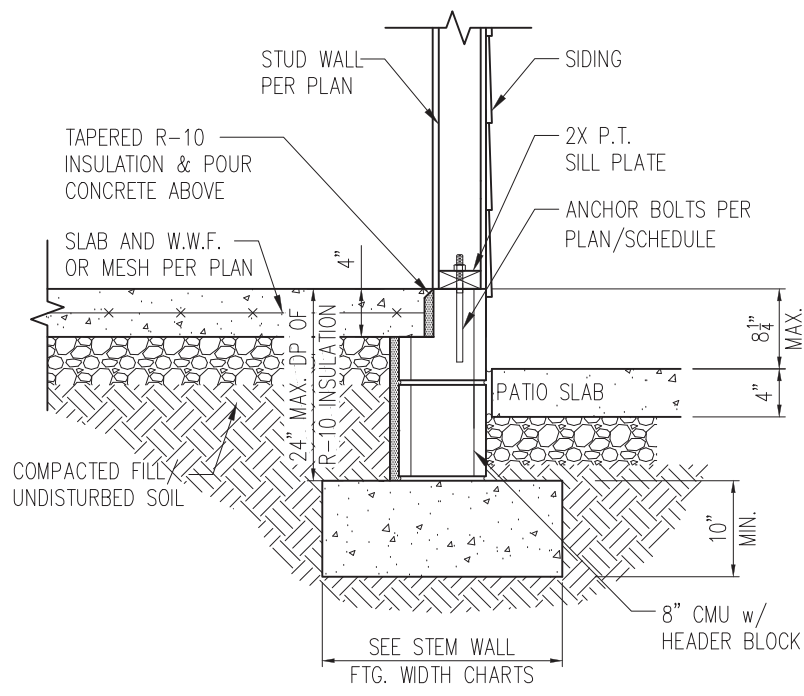
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Woodstock, GA 30188

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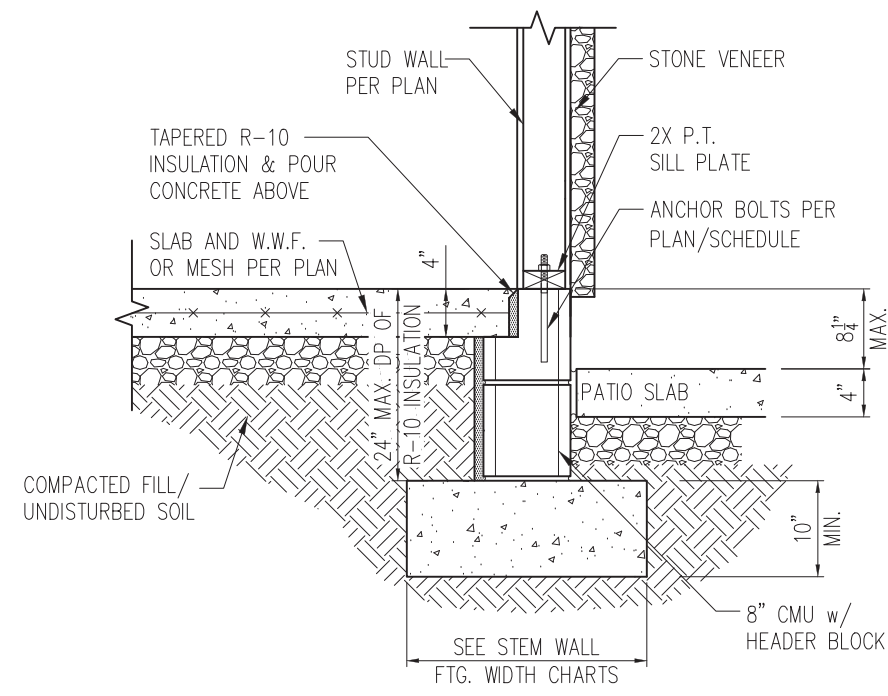
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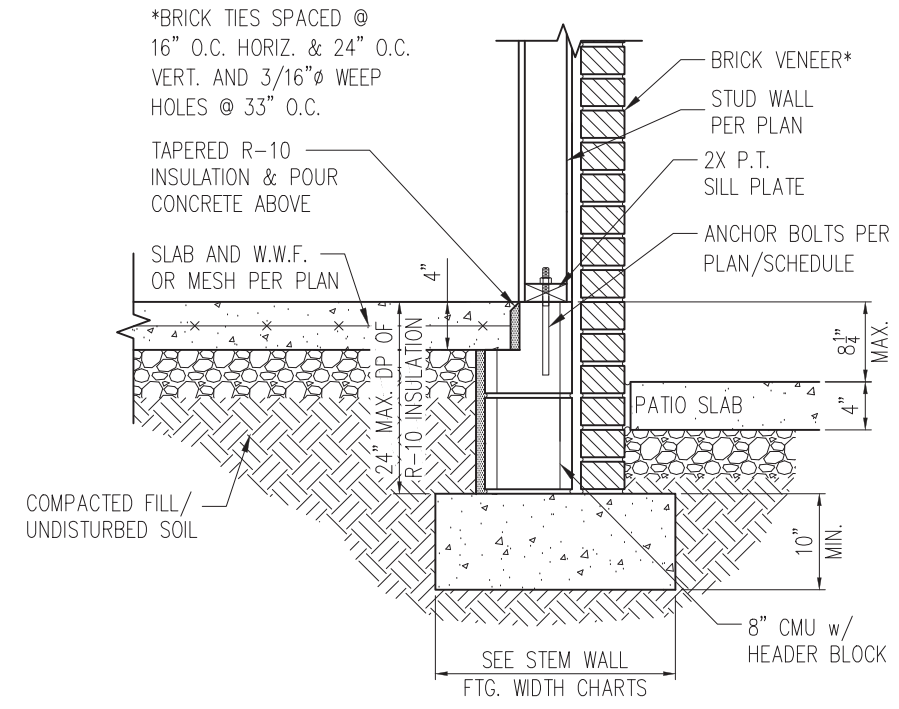
D2s



STANDARD - SIDING

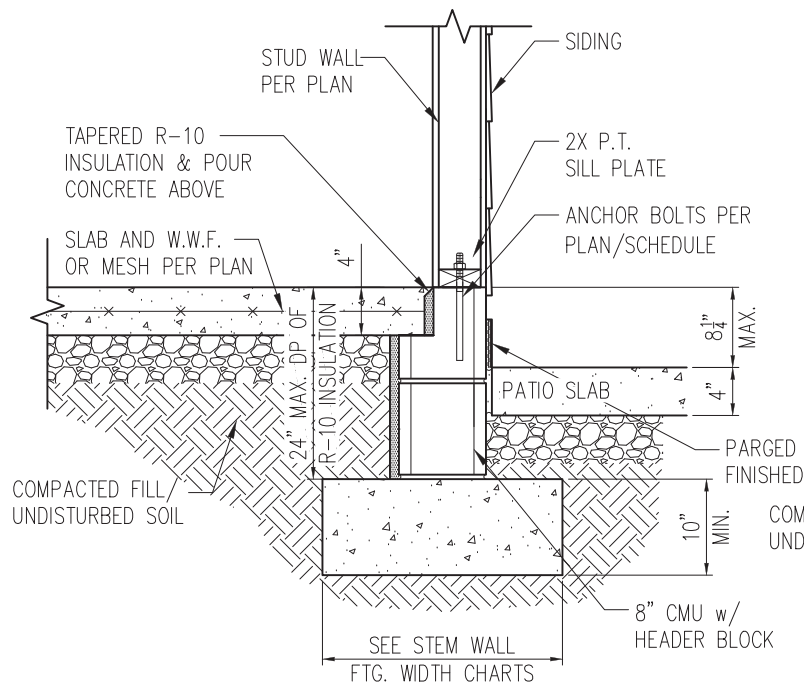


STANDARD - STONE

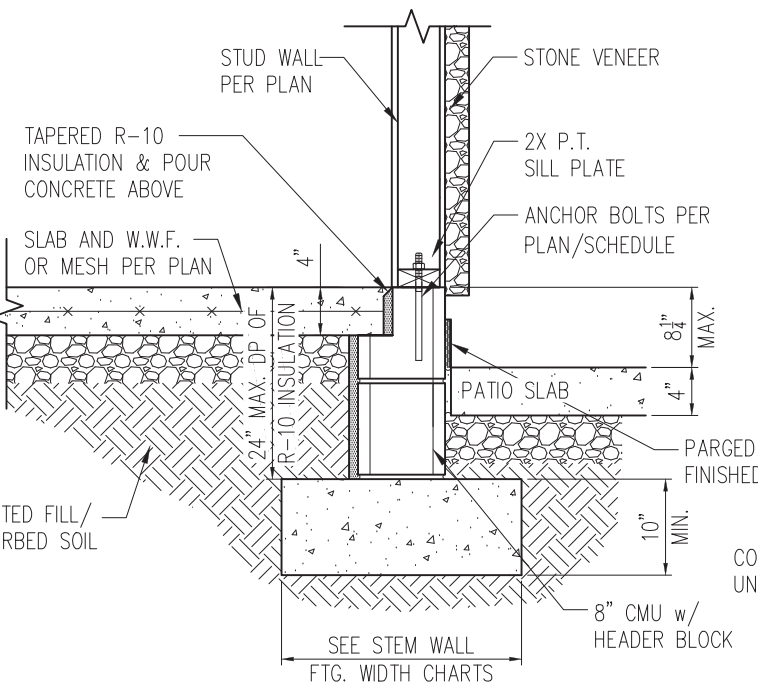


STANDARD - BRICK

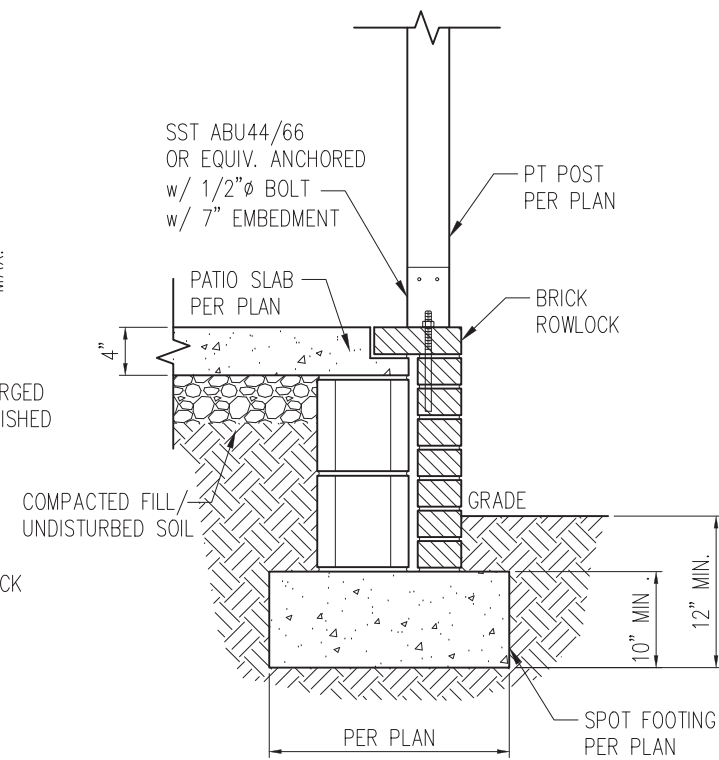
1 PORCH SLAB DETAIL
D3s 3/4" = 1'-0"



STANDARD - SIDING

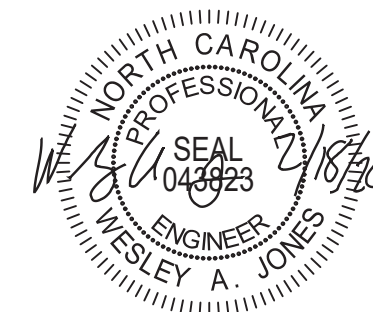


STANDARD - STONE



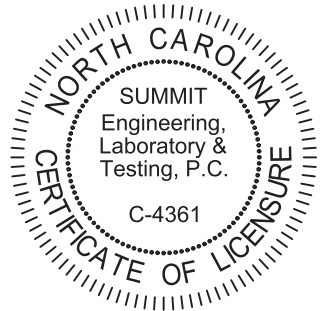
2 COVERED PORCH DETAIL
D3s 3/4" = 1'-0"

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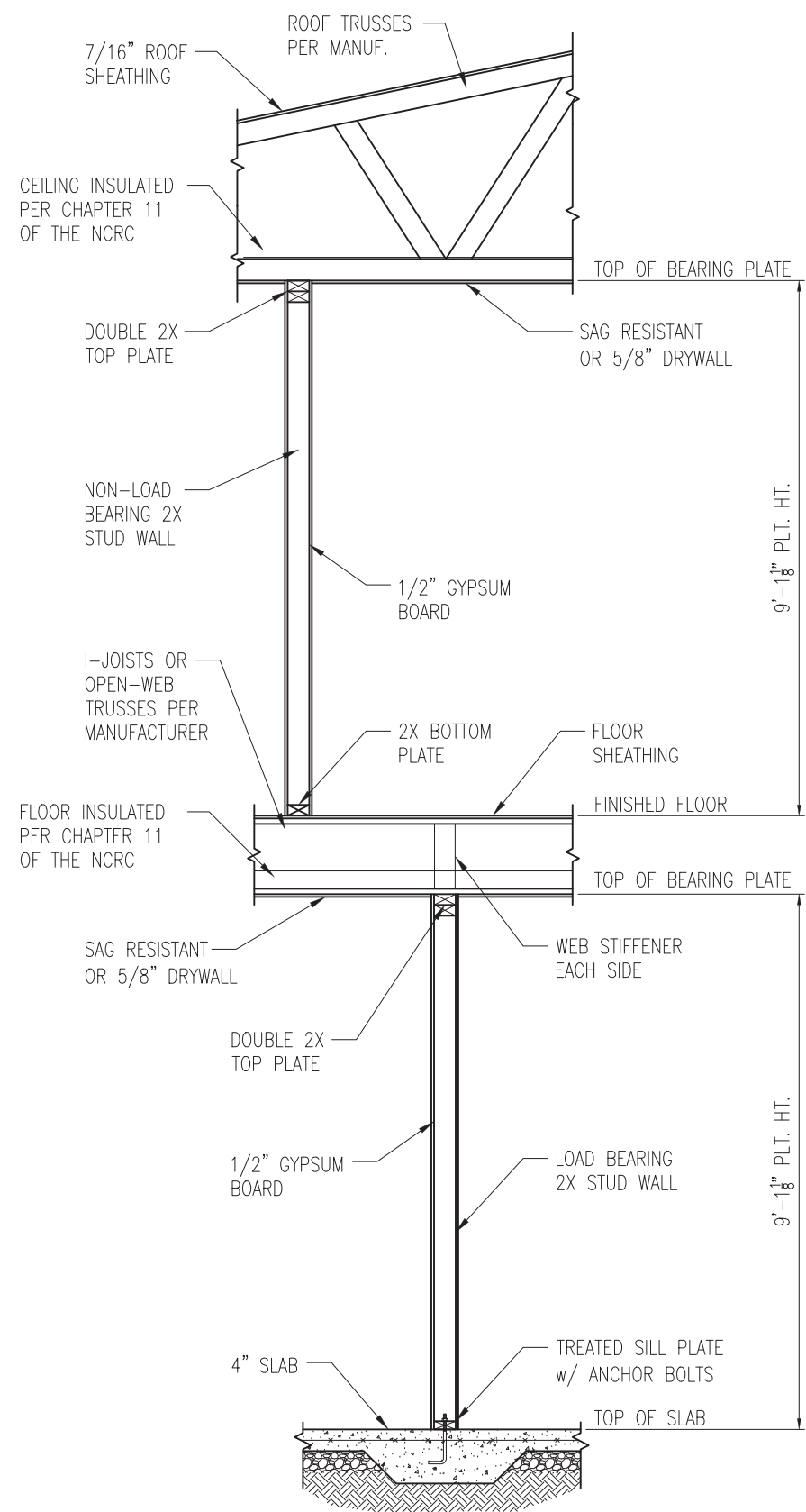
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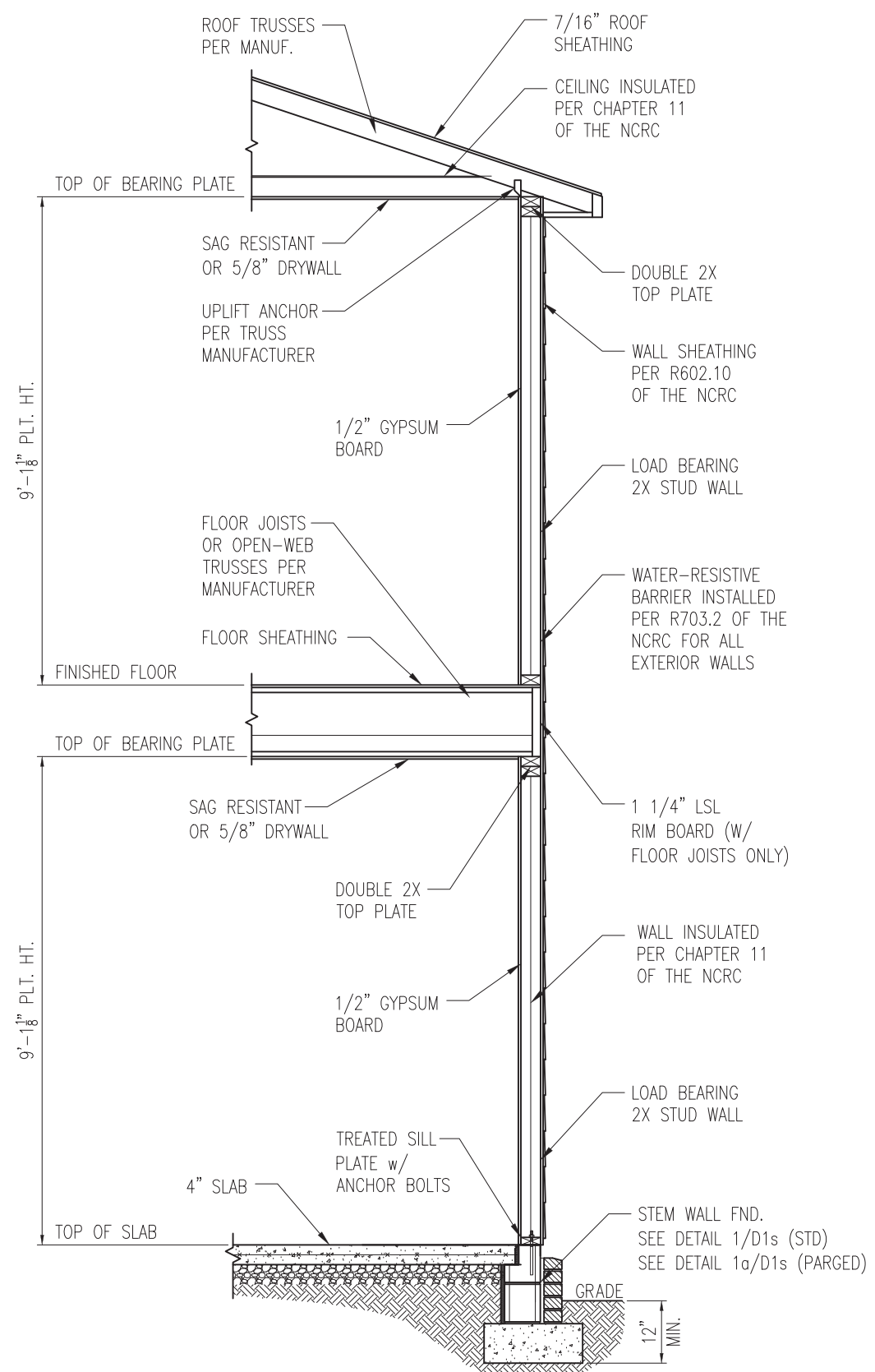
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SHEET
D3s



1 TYP. INTERIOR LOAD BEARING WALL SECTION
 D4s 3/4" = 1'-0"



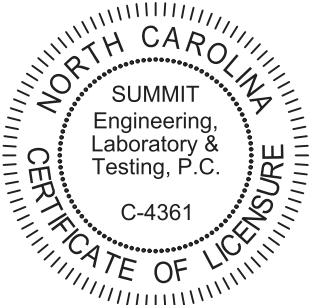
2 TYP. EXTERIOR LOAD BEARING WALL SECTION
 D4s 3/4" = 1'-0" -SIMILAR w/ BRICK AND STONE
 -BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT.
 -MIN. 3/16" WEEP HOLES @ 33" O.C.

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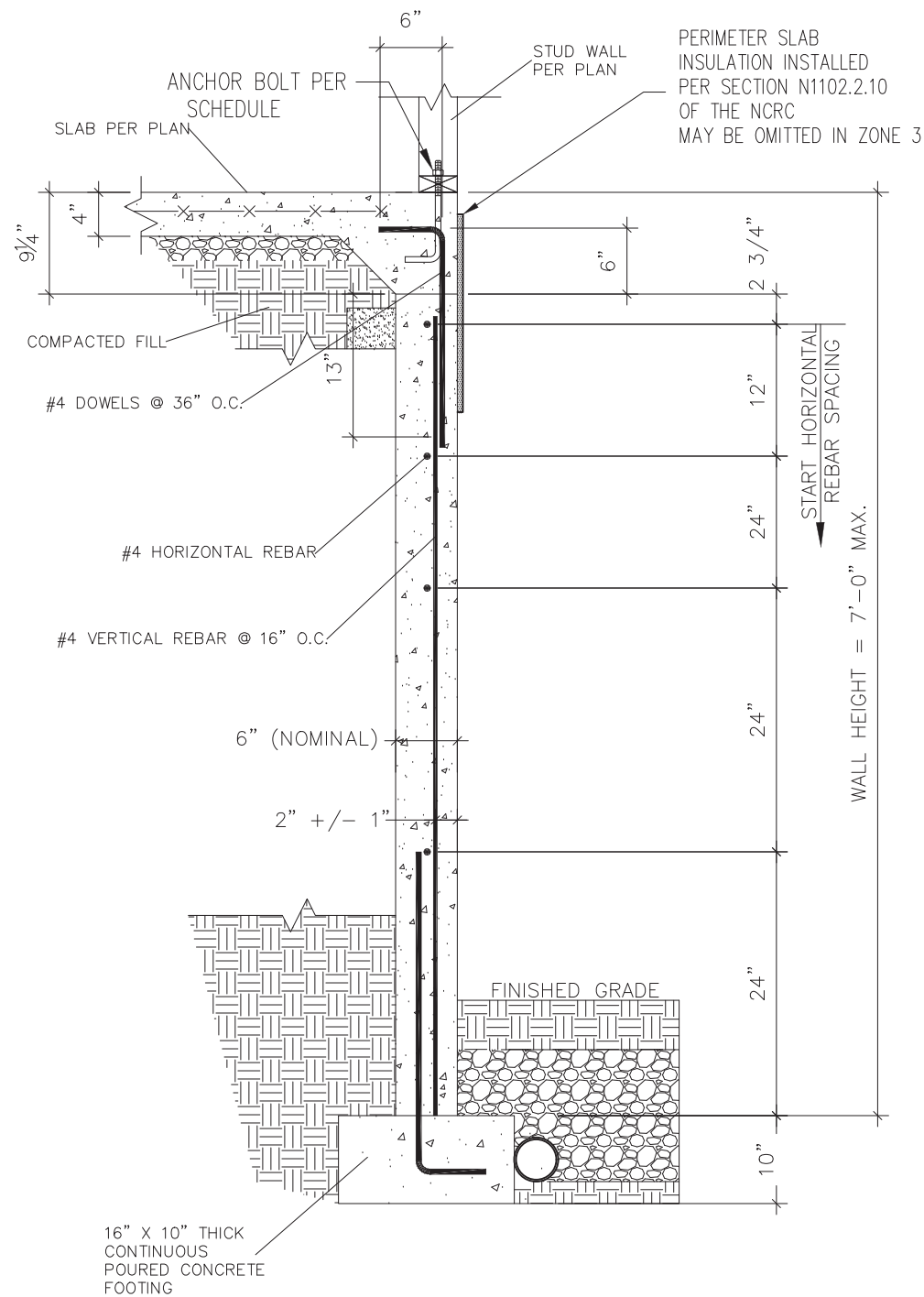
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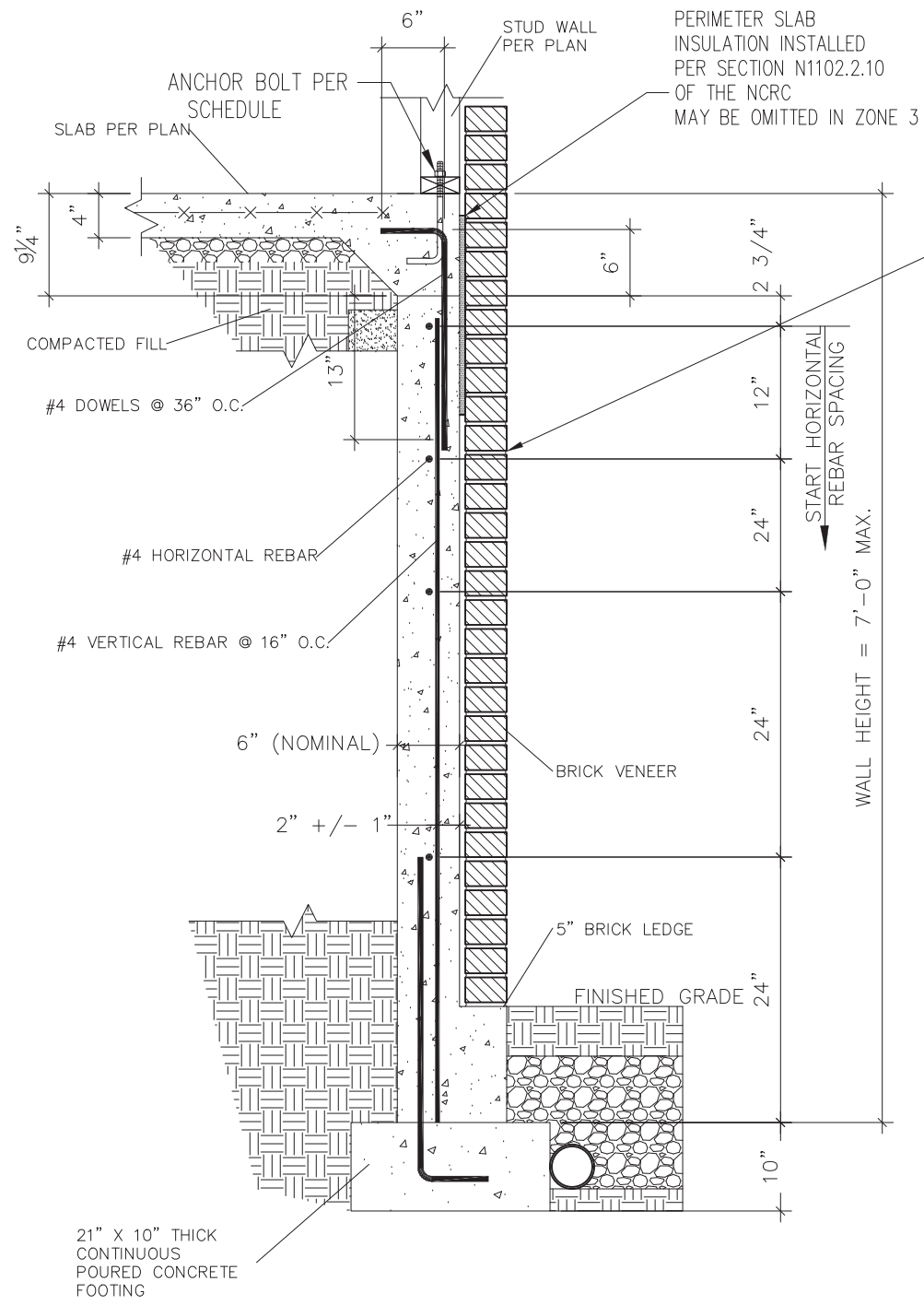
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SHEET
D4s



1 SUBWALL FOUNDATION
 D5s 3/4" = 1'-0"



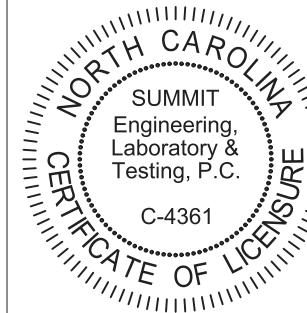
2 SUBWALL FOUNDATION W/ BRICK VENEER
 D5s 3/4" = 1'-0"

PROVIDE LADDER WIRE OR METAL TIES, INSTALLED PER R608.1.2 OF THE 2012 NCRC, AND FULLY GROUT BETWEEN BRICK AND CONCRETE.



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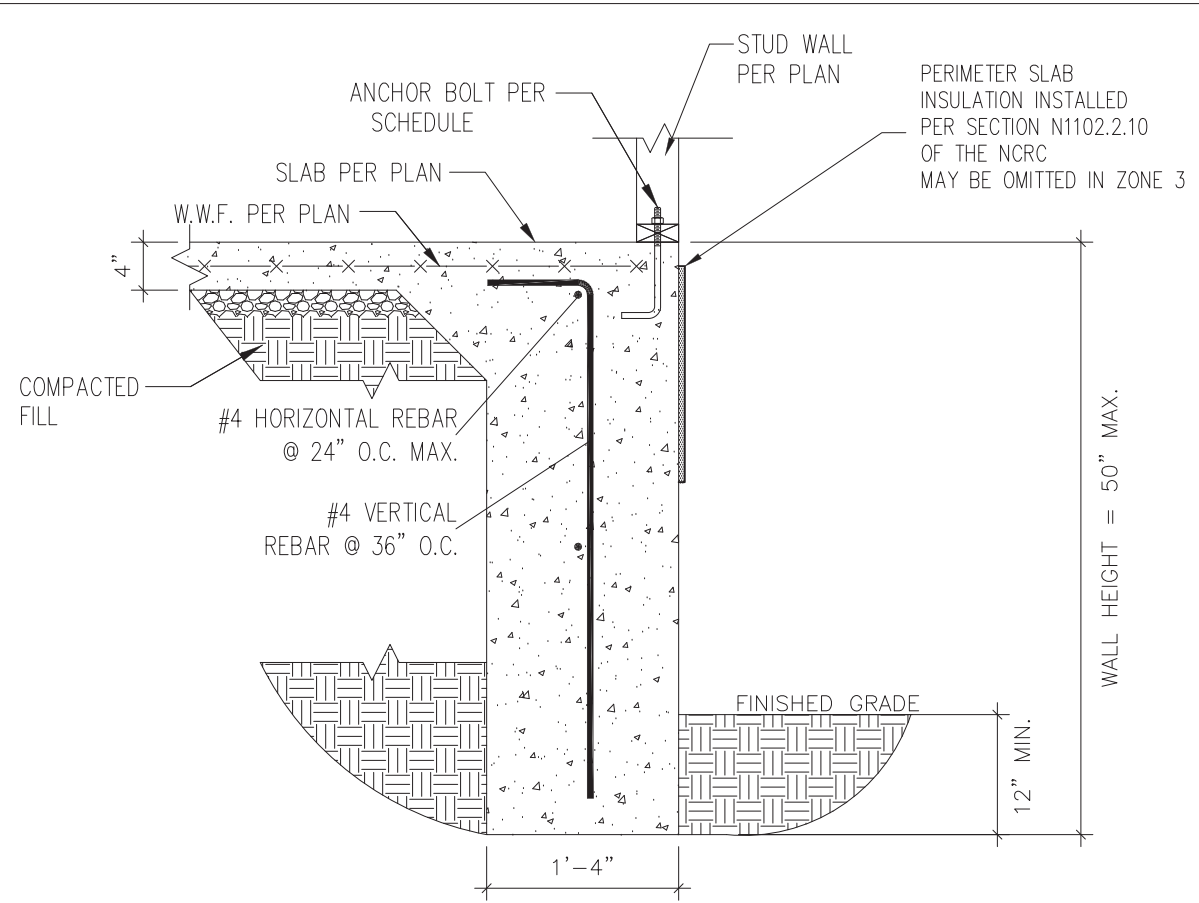
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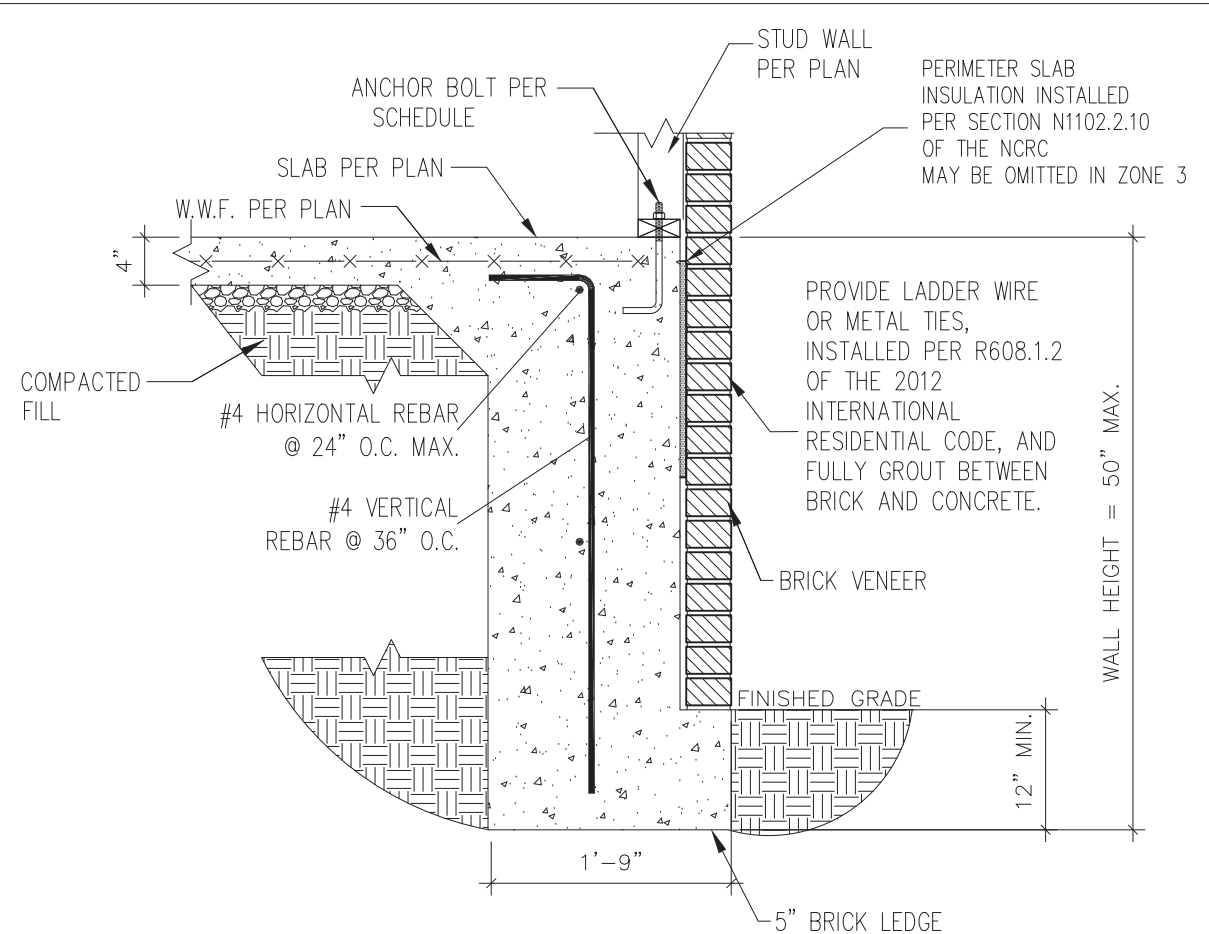
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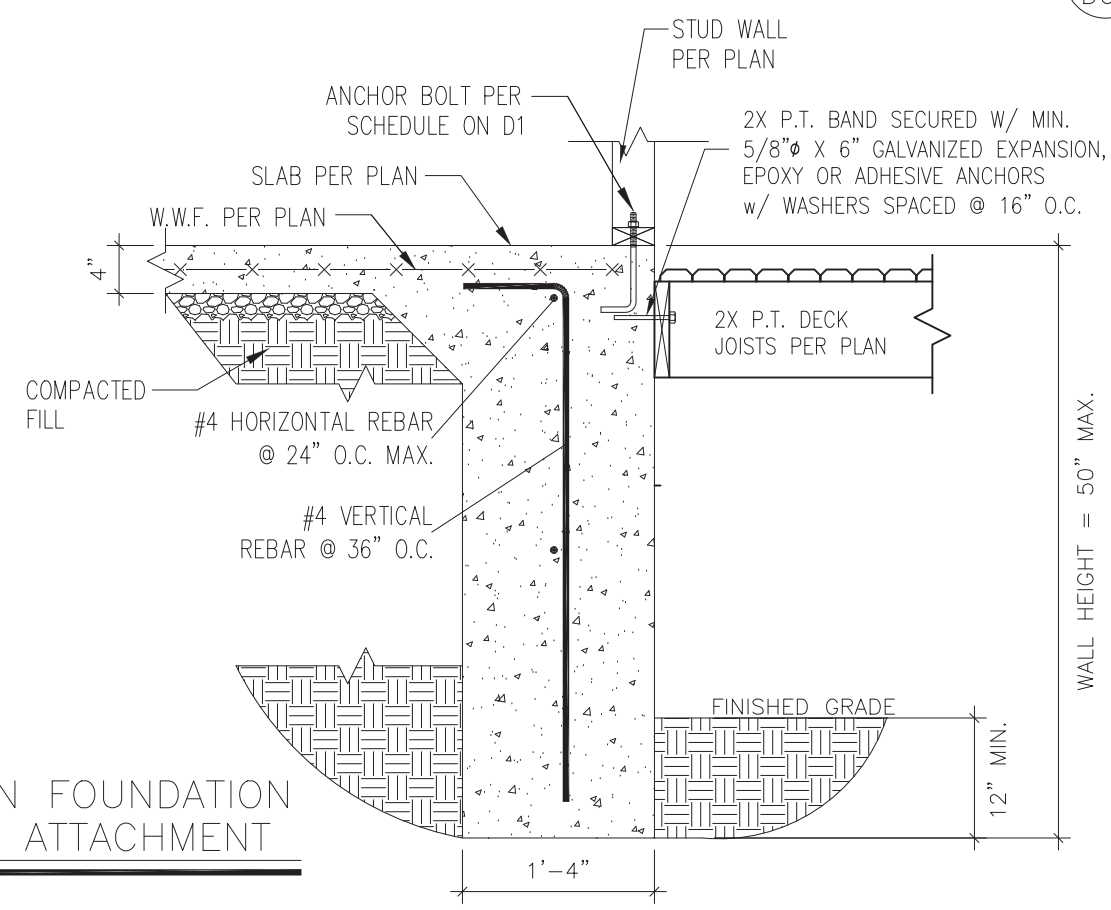
D5s



1 TURNDOWN FOUNDATION
 D6s 3/4" = 1'-0"



2 TURNDOWN FOUNDATION W/ BRICK VENEER
 D6s 3/4" = 1'-0"

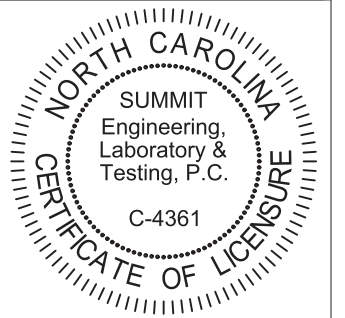


3 TURNDOWN FOUNDATION W/ DECK ATTACHMENT
 D6s 3/4" = 1'-0"



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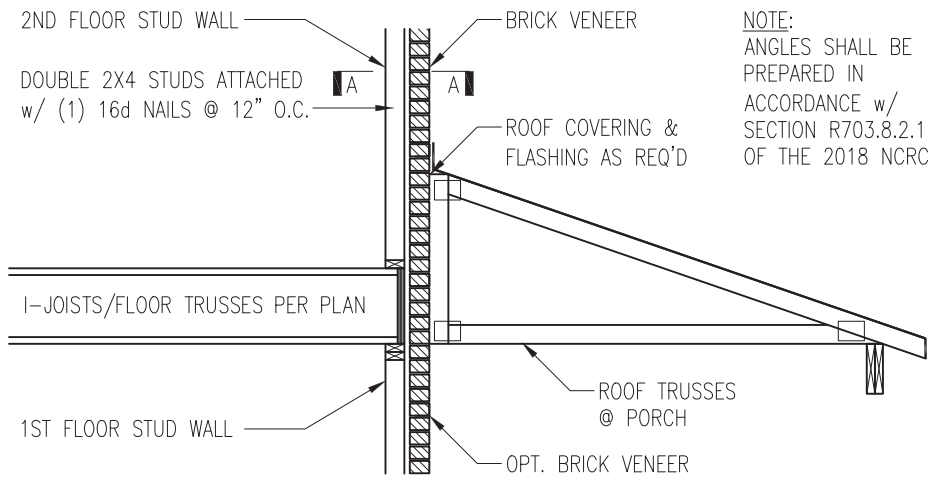
PROJECT
Standard Details
Stemwall Details
 CLIENT
Smith Douglas Homes
 110 Village Trail, Suite 215
 Woodstock, GA 30188

CURRENT DRAWING
 DATE: 2/18/20
 SCALE: NTS
 PROJECT #: 3832
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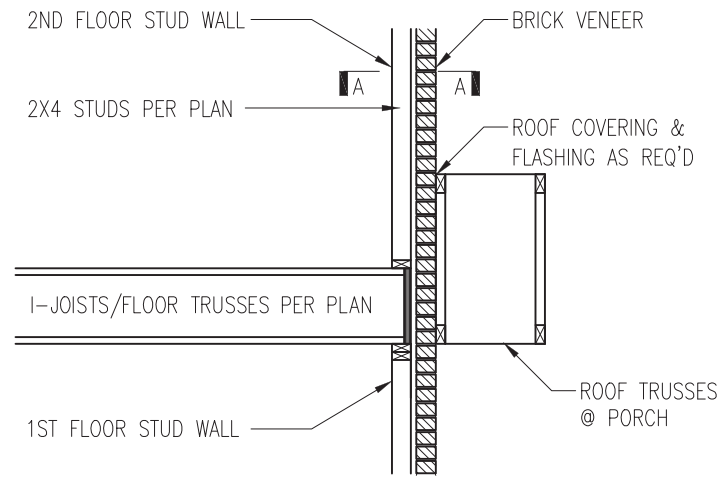
NO.	DATE	PROJECT #
0	1/7/16	3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET
D6s



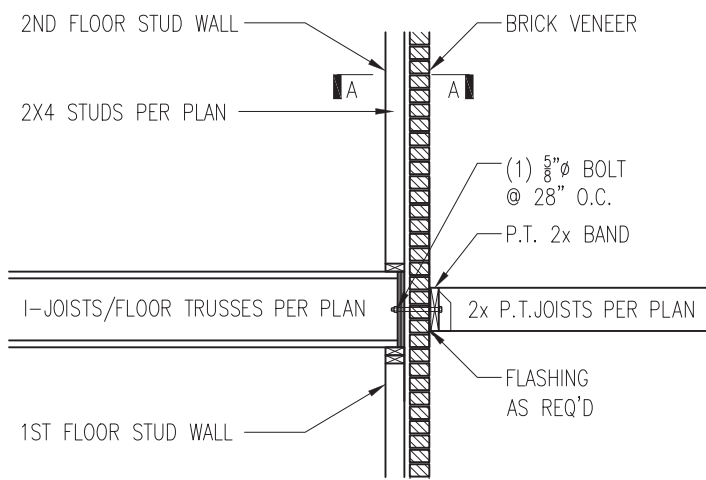
NOTE:
ANGLES SHALL BE PREPARED IN ACCORDANCE w/ SECTION R703.8.2.1 OF THE 2018 NCR



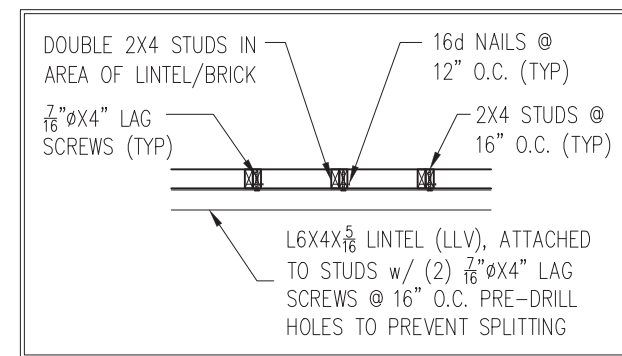
TRUSSES PERPENDICULAR TO STUD WALL

TRUSSES PARALLEL TO STUD WALL w/ CONTINUOUS BRICK VENEER

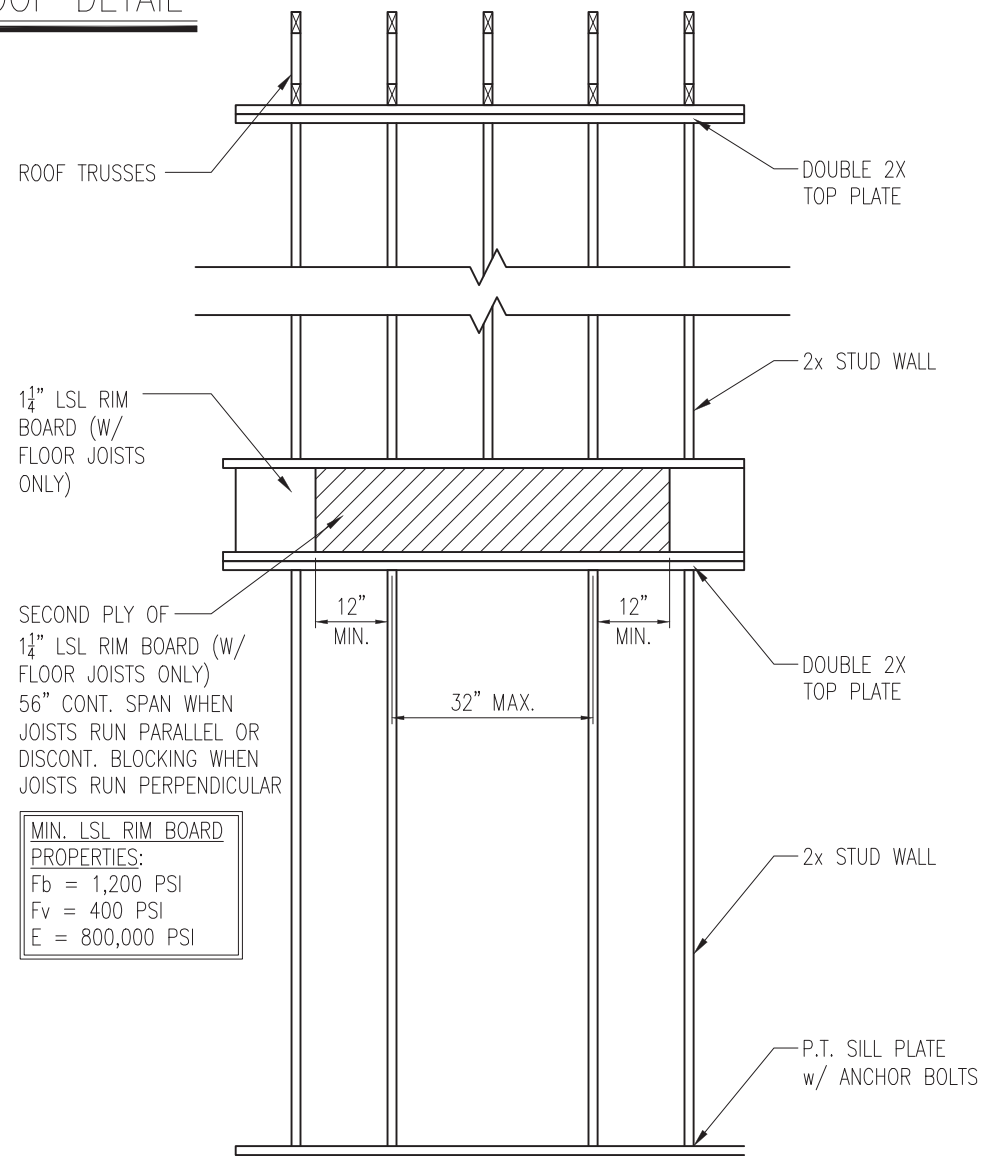
1 BRICK SUPPORT ABOVE STORAGE/PORCH ROOF DETAIL
D5f NTS



3 BALCONY JOIST ATTACHMENT
D5f NTS



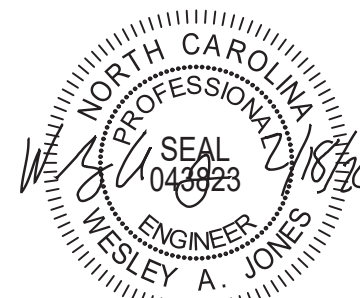
SECTION A-A
NTS



SECOND PLY OF 1 1/4\"/>

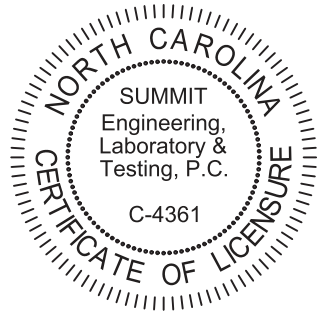
MIN. LSL RIM BOARD
PROPERTIES:
Fb = 1,200 PSI
Fv = 400 PSI
E = 800,000 PSI

4 TYP. RANGE VENT FRAMING
D5f VENTED TO EXTERIOR WALL



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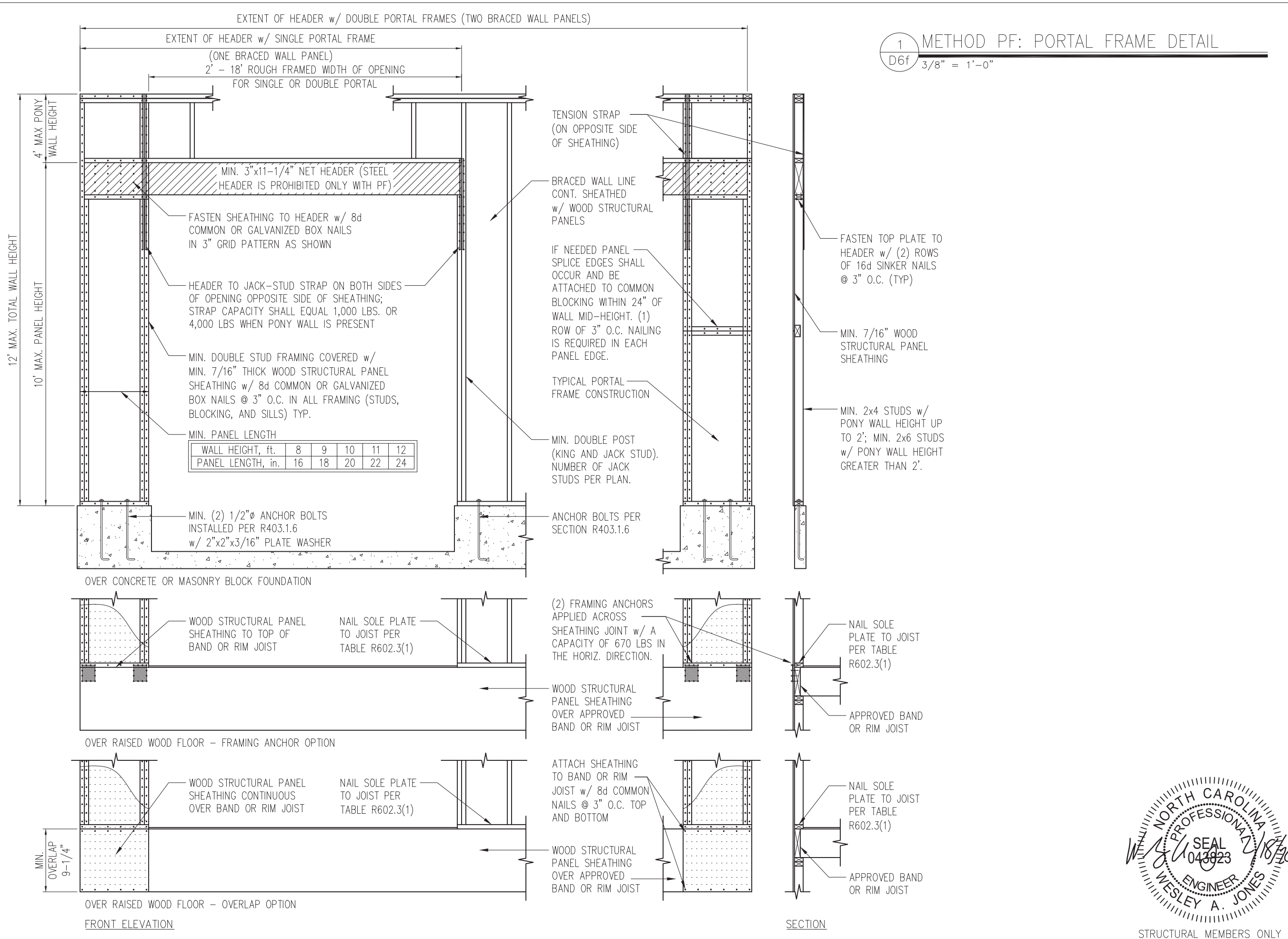
PROJECT
Standard Details
Framing Details
CLIENT
Smith Douglas Homes
110 Village Trail, Suite 215
Woodstock, GA 30188

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SHEET
D5f



1 METHOD PF: PORTAL FRAME DETAIL
D6f 3/8" = 1'-0"

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SUMMIT
Engineering,
Laboratory &
Testing, P.C.
C-4361
CERTIFICATE OF LICENSURE

PROJECT
Standard Details
Framing Details - Bracing

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Woodstock, GA 30188

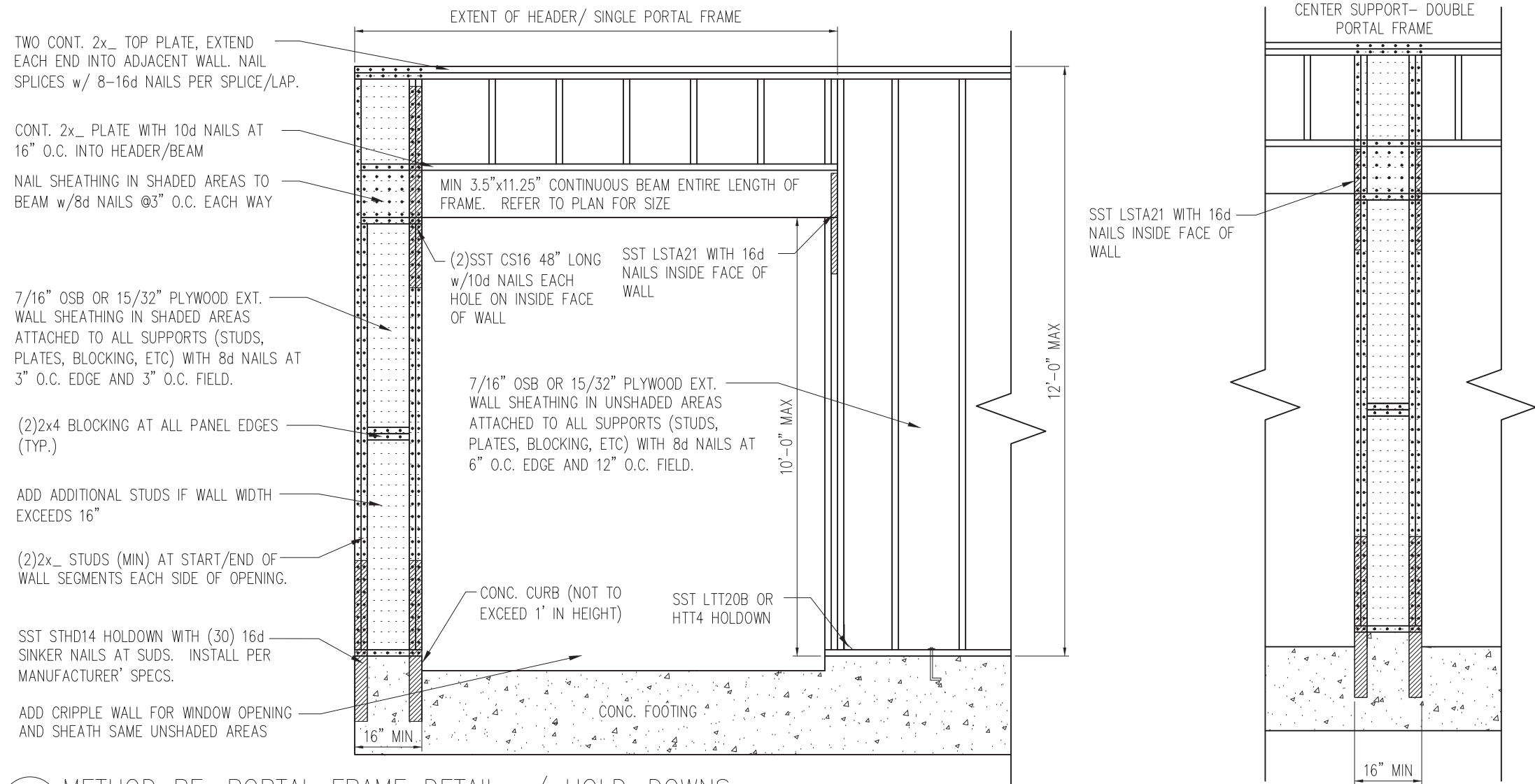
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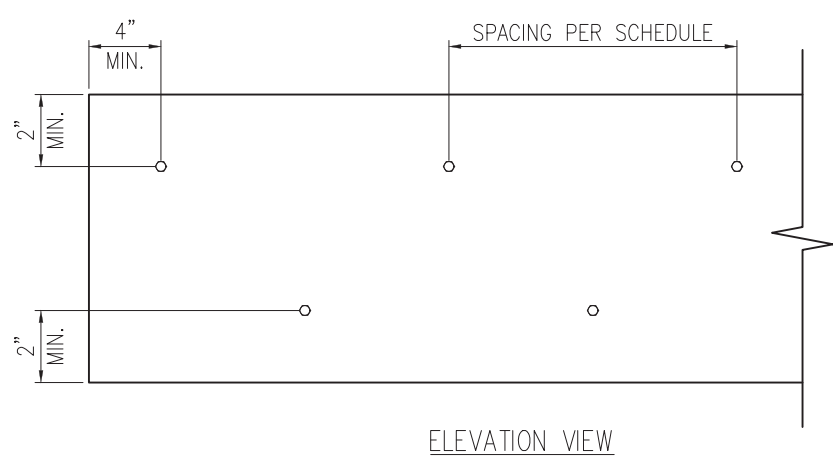
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SHEET
D6f
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1 METHOD PF: PORTAL FRAME DETAIL w/ HOLD-DOWNS
 D7f 3/4" = 1'-0"



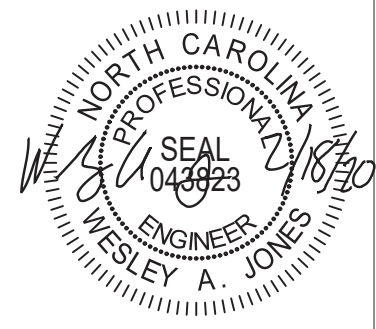
2 MULTI-PLY BEAM CONNECTION DETAIL
 D7f N.T.S.

MINIMUM FASTENING REQUIREMENTS FOR TOP- AND SIDE-LOADED MEMBERS

FASTENER TYPE	LVL DEPTH	3/4" WIDE		5/4" WIDE		7" WIDE	
		2-Ply 1 3/4"	3-Ply 1 3/4"	1 3/4" + 3 1/2"	4-Ply 1 3/4"	2-Ply 1 3/4" + 3 1/2"	2-Ply 3 1/2"
10d (0.128" x 3") Nails	7/4" ≤ d < 14"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
	d ≥ 14"	4 rows @ 12" o.c.	4 rows @ 12" o.c. (ES)	4 rows @ 12" o.c.	-	4 rows @ 12" o.c. (ES)	-
16d (0.162" x 3 1/2") Nails	7/4" ≤ d < 14"	2 rows @ 12" o.c.	2 rows @ 12" o.c. (ES)	2 rows @ 12" o.c.	-	2 rows @ 12" o.c. (ES)	-
	d ≥ 14"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
1/2" Through Bolts	d ≥ 7/4"	2 rows @ 24" o.c.	2 rows @ 24" o.c.		2 rows @ 24" o.c.		
SDS 1/4" x 3 1/2", WS35, 3 3/8" TrussLok		2 rows @ 24" o.c.	2 rows @ 24" o.c. (ES)	2 rows @ 24" o.c.	-	2 rows @ 24" o.c. (ES)	-
SDS 1/4" x 6", WS6		-	-	-	2 rows @ 24" o.c. (ES)		
5" TrussLok		-	2 rows @ 24" o.c.		-		
6 3/4" TrussLok		-	-	-	2 rows @ 24" o.c.		

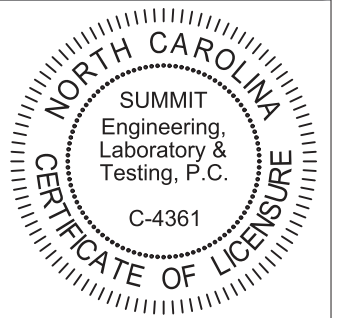
NOTES:

- All fasteners must meet the minimum requirements in the table above. Side-loaded multiple-ply members must meet the minimum fastening and side-loading capacity requirements given on page 48.
- Minimum fastening requirements for depths less than 7/4" require special consideration. Please contact your technical representative.
- Three general rules for staggering or offsetting for a certain fastener schedule:
 - If staggering or offsetting is not referenced, then none is required;
 - If staggering is referenced, then fasteners installed in adjacent rows on the front side are to be staggered up to one-half the o.c. spacing, but maintaining the fastener clearances above; and
 - If "ES" is referenced, then the fastener schedule must be repeated on each side, with the fasteners on the back side offset up to one-half the o.c. spacing of the front side (whether or not it is staggered).



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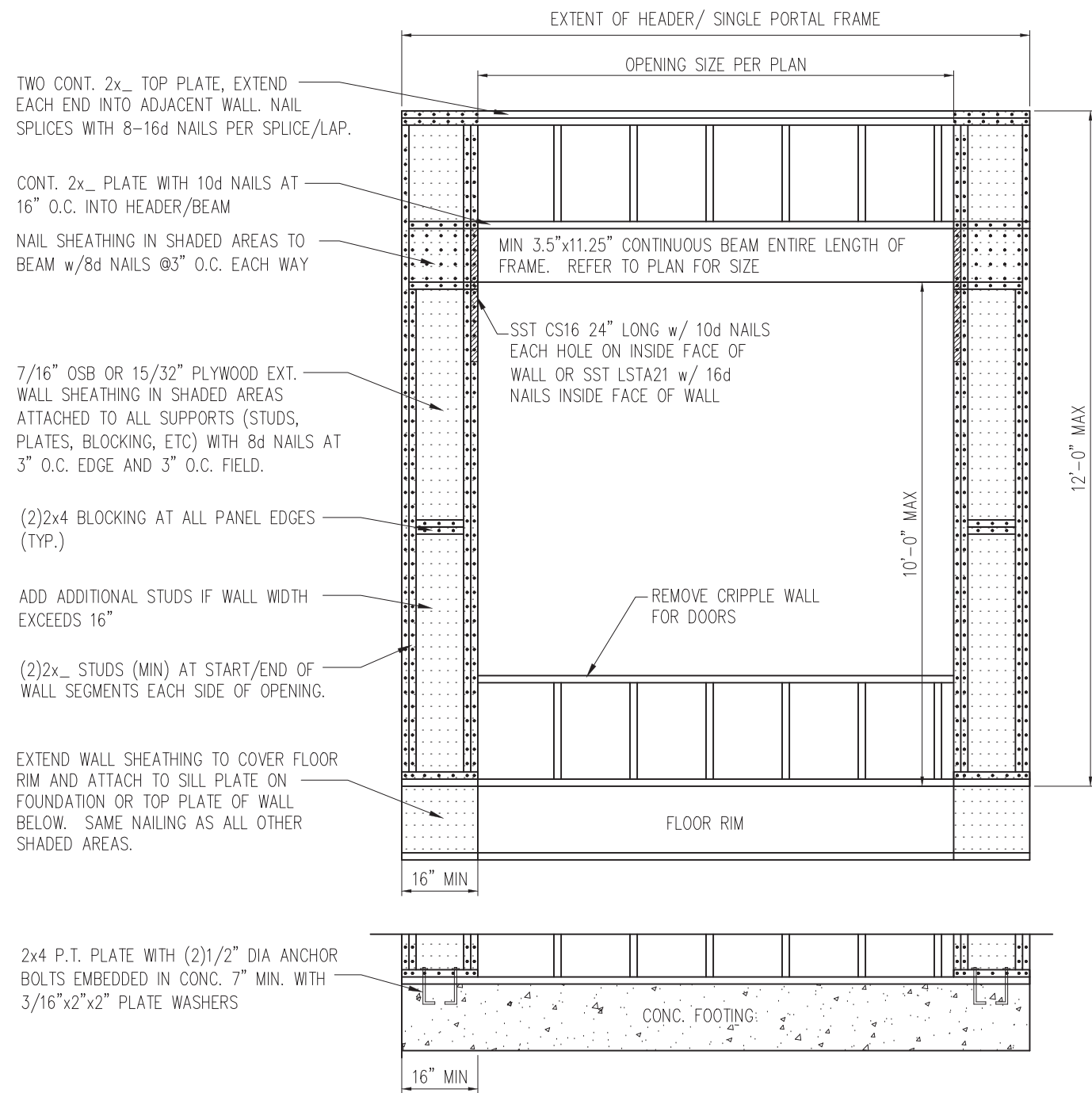


PROJECT
 Standard Details
 Framing Details - Bracing
 CLIENT
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 110 Village Trail, Suite 215
 Woodstock, GA 30188

CURRENT DRAWING
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SHEET
D7f



TWO CONT. 2x_ TOP PLATE, EXTEND EACH END INTO ADJACENT WALL. NAIL SPLICES WITH 8-16d NAILS PER SPLICE/LAP.

CONT. 2x_ PLATE WITH 10d NAILS AT 16\" O.C. INTO HEADER/BEAM

NAIL SHEATHING IN SHADED AREAS TO BEAM w/8d NAILS @3\" O.C. EACH WAY

7/16\" OSB OR 15/32\" PLYWOOD EXT. WALL SHEATHING IN SHADED AREAS ATTACHED TO ALL SUPPORTS (STUDS, PLATES, BLOCKING, ETC) WITH 8d NAILS AT 3\" O.C. EDGE AND 3\" O.C. FIELD.

(2)2x4 BLOCKING AT ALL PANEL EDGES (TYP.)

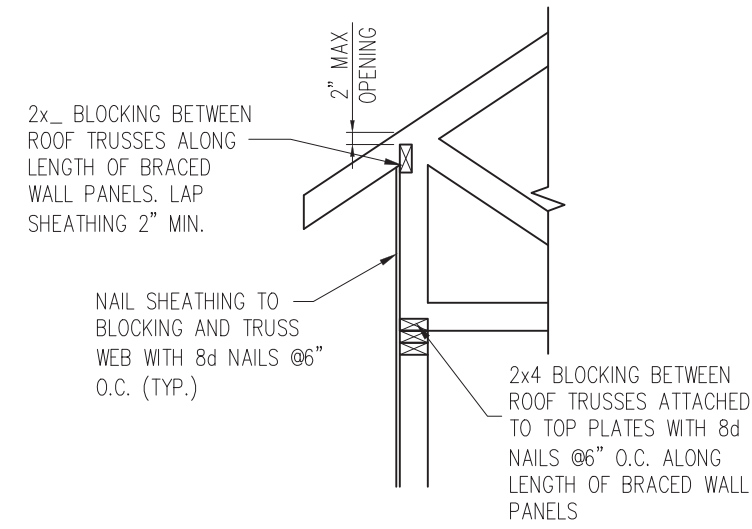
ADD ADDITIONAL STUDS IF WALL WIDTH EXCEEDS 16\"

(2)2x_ STUDS (MIN) AT START/END OF WALL SEGMENTS EACH SIDE OF OPENING.

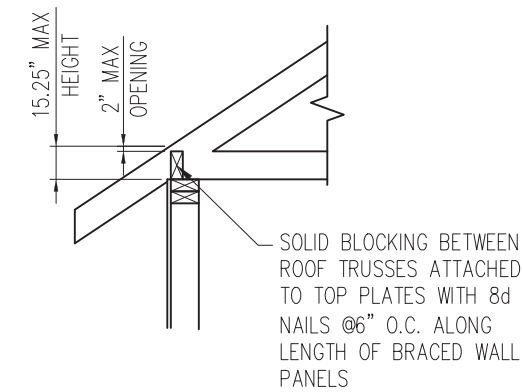
EXTEND WALL SHEATHING TO COVER FLOOR RIM AND ATTACH TO SILL PLATE ON FOUNDATION OR TOP PLATE OF WALL BELOW. SAME NAILING AS ALL OTHER SHADED AREAS.

2x4 P.T. PLATE WITH (2)1/2\" DIA ANCHOR BOLTS EMBEDDED IN CONC. 7\" MIN. WITH 3/16\"x2\"x2\" PLATE WASHERS

1 METHOD PF: PORTAL FRAME DETAIL
D8f 3/4\" = 1'-0\" OPENINGS UNDER 8'-0\"



HEEL HEIGHT GREATER THAN 15.25\"



HEEL HEIGHT LESS THAN 15.25\" *

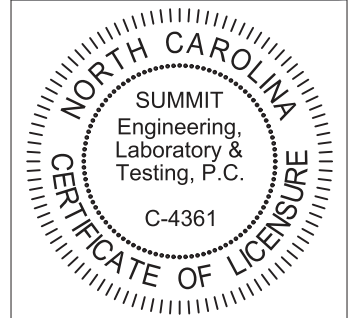
*BLOCKING IS NOT REQUIRED WITH HEEL HEIGHTS LESS THAN 9.25\"

2 TYP. WALL PANEL TO ROOF TRUSS CONNECTION
D8f 1\" = 1'-0\"



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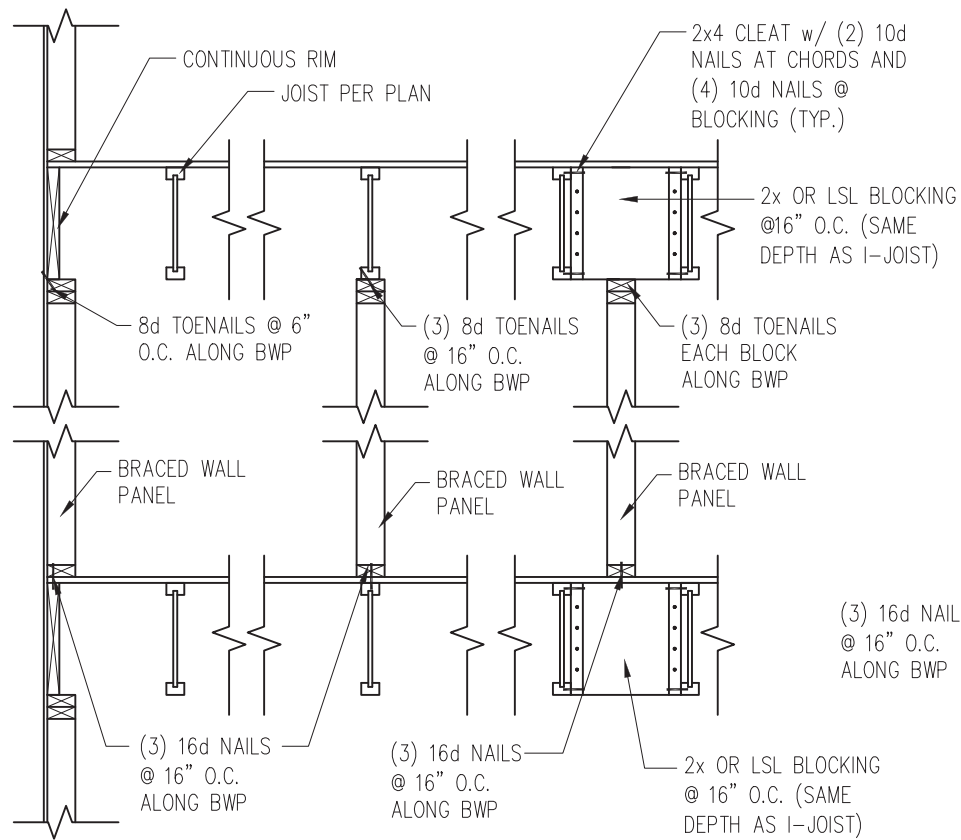
PROJECT
Standard Details - Bracing
Framing Details - Bracing
CLIENT
Smith Douglas Homes
110 Village Trail, Suite 215
Woodstock, GA 30188

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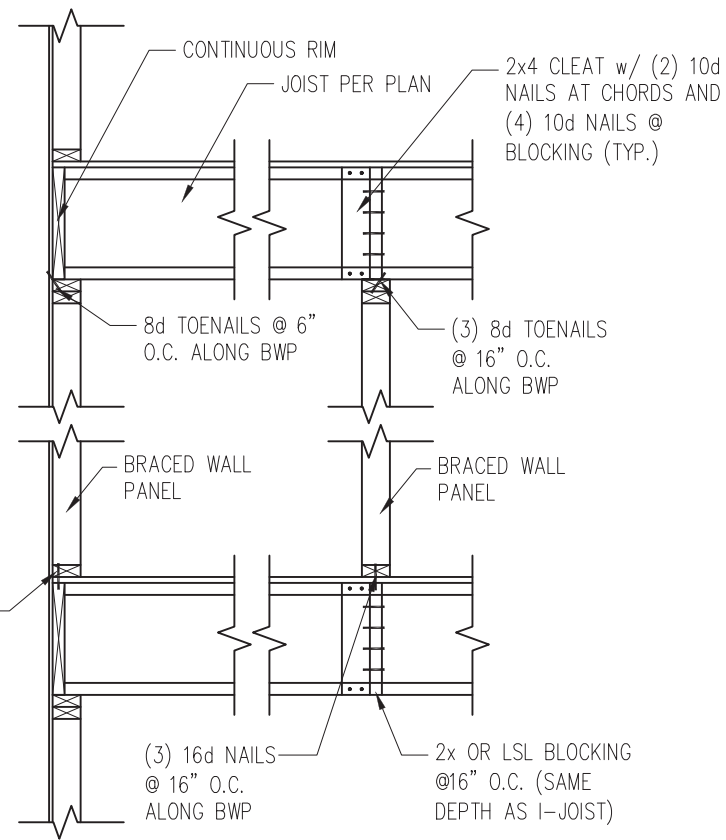
ORIGINAL DRAWING
NO. DATE PROJECT #
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SHEET
D8f

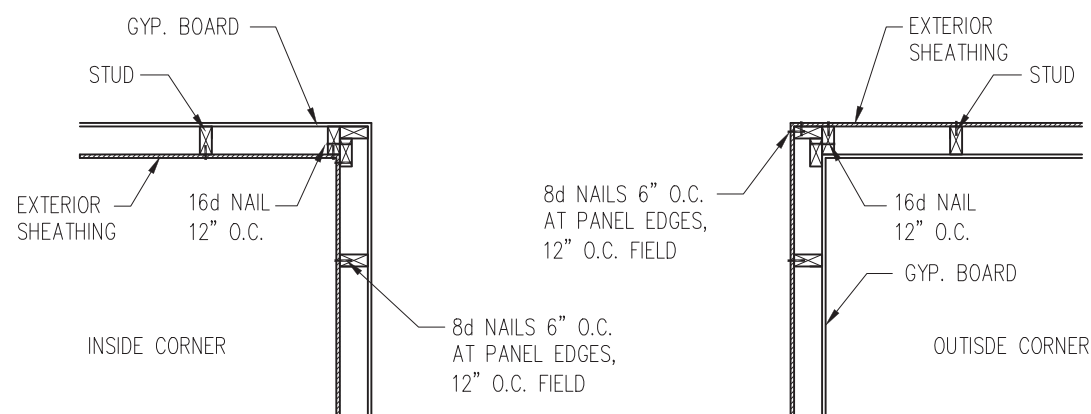


JOISTS PARALLEL TO BRACED WALLS



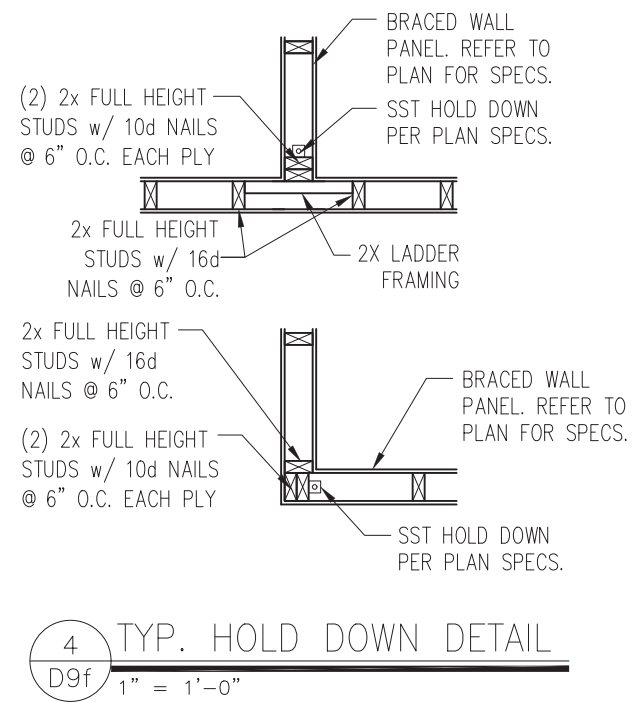
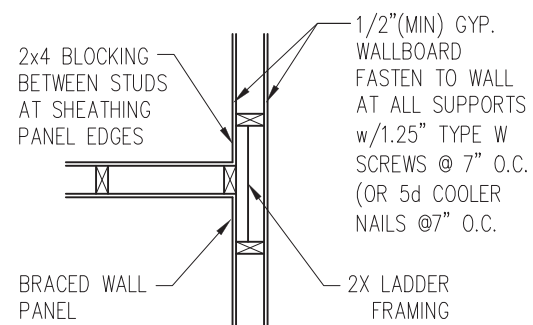
JOISTS PERPENDICULAR TO BRACED WALLS

1 TYP. WALL PANEL TO FLOOR/CEILING CONNECTION
D9f 1" = 1'-0"



2 TYP. EXTERIOR CORNER FRAMING
D9f 1" = 1'-0"

3 INTERIOR 3-STUD WALL INTERSECTION
D9f 1" = 1'-0"

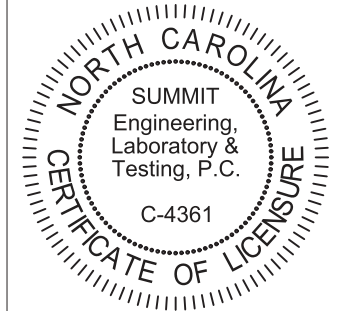


4 TYP. HOLD DOWN DETAIL
D9f 1" = 1'-0"



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Framing Details - Bracing
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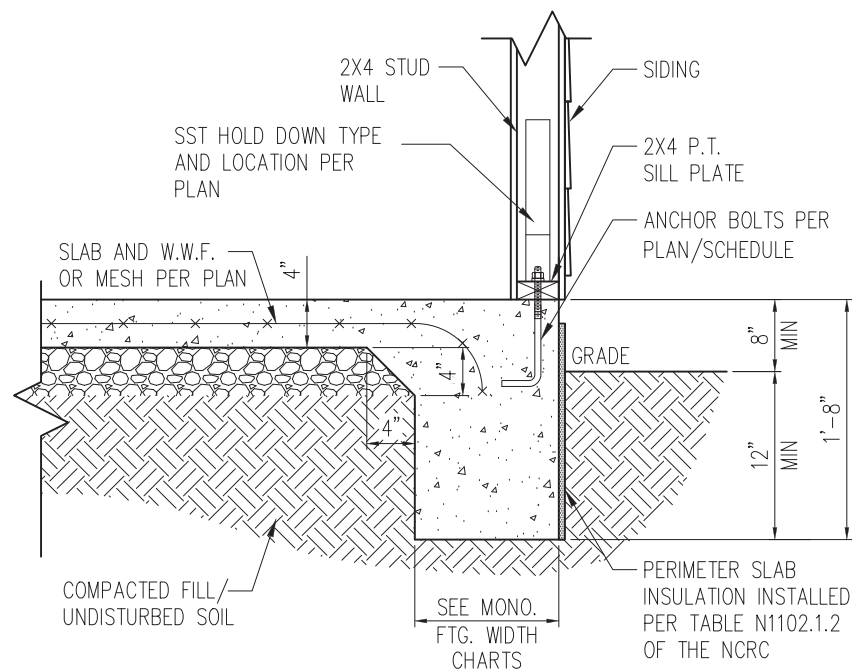
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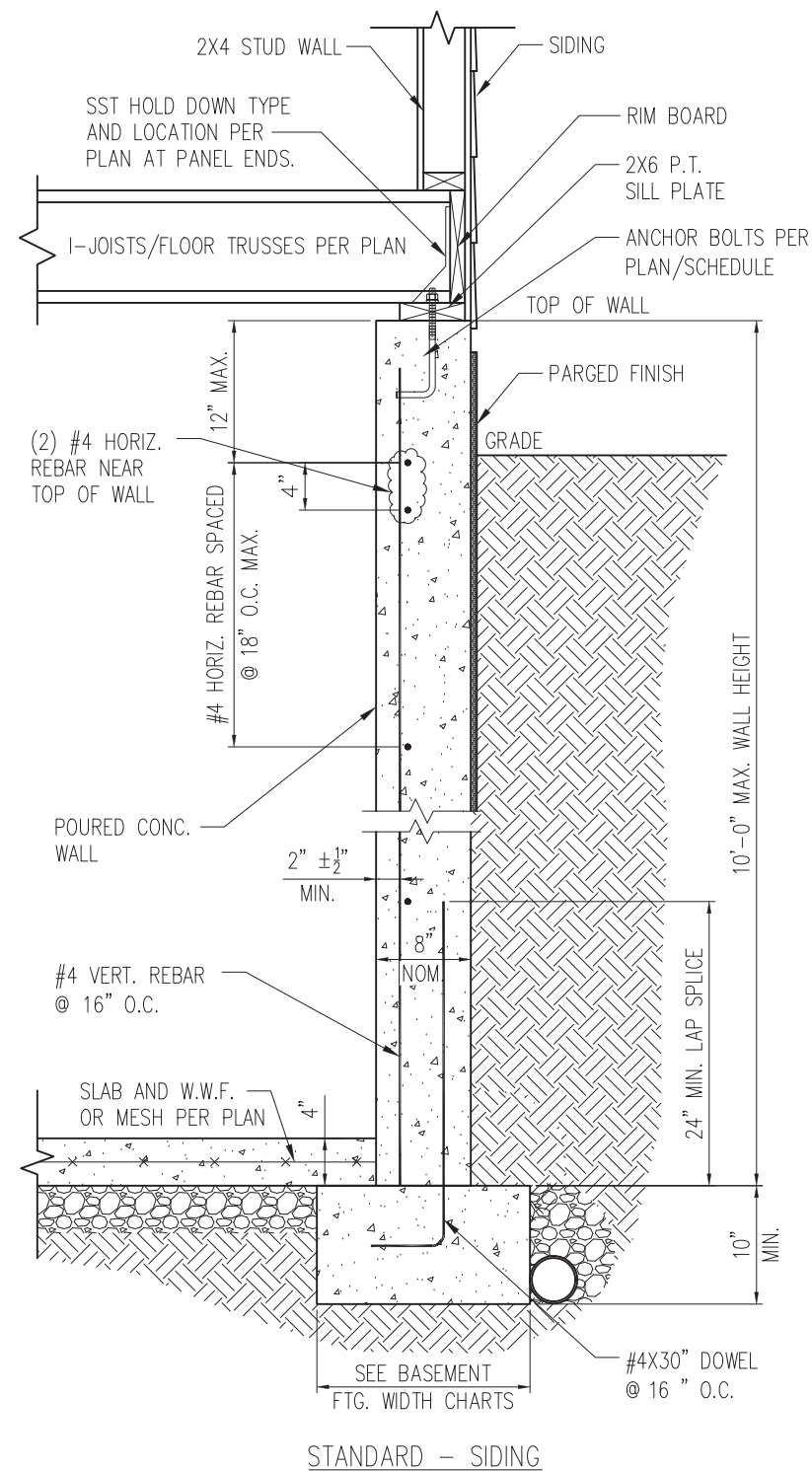
REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

D9f



1 SLAB DETAIL w/ HOLD-DOWN
 D10f 3/4" = 1'-0"

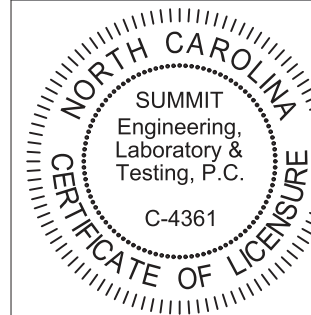


2 BASEMENT FOUNDATION WALL DETAIL W/ HOLD-DOWN
 D10f 3/4" = 1'-0"



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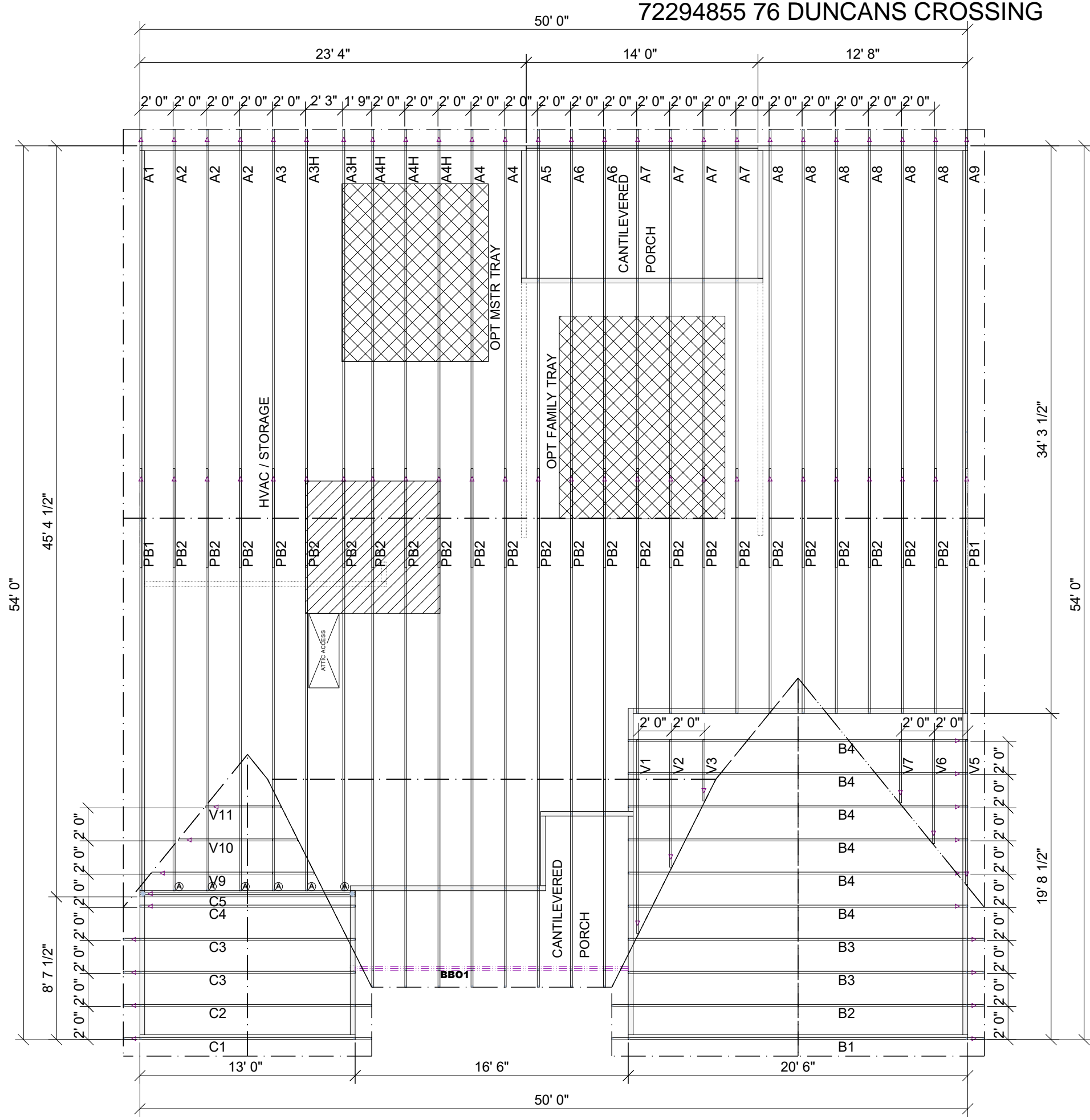
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D10f

TRUSS TO WALL CONNECTIONS, IF SHOWN, ARE FOR UPLIFT ONLY AND DO NOT CONSIDER LATERAL LOADS. ALL CONNECTORS ON THIS PROJECT ARE TO BE INSTALLED PER THE CONNECTOR MANUFACTURER'S SPECIFICATIONS. ALL CONNECTORS SHOWN THAT ARE NOT "TRUSS TO TRUSS" ARE SUGGESTIONS ONLY AND ARE TO BE VERIFIED BY THE BUILDING DESIGNER OR ENGINEER OF RECORD FOR SUITABILITY TO THIS PARTICULAR PROJECT. UFP MID-ATLANTIC, LLC. ACCEPTS NO RESPONSIBILITY FOR THE SPECIFIC APPLICATION OR SUITABILITY OF ANY CONNECTOR THAT IS NOT "TRUSS TO TRUSS" AS THEY APPLY TO THIS SPECIFIC STRUCTURE.



72294855 76 DUNCANS CROSSING

LANCASTER ADG

Hatch Legend

	OPT FAMILY TRAY
	HVAC / STORAGE
	OPT MSTR TRAY

Roof Hanger List

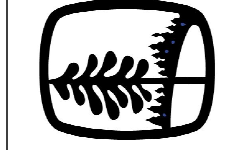
MARK	TYPE	DESCRIPTION	QTY
(A)	HUS26	FACE MOUNT HANGER	6

ROOF AREA: 3255.68 ft² RIDGE LINE: 93.08 ft VALLEY LINES: 72.21 HIP LINES: 0 INDICATES LEFT END OF TRUSS

Customer: **SMITH DOUGLAS**
 Job Name: **LANCASTER ADG**
 Date: 03-11-20
 Scale: NTS
 Revision Date: _____
 Revision Date 2: _____

Quality Products for Quality Builders
 Lancaster ADG

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2. SEE ENGINEERED DRAWING FOR PERMANENT BRACING MINIMUM REQUIREMENTS.
3. FRAMER TO VERIFY ALL DIMENSIONS, DROP, & RISE LOCATIONS PRIOR TO TRUSS PLACEMENT.
4. BLDR/FRAMER RESPONSIBLE FOR ADJUSTMENT OF TRUSS SPACING TO MISS PLUMBING DROPS, UNLESS NOTED OTHERWISE.

This layout is not an engineered drawing. This drawing was created to establish truss placement only. It is the responsibility of the builder to provide adequate support for all the elements shown in this drawing.