

REDBUD H&H HOMES

PLAN REVISIONS

II-21-19 U ADDED ROOF VENTING CALCULATIONS FOR ELEVATIONS A, B, AND C.
2) ADDED ROOM DIMENSIONS TO ROOM LABELS FOR CLARITY.
3) CHANGE MASTERS TO OWNERS THROUGHOUT PLANSÆLEVATIONS TO MEET HITH

4.) UPDATED BATHROOM NAMING IN ACCORDANCE TO HAH STANDARDS. 5.) REVISED AND VERIFIED SQUARE FOOTAGE.

1-16-2020 IJ CHANGED FIREPLACE TO OPTIONAL INSTEAD OF STANDARD PER HIH. 2J UPDATED CUTSHEETS.

REDBUD SQUARE FOOTAGES		
AREA	Ed V A'	
Ist FLOOR	1502 SF	
2nd FLOOR	1723 SF	
TOTAL LIVING	3225 SF	
GARAGE	464 SF	
PORCH	121 SF	
OPT. COVERED PATIO	100 SF	
OPT 3 CAR GARAGE	240 SF	

ARPA	ELEV 'B'
et FLOOR	1507 SF
2nd FLOOR	1732 SF
TOTAL LIVING	3234 SF
GARAGE	464 SF
PORCH	201 SF
OPT OVERED PATIO	100 SF
PT. 3-GAR GARAGE	240 SF

AREA	ELEV 'C'
lst FLOOR	1502 SF
2nd FLOOR	1736 SF
TOTAL LIVING	3238 SF
GARAGE	464 SF
PORCH	128 SF
OPT. COVERED PATIO	100 SF
OPT. 3-CAR GARAGE	240 8

DRAWINGS ON II"xIT" SHEET ARE ONE HALF THE SCALE NOTED

出

GARAGE

REDBUD

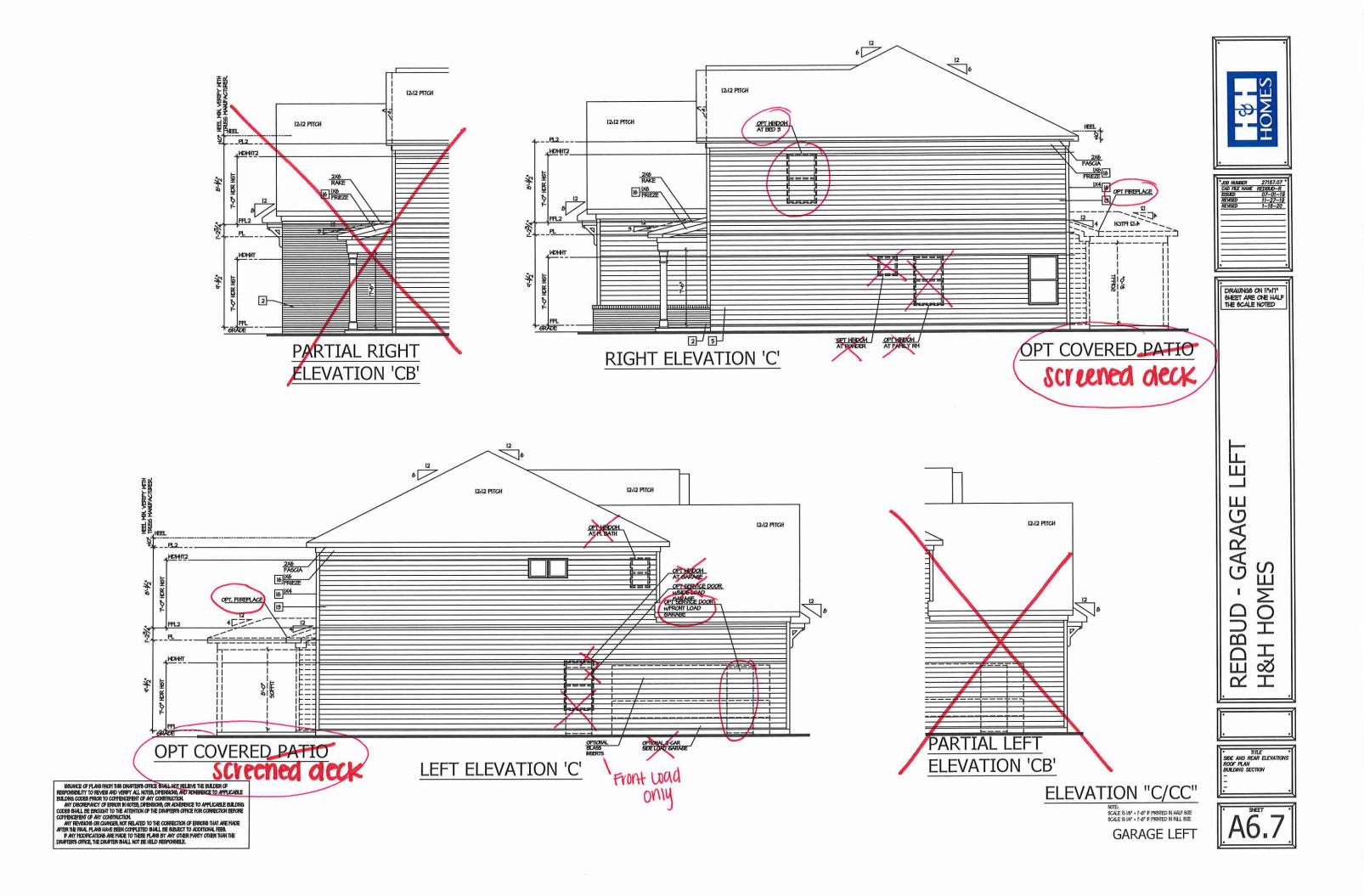
H&H HOMES

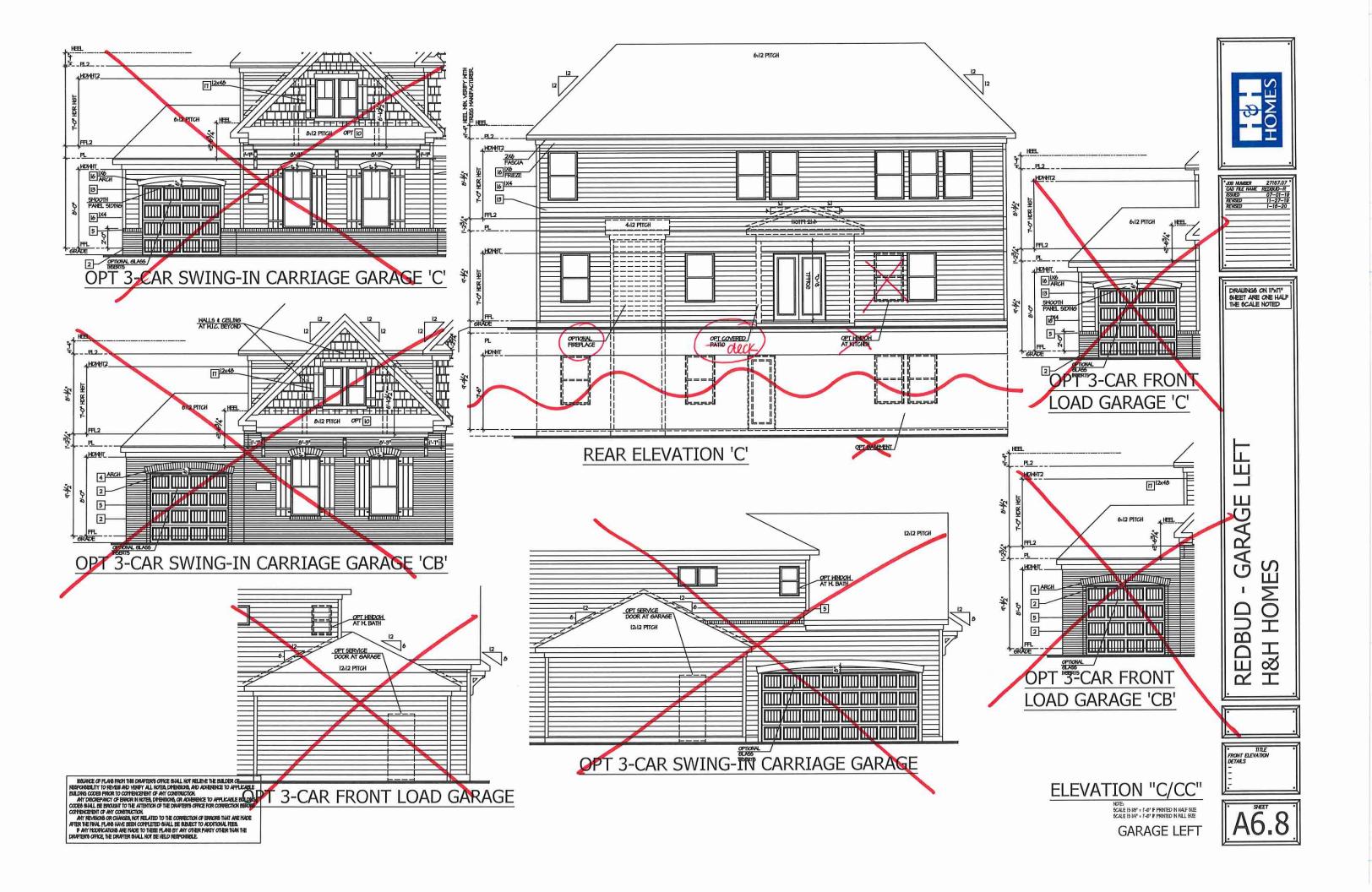


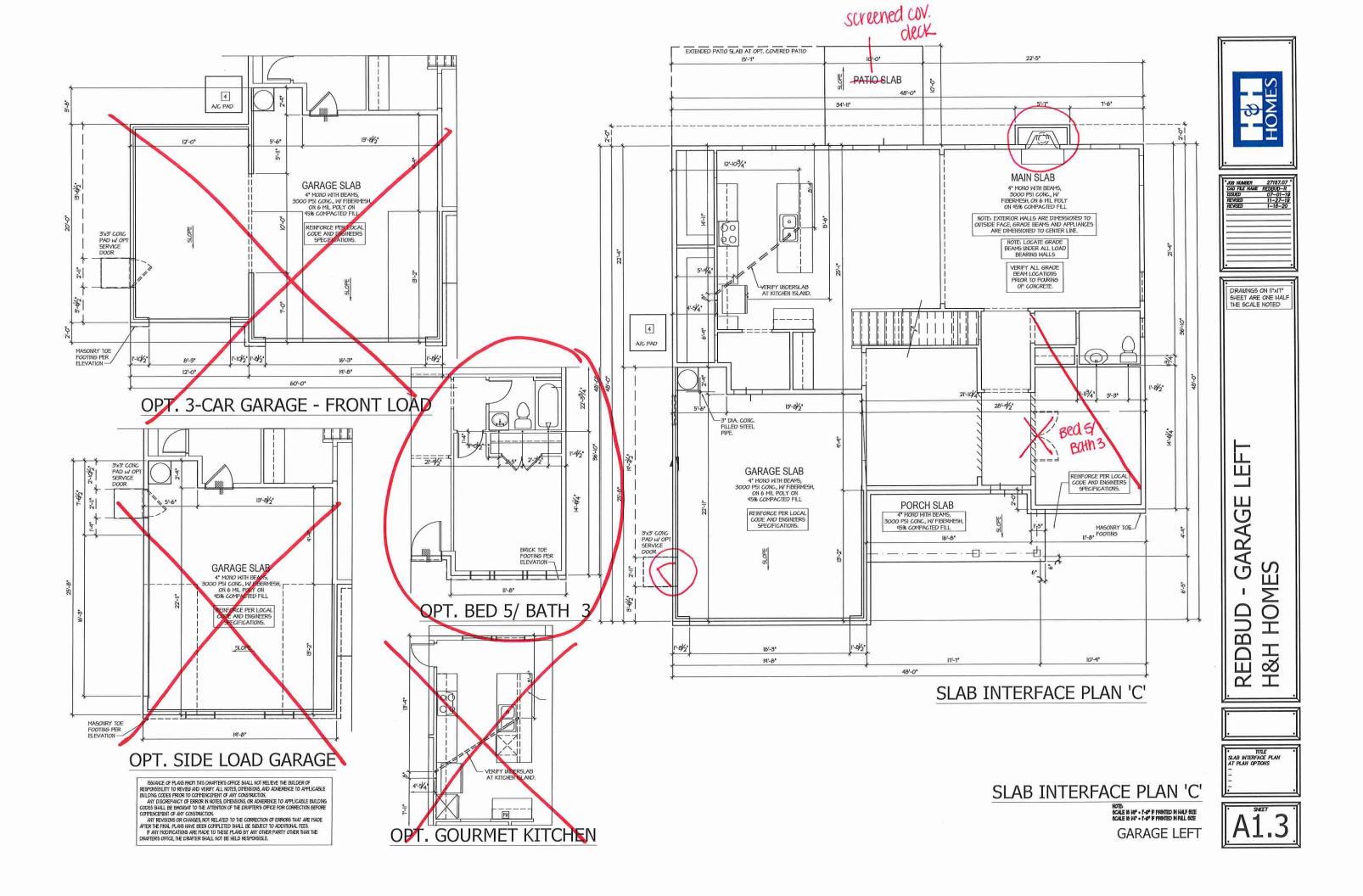
ISSUANCE OF PLANS FROM THIS DRAFTER'S OFFICE SHALL NOT RELEVE THE BULDER OF REPROSEDLIN'T TO REVEU AND VERRY ALL NOTES, DYENKIONS, AND ADHERBYCE TO APPLICABLE BULDING CODES FROM TO COTTENCE THE OFFICE AND RESPONSE OF ADHEBYCE OF APPLICABLE BULDING CODES SHALL BE BROUGHT TO THE ATTENTION OF THE DRAFTER'S OFFICE FOR CORRECTION BEFORE COTTENCE THE OFFICE AND CONTINUES AND SHALL BE BROUGHT TO THE ATTENTION OF THE DRAFTER'S OFFICE FOR CORRECTION BEFORE COTTENCETOR OF ANY CONSTRUCTION.

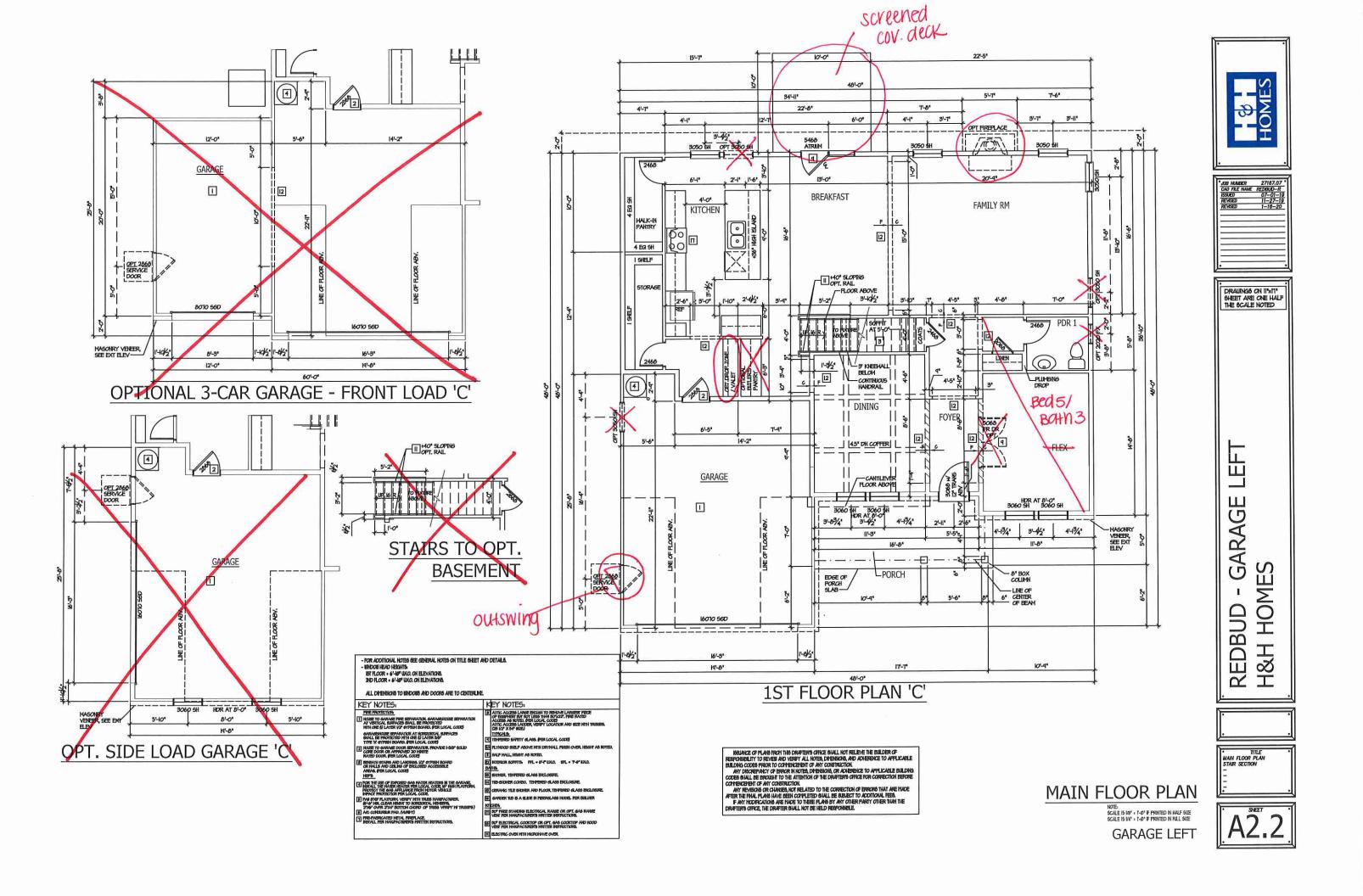
ANY REMSONS OR CHANGES, NOT RELATED TO THE CORRECTION OF ERRORS THAT ARE TAKE THE THALL TAKE HAVE EXPLOYED SHALL BE SUBJECT TO ADDITIONAL FIELS. IF ANY TROPPICATIONS ARE MADE THE FLANS BY ANY OTHER PRANTY OTHER THAN THE DRAFTER SHALL NOT BE HELD RESPONSIBLE.

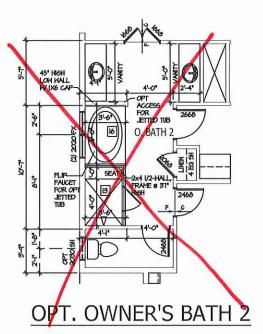


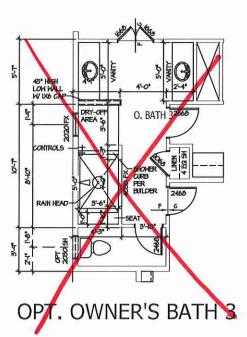


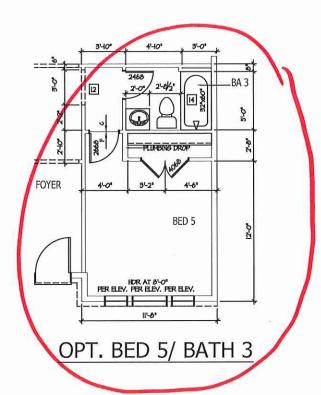




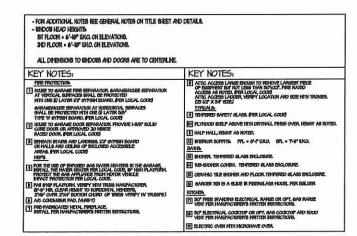




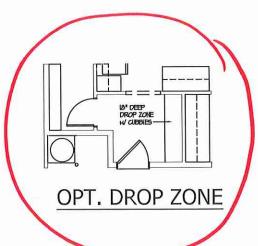


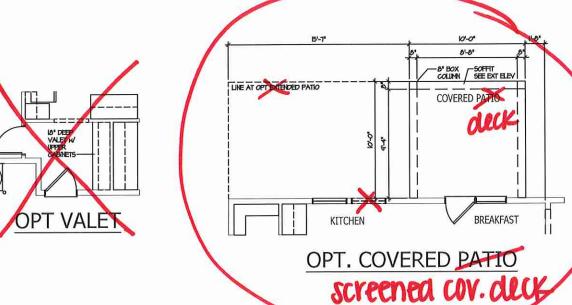












INJUNCE OF PLANS FROM THIS DRUFFERS OFFICE SHALL HOT RELEVE THE BILLDER OF REPORTED TO PROVIDE AND VERRY ALL NOTES, DYDRIGHS, AND ACKERINGE TO APPLICABLE BILLDING COORD FROM TO CONTRICTOR AND TO CONTRICTION.

AND TO ROOFFING OF PROVIDE HOUSE, DEPORTED ON THE PLANS FROM CORRECTION OF THE DRUFFERS OFFICE FOR CORRECTION DEFORE CONTRICTION OF ANY CONTRICTION.

AND THE PRIVAL FILE AND THE PLANS DO TO THE CORRECTION OF PRIVATE THAT ARE PLACE AFTER THAT IN THE BEST OFFICE TO ADDITIONAL HEED.

FIRST HOUSE OFFICE THE DRUFFERS OFFICE THAT SHE THAT THE PLACE THAT TH

MAIN FLOOR OPTIONS

NOTE: SCALE IS 1/8" : 1"-0" F PRINTED IN HALF SIZE SCALE IS 1/4" : 1"-0" F PRINTED IN FILL SIZE

GARAGE LEFT





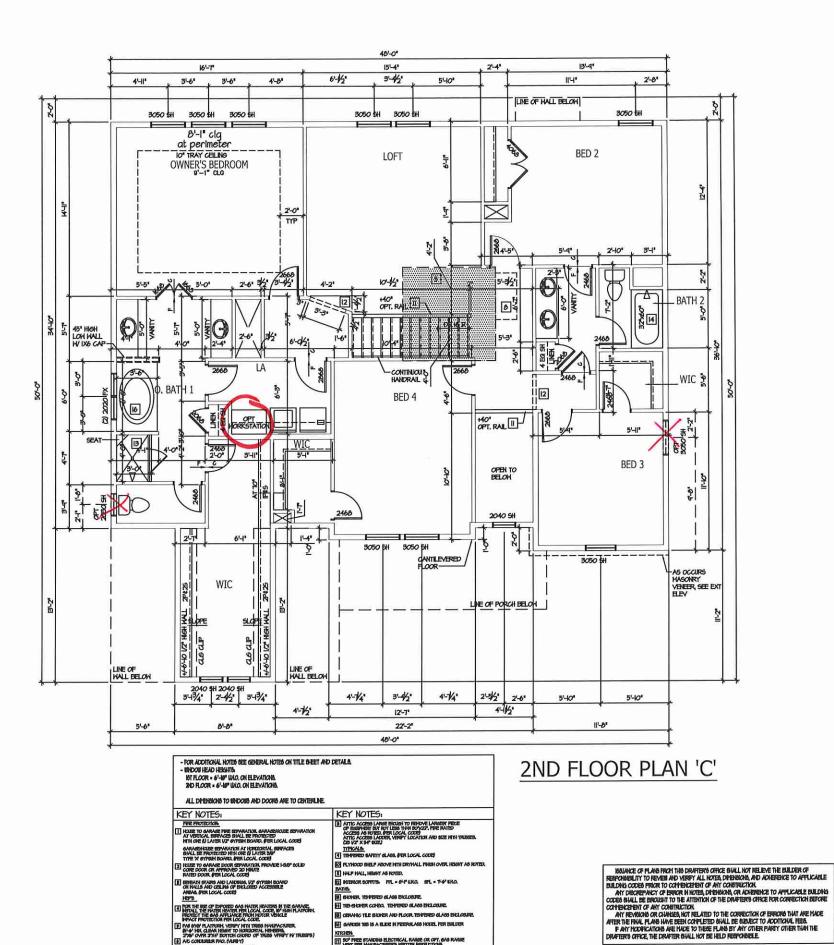
DRAWNGS ON II"x11" SHEET ARE ONE HALF THE SCALE NOTED

E

REDBUD - GARAGELE H&H HOMES



A2.4



CERNAGO TILE SHOWER AND PLOCES TEMPTIFED GLASS ENCLOSURE

E 90" ELECTRICAL COOKTOP OR OPT, 646 COOKTOP AND HOOD VOID FOR NAVIPACITIES OF HOTTER BETTACTIONS.

III BLECTRIC OVER HTDI HOROHWE OVER





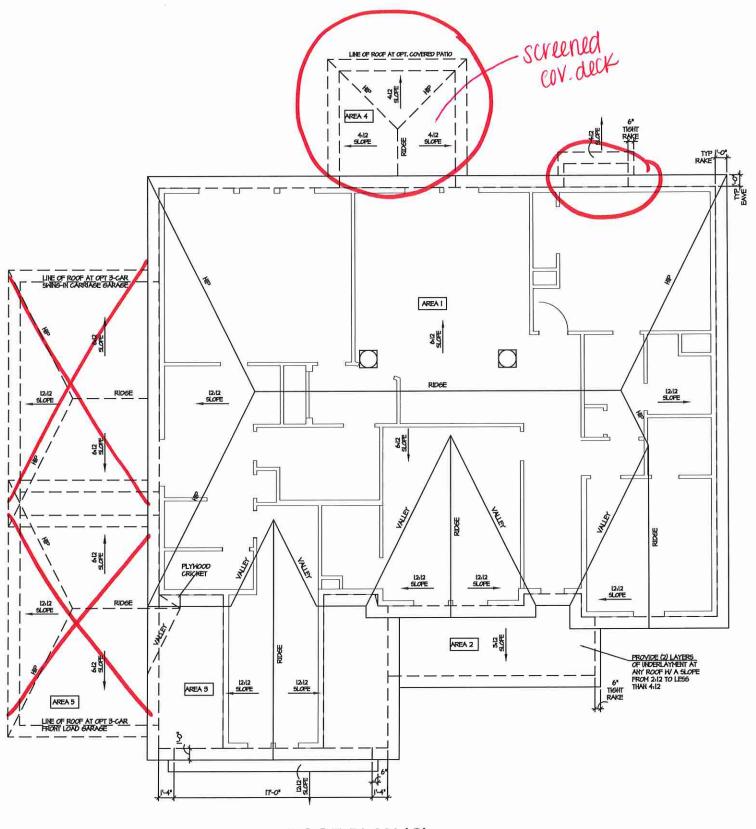
DRAWNSS ON II'XII' SHEET ARE ONE HALF THE SCALE NOTED

H GARAGE H&H HOMES REDBUD

NOTE: SCALE IS 1/8" = 1"-0" IF PRINTED IN HALF SIZE SCALE IS 1/4" = 1"-0" IF PRINTED IN RALL SIZE **GARAGE LEFT**

ITLE MAIN FLOOR PLAN STAIR SECTION

UPPER FLOOR PLAN



ROOF PLAN 'C'

INSURICE OF PLANS FIRST THIS DIVETERS OFFICE SHALL NOT RELEASE THE BUILDER OF REPRESENTED TO FORMER AND MERCHA AND ADDRESSAGE TO APPLICABLE BUILDING COORD STORT TO COTTEMENTED OF ANY CONSTRUCTION.

ANY DISCORDERSON OF REPRESENT HISTORY DEPOSITION, OR ADDRESSAGE TO APPLICABLE BUILDING COORD SHALL BE REQUISIT TO THE ATTENDION OF THE DIVETERS OFFICE FOR CORPECTION BEFORE COTTEMENT OF ANY CONSTRUCTION.

ANY REMISCASE OR CHANGES, HOT RELATED TO THE CORPECTION OF ENGINES THAT AND HADDE AFTER THE PINAL PLANS HAVE BEEN OFFICED SHALL BE SUBJECT TO ADDIVINAL FIELD FOR THE PINAL PLANS HAVE HADDE AND THE PINAL PLANS HAVE BEEN OFFICED SHALL BE SUBJECT TO ADDIVINAL FIELD FOR THE PINAL PLANS HAVE THE PINAL PLANS HAVE BEEN OFFICED SHALL BE SUBJECT TO ADDIVINAL FIELD PINAL BE SHALL BY SHAPPY OTHER THAN THE PINAL PLANS HAVE THE PINAL

ROOF PLAN "C"

NOTE: SCALE IS US' : 1'-0' F PRINTED IN HALF SIZE SCALE IS US' : 1'-0' F PRINTED IN FILL SIZE

GARAGE LEFT



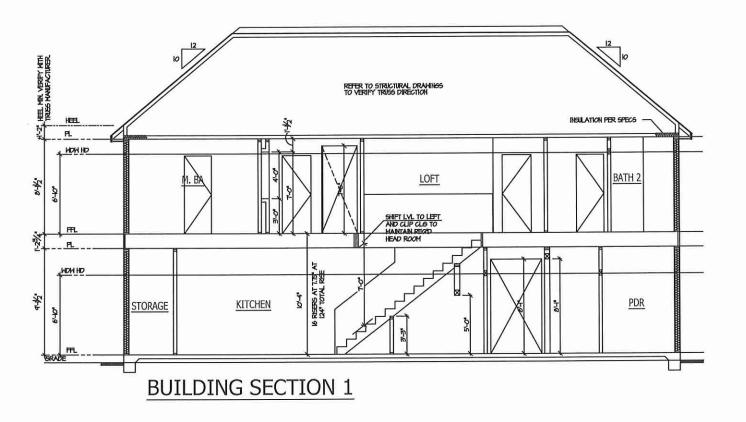


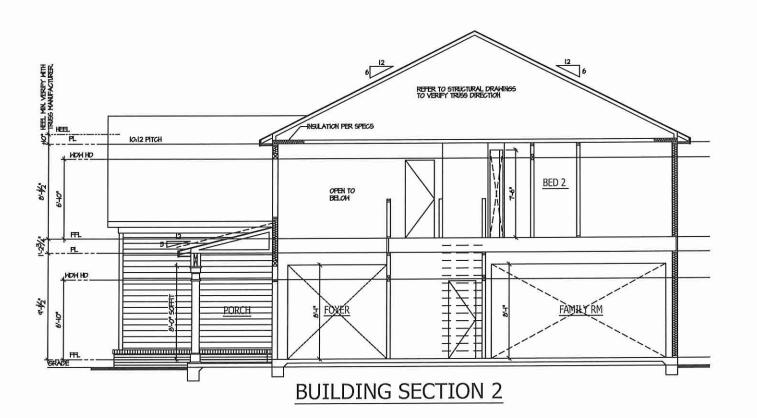
DRAWNSS ON II'XTI' SHEET ARE ONE HALF THE SCALE NOTED

H H GARAGE H&H HOMES REDBUD



A4.2





INDUNCE OF FLANS FROM THIS DRAFFERS OFFICE SHALL NOT RELEVE THE BUILDER OF REPORTED TO FEVER AND VERSEY ALL NOTES, DYENBOLMS, AND ADJECTIVE TO AFFILCABLE BUILDING CODES FROM TO CONTRICTION AND PROPERTIES OF CONTRICTION.

ANY DRAFFERMON OF PROPE IN NOTES, DEPOSITIONS, OR ADJECTIVE TO AFFILCABLE BUILDING CODES BHALL BE DRAVING TO THE ATTENDION OF THE DRAFFERS OFFICE FOR CORRECTION EFFORE CONTRICTION OF ANY CONTRICTION.

ANY REMARKAS OR CHANGES, NOT RELIABLED TO THE CORRECTION OF ERRORS THAT ARE INDOM
AFTER THANK, FLANS HAVE EXENDED SHALLED TO ADJECT TO ADDITION HERA.

FAIR MODELATIONS ARE FLOCE TO THESE FLANS BY ANY OTHER PARTY OTHER THAN THE DRAFFERS OFFICE, THE DRAFFERS SHALL NOT SEE HELD RESPONSIBLE.



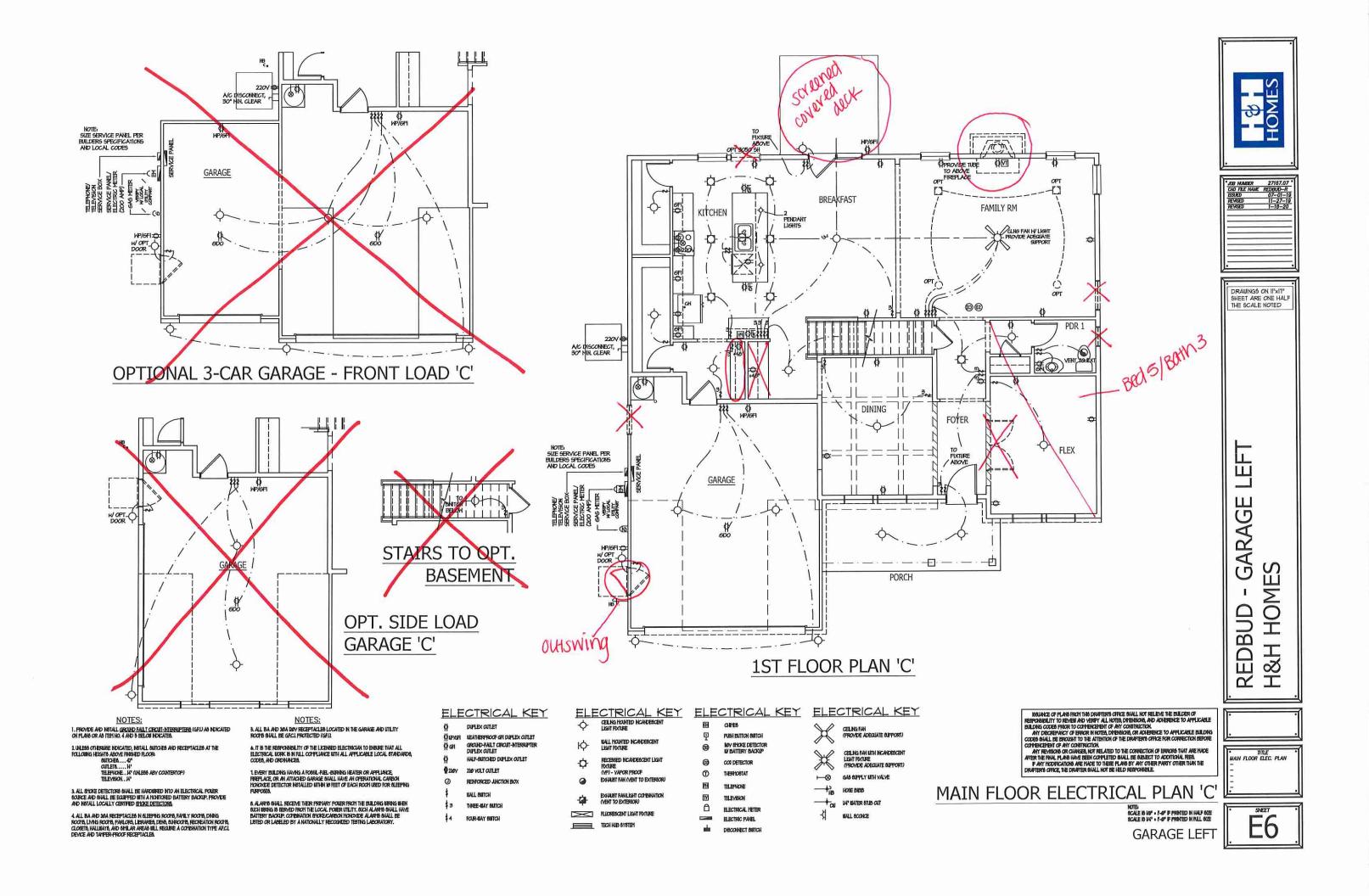
DRAWINGS ON 11"x11" SHEET ARE ONE HALF THE SCALE NOTED

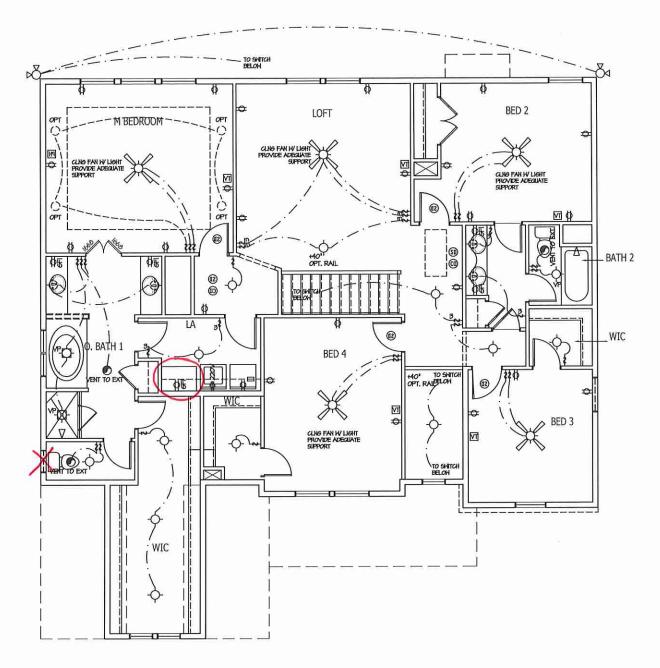
- GARAGE H&H HOMES REDBUD

BUILDING SECTIONS

NOTE: SCALE IS NO' = 1'-0' IF PRINTED IN HALF SIZE SCALE IS NA' = 1'-0' IF PRINTED IN HALF SIZE GARAGE LEFT

FRONT ELEVATION DETAILS





2ND FLOOR PLAN 'C'

I. PROVIDE AND INSTALL GROUND FALLT CIRCUIT-NIERRUPTERS (GFL) AS INDICATED ON PLANS OR AS ITEM NO. 4 AND 5 BELOW INDICATES.

2. UNLESS OTHERWISE NOXCATED, INSTALL, SUTGRESS AND RECEPTACLES AT THE

3. ALL OYCKE DETECTORS SHALL BE HAPOLINED NTO AN ELECTRICAL POWER SOURCE AND SHALL BE SOURTED WITH A HONTONED BATTERY BACKUP, PROVIDE AND NOTALL LOCALLY CERTIFED <u>MYCKE DETECTORS</u>.

4. ALL DA AND 20A RECEPTACIES IN GLEEPING ROCHS, FAVILLY ROCHS, DAING ROCHS, LIANG ROCHS, PAULONS, LERANGES, DEINS, GUNGOTHS, RECREATION ROCHS, CLOSETS, HALLIMYS, AND SYSTAM, AREAS WILL, RECURRE A COMENATION TYPE AFCL DEVICE AND TAPPER-PROCE PECEPTACIES.

NOTES:

B. ALL BA AND 20A BBY RECEPTACLES LOCATED IN THE GARAGE AND UTILITY ROCHES SHALL BE GECL PROTECTED (GF1).

6. IT IS THE RESPONSIBILITY OF THE LICENSED ELECTRICIAN TO ENSURE THAT ALL ELECTRICAL SORK IS IN RULL COMPLIANCE WITH ALL APPLICABLE LOCAL STANDARDA, CODES, AND OFFONANCEA.

1 EVERY BUILDING HAVING A POSSE-REEL-BURNING HEATER OR AFFLUNCE, RREFLACE, OR AM ATMORED GARAGE BUILL HAVE AM OFERATIONAL CARBON HANDADE DETECTOR INSTALLED WITHIN UP HERT OF EACH ROOM WED FOR SLEEPING RINFOCES.

A ALAPIO SULL RECENE THER PROVATY POUER FRICH THE DULLING URANS IN EN BUCH HIRPAS IN BERRED FRICH THE LOCAL POUER HILLTY, BUCH ALAPIO SULL, HAVE BATTERY BACKSEP, COTENATION BYCKEPLAREON HONOXIDE HAVEN SULL EE LISTED OR LIBELED BY A NITURALLY RECORDED TESTING LIBERATIONY.

ELECTRICAL KEY

DUPLEX OUTLET PUPAR LEATHERFROOF OF DUPLEX OUTLET GROUND-FALLT CROUT-MIERRUPTER DUPLEX CUTLET H GH

HALF-BUTGED DUFLEX GUTLET nov no volt offlet

RENFORCED LINCTION BO ENTT BRITCH

THREE-MAY BUTCH POUR-BLAY BUTTCH

RECEIVED INCANDENCENT LIGH FIXTURE (VP) - VAPOR PROOF

EXHAUST FAN (VENT TO EXTERSOR

FLUCRESCENT LIGHT FIXTURE TECH HUB SYSTEM

ELECTRICAL KEY ELECTRICAL KEY ELECTRICAL KEY

THEVISION

ELECTRICAL HETER

ELECTRIC PANEL

FUSH BUTTON SHITCH MAY SHOKE DETECTOR IN BATTERY BACKUP CELING FAN WITH INCANDERCENT LIGHT FIXTURE (PROVIDE ADEQUATE BUFFORT) COS DETECTOR THERMOSTAT ---⊗ GAS SUPPLY WITH YALVE TELEPHONE

HOSE BIEB W WITER STUB OUT IWI SCOKE

MOUNCE OF PLANS FIRST TIME DRAFTERS CIPICE SWILL NOT RELEVE THE DILLDER OF REAPCHABOLITY TO REVENT AD VERST ALL NOTES, OFENSIONS, AND ADTERRICE TO APPLICABLE BILLDING CODES FROM TO COMPENCION OF ANY CONSTRUCTION.

ANY DECORPSION OF STORM HOUTED, OF SHEET, OR REPORTED TO APPLICABLE BILLDING CODES SMILL BE BROKISH TO THE ATTENTION OF THE DRAFTERS CIPICE FOR CORRECTION BEFORE COPPENCION OF ANY CONSTRUCTION.

ANY REPORTED OF ANY CONSTRUCTION.

ANY REPORTED OF ANY CONSTRUCTION.

ANY REPORTED ANY CONSTRUCTION OF THE THAN BOY ANY CONSTRUCTION AND THE THAN THAN BLAVE RESERVED SHALL FEEL SHALL FEEL AND BOY ANY CONSTRUCTION AND ADDRESS OF THE PLANS BOY ANY CONSTRUCTION AND ADDRESS OF THE PLANS BOY ANY CONSTRUCTION AND ADDRESS OF THE PLANS BOY ANY CONSERVED OF THE PLANS BOY A

UPPER FLOOR ELECTRICAL PLAN 'C'

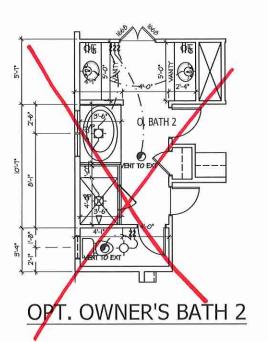
NOTE 6CALE 16 W* • T-8" IF FRANTED IN HALF SIZE 6CALE 16 W* • T-8" IF FRANTED IN HALL SIZE **GARAGE LEFT**

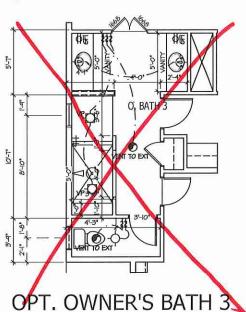


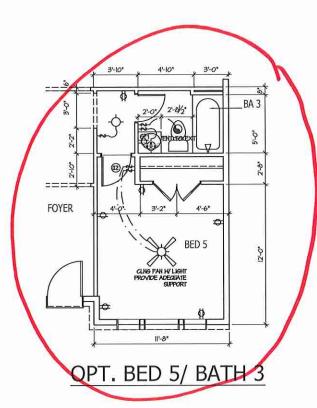


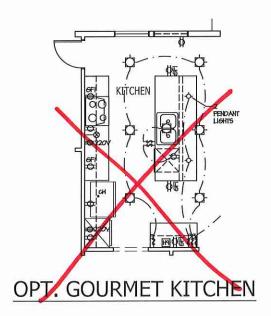
DRAWINGS ON II"xI" SHEET ARE ONE HALF THE SCALE NOTED

回 GARAGE H&H HOME REDBUD



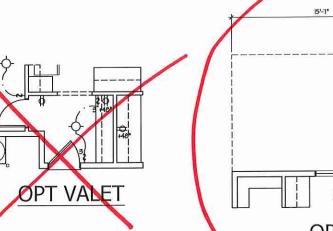


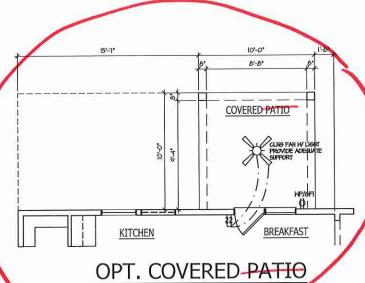












screened deck

NOTES:

1. PROVIDE AND INSTALL GROUND FALLT CROUT! NITERALPTERS (GFL) AS NOICATED ON FLANS OR AS TIENHO. 4 AND 5 DELOW INDICATED.

2 UNLESS OTHERWISE NOICATED, NSTALL GUTCHES AND RECEPTACLES AT THE FOLLOWINS HEIGHTS AROVE PROSEED FLOOR-BUTCHES..... IF

TELEPHONE. M' (INLESS ABY CONTERTOP)

3. ALL BYCKE DETECTORS SHALL BE HARDWIRED NTO AN ELECTRICAL POWER COURCE AND SHALL BE EXERTED WITH A HONTORED BATTERY BACKUP. PROVIDE AND NOTALL LOCALLY CERTIFIED $\underline{WYCKEDETECTORS}$.

A ALL BA AND 26A RECEPTACLES IN MEETING ROCKS, FAVILY ROCKS, DANING ROCKS, LIMAG ROCKS, PARLORA, LERAVERS, DENS, BUNDOOMS, RECREATION ROCKS, CLOSETS, MALIBAYS, AND SHELAR AREAS IELL REALISE A COMBANICAN THE AFEL DEVICE AND TAPPER-PROCE RECEPTACES.

5. ALL BA AND 26A BBY RECEPTACLES LOCATED IN THE GARAGE AND UTILITY ROCKS SHALL BE GECL PROTECTED (GFL):

6. IT IS THE RESPONSIBILITY OF THE LICENSED ELECTRICAN TO ENSIRE THAT ALL ELECTRICAL LOOK IS IN RILL COMPLIANCE WITH ALL APPLICABLE LOCAL STANDARDS,

1. EMERT BULDNIS HAVNIS A FORBUL-FUENNIS HEATER OR AFFLANCE, FREFLACE, OR AN ATTACHED GARAGE BULL HAME AN OFFENJIOULL CARBON HONOXODE DETECTOR INSTALLED LITTIN IN FIET OF EACH ROOM UNED FOR BLEEPING

A JUAN'S GULL RECEYE THER FRYNKY FOUR FROM THE BUILDN'S WENS WEN BOOK WINN'S BERKED RECHT THE LOCAL POURS WILLIT, BOOK JUAN'S BUILL HAVE BUTTENT BUCKEN, COMBANION BOKECHARREN KROOKE ALAN'S BUILD BE LISTED OR LUBELED BY A HANGAULL'Y RECORDED TESTING LARGRAFORY.

ELECTRICAL KEY

OLDER DEATHERPROOF OF DUFLEY OUTLET GROUND-FAILT CROUT-MIERRUPTER DUPLEX CUTLET HALF-BUTGED DUFLEX CUTLET

220 VOLT OUTLET REINFORCED JUNCTION BOX

발 등 등 THREE-WAY SUTTCH FOR-BAY BUTCH

ELECTRICAL KEY ELECTRICAL KEY

CELLING HOUNTED INCANDERCENT O CHINES FUEL BUTTON BUTTON

RECEMBED INCANDESCENT LIGH FORTURE (VP) - VAPOR FROOF TATACHSELLT ENHANT FAN (VENT TO EXTERNO TELEPHONE TELEVISION ۵ BLECTRICAL HETER

TECH HUB STISTEM

ф

NOV SHOKE DETECTOR W BATTERY BACKUP

ELECTRIC PANEL

DISCONNECT BUTTO

ELECTRICAL KEY

CELING FAN (FROMDE ADEQUATE BUFFORT) CELING FAN LITH INCANDESCENT LIGHT FIXTURE (PROVIDE ADEGLATE SUPPORT)

GAS SUFFLY WITH YALVE ON 14" WATER STUB OUT WILL SCONCE

NOUNCE OF FLANS HIGH THIS DIRECTION OF THE SHALL NOT RELEVE THE BUILDIES OF REPORTMENT TO REVEN AND VERRY ALL NOTES, DYENDOM, AND ACKREDICE TO APPLICABLE BUILDING CODES FROM TO CONTRICTION.

ANY DISCREPANCY OF PROVE IN HOTES, DYENDOM, OR ACHEBICE TO APPLICABLE BUILDING CODES MALL BE PROJECT TO THE ATTRIBUTOR OF THE DIRECTION OF THE FOR CONTRICTION BEFORE CONTRICTION OF ANY CONTRICTION.

ANY REVIOLS OR CLANKES, NOT RELATED TO THE CONTRICTION OF ENTERS THAT ARE HADE ATTRIBUTED IN HIM EXERT CONTRICTION.

F ARY INCOMPLICATION ARE HADE TO THESE FLAND BY ANY CONTRICTION OF THE THAT THE DIRECTION OF THE PROPERTY OF THE THAT THE DIRECTION OF THE PROPERTY OF THE THAT THE DIRECTION OF THE DIRECTION OF THE THAT THE DIRECTION OF THE DIRECTION OF THE THAT THE DIRECTION OFFICE, THE DIRECTION OFFICE THAT THE DIRECTION OFFICE THE DIRECTION OFFICE THAT THE DIRECTION OFFICE THE DIRECTION OFFICE THAT THE DIRECTION OFFICE THAT THE DIRECTION OFFICE THAT THE DIRECTION OFFICE THAT THE DIRECTION OFFICE THE DIRECTION OFFICE THE DIRECTION OFFICE THAT THE DIRECTION OFFICE THE DIRE

ELECTRICAL OPTION

GARAGE LEFT





DRAWINGS ON II"XIT" SHEET ARE ONE HALF THE SCALE NOTED

Ш Ш GARAGI ES H&H HOM REDBUD





1900 AM DRIVE, SUITE 201, QUAKERTOWN, PA 18951 (215) 804 - 4449 www.kse-eng.com

REDBUD

CAROLINA DIVISION

THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS, THIS COORDINATION IS NOT THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD (SER). SHOULD ANY DISCREPANCIES BECOME APPARENT, THE CONTRACTOR SHALL NOTIFY KSE ENGINEERING, P.C. BEFORE CONSTRUCTION BEGINS. IT IS THE INTENT OF THE ENGINEER LISTED ON THESE DOCUMENTS THAT THESE DOCUMENTS BE ACCURATE, PROVIDING LICENSED PROFESSIONALS CLEAR INFORMATION. EVERY ATTEMPT HAS BEEN MADE TO PREVENT ERROR. THE BUILDER AND ALL SUBCONTRACTORS ARE REQUIRED TO REVIEW ALL OF THE INFORMATION CONTAINED IN THESE DOCUMENTS PRIOR TO THE COMMENCEMENT OF ANY WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ANY PLAN ERRORS, OMISSIONS, OR MISINTERPRETATIONS UNDETECTED AND NOT REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION. ALL CONSTRUCTION MUST BE IN ACCORDANCE TO THE INFORMATION FOUND IN THESE DOCUMENTS.

DESIGN SPECIFICATIONS:

DESIGN BUILDING CODE (REFERRED TO HEREIN AS 'THE BUILDING CODE'):

· 2018 NORTH CAROLINA RESIDENTIAL CODE. WALL BRACING PER INTERNATIONAL RESIDENTIAL

DESIGN LIVE LOADS:

- *** NROF = 20 PSF (LOAD DURATION FACTOR=1.25)

 *** UNINHABITABLE ATTICS WITH LIMITED STORAGE = 20 PSF (WHERE SPECIFIED ON PLANS)
- · HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS = 30 PSF
- FLOOR = 40 PSF • FLOOR (SLEEPING AREAS) = 30 PSF
- DECK = 40 PSF
- · BALCONY = 40 PSF
- STAIRS = 40 PSF

DESIGN DEAD LOADS:

- ROOF TRUSS = 17 PSF (TC=7, BC=10)
- FLOOR TRUSS = 15 PSF (TC=10, BC=5) • FLOOR JOIST = 10 PSF
- · QUEEN ANNE BRICK = 25 PSF

NOTE: STRUCTURAL FRAMING HAS NOT BEEN DESIGNED FOR TILE, GRANITE, MARBLE OR OTHER MATERIALS HEAVIER THAN THE ABOVE LOADING UNLESS SPECIFICALLY NOTED ON PLANS..

DESIGN WIND LOADS:

- ULTIMATE WIND SPEED = 120 MPH
- EXPOSURE CATEGORY = B

ASSUMED SOIL BEARING CAPACITY = 2000 PSF

ASSUMED LATERAL SOIL PRESSURE = 45 PCF

FROST DEPTH = 12"

SEISMIC DESIGN CATEGORY = B

ENGINEERED LUMBER SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:

- **TJI 210 SERIES (SERIES AND SPACING PER PLANS)

 **LSL: E=1,550,000 PSI, F₈=2,325 PSI, F_V=310 PSI, F_C=900 PSI

 **LM: E=2,000,000 PSI, F₈=2,600 PSI, F_V=285 PSI, F_C=750 PSI

 **PSL: E=2,100,000 PSI, F₈=2,900 PSI, F_V=290 PSI, F_C=625 PSI

THIS PLAN HAS BEEN DESIGNED PER THE 2018 EDITION OF THE NC RESIDENTIAL CODE. WHERE FRAMING, FOUNDATION, OR OTHER STRUCTURAL ITEMS DO NOT COMPLY WITH THE PRESCRIPTIVE METHODS OF THE CODE, THOSE ITEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE PER NCRC R301.1.3.





Ł

Redbud Model 120 M.P.H. Carolina Divisio

Division

Project #: 105-16009

Designed By: KRK Checked By:

Issue Date: 4/1/19

Re-Issue:

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

GENERAL STRUCTURAL NOTES:

- THE DESIGN PROFESSIONAL WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE STRUCTURAL ENGINEER OF RECORD (SER) FOR THIS PROJECT. THE SER BEARS THE RESPONSIBILITY OF THE PRIMARY STRUCTURAL ELEMENTS AND THE PERFORMANCE OF THIS STRUCTURE NO OTHER PARTY MAY REVISE ALTER OR DELETE ANY STRUCTURAL ASPECTS OF THESE CONSTRUCTION DOCUMENTS WITHOUT WRITTEN CONSENT OF KSE ENGINEERING, P.C. OR THE SER. FOR THE PURPOSES OF THESE CONSTRUCTION DOCUMENTS. THE SER AND KSE ENGINEERING 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
- THE SER DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF GEOMETRY. THE SER ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS. THE SER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS.
- 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 KSE ENGINEERING FOR REVIEW BEFORE ANY CONSTRUCTION BEGINS. THE SHOP DRAWINGS WILL BE REVIEWED FOR OVERALL COMPLIANCE AS IT RELATES TO THE STRUCTURAL DESIGN OF THIS PROJECT. VERIFICATION OF THE SHOP DRAWINGS FOR DIMENSIONS, OR FOR ACTUAL FIELD CONDITIONS, IS NOT THE RESPONSIBILITY OF THE SER OR KSE ENGINEERING, P.C.
- 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 KSE ENGINEERING, P.C. 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 BUILDING CODE AND ANY LOCAL DO NOT SCALE DRAWINGS, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. ALL DIMENSIONS ARE TO FACE OF STUD
- OR TO FACE OF FRAMING UNLESS OTHERWISE NOTED. 10. PROVIDE MOISTURE PROTECTION AND FLASHING PER ARCHITECTURAL

FOUNDATIONS:

- FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE BUILDING CODE
- CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION, THE BUILDER SHALL FURNISH ANY AND ALL REPORTS RECEIVED FROM THE GEOTECHNICAL ENGINEER ON THE STUDY OF THE PROPOSED SITE TO THE DESIGNER, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN THE BUILDING CODE
- THE SER HAS NOT PERFORMED A SUBSURFACE INVESTIGATION. VERIFICATION OF THE 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, BUT NOT LESS THAN A MINIMUM OF 12" BELOW GRADE, ALL FOOTINGS TO HAVE A MINIMUM PROJECTION OF 2" ON EACH SIDE OF FOUNDATION WALLS. MAXIMUM FOOTING PROJECTION SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.
- WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH 1/2" ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM OF 6'-0" O.C. INSTALL MINIMUM 2 ANCHOR BOLTS PER SECTION. 12" MAXIMUM FROM CORNERS, X" DIAMFTER x 8" LONG SIMPSON TITEN HD OR USP SCREW-BOLT+ SCREWS MAY BE SUBSTITUTED ON A 1 FOR 1
- 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%
- 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
- 10. PROVIDE FOUNDATION WATERPROOFING AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS (SEE ARCHITECTURAL PLANS AND DETAILS).
- 11. NONE OF THE FOUNDATION DESIGNS IN THESE DOCUMENTS ARE SUITABLE FOR INSTALLATION IN SHRINK/SWELL CONDITIONS. REFER TO GEOTECHNICAL ENGINEER FOR APPROPRIATE DESIGN.
- 12. LOTS SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS. THE GRADE SHALL FALL A MINIMUM OF 6 INCHES WITHIN THE FIRST TEN FEET
- 13. CRAWL SPACE TO BE GRADED LEVEL AND CLEAR OF ALL DEBRIS. PROVIDE MINIMUM 6 MIL APPROVED VAPOR BARRIER. ALL JOINTS TO BE LAPPED MINIMUM 12" AND SEALED.

CONCRETE & REINFORCING

- CONCRETE DESIGN BASED ON ACI 318 AND ACI 318.1 OR ACI 332. CONCRETE SHALL HAVE A NORMAL WEIGHT AGGREGATE AND A MINIMUM COMPRESSIVE STRENGTH (f'c) = 3,000 PSI MINIMUM AT 28 DAYS PER CODE (VARIES W/ WEATHER), 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 STRUCTURA ELEMENTS EXPOSED TO FREEZE/THAW CYCLES AND DEICING CHEMICALS. AIR ENTRAINMENT AMOUNTS (IN PERCENT) SHALL BE WITHIN -1% TO +2% OF 5% FOR FOOTINGS AND EXTERIOR SLABS.
- NO ADMIXTURES SHALL BE ADDED TO ANY STRUCTURAL CONCRETE WITHOUT WRITTEN PERMISSION OF THE SER, WATER ADDED TO CONCRETE ON SITE SHALL NOT EXCEED THAT ALLOWED BY THE MIX DESIGN.
- CONCRETE SLABS-ON-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 302.1R: "GUIDE FOR CONCRETE SLAB AND SLAB CONSTRUCTION".
- CONTROL OR SAW CUT JOINTS (CUT OR TOOLED) 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, CARE SHALL BE TAKEN TO AVOID RE-ENTRAN' CORNERS
- CONTROL OR SAW CUT JOINTS SHALL BE PRODUCED USING CONVENTIONAL CUT OR TOOLED PROCESSES WITHIN 4 TO 12 HOURS AFTER THE SLAB HAS BEEN FINISHED.
- ALL WELDED WIRE FABRIC (W.W.F.) FOR CONCRETE SLABS-ON-GRADE SHALL BE PLACED AT MID-DEPTH OF SLAB. THE W.W.F. SHALL BE SECURELY SUPPORTED DURING THE CONCRETE POUR. FIBROUS CONCRETE REINFORCEMENT, OR POLYPROPYLENE FIBERS MAY BE USED IN LIFU OF W.W.F. APPLICATION OF POLYPROPYLENE FIBERS PER CUBIC YARD OF CONCRETE SHALL BE PER MANUFACTURER AND COMPLY WITH ASTM C1116, ANY LOCAL BUILDING CODE REQUIREMENTS AND SHALL MEET OR EXCEED CURRENT INDUSTRY STANDARD.
- POLYPROPYLENE REINFORCING TO BE 100% VIRGIN, CONTAINING NO REPROCESSED OLEFIN MATERIALS AND SPECIFICALLY MANUFACTURED FOR USE AS CONCRETE SECONDARY REINFORCEMENT.
- 10. STEEL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING 11. 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".
- 12. 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.
- 13. PROVIDE REINFORCEMENT LAP AS NOTED BELOW, UNLESS NOTED OTHERWISE:
- #4 BARS 30" LENGTH #5 BARS - 38" LENGTH #6 BARS - 45" LENGTH
- 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. SEE KSE FOUNDATION DETAILS.
- 15. WHERE FOOTING BOTTOMS ARE TO BE STEPPED AT SLOPING GRADE CONDITIONS, PROVIDE CONTINUOUS REINFORCING WITH Z BARS (TO MATCH FOOTING REINFORCING) AS REQUIRED.
- BAR SUPPORT ACCESSORIES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST ACL MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, EXCEPT THAT REINFORCING SHALL BE CHAIRED ON THE BOTTOM AND/OR THE SIDES ON BOLSTERS SPACED NOT MORE THAN 4 FEET ON CENTER, NO ROCKS, CMU, CLAY TILE, OR BRICK SHALL BE USED TO SUPPORT REINFORCING.
- FOR GRADE SUPPORTED SLABS, SLAB REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS AND ACCESSORIES AS DESCRIBED IN THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED A MAXIMUM OF 4'-0" O.C. BOTH WAYS IN STRAIGHT LINES ON THE MESH GRID.

MASONRY

- ALL MASONRY SHALL CONFORM TO ASTM C-90, F'm=1500 PSI. ALL BRICK SHALL CONFORM TO ASTM C-216, F'm=1500 PSI. ALL MORTAR SHALL BE TYPE 'S' (TYPE 'M' BELOW GRADE) AND CONFORM TO ASTM C-270. COARSE GROUT SHALL CONFORM TO ASTM C-476 WITH A MAXIMUM AGGREGATE SIZE OF 38" AND A MINIMUM COMPRESSIVE STRENGTH OF 2,000
- ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" ACI 530/ASCE 5/TMS 402 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" ACI 530.1/ ASCE 6/TMS 602.
- THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIERS SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION, UNFILLED HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION
- EACH CRAWL SPACE PIER SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING AND EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS, PILASTERS TO BE BONDED TO PERIMETER
- TOP COURSE OF MASONRY SHALL BE GROUTED SOLID.
- HORIZONTAL WALL JOINT REINFORCEMENT SHALL BE STANDARD 9 GAGE GALVANIZED LADDER OR TRUSS TYPE SPACED AT 16" O.C., UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- SPLICED WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE 6". LAP WITH STANDARD 'T' AND 'L' SHAPED PIECES AT INTERSECTIONS AND CORNERS.

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
- SPRUCE-PINE-FIR (SPF) WITH THE FOLLOWING MINIMUM DESIGN
- E=1,400,000 PSI, $F_b=875$ PSI, $F_v=135$ PSI 1.1. FRAMING: SPF #2.
- 1.2. PLATES: SPF #2.
- STUDS: SPF STUD GRADE
- WALL STUD SPACING, (MAXIMUM 10' NOMINAL PLATE HEIGHT): 1 & 2 STORY EXTERIOR AND INTERIOR BEARING:
- 2x4 @ 16" O.C. OR 2x6 @ 24" O.C., U.N.O. BOTTOM OF 3 STORIES EXTERIOR AND INTERIOR BEARING: 2x6 @ 16" O.C., U.N.O.
- INTERIOR NON-BEARING: 2x @ 24" O.C., U.N.O
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE TREATED SOUTHERN YELLOW PINE #2 OR
- ANCHOR SILL PLATES IN ACCORDANCE W/ GENERAL STRUCTURAL NOTES. ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY, LARGER MEMBERS MAY BE SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.
- NAILS SHALL BE COMMON WIRE NAILS LINLESS OTHERWISE NOTED BOLT HOLES AND LEAD HOLES FOR LAG SCREWS SHALL BE IN
- ACCORDANCE WITH NDS SPECIFICATIONS. INDIVIDUAL STUDS FORMING A COLUMN SHALL BE ATTACHED WITH (2) ROWS 10d NAILS @ 6" O.C. STAGGERED. THE STUD COLUMN SHALL BE FULLY BLOCKED AT ALL FLOOR LEVELS TO ENSURE PROPER LOAD TRANSFER WALL SHEATHING SHALL BE NAILED TO EDGE OF EACH STUD.
- FACE NAIL ALL MULTI-PLY BEAMS AND HEADERS WITH (2) ROWS 16d COMMON NAILS @ 16" O.C., STAGGERED, OR PER MANUFACTURER'S SPECIFICATIONS FOR ENGINEERED LUMBER. APPLY NAILING FROM BOTH FACES FOR (3) OR MORE PLIES.
- 10. FASTEN 4-PLY BEAMS WITH (1) ½" DIAMETER THROUGH BOLT W/ NUTS AND WASHERS AT 12" O.C. STAGGERED TOP AND BOTTOM, 15" MINIMUM EDGE DISTANCE. (UNLESS OTHERWISE NOTED)
- 11. ALL BEAMS AND HEADERS SHALL HAVE (1)2x JACK STUD & (1)2x KING STUD UNLESS OTHERWISE NOTED. THE NUMBER OF STUDS INDICATED ON PLANS ARE THE TOTAL NUMBER OF JACK STUDS REQUIRED, UNLESS
- 12. PROVIDE KING STUDS AT EACH END OF HEADERS AS NOTED BELOW. (1) STUD UP TO 6' OPENING (2) STUDS UP TO 8' OPENING
- STUDS UP TO 9' OPENING
- 13 ALL REAMS TO BE CONTINUOUSLY SUPPORTED LATERALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED WITH A MINIMUM OF TWO STUDS, UNLESS OTHERWISE NOTED. ALL BEAM SPLICES SHALL OCCUR OVER SUPPORTS.
- 14. SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.
- 15. ALL LUMBER SPECIFIED ON DRAWINGS IS INTENDED FOR DRY USE ONLY (MOISTURE CONTENT <19%) UNLESS OTHERWISE NOTED.
- 16 ALL WATERPROOFING AND FIRE SAFFTY SYSTEMS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHERS.
- 17. ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1" DIAMETER SHALL HAVE STUD PROTECTION SHIELDS. ALL HOLES OVER 1" IN DIAMETER FOR PLUMBING LINES, ETC. SHALL BE REPAIRED WITH SIMPSON HSS2 OR USP STS1 STUD SHOES, TYPICAL, UNLESS OTHERWISE NOTED.
- BEARING WALLS SHALL BE SHEATHED ON NOT LESS THAN ONE SIDE WITH OSB OR GYPSUM BOARD, BRIDGING SHALL BE INSTALLED NOT GREATER THAN 4 FEET APART MEASURED VERTICALLY FROM EITHER END OF THE STUD IN LIEU OF SHEATHING
- 19. DIAGONAL BRACING SHALL BE INSTALLED AT EACH END OF BASEMENT BEARING WALLS AND NOT MORE THAN 20' ON CENTER.

EXTERIOR WOOD FRAMED DECKS:

- 1. DECKS ARE TO BE FRAMED IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND AS REFERENCED ON THE STRUCTURAL PLANS, FITHER THROUGH CODE REFERENCES OR CONSTRUCTION DETAILS.
- PRESERVATIVE TREATED WOOD FRAMING TO BE SOUTHERN YELLOW PINE #2 OR BETTER.
- GUARD RAILS REQUIRED AT DECKS, DESIGN BY OTHERS TO MEET MINIMUM CODE REQUIREMENTS.
- 4. PROVIDE DECK LATERAL LOAD AND BRACING CONNECTIONS PER BUILDING

RAFTER FRAMED ROOF CONSTRUCTION:

- PROVIDE 2x4x4'-0" RAFTER TIES AT 48" O.C. RAFTERS SHALL BE SUPPORTED BY PURLINS AND PURLIN BRACES AS SHOWN ON THE PLAN, PURLIN BRACES SHALL NOT BEAR ON ANY CEILING JOIST, STRONGBACK OR HEADER UNLESS SPECIFICALLY
- SHOWN ON PLAN RAFTERS MAY BE SPLICED AT PURLIN LOCATIONS. CEILING JOISTS SHALL HAVE LATERAL SUPPORT W/ 1x4 FLAT BRACING ON TOP EDGE OF JOIST AT LOOSE JOIST ENDS (WHERE JOISTS NOT FASTENED TO RAFTERS) OR FULL DEPTH BLOCKING. FASTEN END OF BRACING TO RAFTER OR CABLE END FRAMING.
- 4. FASTEN RAFTER AND CEILING JOIST WITH (6) 12d NAILS UNLESS OTHERWISE NOTED.
- PROVIDE VERTICAL 2x6 STRONGBACKS AT CEILING JOISTS @ 8'-0" O.C. TIE STRONGBACK ENDS TO GABLE STUDS OR RAFTERS WHERE POSSIBLE, PROVIDE BLOCKING BETWEEN TOP PLATES AND STRONGBACKS, PROVIDE 2x4 FLAT FASTENED TO EACH JOIST WITH (2) 12d NAILS, FASTEN STRONGBACK TO 2x4 FLAT WITH 12d NAILS @ 12" O.C. AND FASTENED TO EACH JOIST WITH (1) 12d TOENAIL.

WOOD TRUSSES (FLOOR & ROOF):

- 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 (5) DAYS FOR REVIEW. THE REVIEW BY THE SER SHALL BE FOR OVERALL COMPLIANCE OF THE DESIGN DOCUMENTS. THE SER SHALL ASSUME NO RESPONSIBILITY FOR THE CORRECTNESS OF THE STRUCTURAL DESIGN FOR THE WOOD TRUSSES.
- WOOD TRUSSES SHALL BE DESIGNED FOR ALL REQUIRED LOADINGS AS SPECIFIED IN THE LOCAL BUILDING CODE, THE ASCE STANDARD "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES." (ASCE 7), AND THE LOADING REQUIREMENTS SHOWN ON THESE SPECIFICATIONS. THE TRUSS DRAWINGS SHALL BE COORDINATED WITH ALL OTHER CONSTRUCTION DOCUMENTS AND PROVISIONS PROVIDED FOR LOADS SHOWN ON THESE DRAWINGS INCLUDING BUT NOT LIMITED TO HVAC EQUIPMENT, PIPING, AND ARCHITECTURAL FIXTURES ATTACHED TO THE TRUSSES.
- THE TRUSSES SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/TPI 1: "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION".
- THE TRUSS MANUFACTURER SHALL PROVIDE ADEQUATE BRACING INFORMATION IN ACCORDANCE WITH "BUILDING COMPONENT SAFETY INFORMATION GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES* (BCSI) 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.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING TEMPORARY BRACING AND SHORING FOR THE FLOOR AND ROOF TRUSSES AS REQUIRED DURING CONSTRUCTION. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE LATEST BCSI. THE CONTRACTOR SHALL KEEP A COPY OF THE BCSI SUMMARY SHEETS ON SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL PERMANENT TRUSS BRACING SHOWN IN THE STRUCTURAL DRAWINGS AND IN THE TRUSS DESIGNS, ALL CONTINUOUS LATERAL BRACING OF WEBS REQUIRES BRACES, REFER TO BCSI SUMMARY SHEET B3 FOR TYPES OF DIAGONAL BRACES TO PROVIDE AT EACH CONTINUOUS LATERAL BRACE LINE, SUCH DIAGONAL BRACES SHALL NOT BE SPACED MORE THAN 20 FEET O.C. DIAGONAL BRACES SHALL BE FASTENED TO FACH TRUSS WEB WITH A MINIMUM OF TWO 10d FACE NAILS. WHERE CONTINUOUS LATERAL BRACING CANNOT BE INSTALLED. DUE TO A MINIMUM OF THREE ADJACENT TRUSSES NOT BEING IDENTICAL, THE CONTRACTOR SHALL COORDINATE WITH THE TRUSS SPECIALTY ENGINEER/MANUFACTURER TO DETERMINE WHAT TYPE OF ALTERNATE BRACE (I.E., T OR L BRACE, ETC.) IS RECUIRED
- ANY CHORDS OR TRUSS WEBS SHOWN ON THESE DRAWINGS HAVE BEEN SHOWN AS A REFERENCE ONLY. THE FINAL DESIGN OF THE TRUSSES SHALL RE PER THE MANUFACTURER.
- TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN ON THE SEALED STRUCTURAL DRAWINGS, TRUSS PROFILES TO BE SEALED BY THE TRUSS MANUFACTURER, TRUSS PLANS TO BE COORDINATED WITH THE SEALED STRUCTURAL DRAWINGS
- TRUSS MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTORS FOR ALL TRUSSES.
- 10. PROVIDE SIMPSON H2.5A, USP RT7 OR EQUIVALENT AT EACH TRUSS TO TOP PLATE CONNECTION, UNLESS OTHERWISE NOTED.

- WOOD STRUCTURAL PANELS:

 1. 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 REQUIRED WOOD SHEATHING SHALL BEAR THE MARK OF THE
- 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. EXTERIOR WALLS TO BE FULLY SHEATHED USING $\%_6$ " OSB OR PLYWOOD MINIMUM. AT BRACED WALL PANELS, PROVIDE BLOCKING AT ALL SHEET EDGES NOT FALLING ON STUDS
- ROOF SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ROOF SHEATHING SHALL BE CONTINUOUS OVER TWO SUPPORTS MINIMUM AND ATTACHED TO ITS SUPPORTING ROOF FRAMING WITH 8d NAILS AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANE 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, PROVIDE SUITABLE EDGE SUPPORT BY USE OF PLYWOOD CLIPS OR LUMBER BLOCKING UNLESS OTHERWISE NOTED PANEL END JOINTS SHALL OCCUR OVER FRAMING. ROOF SHEATHING TO BE % OSB MINIMUM.
- WOOD FLOOR SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ATTACH SHEATHING TO ITS SUPPORTING FRAMING WITH (1) 10d NAIL AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANEL FIFLD UNLESS OTHERWISE NOTED ON THE PLANS, SHEATHING SHALL BE APPLIED PERPENDICULAR TO FRAMING SHEATHING SHALL HAVE A SPAN RATING CONSISTENT WITH THE FRAMING SPACING. PROVIDE SUITABLE EDGE SUPPORT BY USE OF T&G PLYWOOD OR LUMBER BLOCKING UNLESS OTHERWISE NOTED. PANEL END JOINTS SHALL OCCUR OVER FRAMING.
- 6. SHEATHING SHALL HAVE A 16" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE APA.

STRUCTURAL FIBERBOARD PANELS:

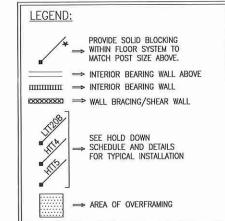
- STRUCTURAL FIBERBOARD SHEATHING SHALL ONLY BE USED WHERE SPECIFICALLY NOTED ON THE STRUCTURAL PLANS. FABRICATION AND PLACEMENT OF STRUCTURAL FIBERBOARD
- SHEATHING SHALL BE IN ACCORDANCE WITH THE APPLICABLE AFA STANDARDS.
- FIBERBOARD WALL SHEATHING SHALL COMPLY WITH THE REQUIREMENTS OF LOCAL BUILDING CODES FOR THE APPROPRIATE STATE AS INDICATED ON THESE DRAWINGS. REFER TO WALL BRACING NOTES IN PLAN SET FOR MORE INFORMATION.
- SHEATHING SHALL HAVE A 16" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE AFA.

STRUCTURAL STEEL:

- STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND OF THE MANUAL OF STEEL CONSTRUCTION "LOAD RESISTANCE FACTOR DESIGN" LATEST EDITIONS
- ALL STEEL SHALL HAVE A MINIMUM YIELD STRESS (F,) OF 50 KSI UNLESS OTHERWISE NOTED.
- WELDING SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE AWA D1.1. ELECTRODES FOR SHOP AND FIELDING WELDING SHALL BE CLASS E70XX, ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER PER THE ABOVE STANDARDS.
- ALL STEEL BEAMS TO BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 35" AND FULL FLANGE WIDTH UNLESS OTHERWISE NOTED. BEAMS MUST BE ATTACHED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR (2) 1/2" x 4" LAG SCREWS LINLESS OTHERWISE NOTED.
- INSTALL 2x WOOD PLATE ON TOP OF STEEL BEAMS, RIPPED TO MATCH BEAM WIDTH. FASTEN PLATE TO BEAM W/ HILTI X-DNI 52 P8 PINS AT 12" O.C. STAGGERED OR 12" DIAMETER BOLTS AT 24"

MECHANICAL FASTENERS:

- ALL METAL HARDWARE AND FASTENERS TO BE SIMPSON STRONG-TIE OR APPROVED EQUIVALENT
- ALL HARDWARE AND EASTENERS IN CONTACT WITH PRESERVATIVE PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A 153, G-185.
- MANY OF THE NEW PRESSURE TREATED WOODS USE CHEMICALS THAT ARE CORROSIVE TO STEEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIEY THE TYPE OF WOOD TREATMENT AND SELECT APPROPRIATE CONNECTORS THAT WILL RESIST THE APPLICABLE CORROSIVE CHEMICALS.



SPAN	VENEER LINTEL S	END BEARING
UP TO 3'-0"	3/6"x3/5"x/4"	4"
UP TO 6'-3"	5"x3½"x¾6" L.L.V.	8"
UP TO 9'-6"	6"x3½"x5/6" L.L.V.	12"







Not tural S D a)

Division

工

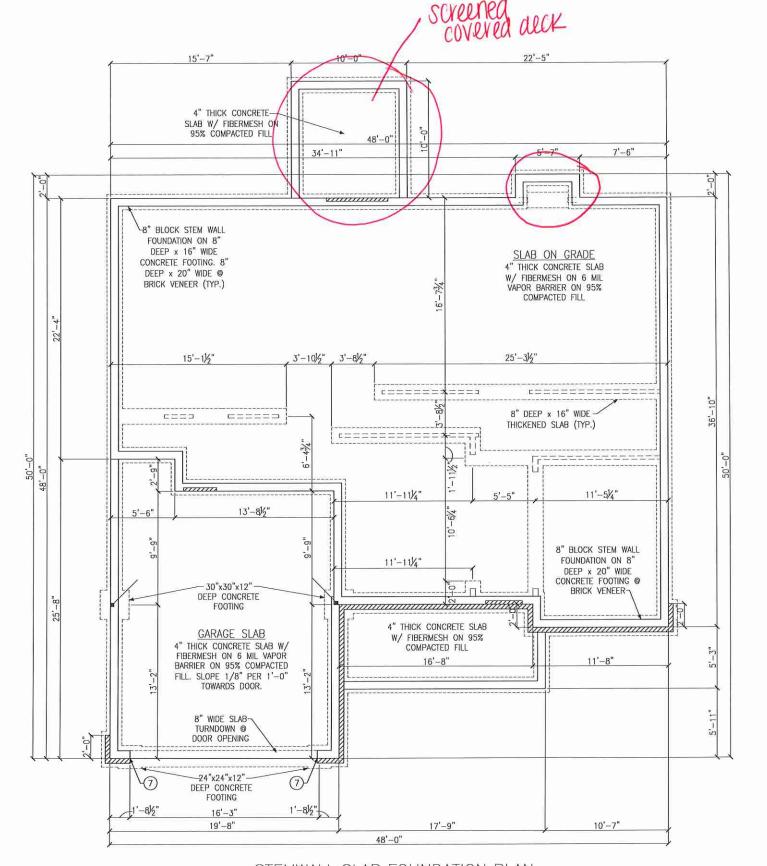
Ĭ. Ž

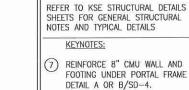
20

Carolina Project #: 105-19000 Designed By: KRK Checked By:

ssue Date: 1/1/19 Re-Issue: Scale: 1/8"=1'-0" @ 11x17

1/4"=1'-0" @ 22x34





48" WSP

(7) REINFORCE 8" CMU WALL AND FOOTING UNDER PORTAL FRAME PER DETAIL A OR B/SD-4.

LEGEND

IIIIIIIIIII

INTERIOR BEARING WALL

PROVIDE SOLID BLOCKING

MATCH POST SIZE ABOVE.

(SEE KSE STRUCTURAL DETAIL SHEETS FOR BRACED WALL

PANEL SHEATHING FASTENING

& BLOCKING DETAILS)

⇒ WITHIN FLOOR SYSTEM TO

⇒ BRACED WALL PANEL

Stem Wall Elevation Redbud M 120 M.P.H Carolina D Project #: 105-16009 Designed By: KRK Checked By: Issue Date: 4/1/19 Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

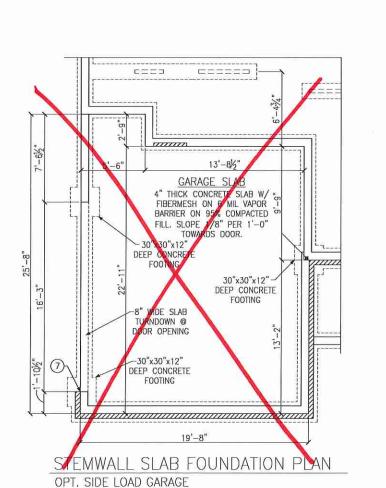
 $\overline{\Box}$

Foundation A & Option odel — LH

n A & Model

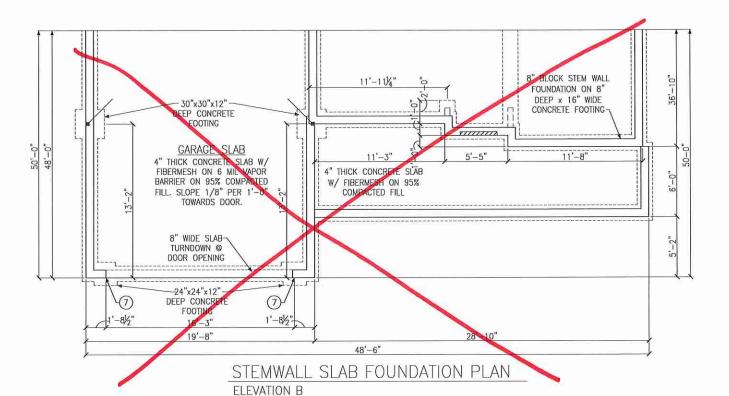
.P.H. a Division

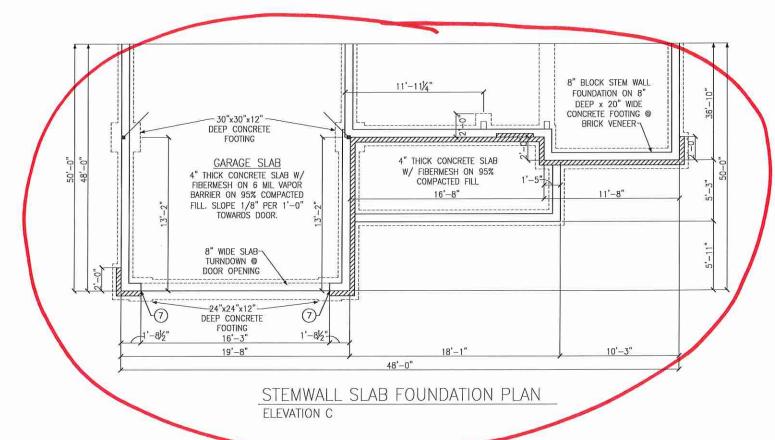
STEMWALL SLAB FOUNDATION PLAN **ELEVATION A** see elevation C

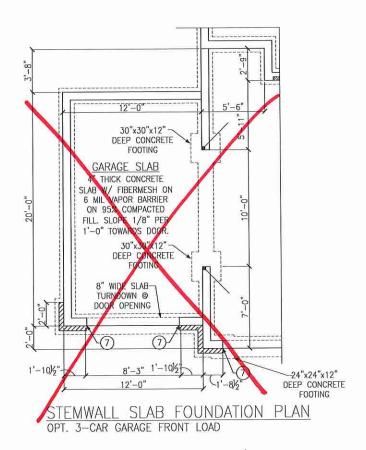


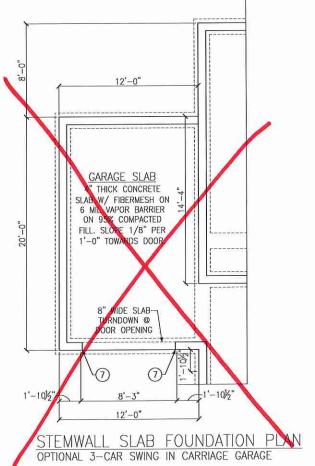


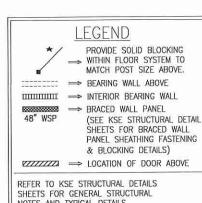


















NOTES AND TYPICAL DETAILS

KEYNOTES:

REINFORCE 8" CMU WALL AND FOOTING UNDER PORTAL FRAME PER DETAIL A OR B/SD-4.

Stem Wall Foundo Elevations B, C & Redbud Model — 120 M.P.H. Carolina Division Project #: 105-16009 Designed By: KRK

Plans

Foundation Plans B, C & Options Iodel — LH

Checked By: Issue Date: 4/1/19 Re-Issue:

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

SECOND FLOOR FRAMING PLAN

see elevation C







PROVIDE SOLID BLOCKING
WITHIN FLOOR SYSTEM TO
MATCH POST SIZE ABOVE.

⇒ BEARING WALL ABOVE ⇒ INTERIOR BEARING WALL ⇒ BRACED WALL PANEL (SEE KSE STRUCTURAL DETAIL SHEETS FOR BRACED WALL

PANEL SHEATHING FASTENING & BLOCKING DETAILS) REFER TO KSE STRUCTURAL DETAILS SHEETS FOR GENERAL STRUCTURAL NOTES AND

PLAN DESIGNED WITH 9' WALL PLATES

FLOOR FRAMING TO BE 14" DEEP TJI 110 SERIES OR EQUAL, SPACING PER MANUFACTURER.

KEYNOTES:

TYPICAL DETAILS

(5) INSTALL TWO PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.



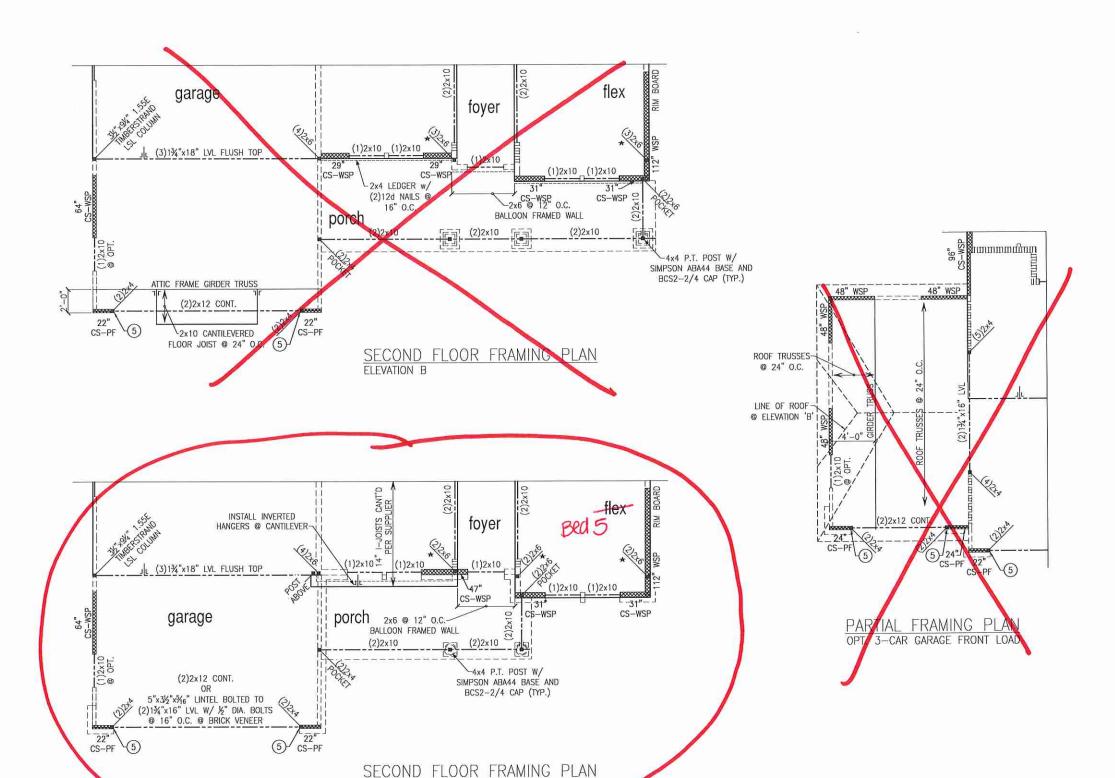
Division Model Second Fl Elevation Redbud M 120 M.P.H Carolina [

Framing

Floor

Project #: 105-16009 Designed By: KRK Checked By: Issue Date: 4/1/19

Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34



ELEVATION C







PROVIDE SOLID BLOCKING

⇒ WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

⇒ BEARING WALL ABOVE

48" WSP

⇒ BRACED WALL PANEL (SEE KSE STRUCTURAL DETAIL SHEETS FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)

REFER TO KSE STRUCTURAL DETAILS SHEETS FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

PLAN DESIGNED WITH 9' WALL PLATES

FLOOR FRAMING TO BE 14" DEEP TJI 110 SERIES OR EQUAL, SPACING PER MANUFACTURER.

KEYNOTES:

(5) INSTALL TWO PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.



Framing Plans C & Option Second Floor Frai Elevations B, C & Redbud Model — 120 M.P.H. Carolina Division

Project #: 105-16009 Designed By: KRK Checked By: Issue Date: 4/1/19

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34







LEGEND PROVIDE SOLID BLOCKING

→ WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE. ⇒ BEARING WALL ABOVE IIIIIIIIII \Longrightarrow INTERIOR BEARING WALL ⇒ BRACED WALL PANEL (SEE KSE STRUCTURAL DETAIL SHEETS FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)

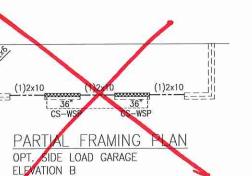
REFER TO KSE STRUCTURAL DETAILS SHEETS FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

PLAN DESIGNED WITH 9' WALL PLATES

FLOOR FRAMING TO BE 14" DEEP TJI 110 SERIES OR EQUAL, SPACING PER MANUFACTURER.

KEYNOTES:

(5) INSTALL TWO PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.



PARTIAL FRAMING PLAN

OPT. SIDE LOAD GARAGE

ELEVATIONS A & C

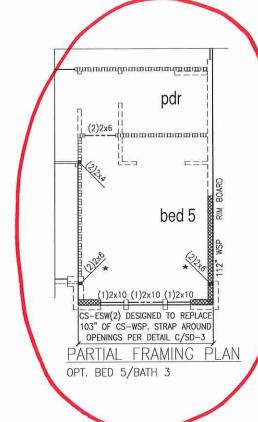
(8)246 I

32" CS-WSI

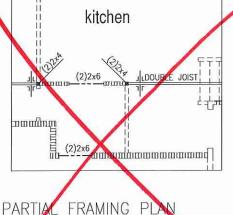
garage

(3)1¾"x18"

(5)





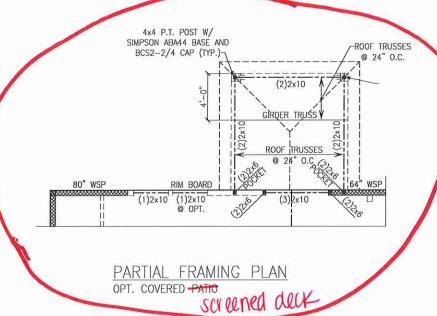


Second Floor F Options Redbud Model 120 M.P.H. Carolina Divisior Project #: 105-16009 Designed By: KRK Checked By: Issue Date: 4/1/19 Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

.P.H. Division

屲

 \mathcal{O}



12 CONT.

CS-PF (5)

PARTIAL FRAMING PLAN
PTIONAL 3-CAR SWING IN CARRIAGE GARAGE FRAMING PLAN

80" WSP

DOUBLE JOIST

48" WSP

ROOF TRUSSES-

@ 24" O.C.

LINE OF ROOF

@ ELEV. 'B'





PROVIDE SOLID BLOCKING ⇒ WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

⇒ BEARING WALL ABOVE

48" WSP

BRACED WALL PANEL
(SEE KSE STRUCTURA (SEE KSE STRUCTURAL DETAIL SHEETS FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)

REFER TO KSE STRUCTURAL DETAILS SHEETS FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

PLAN DESIGNED WITH 9' WALL PLATES

KEYNOTES:

- ONNECT STUD AT END OF BRACED WALL PANEL TO FRAMING BELOW WITH A 30" LONG SIMPSON CS22 COIL STRAP WITH MIN 8-10d NAILS EACH END.
- (10) 8'x12' HVAC PLATFORM TRUSSES DESIGNED TO SUPPORT HVAC UNITS.
- (11) 2x6 OVERFRAMING W/ 2x8 RIDGE AND VALLEY PLATES OR VALLEY SET TRUSSES @ 24" O.C. (TYP.)

an $\overline{\Box}$

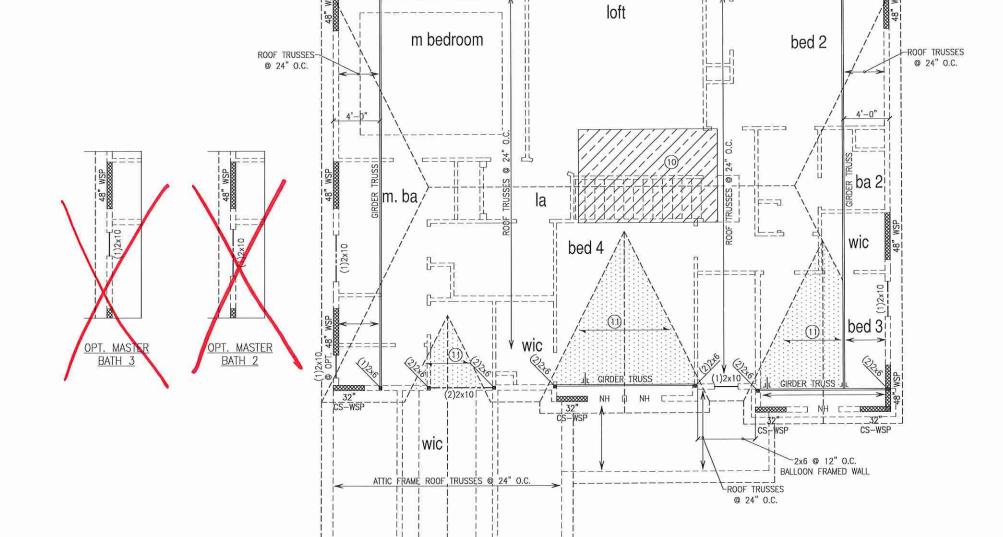
I.P.H. na Division Roof Framing F Elevation C Redbud Model 120 M.P.H. Carolina Division

Project #: 105-16009

Designed By: KRK

Checked By: Issue Date: 4/1/19 Re-Issue:

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

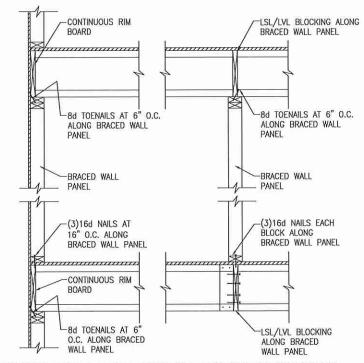


(2)2x10 (1)2x10 (1)2x10

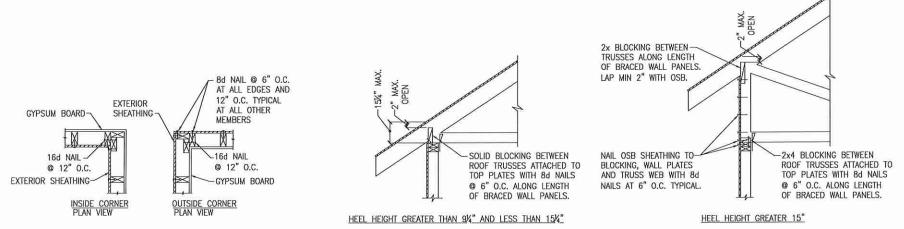
32" (1) CS-WSP

(1)2×10 (1)2×10

ROOF FRAMING PLAN ELEVATION C

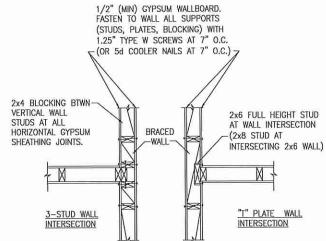


B TYPICAL BRACED WALL PANEL TO FLOOR/CEILING CONNECTION BRACED WALL PANELS PERPENDICULAR TO I-JOISTS



(D) TYPICAL EXTERIOR CORNER WALL FRAMING

(E) ROOF TRUSS BEARING/BLOCKING AT BRACED WALL PANELS ONLY REQUIRED AT BRACED WALL PANELS



BRACED WALL INTERSECTIONS MAY BE FRAMED USING EITHER THE 3-STUD OR THE T-PLATE METHOD.

(C) METHOD GB(1) AND GB(2) INTERSECTION DETAILS



Wall Braced

Carolina Project #: 105-19000 Designed By: KRK

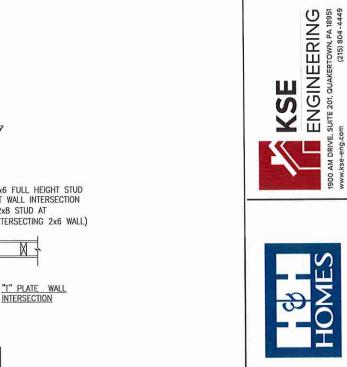
Checked By: Issue Date: 1/1/19 Re-Issue:

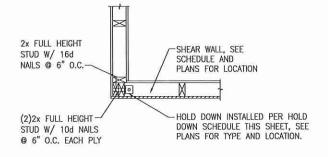
Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

M.P.H. olina Division

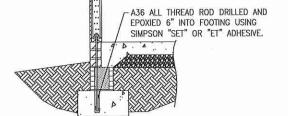
20







-HOLD DOWN INSTALLED PER HOLD DOWN SCHEDULE THIS SHEET, SEE PLANS FOR TYPE AND LOCATION. -A36 ALL THREAD ROD DRILLED AND EPOXIED 6" INTO FOOTING USING SIMPSON "SET"/"ET" OR USP CIA-GEL ADHESIVE.

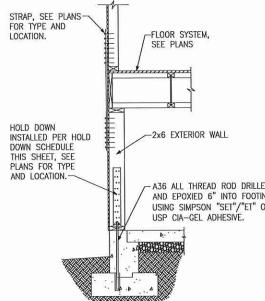


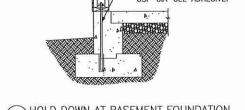
SIMPSON HOLD DOWN INSTALLED PER

HOLD DOWN SCHEDULE THIS SHEET

HOLD DOWN AT STEMWALL SLAB FOUNDATION

(C)HOLD DOWN AT STEMWALL SLAB





- A36 ALL THREAD ROD DRILLED AND EPOXIED 6" INTO FOOTING USING SIMPSON "SET"/"ET" OR

G HOLD DOWN AT BASEMENT FOUNDATION
STEM WALL

	HOLI	DOWN SCH	EDULE
HOLD DOWN		ALL THREAD ROD	FASTENERS
SIMPSON	USP	ALL INKEAU KOD	I ASILINLINS
LTT20B	LTS20B	为" DIA.	(10)10d NAILS
HTT4	HTT16	%" DIA.	(18)16dx2½" LONG NAILS
HTT5	HTT45	5%" DIA.	(26)16dx2½" LONG NAILS

Division M.P.H. Carolina 120

Detai

0 2 ENGINEERING
E, SUITE 201, QUAKERTOWN, PA 18951
(215) 804-4449

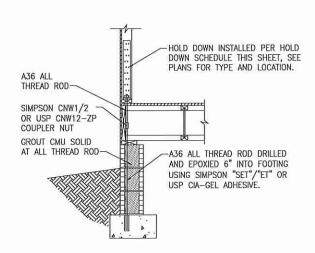
S

Project #: 105-19000 Designed By: KRK Checked By:

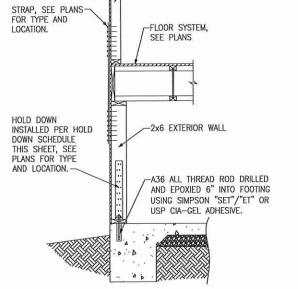
Issue Date: 1/1/19 Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

(A) TYPICAL HOLD DOWN DETAIL







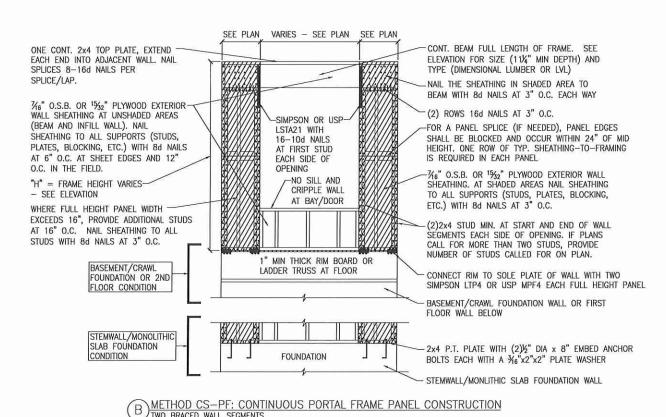


F HOLD DOWN AT BASEMENT FOUNDATION MONOLITHIC TURN-DOWN



-HOLD DOWN INSTALLED PER HOLD DOWN SCHEDULE THIS SHEET, SEE

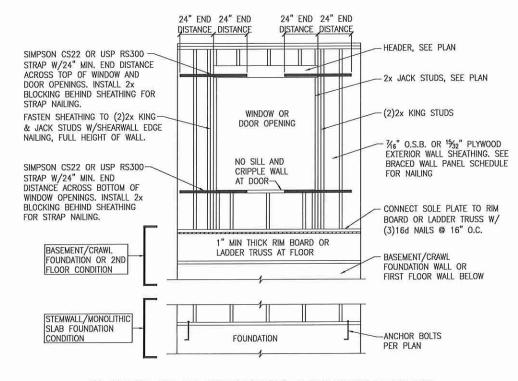
PLANS FOR TYPE AND LOCATION.



BRACED WALL PANEL AND ENGINEERED SHEAR WALL SCHEDULE **FASTENERS** PANEL TYPES PANEL TYPE 6D OR 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT INTERMITTENT WOOD INTERMEDIATE SUPPORTS. ENGINEERED ALTERNATIVE: 16 GAGE BY 1.75" LONG 7/16" OSB STRUCTURAL PANEL STAPLES AT 3" O.C. AT SHEET EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W 1/2" GYPSUM BOARD (SHEATHING ONE DRYWALL SCREWS AT 7" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACE OF WALL) INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W GB(1)-4BOARD (SHEATHING ONE DRYWALL SCREWS AT 4" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACE OF WALL) INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W 1/2" GYPSUM GB(2) BOARD (SHEATHING BOTH DRYWALL SCREWS AT 7" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACES OF WALL) 6D OR 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT CONTINUOUS SHEATHED INTERMEDIATE SUPPORTS. ENGINEERED ALTERNATIVE: 16 GAGE BY 1.75" LONG CS-WSP 7/16" OSB WOOD STRUCTURAL STAPLES AT 3" O.C. AT SHEET EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS CONTINUOUS SHEATHED 7/16" OSB CS-PF PORTAL FRAME 7/16" OSB PORTAL FRAME WITH NAILING PER DETAIL HOLD DOWNS 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT 7/16" OSB ENGINEERED SHEAR CS-ESW(1) INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS WALL, TYPE 1 8D COMMON NAILS AT 4" O.C. AT SHEET EDGES AND 12" O.C. AT 7/16" OSB ENGINEERED SHEAR CS-ESW(2) INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS WALL, TYPE 2 8D COMMON NAILS AT 3" O.C. AT SHEET EDGES AND 12" O.C. AT 7/16" OSB CS-ESW(3) INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS WALL, TYPE 3

BRACED WALL PANEL NOTES:

- ALL BRACED WALL PANELS, EXCEPT GB(1) & GB(2), SHALL HAVE 2x BLOCKING BETWEEN WALL STUDS AT ALL HORIZONTAL SHEET EDGES.
- PROVIDE NAILING/BLOCKING ABOVE AND BELOW ALL BRACED WALL PANELS PER KSE BRACED WALL DETAILS.
- SHEATH ALL EXTERIOR WALLS OF THE HOUSE WITH 1/6" O.S.B., OR 15/2" PLYWOOD, FASTENED PER IRC. AT EXTERIOR CORNERS SHEATHING SHALL BE FASTENED PER KSE BRACED WALL DETAILS. AT INTERIOR WALL INTERSECTIONS, FASTEN STUDS & WALL BRACING PER KSE BRACED WALL DETAILS.
- BRACED WALL PANELS AND ENGINEERED SHEAR WALLS ARE PROVIDED PER IRC. PANEL LENGTHS SHOWN ON PLANS ARE THE MINIMUM LENGTH REQUIRED.



(C) WINDOW OR DOOR REINFORCEMENT IN ENGINEERED SHEAR WALL ONLY REQUIRED WHERE SPECIFED ON PLANS





S Wall

Division \Box $\dot{\geq}$ 20

lina

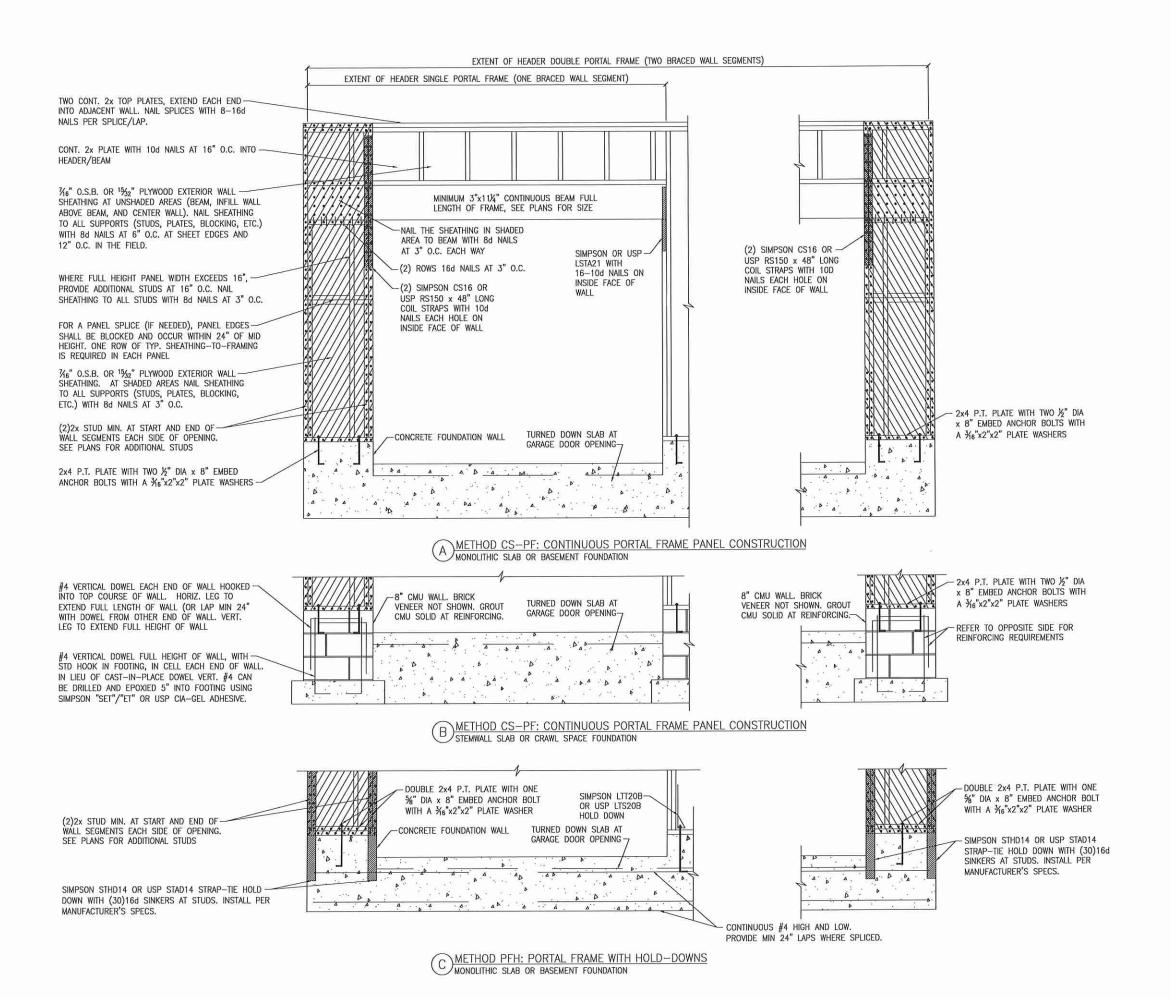
arol

Project #: 105-19000 Designed By: KRK

Checked By: ssue Date: 1/1/19

Re-Issue:

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34



IEERING
KERTOWN, PA 18951
(215) 804-4449



ortal

M.P.H. Carolina 20

Division

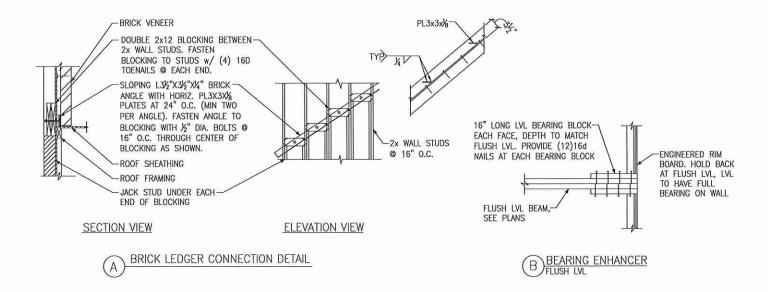
Project #: 105-19000

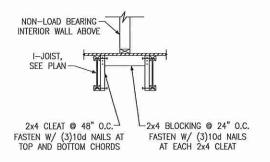
Designed By: KRK Checked By:

ssue Date: 1/1/19

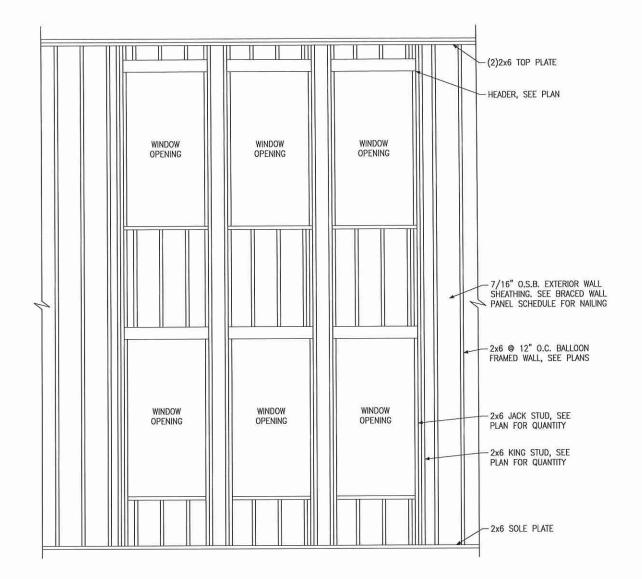
Re-Issue: Scale: 1/8"=1'-0" @ 11x17

1/4"=1'-0" @ 22x34





C I-JOIST LADDER BLOCKING AS REQUIRED @ PARALLEL WALLS



DBALLOON FRAMED WALL DETAIL N.T.S.



Detail



120 M.P.H. Carolina Division Project #: 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19 Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

ENGINEERING
E, SUITE 201, QUAKERTOWN, PA 18951
COM
(215) 804-4449

KSE

-LINE OF OPTIONAL BRICK -WALL SHEATHING

FASTEN RAFTER TO LEDGER WITH

w/(2) ROWS SIMPSON SDS4x31/2" OR

USP WS35 SCREWS @ 16" O.C.

-FASTEN VERTICAL TO RAFTER &

CLG. JOIST w/(4) 12d NAILS.

WALL STUDS WITH (2) ROWS

BRICK VENEER, PER ELEVATION

-2x4 LEDGER. FASTEN TO

12d NAILS @ 16" O.C.

SUH24-2 HANGER

-SIMPSON U24-2 OR USP

-2x4 VERTICAL

LAP WITH VERTICAL

SIMPSON H3 OR USP RT3A

WALL STUD OR GABLE TRUSS TOENAIL RAFTER TO LEDGER WITH (4) 12d NAILS -2x4 LEDGER. FASTEN TO WALL STUDS w/(2) ROWS SIMPSON SDS4x3½" OR USP WS35 SCREWS @ 16" O.C. -2x4 RAFTER & CEILING JOIST, LAP AND FACE NAIL WITH (4) 12d NAILS 12" MAXIMUM -2x4 LEDGER. FASTEN TO WALL OR GABLE TRUSS WITH (2) ROWS 12d NAILS @ 16" O.C.

C EYEBROW ROOF DETAIL
STRAIGHT ROOF

IEERING KERTOWN, PA 18951 (215) 804-4449

ENGINE SUITE 201, QUAKE

Det raming L laneous scell

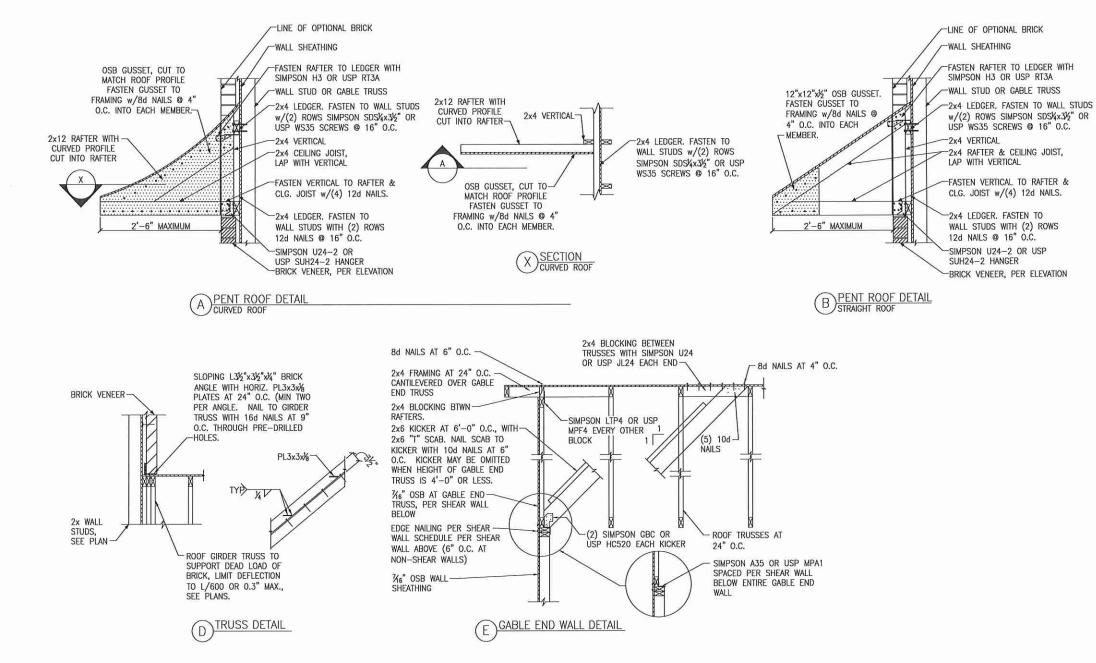
∑. D. Carolina 120

Division

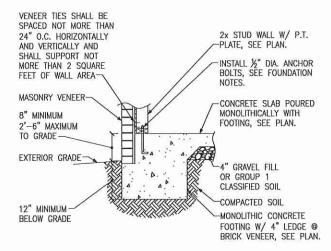
Project #: 105-19000 Designed By: KRK

Checked By: Issue Date: 1/1/19

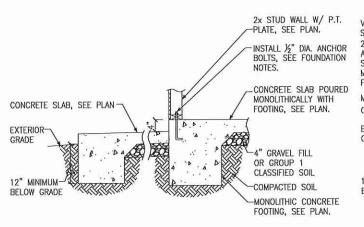
Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34



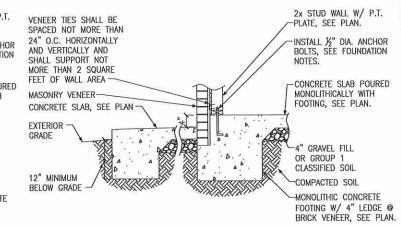




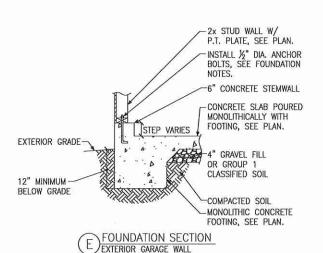
FOUNDATION SECTION B) EXTERIOR WALL @ MASONRY

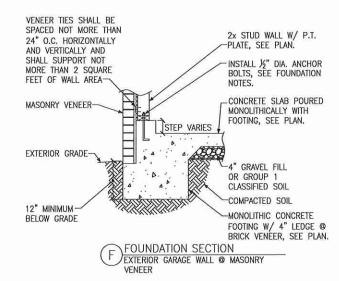


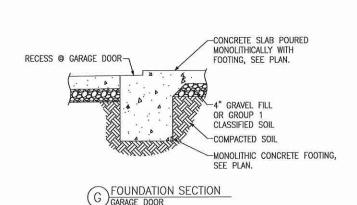
FOUNDATION SECTION EXTERIOR WALL AT PORCH

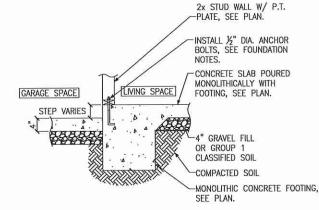


FOUNDATION SECTION EXTERIOR WALL AT PORCH W/ MASONRY VENEER

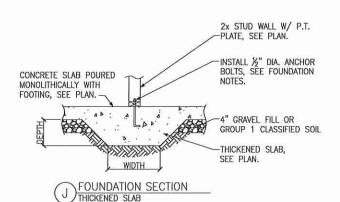


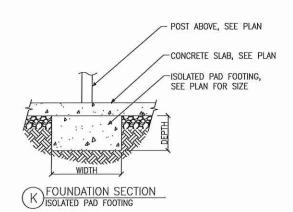






FOUNDATION SECTION INTERIOR GARAGE WALL







Detai Foundation ap S Monolithic

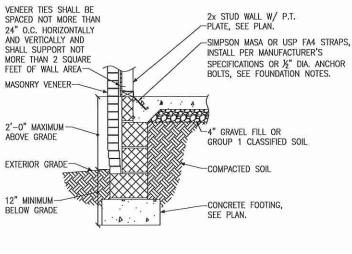
Division M. M. 20

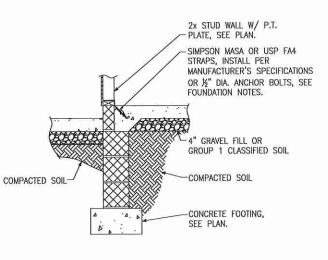
arolina

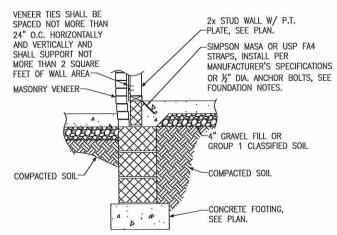
ENGINEERING F. SUITE 201, QUAKERTOWN, PA 18951

Project #: 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19

Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34







FOUNDATION SECTION EXTERIOR WALL AT PORCH W/ MASONRY VENEER

2x STUD WALL W/

P.T. PLATE, SEE PLAN.

STRAPS, INSTALL PER

FOUNDATION NOTES.

4" GRAVEL FILL OR

COMPACTED SOIL

GROUP 1 CLASSIFIED SOIL

LIVING SPACE

-SIMPSON MASA OR USP FA4

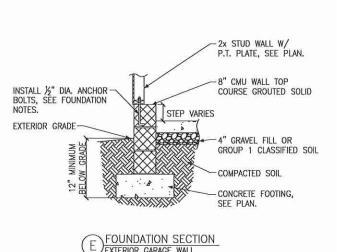
MANUFACTURER'S SPECIFICATIONS

OR 1/2" DIA. ANCHOR BOLTS, SEE

FOUNDATION SECTION (A) EXTERIOR WALL



FOUNDATION SECTION C EXTERIOR WALL AT PORCH



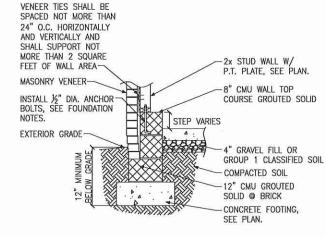
EXTERIOR GARAGE WALL

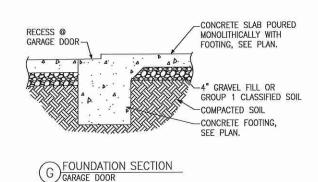
WIDTH

FOUNDATION SECTION THICKENED SLAB

CONCRETE SLAB POURED

MONOLITHICALLY WITH FOOTING, SEE PLAN.

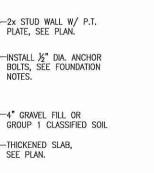






GARAGE SPACE

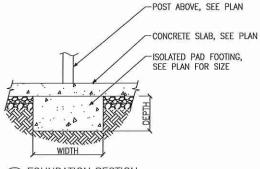




NOTES.

SEE PLAN.







ENGINEERING
E, SUITE 201, QUAKERTOWN, PA 18951
com (215) 804-4449 S

Project #: 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19 Re-Issue:

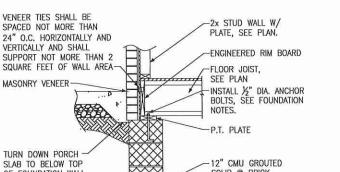
Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

Division

arolina

Σ. D.

20



SUPPORT NOT MORE THAN 2 SQUARE FEET OF WALL AREA-MASONRY VENEER TURN DOWN PORCH SLAB TO BELOW TOP OF FOUNDATION WALL SOLID @ BRICK -CONCRETE FOOTING, SEE PLAN.

SEE ARCHITECTURAL DETAILS FOR WATERPROOFING AT PORCH SLAB/WOOD FRAMING. FOUNDATION SECTION

-2x STUD WALL W/ PLATE, SEE PLAN. - ENGINEERED RIM BOARD INSTALL 1/2" DIA. ANCHOR BOLTS, SEE FOUNDATION NOTES. -FLOOR JOIST. SEE PLAN P.T. PLATE -2'-0" MAXIMUM 8" CMU WALL TOP ABOVE GRADE -COURSE GROUTED SOLID EXTERIOR GRADE -CONCRETE FOOTING, SEE PLAN.

> FOUNDATION SECTION (A) EXTERIOR WALL

INSTALL ½" DIA. ANCHOR-BOLTS, SEE FOUNDATION

NOTES.

EXTERIOR GRADE

B FOUNDATION SECTION
EXTERIOR WALL @ MASONRY VENEER

-2x STUD WALL W/

PLATE, SEE PLAN.

-FLOOR JOIST,

SEE PLAN

-P.T. PLATE

NOTES.

-ENGINEERED RIM BOARD

INSTALL ½" DIA. ANCHOR BOLTS, SEE FOUNDATION

COURSE GROUTED SOLID

TURN DOWN PORCH -SLAB TO BELOW TOP

OF FOUNDATION WALL

-8" CMU WALL, TOP

-12" CMU GROUTED

CONCRETE FOOTING,

SEE PLAN.

SOLID @ BRICK

SEE PLAN.

VENEER TIES SHALL BE SPACED NOT MORE THAN 24" O.C. HORIZONTALLY

VENEER TIES SHALL BE

SPACED NOT MORE THAN

24" O.C. HORIZONTALLY

AND VERTICALLY AND

SHALL SUPPORT NOT

MORE THAN 2 SQUARE

FEET OF WALL AREA-

MASONRY VENEER-

2'-0" MAXIMUM

ABOVE GRADE -

EXTERIOR GRADE

AND VERTICALLY AND SHALL SUPPORT NOT MORE THAN 2 SQUARE -2x STUD WALL W/ P.T. PLATE, SEE PLAN. FEET OF WALL AREA MASONRY VENEER--8" CMU WALL TOP COURSE GROUTED SOLID INSTALL ½" DIA. ANCHOR-BOLTS, SEE FOUNDATION NOTES. STEP VARIES EXTERIOR GRADE -4" GRAVEL FILL OR GROUP 1 CLASSIFIED SOIL COMPACTED SOIL -12" CMU GROUTED SOLID @ BRICK CONCRETE FOOTING,

> FOUNDATION SECTION EXTERIOR GARAGE WALL @ MASONRY VENEER

CONCRETE SLAB POURED RECESS @ MONOLITHICALLY WITH GARAGE DOOR FOOTING, SEE PLAN. -4" GRAVEL FILL OR GROUP 1 CLASSIFIED SOIL COMPACTED SOIL -CONCRETE FOOTING, SEE PLAN.

-2x STUD WALL W/

PLATE, SEE PLAN.

FLOOR JOIST,

SEE PLAN

NOTES.

-P.T. PLATE

SEE PLAN.

-ENGINEERED RIM BOARD

HINSTALL 1/2" DIA. ANCHOR BOLTS, SEE FOUNDATION

-8" CMU WALL TOP

-CONCRETE FOOTING,

COURSE GROUTED SOLID

FOUNDATION SECTION G FOUNDATIO

FOUNDATION SECTION C EXTERIOR WALL AT PORCH

> -2x STUD WALL W/ PLATE, SEE PLAN. -ENGINEERED RIM BOARD FLOOR JOIST, SEE PLAN ─INSTALL ½" DIA. ANCHOR BOLTS, SEE FOUNDATION P.T. PLATE GARAGE SPACE 8" CMU WALL TOP COURSE GROUTED SOLID -CONCRETE FOOTING, SEE PLAN.

EXTERIOR WALL AT PORCH W/ MASONRY VENEER

LIVING SPACE

FOUNDATION SECTION H HOUNDATION SELECTION OF THE INTERIOR GARAGE WALL

_____ FLOOR JOIST, SEE PLAN GIRDER PER -2x8 PT BEARING BLOCK, FULL LENGTH OF PIER PLAN CMU PIER GROUTED — SOLID, SEE SCHEDULE FOR SIZE AND HEIGHT LIMITS CONCRETE FOOTING, SEE PLAN.

FOUNDATION SECTION

FOUNDATION SES.
EXTERIOR GARAGE WALL

ENGINEERED RIM BOARD. DO NOT SPLICE WITHIN 6" OF VENT OPENING FACE MOUNT JOIST HANGER, FILL ALL HOLES WITH 10d NAILS CLINCHED 2x P.T. SILL PLATE. DO NOT SPLICE WITHIN 6" OF VENT OPENING 16" VENT-**OPENING**

PIER AND FOOTING SCHEDULE PIER HEIGHT PIER SIZE MIN. FOOTING SIZE UP TO 2"-8" 8" x 16" 24" x 24" x 12" U.N.O.
UP TO 5'-4" 16" x 16" 24" x 24" x 12" U.N.O.
UP TO 8'-0" 16" x 16" 30" x 30" x 12" U.N.O. PIERS SHALL BE CAPPED WITH 8" OF SOLID MASONRY OR CONCRETE OR TOP COURSE FILLED SOLID WITH CONCRETE/MORTAR. PIERS OVER 5'-4" SHALL BE BE FILLED SOLIDLY WITH CONCRETE OR TYPE M OR S MORTAR. FOR PIERS OVER 8'-0" CONTACT KSE ENGINEERING FOR PIER AND FOOTING DESIGN.

(K) CRAWL SPACE VENT DETAIL J FOUNDATION SECTION INTERIOR PIER

-2x STUD WALL W/ P.T.

COURSE GROUTED SOLID

PLATE, SEE PLAN.

8" CMU WALL TOP

4" GRAVEL FILL OR

COMPACTED SOIL

SEE PLAN.

-CONCRETE FOOTING.

GROUP 1 CLASSIFIED SOIL

STEP VARIES



ENGINEERING
JUITE 201, QUAKERTOWN, PA 18951
(215) 804-4449 Ш



Det Foundation

Division M. P. 20

arolina

Project #: 105-19000 Designed By: KRK Checked By:

Issue Date: 1/1/19 Re-Issue:

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

SD-9