#### ABBREVIATIONS INDEX A/C AIR CONDITIONING A.D. AREA DRAIN AD.J AD.JISTABLE ALIT ALITERNATE ALIMINIM ARCH. ARCHITECTURAL BA BATHROOM BD BOARD BF BI-FOLD (DOOR) 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 BTINN BETWEEN 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 W/ BASEMENT 3 CS K CRAWL SPACE PLAN '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 5 SOUNCE DETECTOR 55 SOUNCE DETECTOR 55 SOUNCE DETECTOR 55 SOUNCE DETECTOR 56 SING SINGLE FINIS OR SHELF 51M 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 VIERT VERTICAL VIERT VERTICAL VIERT VERTICAL MASHING MACHINE MO MOOD MICH MINDON MIN MOOTH MIN MOOSH MIN MIN MOOSH MIN MOOSH MIN MOOSH MIN MOOSH MIN MOOSH MIN MOOSH MIN MIN MOOSH 2.2 B 3 SW P STEM WALL PLAN 'P' W/ BASEMENT CRAWL SPACE PLAN 'P 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 WIC WALK-IN CLOSET W WO MITH OR MITHOUT MP WATERPROOF(ING) WMM WELDED WIRE MESH BASEMENT PLAN 'B' 3 BS B 4 B IST FLOOR PLAN 'B' FRONT ELEVATION 'R' GL GLASS OR GLATING OFF PD OFFS PM BOARD HB HOSE BIBB HD HEAD OR HARD HDR HEADER HCR HEADER HYAC HEATHWANTHILATING/AIR COND. HIST MICRORY AIT MICRORY JOHN KIT KITCHEN KIT KITCHEN PL PROPERTY LINE Ø ROUND / DIAMETER 2ND FLOOR PLAN 'B' 5 B I.I R 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 - LH

McKay Place Lot 44 Lillington, NC 27546

NO: DATE: REVISION: 04.25.22 PROFESSIONAL SEAL:

40' Series

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

FOR CONSTRUCTION

CONSULTANTS:

## GENERAL NOTES DESIGNER NORTH CAROLINA:

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 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.

BATHROOMS AND POWDER ROOMS, VERIEY LOCATIONS AT FRAMING WALK

ELASTOMERIC SHEET WATERPROOFING: FURNISH AND INSTALL ALL WATERPROOFING COMPLETE. A OM ILL. SELF-ADHERING MEMBRANE OF RUBBERIZED
ASPHALT INTEGRALLY BONDED TO POLYETHYLENE SHEETING, OR EQUAL.
INSTALL PER MANIFACTURES AND TRADE ASSOCIATIONS PRINTED
INSTALL LATION INSTRUCTIONS. 6" MINIMUM 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.

### THE BUILDER SHALL FURNISH ANY AND ALL REPORTS RECEIVED FROM THE

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 THIS SET OF PLANS IS SUFFICIENT TO OBTAIN A BUILDING PERMIT; HOMEVER, ALL MATERIALS AND METHODS OF CONSTRUCTION NECESSARY TO COMPETER 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 / CONTRACTOR THOROUGHLY KNOWLEDGEABLE WITH 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 WHERE TWO OR MORE QUALITY PROVISIONS OF THOSE REQUIREMENTS CONFLICT 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		ELEV 'B'	
Ist FLOOR		1066 SF	
2nd FLOOR		1445 SF	
TOTAL LIVING		2511 SF	
GARAGE		422 SF	
PORCH		109 SF	
OPT. COVERED PORCH	N.	80 SF	
OPT. BASEMENT		1006 SF	
**BASEMENT AREA IS TA	KEN TO INSIDE O	OF CONCRETE W	ALL**

PROJECT NO: 6MD17049

Express

TITLE SHEET

PRINT DATE: January 22, 2021







Front Elevation 'A'

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



Front Elevation 'F' scale; 1/4"=1"-0" at 22"x84" Layout 1/8"=1"-0" at 11"x11" Layout



NO: DATE: REVISION:

O4.25.22

PROFESSIONAL SEAL:

PROJECT

40' Series

FOR CONSTRUCTION

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

QUICK VIEW

PRINT DATE:

January 22, 2021

10:

0.1



#### 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.
  BILLIDER SHALL VERIFY AND COORDINANE PER ACTUAL SITE CONDITIONS.
  HINDOW HEAD HEIGHTS.
  IST FLOOR = 6-6" UNJO. ON ELEVATIONS.
  210 FLOOR = 7-0" UNJO. ON ELEVATIONS.
   ROOPING: PITCHED SHINGLES FER DEVELOPER.

- WINDOWS: MANUFACTURER PER DEVELOPER, DIVIDED LITES AS SHOWN ON THE EXTERIOR ELEVATIONS
- GARAGE DOORS: AS SELECTED BY DEVELOPER, RAISED PANEL AS SHOWN.
- ALL EXTERIOR MATERIALS TO BE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

- ALL EXTERIOR MATERIALS TO BE INSTALLED PER MANA-ACTURER'S MRITTEN INSTRUCTION PROTECTION ACAINST DISCAY.

  (ALL PORTIONS OF A PORCH, SCREEN PORCH OR DECK FROM THE BOTTOM OF THE HEADER DOWN, INCLIDING POST, RAILS, PICKETS, STEPS AND FLOOR STRUCTURE)

  INSULATION. FER TABLE NICO21.2.

  ENTERIOR MALLS.

  CRUSS OF THE STRUCTURE.

  R-15 BATTS MINMM, VERIFY

  CRANL SPACE FLOORING.

  R-19 BATTS MINMM, VERIFY

  CRANL SPACE FLOORING.

  R-19 BATTS MINMM, 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 IO 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.
  HIBER 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 CHE'NT FAULS JOING W IX3 BATTS AT I2" O.C. FER DEVELOPER W IX4 CORNER TRIM BOARD.

  (AT SPECIFIC LOCATIONS.
  IX FIBER CHENT TRIM OR EQUIA., UN.O. 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 DEVICES COMPLYING MITH THE NCRC SECTION R312.21 AND R312.22.



NO: DATE: REVISION: 04.25.22 PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

FOR CONSTRUCTION

CLIENTS NAME:



PROJECT NO: GMD17049

'HAYDEN'

**EXTERIOR ELEVATIONS** '4EPF-B'

PRINT DATE: January 22, 2021

1B

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

THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN THE NET PIECE VINICATION AND SPACE VENTILATED, PROVIDED THAT INSO OF THE AREA OF THE SPACE VENTILATED, PROVIDED THAT AT LEAST 50 PERCENT AND NOT MORE THAN 80 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATIORS LOCATED IN THE UPPER PORTION OF THE SPACE VENTILATIONS DEVALED IN THE SPEEK PORTION THE SPAYE 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

SENERAL CONTRACTOR SHALL VERIFY THE NET FREE VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER. VENITIATION OF THE YENT PRODUCT SELECTED 3T DAMAGE VERIFY THIN ANNIFACTURER OF HIGH AND LOW VENTS TO BE USED FOR MINIMUM CALCULATED YENTS REQUIRED. THE REGULED VENTILATION SHALL BE MAINTAINED, PROVIDE INSULATION STOP SUCH THAT INSULATION DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REQUIRED. BY THE BUILDING OFFICIAL

BY THE BUILDING OFFICIAL.

ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE
OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF
SHEATHING (AS 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
FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE
VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A
CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT
INDEPENDENCE OF ERDANDED IS BEAUTY. UNDERSIDE OF FRAMED ELEMENT.

#### (PER SECTION R806.2)

I 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.) / ISO = 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 144 = 5616 SQ. IN. 5616 SQ. IN. / ISO = 371.44 SQ. IN. *O*F VENT REQ'D

ROOF AREA 3:= 180 SF 180 Sa. FT. X 144 = 25920 Sa. IN. 25920 Sa. IN. / 150 = 172.80 Sa. IN. OF VENT REQ'D

- ALL ROOF DRAINAGE SHALL BE PIPED TO STREET OR APPROVED DRAINAGE FACILITY. - TRUSS MANUFACTURER SHALL SUBMIT STRUCTURAL CALCS AND SHOP DRAWINGS TO THE BUILDER'S GENERAL CONTRACTOR AND BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATIONS.

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

- 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, THE NET FREE CROSS-VENTILATION AREA MAY BE REDUCED TO 1/300 HETHA 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 MINIMAN CALCULALTED VENTS REQUIRED. THE REQUIRED VENTILATION SHALL BE MAINTAINED. PROVIDE INSULATION STOP SUCH THAT INSULATION DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REQUIRED BY THE BUILDING OFFICIAL.

ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING KAS 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 FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED LEPIENT.

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: =
 1466 SF

 1486 SQ, FT, X 144 =
 24272 SQ, IN, 24272
 SQ, IN, 24

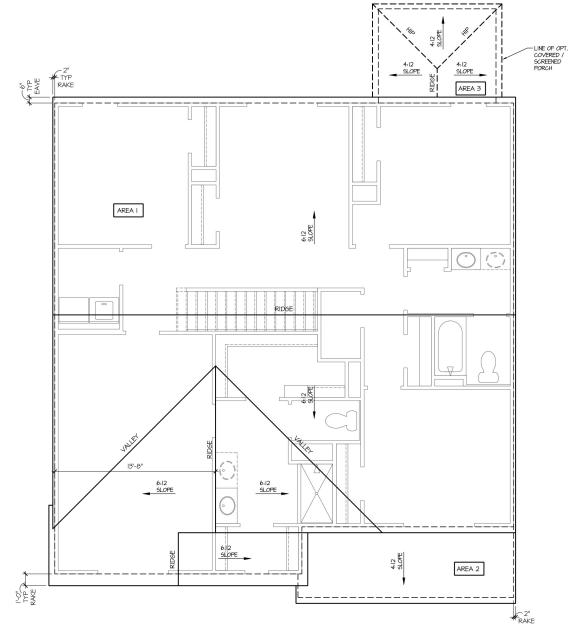
 214272 SQ, IN, 2 =
 35112 SQ, IN, OF VENT AT HIGH
 35112 SQ, IN, OF VENT AT LOW REQUIRED.

ROOF AREA 2: 34 5F 34 50. FT. X 144 = 5616 50. FT. X 144 = 15616 50. IN. 0F VENT REQ'D 16.12 50. IN. / 2 = 436 50. IN. 0F VENT AT HIGH 1 4 36 50. IN. 0F VENT AT LOW REQUIRED.

ROOF AREA 3; = 180 SF.
180 Sq. FT. X 144 = 25420 Sq. IN.
25420 Sq. FT. X 300 = 8640 Sq. IN. 0F VENT REQ'D
8640 Sq. IN. 0F VENT AT HIGH \$4320 Sq. IN. 0F VENT AT LOW REQUIRED.

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:



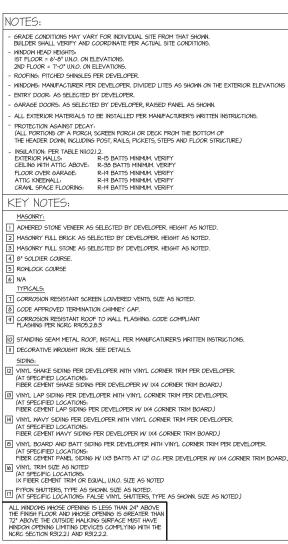
PROJECT NO: GMD17049

'HAYDEN' **ROOF PLAN** 

'4EPF-B'

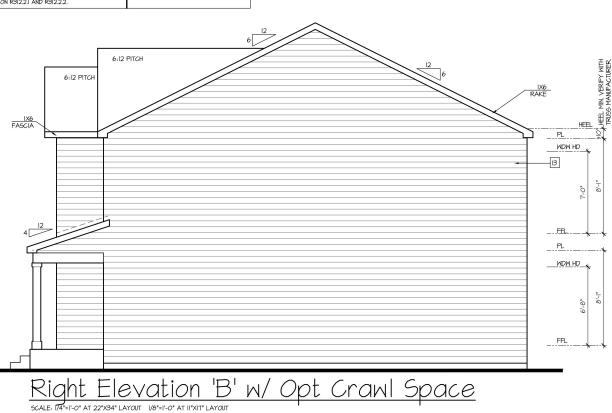
PRINT DATE: January 22, 2021

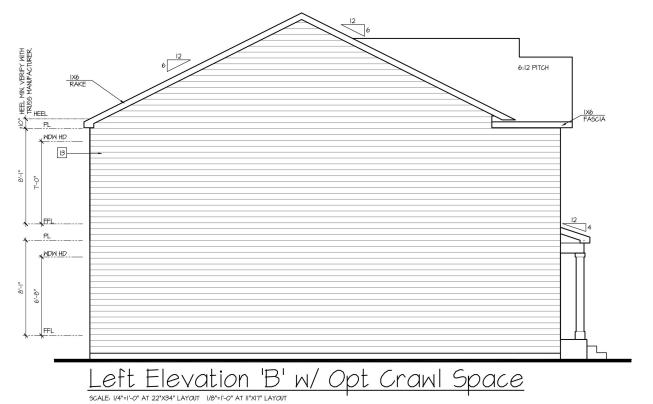
1.1 B



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'





-RELOCATE WDW -W OPT. BED 6/ BED 5/ BA 4, SEE FLOOR PLAN

Rear Elevation 'B' w/ Opt Crawl Space Scale: 1/4"=1"-0" AT 22">SQALE: 1/4"=1"-0" AT 22">SQALE: 1/4"=1"-0" AT 22">SQALE: 1/4"=1"-0" AT 22">SQALE: 1/4"=1"-0" AT 12">SQALE: 1/4">SQALE: 1/4">SQA

6:12 PITCH

FASCIA

, WDW HD

, WDW HD



PROJECT TITLE:

40' Series

FOR CONSTRUCTION

CLIENTS NAME:

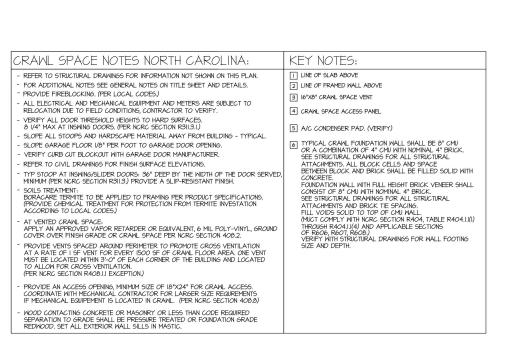


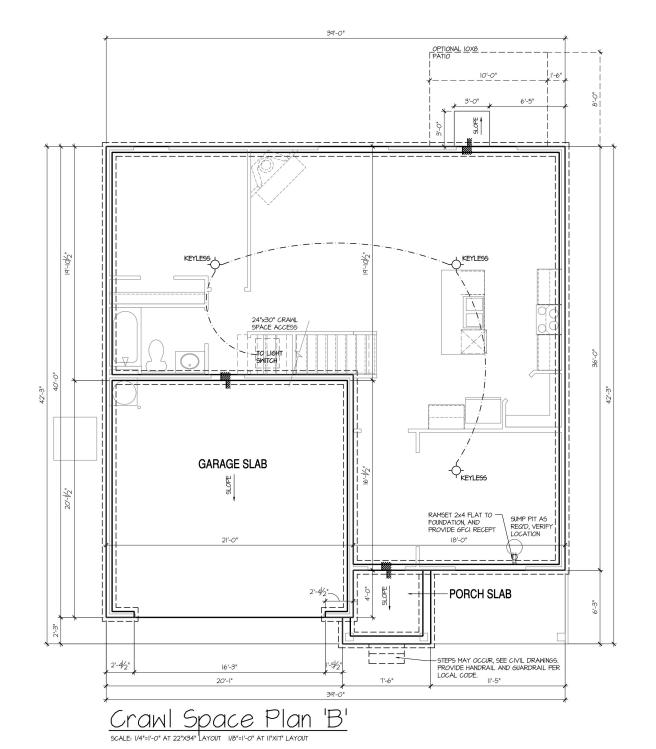
PROJECT NO: GMD17049

'HAYDEN' **EXTERIOR ELEVATIONS** '4EPF-B'

PRINT DATE: January 22, 2021

2.1 B





PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

FOR CONSTRUCTION

CLIENTS NAME:



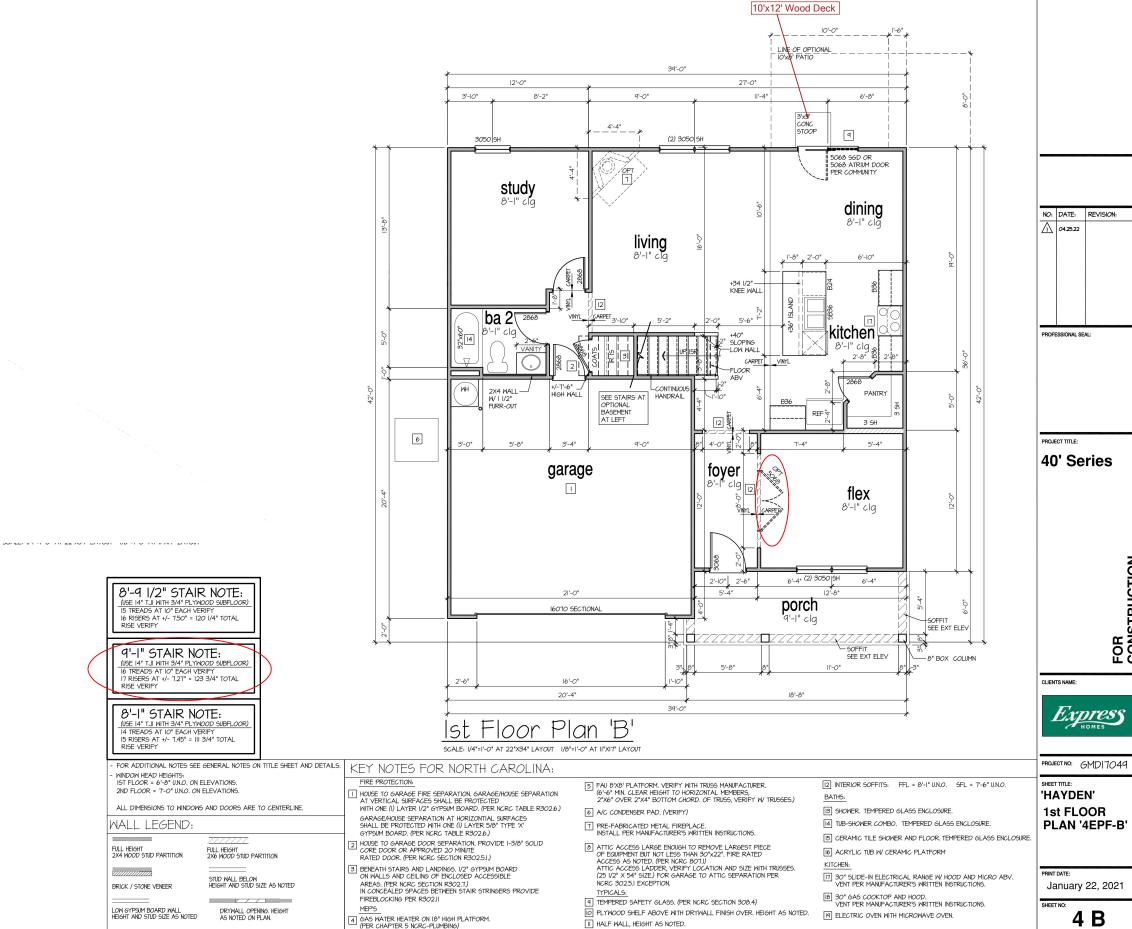
PROJECT NO: GMD17049

SHEET TITLE:
'HAYDEN'

CRAWL SPACE
PLAN '4EPF-B'

PRINT DATE:
January 22, 2021

3 CS B



III HALF WALL, HEIGHT AS NOTED.

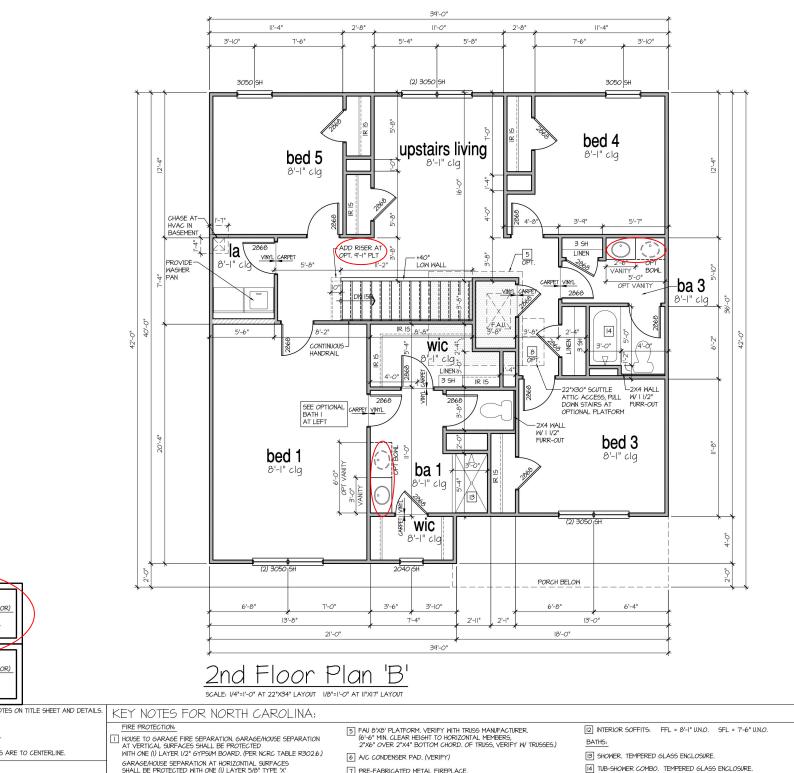
NO: DATE: REVISION:

FOR CONSTRUCTION



PLAN '4EPF-B'

4 B



FOR CONSTRUCTION

NO: DATE: REVISION: 04.25.22

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

'HAYDEN'

2nd FLOOR PLAN '4EPF-B' 15 CERAMIC TILE SHOWER AND FLOOR, TEMPERED GLASS ENCLOSURE.

16 ACRYLIC TUB W CERAMIC PLATFORM PRINT DATE: II 30" SLIDE-IN ELECTRICAL RANGE W HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

January 22, 2021

5 B

9'-I" STAIR NOTE:

(USE 14" T.JI WITH 3/4" PLYWOOD SUBFLOOR 16 TREADS AT 10" EACH VERIFY 17 RISERS AT +/- 7.27" = 123 3/4" TOTAL RISE VERIFY

8'-1" STAIR NOTE:
(USE I4" T.JI WITH 3/4" PLYWOOD SUBFLOOR)
I4 TREADS AT IO" EACH VERIFY
I5 RISER'S AT + - 1.45" = III 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

LOW GYPSUM BOARD WALL HEIGHT AND STUD SIZE AS NOTED

FULL HEIGHT 2X6 WOOD STUD PARTITION

STUD WALL BELOW HEIGHT AND STUD SIZE AS NOTED 

DRYWALL OPENING. HEIGHT AS NOTED ON PLAN.

GARAGE/HOUSE SEPARATION AT HORIZONTIAL SURFACES SHALL BE PROTECTED WITH ONE (I) LAYER 5/8" TYPE 'X' GYPSUM BOARD. (PER NCRC TABLE R302.6.)

2) HOUSE TO GARAGE DOOR SEPARATION, PROVIDE 1-3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE RATED DOOR, (PER NCRC SECTION R302.5.1.)

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)

T PRE-FABRICATED METAL FIREPLACE.
INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

 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:

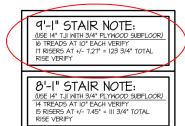
TEMPERED SAFETY GLASS. (PER NCRC SECTION 308.4)

PLYWOOD SHELF ABOVE WITH DRYWALL FINISH OVER, HEIGHT AS NOTED. 19 ELECTRIC OVEN WITH MICROWAVE OVEN.

KITCHEN:

| 30" GAS COOKTOP AND HOOD. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

III HALF WALL, HEIGHT AS NOTED.



## 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. VERIFY

R-30 BATTS MINIMUM. VERIFY

R-31 BATTS MINIMUM. VERIFY

R-32 BATTS MINIMUM. VERIFY

R-33 BATTS MINIMUM. VERIFY

R-34 BATTS MINIMUM. VERIFY

R-35 BATTS MINIMUM. VERIFY

R-36 BATTS MINIMUM. VERIFY

R-37 BATTS MINIMUM. VERIFY

R-37 BATTS MINIMUM. VERIFY

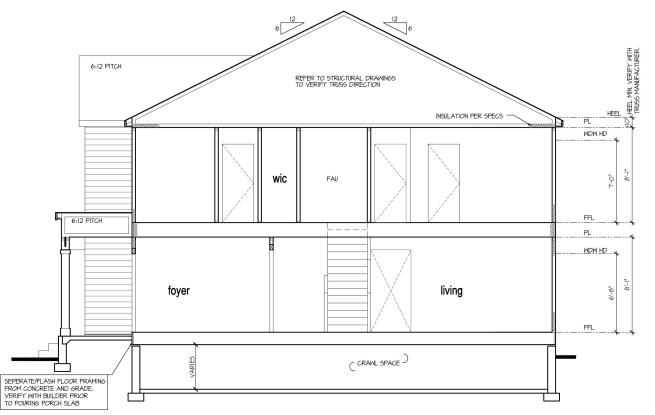
R-38 BATTS MINIMUM. VERIFY

R-38 BATTS MINIMUM. VERIFY

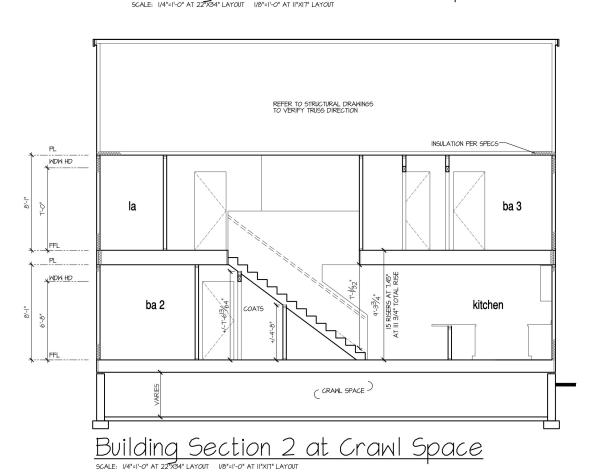
R-39 BATTS MINIMUM. VERI

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:

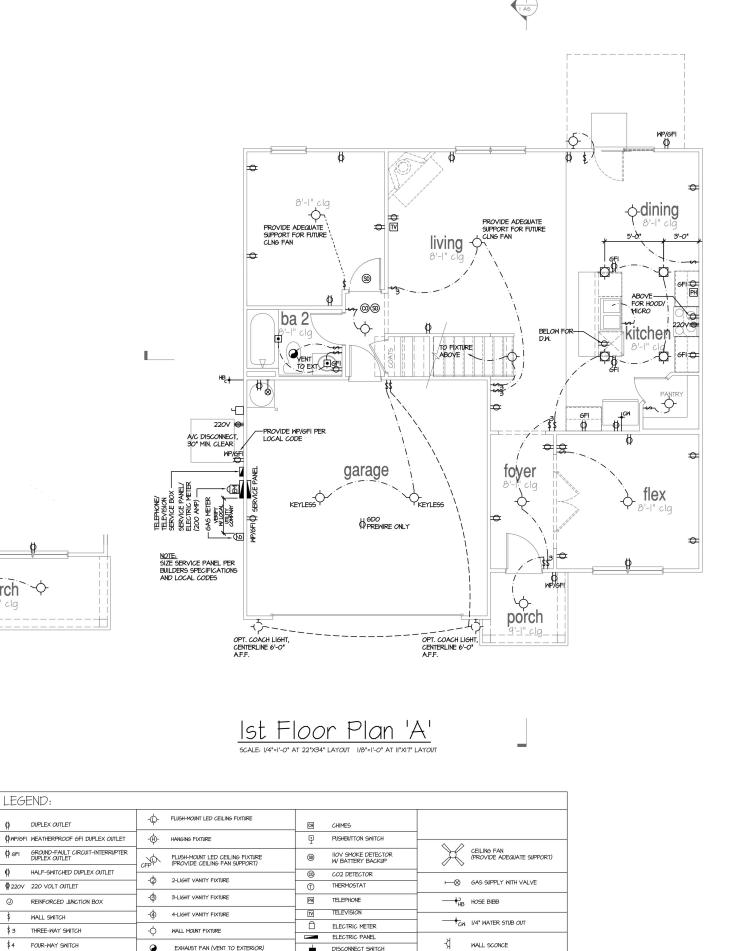


PROJECT NO: GMD17049

'HAYDEN' **BUILDING** SECTIONS

PRINT DATE: January 22, 2021

1.1.2A S



NO: DATE: 04.25.22 PROFESSIONAL SEAL: PROJECT TITLE: 40' Series

CLIENTS NAME:



FOR CONSTRUCTION

REVISION:

PROJECT NO: GMD17049

'HAYDEN' 1st FLOOR UTILITY PLAN

PRINT DATE: January 22, 2021

SWITCH AND RECEPTACLE BOXES OVER BATH CABINETS SWITCH AND RECEPTACLE BOXES OVER KITCHEN CABINETS

BASE CABINET

STANDARD ELECTRICAL BOX HEIGHTS

30" HIGH VANITY

NOTE: SIZE SERVICE PANEL PER BUILDERS SPECIFICATIONS AND LOCAL CODES

OPT. COACH LIGHT, CENTERLINE 6'-0" A.F.F.

NOTES:

Ist Floor Plan 'B'

SCALE: I/4"=I'-0" AT 22"X34" LAYOUT I/8"=I'-0" AT II"XIT" LAYOUT

PROVIDE GROUNDING ELECTRICAL ROD PER LOCAL CODES.

ALL EXHAUST FANS SHALL HAVE BACKDRAFT DAMPERS.

PROVIDE AND INSTALL ARC FAULT CIRCUIT-INTERRIPTERS (AFCI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.

- ELECTRICAL SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT.
- PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CO2 DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
- PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRIPTERS (6FI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.

ALL ELECTRICAL AND MECHANICAL EQUIPMENT (FIRMACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PI DRAIN TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS. PROVIDE POWER, LIGHT AND SMITCH AS REQUIRED FOR ATTIC FURNACE PER CODE AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

FAN/LIGHTS IN WET/DAMP LOCATIONS SHALL BE LABLED "SUITABLE FOR WET OR DAMP LOCATIONS."

ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS. HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.

OPT. COACH LIGHT, CENTERLINE 6'-0" A.F.F.

LEGEND:

DUPLEX OUTLET

\$220V 220 VOLT OUTLET

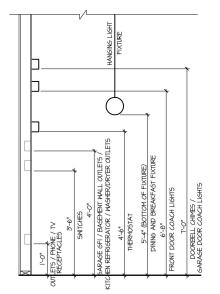
WALL SWITCH

THREE-WAY SWITCH

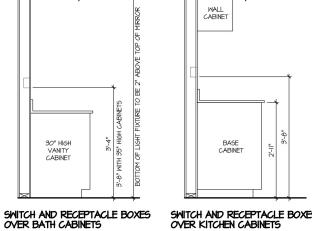
FOUR-WAY SWITCH

REINFORCED JUNCTION BOX

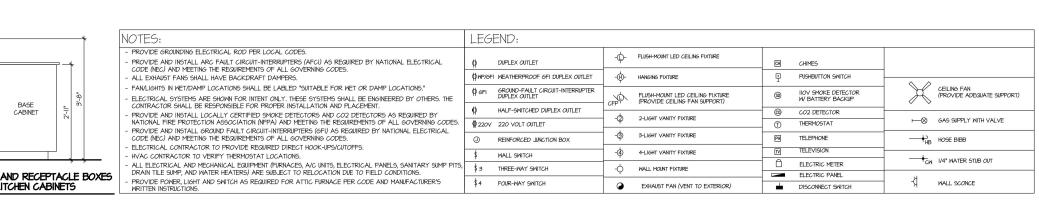
EXHAUST FAN (VENT TO EXTERIOR)

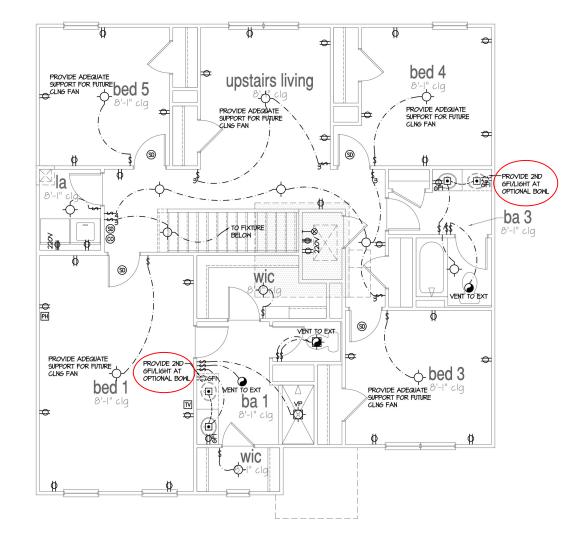


## STANDARD ELECTRICAL BOX HEIGHTS



SWITCH AND RECEPTACLE BOXES OVER KITCHEN CABINETS





# 2nd Floor Plan 'A' scale: 1/4\*=1'-0\* AT 22\*X34\* LAYOUT 1/8\*=1'-0\* AT 11\*X17\* LAYOUT

	LEGI	END:						
	ф	DUPLEX OUTLET	ф-	FLUSH-MOUNT LED CEILING FIXTURE	CH	CHIMES		
	ФиР/6FI	WEATHERPROOF GFI DUPLEX OUTLET	-ф-	HANGING FIXTURE	9	PUSHBUTTON SWITCH	^ ^	
Æ	∯ 6FI	GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX CUTLET	CFP	FLUSH-MOUNT LED CEILING FIXTURE (PROVIDE CEILING FAN SUPPORT)	(9)	IIOV SMOKE DETECTOR W BATTERY BACKUP	$\times$	CEILING FAN (PROVIDE ADEQUATE SUPPORT)
	ф	HALF-SWITCHED DUPLEX OUTLET	<b>—</b> .	O LIGHT VANITY FIVERE	@	CO2 DETECTOR		
ES.	<b>\$</b> 220∨	220 VOLT OUTLET	-\$	2-LIGHT VANITY FIXTURE	①	THERMOSTAT	⊢⊗	GAS SUPPLY WITH VALVE
	0	REINFORCED JUNCTION BOX	-\$	3-LIGHT VANITY FIXTURE	PH	TELEPHONE	→+ <sub>HB</sub>	HOSE BIBB
	\$	WALL SWITCH		4-LIGHT VANITY FIXTURE	TV	TELEVISION		
PITS,	\$ 3	THREE-WAY SWITCH	-0	WALL MOUNT FIXTURE	<u> </u>	ELECTRIC METER	TOM	I/4" WATER STUB OUT
	\$ 4	FOUR-WAY SMITCH	•	EXHAUST FAN (VENT TO EXTERIOR)	-	ELECTRIC PANEL DISCONNECT SWITCH	∹ൃ	WALL SCONCE

NO: DATE: REVISION: 04.25.22 PROFESSIONAL SEAL:

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.	KOOI	Live Loads		
	1.1.	Conventional 2x	20	PE
	1.2.	Truss	20	PE
		1.2.1. Attic Truss	60	P
2.	Roof	Dead Loads		
	2.1.	Conventional 2x	10 F	-SF
	2.2.	Truss	20	PS
3.	Snow		15 F	SF
	3.1.	Importance Factor	1.0	
4.	Floor	Live Loads		
	4.1.	Typ. Dwelling	40	P

42. Sleeping Areas . 40 PSF 5. Floor Dead Loads Conventional 2x 10 PSF

6. Ultimate Design Wind Speed (3 sec. gust) ...
6.1. Exposure ..... 6.2. Importance Factor... 6.3. Wind Base Shea

6.3.1. VX = 6.32. VY = 7. Component and Cladding (in PSF)

MEAN ROOF HT.	UP TO 30'	30'1"-35'	35'1"-40'	40'1"-45'
ZONE 1	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

00151111	_	
8.1.	Site Class	D
82.	Design Category	C
8.3.	Importance Factor	1.0
0.1	Catanta Han Canada	1

Spectral Response Acceleration
 S.S.I. Sms = %g
 S.S.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

## HAYDEN LH

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 D.R. Horton, Inc., 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 SUMMIT immediately.

### SHEET LIST:

REVISION LIST:

Sheet No.	Description
C9I	Cover Sheet, Specifications, Revisions
S1.Øm	Monolithic Slab Foundation
S1.Øs	Stem Wall Foundation
51.0c	Crawl Space Foundation
S1.0b	Basement Foundation
52.0	Basement Framing Plan
63.0	First Floor Framing Plan
54.0	Second Floor Framing Plan
S5.Ø	Roof Framing Plan
S6.Ø	Basement Bracing Plan
ST.Ø	First Floor Bracing Plan
58.0	Second Floor Bracing Plan

Revision No.	Date	Project No.	Description
1	4.19.21	TØ177	Updated elevation names
			Added Stem Wall, Crawlspace, and Basement Foundations
2	6.14.21	TØ177	Added OX-15 option and table for framing
3	11.23.21	TØ177	Updated framing in the first floor
		1	

#### DR HORTON PROJECT SIGN-OFF:

Manager	Signature
Operations	
Operations System	
Operations Product Development	

SUMMIT



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



DATE: IV23/202 9CALE: 22x34 1/4"+1"-@" lbd1 1/8"+1"-@"

CHECKED BY: CTB

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

STRUCTURAL MEMBERS ONL

PROJECT 4 528-TØITT DRAWN BY: JCEF

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.

of the current local building 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

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 mil polysthylene 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 materia

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"

Structural steel shall receive one coat of shop applied rust-inhibitive paint. All steel shall have a minimum yield stress  $\langle F_u \rangle$  of 36 ksi unless

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

<u>ICREIE:</u>

Concrete shall have a normal weight aggregate and a minimum compressive strength (f'<sub>c</sub>) 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% 32.Exterior Slabs: 5%

No admixtures shall be added to any structural concrete without written permission of the SER.

Concrete slabs-on-grade shall be constructed in accordance with ACI 302.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.

 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 B182.1-1981. Lead holes for lag screws shall be in accordance with NDS specifications

All beams shall have full bearing on supporting framing members unless otherwise noted.

Exterior and load bearing stud walls are to be 2x4 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 "I'lnimm 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.

And 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

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.

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

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

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

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 property of the property of

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

STRUCTURAL MEMBERS ONLY

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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 Arrowidge Blvd. Charlotte, NC 28213

Hayden LH Crawl Space Foundation



22869 5/5/9 REFER TO COVER 9-EET FOR A COMPLETE LIST OF REVISIONS

S1.1c

REQUIRED BRACED WALL PANEL CONNECTIONS						
			REQUIRED (	CONNECTION		
METHOD	MATERIAL	MIN. THICKNESS	@ PANEL EDGES	@ INTERMEDIATE SUPPORTS		
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS	6d COMMON NAILS © 12" O.C.		
GB	GYPSUM BOARD	1/2"	5d COOLER NAILS** © 7" O.C.	5d COOLER NAILS** @ 7" O.C.		
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS	6d COMMON NAILS © 12" O.C.		
PF	WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.6.4	PER FIGURE R602.10.6.4		
"OR EQUIVALENT PER TABLE RT02.3.5						

#### 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.
- THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD (UNO). FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON
- FOR COMMISSION OFFICIALS (INCLUDING INFILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALL)
  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 TASONRY OR CONCRETE STEM WALLS W/A LENGTH OF 48" OR LESS SUPPORTING A
  BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE
  R602.104.3 OF THE 2010 NCRC.

   BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN
  ACCORDANCE WITH SECTION R602.104.4

   BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN
  ACCORDANCE WITH SECTION R602.104.5

   CONDENSE WITH SECTION R602.104.5

- 15. CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.104.6
- 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<sub>B</sub> = 1600 PSI, F<sub>1</sub> = 285 PSI, E = 1.9x10<sup>6</sup> PSI
  PARALLAM (PSI), F<sub>1</sub> = 2900 PSI, F<sub>2</sub> = 290 PSI, E = 125x10<sup>6</sup> 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 A615 AND SHALL HAVE A MINIMUM COVER OF 3".

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

  FLITCH BEAMS, 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.

FIRST FLOOR BRACING (FT)

CONTINUOUS SHEATHING METHOD

11.6

BWL 1-1

BWL 1-2 BWL 1-A REQUIRED PROVIDED

24.8

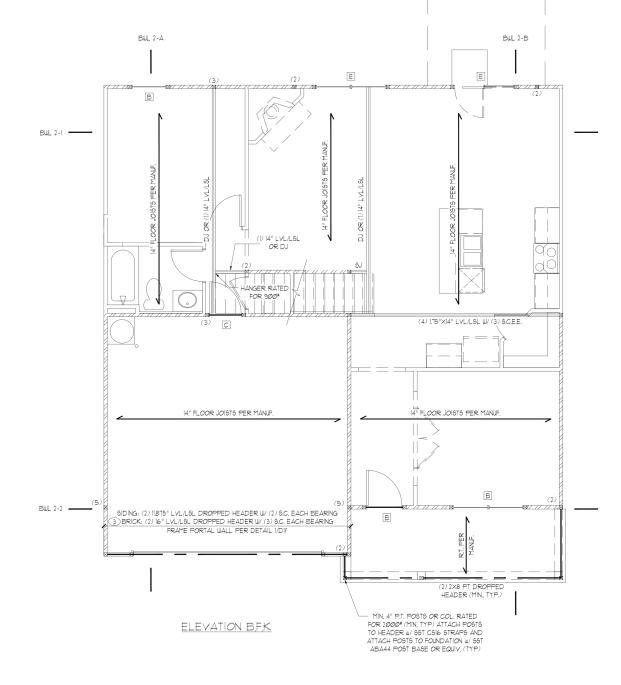
15.0

40.0

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"



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)				
H	(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'-Ø"	(2)
10'-0"	(3)
12'-0"	(3)
14'-Ø"	(3)
16'-0"	(4)
18'-Ø"	(4)

WALL STUD SCHEDULE (10 FT HEIGHT)						
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:

1. BRACED WALLS STUDS SHALL BE A MAX. OF 16" OC.

2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE

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'-Ø"		
2	L5x3x1/4"	6'-0" TO 10'-0"		
3	L5x3-1/2x5/16"	GREATER THAN 10'-0		
L5x3-1/2x5/16" ALL ARCHED  ROLLED OR EQUIV. OPENINGS				
SECURE LINTEL TO HEADER W/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED ® 16" O.C. (TYP FOR )				

SHADED WALLS INDICATED LOAD BEARING WALLS

ALL HEADERS WHERE BRICK IS USED, TO BE:

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. R602.10.1 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

SUMMIT

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

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DATE: 11/23/20/2 PROJECT 5 528-TØTT CHECKED BY: CTB

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

REQUIRED BRACED WALL PANEL CONNECTIONS						
			REQUIRED (			
METHOD	MATERIAL	MIN. THICKNESS	@ PANEL EDGES	@ INTERMEDIATE SUPPORTS		
CS-USP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS 8 12" O.C.		
GB	GYPSUM BOARD	1/2"	5d COOLER NAILS** ⊕ 1" O.C.	5d COOLER NAILS** @ T" O.C.		
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS	6d COMMON NAILS # 12" O.C.		
PF	WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.6.4	PER FIGURE R602.10.6.4		
	"OR EQUIVALENT PER TABLE RT0235					

#### 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 R602.10.1
- ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1.
- THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD (UNO), FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES 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. 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
- 12. MASONRY OR CONCRETE STEM WALLS W/ A LENGTH OF 48" OR LESS SUPPORTING A 12. MASONRY OR CONCRETE STEM WALLS W/A LENGTH OF 48" OR LESS SUPPORTING A
  BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE
  R602.10.4.3 OF THE 2010 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
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO) 17. ABBREVIATIONS:

GB = GYPSUM BOARD

WSP = WOOD STRUCTURAL PANEL GB = GYP5UM BOARD

C6-XXX = CONT. SHEATHED

FF = PORTAL FRAME

WOT = WOOD VIRULIANAL | AND VIRULIANAL | AND

### 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<sub>B</sub> = 2600 PSI, Fv = 238 PSI, E = 1.9x10<sup>6</sup> PSI
  PARALLAM (19L): F<sub>B</sub> = 2900 PSI, Fv = 239 PSI, E = 1.25x10<sup>6</sup> PSI
  ALL WOOD MEMBERS SHALL BE '2' SYP UNLESS NOTED ON PLAN, ALL
  STUD COLUMNS AND JOISTS SHALL BE '2' SYP (UNO).
  ALL BEAYIS SHALL BE SUPPORTED WITH A (2) 2x4 '2' SYP STUD COLUMN
  AT EACH END UNLESS NOTED OTHERWISE.
  ALL RENFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO
  ASTMACKER AND SHALL USES AND MISSING COLUMN COLUMN.

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

  8. CONTRACTOR TO PROVIDED LOCKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- PERFENDICULAR 10 RAFIERD.
  FLITCH BEAMS, 4-PLY LYLS AND 3-PLY SIDE LOADED LYLS 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

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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.

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

SECOND FLOOR FRAMING PLAN

BWL 2-1 6.0 BWL 2-2 6.0 BWL 2-A

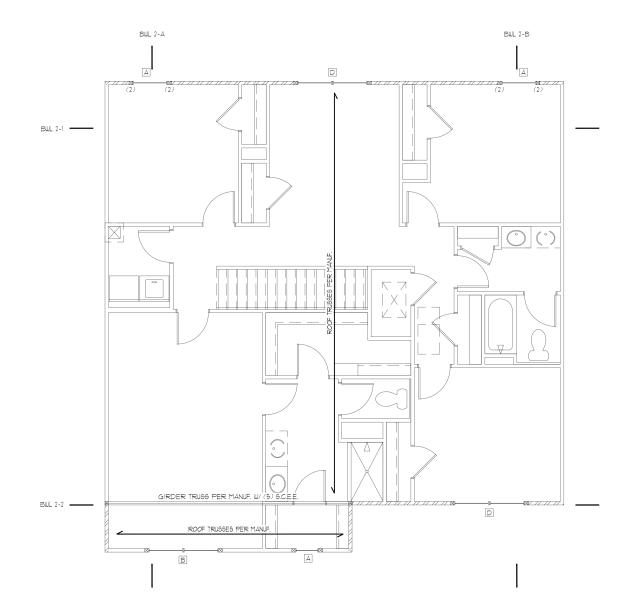
SECOND FLOOR BRACING (FT)

CONTINUOUS SHEATHING METHOD REQUIRED

27.0

25.0

40.0



ELEVATION B.F.K.

HE,	ADER SCHED	JLE
TAG	SIZE	JACKS (EACH END
А	(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)

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"	(1)
6'-0"	(2)
8'-0"	(2)
10'-0"	(3)
12'-Ø"	(3)
14'-Ø"	(3)
16'-0"	(4)
18'-0"	(4)

WALL STUD SCHEDULE (10 FT HEIGHT)					
STUD SIZE		STUD SPACING (O.C.)			
	ROOF ONLY	ROOF \$ 1 FLOOR	ROOF \$ 2 FLOORS	NON-LOAD BEARING	
2×4	24"	16"	12"	24"	
2x6	24"	24"	16"	24"	
NOTES					

I. 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 LINTEL TO HEADER #/ (2) 1/2" DIAMETER LAG					

9CREWS 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 4 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 gineering, Labora & Testing, Inc. No. F-1454

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

QĬ. 00 Ĭ  $\sigma$ Hayden LH Secon



DATE: 11/23/20/2 8CALE: 22x34 |/4"=|"-@" |bd7 |/8"=|"-@" 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	NG & FASTENERS		
1200 LBS	(2) H2.5A	CSI6 (END = II")	DTT2Z		
145Ø 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	LGT3-5D62.5	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 REOZIILI. WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION REOZI35 OF THE 2018 NCRC. REFER TO BRACED WALL PLANS FOR SHEATHING AND FASTENER REQUIREMENTS.

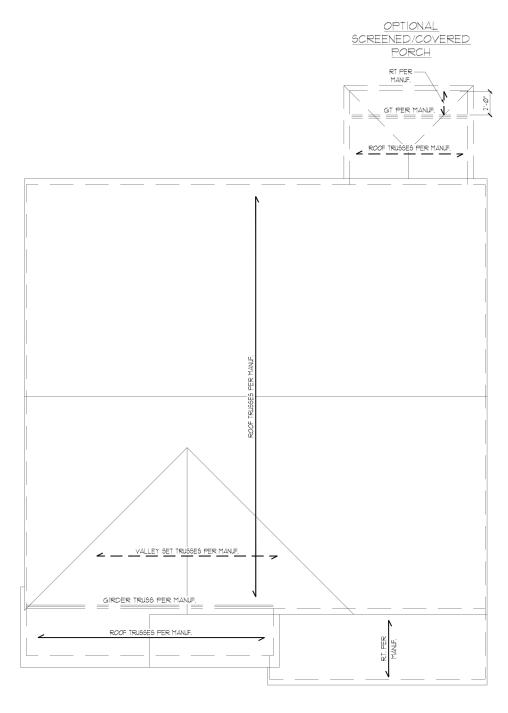
THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL, PLANS PROVIDED BY DR. HORTON COMPLETED/REVISED ON A/B/2/. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C., IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, 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"



ELEVATION B.F.K.





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 Tupe: 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

ign L	oads:		
1.		Live Loads	
		Conventional 2x	
	1.2.	Trus <b>s</b>	20 PS
		12.1. Attic Truss	60 PS
2.		Dead Loads	
	2.1.	Conventional 2x	10 PSI
	2.2.	Trus <b>s</b>	20 PS
3.			
	3.1.	Importance Factor	lø
4.	Floor	Live Loads	
	4.1.	Typ. Dwelling	40 PS
	4.2.	Sleeping Areas	30 PS
		Decks	
	4.4.	Passenger Garage	50 PS
5.	Floor	Dead Loads	
	5.1.	Conventional 2x	10 PSI
	5.2.	I-Joist	15 PSF

53. 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'	<b>3</b> Ø'l"-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 <b>0</b> .7	20.4,-21.3
ZONE 5	18.2,-24.0	19.2,-25.2	19.9,-26.1	20.4,-26.9

Seismi	c		
8.1.	Site Class	 ·····	. D
8.2.	Design Category	 	. C
8.3.	Importance Factor	 	. I.Ø
84	Seismic Use Group		1

8.4. Seismic Use Group \_\_\_\_\_\_\_ 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: TBD

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:

ANCHOR BOLT	PT	PRESSURE TREATED
ABOVE FINISHED FLOOR	RS	ROOF SUPPORT
CEILING JOIST	SC	STUD COLUMN
CLEAR	<b>5</b> J	SINGLE JOIST
DOUBLE JOIST	SPF	SPRUCE PINE FIR
DOUBLE STUD POCKET	SST	SIMPSON STRONG-TIE
EACH END	<b>S</b> YP	SOUTHERN YELLOW PINE
EACH WAY	ŤJ	TRIPLE JOIST
OT TO SCALE	TSP	TRIPLE STUD POCKET
ON CENTER	TYP	TYPICAL
POUNDS PER SOUARE FOOT	UNO	UNLESS NOTED OTHERWISE
POUNDS PER SQUARE INCH	WWF	WELDED WIRE FABRIC
	BOYE FINISHED FLOOR EILING JOIST LEAR OUBLE JOIST OUBLE STUD POCKET ACH END ACH WAY OUT TO SCALE N CENTER OUDLS FER SQUARE FOOT	BOVE FINISHED FLOOR RS EILING JOIST SC LEAR S, LEAR S, UBLE JOIST SFF OUBLE STUD POCKET S6T ACH END SYP ACH WAY T, TO TO GCALE TSP N CENTER TYP OUNDS PER SQUARE FOOT UNO

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

Project No.

Revision

No.

Sheet No.	Description	
CSI	Cover Sheet, Specifications, Revisions	
Dlm	Monolithic Slab Foundation Details	
Dis	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<sub>u</sub>) of 36 ksi 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 racking 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<sub>b</sub> = 26000 psi 2.3.F<sub>v</sub> = 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 new and standard C-1
  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
- 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
- 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."
- 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

#### be per the manufacture 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 edge support to use of TKG bluecod 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

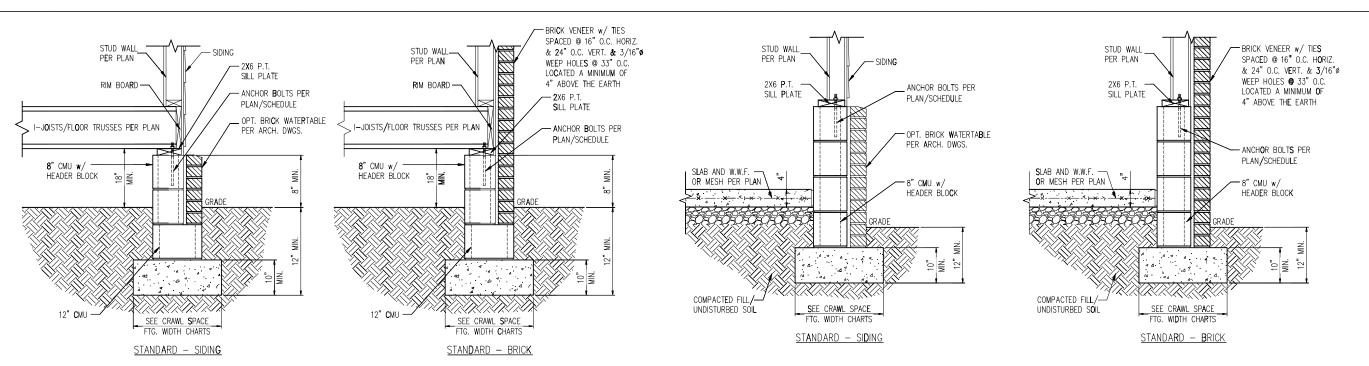
Details Foundation Space 1 PROJECT: Standard D Crawl



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

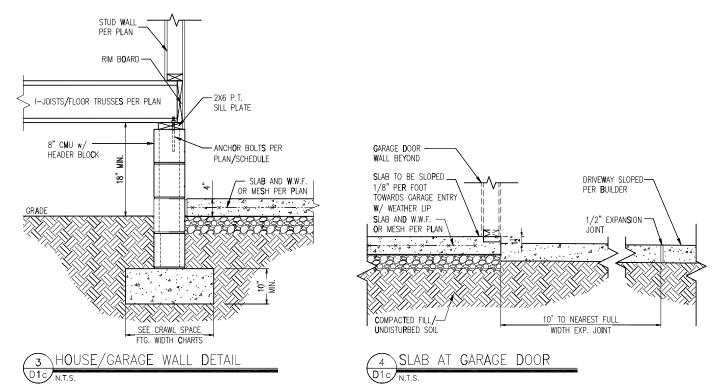
REFER TO GOVER SHEET FOR A COMPLETE LIST OF REVISIONS

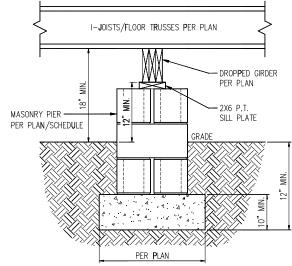
Dlc



TYP. FOUNDATION WALL DETAIL

TYP. GARAGE CURB DETAIL





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

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

### CRAWL SPACE FOOTING WIDTH

PIER SIZE AND HEIGHT SCHEDULE

010000000000000000000000000000000000000	1110 111			
# OF STO <b>R</b> IES	WIDTH BASED	WIDTH BASED ON SOIL BEARING CAPACITY		
	150 <b>0</b> 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 S	SUPPORT			

## WALL ANCHOR SCHEDULE

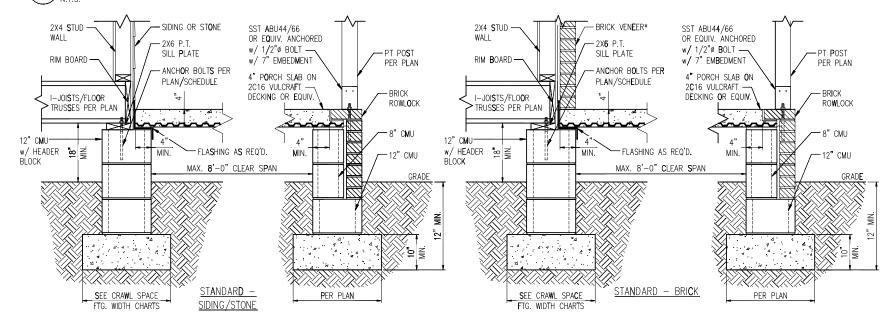
TITLE ANTOHOR SOMEBULE				
TYPE OF ANCHOR	MIN. CONC.	SPACING	INTERI <b>O</b> R	EXTERIOR
	EMBEDMENT	EMBEDMENT	WALL	WALL
1/2"ø A3 <b>0</b> 7 BOLT <b>S</b> w/	7"	6'-0"	YES	YES
STD. 90° <b>B</b> END				
S\$T - MAS	4"	5'-0"	NO	YES
HILTI KWIK BOLT KBI 1/2-2-3/4	2-1/4"	6'-0"	YES	NO
1/2"ø HILTI THREADED ROD	7"	6'-0"	YES	YES
w/ HIT HY150 ADHESIVE				

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)

FASTENERS	MAX. 8'-0" JOIST	MAX. 16'-0" JOIST
	SPAN	SPAN
5/8" GALV. BOLTS w/ NUT & WASHER b	(1) <b>@</b> 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)

FASTENERS	MAX. 8'-0" JOIST	MAX. 16'-0" JOIST
	SPAN	SPAN
5/8" GALV. BOLTS w/ NUT & WASHER b	(1) <b>@</b> 2'-4" O.C.	(1) @ 1'-4" O.C.

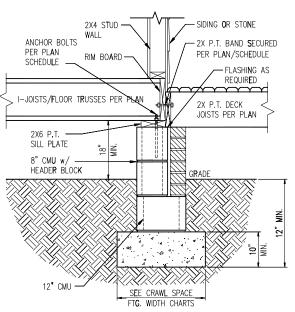
- a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOIST SPANS IS ALLOWED.
- b. MINIMUM EDGE DISTANCE FOR BOLTS IS  $2\frac{1}{2}$ ".

#### CRAWL SPACE FOOTING WIDTH

FOOTING WIDTH FOR BRICK SUPPORT

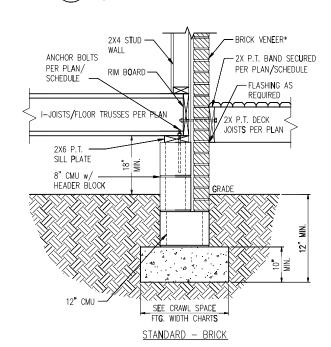
# OF STORIES	WIDTH BASED (	ON SOI <b>L</b> BEARIN	ig capa <b>c</b> ity
	1500 PSF	2000 <b>P</b> SF	2500 P <b>\$</b> F
1 STORY - STD.	16"	16"	16"
1 Story – Brick <b>V</b> eneer	21"*	21"*	21"*
2 STORY - STD.	16"	16"	16"
2 STORY - BRICK VENEER	21"*	21"*	21"*
3 STORY - STD.	23"	18"	18"
3 Story - Brick Veneer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



.DE**c**k attachme**n**t detai**l** 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

SUMMIT



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

Details Foundation Space 1 PROJECT: Standard Di Crawl

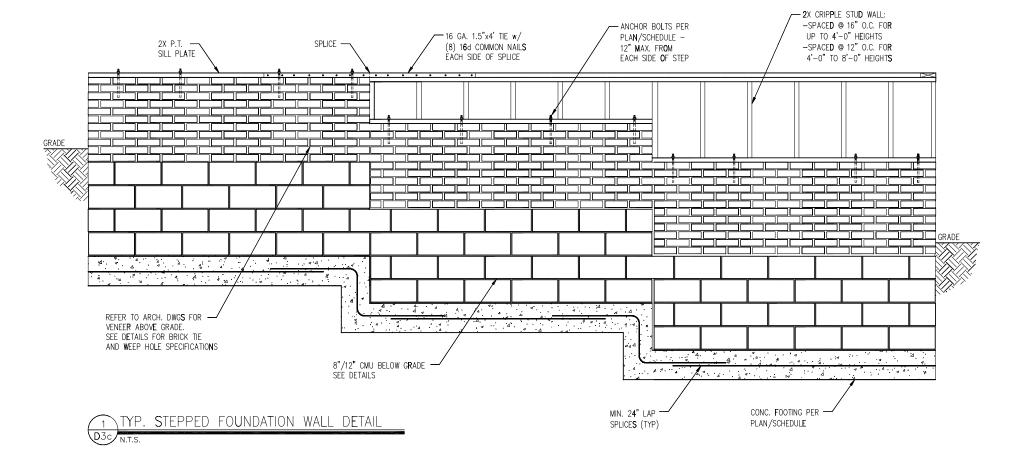


DATE: Ø2/4/2023 9CALE: 22x34 1/4"+1"-6" lbcT 1/8"+1"-6" PROJECT 4 528-66R DRAWN BY: JOEF CHECKED BY: BCP

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.
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- 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 Division 8001 Arrowridge Bivd. Charlotte, NC 28213

PROJECT: Standard Details (0x-15) Crawl Space Foundation Details



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

A 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

DATE: 02/4/2023

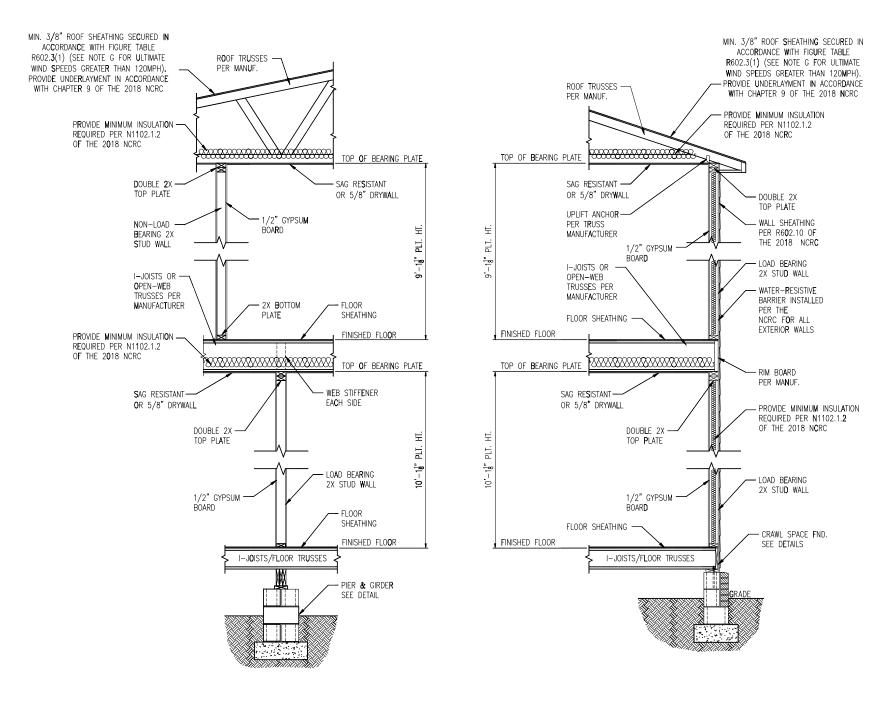
9CALE: 22:64 1/4\*1\*-6\*
BMT 1/6\*1\*-6\*
PROJECT 1: 528-66R

DRAIN BY: JCEF
CHECKED 5Y: BCP

ORIGINAL INFORMATION
PROJECT DATE
1/31/2011

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

D4c

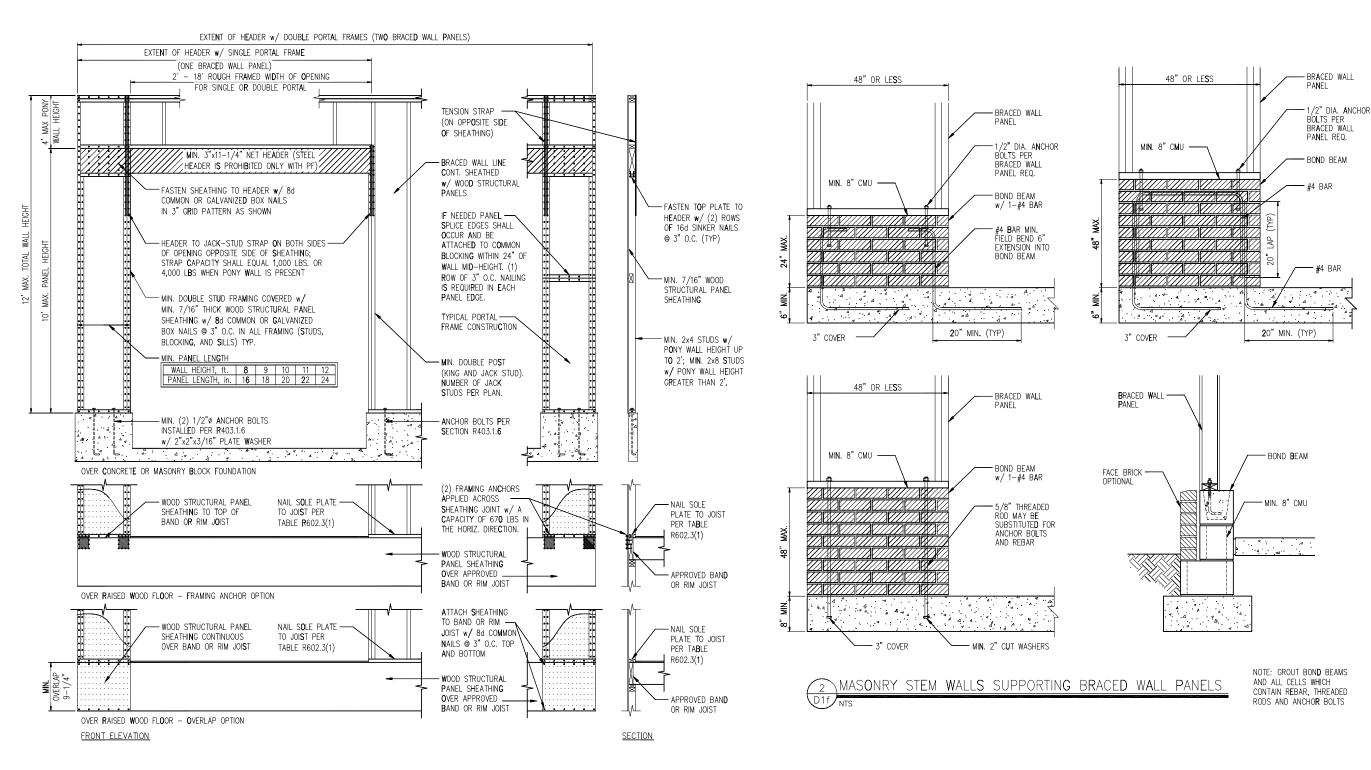


1 TYP. INTERIOR LOAD BEARING WALL SECTION

TYP. EXTERIOR LOAD BEARING WALL SECTION

3/4" = 1'-0" - SIMILAR w/ E

-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

SUMMIT

SIDE LABORATOR TENNO

120 PERMARC DR. SUITE 100

RALIEGO, NC. 2703

OFFICE: 915.380,9991

FAX: 1915.380,9993



Carolina Division ridge Blvd.

CLIENT:
DR Horton Carolina DIVI
8001 Arrountige BIVd.
Charlotte, NC 28213

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

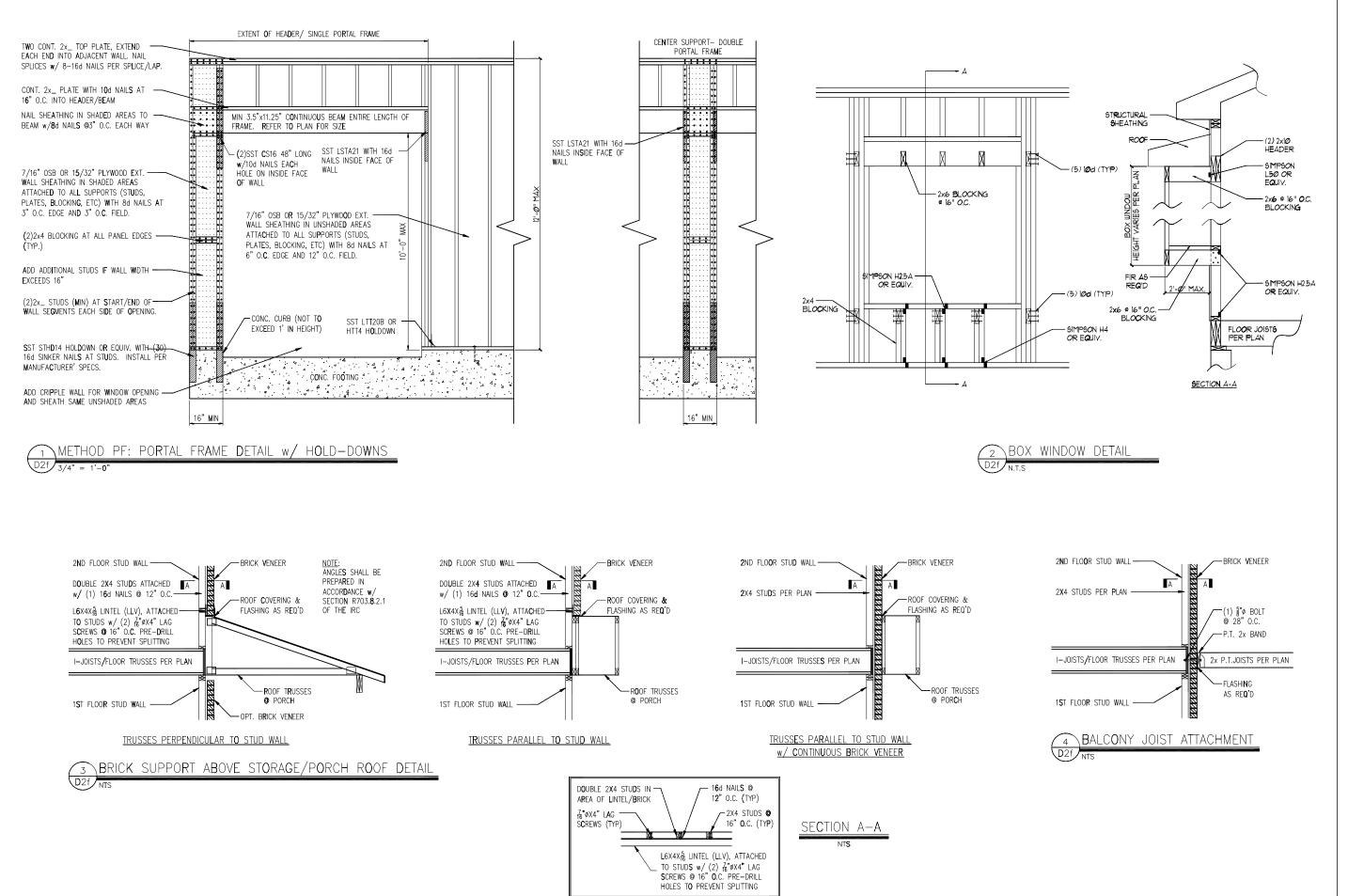


DRAINS
DATE: 02/4/02/3
SCALE: 22/04 1/4\*1\*-0\*
INT 1/8\*1\*-0\*
PROJECT \* 5/28-06R
DRAIN BY: JCEF
CHECKED BY: BCP

ORIGINAL INFORMATION
PROJECT DATE
1/31/2017

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

Dlf



SUMMIT

130 PRIMARC DR., SUITE 100

RALEDRI, NC. 27603

GYPICE: 193-380, 5991

WWW. 1913-380, 5991



ton Carolina Division rouridge Blvd.

PROJECT. Standard Details (OX-15) Framing Details

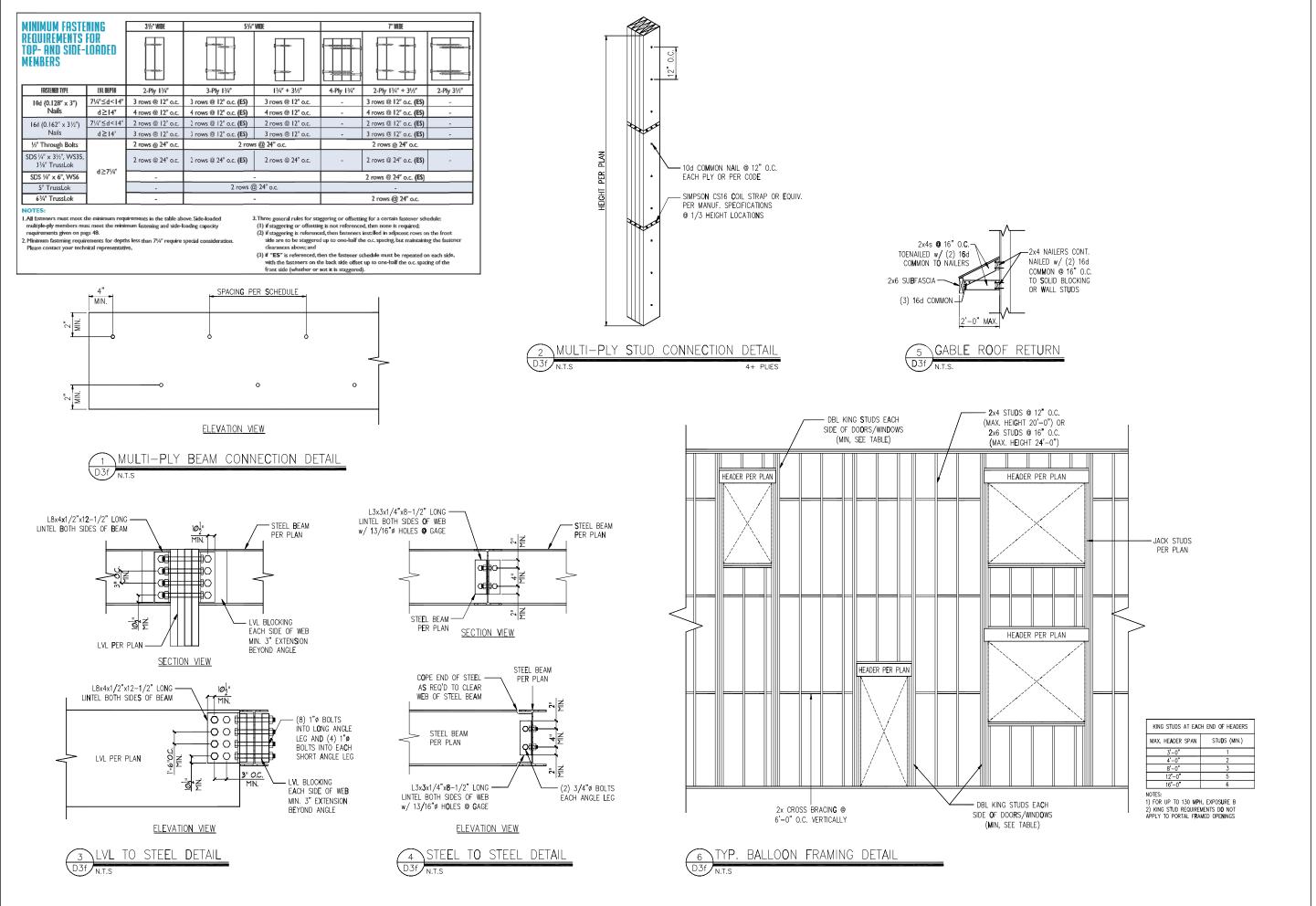


DRAWNS
DATE #2/M/1023
SCALE: 22x24 V4\*\*I\*-Ø\*
PROJECT \*1 528-06-R
DRAWN BY: XEF
CHECKED BY: BCP

ORIGINAL INFORMATION
PROJECT \* DATE
1/31/2011

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

D2f







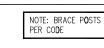
alls (0x-15) | Detail PROJECT: Standard Details Framing



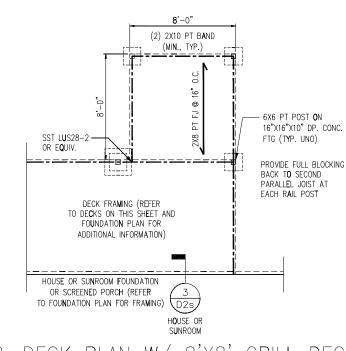
DATE: Ø2/4/2023 9CALE: 22x34 V4"+1'-6" lbtT V8"+1'-6" PROJECT & 528-66R DRAWN BY: JOEF CHECKED BY: BCP

REFER TO GOVER SHEET FOR A COMPLETE LIST OF REVISIONS

D3f



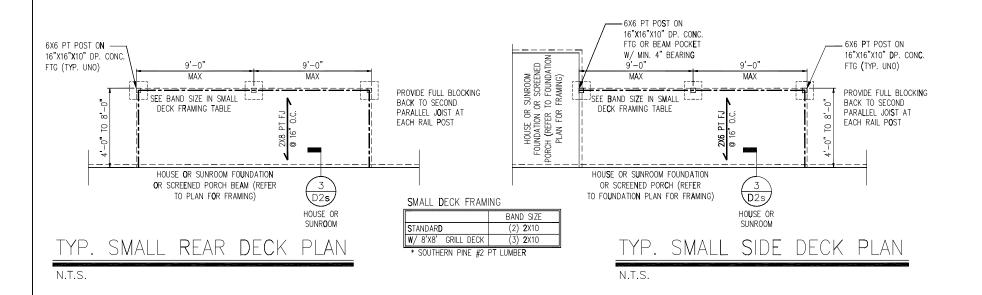
SÜMMIT



PROVIDE FULL BLOCKING

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

<u>- t---</u>-

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,
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  4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND
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Details Wall PROJECT: Standard I Stem STRUCTURAL MEMBERS ONLY

Details

Foundation

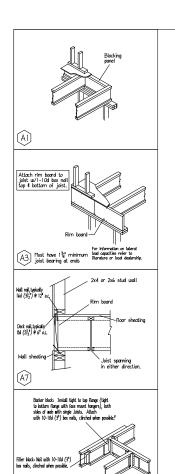
CLIENT: DR Hort 8001 A

DATE: 3/2/2010 8CALE: 22±34 1/4"∗1"-**6**" Ibd1 1/8"∗1"-**6**" PROJECT & 528-Ø6R DRAWN BY: LAG

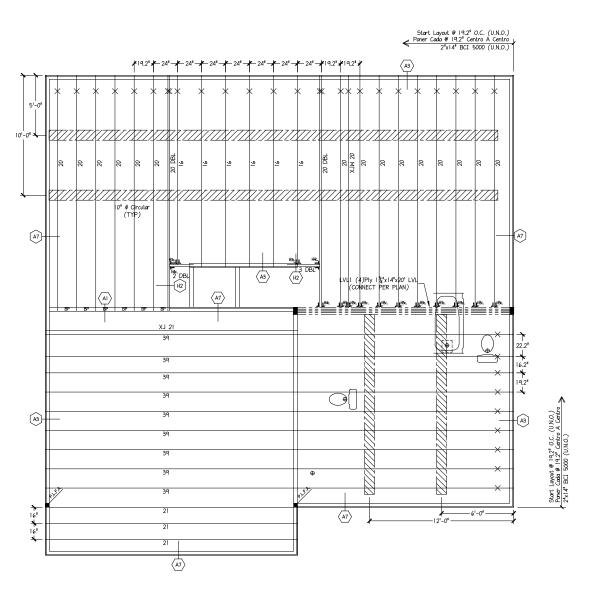
CHECKED BY: WAJ ORIGINAL INFORMATION
PROJECT \* DATE
1/31/2011

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

D3s

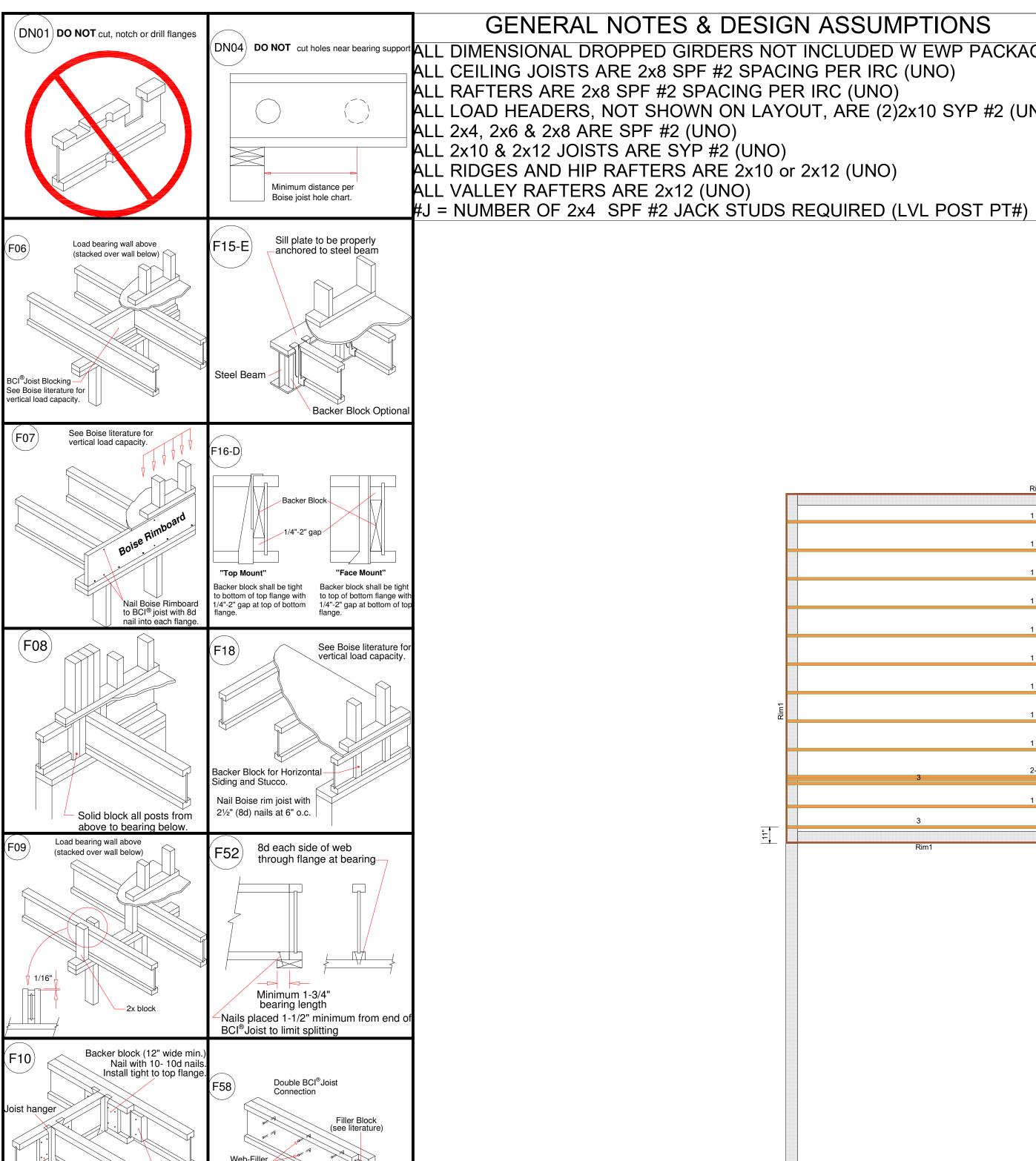


(H2)



2ND FLOOR I - JOIST PLACEMENT PLAN DR HORTON - HAYDEN





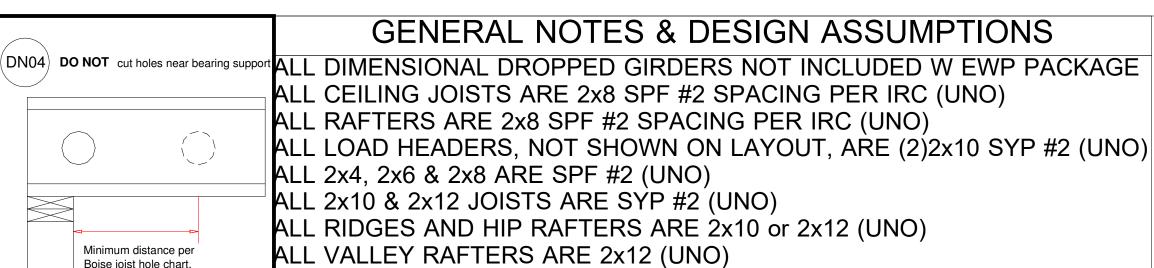
Nail with

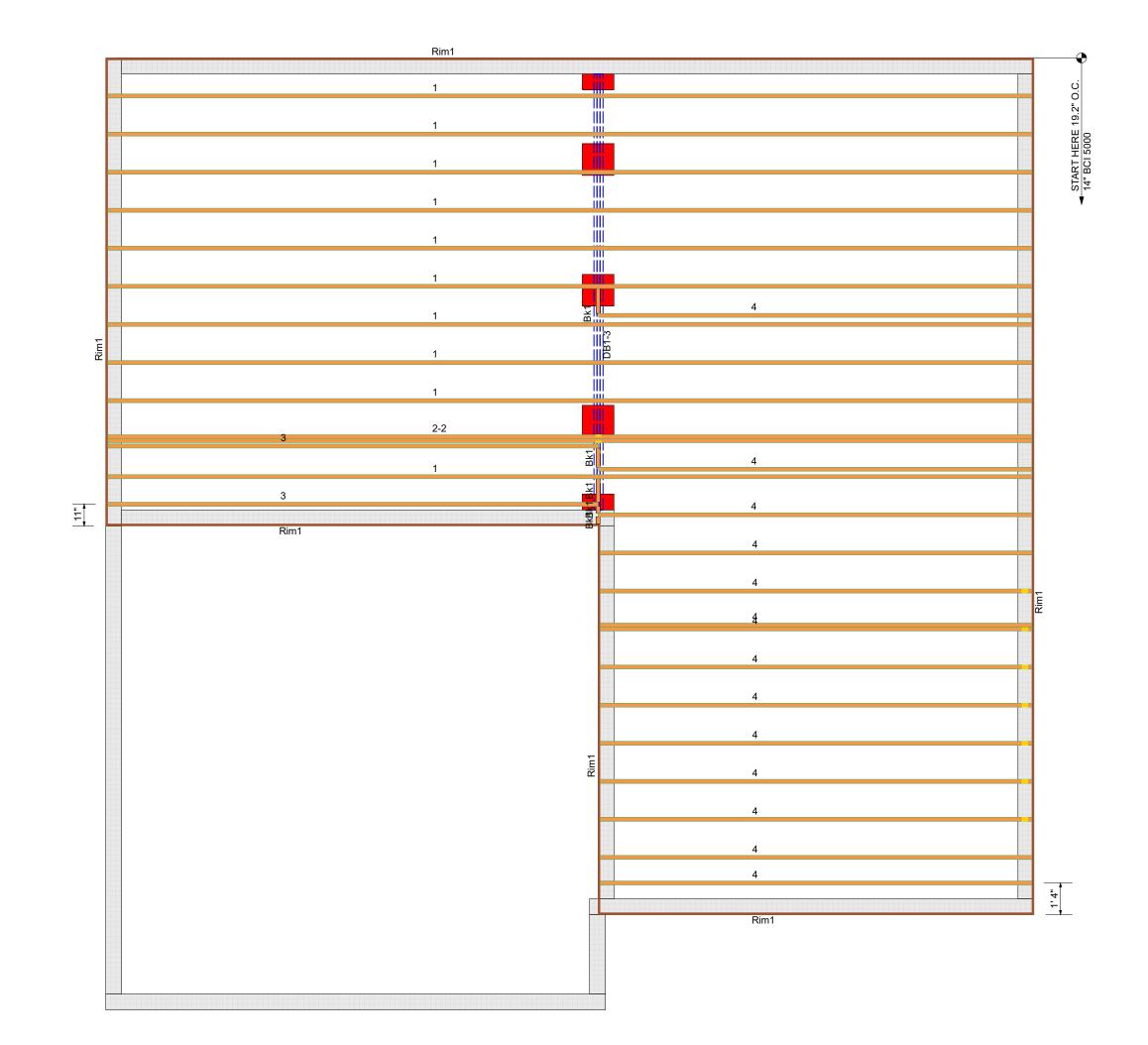
Backer block required where top mount hanger load exceeds 250 lbs.

Install tight to top flange.

Connection valid for all applications.

Contact Boise EWP Engineering for specific condition





		Products		
PlotID	Length	Product	Plies	Net Qty
1	39' 0"	14" BCI® 5000s-1.8	1	10
2-2	39' 0"	14" BCI® 5000s-1.8	2	2
3	21' 0"	14" BCI® 5000s-1.8	1	2
4	19' 0"	14" BCI® 5000s-1.8	1	14
DB1-3	20' 0"	2x10 SP No.2	3	3

1" x 14" BC RIM BOARD OSB

14" BCI® 5000s-1.8

Live Load psf Dead Load psf Joist & Rafter Area Loads Primary Living Secondary & Attic Permanent Stairs 30 Ceiling - Limited Storage 20 10 Ceiling - No Storage 10 Roof - No Ceiling Load 20 Flat Roof or Catherdral w/Drywall Ceiling 20

www.bldr.com **Boise Cascade** 

7601 BOEING DRIVE GREENSBORO, NC 27409 V (336) 884-5454 4575 HAMPTON ROAD CLEMMONS, NC 27409 V (336) 712-9910

1135 ROBESON STREET FAYETTEVILLE, NC 28305 V (910) 485-1111

3189 NC HIGHWAY 5 ABERDEEN NC 28315 V (910) 944-2516

This layout and associated materials list has been prepared based on project plans and/or information provided to Builders FirstSource (BFS). It remains the responsibility of the builder, architect, designer, or other responsible persons to review this information to assure that it is appropriate, accurate, complete and complies with applicable building codes.

2.0

HAYDEN MASTER 

MINIMUM DESIGN DATA

LIVE LOAD 40 PSF DEAD LOAD 10 PSF

TOTAL LOAD 50 PSF

DOL = 100%

**DEFLECTION CRITERIA** L/480 (MINIMUM)

ARCHITECTUAL PLAN DATE XX-XX-XX REVISED ARCH. PLAN DATE XX-XX-XX

XXXXXXX

Sheet 1 of 2

