The Downton Model
Garage LEFT

STANDARD WITH OPTIONS

AUGUST 14th, 2023

BUILDING AREAS:

HEATED AREAS:			
FIRST FLOOR	±	1,670.05	SQ FT
SECOND FLOOR	±	1,314.50	SQ FT
TOTAL HEATED	**±**	**2,984.55**	**SQ FT**
OPT. TOTAL HEATED	**±**	**3,550.01**	**SQ FT**
UNHEATED AREAS:			
PORCHES	±	267.63	SQ FT
GARAGE	±	405.83	SQ FT
STORAGE (UNCONDITIONED)	±	305.91	SQ FT
STORAGE / BONUS (OPT)	±	259.55	SQ FT
TOTAL UNHEATED	**±**	**1,238.92**	**SQ FT**
3 CAR GARAGE (OPTIONAL)	±	240.00	SQ FT
OPT. TOTAL UNHEATED	**±**	**1,478.92**	**SQ FT**
TOTAL AREA UNDER ROOF:	**±**	**4,223.47**	**SQ FT**
OPT. TOTAL AREA UNDER ROOF:	±	4,463.47	**SQ FT**

SHEET INDEX

ANDERSON CREEK

1. TRELLIS FOR 2 CAR GARAGE
2. STEM WALL
3. STONE VENEER AT FRONT FOUNDATION
4. SHUTTERS
5. CEMENT SIDING
6. SCREENED PORCH WITH WOOD SCREEN DOOR.
7. WOOD SHELVING IN PANTRY & MASTER CLOSET.
8. GOURMENT CABINET UPGRADE
9. SHEETROCK ISLAND
10. SHOWER BASE WITH TILE WALLS
11. TILE FLOORING IN BATHS I/O LVP
12. TILE KITCHEN BACKSPLASH
13. LUXURY LIGHTING PACKAGE
14. UNDERCABINET LIGHTS
15. LUXURY APPLIANCE PACKAGE

ADDED OPTIONS

1. 3rd car garage front load
2. BONUS ROOM
3. OPTIONAL VANITY UPSTAIRS BATH

ORIGINAL SKETCH FRONT ELEVATION

OPTIONS

House Plan	Development	Lot #	Address	Garage Side	Total HSF	Total Under Roof
Downton	Anderson Creek	1137	78 GRADUATE CT	Left	3244.10	4463.47

EXTERIOR:

X	Elevation STD or A
	Elevation B
	Elevation C
X	Cement Siding
	Vinyl Siding
	Lap siding only
	Board and Batten
X	Trellis
	Shutters
X	3 Car Garage
	Side Load
	Garage Window Panels
	Garage door from double car to single car garage
	Garage Door to Back Yard
	Covered Back Porch
X	Screened Porch
	Side Lite
	Stone Skirt
X	Stem
	Crawl

INTERIOR:

	Extra windows in living room
	Optional Kitchen Layout
	1st Floor Guest Suite
	1st Floor Flex Room
X	Standard Electric Fireplace
	Gas Fireplace
	Shiplap Electric Fireplace
	Shiplap Gas Fireplace
	Bookshelves
X	Under Cab Lighting
X	Bonus Room
X	2nd Vanity in Secondary bathroom
	Linen Room Door (Argyle Owner Suite Only)
	Open Railing
	Attic Stairs
	Laundry Sink

ELECTRICAL:

X	Under Cab Lights
X	Second Vanity - Upstairs bathroom

REVISIONS:

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N.C. LICENSE NO.: C-1733

ASCOT
Land Development and Construction
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THE DOWNTON
COVER SHEET

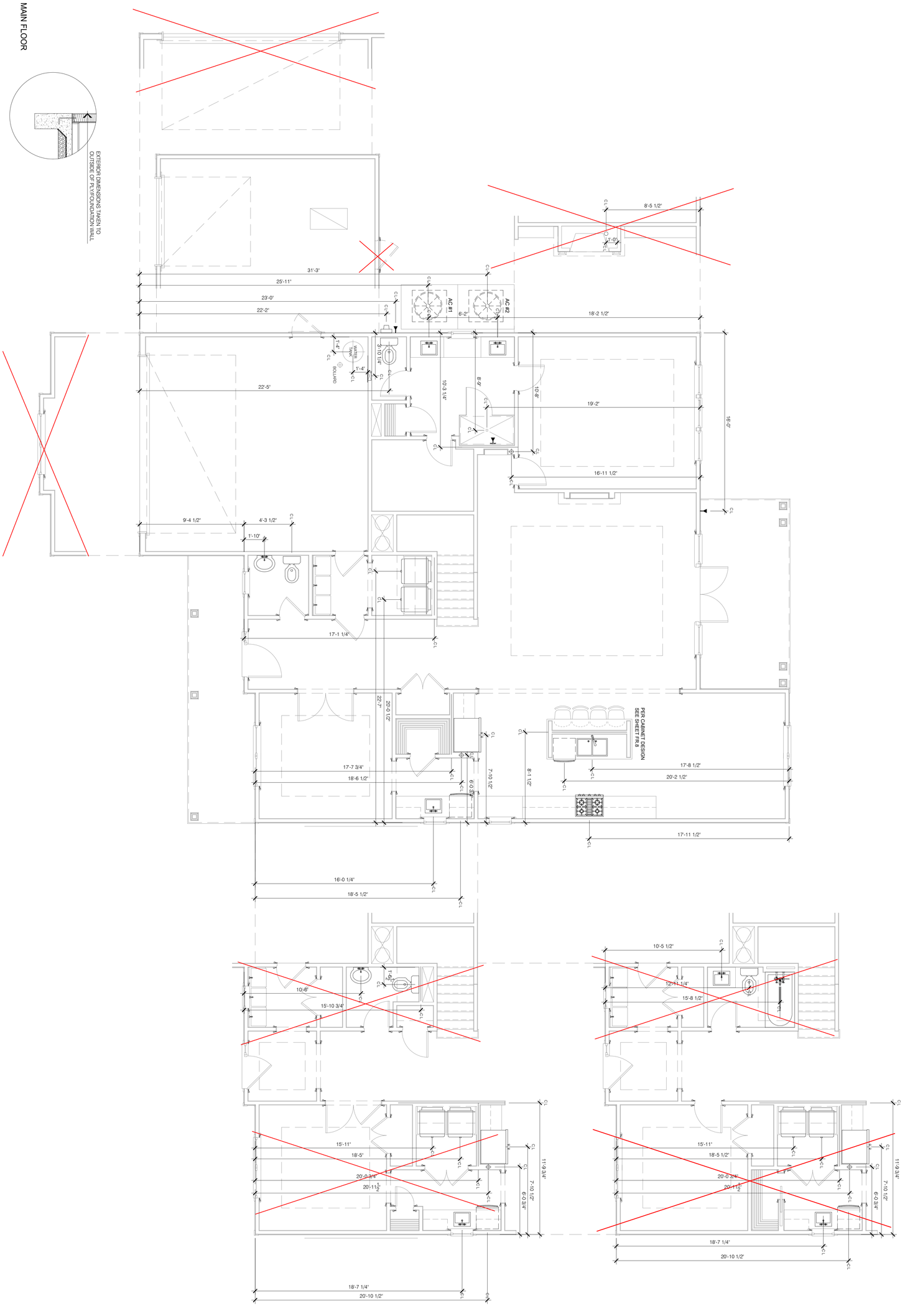
DATE: 2023-08-14
DRAWN BY: MD
REVIEWED BY: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: NTS

SHEET NUMBER#:
A0

PLUMBING FIXTURE LOCATIONS PLANS - WITH OPTIONS

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

MAIN FLOOR



DATE: 2023-08-14
DRAWN BY: MD
ENGINEER: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4" = 1'-0"

SHEET NUMBER#:

P1

THE DOWNTON

PLUMBING FIXTURE
MAIN FLOOR PLAN

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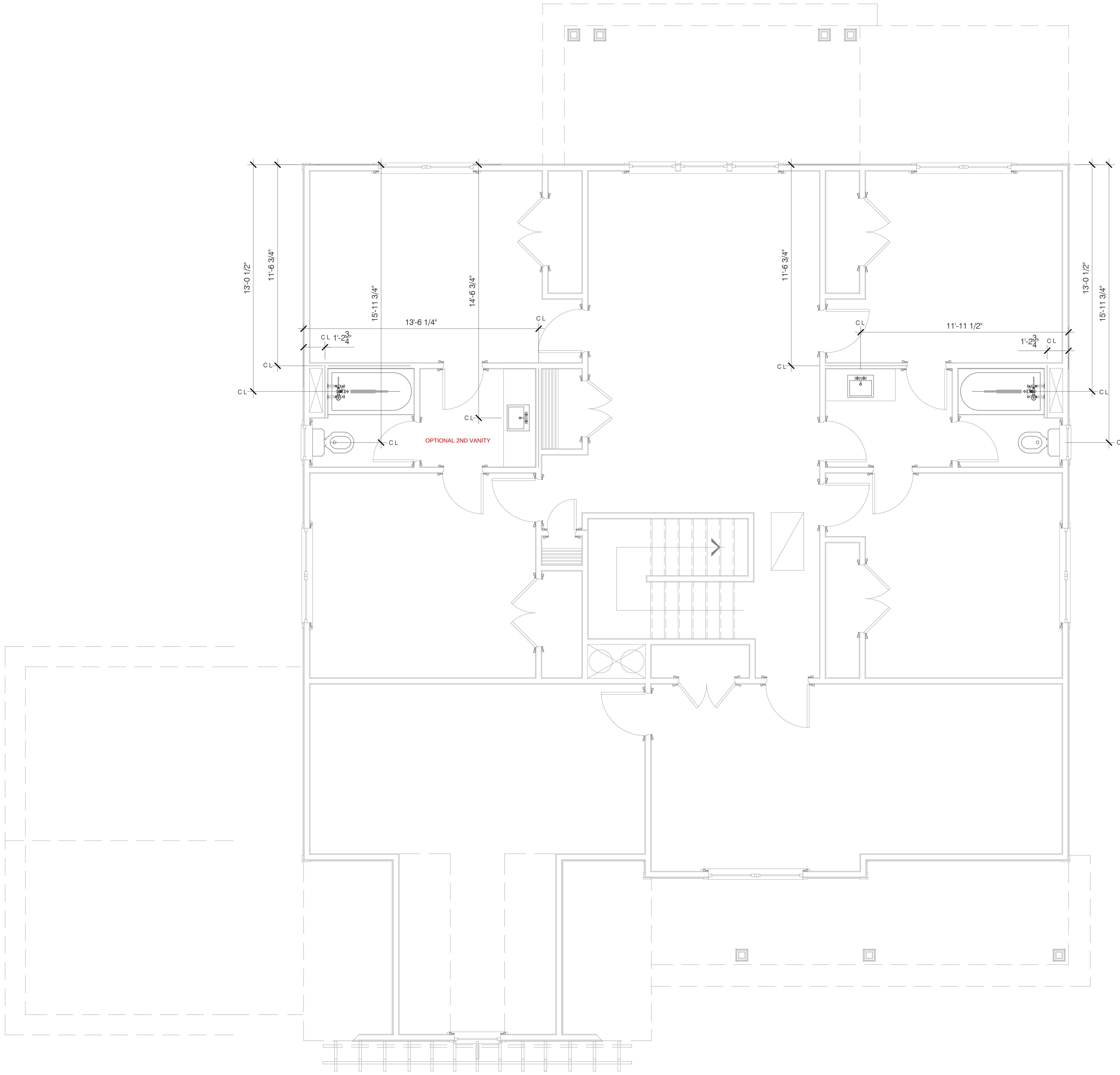
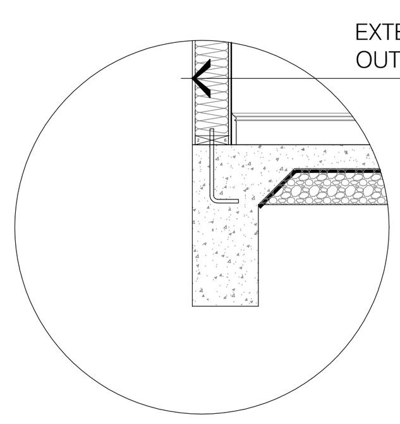
RALEIGH, NC 27603
PHONE: (919) 789-9921
N.C. LICENSE NO: C-1731

REVISIONS:





UPPER FLOOR

PLUMBING FIXTURE LOCATIONS PLANS - WITH OPTIONS
SCALE: 1/4" = 1'-0"

REVISIONS:

J.S.THOMPSON
ENGINEERING, INC.
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RALEIGH, NC 27609
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FAX: (919) 789-9921
N.C. LICENSE NO.: C-1733

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THE DOWNTON
PLUMBING FIXTURE UPPER FLOOR PLAN

DATE: 2023-08-14
DRAWN BY: MD
ENGINEER: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4" = 1'-0"

SHEET NUMBER#:
P1.1

BUILDING AREAS:

HEATED AREAS:			
FIRST FLOOR	±	1,670.05	SQ FT
SECOND FLOOR	±	1,314.50	SQ FT
TOTAL HEATED	**±**	**2,984.55**	**SQ FT**
OPT. TOTAL HEATED	**±**	**3,550.01**	**SQ FT**
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TOTAL AREA UNDER ROOF:	**±**	**4,223.47**	**SQ FT**
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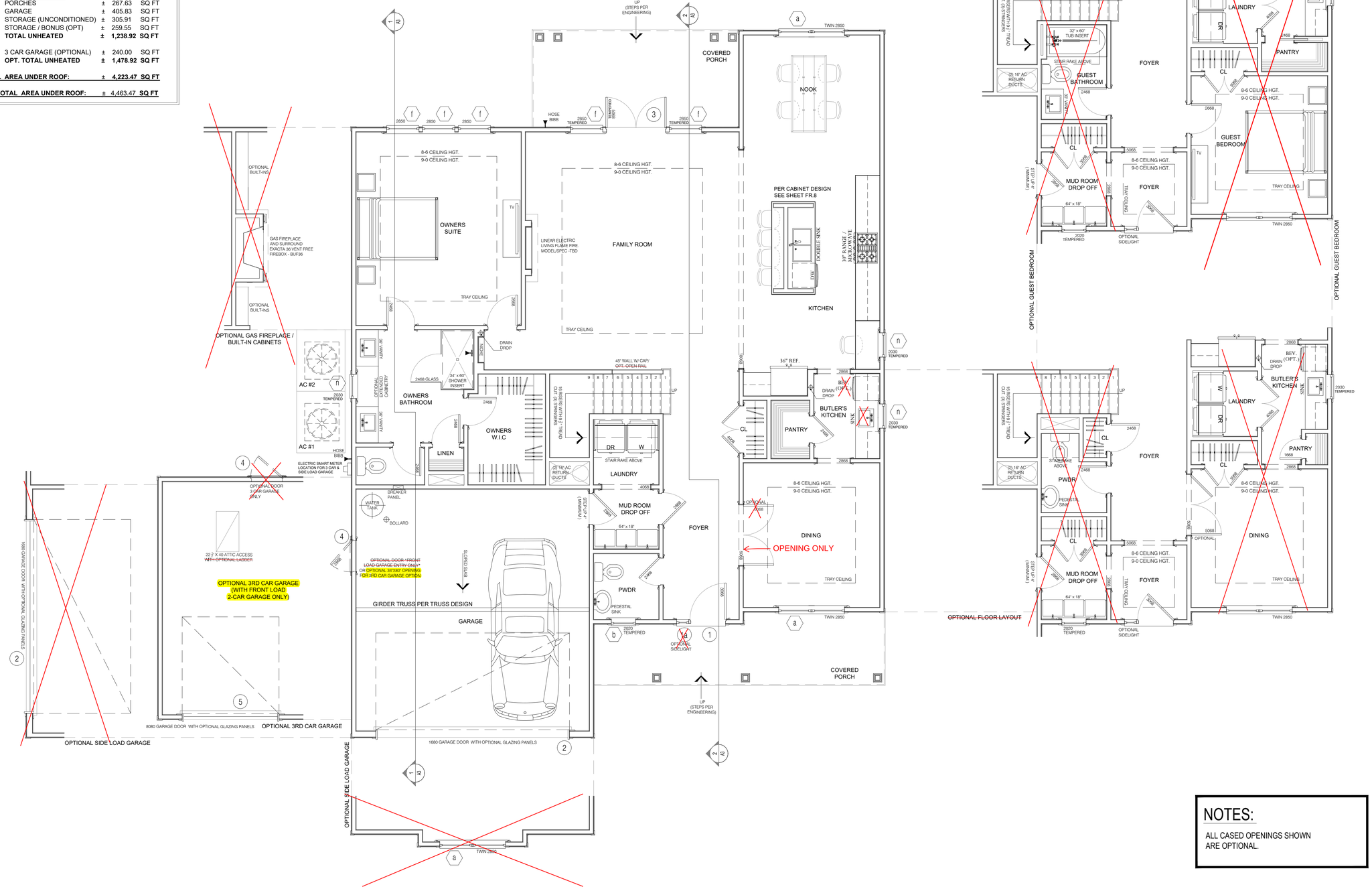

MAIN FLOOR PLAN - WITH OPTIONS
SCALE: 1/4" = 1'-0"

NOTES:

ALL CASED OPENINGS SHOWN ARE OPTIONAL.

REVISIONS:

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THE DOWNTON MAIN FLOOR PLAN

DATE: 2023-08-14
DRAWN BY: MD
ENGINEER: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4" = 1'-0"

SHEET NUMBER#: A1

BUILDING AREAS:

HEATED AREAS:			
FIRST FLOOR	±	1,670.05	SQ FT
SECOND FLOOR	±	1,314.50	SQ FT
TOTAL HEATED	**±**	**2,984.55**	**SQ FT**
OPT. TOTAL HEATED	**±**	**3,550.01**	**SQ FT**
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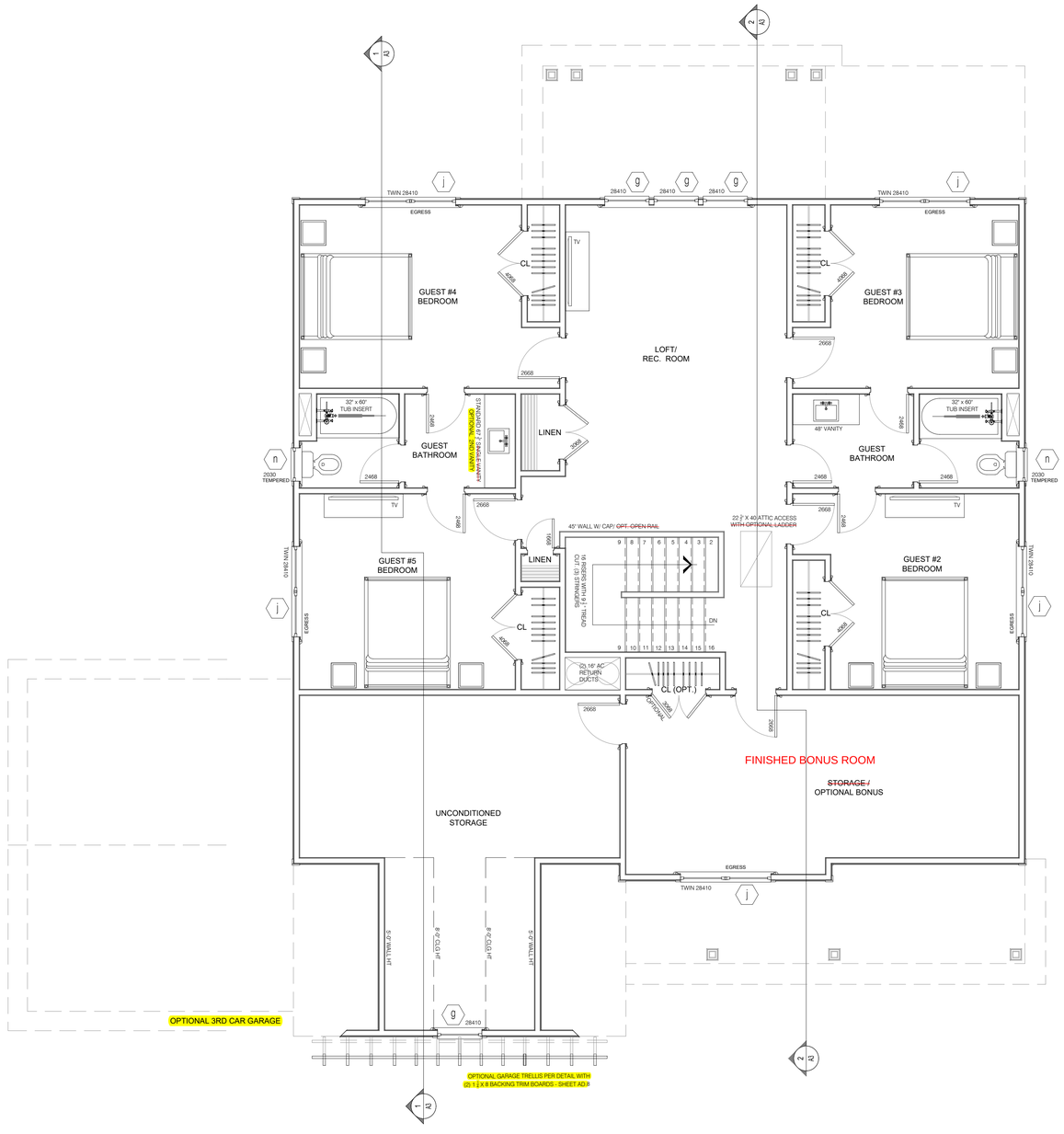
TOTAL AREA UNDER ROOF:	±	**4,223.47**	**SQ FT**
OPT. TOTAL AREA UNDER ROOF:	±	4,463.47	**SQ FT**



UPPER FLOOR PLAN
SCALE: 1/4" = 1'-0"

NOTES:

ALL CASED OPENINGS SHOWN
ARE OPTIONAL.

REVISIONS:

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N.C. LICENSE NO.: C-1733

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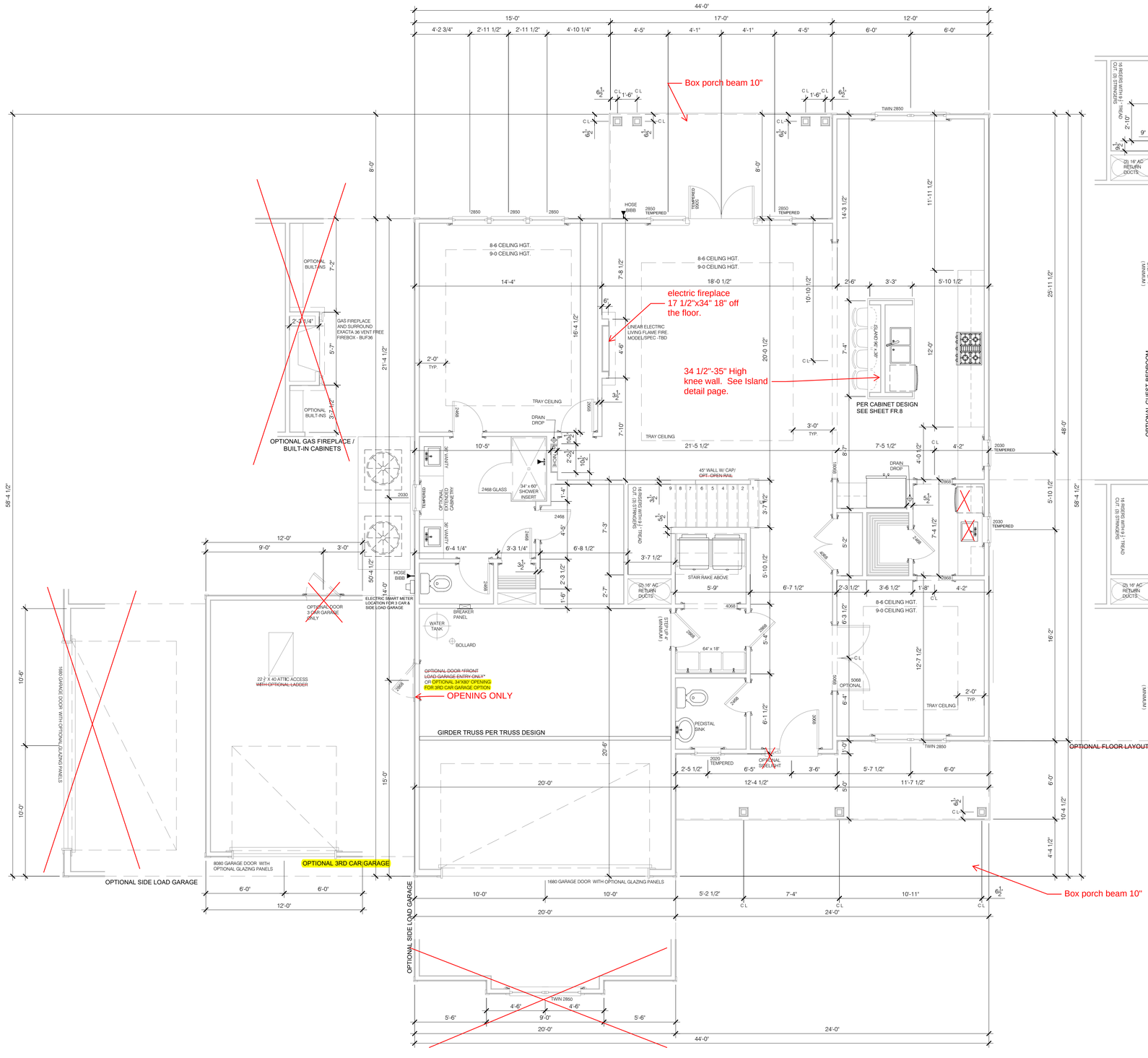
THE DOWNTON
UPPER
FLOOR PLAN

DATE: 2023-08-14
DRAWN BY: MD
ENGINEER: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4" = 1'-0"

SHEET NUMBER#:
A1.1



MAIN FLOOR PLAN - WITH OPTIONS

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

NOTES:

ALL CASED OPENINGS SHOWN
ARE OPTIONAL.

REVISIONS:

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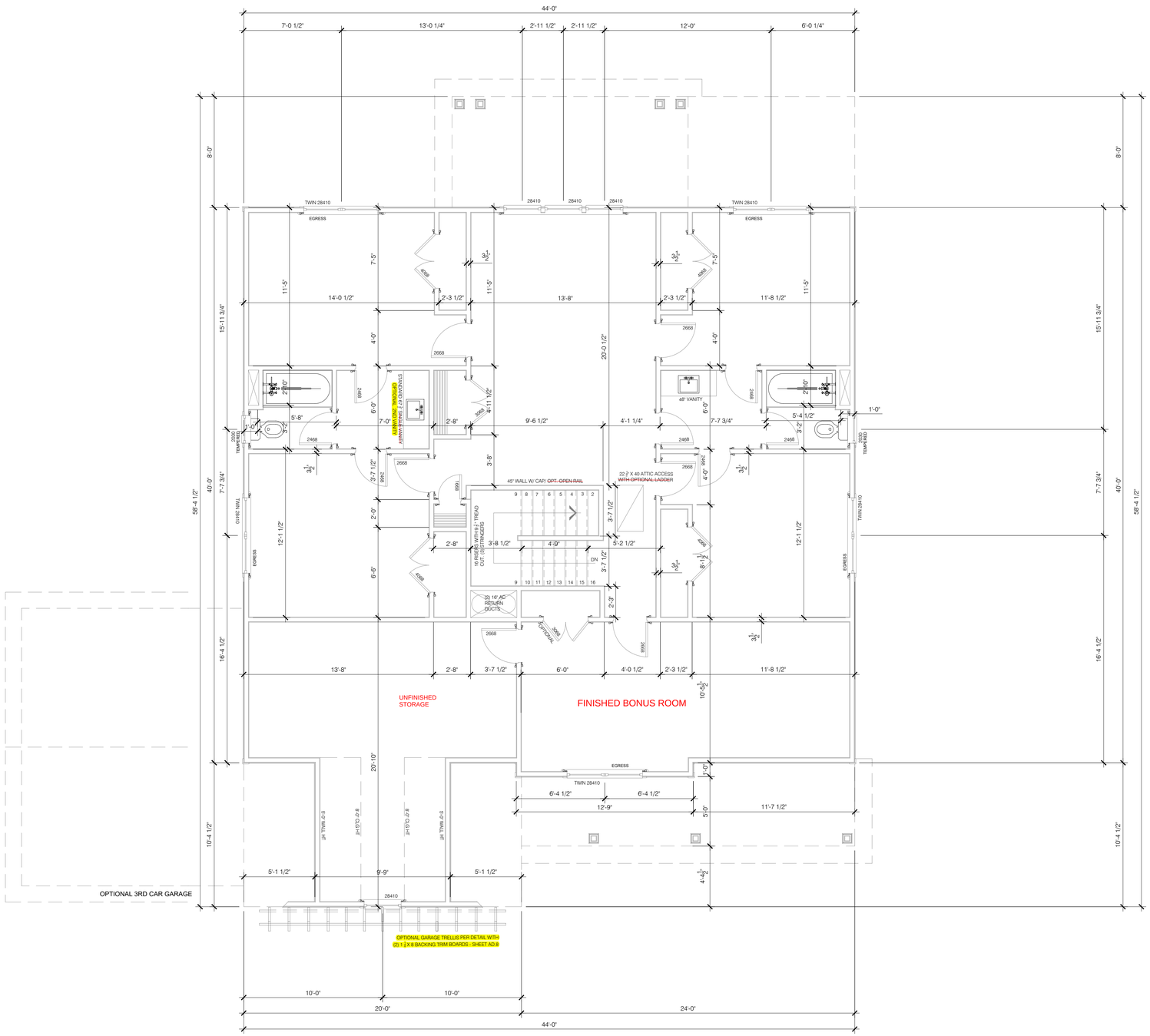
THE DOWNTON
DIMENSIONED
MAIN FLOOR PLAN

DATE: 2023-08-14
DRAWN BY: MD
ENGINEER: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4" = 1'-0"

SHEET NUMBER#:
A1.2



SECOND FLOOR PLAN - WITH OPTIONS
SCALE: 1/4" = 1'-0"

NOTES:

ALL CASED OPENINGS SHOWN ARE OPTIONAL.

REVISIONS:

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N.C. LICENSE NO.: C-1733

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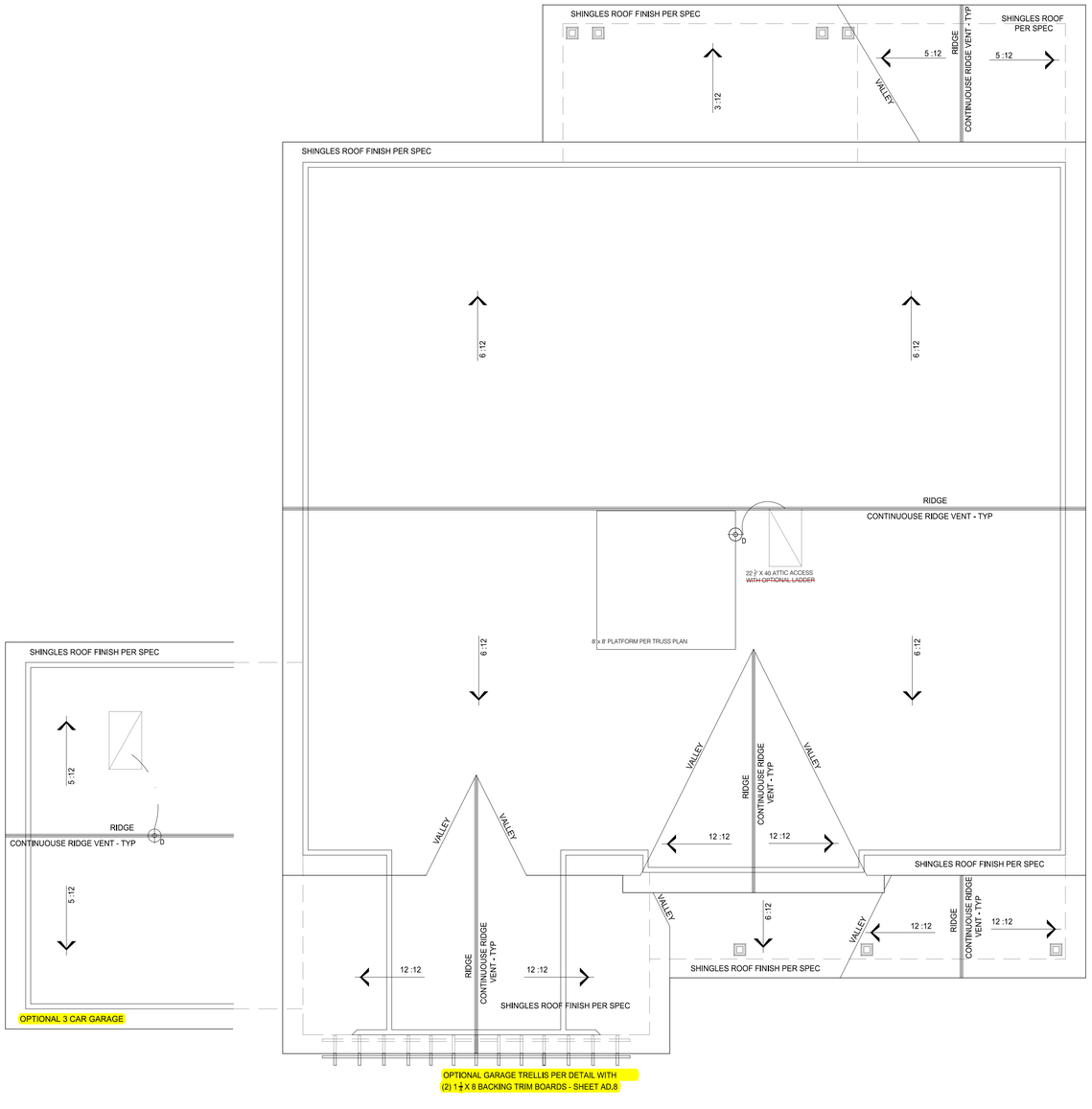
THE DOWNTON
DIMENSIONED
UPPER FLOOR PLAN

DATE: 2023-08-14
DRAWN BY: MD
REVIEWED BY: KS
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4" = 1'-0"

SHEET NUMBER#:
A1.3



ROOF PLAN - PRE TRUSS DESIGN - ELEVATION "A"

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

REVISIONS:

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THE DOWNTON

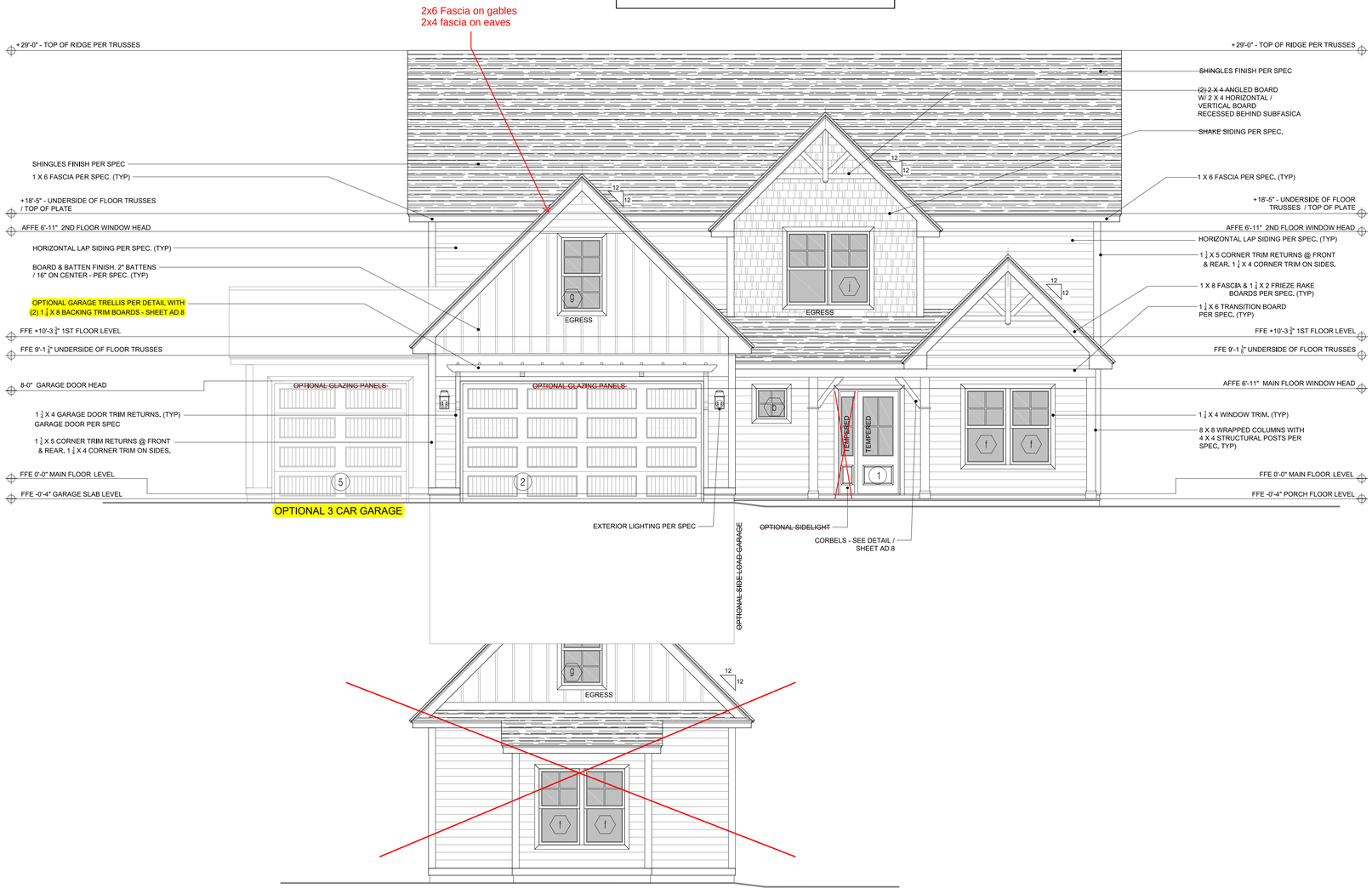
ROOF PLAN

DATE: 2023-08-14
DRAWN BY: MD
BUILDER: SST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4" = 1'-0"

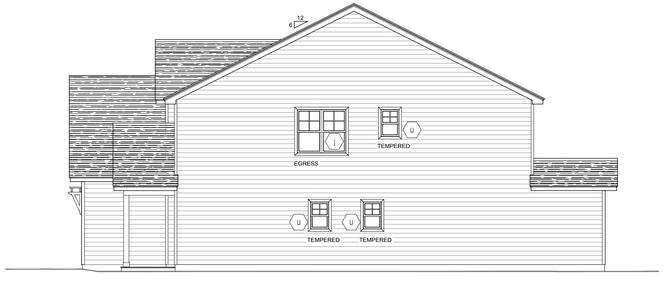
SHEET NUMBER#:

A1.4

CEMENT SIDING

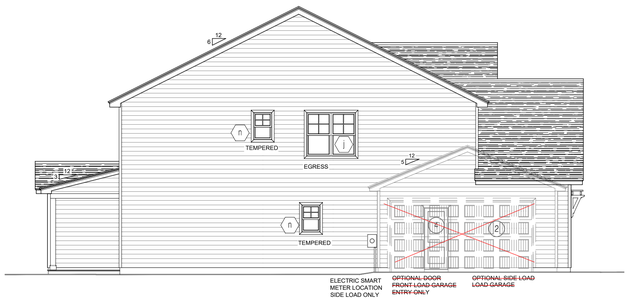


FRONT ELEVATION
SCALE: 1/4" = 1'-0"



RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

REAR ELEVATION
SCALE: 1/4" = 1'-0"



LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

REVISIONS:

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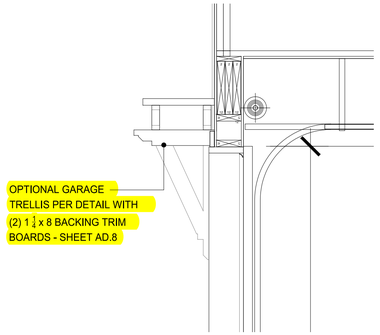
THE DOWNTON
ALL EXTERNAL ELEVATIONS

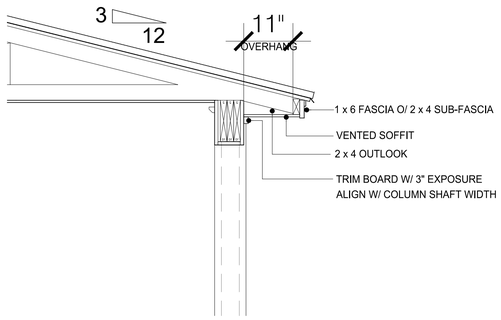
DATE: 2023-08-14
DRAWN BY: MD
REVIEWED BY: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4" = 1'-0"

SHEET NUMBER#:
A2



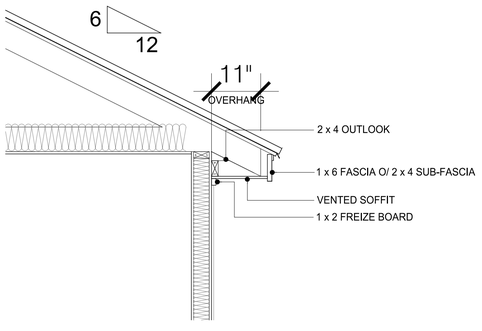
DETAIL C

SCALE: 3/4" = 1'-0"



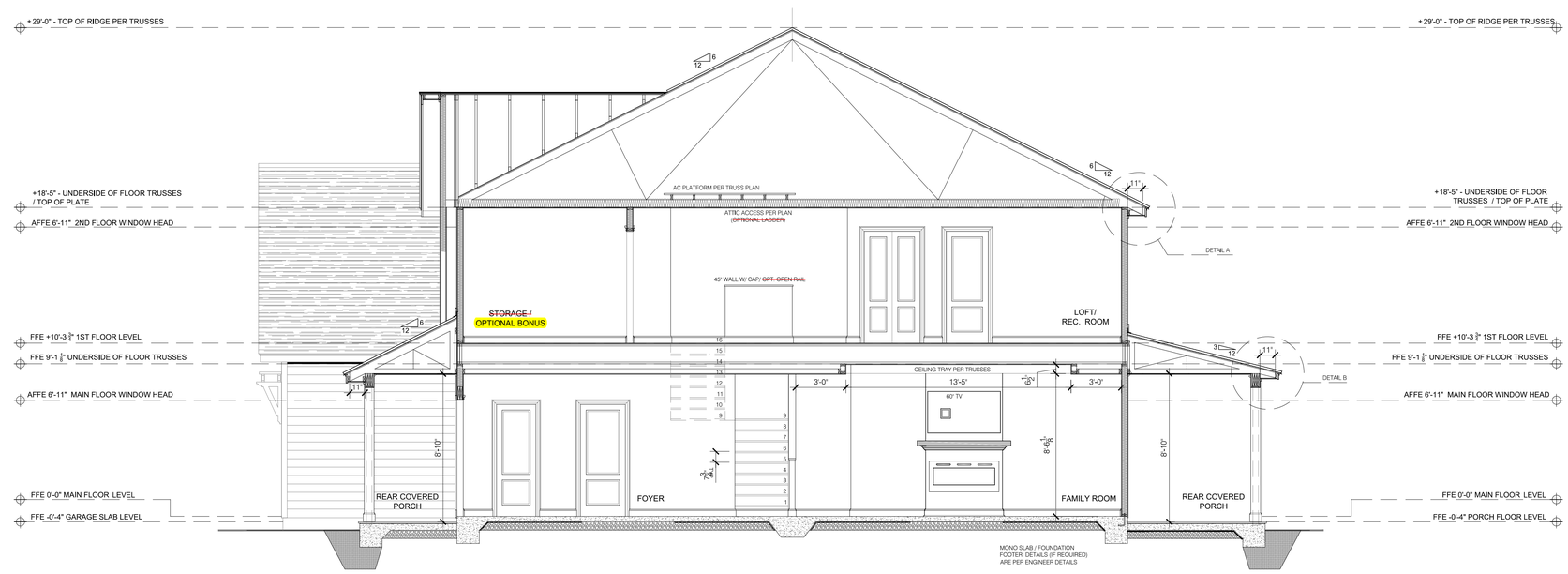
DETAIL B

SCALE: 3/4" = 1'-0"



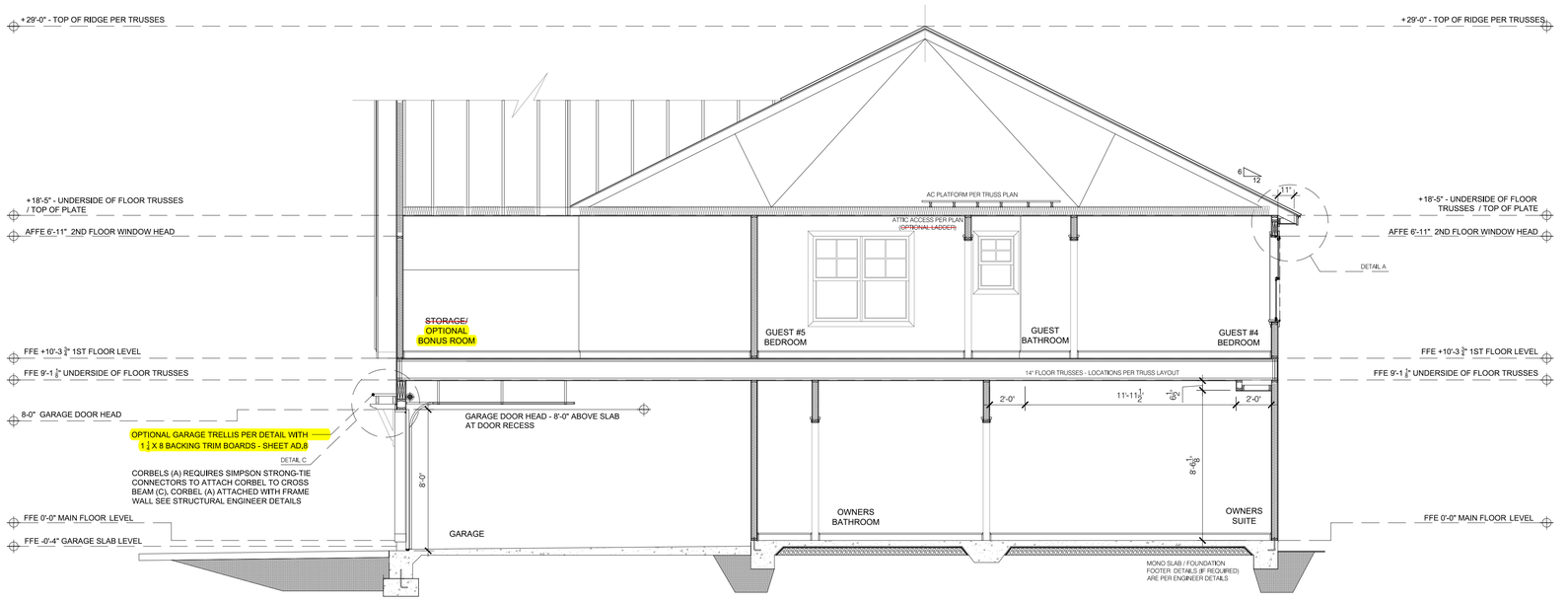
DETAIL A

SCALE: 3/4" = 1'-0"



BUILDING SECTION - 2

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



BUILDING SECTION - 1

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

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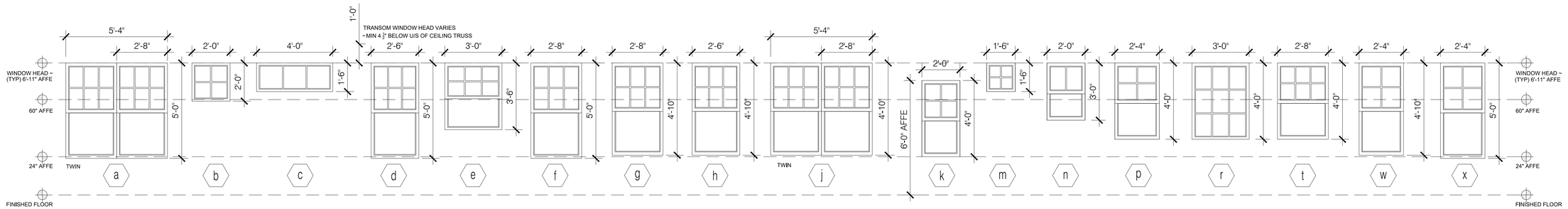
THE DOWNTON
CONSTRUCTION
SECTIONS & DETAILS

DATE: 2023-08-14
DRAWN BY: MD
ENGINEER: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4"-1'0"

SHEET NUMBER#:
A3



WINDOW & DOOR GLAZING PATTERNS

SCALE: 3/8" = 1'-0"

NOTES:
1. ALL WINDOWS SHALL BE IN DOUBLE GLAZED INSULATED LOW 'E' GLAZING

2. ALL HARDWARE TO BE PER CLIENT/ASCOT SELECTIONS

3. DETAIL SHOP DRAWINGS FOR ALL WINDOW TYPES SHALL BE APPROVED

4. ALL PROFILES TO BE APPROVED BY ASCOT

5. WINDOW DIMENSIONS AND GLAZING PATTERN ARE PER NOMINATED VINYL SIZE DOCUMENTATION COLORED VINYL SINGLE HUNG TILT & SLIDE & FIXED WINDOWS

6. WINDOWS NOTED AS EGRESS SHALL COMPLY WITH THE RELEVANT BUILDING CODE REFERENCE. ALL WINDOWS SILLS LOWER THAN 24" ABOVE FINISHED FLOOR ELEVATIONS SHALL BE PROVIDED WITH FALL PREVENTATIVE DEVICES OR RESTRICTED TO ONLY ALLOW A 4" DIAMETER SPHERE TO PASS. NO WINDOW SILL SHALL BE HIGHER THAN 72" ABOVE ADJACENT GRADE.

7. EGRESS WINDOWS SHALL HAVE A NET OPENING AREA OF NOT LESS THAN 5.0 SQFT (20 X 24) - *(NORTH CAROLINA)* FOR GRADE FLOOR EGRESS OR 5.7 SQFT TO UPPER EGRESS FLOORS. NO WINDOW SILL SHALL BE HIGHER THAN 44" ABOVE FINISHED FLOOR ELEVATION OR BELOW A MIN OF 24 ABOVE THE FINISHED FLOOR.

8. CONTRACTOR/ASCOT SUPERINTENDENT SHALL VERIFY ALL MASONRY & FRAME OPENINGS BUILT ON SITE PRIOR TO WINDOW INSTALLATION.

9. TEMPERED GLAZING SHALL BE PROVIDED AND INSTALLED WITH CRITICAL HAZARDOUS LOCATIONS PER LOCAL AND STATE CODES, AND AS NOTED ON PLANS AND ELEVATIONS HEREIN, UNLESS OTHERWISE AGREED WITH CODE OFFICIALS.

GENERAL NOTES

SCALE: NTS

NOTES:
GLAZING IN WET AREAS WHEN A BATH TUB OR SHOWER IS INSTALLED SHALL BE TEMPERED GLASS WHEN THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" MEASURED VERTICALLY ABOVE THE FINISHED FLOOR ELEVATION - PER CODE: R308.4.5.

WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS BELOW 24" MEASURED VERTICALLY ABOVE THE FINISHED FLOOR ELEVATION TEMPERED GLASS SHALL COMPLY WITH EITHER ~ PREVENTATIVE FALL DEVICES SHALL BE INSTALLED OR THE WINDOW OPENING SHALL BE RESTRICTED TO A 4" OPENING DIMENSION NOT ALLOWING A 4" SPHERE TO PASS, PER CODE: R312.2.1.

GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36" ABOVE THE PLANE OF AN ADJACENT WALKING SURFACE OF STAIRWAYS, LANDING, BETWEEN FLIGHTS AND RAMPS SHALL BE CONSIDERED A HAZARDOUS LOCATION, PER CODE: R308.4.6

WHERE GLAZING IS WITHIN 24" OF EITHER SIDE OF A DOOR IN A CLOSED POSITION SHALL BE CONSIDERED A HAZARDOUS LOCATION, PER CODE: R308.4.2

GLAZING ADJACENT TO A LANDING AT THE BOTTOM OF A STAIRWAY WHERE GLAZING IS LESS THAN 36" ABOVE THE LANDING AND WITHIN 60" HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM STAIR NOSING IS CONSIDERED A HAZARDOUS LOCATION, PER CODE: 308.4.7

EXTERNAL DOOR SCHEDULE

MARK	SIZE (WxH)	LOCATION
1	3'-0" X 6'-8"	FRONT ENTRANCE - TEMPERED GLASS
1a	1'-0" X 6'-8"	OPTIONAL SIDELIGHT - TEMPERED GLASS
2	16'-0" X 8'-0"	GARAGE DOOR WITH OPTIONAL GLAZING PANELS
3	5'-0" X 6'-8"	DINING ROOM - TEMPERED GLASS
4	*2'-8" X 6'-8"	*OPTIONAL GARAGE SERVICE ENTRY DOOR
5	*8'-0" X 8'-0"	*OPTIONAL GARAGE DOOR WITH OPTIONAL GLAZING PANELS

INTERNAL DOOR SCHEDULE

SIZE	QUANTITY	DOOR TYPE	NOTES
1'-6" X 6'-8"	1 +*(1) OPTION	SINGLE	2ND FLOOR LINEN / * OPTIONAL PANTRY
2'-4" X 6'-8"	12 +*(3) OPTION	SINGLE	GUEST BATHS/OWNERS LINEN/OWNER'S W.I.C./ PWD./ PANTRY/ OPT. GUEST BATH/ OPT. PWD/ OPT. FOYER CLOSET
2'-6" X 6'-8"	7 +*(1) OPTION	SINGLE	*OPT GUEST BED / BEDROOM #2/ #3 / #4 / #5 / OPT. BONUS ROOM / OWNER'S SUITE / STORAGE
2'-8" X 6'-8"	1	SINGLE	MUD ROOM
2'-8" X 6'-8"	1	SINGLE	GARAGE FIRE DOOR - 20 MINUTE MIN
3'-0" X 6'-8"	1 +*(5) OPTION	BI-SWING PAIR	LOFT LINEN/ OPT. BONUS ROOM CLOSET/ OPT. MUD ROOM/ OPT. DINING/ OPT. BED ROOM
4'-0" X 6'-8"	5 +*(2) OPTION	BI-SWING PAIR	OPT. GUEST BEDROOM CLOSETS / FOYER CLOSET
5'-0" X 6'-8"	*(2) OPTION	BI-SWING PAIR	DINING ROOM / OPTIONAL DINING ROOM
* 2'-4" X 6'-8"	*(1) OPTION	SINGLE POCKET	OPTIONAL PANTRY

WINDOW SCHEDULE

MARK	RO SIZE (WxH)	WINDOW TYPE	LOCATION	QUANTITY	NOTES
a	TWIN 2'-8" X 5'-0"	SINGLE HUNG	BREAKFAST NOOK, DINING	2 +*(1) OPTION	*WITH OPTIONAL SIDE LOAD GARAGE
b	2'-0" X 2'-0"	PICTURE	POWDER ROOM	1	TEMPERED GLASS
c	NOT USED				
d	NOT USED				
e	NOT USED			*2	
f	2'-8" X 5'-0"	SINGLE HUNG	OWNER'S SUITE / FAMILY ROOM	5	(2) TEMPERED GLASS
g	2'-8" X 4'-10"	SINGLE HUNG	LOFT / REC. ROOM / UNCONDITIONED STORAGE	4	
h	NOT USED				
j	TWIN 2'-8" X 4'-10"	SINGLE HUNG	GUEST BED #2, 3, 4, 5 / OPTIONAL BONUS	5	EGRESS TO BEDROOMS #2, 3, 4, & 5
k	NOT USED				
m	NOT USED				
n	2'-0" X 3'-0"	SINGLE HUNG	OWNER'S & GUEST BATH/ KITCHEN/ BUTLER'S KITCHEN	5	TEMPERED GLASS
r	NOT USED				

SCHEDULES

SCALE: NTS

REVISIONS:

J.S.THOMPSON
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PHONE: (919) 789-9919
FAX: (919) 789-9921
N.C. LICENSE NO.: C-1733

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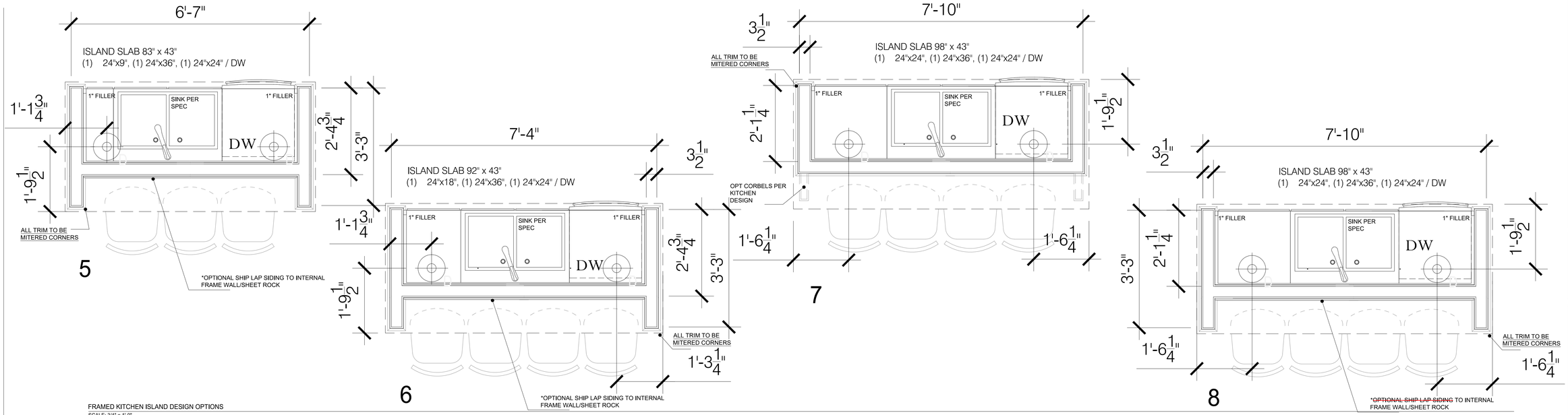
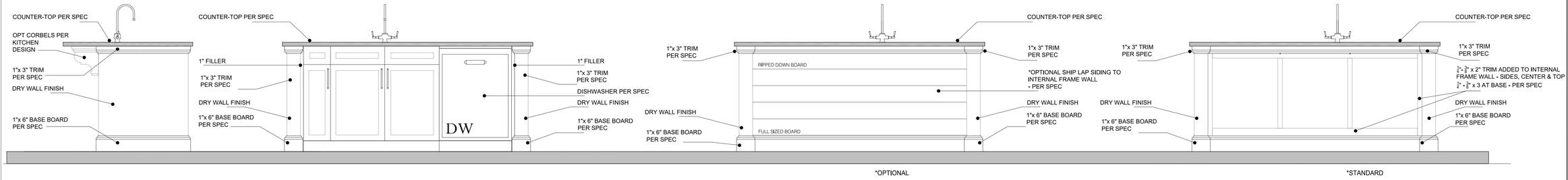
THE DOWNTON
WINDOW & DOOR
SCHEDULES

DATE: 2023-08-14
DRAWN BY: MD
REVIEWED BY: JS
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4"-1'0"

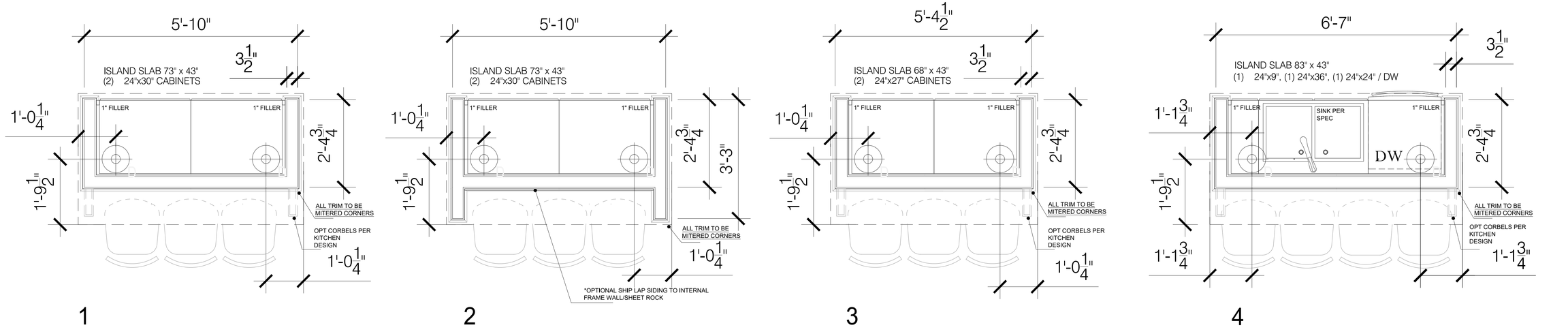
SHEET NUMBER#:
A4



FRAMED KITCHEN ISLAND DESIGN OPTIONS
SCALE: 3/4" = 1'-0"



FRAMED KITCHEN ISLAND - TYPICAL ELEVATIONS
SCALE: 3/4" = 1'-0"



FRAMED KITCHEN ISLAND DESIGN OPTIONS
SCALE: 3/4" = 1'-0"

REVISIONS:

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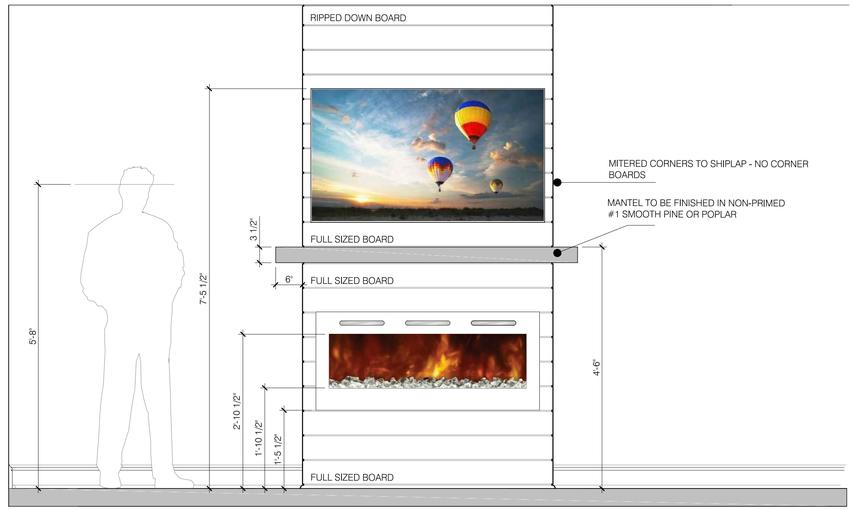
FRAMED KITCHEN ISLAND DESIGN OPTIONS

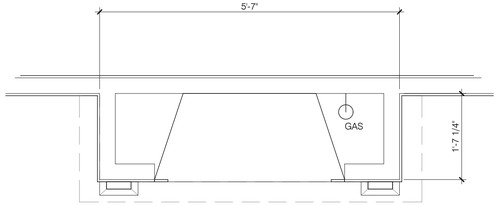
DATE: 2023-02-08
DRAWN BY: MD
ENGINEER: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: AS SHOWN

SHEET NUMBER#: FR.8

AS-BUILT MANTEL
SCALE: NTS

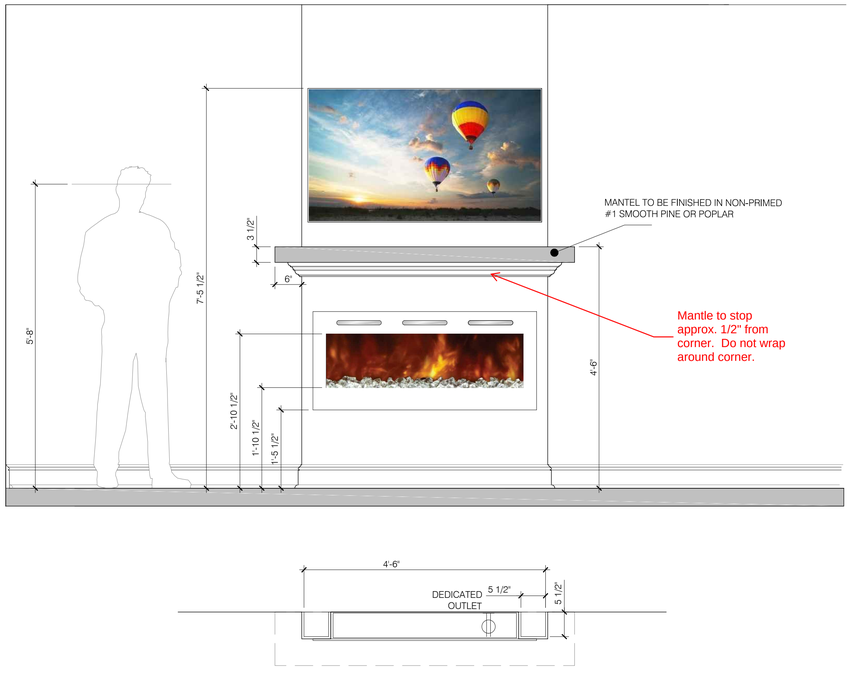
NOTE: TILED SURROUND - PER SPEC.





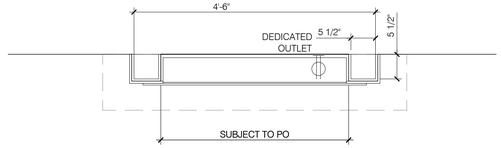
GAS FIREPLACE AND SURROUND
EXACTA 36 VENT FREE
FIREBOX - BUF36

OPTION SELECTION #2: GAS FIRE AND FIRE SURROUND
SCALE: 3/4" = 1'-0"



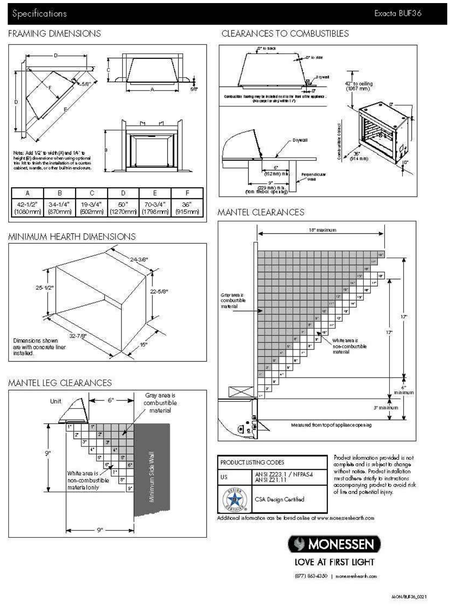
LINEAR ELECTRIC
LIVING FLAME FIRE.
MODEL/SPEC -TBD

STANDARD SELECTION: ELECTRIC FIRE AND MANTEL - DRYWALL FINISH
SCALE: 3/4" = 1'-0"



LINEAR ELECTRIC
LIVING FLAME FIRE.
MODEL/SPEC -TBD

OPTION SELECTION #1 ELECTRIC FIRE AND MANTEL - SHIPLAP FINISH
SCALE: 3/4" = 1'-0"


Specifications — Exacta BUF36

FRAMING DIMENSIONS

A	B	C	D	E	F
42-1/2" (1080mm)	34-1/4" (870mm)	19-3/4" (500mm)	80° (1270mm)	70-3/4" (1795mm)	36" (915mm)

CLEARANCES TO COMBUSTIBLES

MINIMUM HEARTH DIMENSIONS

MANTEL LEG CLEARANCES

MANTEL CLEARANCES

PRODUCT LISTING CODES
US — ANSI Z223.1 / NFPA54, ANSI Z21.11.1
CSA Design Certified

Product information provided is not complete and is subject to change without notice. Product installation must adhere strictly to instructions accompanying product to avoid risk of fire and potential injury.

Additional information can be found online at www.monessenhearth.com

MONESSEN
LOVE AT FIRST LIGHT
(877) 663-4300 | monessenhearth.com

MON/BUF36_0321

EXACTA BUF36 SPEC SHEET #2
SCALE: NTS

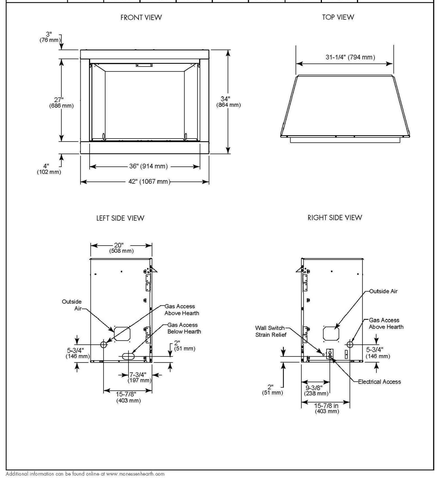
Specifications — Exacta BUF36

MONESSEN
LOVE AT FIRST LIGHT

Please consult the manufacturer's installation manual for all details and requirements before making a final design layout decision.

Exacta 36
Vent Free Gas Firebox

MODEL	FRONT WIDTH		BACK WIDTH		HEIGHT		DEPTH		VIEWING AREA
	Actual	Framing	Actual	Framing	Actual	Framing	Actual	Framing	
BUF36	42"	42-1/2"	31-1/4"	42-1/2"	34"	34-1/4"	20"	19-3/4"	36" x 27"



Additional information can be found online at www.monessenhearth.com

EXACTA BUF36 SPEC SHEET #1
SCALE: NTS

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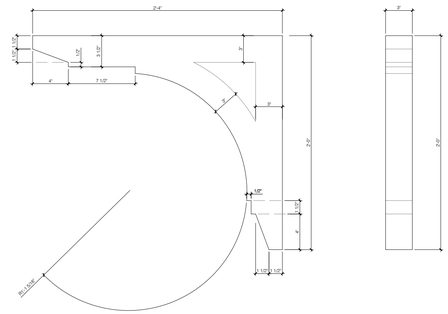
THE DOWNTON

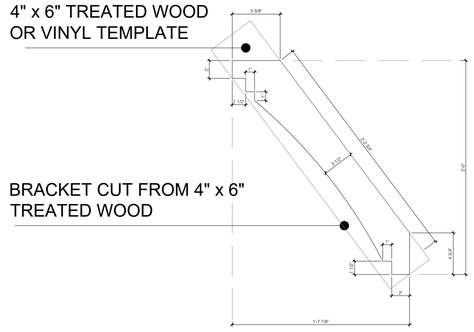
ELECTRIC & GAS FIREPLACES MANTEL DETAILS

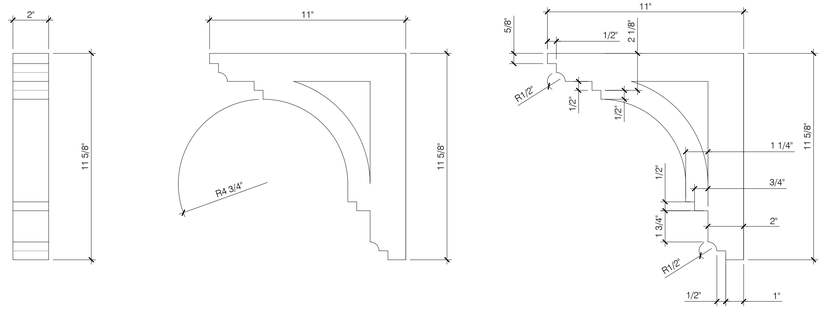
DATE: 2023-02-08
DRAWN BY: MD
ENGINEER: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4" = 1'-0"

SHEET NUMBER#: AD.3

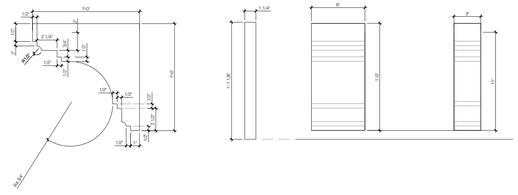


PORCH CORBEL PROFILE DETAILS
SCALE: 1 1/2" = 1'-0"

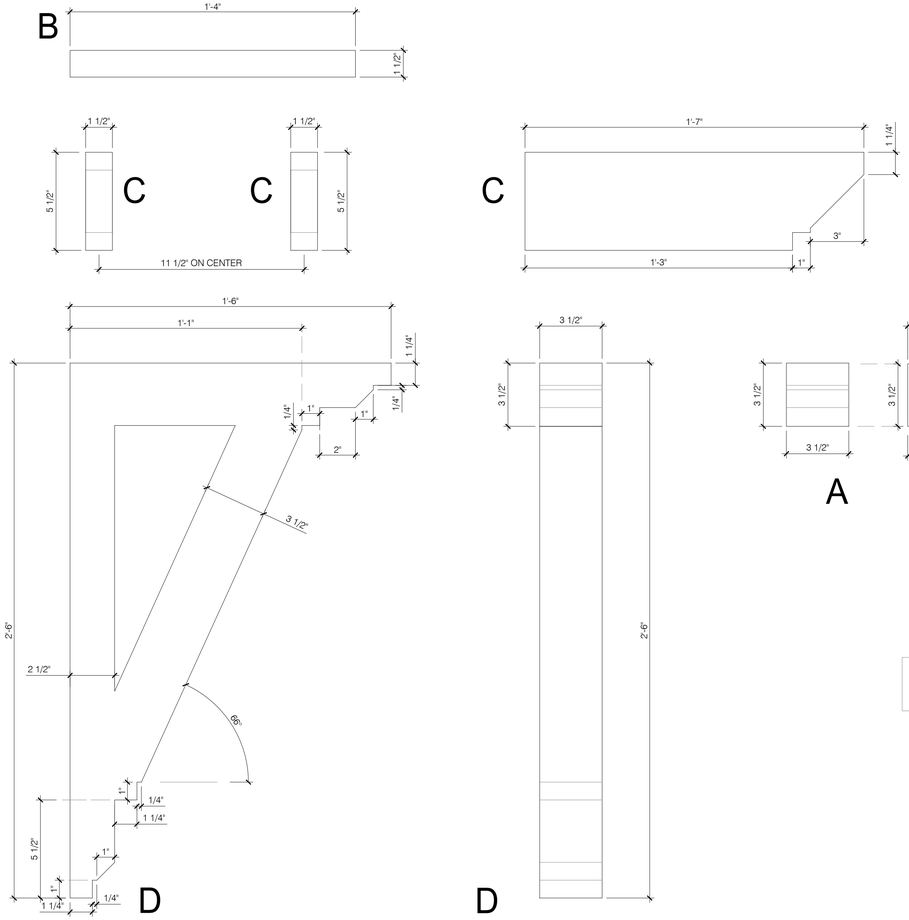




PORCH CORBEL PROFILE DETAILS
SCALE: 3" = 1'-0"

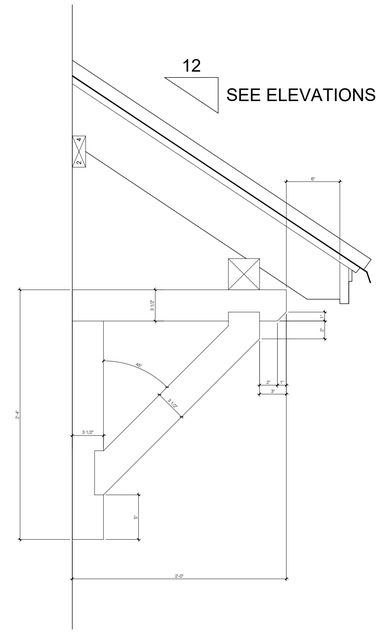


CORNICE MODILLION PROFILE DETAILS
SCALE: 1 1/2" = 1'-0"



GARAGE EXTERNAL TRELLIS PROFILES
SCALE: 3" = 1'-0"

GARAGE EXTERNAL TRELLIS DETAILS
SCALE: 3/4" = 1'-0"



CORNICE MODILLION PROFILE DETAILS
SCALE: 1 1/2" = 1'-0"

REVISIONS:

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THE DOWNTON

EXTERNAL GARAGE TRELLIS, CORBELS, BRACKETS & MODILLION DETAILS

DATE: 2023-02-08
DRAWN BY: MD
ENGINEER: JTS
CHECKED BY: NS
Q.C. BY: NS
SCALE: AS SHOWN

SHEET NUMBER#:
AD.8

STANDARD ELECTRICAL & LIGHTING KEY

	WIRING CIRCUIT
LV	WIRING CIRCUIT LOW VOLTAGE
	LIGHTING CONTROL
	WALL SWITCH SINGLE POLE
3	THREE-WAY SWITCH
4	FOUR-WAY SWITCH
F	FAN SWITCH
D	DIMMER SWITCH
D3	THREE-WAY DIMMER SWITCH
D	DIMMER SWITCH ON SYSTEM
S	SINGLE POLE SWITCH ON SYSTEM
	PUSH BUTTON SWITCH (GARAGE DOOR)
MS	MOTORIZED SHADE (INTERIOR)
MSEX	MOTORIZED SHUTTERS (EXTERIOR)
DB	DOOR BELL
CH	CHIMES
	DUPLEX OUTLET
	GROUND FAULT DUPLEX OUTLET ABOVE COUNTER
GFI	GROUND FAULT INTERRUPTER DUPLEX OUTLET
WP/GFI	WEATHERPROOF GROUND FAULT DUPLEX OUTLET
	HALF-SWITCHED DUPLEX OUTLET
	DEDICATED OUTLET
220V	220 VOLT OUTLET
	FLOOR OUTLET
	HALF SWITCHED FLOOR OUTLET
	TELEPHONE/DATA-FLOOR
	CLOCK BOX-WALL
COMBO BOX 12" AFF TV	RECESSED TV COMBINATION BOX
TV	TV CONNECTION
	TELEPHONE/DATA-WALL
USB	ELECTRICAL OUTLET / USB COMBO
DTV	DTV SHOWERING SYSTEM
	KEYPAD-SYSTEM CONTROL
T	THERMOSTAT
KP	KEYPAD FOR ALARM
HD	HEAT DETECTOR
	LIGHT & EXHAUST FAN
EF	EXHAUST FAN
L	LANDSCAPE LIGHTING (POWER/SWITCH LEG)
SD	CARBON MONOXIDE/SMOKE DETECTOR COMBINATION UNIT
S	SPEAKER (OPTIONAL)
	GARBAGE DISPOSAL
DO	ELECTRIC DOOR OPERATOR (GARAGE)

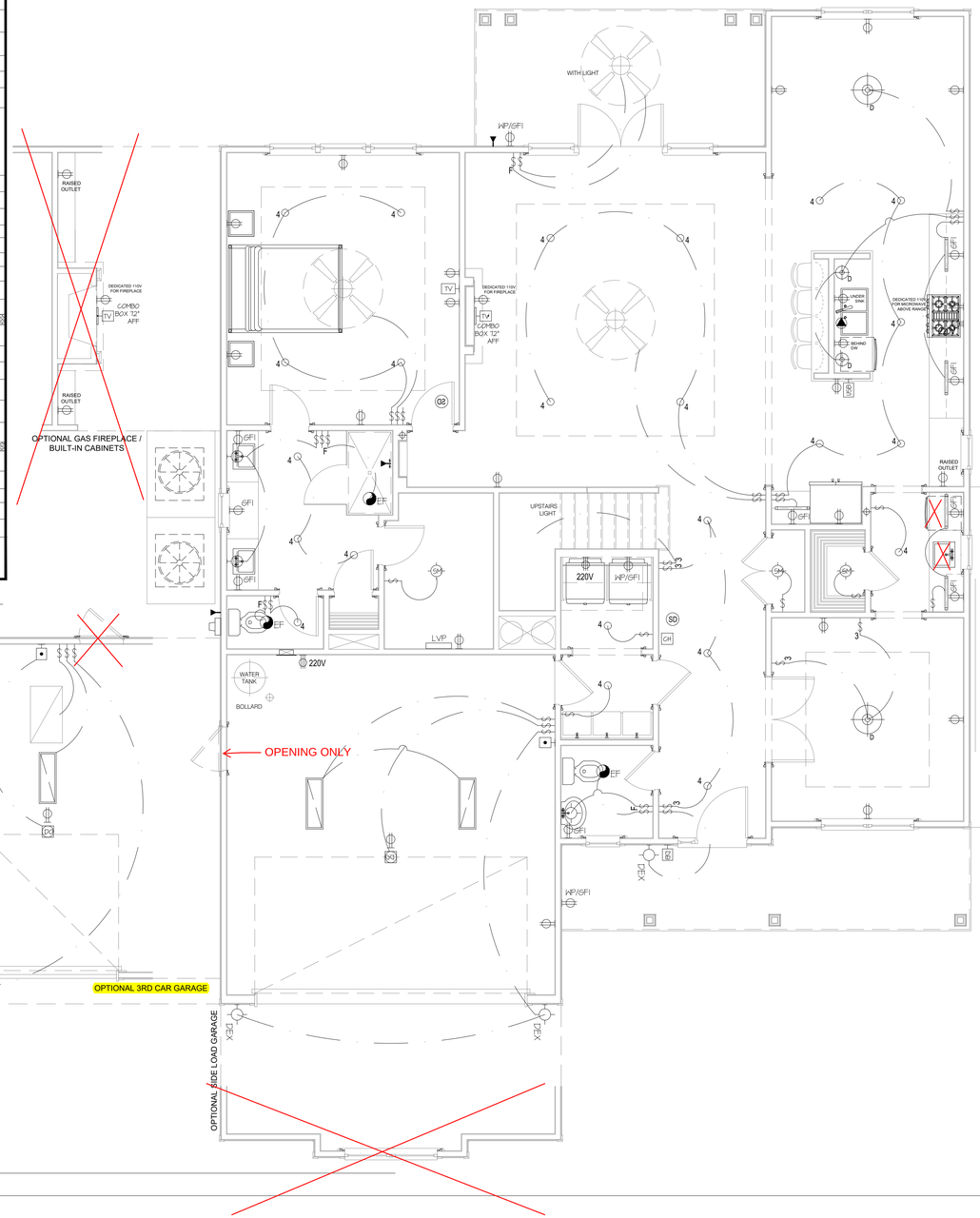
	WHIP FOR LIGHTING
3/4/5	3" RECESSED INCANDESCENT CEILING LIGHT
4/5/6	4" RECESSED INCANDESCENT CEILING LIGHT
	4" RECESSED LED CEILING CAN LIGHT
VP2	4" VAPOR PROOF LED RECESSED CAN LIGHT
JUB	JUNCTION BOX REINFORCED CEILING MOUNT
J	CEILING JUNCTION BOX
	SURFACE MOUNTED LED CEILING LIGHT
	PENDANT LIGHT
	CHANDELIER (REINFORCED CEILING MOUNT)
	WALL MOUNTED INCANDESCENT LIGHT FIXTURE
DEX	DECORATIVE EXTERIOR SCONCE
	AIMABLE RECESSED DOWN LIGHT LOW VOLTAGE
	LED RECESSED DOWN LIGHT - PHOTO CELL
	PUCK LIGHT
	DOUBLE LAMP CEILING LIGHT (CLOSET)
	TRIPLE LAMP CEILING LIGHT (CLOSET)
	JAMB LIGHT FIXTURE
	TRACK LIGHT FIXTURE
	FLUORESCENT FIXTURE-SURFACE MOUNT
	CEILING FAN *(Add light where indicated)*
	SINGLE FLOOD LIGHT
	PHOTO CELL DOUBLE FLOOD LIGHT
	UC STRIP LIGHT
	STRIP LIGHT ABOVE CABINET
	TOE KICK STRIP LIGHT
	UNDER CABINET LIGHT
	PLUG MOLD
	COVE LIGHTING-LINEAR
TR	TRANSFORMER
DRIVER	DRIVER
D	DEMARCATION BOX
E	ELECTRIC METER
	ELECTRIC PANEL
	DISCONNECT SWITCH
G	GAS METER
W	WATER METER
	GAS VALVE
	AIR SWITCH
	PIN LIGHT
LVP	LOW VOLTAGE PANEL

ELECTRICAL NOTES:

1. PROVIDE AND INSTALL CERTIFIED SMOKE DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES. ALL SMOKE DETECTORS SHALL NOT BE LOCATED WITHIN THREE FEET OF A BATHROOM OR AN A/C SUPPLY.
2. PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRIC CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
3. HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.
4. ALL ELECTRICAL AND MECHANICAL EQUIPMENT (I.E. FURNACES, A/C UNITS, ELECTRICAL PANELS, AND WATER HEATERS) ARE SUBJECT TO RELOCATION PER FIELD CONDITIONS.
5. PROJECT WALK-THRU WITH SUPERINTENDENT AND ELECTRICAL CONTRACTOR TO BE SCHEDULED PRIOR TO ELECTRICAL ROUGH-IN.
6. REFER TO CABINET DRAWINGS AND LIGHTING DETAILS FOR POWER STUB-OUT LOCATIONS FOR BUILT-IN AND CABINET LIGHTING.
7. ALL ELECTRICAL PLANS AND LOCATIONS AS SHOWN ARE TO BE LAID OUT PER LOCAL AND STATE BUILDING CODES AND ANY RELEVANT INSPECTIONS.
8. ALL LIGHTING LOCATIONS SHALL BE REVIEWED AND COORDINATED WITH APPROVED FLOOR AND ROOF TRUSS LAYOUTS PRIOR TO INSTALLATION IN THE FIELD.

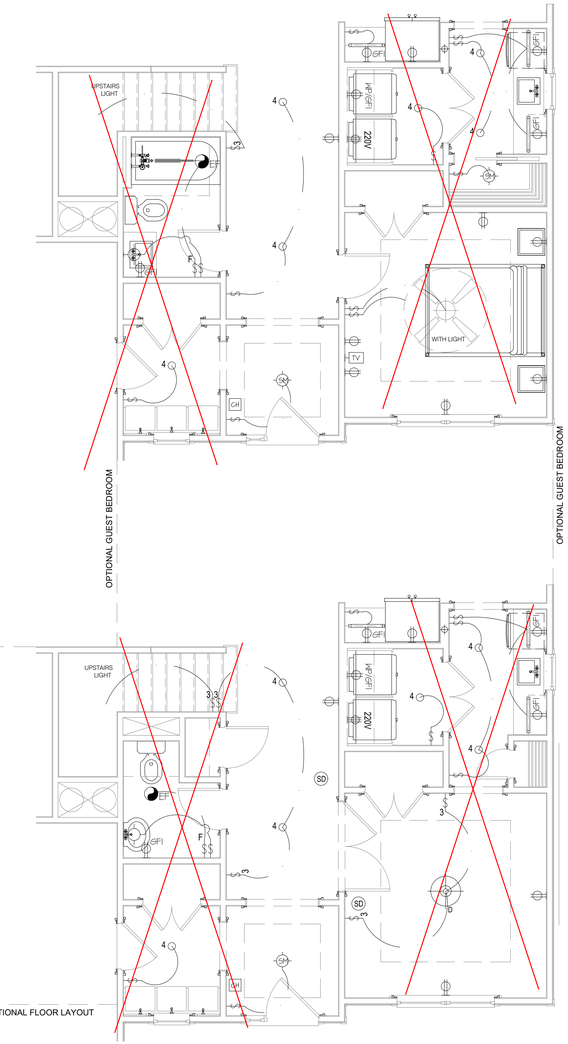
ELECTRICAL SYMBOLS LEGEND

SCALE: NTS



MAIN FLOOR PLAN WITH OPTIONS - ELECTRICAL

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



REVISIONS:

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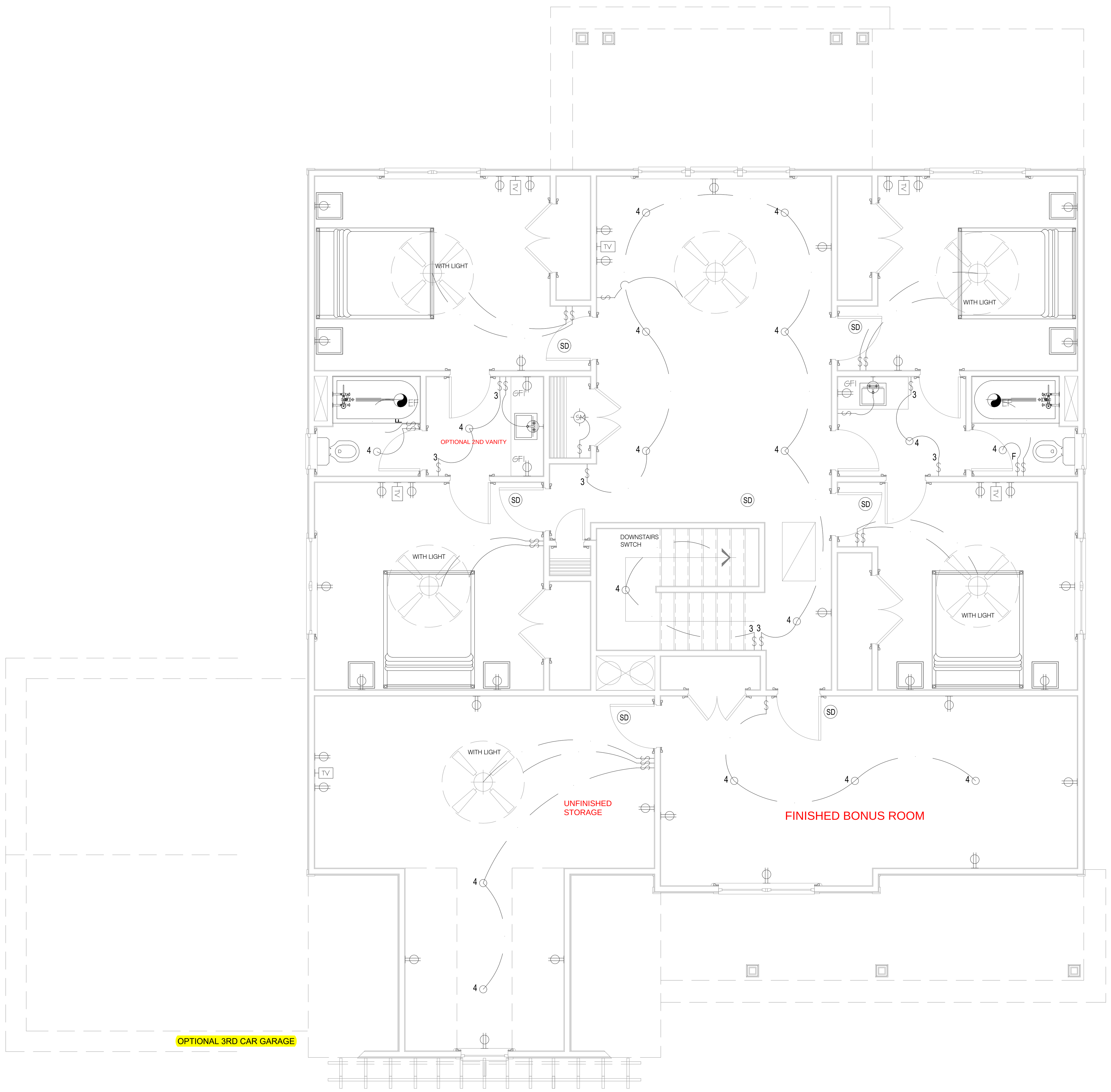
THE DOWNTON

ELECTRICAL - MAIN FLOOR PLAN

DATE: 2023-08-14
DRAWN BY: MD
REVIEWED BY: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4"-1'0"

SHEET NUMBER#: E1



UPPER FLOOR PLAN WITH OPTIONS - ELECTRICAL
SCALE: 1/4" = 1'-0"

STANDARD ELECTRICAL & LIGHTING KEY

WIRING CIRCUIT	WHIP FOR LIGHTING
WIRING CIRCUIT LOW VOLTAGE	3" RECESSED INCANDESCENT CEILING LIGHT
LIGHTING CONTROL	4" RECESSED INCANDESCENT CEILING LIGHT
WALL SWITCH SINGLE POLE	4" RECESSED LED CEILING CAN LIGHT
THREE-WAY SWITCH	4" VAPOR PROOF LED RECESSED CAN LIGHT
FOUR-WAY SWITCH	JUNCTION BOX REINFORCED CEILING MOUNT
FAN SWITCH	CEILING JUNCTION BOX
DIMMER SWITCH	SURFACE MOUNTED LED CEILING LIGHT
THREE-WAY DIMMER SWITCH	PENDANT LIGHT
DIMMER SWITCH ON SYSTEM	CHANDELIER (REINFORCED CEILING MOUNT)
SINGLE POLE SWITCH ON SYSTEM	WALL MOUNTED INCANDESCENT LIGHT FIXTURE
PUSH BUTTON SWITCH (GARAGE DOOR)	DECORATIVE EXTERIOR SCONCE
MOTORIZED SHADE (INTERIOR)	AIMABLE RECESSED DOWN LIGHT LOW VOLTAGE
MOTORIZED SHUTTERS (EXTERIOR)	LED RECESSED DOWN LIGHT - PHOTO CELL
DOOR BELL	PUCK LIGHT
CHIMES	DOUBLE LAMP CEILING LIGHT (CLOSET)
DUPLEX OUTLET	TRIPLE LAMP CEILING LIGHT (CLOSET)
GROUND FAULT DUPLEX OUTLET ABOVE COUNTER	JAMB LIGHT FIXTURE
GROUND FAULT INTERRUPTER DUPLEX OUTLET	TRACK LIGHT FIXTURE
WEATHERPROOF GROUND FAULT DUPLEX OUTLET	FLUORESCENT FIXTURE-SURFACE MOUNT
HALF-SWITCHED DUPLEX OUTLET	CEILING FAN *(Add light where indicated)*
DEDICATED OUTLET	SINGLE FLOOD LIGHT
220 VOLT OUTLET	PHOTO CELL DOUBLE FLOOD LIGHT
FLOOR OUTLET	UC STRIP LIGHT
HALF SWITCHED FLOOR OUTLET	STRIP LIGHT ABOVE CABINET
TELEPHONE/DATA-FLOOR	TOE KICK STRIP LIGHT
CLOCK BOX-WALL	UNDER CABINET LIGHT
RECESSED TV COMBINATION BOX	PLUG MOLD
TV CONNECTION	COVE LIGHTING-LINEAR
TELEPHONE/DATA-WALL	TRANSFORMER
ELECTRICAL OUTLET / USB COMBO	DRIVER
DTV SHOWERING SYSTEM	DEMARCATION BOX
KEYPAD-SYSTEM CONTROL	ELECTRIC METER
THERMOSTAT	ELECTRIC PANEL
KEYPAD FOR ALARM	DISCONNECT SWITCH
HEAT DETECTOR	GAS METER
LIGHT & EXHAUST FAN	WATER METER
EXHAUST FAN	GAS VALVE
LANDSCAPE LIGHTING (POWER/SWITCH LEG)	AIR SWITCH
CARBON MONOXIDE/SMOKE DETECTOR COMBINATION UNIT	PIN LIGHT
SPEAKER (OPTIONAL)	LOW VOLTAGE PANEL
GARBAGE DISPOSAL	
ELECTRIC DOOR OPERATOR (GARAGE)	

ELECTRICAL SYMBOLS LEGEND
SCALE: NTS

ELECTRICAL NOTES:

1. PROVIDE AND INSTALL CERTIFIED SMOKE DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES. ALL SMOKE DETECTORS SHALL NOT BE LOCATED WITHIN THREE FEET OF A BATHROOM OR AN A/C SUPPLY.
2. PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRIC CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
3. HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.
4. ALL ELECTRICAL AND MECHANICAL EQUIPMENT (I.E. FURNACES, A/C UNITS, ELECTRICAL PANELS, AND WATER HEATERS) ARE SUBJECT TO RELOCATION PER FIELD CONDITIONS.
5. PROJECT WALK-THRU WITH SUPERINTENDENT AND ELECTRICAL CONTRACTOR TO BE SCHEDULED PRIOR TO ELECTRICAL ROUGH-IN.
6. REFER TO CABINET DRAWINGS AND LIGHTING DETAILS FOR POWER STUB-OUT LOCATIONS FOR BUILT-IN AND CABINET LIGHTING.
7. ALL ELECTRICAL PLANS AND LOCATIONS AS SHOWN ARE TO BE LAID OUT PER LOCAL AND STATE BUILDING CODES AND ANY RELEVANT INSPECTIONS.
8. ALL LIGHTING LOCATIONS SHALL BE REVIEWED AND COORDINATED WITH APPROVED FLOOR AND ROOF TRUSS LAYOUTS PRIOR TO INSTALLATION IN THE FIELD.

REVISIONS:

J.S.THOMPSON
ENGINEERING, INC
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RALEIGH, NC 27609
PHONE: (919) 789-9919
FAX: (919) 789-9921
N.C. LICENSE NO.: C-1733

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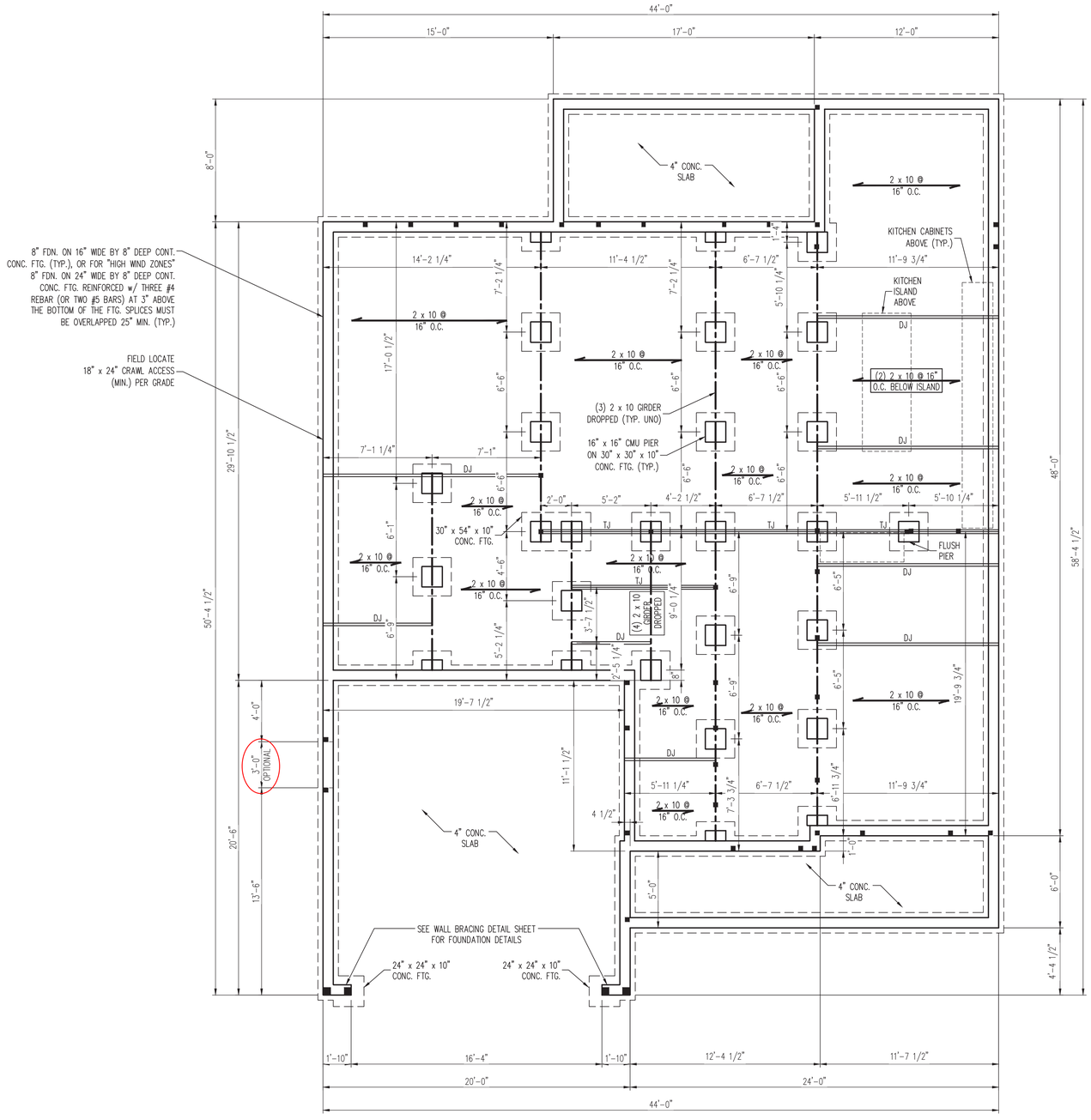
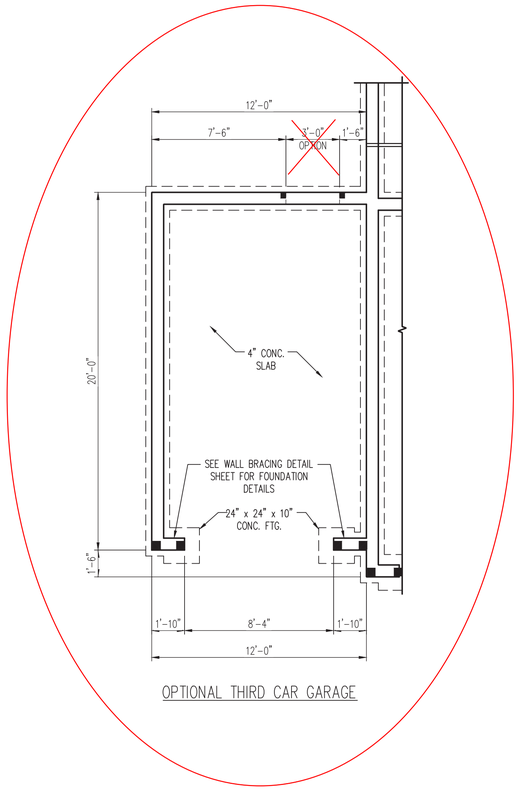
THE DOWNTON
ELECTRICAL - UPPER FLOOR PLAN

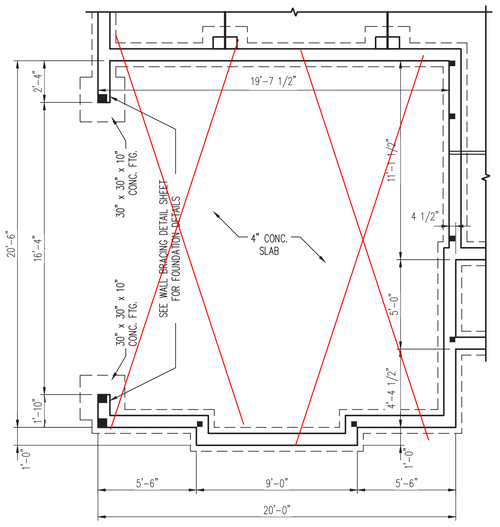
DATE: 2023-08-14
DRAWN BY: MD
ENGINEER: JST
CHECKED BY: NS
Q.C. BY: NS
SCALE: 1/4"-1'0"

SHEET NUMBER#:
E1.1





OPTIONAL THIRD CAR GARAGE



OPTIONAL SIDE LOAD GARAGE

J.S. THOMPSON ENGINEERING, INC
333 EAST SIX FORKS ROAD, SUITE 180 RALEIGH, NC 27609
PHONE: (919) 789-9919 FAX: (919) 789-9921
N.C. LICENSE NO.: C-1733

150 MPH ULTIMATE DESIGN WIND SPEED NOTES FOR LESS THAN 30' MEAN ROOF HEIGHT:

1. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
2. STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION WITH SPECIAL CONSIDERATION TO CHAPTER 45 ("HIGH WIND ZONES" FOR 150 MPH WINDS).
3. BUILDER IS TO PROVIDE FRAMING CONNECTIONS AS REQUIRED BY CHAPTER 45 ("HIGH WIND ZONES" FOR 150 MPH WINDS) OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
4. FOUNDATION ANCHORAGE TO COMPLY WITH SECTION 4504 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
5. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
6. WALL CLADDING DESIGNED FOR +24.3 PSF AND -32 PSF (+/- INDICATE POSITIVE / NEGATIVE PRESSURE (TYP).
7. ROOF CLADDING DESIGNED FOR +22.2 PSF AND -28 PSF FOR ROOF PITCHES 7/12 TO 12/12 AND +14 PSF AND -57 PSF FOR ROOF PITCHED 2.25/12 TO 7/12.
8. 7/16" OSB SHEATHING IS REQUIRED ON ALL EXTERIOR WALLS.
9. WALLS TO BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION AND AS NOTED ON PLANS.
10. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.

120 MPH ULTIMATE DESIGN WIND SPEED NOTES FOR LESS THAN 30' MEAN ROOF HEIGHT:

1. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
2. STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
3. INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH CORNER. ANCHOR BOLTS MUST EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE. LOCATE BOLT WITHIN MIDDLE THIRD OF PLATE WIDTH.
4. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
5. EXTERIOR WALLS DESIGNED FOR 120 MPH WINDS.
6. WALL CLADDING DESIGNED FOR +15.5 PSF AND -20 PSF (+/- INDICATE POSITIVE / NEGATIVE PRESSURE (TYP).
7. ROOF CLADDING DESIGNED FOR +14.2 PSF AND -18 PSF FOR ROOF PITCHES 7/12 TO 12/12 AND +10 PSF AND -36 PSF FOR ROOF PITCHED 2.25/12 TO 7/12.
8. INSTALL 7/16" OSB SHEATHING ON ALL EXTERIOR WALLS OF ALL STORIES IN ACCORDANCE WITH SECTION R602.10.3 OF THE NCRC, 2018 EDITION. SEE THE WALL BRACING NOTES AND DETAILS SHEET FOR MORE INFORMATION.
9. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.
10. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

STRUCTURAL NOTES:

1. ALL FRAMING LUMBER TO BE #2 SPF (UNO). ALL TREATED LUMBER TO BE #2 SYP (UNO.)
2. PROVIDE DOUBLE OR TRIPLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS WHERE NOTED ON THE PLANS.
3. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION.
4. SHADED PIERS TO BE FILLED SOLID.
5. INSTALL LADDER WIRE @ 16" O.C. TO SECURE MULTIPLE WYTHE FOUNDATION WALLS TOGETHER.
6. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

LEGEND	
CONT	CONTINUOUS
XJ	EXTRA JOIST
DJ	DOUBLE JOIST
TJ	TRIPLE JOIST
EA	EACH
FDN	FOUNDATION
FTG	FOOTING
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TRTD	PRESSURE TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

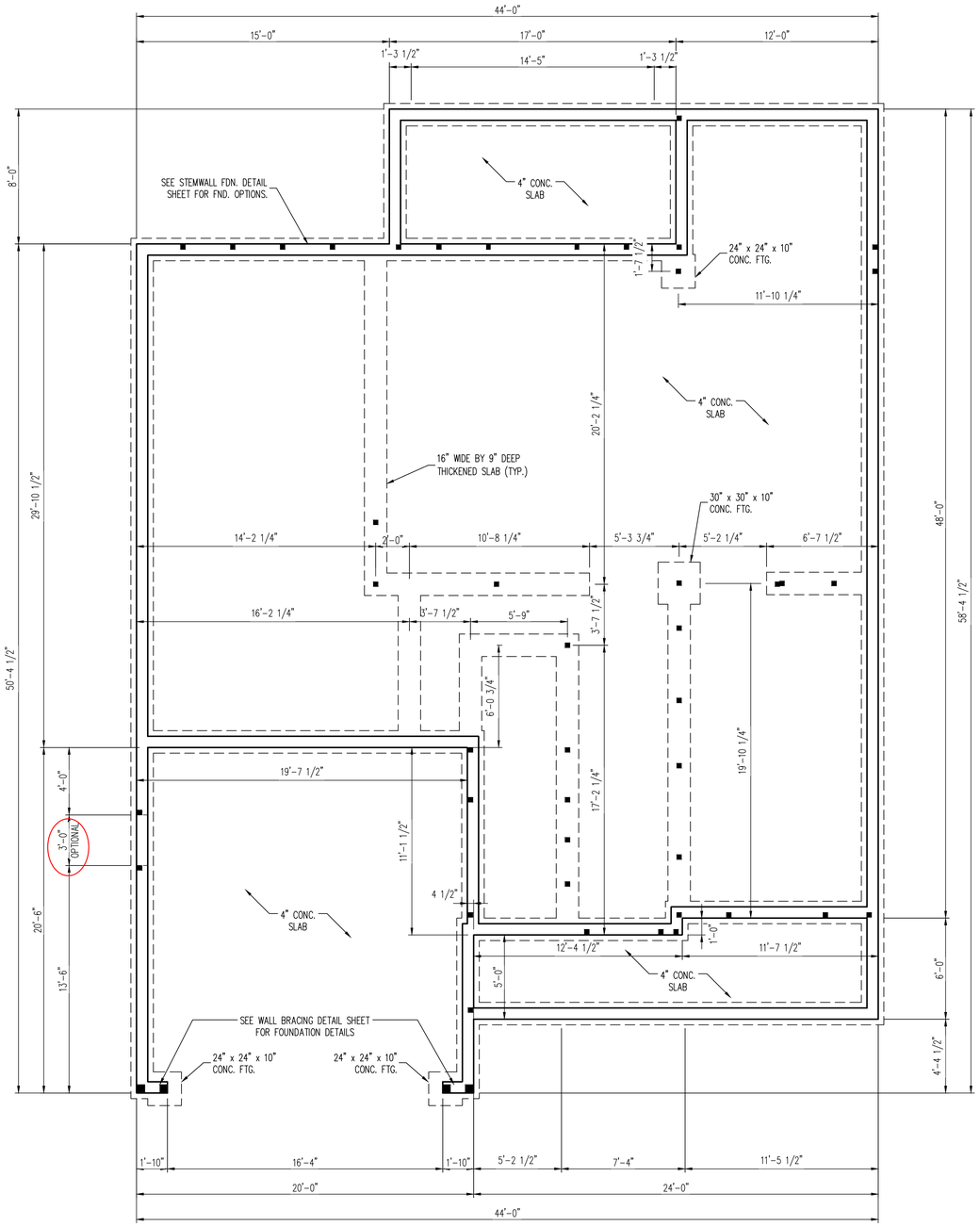
NORTH CAROLINA PROFESSIONAL SEAL 33736 ENGINEER MATTHEW G. STROTHER

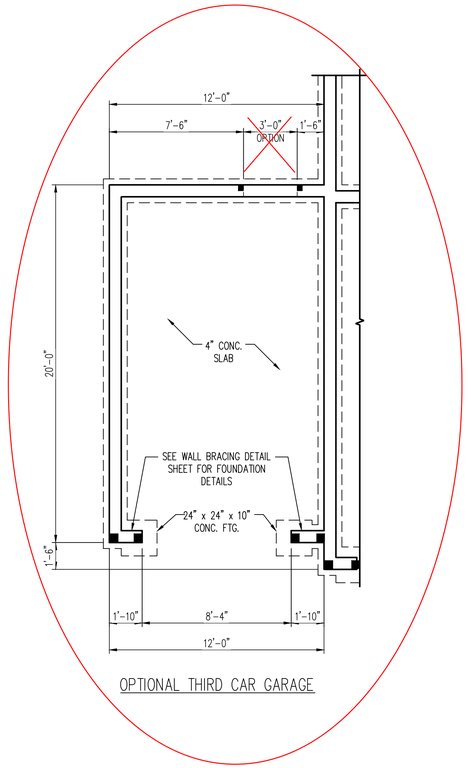
3/8/2024

DOWNTON
ASCOT GROUP

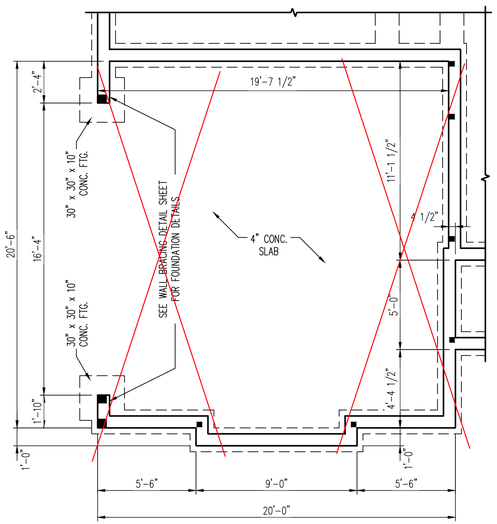
DATE: MARCH 8, 2024
SCALE: 1/4" = 1'-0"
DRAWN BY: ASCOT GROUP
ENGINEERED BY: WFB

S-1.1a
CRAWL
FOUNDATION PLAN





OPTIONAL THIRD CAR GARAGE



OPTIONAL SIDE LOAD GARAGE

150 MPH ULTIMATE DESIGN WIND SPEED NOTES FOR LESS THAN 30' MEAN ROOF HEIGHT:

1. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
2. STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION WITH SPECIAL CONSIDERATION TO CHAPTER 45 ("HIGH WIND ZONES" FOR 150 MPH WINDS).
3. BUILDER IS TO PROVIDE FRAMING CONNECTIONS AS REQUIRED BY CHAPTER 45 ("HIGH WIND ZONES" FOR 150 MPH WINDS) OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
4. FOUNDATION ANCHORAGE TO COMPLY WITH SECTION 4504 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
5. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
6. WALL CLADDING DESIGNED FOR +24.3 PSF AND −32 PSF (+/- INDICATE POSITIVE / NEGATIVE PRESSURE (TYP).
7. ROOF CLADDING DESIGNED FOR +22.2 PSF AND −28 PSF FOR ROOF PITCHES 7/12 TO 12/12 AND +14 PSF AND −57 PSF FOR ROOF PITCHED 2.25/12 TO 7/12.
8. 7/16" OSB SHEATHING IS REQUIRED ON ALL EXTERIOR WALLS.
9. WALLS TO BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION AND AS NOTED ON PLANS.
10. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.

120 MPH ULTIMATE DESIGN WIND SPEED NOTES FOR LESS THAN 30' MEAN ROOF HEIGHT:

1. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
2. STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
3. INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH CORNER. ANCHOR BOLTS MUST EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE. LOCATE BOLT WITHIN MIDDLE THIRD OF PLATE WIDTH.
4. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
5. EXTERIOR WALLS DESIGNED FOR 120 MPH WINDS.
6. WALL CLADDING DESIGNED FOR +15.5 PSF AND −20 PSF (+/- INDICATE POSITIVE / NEGATIVE PRESSURE (TYP).
7. ROOF CLADDING DESIGNED FOR +14.2 PSF AND −18 PSF FOR ROOF PITCHES 7/12 TO 12/12 AND +10 PSF AND −36 PSF FOR ROOF PITCHED 2.25/12 TO 7/12.
8. INSTALL 7/16" OSB SHEATHING ON ALL EXTERIOR WALLS OF ALL STORIES IN ACCORDANCE WITH SECTION R602.10.3 OF THE NCRC, 2018 EDITION. SEE THE WALL BRACING NOTES AND DETAILS SHEET FOR MORE INFORMATION.
9. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.
10. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

LEGEND	
CONT	CONTINUOUS
XJ	EXTRA JOIST
DJ	DOUBLE JOIST
TJ	TRIPLE JOIST
EA	EACH
FDN	FOUNDATION
FTG	FOOTING
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TRTD	PRESSURE TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

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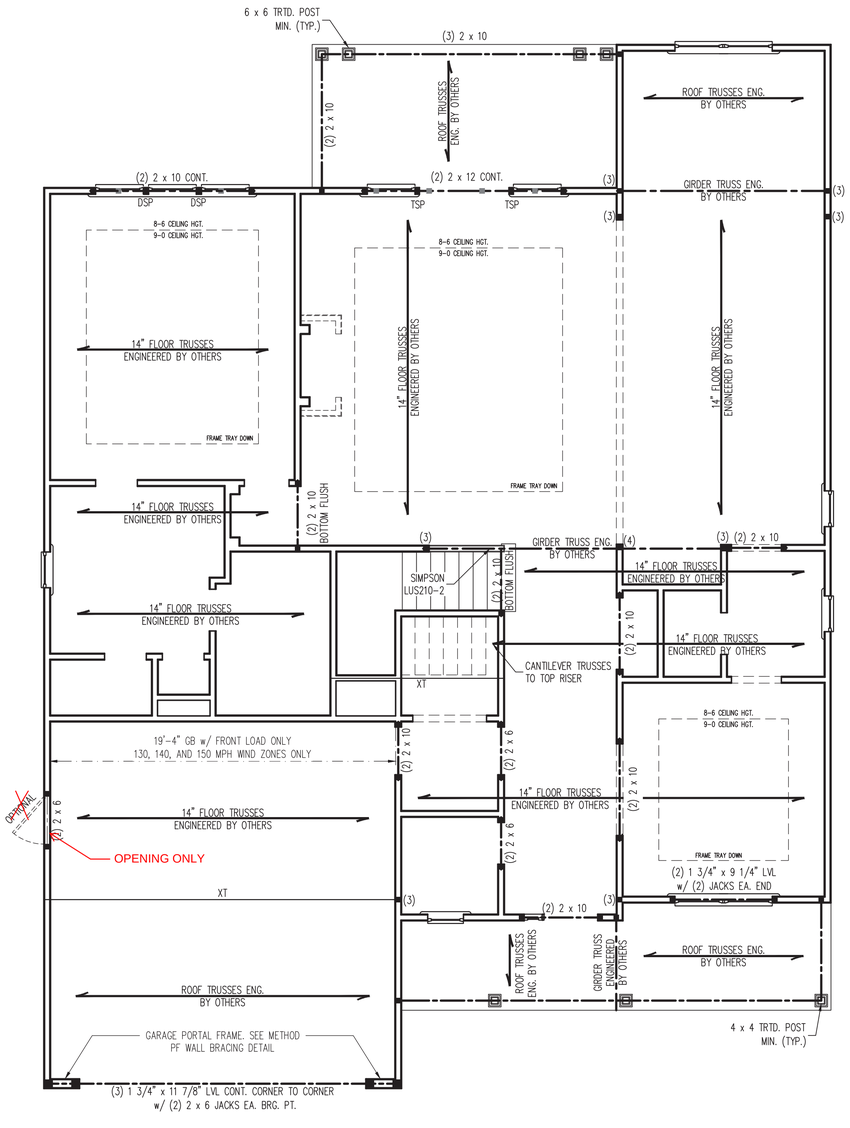
N.C. LICENSE NO.: C-1733

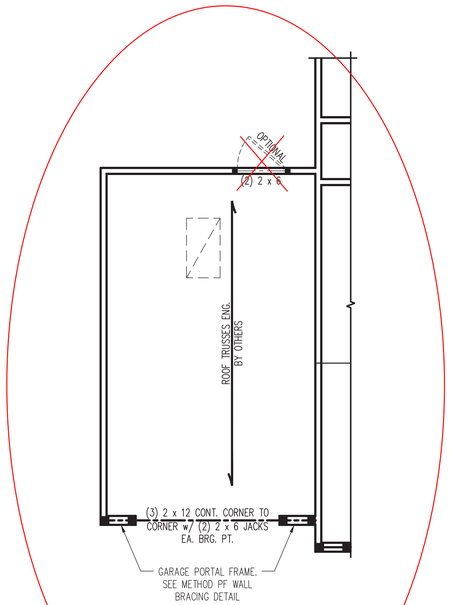
DOWNTON
2018 NCRC
ASCOT GROUP

DATE: MARCH 8, 2024
SCALE: 1/4" = 1'-0"
DRAWN BY: ASCOT GROUP
ENGINEERED BY: WFB

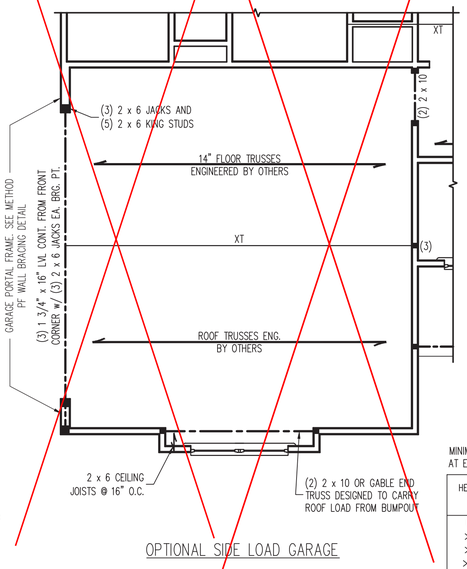
NORTH CAROLINA PROFESSIONAL SEAL 33736 ENGINEER MATTHEW G. STROTHER
1/17/2025

S-1.3a
STEM WALL FOUNDATION PLAN





OPTIONAL THIRD CAR GARAGE



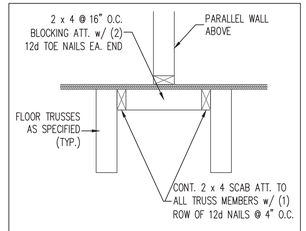
OPTIONAL SIDE LOAD GARAGE

BRACED WALL DESIGN NOTES:

1. BRACED WALL DESIGN PER SECTION R602.10.5 "WALL BRACING BY ENGINEERED DESIGN" OF THE NCRC 2018 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.1 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE.
2. SHEATH ALL EXTERIOR WALLS w/ 7/16" OSB TO PROVIDE CS-WSP WALL BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NCRC 2018 EDITION.
3. CS-WSP REFERS TO "CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.
4. GB REFERS TO "GYPSUM BOARD." CONTRACTOR IS TO INSTALL 1/2" (MIN.) GYPSUM BOARD ON BOTH SIDES OF WALL WHERE NOTED ON THE PLANS ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD.
5. BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NCRC 2018 EDITION.
6. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

STRUCTURAL NOTES:

1. ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO.)
2. ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
3. INSTALL 2 x 4 @ 16" O.C. BLOCKING BETWEEN ADJACENT TRUSSES UNDER WALLS PARALLEL TO FLOOR TRUSSES WHERE WALL LENGTH EXCEEDS 1/3 OF TRUSS SPAN (SEE DETAIL THIS SHEET). TRUSS DESIGNER TO DESIGN ADJACENT TRUSSES FOR ADDITIONAL LOADING FROM WALLS.
4. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.
5. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO.)
6. FOR HIGH WIND ZONES, ALL EXTERIOR WALLS TO BE SHEATHED WITH 7/16" OSB SHEATHING WITH JOINTS BLOCKED AND SECURED WITH 8d NAILS AT 3" O.C. ALONG EDGES AND 6" O.C. IN THE FIELD.
7. FOR HIGH WIND ZONES, SECURE ALL EXTERIOR WALL SHEATHING PANELS TO DOUBLE TOP PLATES, BANDS, JOISTS, AND GIRDERS WITH (2) ROWS OF 8d NAILS STAGGERED AT 3" O.C. PANELS SHALL EXTEND 12" BEYOND CONSTRUCTION JOINTS AND SHALL OVERLAP GIRDERS AND DOUBLE SILL PLATES THEIR FULL DEPTH.
8. ALL 4 x 4 POSTS SHALL BE ANCHORED TO SLABS w/ SIMPSON ABU44 POST BASES (OR EQUAL) AND 6 x 6 POSTS w/ ABU66 POST BASES (OR EQUAL) (UNO). ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 700 LB CAPACITY UPLIFT CONNECTORS AT TOP (UNO.)
9. FOR FIBERGLASS, ALUMINUM, OR COLUMN ENG. BY OTHERS, SECURE TO SLAB w/ (2) METAL ANGLES USING 2" CONC. SCREWS. FASTEN ANGLES TO COLUMNS w/ 1/4" THROUGH BOLTS w/ NUTS AND WASHERS. LOCATE ANGLES ON OPPOSITE SIDES OF COLUMN. THROUGH BOLTS MUST BE INSTALLED PRIOR TO SETTING COLUMN.
10. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.



TRUSS BLOCKING DETAIL

INSTALL 2 x 4 @ 16" O.C. BLOCKING BETWEEN ADJACENT TRUSSES UNDER WALLS PARALLEL TO FLOOR TRUSSES WHERE WALL LENGTH EXCEEDS 1/3 OF TRUSS SPAN. TRUSS DESIGNER TO DESIGN ADJACENT TRUSSES FOR ADDITIONAL LOADING FROM WALLS.

TABLE R602.7.5
MINIMUM NUMBER OF FULL HEIGHT KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (FEET)	MINIMUM NUMBER OF FULL HEIGHT STUDS (KINGS)
UP TO 3'	1
> 3' TO 6'	2
> 6' TO 9'	3
> 9' TO 12'	4
> 12' TO 15'	5

LEGEND	
CONT	CONTINUOUS
XJ	EXTRA JOIST
DJ	DOUBLE JOIST
TJ	TRIPLE JOIST
EA	EACH
( )	NUMBER OF STUDS
DSP	DOUBLE STUD POCKET
TSP	TRIPLE STUD POCKET
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TRTD	PRESSURE TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

NORTH CAROLINA PROFESSIONAL SEAL 33736 ENGINEER MATTHEW G. STROTHER

3/8/2024

J.S. THOMPSON ENGINEERING, INC
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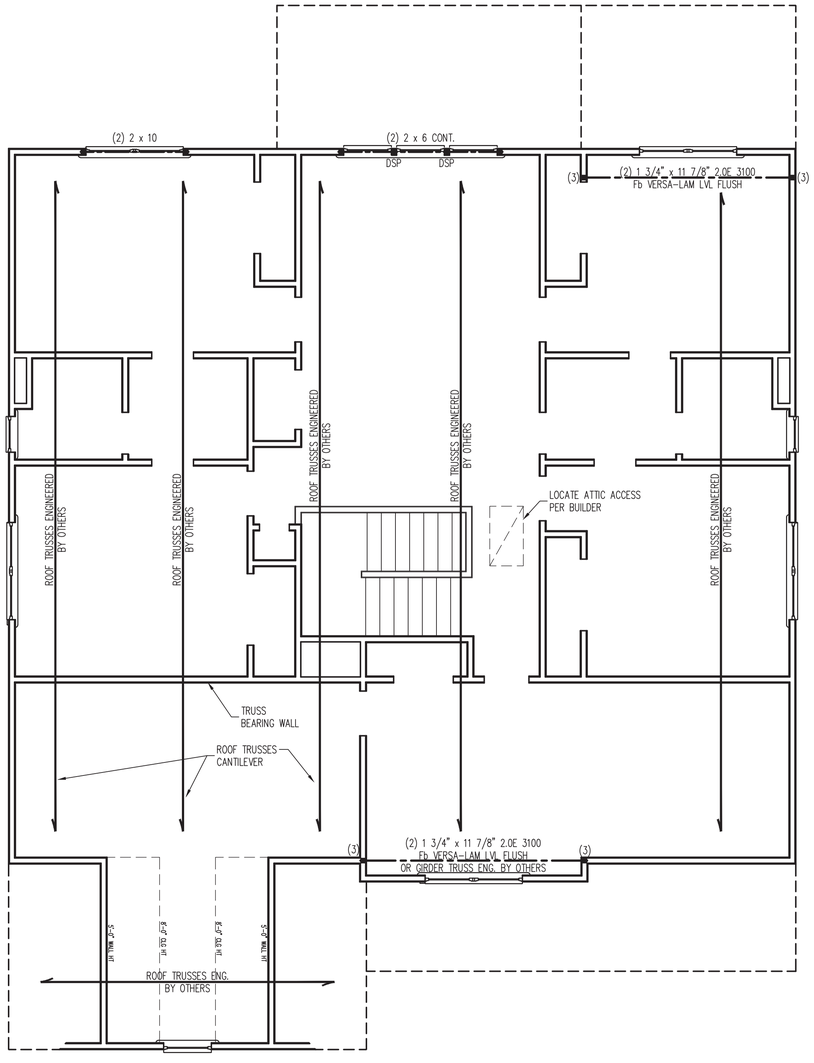
N.C. LICENSE NO.: C-1733

DOWNTON
ASCOT GROUP

DATE: MARCH 8, 2024
SCALE: 1/4" = 1'-0"
DRAWN BY: ASCOT GROUP
ENGINEERED BY: WFB

S-2a
SECOND FLOOR FRAMING PLAN



BRACED WALL DESIGN NOTES:

1. BRACED WALL DESIGN PER SECTION R602.10.5 "WALL BRACING BY ENGINEERED DESIGN" OF THE NCRC 2018 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.1 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE.
2. SHEATH ALL EXTERIOR WALLS w/ 7/16" OSB TO PROVIDE CS-WSP WALL BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NCRC 2018 EDITION.
3. CS-WSP REFERS TO "CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.
4. GB REFERS TO "GYPSUM BOARD." CONTRACTOR IS TO INSTALL 1/2" (MIN.) GYPSUM BOARD ON BOTH SIDES OF WALL WHERE NOTED ON THE PLANS ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD.
5. BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NCRC 2018 EDITION.
6. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

STRUCTURAL NOTES:

1. ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO.)
2. ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
3. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.
4. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO.)
5. FOR HIGH WIND ZONES, ALL EXTERIOR WALLS TO BE SHEATHED WITH 7/16" OSB SHEATHING WITH JOINTS BLOCKED AND SECURED WITH 8d NAILS AT 3" O.C. ALONG EDGES AND 6" O.C. IN THE FIELD.
6. FOR HIGH WIND ZONES, SECURE ALL EXTERIOR WALL SHEATHING PANELS TO DOUBLE TOP PLATES, BANDS, JOISTS, AND GIRDERS WITH (2) ROWS OF 8d NAILS STAGGERED AT 3" O.C. PANELS SHALL EXTEND 12" BEYOND CONSTRUCTION JOINTS AND SHALL OVERLAP GIRDERS AND DOUBLE SILL PLATES THEIR FULL DEPTH.
7. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

TABLE R602.7.5
MINIMUM NUMBER OF FULL HEIGHT KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (FEET)	MINIMUM NUMBER OF FULL HEIGHT STUDS (KINGS)
UP TO 3'	1
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> 9' TO 12'	4
> 12' TO 15'	5

LEGEND	
CONT	CONTINUOUS
XT	EXTRA TRUSS
TS	TRUSS SUPPORT
EA	EACH
( )	NUMBER OF STUDS
DSP	DOUBLE STUD POCKET
TSP	TRIPLE STUD POCKET
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TRTD	PRESSURE TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

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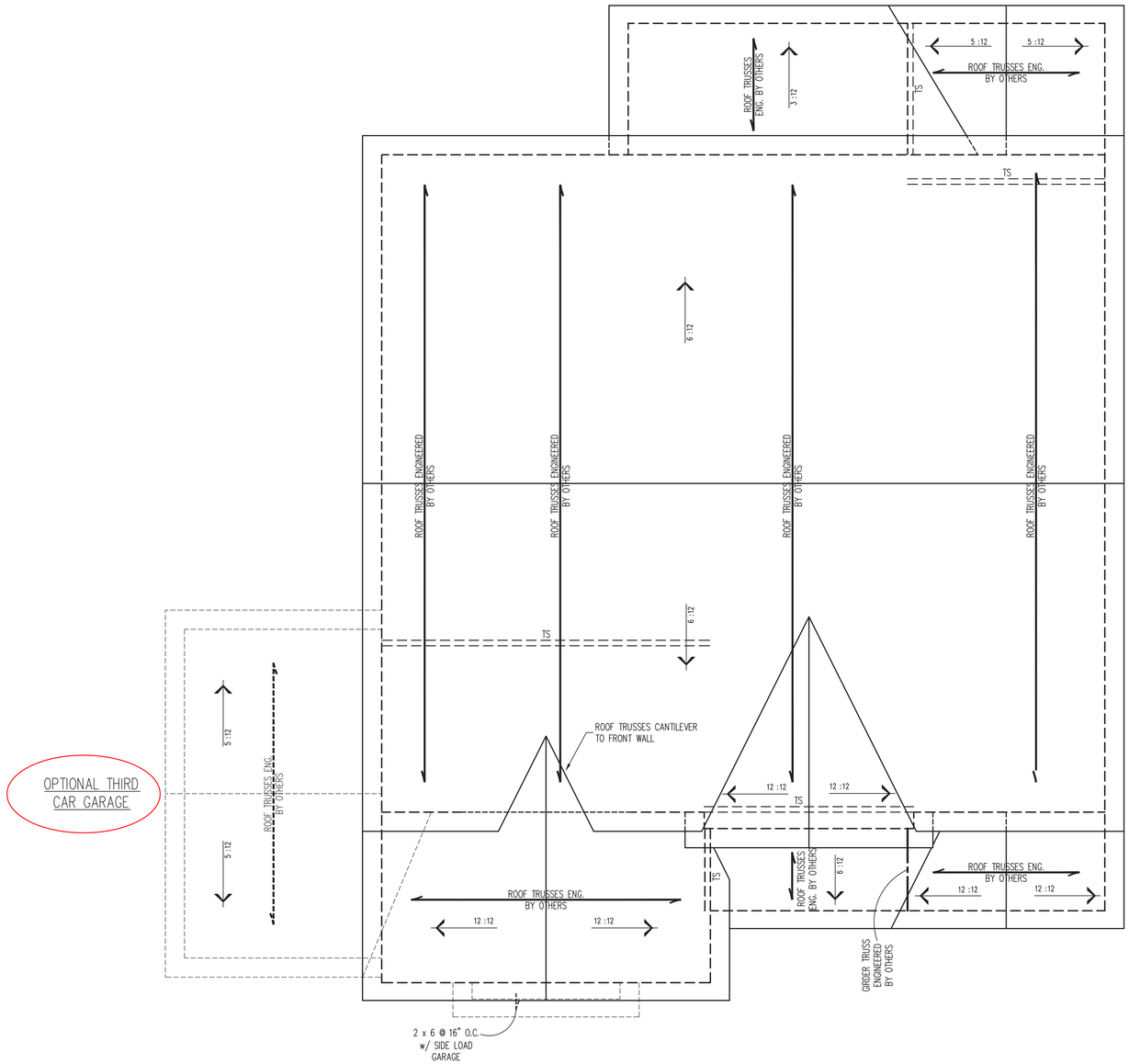
N.C. LICENSE NO.: C-1733

DOWNTON
ASCOT GROUP

DATE: MARCH 8, 2024
SCALE: 1/4" = 1'-0"
DRAWN BY: ASCOT GROUP
ENGINEERED BY: WFB

NORTH CAROLINA PROFESSIONAL SEAL 33736 ENGINEER MATTHEW G. STROTHER
3/8/2024

S-3
ATTIC FLOOR FRAMING PLAN



STRUCTURAL NOTES:

1. ALL FRAMING LUMBER TO BE #2 SPF (UNO).
2. STICK FRAME OVER-FRAMED ROOF SECTIONS W/ 2 x 8 RIDGES, 2 x 6 RAFTERS @ 16" O.C. AND FLAT 2 x 10 VALLEYS OR USE VALLEY TRUSSES.
3. FASTEN FLAT VALLEYS TO RAFTERS OR TRUSSES WITH SIMPSON H2.5A HURRICANE TIES @ 32" O.C. MAX. PASS HURRICANE TIES THROUGH NOTCH IN ROOF SHEATHING. EACH RAFTER IS TO BE FASTENED TO THE FLAT VALLEY WITH A MIN. OF (6) 12d TOE NAILS.
4. REFER TO SECTION R802.11 OF THE 2018 NCRC FOR REQUIRED UPLIFT RESISTANCE AT RAFTERS AND TRUSSES.
5. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ROOF PITCHES, PLATE HEIGHTS, DIMENSIONS, OVERHANG WIDTHS, AND ATTIC VENT CALCS.

LEGEND	
XT	EXTRA TRUSS
TS	TRUSS SUPPORT
XR	EXTRA RAFTER
RS	RAFTER SUPPORT
CONT	CONTINUOUS
EA	EACH
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

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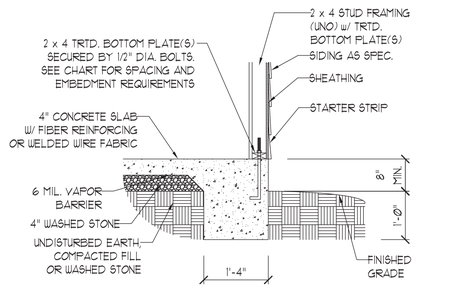
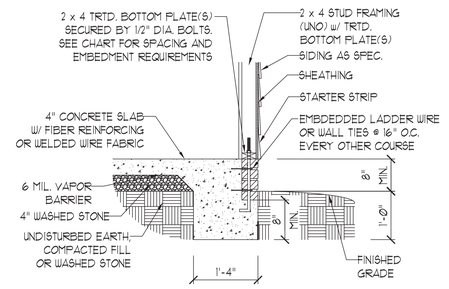
SCALE: 1/4" = 1'-0"
DRAWN BY: ASCOT GROUP
ENGINEERED BY: WFB

NORTH CAROLINA PROFESSIONAL SEAL 33736 ENGINEER MATTHEW G. STROTHER
3/8/2024

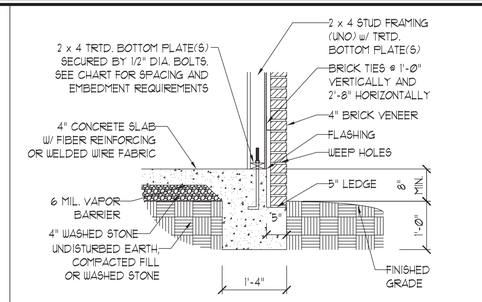
S-4
ROOF FRAMING PLAN



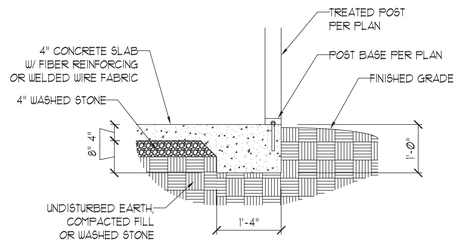
TYPICAL SLAB (1)



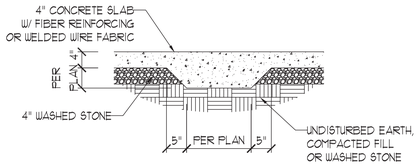
TYPICAL SLAB w/ BRICK LEDGE (2)



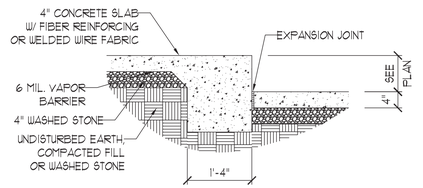
TYPICAL SLAB w/ BRICK VENEER LEDGE (3)



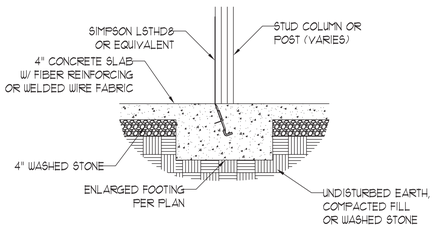
PORCH/SCREEN PORCH (4)



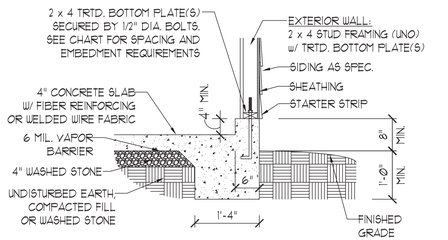
TYPICAL THICKENED SLAB (5)



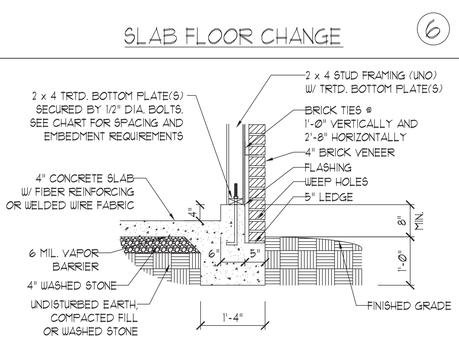
SLAB FLOOR CHANGE (6)



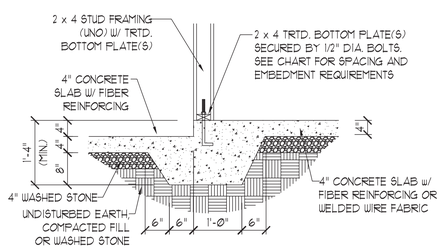
TYPICAL COLUMN TO SLAB CONNECTION (7)



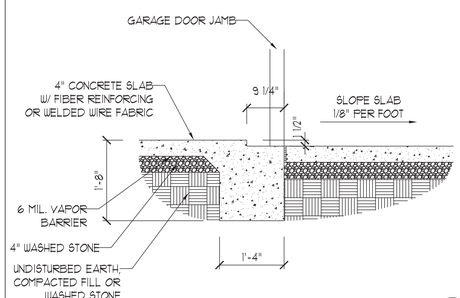
GARAGE CURB (8)



GARAGE CURB w/ BRICK LEDGE (9)



STEP IN GARAGE (10)



SLAB AT GARAGE DOOR (11)

ANCHOR SPACING AND EMBEDMENT		
WIND ZONE	120 MPH	130 MPH
SPACING	6'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS	4'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS
EMBEDMENT	7"	15" INTO MASONRY 7" INTO CONCRETE

NOTE:

THREADED ROD WITH EPOXY, SIMPSON TITEN HD, OR APPROVED ANCHORS SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE TO 1/2" DIAMETER ANCHOR BOLTS MAY BE USED IN LIEU OF 1/2" ANCHOR BOLTS.

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N.C. LICENSE NO.: C-1733

MONOLITHIC SLAB FOUNDATION DETAILS

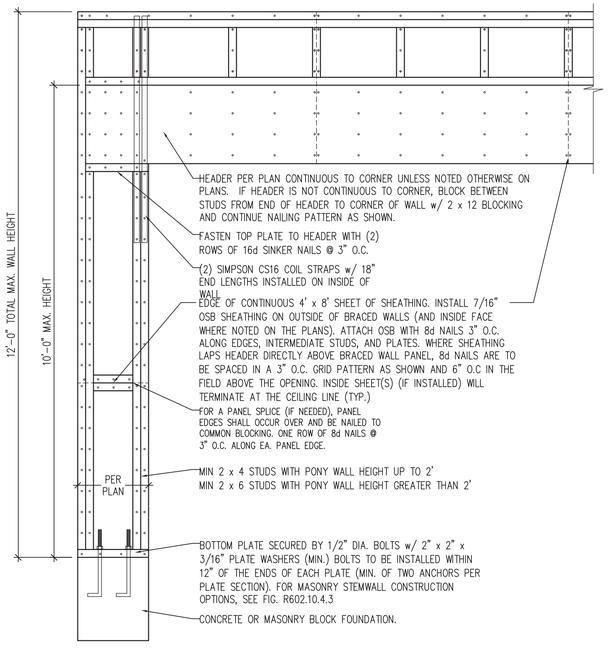
DATE: AUGUST 30, 2022
SCALE: NTS
DRAWN BY: JST
ENGINEERED BY: JST

NORTH CAROLINA PROFESSIONAL SEAL 33736 ENGINEER MATTHEW G. STROTHER
3/8/2024

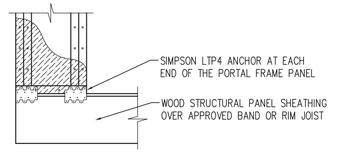
FOUNDATION DETAILS

GENERAL WALL BRACING NOTES:

1. WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NCRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NCRC.
2. SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NCRC FOR ADDITIONAL INFORMATION AS NEEDED.
3. BRACED EXTERIOR WALLS SUPPORTING ROOF TRUSSES AND RAFTERS, INCLUDING STORIES BELOW THE TOP FLOOR, HAVE BEEN DESIGNED PER R602.3.5 (3). WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST COMBINED UPLIFT AND SHEAR FORCES IN ACCORDANCE WITH ACCEPTED ENGINEERED PRACTICE.
4. SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS, DIMENSIONS, HOLD DOWN TYPE AND LOCATIONS, BRACED WALL LINE KEY WITH WALL DESIGN SUMMARY OF REQUIRED/PROVIDED TOTALS FOR EACH WALL LINE AND ANY SPECIAL NOTES OR REQUIREMENTS.
5. ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH CS-WSP IN ACCORDANCE WITH SECTION R602.10.3 UNLESS NOTED OTHERWISE.
6. ALL EXTERIOR AND INTERIOR WALLS TO HAVE 1/2" GYPSUM INSTALLED. WHEN NOT USING METHOD "GB", GYPSUM TO BE FASTENED PER TABLE R702.3.5. METHOD GB TO BE FASTENED PER TABLE R602.10.1
7. CS-WSP REFERS TO THE "CONTINUOUS SHEATHING – WOOD STRUCTURAL PANELS" WALL BRACING METHOD. 7/16" OSB SHEATHING IS TO BE INSTALLED ON ALL EXTERIOR WALLS ATTACHED w/ 6d COMMON NAILS OR 8d (2 1/2" LONG x 0.113" DIAMETER) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (U.N.O.).
8. GB REFERS TO THE "GYPSUM BOARD" WALL BRACING METHOD. 1/2" (MIN.) GYPSUM WALL BOARD IS TO BE INSTALLED ON BOTH SIDES OF THE BRACED WALL FASTENED WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 7" O.C. ALONG PANEL EDGES INCLUDING TOP AND BOTTOM PLATES AND INTERMEDIATE SUPPORTS (U.N.O.). VERIFY ALL FASTENER OPTIONS FOR 1/2" AND 5/8" GYPSUM PRIOR TO CONSTRUCTION. FOR INTERIOR FASTENER OPTIONS SEE TABLE R702.3.5. FOR EXTERIOR FASTENER OPTIONS SEE TABLE R602.3(1). EXTERIOR GB TO BE INSTALLED VERTICALLY.
9. REQUIRED BRACED WALL LENGTH FOR EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE ARE INTERPOLATED PER TABLE R602. 10.3. METHOD CS-WSP CONTRIBUTES ITS ACTUAL LENGTH, METHOD GB CONTRIBUTES .5 ITS ACTUAL LENGTH, AND METHOD PF CONTRIBUTES 1.5 TIMES ITS ACTUAL LENGTH.



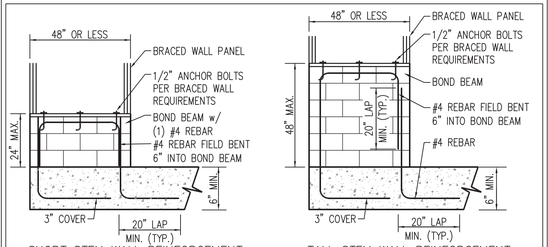
OVER CONCRETE OR MASONRY BLOCK FOUNDATION



OVER RAISED WOOD FLOOR – FRAMING ANCHOR OPTION

* APPLICABLE w/ GREATER THAN 12" KNEE WALL HEIGHTS IN CRAWL SPACE AND ABOVE FRAMED BASEMENT WALLS *

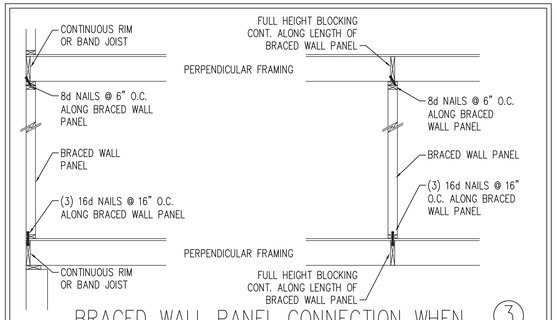
METHOD PF–PORTAL FRAME DETAIL (1)



NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

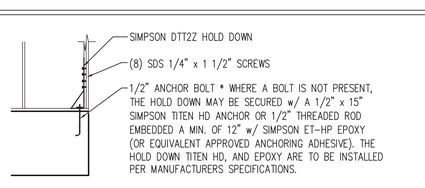
MASONRY STEM WALLS SUPPORTING BRACED WALL PANELS (2)

PER FIGURE R602.10.4.3



BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING (3)

PER FIGURE R602.10.4.4(1)

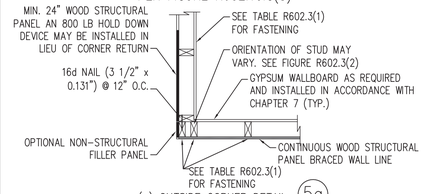


HOLD DOWN DETAIL FOR MASONRY FOUNDATION OR MONOLITHIC SLAB (4)

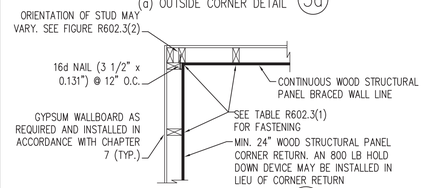
* APPLICABLE ONLY WHERE SPECIFIED ON PLAN *

TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING (5)

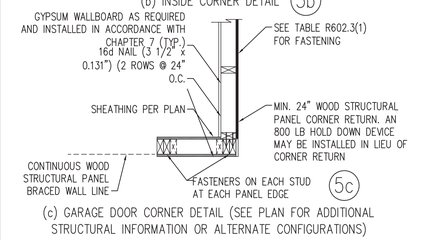
PER FIGURE R602.10.3(5)



(a) OUTSIDE CORNER DETAIL (5a)



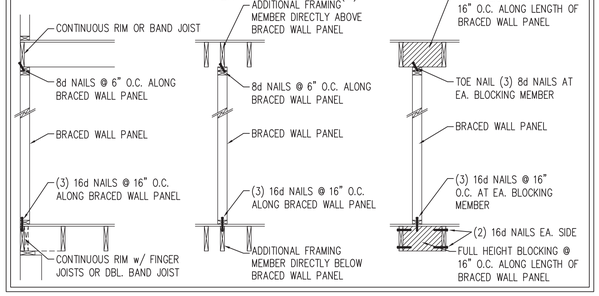
(b) INSIDE CORNER DETAIL (5b)

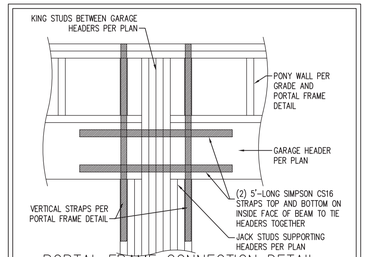


(c) GARAGE DOOR CORNER DETAIL (SEE PLAN FOR ADDITIONAL STRUCTURAL INFORMATION OR ALTERNATE CONFIGURATIONS) (5c)

BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING (6)

PER FIG. R602.10.4.4(2)



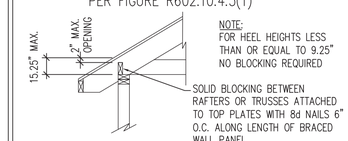


PORTAL FRAME CONNECTION DETAIL BETWEEN GARAGE DOOR HEADERS (7)

(REFERENCE PORTAL FRAME DETAIL FOR ALL OTHER PORTAL FRAME INFORMATION)

BRACED WALL PANEL CONNECTION TO PERPENDICULAR RAFTERS (8)

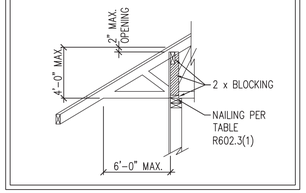
PER FIGURE R602.10.4.5(1)



BRACED WALL PANEL CONNECTION TO PERPENDICULAR ROOF TRUSSES (9)

PER FIGURE R602.10.4.5(3)

(OR ALTERNATIVE: FIGURE R602.10.4.5(2))



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N.C. LICENSE NO.: C-1733

WALL BRACING NOTES AND DETAILS

DATE: AUGUST 30, 2022
SCALE: 1/4" = 1'-0"
DRAWN BY: JST
ENGINEERED BY: JST

BRACED WALL NOTES AND DETAILS AND PF DETAIL

NORTH CAROLINA PROFESSIONAL SEAL 33736 ENGINEER MATTHEW G. STROTHER
3/8/2024

GENERAL NOTES

1. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS, HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIERS, GIRDER SYSTEM AND FOOTING. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OF ARCHITECTURAL LAYOUT INCLUDING ROOF. ENGINEER'S SEAL DOES NOT APPLY TO I-JOIST OR FLOOR/ROOF TRUSS LAYOUT DESIGN AND ACCURACY.

2. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NCRC), 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

3. STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NCRC, 2018 EDITION (R301.4 – R301.7)

DESIGN CRITERIA:	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (IN)
ATTIC WITH LIMITED STORAGE	20	10	L/240 (L/360 w/ BRITTLE FINISHES)
ATTIC WITHOUT STORAGE	10	10	L/360
DECKS	40	10	L/360
EXTERIOR BALCONIES	40	10	L/360
FIRE ESCAPES	40	10	L/360
HANDRAILS/GUARDRAILS	200	10	L/360
PASSENGER VEHICLE GARAGE	50	10	L/360
ROOMS OTHER THAN SLEEPING ROOM	40	10	L/360
SLEEPING ROOMS	30	10	L/360
STAIRS	40	10	L/360
WIND LOAD	(BASED ON TABLE R301.2(4) WIND ZONE AND EXPOSURE)		
GROUND SNOW LOAD: Pg	20 (PSF)		

– I-JOIST SYSTEMS DESIGNED WITH 12 PSF DEAD LOAD AND DEFLECTION (IN) OF L/480
– FLOOR TRUSS SYSTEMS DESIGNED WITH 15 PSF DEAD LOAD

4. FOR 115 AND 120 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.1.6 OF THE NCRC, 2018 EDITION. FOR 130 MPH, 140 MPH, AND 150 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 4504 OF THE NCRC, 2018 EDITION.

5. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.

FOOTING AND FOUNDATION NOTES

1. FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.

2. FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. A 4" THICK BASED COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE NCRC, 2018 EDITION.

3. PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE SLAB IS AT OR BELOW WATER TABLE. IF APPLICABLE, 3/4" – 1" DEEP CONTROL JOINTS ARE TO BE SAWED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.

4. CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NCRC, 2018 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60. WELDED WIRE FABRIC TO BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS. FOR POURED CONCRETE WALLS, CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE INSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 3/4". CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1 1/2" FOR #5 BARS OR SMALLER, AND NOT LESS THAN 2" FOR #6 BARS OR LARGER.

5. MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM TO ASTM C270.

6. THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS. PERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR. PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.

7. THE CENTER OF EACH OF THE PIERS SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING. EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS.

8. ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NCRC, 2018 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCMA TR68-A OR ACE 530/ASCE 5/TMS 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.1(1), R404.1.1(2), R404.1.1(3), OR R404.1.1(4) OF THE NCRC, 2018 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.1(5) OF THE NCRC, 2018 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).

FRAMING NOTES

1. ALL FRAMING LUMBER SHALL BE #2 SPF MINIMUM (Fb = 875 PSI, Fv = 375 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE #2 SYP MINIMUM (Fb = 975 PSI, Fv =175 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO).

2. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb =2600 PSI, Fv = 285 PSI, E = 1900000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2325 PSI, Fv = 310 PSI, E = 1550000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E =1800000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 2000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.

3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS
   - A. W AND WT SHAPES: ASTM A992
   - B. CHANNELS AND ANGLES: ASTM A36
   - C. PLATES AND BARS: ASTM A36
   - D. HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE B
   - E. STEEL PIPE: ASTM A53, GRADE B, TYPE E OR S

4. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH (UNO). PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS (UNO):

   A. WOOD FRAMING — (2) 1/2" DIA. x 4" LONG LAG SCREWS
   B. CONCRETE — (2) 1/2" DIA. x 4" WEDGE ANCHORS
   C. MASONRY (FULLY GROUTED) — (2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHORS
   D. STEEL PIPE COLUMN — (4) 3/4" DIA. A325 BOLTS OR 3/16" FILLET WELD

   LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOISTS ARE TOE NAILED TO THE 2x NAILER ON TOP OF THE STEEL BEAM, AND THE 2x NAILER IS SECURED TO THE TOP OF THE STEEL BEAM w/ (2) ROWS OF SELF TAPPING SCREWS @ 16" O.C. OR (2) ROWS OF 1/2" DIAMETER BOLTS @ 16" O.C. IF 1/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED w/ (2) ROWS OF 9/16" DIAMETER HOLES @ 16" O.C.

5. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SHADED SQUARES DENOTE POINT LOADS FROM ABOVE WHICH REQUIRE SOLID BLOCKING TO SUPPORTING MEMBER BELOW.

6. ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R602.7(1) AND R602.7(2) OF THE NCRC, 2018 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (UNO), WHICHEVER IS GREATER ALL HEADERS TO BE SECURED TO EACH JACK STUD WITH (4) 8d NAILS. ALL BEAMS TO BE SUPPORTED WITH (2) STUDS AT EACH BEARING POINT (UNO). INSTALL KING STUDS PER SECTION R602.7.5 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.

7. ALL BEAMS, HEADERS, OR GIRDER TRUSSES PARALLEL TO WALL ARE TO BEAR FULLY ON (1) JACK OR (2) STUDS MINIMUM OR THE NUMBER OF JACKS OR STUDS NOTED. ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY (3) STUDS OR LESS ARE TO HAVE 1 1/2" MINIMUM BEARING (UNO). ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY MORE THAN (3) STUDS OR OTHER NOTED COLUMN ARE TO BEAR FULLY ON SUPPORT COLUMN FOR ENTIRE WALL DEPTH (UNO). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (UNO).

8. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED AT THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED AT TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH (2) BOLTS LOCATED AT 6" FROM EACH END (UNO).

9. ALL I-JOIST OR TRUSS LAYOUTS ARE TO BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO INSTALLATION.

10. BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION WALL BRACING CRITERIA. THE AMOUNT, LENGTH, AND LOCATION OF BRACING SHALL COMPLY WITH ALL APPLICABLE TABLES IN SECTION R602.10.

11. PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR I-JOISTS PER MANUFACTURER'S SPECIFICATIONS. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.

12. FOR ALL HEADERS SUPPORTING BRICK VENEER THAT ARE LESS THAN 8'-0" IN LENGTH, REST A 6" x 4" x 5/16" STEEL ANGLE WITH 6" MINIMUM EMBEDMENT AT SIDES FOR BRICK SUPPORT (U.N.O). FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO HEADER WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED FOR BRICK SUPPORT. FOR ALL BRICK SUPPORT AT ROOF LINES, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING INSTALLED w/ (4) 12d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R703.8.2.1 OF THE NCRC, 2018 EDITION.

13. FOR STICK FRAMED ROOFS: CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF MEMBER SUPPORT. HIP SPLICES ARE TO BE SPACED A MINIMUM OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOWN (UNO).

14. FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 x 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 x 8 RIDGES, 2 x 6 RAFTERS AT 16" O.C. AND FLAT 2 x 10 VALLEYS (UNO).

15. ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 700 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO.) POSTS MAY BE SECURED USING ONE SIMPSON H6 OR LTS12 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON CS16 COIL STRAPPING WITH (8) 8d HDG NAILS AT EACH END MAY BE USED IN LIEU OF EACH TWIST STRAP IF DESIRED. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.

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STANDARD STRUCTURAL NOTES

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ENGINEERED BY: JST

NORTH CAROLINA PROFESSIONAL SEAL 33736 ENGINEER MATTHEW G. STROTHER

3/8/2024

STRUCTURAL NOTES