ABBREVIATIONS INDEX AC. AIR CONDITIONII AD. AREA DRAIN ADJ. ADJISTABLE ALT ALTERNATE ALIMINM ARCH. ARCHITECTURAL BA BATHROOM BD BOARD BF BI-FOLD (DOOR) BLD6 BIJD (DIM) TITLE SHEET / GOVER SHEET FRONT FLEVATION 'K' 0 QUICK VIEW ROOF PLAN 'K' 0.2 QUICK VIEW SIDE AND REAR ELEVATIONS 'K' BLF BI-FOLD (DOOR) BLD BULDING BLK BLOCK (CMUs) BLN BELON BM BEAM BP BI-PASS (DOOR) BOT BOTTOM BOTTOM BOTTOM CAB CABINET CER CERAMIC C.J. CONTROL JOINT C. FRONT ELEVATION 'A' SIDE AND REAR ELEVATIONS 'K'-IA ROOF PLAN 'A' W/ CRAWL SPACE SIDE AND REAR ELEVATIONS 'A' SIDE AND REAR ELEVATIONS 'K'-2 A SIDE AND REAR FLEVATIONS 'A'-2.I A W/ BASEMENT W/ CRAWL SPACE MONOLITHIC SLAB PLAN 'K' CER CÉRANIC C.J. CONTROL JOHT OR CONSTRUCTION JOINT CL. (LOSET OR CENTER LINE CL. CELLINE CLE CLEAR CLEAR COLLINE COLL COLLINE COLL COLLINE COLL COLLINE CRASSESSION ESSISTANT CST CREANIC TILE CRASSESSION TILE CREANIC TILE SIDE AND REAR ELEVATIONS 'A'-STEM WALL PLAN 'K' 2.2 A 3 SW K CRAWL SPACE PLAN 'K' W/ BASEMENT 3 CS K 3 MS A MONOLITHIC SLAB PLAN 'A' BASEMENT PLAN 'K' 3 BS K STEM WALL PLAN 'A' IST FLOOR PLAN 'K' 3 SW A 4 K 3 CS A CRAWL SPACE PLAN 'A' 5 K 2ND FLOOR PLAN 'K' REG REGUIRED 9 SOUNCE PETECTOR 9 SOUNCE PETECTOR 90 SOUNCE PETECTOR 90 SOUNCE PETECTOR 90 SOUNCE PETECTOR 91 SINGLE HANG OR SHELF 91 SOUNCE PETECTOR 91 SOUNCE PETECT BASEMENT PLAN 'A' 3 BS A 4 A IST FLOOR PLAN 'A' IP FRONT FLEVATION 'P' 5 A 2ND FLOOR PLAN 'A' 1.1 P ROOF PLAN 'P' SIDE AND REAR ELEVATIONS 'P' FRONT ELEVATION 'B' SIDE AND REAR ELEVATIONS 'P'-ΙB SQL SQUARE: SYM SYMBOL S45 SMOOTH FOUR SIDES T TREAD (AT STAIRS) OR TILE T.B. TOWEL BAR TEMP. TEMPERED (GLASS) T46 TOKOLE & GROOVE T.O.C. TOP OF CURB I.I B ROOF PLAN 'B' W/ CRAWL SPACE ELEV ELEVATION ELEC ELECTRICAL 2 B SIDE AND REAR ELEVATIONS 'B' SIDE AND REAR ELEVATIONS 'P'-SIDE AND REAR ELEVATIONS 'B' 21 B W/ BASEMENT W CRAWL SPACE MONOLITHIC SLAB PLAN 'P' SIDE AND REAR ELEVATIONS 'B'-TYP TYPICAL UN.O. UNLESS NOTED OTHERWISE VB. VAPOR BARRIER VERTICAL VIET VERTICAL VIET VERTICAL VIET VERTICAL MASHING MACHINE MO MOOD MINION M 2.2 B 3 SWP STEM WALL PLAN 'P' CRAWL SPACE PLAN P W/ BASEMENT 3 (SP 3 MS B MONOLITHIC SLAB PLAN 'B' BASEMENT PLAN 'P' 3 BS P 3 SW B STEM WALL PLAN 'B' 4 P IST FLOOR PLAN 'P' CRAWL SPACE PLAN 'B' 2ND FLOOR PLAN 'P' 3 (SB 5 P MIC WALK-IN CLOSET W WO WITH OR WITHOUT MP WATERPROOF(ING) WMM WELDED WIRE MESH BASEMENT PLAN 'B' 3 BS B 4 B IST FLOOR PLAN 'B' FRONT ELEVATION 'R' PL PROPERTY LINE Ø ROUND / DIAMETER 2ND FLOOR PLAN 'B' 5 B IIR ROOF PLAN 'R' SIDE AND REAR ELEVATIONS 'R' FRONT ELEVATION 'F' SIDE AND REAR ELEVATIONS 'R'-LLF ROOF PLAN 'F' W/ CRAWL SPACE SIDE AND REAR ELEVATIONS 'F' SIDE AND REAR ELEVATIONS 'R'-2 F 21 F SIDE AND REAR ELEVATIONS 'F'-W/ BASEMENT BUILDING CODE COMPLIANCE, W/ CRAWL SPACE MONOLITHIC SLAB PLAN 'R' SIDE AND REAR ELEVATIONS 'B'-3 SWR STEM WALL PLAN 'R' PROJECT INFORMATION W/ BASEMENT 3 CS R CRAWL SPACE PLAN 'R' ALL CONSTRUCTION TO COMPLY WITH LOCAL CODES AND ORDINANCES MONOLITHIC SLAB PLAN 'F' BASEMENT PLAN 'R' 3 BS R CURRENTLY IN USE WITH THE LOCAL JURISDICTION. 3 SW F STEM WALL PLAN 'F' 4 R IST FLOOR PLAN 'R' CRAWL SPACE PLAN 'F' 2ND FLOOR PLAN 'R' 3 (S F 5 R FOLLOW ALL APPLICABLE STATE AND LOCAL CODES 3 BS F BASEMENT PLAN 'F' 2018 NORTH CAROLINA STATE SUPPLEMENTS AND AMENDMENTS IST FLOOR PLAN 'F' IAS BUILDING SECTIONS 2ND FLOOR PLAN 'F' BUILDING SECTIONS LLAS CONTRACTOR AND BUILDER SHALL REVIEW ENTIRE PLAN TO VERIFY CONFORMANCE WITH ALL CURRENT APPLICABLE CODES IN EFFECT AT TIME OF CONFORMANCE WITH ALL CURRENT APPLICABLE CODES IN EFFECT AT TIME OF CONSTRUCTION. BY USING THESE DRAWINGS FOR CONSTRUCTION IT IS UNDERSTOOD THAT CONFORMANCE WITH ALL APPLICABLE CODES IS THE RESPONSIBILITY OF THE BUILDER AND CONTRACTOR. I.I.2 A S BUILDING SECTIONS I.I.3 A S BUILDING SECTIONS BASEMENT LITTLETY PLAN PRODUCT: SINGLE FAMILY RESIDENCE IST FLOOR UTILITY PLAN 2ND FLOOR UTILITY PLAN OCCUPANCY CLASSIFICATION ARCHITECTURAL SHEETS ALL CONSULTANT DRAWINGS ACCOMPANYING THESE ARCHITECTURAL DRAWINGS HAVE NOT BEEN PREPARED BY OR UNDER THE DIRECTION OF GMD DESIGN GROUP, INC. GMD DESIGN GROUP INC. THEREFORE ASSUMES NO LIABILITY FOR THE COMPLETENESS OR CORRECTNESS OF THESE DRAWINGS

EXPRESS HOMES 40' SFRIFS MODEL - HAYEN 4 BR - RH

Mason Ridge Lot 7 138 Fair Child Road Spring Lake, NC 28390



PLAN CHANGES INITIAL PLAN RELEASE 02.22.21 CLIENT REVISIONS CLIENT REVISIONS 04.14.21 CLIENT REVISIONS 12.03.21 CLIENT REVISIONS CLIENT REVISIONS ADDED LIGHT OVER TUB/SHOWER IN BATH 2 04.25.22 CONSULTANTS:

FOR CONSTRUCTION

Express

PROJECT TITLE

40' Series

GENERAL NOTES DESIGNER NORTH CAROLINA:

WRITTEN APPROVAL OF THE DESIGNER

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE AND ALL INCONSISTENCES SHALL BE BROUGHT TO THE ATTENTION OF THE DEVELOPER AND THE DESIGNER BEFORE PROCEEDING WITH WORK.

ANY ERRORS OR OMISSIONS FOUND IN THESE DRAWINGS SHALL BE BROUGHT TO DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED

ALL DIMENSIONS ARE TO FACE OF STUD OR TO FACE OF FRAMING UNLESS

ALL TRUSS DRAMINGS TO BE REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO ISSUANCE OF BUILDING PERMIT.

ALL OR EQUAL SUBSTITUTIONS MUST BE SUBMITTED TO AND APPROVED BY CITY BUILDING OFFICIAL PRIOR TO INSTALLATION.

ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS OTHERWISE NOTED. PROVIDE FIREBLOCKING. (PER LOCAL CODES.)

ALL ELECTRICAL AND MECHANICAL EQUIPMENT AND METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS, CONTRACTOR TO VERIFY.

THESE DOCUMENTS ARE THE PROPERTY OF THE DESIGNER AND SHALL NOT BE COPIED. PROVIDE BLOCKING AND/OR BACKING AT ALL TOMEL BAR. TOMEL RING AND/OR BATHROOMS AND POWDER ROOMS, VERIEY LOCATIONS AT FRAMING WALK

> ELASTOMERIC SHEET WATERPROOFING: FURNISH AND INSTALL ALL WATERPROOFING COMPLETE. A 40 MIL. SELF-ADHERING MEMBRANE OF RUBBERIZED
> ASPHALT INTEGRALLY BONDED TO POLYETHYLENE SHEETING, OR EGUAL.
> INSTALL FER MANIFACINES AND TRADE ASSOCIATIONS PRINTED
> INSTALL LATION INSTRUCTIONS, 6" MINIMM LAP AT ALL ADJACENT WALL SURFACES.

TO THE BEST OF THE DESIGNER'S KNOWLEDGE THESE DOCUMENTS ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE BUILDING AUTHORITIES HAVING JURISDICTION OVER THIS TYPE OF CONSTRUCTION AND OCCUPANCY.

SHOP DRAMING REVIEW AND DISTRIBUSTION, ALONG WITH PRODUCT SUBMITTALS, REQUESTED IN THE CONSTRUCTION DOCUMENTS, SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR, UNLESS DIRECTED OTHERWISE UNDER A SEPARATE AGREEMENT.

DEVIATIONS FROM THESE DOCUMENTS IN THE CONSTRUCTION PHASE SHALL BE REVIEWED BY THE DESIGNER AND THE OWNER PRIOR TO THE START OF WORK IN QUESTION. ANY DEVIATIONS FROM THESE DOCUMENTS WITHOUT PRIOR REVIEW, SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS REPRESENTED ON THESE DOCUMENTS INCLUDING MATERIALS FURNISHED BY SUBCONTRACTORS AND VENDORS.

SEOTECHNICAL ENGINEER (SOILS REPORT), ON THE STUDY OF THE PROPOSED SITE, TO THE DESIGNER, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR. IN THE EVENT THE GEOTECHNICAL REPORTS DO NOT EXIST. THE SOILS CONDITION SHALL BE ASSUMED TO BE A MINIMUM DESIGN SOIL PRESSURE STATED BY THE STRUCTURAL ENGINEER OF RECORD FOR THE PURPOSE OF STRUCTURAL DESIGN GENERAL CONTRACTOR SHALL ASSURE THE SOIL CONDITIONS MEET OR EXCEED

ALL WORK PERFORMED BY THE GENERAL CONTRACTOR SHALL COMPLY AND CONFORM WITH LOCAL AND STATE BUILDING CODES, ORDINANCES AND REGULATIONS, ALONG WITH ALL OTHER AUTHORITIES HAVING JURISDICTION. THE GENERAL CONTROLTOR IS RESPONSIBLE TO BE AWARE OF THESE REGUIREMENTS AND GOVERNING REGILATIONS

PROVIDE AN APPROVED WASHER DRAIN PAN AT SECOND FLOOR ONLY

WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS TO HAVE A CLEAR OPENABLE AREA OF 4,0 SQ FT. THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 22° AND THE MINIMUM NET CLEAR OPENING MIDTH SHALL BE 20°, GLAZING TOTAL AREA OF NOT LESS THAN 5.0 SQ FT IN THE CASE OF A GROUND WINDOW AND NOT LESS THAN 5.7 SQ FT IN THE CASE OF AN UPPER STORY WINDOW. (PER NCRC SECTION R3IO.1.!)

ALL HANDRAIL BALLUSTERS TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALLUSTERS, (PER LOCAL CODES.)

PROVIDE STAIR HANDRAILS AND GUARDRAILS PER LOCAL CODES.

BUILDER SET:

THE SCOPE OF THIS SET OF PLANS IS TO PROVIDE A "BUILDER'S SET" OF CONSTRUCTION DOCUMENTS AND GENERAL NOTES HEREINAFTER REFERRED TO AS "PLANS" THIS SET OF PLANS IS SUFFICIENT TO OBTAIN A BUILDING PERMIT; HOWEVER, ALL MATERIALS AND METHODS OF CONSTRUCTION NECESSARY TO COMPLETE THE PROJECT ARE NOT AND METHODS OF CONSTRUCTION NECESSARY TO COMPLETE THE PROJECT ARE NOT NECESSARILY DESCRIBED. THE PLANS DELINEATE AND DESCRIBE ONLY LOCATIONS, DIMENSIONS, TYPES OF MATERIALS, AND GENERAL METHODS OF ASSEMBLING OR FASTENING. THEY ARE NOT INTENDED TO SPECIFY PARTICULAR PRODUCTS OR OTHER METHODS OF ANY SPECIFIC MATERIALS, PRODUCT OR METHOD. THE IMPLEMENTATION OF THE PLANS REQUIRES A CLIENT / COMTRACTOR THOROUGHLY KNOWLEDSEABLE HITH THE APPLICABLE BUILDING CODES AND METHODS OF CONSTRUCTION SPECIFIC TO THIS PRODUCT TYPE AND TYPE OF CONSTRUCTION.

CONSTRUCTION REQUIREMENTS AND QUALITY: PROVIDE WORK OF THE SPECIFIC QUALITY WHERE QUALITY LEVEL IS NOT INDICATED, PROVIDE WORK OF QUALITY CUSTOMARY IN SIMILAR TYPES OF WORK. WHERE THE PLANS AND SPECIFICATIONS, CODES, LAWS, REGULATIONS, MANUFACTURER'S RECOMMENDATIONS OR INDUSTRY STANDARDS REQUIRE WORK OF HIGHER QUALITY OR PERFORMANCE, PROVIDE WORK COMPLYING WITH THOSE REQUIREMENTS AND QUALITY WITH THE MOST STRINGENT REQUIREMENT; WHERE REQUIREMENTS ARE DIFFERENT BUT APPARENTL' EQUAL, AND WHERE IT IS UNCERTAIN WHICH REQUIREMENT IS MOST STRINGENT, OBTAIN CLARIFICATION FROM THE 6MD DESIGN GROUP BEFORE PROCEEDING

AREA CALCULATIONS:

MODEL 'HAYDEN' SQUARE FOOTAGES AREA 1445 SF 2nd FLOOR TOTAL LIVING 25II SF GARAGE 422 SF PORCH 109 SF OPT. COVERED PORCH 80 SF

BASEMENT AREA IS TAKEN TO INSIDE OF CONCRETE WALL

OPT, BASEMENT

PROJECT NO: GMD17049 TITLE SHEET

1006 SF

January 22, 2021







Eront Elevation 'A' scale: 1/4"=1'-0" at 22"x34" layout 1/8"=1'-0" at 11"x17" layout





Front Elevation 'B' SCALE: I/4"=I'-0" AT 22"X34" LAYOUT I/8"=I'-0" AT II"XI7" LAYOUT

NO: DATE: REVISION:

O4.25.22

PROFESSIONAL SEAL:

40' Series

FOR CONSTRUCTION

CLIENTS NAME:



PROJECT NO: GMD17049

QUICK VIEW

PRINT DATE:

January 22, 2021

0.1

AVAILABLE WITH OPTIONAL 9'-1" FIRST FLOOR PLATE

NOTES AT OPT 9'-1" PLT:

- WDW HT SET AT 7'-6"
- INTERIOR SOFFITS AT 8'-0"
- EXTERIOR SOFFITS AT 8'-0"

NOTES:

- GRADE CONDITIONS MAY VARY FOR INDIVIDUAL SITE FROM THAT SHOWN, BUILDER SHALL VERIFY AND COORDINANE PER ACTUAL SITE CONDITIONS, INDICON HEAD HEIGHTS, IST FLOOR = 6-6" UND, ON ELEVATIONS, 230 FLOOR = 7-0" UND, ON BLEVATIONS, 250 FLOOR = 10" UNDIVIDUALES FER DEVELOPER, DEVELOPER, STOCKED SHINGLES FER DEVELOPER, 250 FLOOR STOCKED SHINGLES SHINGLES FER DEVELOPER, 250 FLOOR STOCKED SHINGLES SHINGLES FER DEVELOPER, 250 FLOOR STOCKED SHINGLES SHINGLES

- WINDOWS: MANUFACTURER PER DEVELOPER, DIVIDED LITES AS SHOWN ON THE EXTERIOR ELEVATIONS
- ENTRY DOOR: AS SELECTED BY DEVELOPER.
- GARAGE DOORS: AS SELECTED BY DEVELOPER, RAISED PANEL AS SHOWN.
- ALL EXTERIOR MATERIALS TO BE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- PROTECTION AGAINST DECAY:
 (ALL FORTIONS OF A PORCH, SCREEN PORCH OR DECK FROM THE BOTTOM OF
 THE HEADER DOWN, INCLIDING POST, RAILS, PICKETS, STEPS AND FLOOR STRUCTURE)
- THE HEADER DOWN, INCLIDING POST, RAILS, PICKETS, STEPS, INGLIATION, PER TABLE INIOZZ.

 ENTERIOR MALLS.

 R-IS BATTS MINIMAN VERIFY
 FLOOR OVER GARAGE:

 ATTIC KREEWALL.

 R-IS BATTS MINIMAN VERIFY
 RAILS MINIMAN VERIFY
 RAILS MARKET MINIMAN VERIFY
 RAILS BATTS MINIMAN VERIFY
 RAILS BATTS MINIMAN VERIFY
 RAILS BATTS MINIMAN VERIFY
 RAILS BATTS MINIMAN VERIFY
 RAIL BATTS MINIMAN VERIFY
 RAIL BATTS MINIMAN VERIFY

KEY NOTES:

- MASONRY: ADHERED STONE VENEER AS SELECTED BY DEVELOPER, HEIGHT AS NOTED.
- 2 MASONRY FULL BRICK AS SELECTED BY DEVELOPER, HEIGHT AS NOTED.
- 3 MASONRY FULL STONE AS SELECTED BY DEVELOPER, HEIGHT AS NOTED.
- 4 8" SOLDIER COURSE. 5 ROWLOCK COURSE

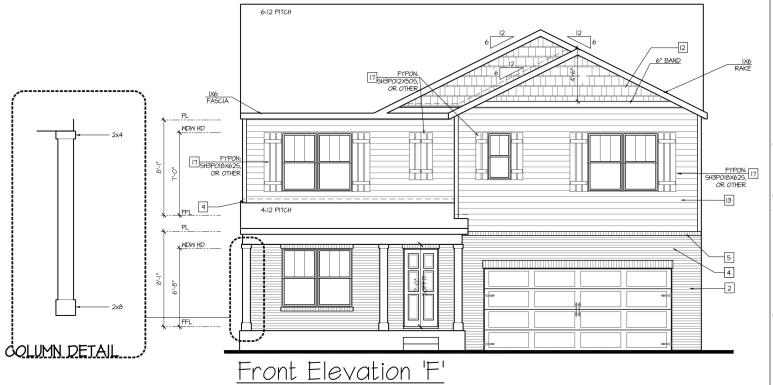
- NA
 TYPICALS:
 CORROSION RESISTANT SCREEN LOWERED VENTS, SIZE AS NOTED.
- CODE APPROVED TERMINATION CHIMNEY CAP.
 CORROSION RESISTANT ROOF TO WALL FLASHING, CODE COMPLIANT FLASHING PER NCRC R905.2.6.3
- TO STANDING SEAM METAL ROOF, INSTALL PER MANUFCATURER'S WRITTEN INSTRUCTIONS.
- II DECORATIVE WROUGHT IRON, SEE DETAILS.
- SIDING.

 | VINTIL SHAKE SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
 (AT SPECIFIED LOCATIONS.
 RIBER CEMENT SHAKE SIDING PER DEVELOPER W IX4 CORNER TRIM BOARD.)
- VINYL LAP SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
 (AT SPECIFIED LOCATIONS:
 FIBER CEMENT LAP SIDING PER DEVELOPER W IX4 CORNER TRIM BOARD.)
- | VINYL WAYY SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS: FIBER CEMENT WAYY SIDING PER DEVELOPER W IX4 CORNER TRIM BOARD.)
- 5 VINYL BOARD AND BATT SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
- AT SPECIFIED LOCATIONS.
 FIBER CHENT FALL SIDING WI I/3 BATTS AT I/2" O.C. PER DEVELOPER W I/4 CORNER TRIM BOARD

 (AT SPECIFIC LOCATIONS.
 IX FIBER CHENT TRIM OR EQUIA., UN.D. SIZE AS NOTED

- TYPON SHUTTERS, TYPE AS SHOWN, SIZE AS NOTED.

 (AT SPECIFIC LOCATIONS: FALSE VINYL SHUTTERS, TYPE AS SHOWN, SIZE AS NOTED.)
- ALL MINDOMS WHOSE OPENING IS LESS THAN 24" ABOVE THE FINISH FLOOR AND WHOSE OPENING IS GREATER THAN 12" ABOVE THE OUTSIDE WALKING SURFACE MAST HAVE MINDOW OPENING LIMITING BEVICES COMPLYING WITH THE NCRC SECTION R312.21 AND R312.22.



W/ Opt Crawl Space/ Basement Scale: 1/4*=1*-0**At 22*/94* LAYOUT 1/8*=1*-0**AT 11*/XIT**LAYOUT

NO: DATE: REVISION: 04.25.22 PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

FOR CONSTRUCTION

CLIENTS NAME:



PROJECT NO: GMD17049

'HAYDEN'

EXTERIOR ELEVATIONS '4EPF-F'

PRINT DATE: January 22, 2021

1F

ATTIC VENT CALCULATION FOR PLAN 'HAYDEN': 1:150 RATIO.

THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN THE ACT YELL SYMILATING AND SPACE VENTILATED, PROVIDED THAT AT LEAST 50 PERCENT AND NOT MORE THAN 60 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE O BE VENTIL ATED AT LEAST 3 FEET ABOVE THE FAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS.

EXCEPTIONS:

1. EXCLOSED ATTIC/RAFTER SPACES REQUIRING LESS THAN

1. SQ FT OF VENTILATION MAY BE VENTED WITH CONTINUOUS

SOFFIT VENTILATION ONLY.

2. ENCLOSED ATTIC/RAFTER SPACES OVER UNCONDITIONED SPACE MAY BE VENTED WITH CONTINUOUS SOFFIT VENT ONLY.

GENERAL CONTRACTOR SHALL VERIFY THE NET FREE GENERAL CONTRACTOR SHALL VERIFY THE NET FREE VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER. VERIFY WITH MANIFACTURER OF HIGH AND LOW VENTS TO BE USED FOR MINIMAN CALCULATED VENTS REGUIRED. THE REGUIRED VENTILATION SHALL BE MAINTAINED. PROVIDE INSULATION STOP SUCH THAT INSULATION DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REGUIRED. BY THE BUILDING OFFICIAL

BY THE BUILDING OFFICIAL.

ALL OVERLAY FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING CAS ALLOWED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC. REQUIREMENTS.

PER DEVELOPER, AT ALL CANTILEVERED FLOORS,
CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUT FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT.

(PER SECTION R806.2)

SQUARE INCH VENT FOR EVERY 150 SQUARE INCHES OF CEILING

*144 SQ, IN. = 1 SQ, FT. BLDG, CEILING (SF) X 144 = BLDG (SQ, IN.)

BLDG. (SQ. IN.) / I50 = SQ. IN. OF VENT REQUIRED

ROOF AREA I.= | 1488 SF | 1488 SQ. FT. X 144 = 214272 SQ. IN. | 214272 SQ. IN. / 150 = | 1428.48 SQ. IN. OF VENT REQ'D

ROOF AREA 2:= 34 SF 34 SQ. FT. X I44 = 5616 SQ. IN. 5616 SQ. IN. / I50 = 31.44 SQ. IN. *O*F VENT REQ'D

ROOF AREA 3:= 180 SF 180 Sq. FT. X 144 = 25420 Sq. IN. 25420 Sq. IN. / 150 = 172.80 Sq. IN. OF VENT REQ'D

- ALL ROOF DRAINAGE SHALL BE PIPED TO STREET OR APPROVED DRAINAGE FACILITY.

DASHED LINES INDICATE WALL BELOW. - LOCATE GUTTER AND DOWNSPOUTS PER BUILDER. - PITCHED ROOFS AS NOTED.

- TRUSS MANUFACTURER SHALL SUBMIT STRUCTURAL CALCS AND SHOP DRAMINGS TO THE BUILDER'S GENERAL CONTRACTOR AND BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATIONS.

- ALL PLIMBING VENTS SHALL BE COMBINED INTO A MINIMUM AMOUNT OF ROOF PENETRATIONS, ALL ROOF PENETRATIONS SHALL OCCUR TO THE REAR OF THE MAIN RIDGE.

ATTIC VENT CALCULATION FOR PLAN 'HAYDEN': 1:300 RATIO

AS AN ALTERNATE TO THE 1/150 RATIO LISTED ABOVE. AS AN ALTERNAL TO THE INDORATION AREA MAY BE REDUCED TO 1/300 WHEN A CLASS I OR II VAPOR RETARDER IS INSTALLED ON THE WARM - IN - WINTER SIDE OF THE CEILING.

GENERAL CONTRACTOR SHALL VERIFY THE NET FREE VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER. VERIFY MITH MANUFACTURER OF HIGH AND LOW VENTS TO BE USED FOR MINIMUM CALULALIED VENTS REGUIRED. THE REGUIRED VENTILATION SHALL BE MAINTAINED. PROVIDE INSULATION STOP SUCH THAT INSULATION DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REGUIRED BY THE BUILDING OFFICIAL.

ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING SIGNED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC REQUIREMENTS.

PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2 CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED LEMENT.

I SQUARE INCH VENT FOR EVERY 300 SQUARE INCHES OF CEILING *144 SQ IN = 1 SQ FT

BLDG. CEILING (SF) X 144 = BLDG (SQ. IN.) BLDG. (SQ. IN.) / 300 = SQ. IN. OF VENT REQUIRED

SQ. IN. OF VENT REQUIRED / 2 = 50% AT HIGH & 50% AT LOW.

 ROOF AREA I: =
 1488 SF

 1486 SQ. FT. X 144 = 2
 50. FT. Z 144 SQ. IN. OF VENT REQ'D

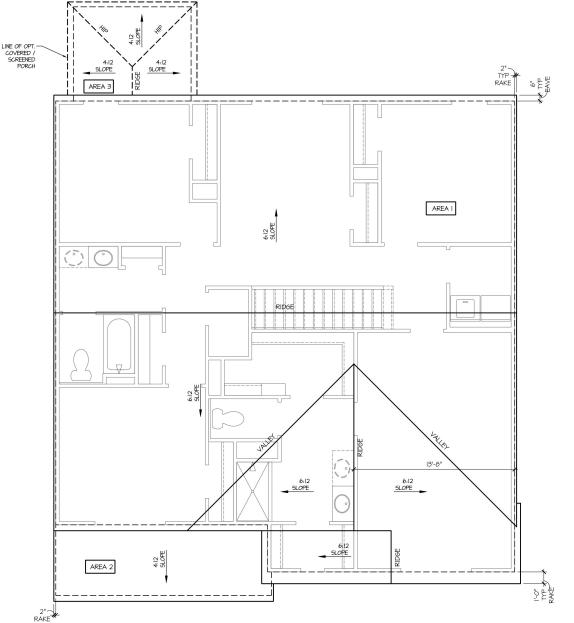
 24272 SQ. IN. Z = 35712 SQ. IN. OF VENT AT HIGH \$ 35712
 50. IN. OF VENT AT HIGH \$ 35712

ROOF AREA 2: 34 55 50. IN. 7 2 60 FT. / 300 5 16/12 50. IN. 7 5 VENT REQUIRED. 18/12 50. IN. 7 5 VENT AT HIGHT 18/35 50. IN. 07 VENT AT HIGHT 18/35 50. IN. 07 VENT AT LOW REQUIRED.

ROOF AREA 3; = | |BO| SF | | |SO| SE | | |SO| SE | |SO| SO | |SO|

BUILDER TO PROVIDE (2) LAYERS OF UNDERLAYMENT AT ANY ROOF W/ A SLOPE FROM 2:12 TO LESS THAN 4:12

> AT SINGLE FAMILY DETACHED PLANS: PREFINISHED VENTED SOFFIT AT EAVE PER MANUFACTURER. (VERIFY FIRE SEPARATION DISTANCE FOR SOFFIT PROTECTION PER NCRC SECTION R302.1.1 AND TABLE R302.1)



SCALE: 1/4"=1"-0" AT 22"X34" LAYOUT 1/8"=1"-0" AT 11"XI7" LAYOUT

NO: DATE: REVISION: 04.25.22 PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

FOR CONSTRUCTION

CLIENTS NAME:



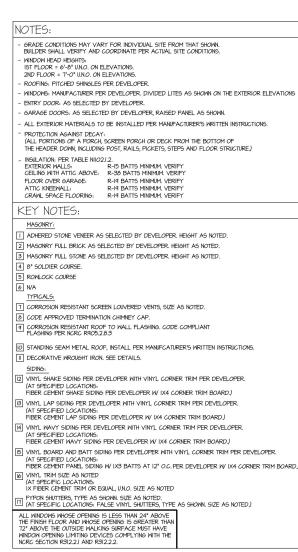
PROJECT NO: GMD17049

'HAYDEN' **ROOF PLAN**

'4EPF-F'

PRINT DATE: January 22, 2021

1.1 F



AVAILABLE WITH OPTIONAL

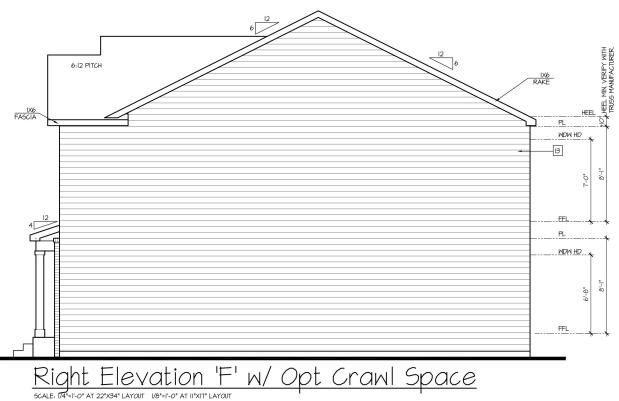
9'-I" FIRST FLOOR PLATE

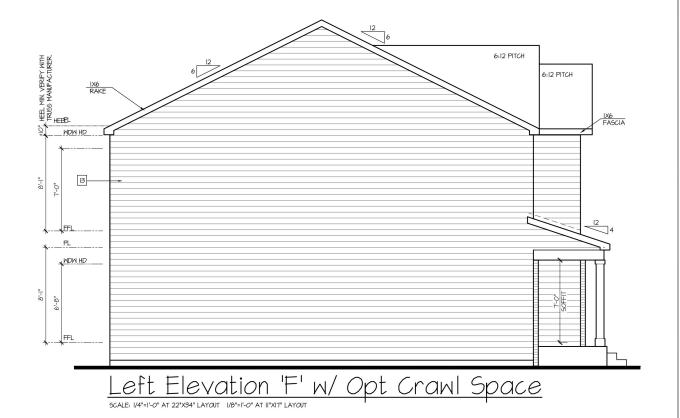
NOTES AT OPT 9'-I" PLT:

- WDW HT SET AT 7'-6"

- INTERIOR SOFFITS AT 8'-0"

- EXTERIOR SOFFITS AT 8'-0"







NO: DATE: REVISION:

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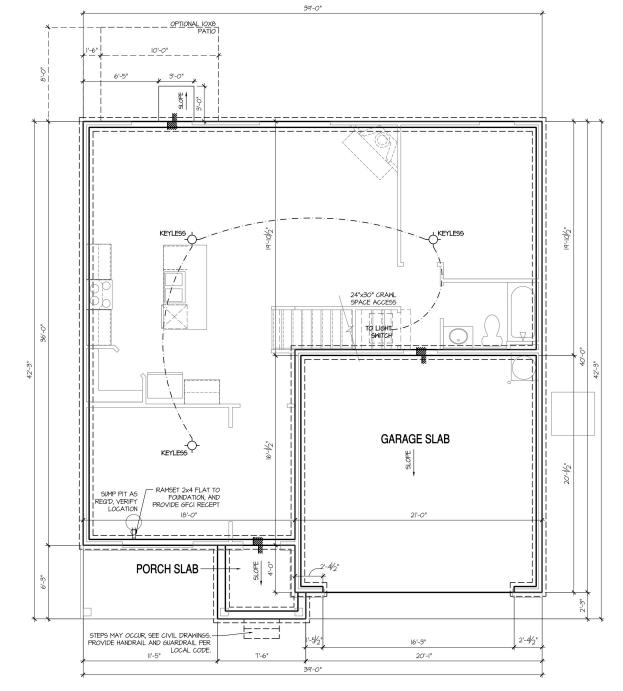
IEET TITLE:

'HAYDEN' EXTERIOR ELEVATIONS '4EPF-F'

PRINT DATE:
January 22, 2021

2.1 F

CRAWL SPACE NOTES NORTH CAROLINA: KEY NOTES: - REFER TO STRUCTURAL DRAWINGS FOR INFORMATION NOT SHOWN ON THIS PLAN. - FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS. LINE OF SLAB ABOVE 2 LINE OF FRAMED WALL ABOVE PROVIDE FIREBLOCKING. (PER LOCAL CODES.) 3 16"X8" CRAWL SPACE VENT ALL ELECTRICAL AND MECHANICAL EQUIPMENT AND METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS, CONTRACTOR TO VERIEY. VERIEY ALL DOOR THREADLD HEIGHTS TO HARD SURFACES, 8 1/4* MAX AT INSHING DOORS, (PER NCRC SECTION R31(3.1).) 4 CRAWL SPACE ACCESS PANEL 5 A/C CONDENSER PAD. (VERIFY) [9] YO CONDETERS FAIL (VERTY) [8] TYPICAL CRAWL FOUNDATION WALL SHALL BE 8" CMU OR A COMBINATION OF 4" CMU WITH NOMINAL 4" BRICK, SEE STRUCTURAL DRAWINGS FOR ALL STRUCTURAL ATTACHMENTS, ALL BLOCK CELLS, AND SPACE BETWEEN BLOCK AND BRICK SHALL BE FILLED SOLID WITH CONCETE. FOUNDATION WALL WITH FULL HEIGHT BRICK VENEER SHALL CONSIST OF 8" CMU WITH NOMINAL 4" BRICK. SEE STRUCTURAL DRAWINGS FOR ALL STRUCTURAL ATTACHMENTS AND BRICK TIE SPACINS. FILL VOIDS SOLID TO TOP OF CMU WALL. (MUCT COMPLY WITH NCRC SECTION R404, TABLE R404.1.1(I)) THROUGH R404.1.1(I) AND APPLICABLE SECTIONS OF R606, R607, R609.) VERIFY WITH STRUCTURAL DRAWINGS FOR WALL FOOTING SIZE AND DEPTH. - SLOPE ALL STOOPS AND HARDSCAPE MATERIAL AWAY FROM BUILDING - TYPICAL. - SLOPE GARAGE FLOOR I/8" PER FOOT TO GARAGE DOOR OPENING. VERIFY CURB CUT BLOCKOUT WITH GARAGE DOOR MANUFACTURER. REFER TO CIVIL DRAWINGS FOR FINISH SURFACE ELEVATIONS. TYP STOOP AT INSHING/SLIDER DOORS: 36° DEEP BY THE WIDTH OF THE DOOR SERVED, MINIMM (FER NCRC SECTION R3II.3) PROVIDE A SLIP-RESISTANT FINISH. SOILS TREATMENT: BORACARE TERMITE TO BE APPLIED TO FRAMING PER PRODUCT SPECIFICATIONS. (PROVIDE CHEMICAL TREATMENT FOR PROTECTION FROM TERMITE INVESTATION ACCORDING TO LOCAL CODES.) AT VENTED CRAVIL SPACE: APPLY AN APPROVED VAPOR RETARDER OR EQUIVALENT, 6 MIL POLY-VINYL, GROUND COVER OVER FINISH GRADE OR CRAVIL SPACE PER NCRC SECTION 408.2. PROVIDE VENTS SPACED AROUND PERIMETER TO PROMOTE CROSS VENTILATION AT A RATE OF I SF VENT FOR EVERY ISOO SF OF CRANL FLOOR AREA. ONE VENT MUST BE LOCATED MITHIN 3-0" OF EACH CORNER OF THE BUILDING AND LOCATED TO ALLOW FOR CROSS VENTILATION. (PER NCRC SECTION R408.I.I EXCEPTION.) PROVIDE AN ACCESS OPENING, MINIMUM SIZE OF 18"X24" FOR CRAML ACCESS, COORDINATE WITH MECHANICAL CONTRACTOR FOR LARGER SIZE REQUIREMENTS IF MECHANICAL EQUIPEMENT IS LOCATED IN CRAML. (PER NCRC SECTION 408.8) WOOD CONTACTING CONCRETE OR MASONRY OR LESS THAN CODE REQUIRED SEPARATION TO GRADE SHALL BE PRESSURE TREATED OR FOUNDATION GRADE REDWOOD, SET ALL EXTERIOR WALL SILLS IN MASTIC.





NO: DATE: REVISION:

O4.25.22

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

FOR CONSTRUCTION

CLIENTS NAME:



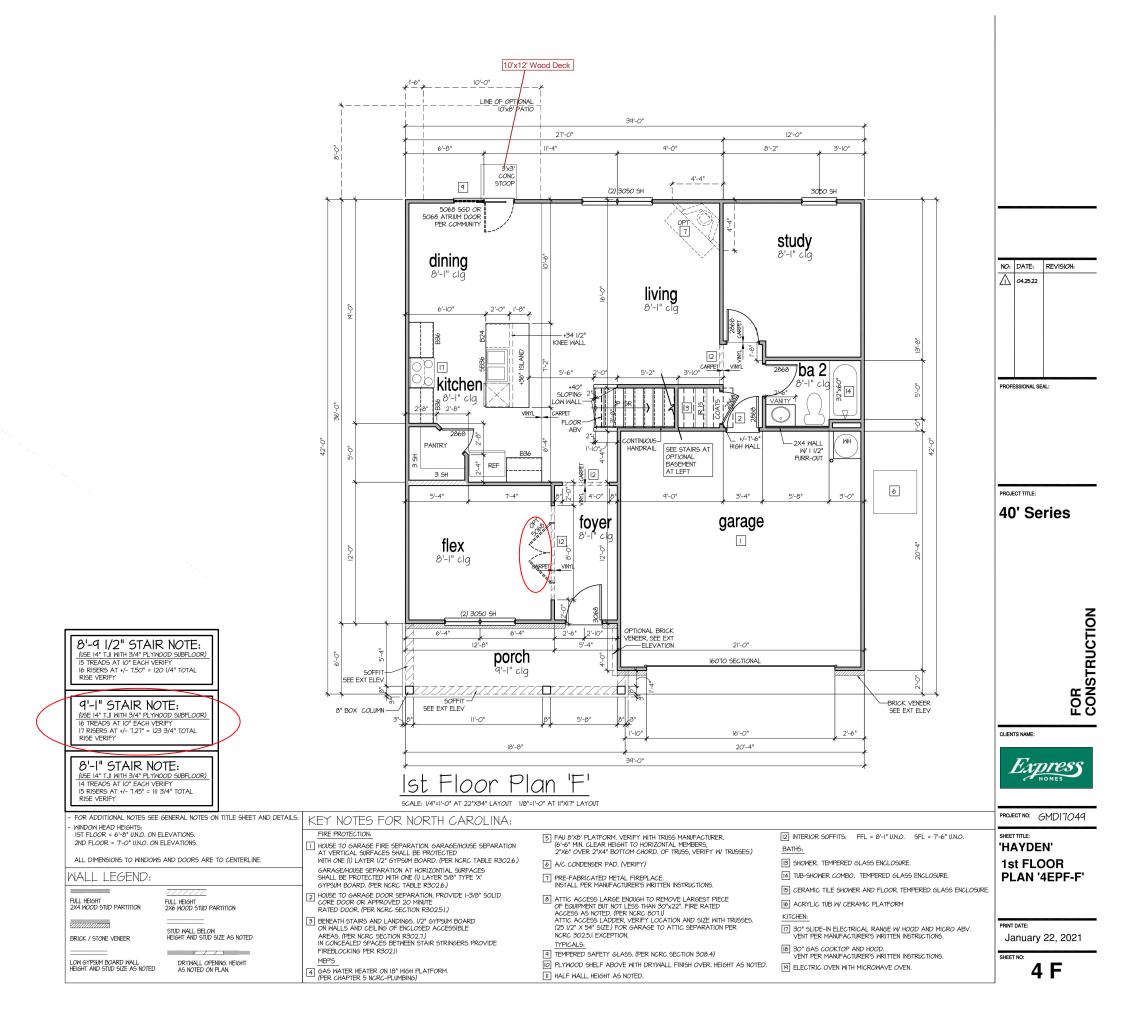
PROJECT NO: GMD17049

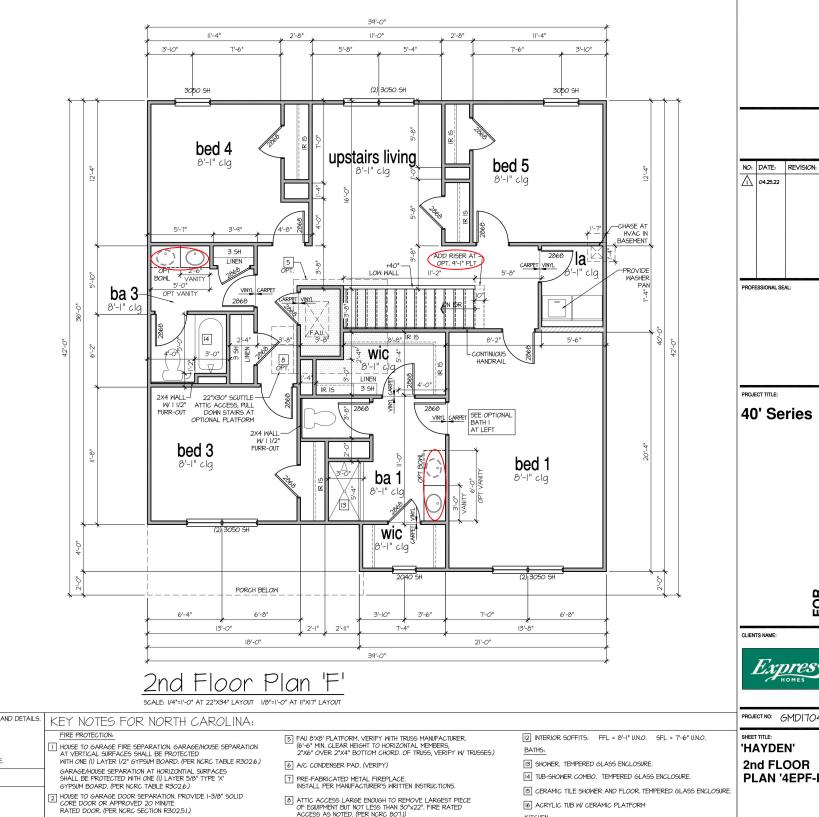
SHEET TITLE:

'HAYDEN' CRAWL SPACE PLAN '4EPF-F'

PRINT DATE:
January 22, 2021

3 CS F





40' Series FOR CONSTRUCTION

Express

PROJECT NO: GMD17049

'HAYDEN' 2nd FLOOR PLAN '4EPF-F'

PRINT DATE:

KITCHEN: II 30" SLIDE-IN ELECTRICAL RANGE W HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

January 22, 2021

18 30" GAS COOKTOP AND HOOD. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS. 19 ELECTRIC OVEN WITH MICROWAVE OVEN.

5 F

9'-1" STAIR NOTE:

(USE 14" T.JI WITH 3/4" PLYWOOD SUBFLOOR)
16 TREADS AT 10" EACH VERIFY
17 RISERS AT +/- T.2T" = 123 3/4" TOTAL
RISE VERIFY

8'-1" STAIR NOTE: (USE 14" T.JI WITH 3/4" PLTYWOOD SUBFLOOR) 14 TREADS AT 10" EACH VERIFY 15 RISERS AT 4" - 1.45" = 111 3/4" TOTAL RISE VERIFY

FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS. WINDOW HEAD HEIGHTS: IST FLOOR = 6'-8" U.N.O. ON ELEVATIONS. 2ND FLOOR = 7'-0" U.N.O. ON ELEVATIONS.

ALL DIMENSIONS TO WINDOWS AND DOORS ARE TO CENTERLINE.

WALL LEGEND:

FULL HEIGHT 2X4 WOOD STUD PARTITION

BRICK / STONE VENEER

FULL HEIGHT 2X6 WOOD STUD PARTITION

STUD WALL BELOW HEIGHT AND STUD SIZE AS NOTED

LOW GYPSUM BOARD WALL HEIGHT AND STUD SIZE AS NOTED DRYWALL OPENING. HEIGHT AS NOTED ON PLAN. 3 BENEATH STAIRS AND LANDINGS. I/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED ACCESSIBLE AREAS. (PER NCRC SECTION R302.7.) IN CONCEALED SPACES BETWEEN STAIR STRINGERS PROVIDE FIREBLOCKING PER R302.II

GAS WATER HEATER ON 18" HIGH PLATFORM. (PER CHAPTER 5 NCRC-PLUMBING)

ATTIC ACCESS LARGE ENOUGH TO REMOVE LARGEST PIECE OF EQUIPMENT BUT NOT LESS THAN 30"x22", FIRE RATED ACCESS AS NOTED, (FER NCR. 80"1).

ATTIC ACCESS LADDER, VERIFY LOCATION AND SIZE WITH TRUSSES, (25 1/2" X 54" SIZE). FOR GARAGE TO ATTIC SEPARATION PER NCR.C 30:25.1 EXCEPTION.

TYPICALS: TEMPERED SAFETY GLASS. (PER NCRC SECTION 308.4)

PLYWOOD SHELF ABOVE WITH DRYWALL FINISH OVER, HEIGHT AS NOTED.

III HALF WALL, HEIGHT AS NOTED.

9'-1" STAIR NOTE: (USE 14" T.JI WITH 3/4" PLYWOOD SUBFLOOR) 16 TREADS AT 10" EACH VERIFY 11 RISESS AT 14" T. 2.21" = 123 3/4" TOTAL RISE VERIFY 8'-I" STAIR NOTE: (USE 14" T.J.I WITH 3/4" PLYWOOD SUBFLOOR) 14 TREADS AT 10" EACH VERIFY 15 RISERS AT +/- 7.45" = 111 3/4" TOTAL RISE VERIFY

NOTES:

- REFER TO FLOOR PLAN NOTES FOR TYPICAL FIRE PROTECTION NOTES AND LOCATIONS.

 THESE BUILDING SECTIONS MAY VARY AT ALTERNATE ELEVATION STYLES AND AT "PLAN OPTION"
 CONDITIONS, REFER TO MAIN FLOOR PLAN AND ALTERNATE FLOOR PLANS FOR INFORMATION NOT SHOWN HERE.

 BUILDING SECTIONS SHOWN HERE DEPICT VOLUMN SPACES WITHIN THE STRUCTURE, REFER TO STRUCTURAL
 DRAWINGS, TRUSS DRAWINGS, STRUCTURAL DETAILS AND CALCULATIONS BY OTHER FOR ALL STRUCTURAL INFO.

 ROOFING: PITCHED SHINGLE ROOF, REFER TO ROOF PLAN FOR TYPICALS.

PER STATE RESIDENTIAL CODE COMPLIANCE METHOD TO BE DETERMINED BY BUILDER.

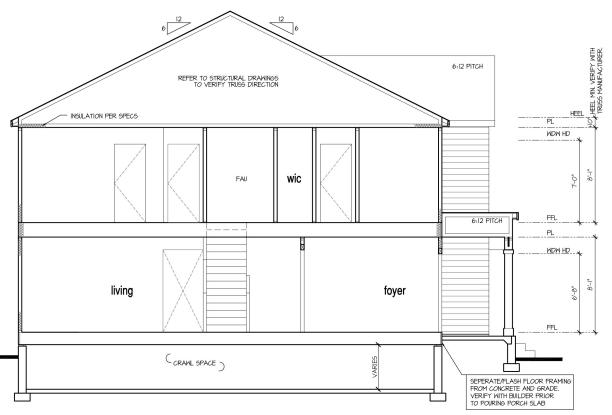
- . WOOD FLOORS: FLOOR SHEATHING OVER FLOOR JOIST. REFER TO STRUCTURAL AND TRUSS DRAWINGS BY OTHERS.
- VERIFY STAIRS MINIMUM AND MAXIMUM REQUIREMENTS FOR CONSTRUCTION CLEARANCES WITH LOCAL CODES.
- INSULATION:

- INSULATION:
EXTERIOR WALLS ZONE 3:
R-13 BATTS MINIMUM. VERIFY
EXTERIOR WALLS ZONE 4:
R-15 BATTS MINIMUM. VERIFY
CEILING WITH ATTIC ABOVE COMPRESSED INSULATION.
R-30 BATTS MINIMUM. VERIFY
CEILING WITH ATTIC ABOVE INCOMPRESSED INSULATION (HEELS IN TRUSSES):
R-30 BATTS MINIMUM. VERIFY

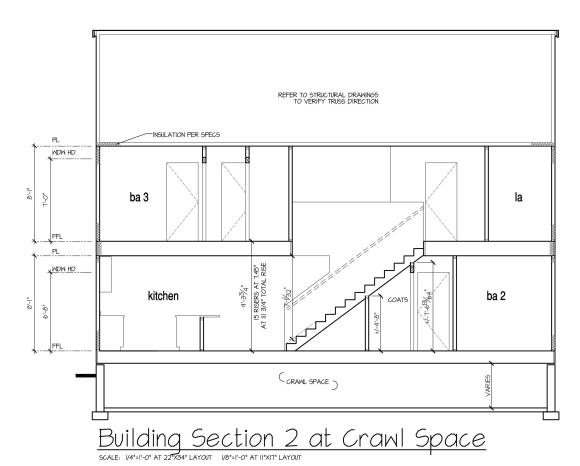
R-30 BATTS MINIMUM. VERI

R-19 BATTS MINIMUM, VERIFY R-19 BATTS MINIMUM, VERIFY R-19 BATTS MINIMUM, VERIFY FLOOR OVER GARAGE: ATTIC KNEEWALL: CRAWL SPACE FLOORING:

WINDOW GLAZING "U" FACTOR: 0.35



Building Section Lat Crawl Space Scale: 1/4*=1-0* AT 22*\$34* LAYOUT 1/8*=1-0* AT 11*XIT* LAYOUT



NO: DATE: REVISION: 04.25.22 PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

FOR CONSTRUCTION

CLIENTS NAME:

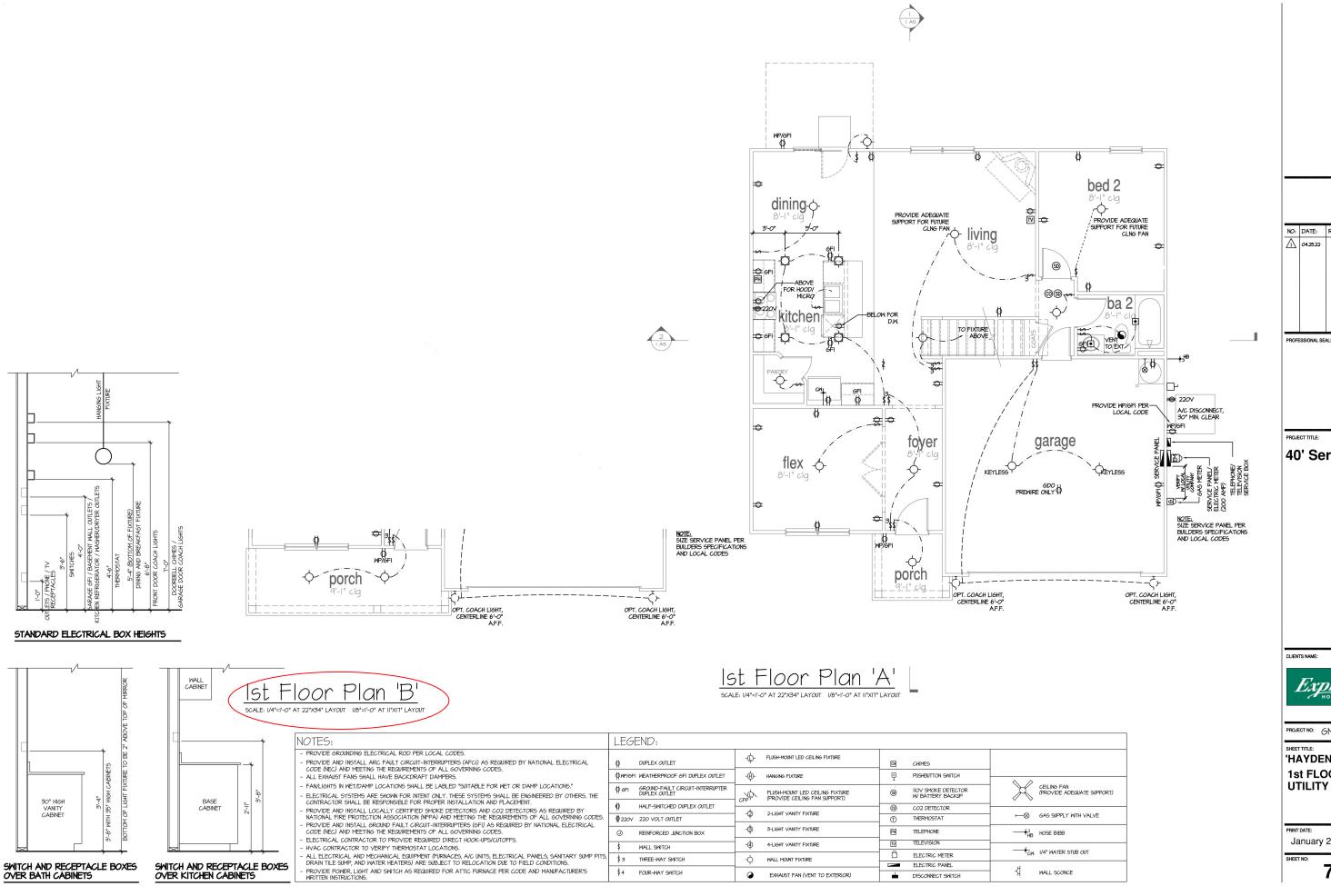


PROJECT NO: GMD17049

'HAYDEN' **BUILDING** SECTIONS

PRINT DATE: January 22, 2021

1.1.2A S



NO: DATE: REVISION: 04.25.22

PROJECT TITLE:

40' Series

FOR CONSTRUCTION

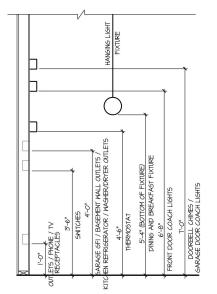
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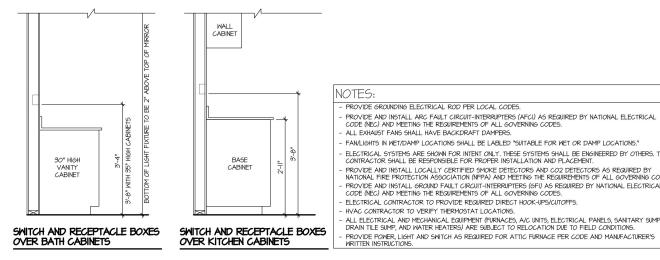
PROJECT NO: GMD17049

'HAYDEN' 1st FLOOR UTILITY PLAN

PRINT DATE: January 22, 2021



STANDARD ELECTRICAL BOX HEIGHTS



(SD) • VENT TO EXT (SI) VENT TO EXT PROVIDE ADEQUATE SUPPORT FOR FUTURE CLNG FAN PROVIDE 2ND GFI/LIGHT AT OPTIONAL BOWL /6FK\$ bed 3 - 8'-1" clg provide adequate support for future VENT TO EXT bed 1 **** IN ⊕ 8'-1" clg wic.

0

(SD)

upstairs living

8'-1" 19
PROVIDE ADEQUATE SUPPORT FOR FUTURE CLNG FAM

TO FIXTURE BELOW

bed 4

PROVIDE ADEQUATE SUPPORT FOR FUTURE CLNG FAN

PROVIDE 2ND 6FI/LIGHT AT 0PTIONAL BOWL

ba 3

2nd Floor Plan 'A' scale: 1/4*=1*-0* AT 22*x34* LAYOUT 1/8*=1*-0* AT 11*x17* LAYOUT

	LEGEND:			
L.	DUPLEX OUTLET	FLUSH-MOUNT LED CEILING FIXTURE	CHIMES	
	MP/GFI WEATHERPROOF GFI DUPLEX OUTLET	-(H)- HANGING FIXTURE	РИЗНВИТТОМ SMITCH	^ ^
5. THE	GFI GROUND-FAULT CIRCUIT-INTERRUPTE DUPLEX OUTLET	FLUSH-MOUNT LED CEILING FIXTURE (PROVIDE CEILING FAN SUPPORT)	(9) IIOV SMOKE DETECTOR W BATTERY BACKUP	CEILING FAN (PROVIDE ADEQUATE SUPPORT)
			⊚ CO2 DETECTOR	
CODES.	\$220V 220 VOLT OUTLET	-② 2-LIGHT VANITY FIXTURE	① THERMOSTAT	
CAL	REINFORCED JUNCTION BOX	- 3 3-LIGHT VANITY FIXTURE	PH TELEPHONE	HB HOSE BIBB
	\$ WALL SWITCH	- 4 4-LIGHT VANITY FIXTURE	TELEVISION TELEVISION	
MP PITS,	\$ 3 THREE-WAY SWITCH	- WALL MOUNT FIXTURE	ELECTRIC METER	CM I/4" WATER STUB OUT
s	\$4 FOUR-WAY SMITCH	EXHAUST FAN (VENT TO EXTERIOR)	ELECTRIC PANEL DISCONNECT SWITCH	WALL SCONCE

NO: DATE: REVISION: 04.25.22

PROFESSIONAL SEAL:

provide adequate

bed 5-years for future

class fan

la

0

(SD)

PROJECT TITLE:

40' Series

FOR CONSTRUCTION

CLIENTS NAME:



PROJECT NO: GMD17049

'HAYDEN' 2nd FLOOR UTILITY PLAN

PRINT DATE: January 22, 2021

Construction Type: Commerical ☐ Residential ☒

Applicable Building Codes:

• 2018 North Carolina Residential Building Code with All Local Amendments

ASCE 7-10: Minimum Design Loads for Buildings and Other Structures

Design Loads: 1. Roof Live Loads

	1.1.	Conventional 2x	20	PSF
	1.2.	Truss	20	P6F
		1.2.1. Attic Truss	60	PSI
2.	Roof	Dead Loads		
	2.1.	Conventional 2x	101	PSF
	2.2.	Truss	20	PSF
3.	Snow		15 F	PSF
	3.1.	Importance Factor	1.0	
4.	Floor	Live Loads		

30 PSF 40 PSF 5. Floor Dead Loads Conventional 2x 10 PSF

6.2. Importance Factor.

6.3. Wind Base Shear 6.3.l. Vx = 6.3.2.Vy =

Component and	Cladding	(in PSF)
MEAN ROOF		

MEAN ROOF HT.	UP TO 30'	3@'1"-35'	35'1"-40'	40'1"-45'
ZONE I	16.7,-18.0	17.6,-18.9	18.3,-19.7	18.8,-20.2
ZONE 2	16.7,-21.0	17.6,-22.1	18.3,-22.9	18.8,-23.6
ZONE 3	16.7,-21.0	17.6,-22.1	18.3,-22.9	18.8,-23.6
ZONE 4	18.2,-19.0	19.2,-20.0	19.9,-20.8	20.4,-21.3
ZONE 5	18.2,-24.0	19.2,-25.2	19.9,-26.2	20.4,-26.9

8. Seismic

	8.1.	Site Class	D	
	82.	Design Category	C	
	8.3.	Importance Factor	1.0	
	8.4.	Seismic Use Group	1	

8.5. Spectral Response Acceleration 8.5.1. Sms = %g 8.5.2. Sml = %g

86. Seismic Base Shea

8.62.Vu = 8.7. Basic Structural Sustem (check one)

Bearing Wall
Building Frame
Moment Frame

Dual w/ Special Moment Frame Dual w/ Intermediate R/C or Special Steel Inverted Pendulum

Wind 🖂 9. Assumed Soil Bearing Capacity 20000sf

No concrete shall be placed against any subgrade containing water, ice, frost, or loose materia

Structural steel shall receive one coat of shop applied

otherwise noted.

Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS DIL. Electrodes for shop and field welding shall be class ETØXX. All welding shall be performed by a certified welder per the above

otherwise noted on the plan.

Requirements for Reinforced Concrete" and ACI 301:

written permission of the SER.



HAYDEN RH

PROJECT ADDRESS

DR Horton, Inc. 8001 Arrowridge Blvd. Charlotte, NC 28273

DESIGNER: GMD Design Group 102 Fountain Brook Circle Suite C Cary, NC 27511

These drawings are to be coordinated with the architectural, mechanical, plumbing, electrical, and civil drawings. This coordination is not the responsibility of the structural engineering of record (SER). Should any discrepancies become apparent, the contractor shall notify SUMMIT Engineering, Laboratory 4 Testing, P.C. before construction begins.

PLAN ABBREVIATIONS

AB	ANCHOR BOLT	PT	PRESSURE TREATED
AFF	ABOVE FINISHED FLOOR	RS	ROOF SUPPORT
CJ	CEILING JOIST	9C	STUD COLUMN
CLR	CLEAR	SJ	SINGLE JOIST
DJ	DOUBLE JOIST	SPF	SPRUCE PINE FIR
DSP	DOUBLE STUD POCKET	SST	SIMPSON STRONG-TIE
EE	EACH END	SYP	SOUTHERN YELLOW PINE
ΕW	EACH WAY	TJ	TRIPLE JOIST
NTS	NOT TO SCALE	TSP	TRIPLE STUD POCKET
oc	ON CENTER	TYP	TYPICAL
P6F	POUNDS PER SQUARE FOOT	UNO	UNLESS NOTED OTHERWISE
P5I	POUNDS PER SQUARE INCH	WWF	WELDED WIRE FABRIC

Roof truss and floor joist layouts, and their corresponding loading details, were not provided to SUMMIT Engineering, Laboratory 4 Testing, P.C. (SUMMIT) prior to the initial design. Therefore, truss and joist directions were assumed based on the information provided by <u>DR Horton, Inc.</u> Subsequent plan revisions based on toof truss and floor joist layouts shall be noted in the revision list, indicating the date the layouts were provided. Should any discrepancies become apparent, the contractor shall notify SUMMIT immediately.

SHEET LIST:

Sheet No.	Description
CSI	Cover Sheet, Specifications, Revisions
51.Øm	Monolithic Slab Foundation
S1.Øs	Stem Wall Foundation
S1.0c	Crawl Space Foundation
S1.00b	Basement Foundation
52.0	Basement Framing Plan
S3.Ø	First Floor Framing Plan
54.0	Second Floor Framing Plan
55.Ø	Roof Framing Plan
S6.Ø	Basement Bracing Plan
ST.Ø	First Floor Bracing Plan
58.0	Second Floor Bracing Plan

REVISION LIST:

Revision No.	Date	Project No.	Description
1	4.19.21	TØITT	Updated elevation names
			Added Stem Wall, Crawlspace, and Basement Foundations
2	6.14.21	10111	Foundations Added OX-16 option and Updated OX-16 table framing
3	11.23.21	TØITT	Updated the engineering in the first floor framing

DR HORTON PROJECT SIGN-OFF:

Manager	Signature
Operations	
Operations System	
Operations Product Development	

Manager	Signature
Operations	
Operations System	
Operations Product Development	

DR Horton, Inc. 8001 Arrowridge Blvc Charlotte, NC 28213

SUMMIT



YER T 11/24/21 STRUCTURAL MEMBERS ONL

DATE: IV23/2002 9CALE: 22x34 1/4"+1"-@" lbd1 1/8"+1"-@" PROJECT 4 528-TØITT DRAWN BY: JCEF

CHECKED BY: CTB REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

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, and the periormance 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 4 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 o 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 i 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 local building codes.

All structural assemblies are to meet or exceed to requirements of the current local building code.

3.1. Footings: 5% 32.Exterior Slabs: 5% 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 rise portion of all rootings and 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% extending the control of the procession of the provider of the control of the provider of t

maximum dry density.

Excavations of footings shall be lined temporarily with a 6 mill polystylene membrane if placement of concrete does not occur within 24 hours of excavation.

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 the manual of Steel Construction "Load Resistance Factor Design"

rust-inhibitive paint. All steel shall have a minimum yield stress $\langle F_u \rangle$ of 36 ksi unless

<u>ICREIE:</u>

Concrete shall have a normal weight aggregate and a minimum compressive strength (f'_c) at 28 days of 3000 psi, unless

Concrete shall be proportioned, mixed, and placed in accordance with the latest editions of ACI 318: "Building Code

"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:

No admixtures shall be added to any structural concrete without

Concrete slabs-on-grade shall be constructed in accordance with ACI 302.IR-96: "Guide for Concrete Slab and Slab

The concrete slab-on-grade has been designed using a subgrade modulus of k=250 pcl 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 WWF, shall be securely supported during the concrete pour.

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

aue to strinkage and tremal expansionicontraction, lowered water migration, an increase in impact capacity, increased abrasion resistance, and residual strength.
Filoemesh reinforcing to be 100% virgin polygropylene 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 CIII6, any local building code
requirements, and shall meet or exceed the current industry

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 masonru 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.

O. 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 Southern-Yellow-Pine (SYP) #2.

LVL or PSL engineered wood shall have the following minimum design values: 2.1. E = 1,900,000 psi

22. Fb = 2600 psi 23. Fv = 285 psi 2.4.Fc = 700 psi Wood in contact with concrete, masonry, or earth shall be

pressure treated in accordance with AUPA standard C-I5. 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 B182.1-1381.

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 SYP *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.

Ning studs shall be continuous, individual studs forming a column shall be attached with one lod nail 6 6" OC. staggered. The stud column shall be continuous to the foundation or beam. The column shall be properly blocked at all floor levels to ensure proper load transfe Multi-ply beams shall have each ply attached with (3) 10d nails @

Four and five ply beams shall be bolted together with (2) rows of 12^n diameter through bolts staggered e [6" OC. 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 folloads shown on these drawings including but not limited to HVAC equipment, piping, and architectural fixtures attached to

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. Anu 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.

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.

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

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 fraining. 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 ringshark 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 T4G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by th

Sheathing shall have a 1/8" gap at panel ends and edges as

STRUCTURAL FIBERBOARD PANELS:

Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards. All structurally required fiberboard sheathing shall bear the

mark or the AFA.

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 interesting the properties.

Sheathing shall have a 1/8" gap at panel ends and edges are

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 NCRC.

CRAWL SPACE FOUNDATION PLAN
SCALE: 1/4*1"-0" ON 22"334" OR 109"1"-0" ON 11"11"

ELEVATION B.F.K





DR Horton, Inc. 8001 Arrowridge Blvd. Charlotte, NC 28213

Hayden RH

Crawl Space Foundation



> 22869 5/5/9 REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

> > S1.1c

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 NORTH CAROLINA RESIDENTIAL CODE WITH ALL LOCAL AND STATE AMENDMENTS. WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND MAXIMUM WIND SPEEDS UP TO
- REFER TO ARCHITECTURAL PLAN FOR DOOR/IJINDOULOPENING SIZES
- BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN ACCORDANCE WITH TABLE R602.10.1
- TADLE ROUSIDI ALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED Ø 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.
- THINITURI PANEL LENGTH SHALL DE PER TADLE ROUZION.

 THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS

 SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM (2° GYPSUM BOARD (UNO).

 FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON
- FOR COMMISSION OFFICIALS (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.

 10. 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.
- 12. MASONRY OR CONCRETE STEM WALLS W/ A LENGTH OF 48" OR LESS SUPPORTING A 12. MASONRY OR CONCRETE SIEM WALLS WE'A LENGTH OF 48° OR LESS SUPPORTING A
 BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE
 R6021043 OF THE 2018 NCRC.

 13. BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN
 ACCORDANCE WITH SECTION R6021044

 14. BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN
 ACCORDANCE WITH SECTION R6021045

 ACCORDANCE WITH SECTION R6021045

- 15. CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R6021046
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO)

GB = GYPSUM BOARD

WSP = WOOD STRUCTURAL PANEL GB = GYP5UM BOARD
C3-XXX = CONT. SHEATHED
FF = PORTAL FRAME
FF-ENG = ENG. PORTAL FRAME

GENERAL STRUCTURAL NOTES:

- CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL
- BUILDING CODE WITH ALL LOCAL AND STATE 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
- 3 CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING
- REQUIRED TO RESIST ALL FORCES ENCOUNTERED DURING ERECTION PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS: PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS:
 MICROLLAM (LVL), F_B = 1600 PSI, F₁ = 285 PSI, E = 1.9x10⁶ PSI
 PARALLAM (PSI), F₁ = 2900 PSI, F₂ = 290 PSI, E = 125x10⁶ PSI
 ALL WOOD MEMBERS SHALL BE '2 SYP UNLESS NOTED ON PLAN, ALL
 STUD COLUMNS AND JOISTS SHALL BE '2 SYP (WNO).
 ALL BEAM'S SHALL BE SUPPORTED WITH A (2) 2x4 '2 SYP STUD COLUMN
 AT EACH END UNLESS NOTED OTHERWISE.
 ALL REINFORCING STEEL SHALL BE GRADE 60 BAR'S CONFORMING TO
 ASTM AGE AND SAULK LUGGE A MINIMARY COURSE DE 31"

- ASTM AGIS AND SHALL HAVE A MINIMUM COVER OF 3".

 8. CONTRACTOR TO PROVIDED LOOKOUTS WHEN CEILING JOISTS SPAN
- PERPENDICULAR TO RAFTERS.
- FERT-ENDIQUAR TO PATIEND.

 FLITCH BEANS, 4-PLY LVLS AND 3-PLY SIDE LOADED LVLS SHALL BE BOLTED TOGETHER WITH I/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL I/D3f. MIN. EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM.

 10. ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP 12,
- 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 6YP 12, DROPPED. (UNLESS NOTED OTHERWISE)

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON
COMPLETED/REVISED ON 4/15/21. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING LABORATORY 4 TESTING PC. 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.

STRUCTURAL MEMBERS ONLY

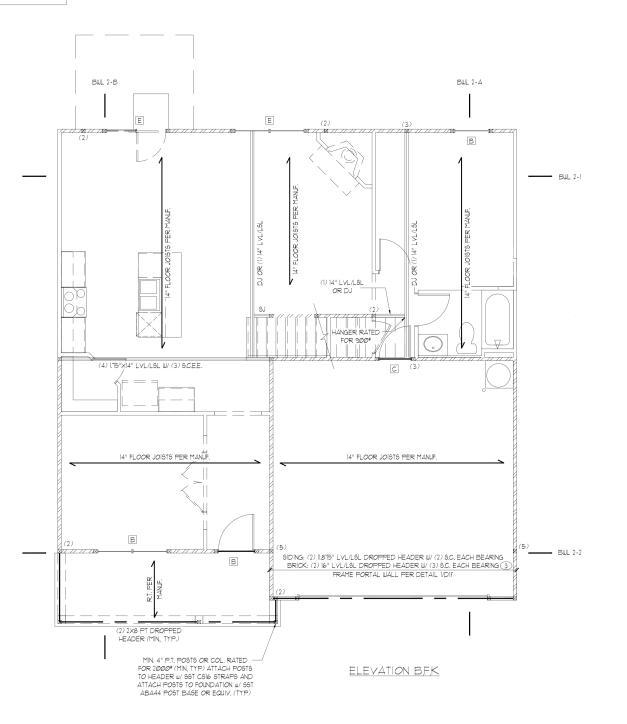
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS.

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 NCRC.

FIRST FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"



FIRST FLOOR BRACING (FT)						
CONTINUOUS SHEATHING METHOD						
	REQUIRED PROVIDED					
BWL 1-1	11.6	24.8				
BWL 1-2	11.6	15.0				
BWL 1-A	11.3	40.0				
BWL 1-B	11.3	36.0				

HE.	HEADER SCHEDULE					
TAG	SIZE	JACKS (EACH END				
Д	(2) 2x6	(1)				
В	(2) 2x8	(2)				
С	(2) 2xlØ	(2)				
D	(2) 2x12	(2)				
E	(2) 9-1/4" LSL/LVL	(3)				
F	(3) 2x6	(1)				
G	(3) 2x8	(2)				
Н	(3) 2xlØ	(2)				
	(3) 2xl2	(2)				

HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.

2. ALL HEADERS TO BE DROPPED (UN.O.). 3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD COLUMNS LISTED ABOVE (UN.O.)

KING STUD	SCHEDULE
MAXIMUM HEADER SPAN	MINIMUM KING STUDS E.E.
4'-Ø"	(1)
6'-0"	(2)
8'-0"	(2)
10'-0"	(3)
12'-Ø"	(3)
14'-∅"	(3)
16'-Ø"	(4)
18'-∅"	(4)

WALL 9	STUD SCI	HEDULE	(10 FT H	EIGHT)	
STUD SIZE		STUD SPACING (O.C.)			
	ROOF ONLY	ROOF & I FLOOR	ROOF & 2 FLOORS	NON-LOAD BEARING	
2×4	24"	16"	12"	24"	
2x6	24"	24"	16"	24"	
NOTES					

NOTES: 1. BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C. 2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX OF 16" OC

3, TWO STORY WALLS SHALL BE FRAMED W/ 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED W/ HORIZ. BLOCKING @ 6'-0" O.C. VERTICALLY.

	LINTEL SCHEDULE			
TAG	TAG SIZE			
0	L3x3x1/4"	LESS THAN 6'-0"		
2	L5x3x1/4"	6'-0" TO 10'-0"		
3	L5x3-1/2x5/16"	GREATER THAN 10'-0		
4	L5x3-1/2x5/16" ROLLED OR EQUIV.	ALL ARCHED OPENINGS		
SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG				

SCREWS STAGGERED @ 16" O.C. (TYP FOR ALL HEADERS WHERE BRICK IS USED, TO BE: (UNO)

SHADED WALLS INDICATED LOAD BEARING WALLS

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

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

DESIGNATES JOIST SUPPORTED LOAD BEARING WALL ABOVE. PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

NOTE: MEMBERS NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDE! THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.

INSTALL HOLD-DOWNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.8 & FIG. R602.10.7 OF THE 2018 NCRC.

NOTE: WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE CONTINUOUS WIND UPLIET LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.3.5 OF THE 2018 NCRC

SUMMIT



DR Horton, Inc. 8001 Arrowridge E Charlotte, NC 2821

Ω Ø Ĭ.



DATE: 11/23/20/2 PROJECT 4 528-TØITT CHECKED BY: CTB

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

S3.1

REQUIRED BRACED WALL PANEL CONNECTIONS					
METHOD MATERIAL MIN. THICKNESS REQUIRED CONNECTION					
MATERIAL	MIN. THICKNESS	@ PANEL EDGES	@ INTERMEDIATE SUPPORTS		
OD STRUCTURAL PANEL	3/8"	6d COMMON NAILS	6d COMMON NAILS 8 12" O.C.		
YPSUM BOARD	1/2"	5d COOLER NAILS** ⊕ 1° O.C.	5d COOLER NAILS** @ 7" O.C.		
OD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS # 12" O.C.		
OD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.6.4	PER FIGURE R602.10.6.4		
	MATERIAL OD STRUCTURAL PANEL YPSUM BOARD OD STRUCTURAL PANEL OD STRUCTURAL OD STRUCTURAL	MATERIAL MIN. THICKNESS DD STRUCTURAL 3/8" PANEL 1/2" DD STRUCTURAL 3/8" PANEL 2/8" DD STRUCTURAL 1/6"	MATERIAL MIN. THICKNESS REQUIRED (0D STRUCTURAL 3/8" 6d COMMON NAILS PANEL 3/8" 6d COMMON NAILS PSUM BOARD 1/2" 5d COOLER NAILS" 0D STRUCTURAL 3/8" 6d COMMON NAILS PANEL 3/8" 6" OC. 2D STRUCTURAL 1/6" DES FIGUET PARAL 1/6"		

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018
- NORTH CAROLINA RESIDENTIAL CODE WITH ALL LOCAL AND STATE AMENDMENTS, WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND MAXIMUM WIND SPEEDS UP TO
- REFER TO ARCHITECTURAL PLAN FOR DOOR/JUNDOULOPENING SIZES
- BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN ACCORDANCE WITH TABLE R602.0.1
- 5. 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 IO.L
- THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM (2" GYPSUM BOARD (UNO). FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES NCLUDING INFILL AREAS BETWEEN BRACED WALL
 PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.

 9. FLOORS SHALL NOT BE CANTILEVERED MORE THAN 24" BEYOND THE FOUNDATION
- OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.

 10. 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.
- 12. MASONRY OR CONCRETE STEM WALLS W/ A LENGTH OF 48" OR LESS SUPPORTING A 12. MASONRY OR CONCRETE STEM WALLS WE'A LENGTH OF 48° OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602:10.43 OF THE 2018 NCRC.

 13. BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602:10.4.4

 14. BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602:10.4.5

 COORDANCE WITH SECTION R602:10.4.5

- 15. CRIPPLE WALLS AND WALK OUT BASETHENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.104.6
- 16. PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO)
- 11 ABBREVIATIONS:

GB = GYPSUM BOARD

WSP = WOOD STRUCTURAL PANEL GB = GYP5UM BOARD

C5-XXX = CONT. SHEATHED

FF = PORTAL FRAME

WOT = WOUD VIRULIANS, I TO SEE THE SHOOL OF TH

GENERAL STRUCTURAL NOTES:

- CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL
- BUILDING CODE WITH ALL LOCAL AND STATE 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
- 3 CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING
- REQUIRED TO RESIST ALL FORCES ENCOUNTERED DURING ERECTION. PROPERTIES USED IN THE DESIGN ARE AS FOLLOUS: PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS:

 MICROLLAM (LVL): F_B = 12000 PSI, Fv = 228 PSI, E = 12510° PSI

 PARALLAM (SPL): F_B = 23000 PSI, Fv = 1200 PSI, E = 12510° PSI

 ALL WOOD MEMBERS SHALL BE 12 SYP UNLESS NOTED ON PLAN, ALL
 STUD COLUMNS AND JOISTS SHALL BE 12 SYP (UND).

 ALL BEAM'S SHALL BE SUPPORTED WITH A (2) 2x4 12 SYP STUD COLUMN

 AT EACH END UNLESS NOTED OTHERWISE.

 ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO
 ASTM AGIS AND SHALL BLAYE A MINIMAR COVER DE 3"

- ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3".

 8. CONTRACTOR TO PROVIDED LOCKOUTS WHEN CEILING JOISTS SPAN
- PERPENDICULAR TO RAFTERS. PERPENDICULAR 10 KAPIERS.

 9. FLITCH BEAMS, 4-PLY LYLS AND 3-PLY SIDE LOADED LYLS SHALL BE BOLTED TOSETHER WITH 1/2" DIA, THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL 1/D3f.
- MIN EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM.

 10. ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP 12,
- 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 6YP 12, DROPPED. (UNLESS NOTED OTHERWISE)

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON
COMPLETED/REVISED ON 4/15/21. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY 4 TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY 4 TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

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 NCRC.

SECOND FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"



BWL 2-B		BWL 2-A	
A *	D	' A	
	ROOF PROSESS FREE WANT.		BWL 2-1
	GIRDER TRUSS F	PER MANUF, W/ (5) S.C.E.E.	
	ROOF TRI	ISSES PER MANUF.	
I	A	B	

ELEVATION B.F.K.

HE,	ADER SCHEDI	JLE
TAG	SIZE	JACKS (EACH EN
Д	(2) 2x6	(1)
В	(2) 2x8	(2)
С	(2) 2x1Ø	(2)
D	(2) 2x12	(2)
E	(2) 9-1/4" LSL/LVL	(3)
F	(3) 2x6	(1)
G	(3) 2x8	(2)
Н	(3) 2xlØ	(2)
	(3) 2xl2	(2)

I. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS, GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION. 2. ALL HEADERS TO BE DROPPED (UN.O.). 3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD

COLUMNS LISTED ABOVE (UN.O.).

KING STUD	SCHEDULE
MAXIMUM HEADER SPAN	MINIMUM KING STUDS E.E.
4'-Ø"	(D)
6'-0"	(2)
8'-Ø"	(2)
10'-0"	(3)
12'-Ø"	(3)

WALL 9	STUD SC	HEDULE	(10 FT H	EIGHT.
STUD SIZE		STUD SPA	CING (0.C.)	
	ROOF ONLY	ROOF \$ 1 FLOOR	ROOF & 2 FLOORS	NON-LOA BEARING
2×4	24"	16"	12"	24"
2x6	24"	24"	16"	24"

L BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C. 2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX OF 16" OC

3. TWO STORY WALLS SHALL BE FRAMED W/ 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED W/ HORIZ. BLOCKING @ 6'-0" O.C. VERTICALLY.

	LINTEL SCHEDULE			
TAG	SIZE	OPENING SIZE		
①	L3x3x1/4"	LESS THAN 6'-0"		
2	L5x3x1/4"	6'-0" TO 10'-0"		
3	L5x3-1/2x5/16"	GREATER THAN 10'-0		
4	L5x3-1/2x5/16" ROLLED OR EQUIV.	ALL ARCHED OPENINGS		
SECURE LINITE	TO HE ADED/ /211/2"	DIAMETER LAG		

SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR 3) ALL HEADERS WHERE BRICK IS USED, TO BE:

SHADED IIIALLS INDICATED LOAD BEARING IIIALLS

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

NOTE: MEMBERS NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDE THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.

INSTALL HOLD-DOWNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.8 & FIG. R602.10.7 OF THE 2018 NCRC.

NOTE: WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE CONTINUOUS WIND UPLET LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R60235 OF THE 2018 NCRC.



SUMMIT



DR Horton, Inc. 8001 Arrowridge E Charlotte, NC 2821;

Qi Floor σ Hayden RH Secon



DATE: 11/23/20/2 8CALE: 22x34 |/4"+|'-0" |kr| |/8"+|'-0" PROJECT 9 528-TØTT DRAWN BY: JCEF CHECKED BY: CTB

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

S4.1

TRUSS UPLIFT CONNECTOR SCHEDULE					
MAX, UPLIFT	ROOF TO WALL	FLOOR TO FLOOR	FLOOR TO FND		
600 LBS	H2.5A	PER WALL SHEATHIN	G & FASTENERS		
1200 LBS	(2) H2.5A	CSI6 (END = II")	DTT2Z		
1450 LBS	HT52Ø	CSI6 (END = II")	DTT2Z		
2000 LBS	(2) MTS2Ø	(2) CSI6 (END = II")	DTT2Z		
2900 LBS	(2) HTS2Ø	(2) CSI6 (END = II")	HTT4		
3685 LBS	LGT3-5D52.5	MSTC52	HTT4		

JOBB LBS LEGIS-505/5 MSICS2

1. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.

2. UPLIFT VALUES LISTED ARE FOR STP TO GRADE MEMBERS.

3. REFER TO TRUISS LATOUT PER MANUF, FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTOR'S SPECIFIED BY TRUSS MANUFACTURER OVERRIDE THOSE LISTED ABOVE.

4. CONTACT SUMMIT FOR REQUIRED CONNECTOR'S UHEN LOADS EXCEED THOSE LISTED ABOVE.

NOTE: 19T PLY OF ALL SHOWN GIRDER TRUSSES TO ALIGN WITH INSIDE FACE OF WALL (TYP, WNO)

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

REFER TO DETAIL 5/D3F FOR EYEBROW, RETURN OR SHED ROOF FRAMING REQUIREMENTS, (TYP FOR ROOFS PROTRUDING MAXIMUM 24" FROM STRUCTURE)

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

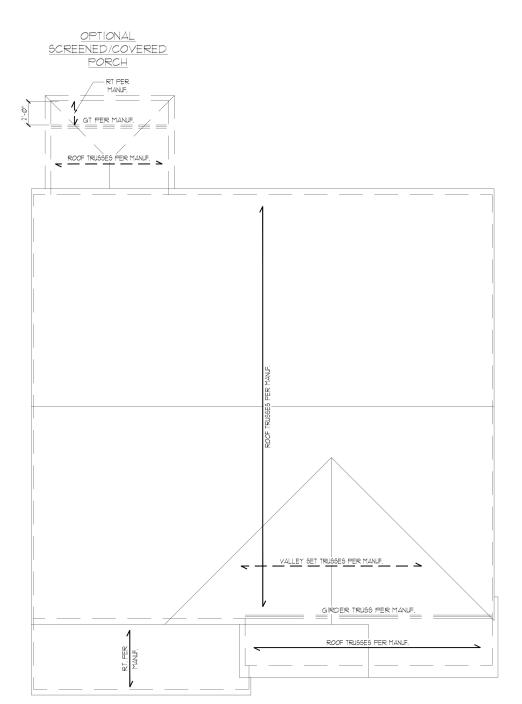
THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL, PLANS PROVIDED BY DR. HORTON COMPLETED/REVISED ON A/B/2/. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C., IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

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 NCRC.

ROOF FRAMING PLAN SCALE: 1/4"=1'-@" ON 22"x34" OR 1/8"=1'-@" ON 11"x17"









Framing



DATE: 1/23/2021 8CALE: 22x34 1/4"=1"-@" lkd1 1/8"=1"-@" PROJECT 9 528-TØITT DRAWN BY: JOEF CHECKED BY: CTB

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

S5.1

DESIGN SPECIFICATIONS:

Construction Tube: Commercial ☐ Residential ☑

Applicable Building Codes:

• 2018 North Carolina Residential Building Code with All Local Amendments

• ASCE 7-10: Minimum Design Loads for Buildings and Other Structures

ıgrı L	Caus:			
٦.	Roof	Live Loads		
	1.1.	Conventional 2x	20	PS
	1.2.	Trus s	20	P9
		12.1. Attic Truss	60	P
2.	Roof	Dead Loads		
	2.1.	Conventional 2x	Ø F	-51
	2.2.	Trus s	20	P9
3.	Snow		15 F	SF
	3.1.	Importance Factor	lØ	
4.		Live Loads		
	4.1.	Typ. Dwelling	40	PS
		Sleeping Areas		
		De c ks		
		Passenger Garage		

5. Floor Dead Loads 5.1. Conventional 2x 52. I-Joist 5.3. Floor Truss

6. Ultimate Wind Speed (3 sec. gust)

6.I. Exposure ... 6.2. Importance Factor... 6.3. Wind Base Shear 63.l. Vx =

632.Vy = 7. Component and Cladding (in PSF)

MEAN ROOF HT.	UP TO 30'	3 Ø'1"-35'	35'1"-40'	40'1"-45'
ZONE 1	16.7,-18.0	17.5,-18.9	18.2,-19.6	18.7,-20.2
ZONE 2	16.7,-21.0	17.5,-22.1	18.2,-22.9	18.7,-23.5
ZONE 3	16.7,-21.0	17.5,-22.1	18.2,-22.9	18.7,-23.5
ZONE 4	18.2,-19.0	19,2,-20.0	19.9,-2 Ø .7	20.4,-21.3
ZONE 5	18.2,-24.0	19.2,-25.2	19.9,-26.1	20.4,-26.9

8 Seismic

00101111	C	
8.1.	Site Class	D
	Design Category	С
8.3.	Importance Factor	IØ
8.4.	Seismic Use Group	1
8.5.	Spectral Response Acceleration	

85.1. Sms = %g 85.2. Sml = %g 86. Seismic Base Shear 861.Vx =

8.7. Basic Structural System (check one) ⊠ Bearing Wall

□ Building Frame

□ Moment Frame

□ Dual w/ Special Moment Frame □ Dual w/ Intermediate R/C or Special Steel
□ Inverted Pendulum

8.8. Arch/Mech Components Anchored ... 8.9. Lateral Design Control: Seismic

9. Assumed Soil Bearing Capacity Wind ⊠



STRUCTURAL PLANS PREPARED FOR

STANDARD DETAILS

PROJECT ADDRESS:

OWNER:

DR Horton Carolinas Division 8001 Arrowridge Blvd Charlotte, NC 28273

ARCHITECT/DESIGNER

GMD Design Group 1845 Satellite Blvd

These drawings are to be coordinated with the architectural, mechanical, plumbing, electrical, and civil drawings. This coordination is not the responsibility of the structural engineering of record (SER). Should any discrepancies become apparent, the contractor shall notify SUMMIT Engineering, Laboratory & Testing, P.C. before construction begins.

PLAN ABBREVIATIONS:

AB	ANCHOR BOLT	PT	PRESSURE TREATED
AFF	ABOVE FINISHED FLOOR	RS	ROOF SUPPORT
CJ	CEILING JOIST	5C	STUD COLUMN
CLR	CLEAR	SJ	SINGLE JOIST
DJ	DOUBLE JOIST	SPF	SPRUCE PINE FIR
DSP	DOUBLE STUD POCKET	SST	SIMPSON STRONG-TIE
噩	EACH END	SYP	SOUTHERN YELLOW PINE
ΕW	EACH WAY	ŤJ	TRIPLE JOIST
NT5	NOT TO SCALE	TSP	TRIPLE STUD POCKET
oc	ON CENTER	TYP	TYPICAL
P\$F	POUNDS PER SQUARE FOOT	UNO	UNLESS NOTED OTHERWISE
P 6I	POUNDS PER SQUARE INCH	WWF	WELDED WIRE FABRIC

Roof truss and floor Joist layouts, and their corresponding loading details, were not provided to SUMMIT Engineering, Laboratory & Testing, P.C. (SUMMIT) prior to the initial design. Therefore, truss and Joist directions were assumed based on the information provided by <u>DR Horton. Inc.</u> Subsequent plan revisions based on roof truss and floor joist layouts shall be noted in the revision list, indicating the date the layouts were provided. Should any discrepancies become apparent, the contractor shall notify **SU**MMIT immediately.

SHEET LIST:

REVISION LIST

Date

EIIII

7,12,17

3 2.15.18

4 2.28.18

5 12.19.18

6 2.19.19

8 3.6.19

9 3220

10 3.18.20 102020

13 5.18.21

14 @2.14.23

3.121

Revision

No.

Project No.

Sheet No.	Description			
CSI	Cover Sheet, Specifications, Revisions			
Dlm	Monolithic Slab Foundation Details			
Dls	Stem Wall Foundation Details			
Dlc	Crawl Space Foundation Details			
Dlb	Basement Foundation Details			
DIf	Framing Details			

Added box bay detail (2/D2f). Added deck

stem wall and crawl space foundations

Revised garage door detail, NC only

Revised per Mecklenburg County Comments Revised stem wall deck attachment and i

Corrected dimensions at perimeter footings

Added alternate two-pour detail for slab and

added note for crawl girder above grade

Added 4/D2m - Tall Slab Detail w/ Siding

Added high-wind foundation details

Revised stem wall insulation note

Revised per 2018 NCRC

sheathing on wall sections.

Added tall turndown detail

Added OX-19 Standard Details

Updated OX-IS Standard Details

options with basement. Revised deck options with

DR HORTON PROJECT SIGN-OFF: Operations Operations Sustem Operations Product Development

SUMMIT



PROJECT: Standard I COVE



DATE: Ø2/14/2023 9CALE: 22x34 1/4"+1"-6" lbt/T 1/8"+1"-6" PROJECT 5 528-06R DRAWN BY: JOEF CHECKED BY: BCP

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

CSI

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 of couments without written permission of SUMMIT Engineering, Laboratory & Testing, P.C. (SUMMIT) or the SER. For th 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.
- 3. 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,
- the stop crasmings for diminishings of the accurations, 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.
- applicable sections of the international residential code.

 This structure and all construction shall conform to all applicable sections of local building codes.

 All structural assemblies are to meet or exceed to requirements of the current local building code.

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.

- STRUCTURAL STEEL:

 1. 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 the manual of Steel Construction "Load Resistance Factor Design latest editions.
- Structural steel shall receive one coat of shop applied
- rust-inhibitive paint.

 3. All steel shall have a minimum yield stress (F_m) of 36 kg unless
- otherwise noted.

 Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AUS DII. Electrodes for shop and field welding shall be class ETOXX. All welding shall be performed by a certified welder per the above

- NUMBELIE:
 Concrete shall have a normal weight aggregate and a minimum compressive strength (Fe) 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:
- 3.1. Footings: 5% 3.2. Exterior Slabs: 5%
- 4. No admixtures shall be added to any structural concrete without written permission of the SER.

- Concrete slabs-on-grade shall be constructed in accordance 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-arade 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
- process within 4 to 12 hours after the slab has been inlined.

 Reinforcing steel may not extend through a beau cut joint.

 Reinforcing steel may extend through a sau cut joint.

 10. All welded wire fabric (www.) for concrete slabs-on-grade shall be placed at mid-depth of slab. The WWF, shall be securely supported during the concrete pour.

- CONCRETE REINFORCEMENT:

 1. Fibrous congrete 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 01% by volume (15 pounds per cubic yard) fibermesh shall comply with ASTM CIII6, any local building code requirements, and shall meet or exceed the current industry
- standard.
 Steel reinforcing bars shall be new billet steel conforming to
- office reinforcing bars shall be new brillet steet combining to ASTM Abig 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 30" 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.

 10. 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-Yellow-Pine (SYP) 2.

 LVL or PSL engineered wood shall have the following minimum ign values: 2.1. E = 1,900,000 psi

 - 2.2.F_b = 26000 psi 2.3.F_v = 285 psi 2.4.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.
- with a varication of the Nails shall be common wire nails unless otherwise noted.

 Lag screws shall conform to ANSI/ASME standard B182.1-1981.

 Lead holes for lag screws shall be in accordance with NDS consolidation.
- specifications. All beams shall have full bearing on supporting framing members
- unless otherwise noted.

 Exterior and load bearing stud walls are to be 2x4 SYP 12 = 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. 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 lød nall e 6" O.C. staggered. The stud column shall be continuous to the foundation or beam. The column shall be properly 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.
- 10. Flitch beams, 4-ply beams and 3-ply side loaded beams shall be bolted together with (2) rous of 1/2" diameter through bolts staggered \$ 16" O.C. unless noted otherwise. Min. edge distance shall be 2" and (2) bolts shall be located a min. 6" from each

WOOD TRUSSES:

- 200 TRUSCES.

 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, shall be designed for all required loadings as a neptifical in the local building roots the ASES Standard.
- Ins wood trusses shall be designed for all required loadings as specified in the local building code, the AGCE Standard "Minimum Design Loads for Buildings and Other Structures."

 (ASCE 1-05), 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
- HYVE equipment, ppng, and an area to the trusses shall be designed, fabricated, and erected in accordance with the latest edition of the "National Design Specification for Ilbod Construction." (NDS) and "Design Specification for Metal Plate Connected Ilbod Trusses."
- 4. 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.

 5. Any chords or truss webs shown on these drawings have been shown as a reference only. The final design of the trusses shall

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.

WOOD STRUCTURAL PANELS:

I. 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

All structurally required wood sheathing shall bear the mark of

- 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 I 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
- 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 to its supporting framing with (1)-bd CC ringshank nail at 6"0/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 edges support to use of TKG bluwcoof or lumber tolocking unless support by use of T4G plywood or lumber blocking unless otherwise note. Panel and 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:

 I. Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards All structurally required fiberboard sheathing shall bear the mark of the AFA.
- 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
- Sheathing shall have a 1/8" gap at panel ends and edges are



CLIENT: DR Horton Carolina Divis 8001 Arrowridge Blvd. **Charlotte, NC 282**13

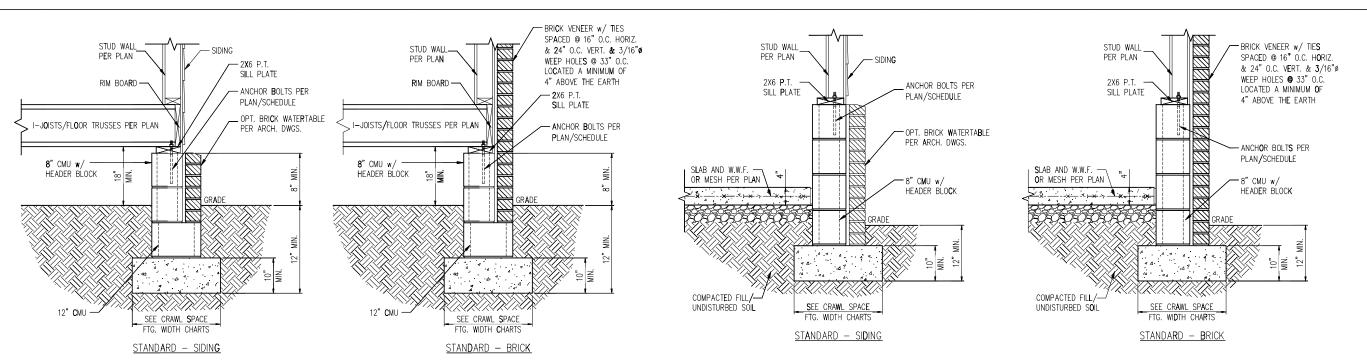
Details Foundation Space 1 PROJECT: Standard D Crawl



RAUNG DATE: Ø2/14/2023 9CALE: 22x34 V4"+1'-6" lbtT V8"+1'-6" PROJECT 4 528-66R DRAWN BY: JOEF CHECKED BY: BCP

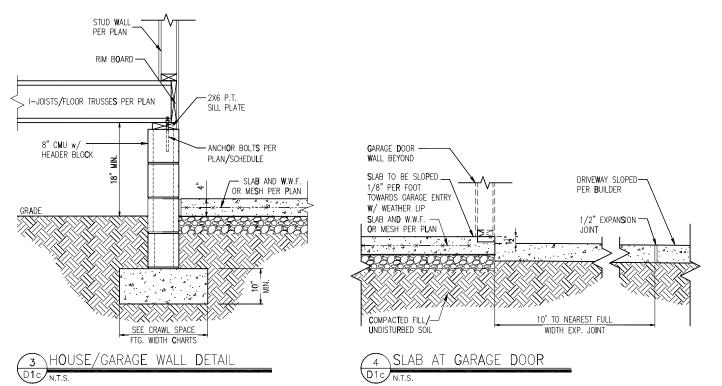
REFER TO GOVER SHEET FOR A COMPLETE LIST OF REVISIONS

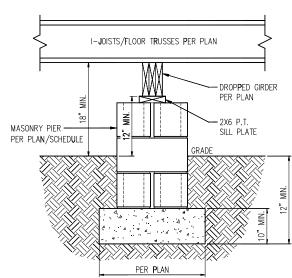
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TYP. FOUNDATION WALL DETAIL

TYP. GARAGE CURB DETAIL





TYP. PIER & GI**R**DER DETAIL

PIER SIZE AND HEIGHT SCHEDULE

	HOLLOW	SOLID		
	UP TO 32" HEIGHT	UP TO 5'-0" HEIGHT		
1 2 "X16"	UP TO 48" HEIGHT	UP TO 9'-0" HEIGHT		
1 6 "X16"	UP TO 64" HEIGHT	UP TO 12'-0" HEIGHT*		
24"X24"	UP TO 96" HEIGHT	UP TO 12'-0" HEIGHT*		
*(4) #4 CONT. REBAR w/ #3 STIRRUPS @ 16" O.C.				
AND 24"	MIN. LAP JOINTS			

CRAWL SPACE FOOTING WIDTH

# OF STO R IES	WIDTH BASED	ON S O IL BEARIN	NG CAPACITY
	150 0 PSF	2000 PSF	2500 PSF
1 STORY - STD.	16"	16"	16"
1 STORY - BRICK VENEER	21"*	21"*	21"*
2 STORY - STD.	16"	16"	16"
2 STORY - BRICK VENEER	21"*	21"*	21"*
3 STORY - STD.	23"	18"	18"
3 STORY - BRICK VENEER	32"*	24"*	24"*
*5" BRICK LEDGE HAS BEEN	ADDED TO THE	CRAWL SPACE	
FOOTING WIDTH FOR BRICK	SLIPPORT		

WALL ANCHOR SCHEDULE

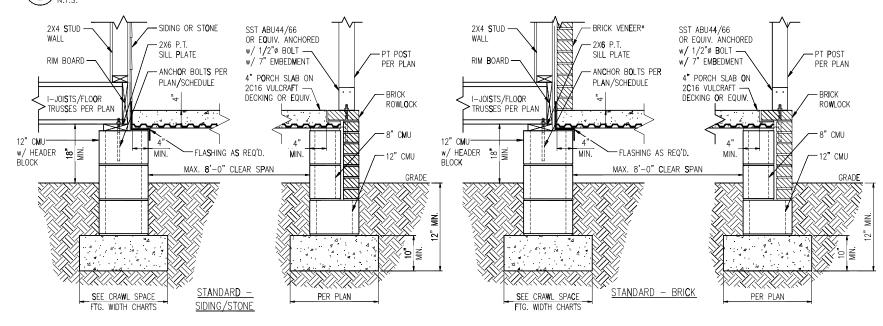
MIN. CONC.	SPACING	INTERI O R	EXTERIOR
EMBED M ENT	EMBEDMENT	WALL	WALL
7"	6'-0"	YES	YES
4"	5'-0"	NO	YES
2-1/4"	6'-0"	YES	NO
7"	6'-0"	YES	YES
	EMBEDMENT 7"	7" 6'-0" 4" 5'-0" 2-1/4" 6'-0"	EMBEDMENT EMBEDMENT WALL 7" 6'-0" YES 4" 5'-0" NO 2-1/4" 6'-0" YES

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

- NOTES:

 1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
- PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
 SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
- 4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
- 5. REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
- 6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRC





10 FRONT PORCH DETAIL W/ SUSPENDED SLAB

DECK ATTACHMENT SCHEDULE (ALL STRUCTURES EXCEPT BRICK)

FAST E NERS	MAX. 8'-0" JOIST	MAX. 16'-0" JOIST
	SPAN	SPAN
5/8" GALV. BOLTS w/ NUT & WASHER	(1) @ 3'-6" O.C.	(1) @ 1'-8" O.C.
AND	AND	AND
12d COMMON GALV. NAILS C	(2) @ 8" O.C.	(3) @ 6° O.C.

- a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOIST SPANS IS ALLOWED.
- b. MINIMUM EDGE DISTANCE FOR BOLTS IS $2\frac{1}{2}$ ".
- c. NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF 11/2"

DECK ATTACHMENT SCHEDULE (BRICK STRUCTURES)

F	AST E NERS		MAX. 8'-0" JOIS	ST MAX. 16'-0" JOIST
			SPA N	SPAN
5,	/8" GALV. B OLTS w/ N	UT & WASHER ^b	(1) @ 2'-4" 0.0	C. (1) @ 1'-4" O.C.

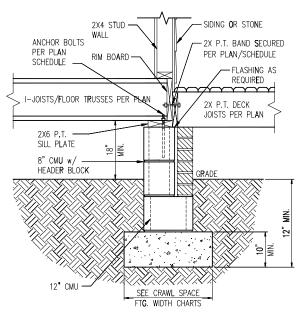
- a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOIST SPANS IS ALLOWED.
- b. MINIMUM EDGE DISTANCE FOR BOLTS IS $2\frac{1}{2}$ ".

CRAWL SPACE FOOTING WIDTH

FOOTING WIDTH FOR BRICK SUPPORT

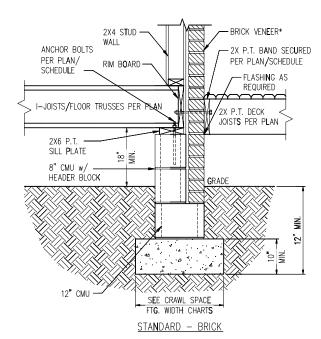
# OF STORIES	WIDTH BASED	ON SOI L BEARIN	ig capa c ity
	1500 PSF	2000 P SF	2500 P \$ F
1 STORY - STD.	16"	16"	16"
1 Story – Brick V eneer	21"*	21"*	21"*
2 STORY - STD.	16"	16"	16"
2 Story – Brick V eneer	21"*	21"*	21"*
3 STORY - STD.	23"	18"	18"
3 STORY - BRICK VENEER	32"*	24"*	24"*
*5" BRICK LEDGE HAS BEEN A	ADDED TO THE	CRAWL SPACE	

*BRICK TIES SPACED @ 16" Q.C. HORIZ. & 24" O.C. VERT. AND 3/16" WEEP HOLES @ 33" O.C. LOCATED A MINIMUM OF 4" ABOVE THE EARTH



STANDARD - SIDING/STONE

\DECK ATTACHMENT DETAIL



DECK ATTACHMENT DETAIL W/ BRICK

- NOTES:

 1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
- PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE. . SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
- 4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
- 5. REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
- 6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRC





CLIENT: DR Horton Carolina DIVI 8001 Arrowrldge BIVd. **Charlotte, NC 282**73

Details Foundation Space 1 PROJECT: Standard Di Crawl

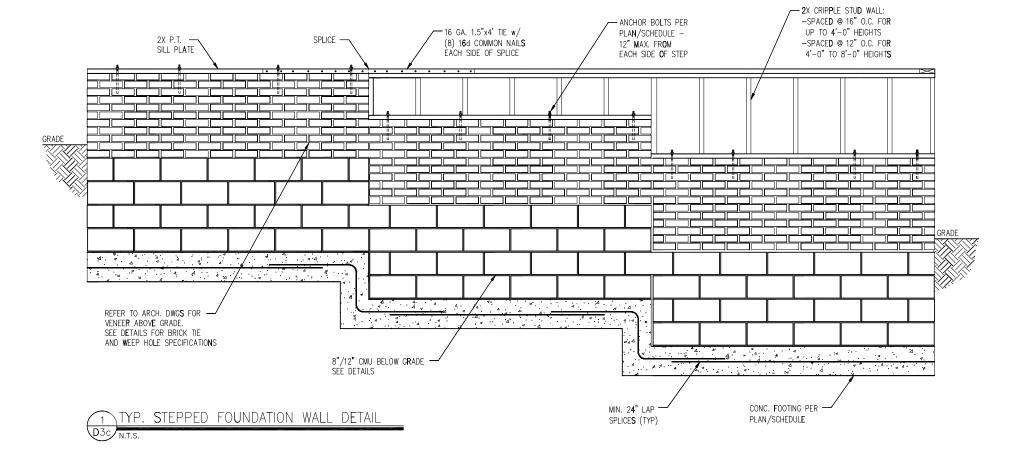


DATE: Ø2/4/2023 9CALE: 22x34 1/4"+1"-6" lbcT 1/8"+1"-6" PROJECT 4 528-66R DRAWN BY: JOEF CHECKED BY: BCP

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

D2c





- NOTES: 1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
- 2. PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
 3. SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
 4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR
- BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND
- CONNECTIONS
 5. REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
- 6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRC

Details PROJECT. Standard Details (0x-16) Crawl Space Foundation D



DRAUNG DATE: 02/14/2023 8CALE: 22x34 V4"+1"-6" lbtT V8"+1"-6" PROJECT & 528-696R DRAWN BY: JCEF CHECKED SY: BCP

ORIGINAL INFORMATION
PROJECT DATE
1/31/2011

REFER TO GOVER SHEET FOR A COMPLETE LIST OF REVISIONS

D3c



CLIENT: DR Horton Carolina Divis 8001 Arrowridge Blvd. **Charlotte, NC 282**13

Details Foundation | Space | PROJECT: Standard D Crawl



RAUNG DATE: Ø2/14/2023 9CALE: 22x34 V4"+1"+0" lbtT V8"+1"+0" PROJECT 1 528-66R DRAWN BY: JOEF CHECKED BY: BCP

NOTES:

1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET

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

4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR

5. REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN 6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRC

PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.

BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND

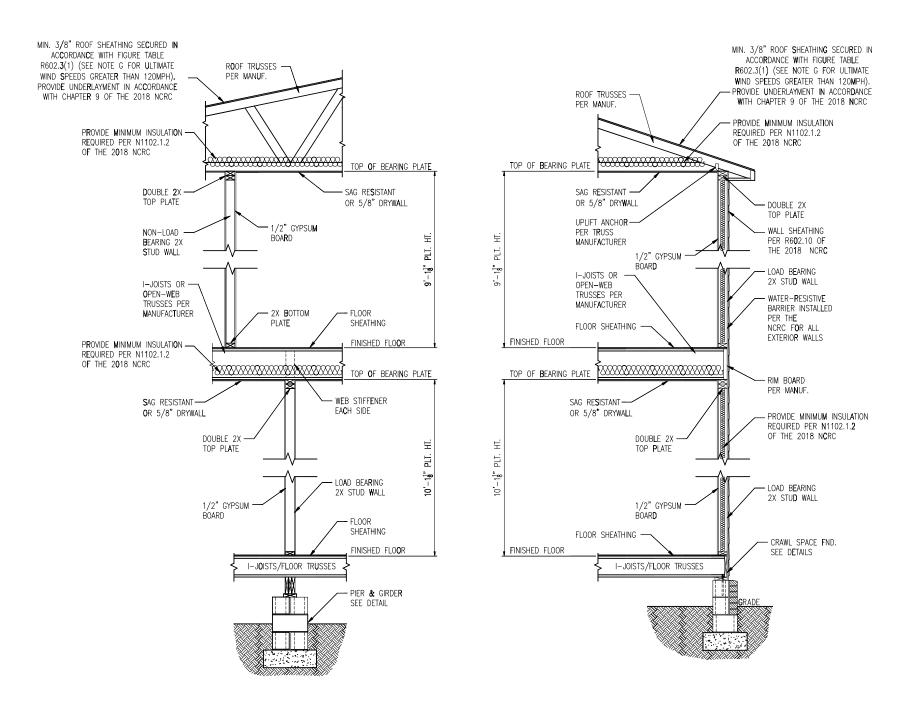
FOR ADDITIONAL INFORMATION.

CONNECTIONS

ORIGINAL INFORMATION
PROJECT DATE
1/31/2011

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

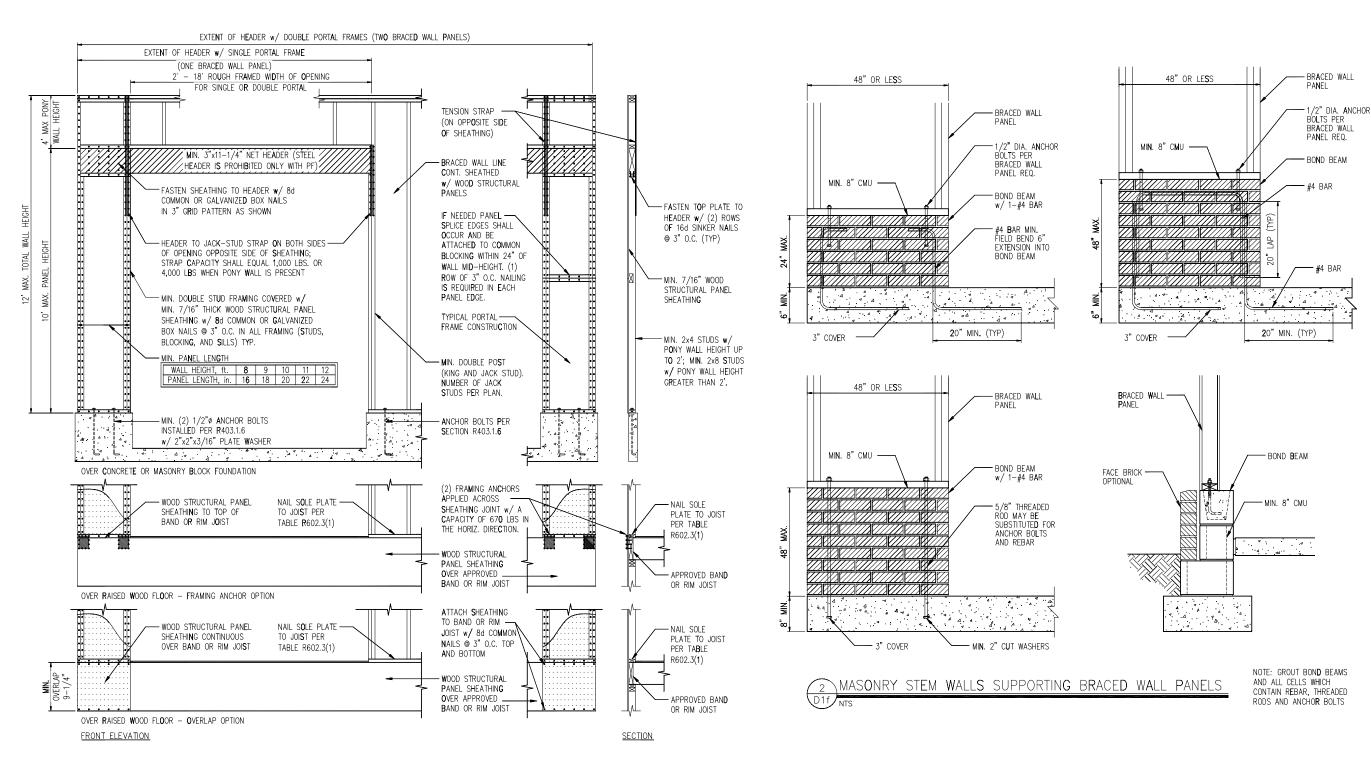
D4c



1 TYP. INTERIOR LOAD BEARING WALL SECTION

TYP. EXTERIOR LOAD BEARING WALL SECTION

-SIMILAR W/ BRICK AND STONE -BRICK TIES SPACED © 16" O.C. HORIZ. & 24" O.C. VERT. -MIN. 3/16"0 WEEP HOLES © 33" O.C.



1 METHOD PF: PORTAL FRAME DETAIL





CLIENT: DR Horton Carolina Division 8001 Arrowridge Bivd. Charlotte, NC 2013

PROJECT: Standard Details (0X-15) Framing Details

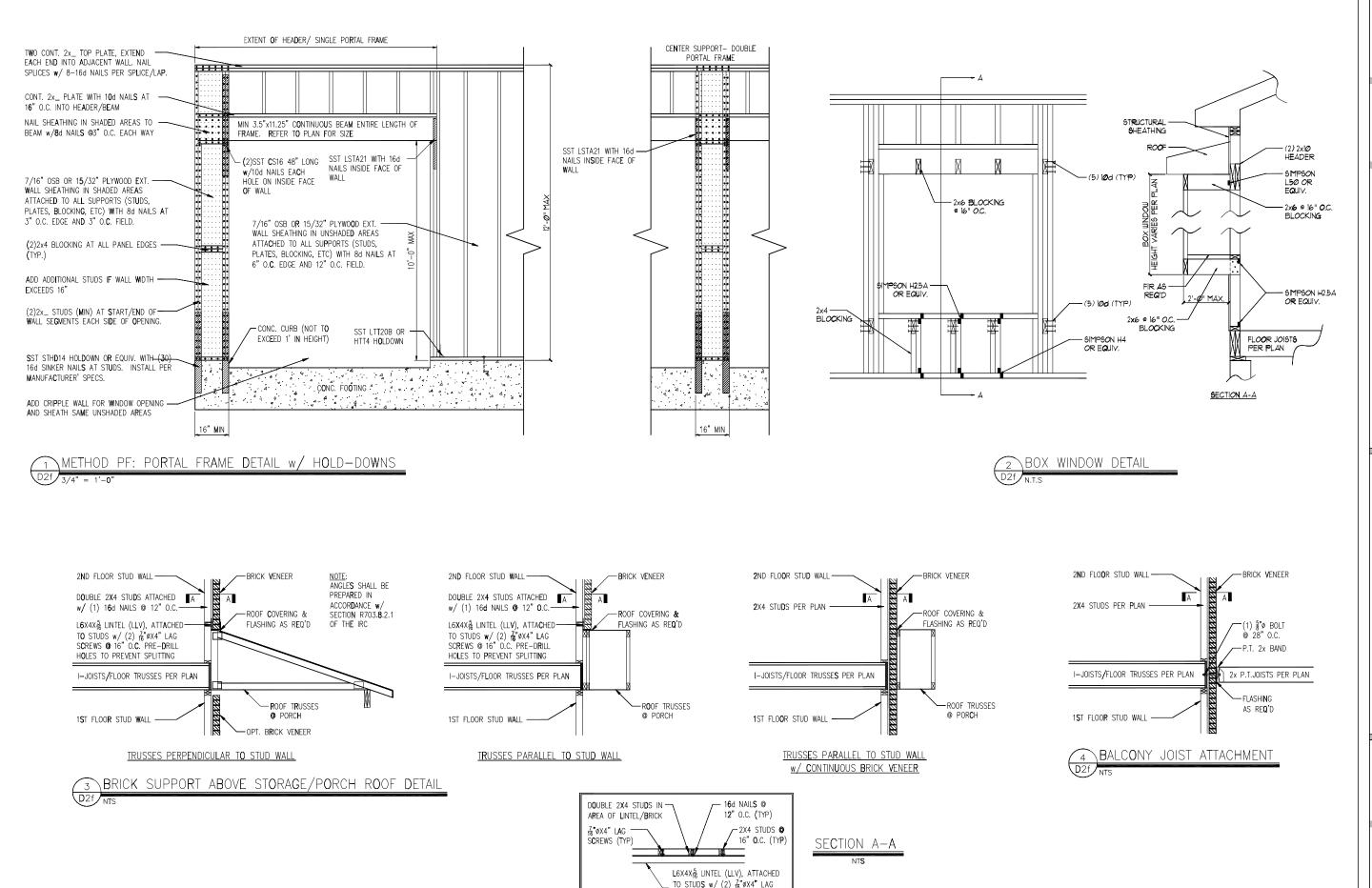


DRAUNG
DATE: 02/M/1023
6CALE: 22/04 V/4*1*-0*
INT V8*1*-0*
PROJECT * 5/28-06R
DRAUN BY: JCEF
CHECKED BY: BCP

ORIGINAL INFORMATION
PROJECT DATE
1/31/201

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

Dlf



SCREWS @ 16" O.C. PRE-DRILL HOLES TO PREVENT SPLITTING SUMMIT

120 PSHMAC DR. SUIT 108

NAMED IN: 2725 08

OPTIC: 193.300.9993

FAX: 913.300.9993

WWW.SURPT-COMPANIES.COM



arolina Division Age Blvd.

Project. Standard Details (0x-15) Framing Details



DRAUMS

DATE: 69/A9/023

SCALE: 22254 V4*11-69*

PROJECT *\ 508-06R

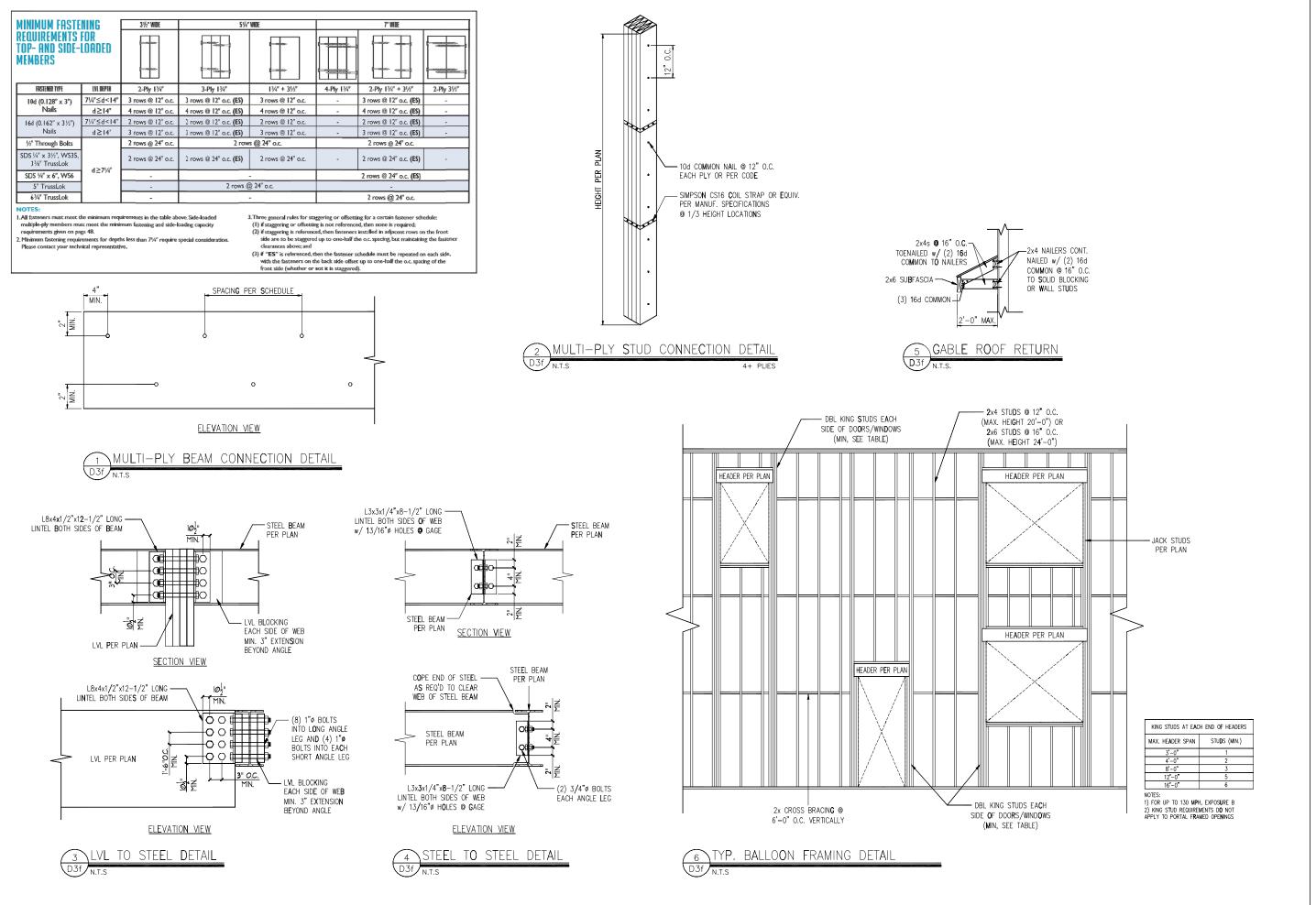
DRAUM BY: JCEF

CHECKED BY: BCP

ORIGINAL INFORMATION
PROJECT * DATE
1/31/2011

REFER TO **C**OVER SHEET FOR A COMPLETE LIST OF REVISIONS

D2f







na Division Bivd.

CLIENT: DR Horton Carolin

PROJECT:
94andard Details (0x-18)
Framing Details



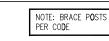
DRAUNG
DATE: 02/4/02/3
SCALE: 22/04 1/4**I*-9*
FROJECT 4 528-96R
DRAUN BY: JCEF
CHECKED BY: BCP

ORIGINAL INFORMATION
PROJECT DATE

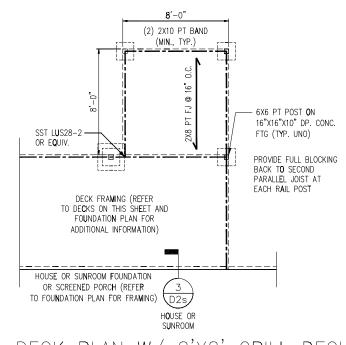
V3V2Ø11

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS ET

D3f

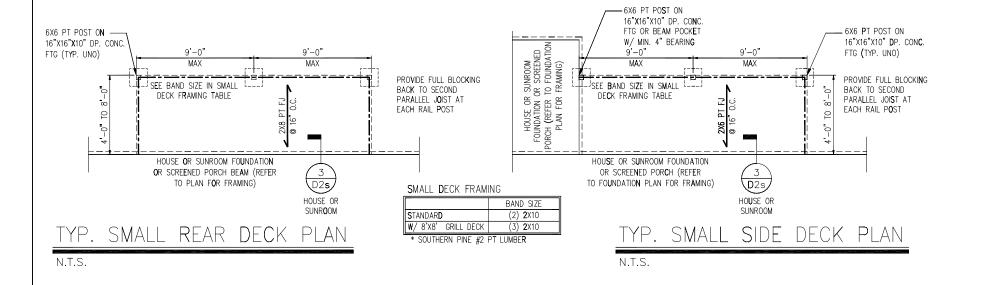


SÜMMIT



TYP. DECK PLAN W/ 8'X8' GRILL DECK

N.T.S.



- SEE INT**E**RMEDIATE

FRAMING TABLE

MAX

DECK FRAMING TABLE

R SUNROOM
OR SCREENED
TO FOUNDATION
R FRAMING)

HOUSE OR FOUNDATION O ORCH (REFER T

INTERMIEDIATE FOOTING

16"x16"x10

24"x24"x10"

6X6 PT POST ON-

HOUSE OR S FOUNDATION OF ORCH (REFER TO PLAN FOR F

BAND SIZE* INTERMIEDIATE FOOTING

16**"x**16"x10

(2) 2X10

(3) 2X10

16"X16"X10" DP. CQNC.

FTG OR BEAM POCKET

W/ MIN. 4" BEARING

SEE BAND SIZE IN

HOUSE OR SUNROOM FOUNDATION

OR SCREENED PORCH (REFER

TO FOUNDATION PLAN FOR FRAMING)

N.T.S.

SEE BAND SIZE IN

DECK FRAMING TABLE

HOUSE OR SUNROOM FOUNDATION

OR SCREENED PORCH (REFER TO FOUNDATION PLAN FOR FRAMING)

N.T.S.

FOOTING IN LARGE DECK

MAX

D2s/

HOUSE OR

SUNR**O**OM

- SEE INTERMEDIATE

FOOTING IN DECK

D2s

HOUSE OR

SUNROOM

SIDE DECK PLAN

FRAMING TABLE

_**!**

LARGE SIDE DECK PLAN

- 6X6 PT POST ON

16"X16"X10" DP. CONC. FTG (TYP. UNO)

PROVIDE FULL BLOCKING BACK TO SECOND

- 6X6 PT POST ON

FTG (TYP. UNO)

BACK TO SECOND PARALLEL JOIST AT

EACH RAIL POST

16"X16"X10" **D**P. CON**C**.

PROVIDE FULL BLOCKI**N**G

PARALLEL JOIST AT

EACH RAIL POST

- SEE INTERMEDIATE

FRAMING TABLE

MAX

D2s

HOUSE OR

SUNROOM

SEE INTERMEDIATE

FOOTING IN DECK

MAX

HOUSE OR

FRAMING TABLE

PROVIDE FULL BLOCKING BACK TO SECOND

LARGE DECK FRAMING

W/ 8'X8' GRILL DECK

PROVIDE FULL BLOCKING

BACK TO SECOND

EACH RAIL POST

DECK FRAMING

W/ 8'X8' GRILL DECK

* SOUTHERN PINE #2 PT LUMBER

STANDARD

PARALLEL JOIST AT

PARALLEL JOIST AT

EACH RAIL POST

MAX

(MIN., TYP.)

2) **2**X12 PT BAND

HOUSE OR SUNROOM FOUNDATION

OR SCREENED PORCH (REFER

TO FOUNDATION PLAN FOR FRAMING)

LARGE REAR DECK PLAN

SEE BAND SIZE IN

DECK FRAMING TABLE

HOUSE OR SUNROOM FOUNDATION

OR SCREENED PORCH BEAM (REFER

TO PLAN FOR FRAMING)

REAR DECK PLAN

FTG (TYP. UNO)

N.T.S.

6X6 PT POST ON

FTG (TYP. UNO)

N.T.S.

16"X16"X10" DP. CONC.

FOOTING IN LARGE DECK



- $\underline{\text{NOTES:}}$ 1. Refer to general notes & Specifications on Coversheet FOR ADDITIONAL INFORMATION.
- 2. PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE. 3. SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS,
- SLOPES AND DEPRESSIONS.

 4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND
- REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
- 6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE IRC



Details

Foundation

Details Wall

CLIENT: DR Hort 8001 A

DATE: 3/2/2010 8CALE: 22±34 1/4"∗1"-**6**" Ibd1 1/8"∗1"-**6**" PROJECT 4 528-06R

CHECKED BY: WAJ ORIGINAL INFORMATION
PROJECT * DATE
1/31/2011

DRAWN BY: LAG

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

D3s

A-72200142 Nate Donaldson Designer: 11/4/2024 STN

REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS.

ROOF PLACEMENT PLAN

Изте

Изте

Изте

Изте

Иате

Revisions

00/00/00

00/00/00

00/00/00

00/00/00

00/00/00

DR Horton Inc

2-06-00 18-00-00 2-06-00 10-00-91 21-00-00 11-00-00 9-08-00 \$1-04-00 \$1-04-00 9 2-01-04 7007 Trusses Hang igno Beam (1 Rim Eoerd AWE to indige Truss Connector Total List
Oty Product Manuf
20 HTU26 Simpson
50 One H2.5A* Simpson 2-00-00 2-00-00 9' 1-1/8" BRG HGT AFF 8' 1-1/8" BRG HGT AFF MHO Platform Hatch Legend 00-00-7 18-00-00 00-00-9 00-60-9 9-02-00 72-06-00 12-00-00 39-00-00

** PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES.

Truss Drawing Left

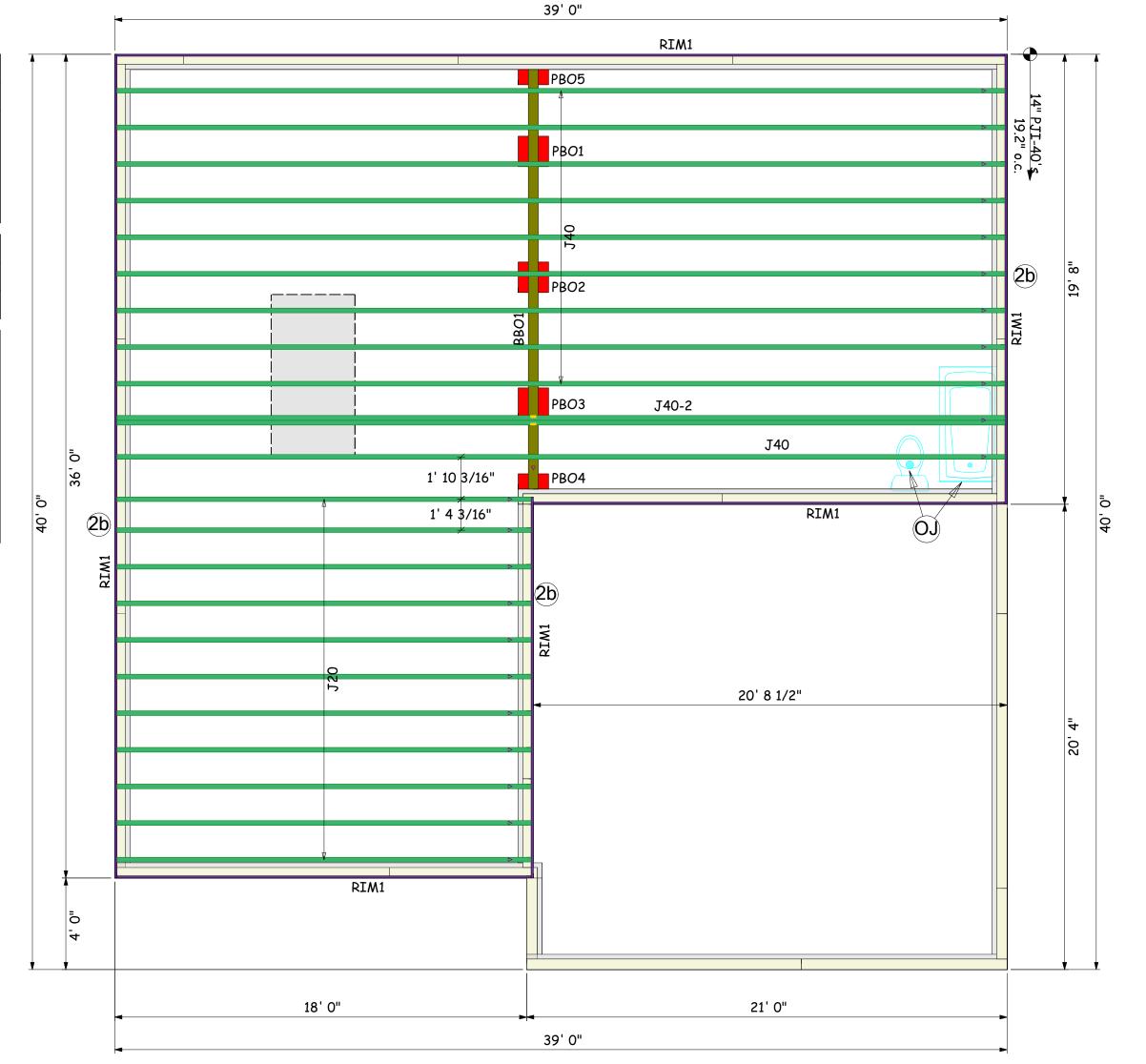
TRIANGULAR SYMBOL NEAR END OF TRUSS INDICATES LEFT END OF TRUSS AS SHOWN ON INDIVIDUAL TRUSS DRAWINGS.

General Notes: ** Cutting or drilling of components should not be done without contacting component supplier first. Customer takes full responsibility for components if cut before authorization.

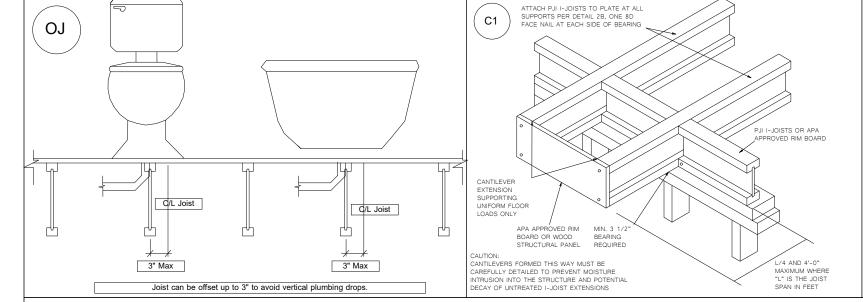
		Products		
Net Qty	Plies	Product	Length	PlotID
10	1	14" PJI-40	40' 0"	J40
2	2	14" PJI-40	40' 0"	J40-2
11	1	14" PJI-40	20' 0"	J20
13	1	1 1/8" × 14" APA Rim Board	12' 0"	RIM1

Accessories						
Net Qty	Plies	Product	Length	PlotID		
34	1	3/4" 4x8 OSB				

KEMPSVILLE BUILDING MATERIALS IS NOT RESPONSIBLE
FOR THE DESIGN OR CALCULATION OF ANY AND ALL I-JOIST AND
LVL/PSL BEAM MATERIAL. ALL ENGINEERING AND INFORMATION FOR
THIS MATERIAL IS TO BE PROVIDED BY THE ENGINEER OF RECORD
MARKED ON APPROVED SET OF PLANS. ALL BEAM PLACEMENTS
ARE PER THE ENGINEERING RECEIVED. ALL CONNECTION
DETAILS TO BE PROVIDED BY ENGINEER OF RECORD. REFER
TO ENGINEER OR RECORD FOR ALL MULTI-PLY LVL/ I-JOIST
CONNECTION PATTERNS. BUILDER TO VERIFY ALL MATERIAL
LENGTHS, QUANTITIES, AND SIZES PRIOR TO ORDERING.



1ST FLOOR LAYOUT



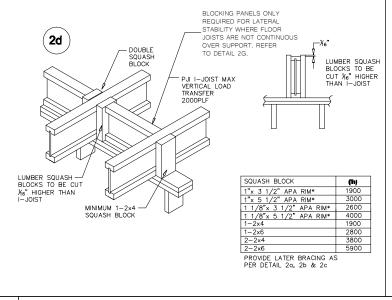
REFER TO TABLE ON EWP PRODUCT VERTICAL LOAD TRANSFER CAPACITY FOR CLARIFICATION

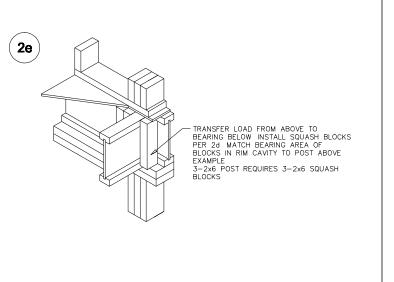
APA APPROVED RIM BOARD MAX VERTICAL LOAD TRANSFER SEE TABLE

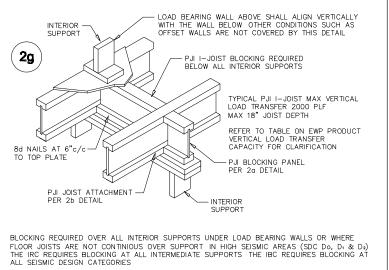
ONE 8d NAIL INTO TOP AND BOTTOM FLANGE

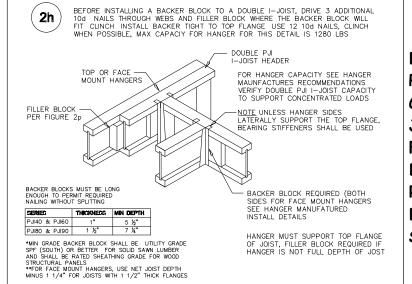
ONE 8D FACE NAIL AT EACH SIDE OF BEARING

TO AVOID SPLITTING FLANGES , START NAILS 1 ½" FROM END OF I—JOIST NAILS MAY BE DRIVEN IN AT AN ANGLE TO AVOID SPLITING BEARING PLATE

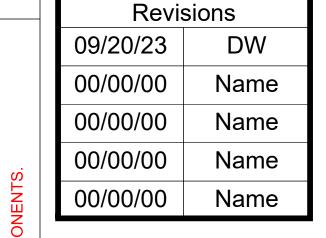








LABEL LEGEND BBO = Beam by Others PBO = Post by Others PBO = Post by Others PBO = Girder by Others GBO = Girder by Others J = I-Joist FB = Flush Beam DB = Dropped Beam RB = Roof Beam BP = Blocking Panels SB = Squash Blocks



st follow the IBC/IRC Code Requirements along with ufacturer's guidelines. This is NOT an engineered ement plan. This placement plan is created from plans ided by the customer using Manufactures guidelines. It is responsibility of the EOR, or builder to review and approve earing conditions, connections, spans, loading, product ge, and quantities. Do not notch or drill holes in beams or ges on joists without prior approval from the manufacturing resentative unless following hole guidlines in the installation e of product. Builder takes full responsibility for doing so NO Back charge will be accepted.



DR Horton
7 Mason Ridge
Hayden F
OOR JOIST LAYOUT

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

Date: // 10/31/24

Designer: DW

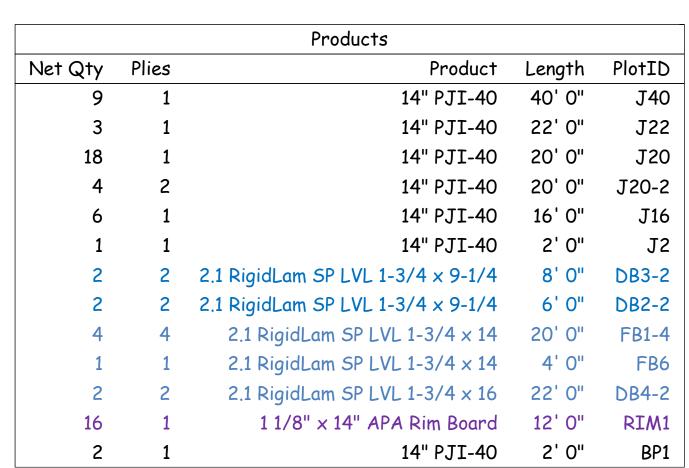
Project #: 24100227
Sheet Number:

1 / 2

PLUMBING DROPS NOTED ARE IN APPROXIMATE LOCATIONS PER PLAN. BUILDER MUST VERY LOCATIONS BEFORE SETTING JOISTS.

** ALL POINT LOADS FROM ABOVE MUST BE TRANSFERRED TO BEARING FROM UNDER SIDE OF SHEATHING.

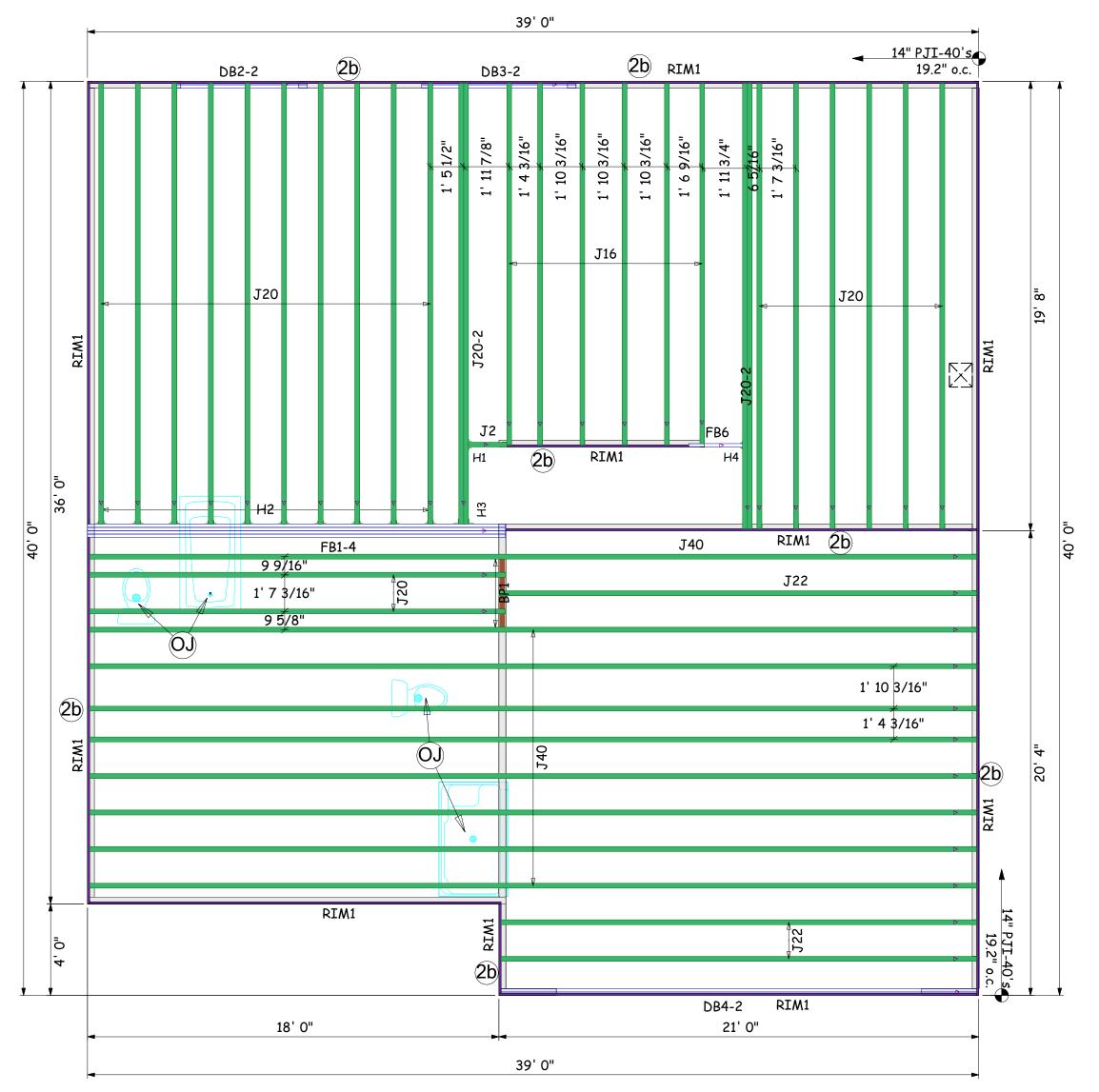
** REFER TO INSTALLATION GUIDE FOR PLY TO PLY CONNECTIONS.



Accessories					
Net Qty	Plies	Product	Length	PlotID	
46	1	3/4" 4x8 OSB			

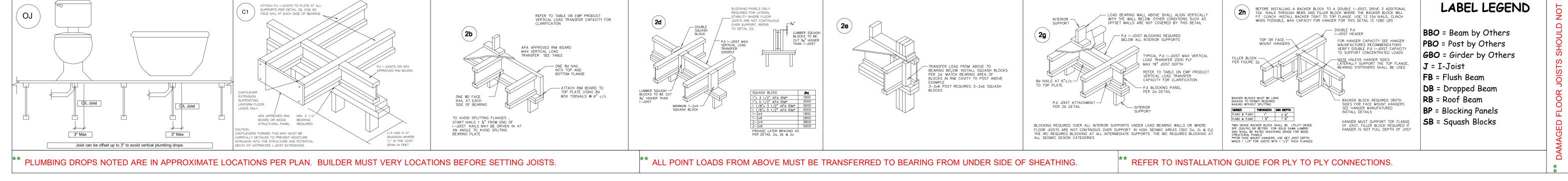
Connector Summary					
Web Stiff	Backer Blocks	Product	Manuf	Qty	PlotID
No	2 and Filler	IUS2.56/14	Simpson	1	H1
No	No	IUS2.56/14	Simpson	10	H2
No	No	MIU5.12/14	Simpson	1	Н3
No	No	HUS1.81/10	Simpson	1	H4

KEMPSVILLE BUILDING MATERIALS IS NOT RESPONSIBLE FOR THE DESIGN OR CALCULATION OF ANY AND ALL I-JOIST AND LVL/PSL BEAM MATERIAL. ALL ENGINEERING AND INFORMATION FOR THIS MATERIAL IS TO BE PROVIDED BY THE ENGINEER OF RECORD MARKED ON APPROVED SET OF PLANS, ALL BEAM PLACEMENTS ARE PER THE ENGINEERING RECEIVED. ALL CONNECTION DETAILS TO BE PROVIDED BY ENGINEER OF RECORD. REFER TO ENGINEER OR RECORD FOR ALL MULTI-PLY LVL/ I-JOIST CONNECTION PATTERNS. BUILDER TO VERIFY ALL MATERIAL LENGTHS, QUANTITIES, AND SIZES PRIOR TO ORDERING.



2ND FLOOR LAYOUT

LABEL LEGEND



Revisions 09/20/23 DW 00/00/00 Name 00/00/00 Name 00/00/00 Name

Name 00/00/00

Ridge n F orton 'den Mason Hay DR OOR

JOIS

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

Date: // 10/31/24 Designer: **DW**

Project #: **24100227** Sheet Number: