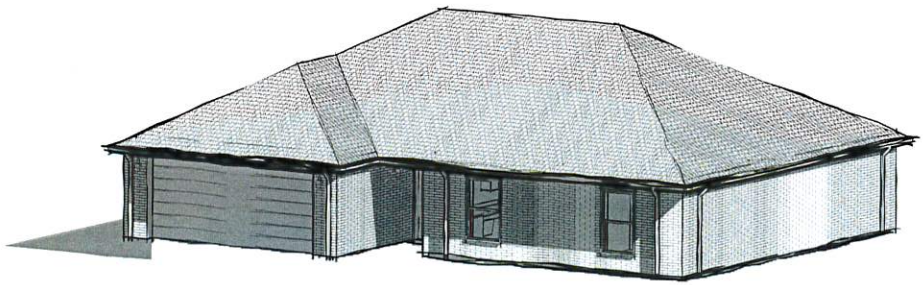
CHEROKEE NATION

HOUSING DEVELOPMENT

CONSTRUCTION DOCUMENTS

7/26/22

TYPE 3



3-D REPRESENTATION FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO DRAWINGS AND DETAILS

PROJECT CONTACTS

OWNER:

HOUSING AUTHORITY OF THE CHEROKEE NATION
P.O. BOX 1987
SAM HENDLEY DRIVE
TAHLEQUAH, OK 74465
P: (918) 456-5482

CONTRACTOR:

ARCHITECT:

BLUE RIVER ARCHITECTS, LLC
324 SOUTH BOSTON AVENUE
SUITE 100
TULSA, OKLAHOMA 74103
P: (918) 671-9836

CONSULTANT CONTACTS

MEP CONSULTANT:

MPU ENGINEERING
110 W. 7TH ST.
TULSA, OK 74119
P: (918) 582-4088

CIVIL CONSULTANT:

WALLACE DESIGN COLLECTIVE
123 N MLK JR BLVD
TULSA, OK 74103
P: (918) 584-5858

STRUCTURAL CONSULTANT:

WALLACE DESIGN COLLECTIVE
123 N MLK JR BLVD
TULSA, OK 74103
P: (918) 584-5858

PROJECT LOCATION

ADDRESS HERE

NORTH

SHEET INDEX

blue river ARCHITECTS
A Native American Owned Firm

STATE OF OKLAHOMA
THOMAS C. REA
No. 21611
TULSA, OK
LICENSED ARCHITECT
07/26/22

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

ADDRESS HERE

CS
COVER SHEET

blueriver ARCHITECTS
A Native American Owned Firm

BLUE RIVER PROJECT NUMBER
20230079

ISSUE DATE
7/26/22

GOAL
CONSTRUCTION DOCUMENTS

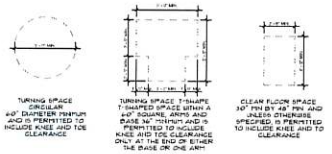
OTHER ISSUE DATES

NO.	DESCRIPTION	DATE

SHEET NAME
COVER SHEET

SHEET NUMBER
CS

TURNING RADIUS AND CLEAR SPACE



TURNING SPACE
CIRCULAR
60" DIAMETER MINIMUM AND IS PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE

TURNING SPACE T-SHAPE
T-SHAPED SPACE WITHIN A 60" SQUARE, ARMS AND BASE 36" MINIMUM AND IS PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE ONLY AT THE END OF EITHER THE BASE OR ONE ARM

CLEAR FLOOR SPACE
30" MIN BY 48" MIN AND UNLESS OTHERWISE SPECIFIED IS PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE

SYMBOLS LEGEND

VIEW TITLE — A TITLE, 1/8" = 1'-0"

VIEW TITLE WITH REFERENCE — A TITLE, 1/8" = 1'-0", REF FROM: R / R101

BUILDING SECTION AND REFERENCE

BUILDING ELEVATION

WALL SECTION SYMBOL

ENLARGED FLOOR PLAN OR PLAN DETAIL REFERENCE

MATCHLINE & REFERENCES — MATCHLINE, SEE 1 / A101

INTERIOR ELEVATION

ROOM NAME
ROOM NUMBER — ROOM NAME, 101

AREA NAME
AREA SQUARE FEET
AREA OCCUPANCY — AREA NAME, 100 SF, 100

LEVEL NAME
RELATIVE ELEVATION — NAME, ELEVATION

PARTITION TYPE SYMBOL — 100, 1HR

DOOR TAG & RATING — 101, 20'

WINDOW / STOREFRONT TAG

MATERIAL TAG

EQUIPMENT TAG — 1, TYP

GRID BUBBLE

PLAN NORTH ARROW — NORTH

GRAPHIC SCALE — 0' 1' 2' 3' 4'

ELEVATION OR HEIGHT SYMBOL

FLOORING TRANSITION

CENTERLINE

OPEN TO STRUCTURE — OTS

ALIGN FINISHES — ALIGN

REVISION EXTENTS & TAG

GENERAL PROJECT NOTES

1. GENERAL NOTES ARE TYPICAL FOR AREAS OF WORK.
2. REFER TO COMPLETE SET OF CONSTRUCTION DOCUMENTS FOR ALL PROJECT NOTES.
3. THE CONTRACT DOCUMENTS IN THEIR ENTIRETY ARE THE RESPONSIBILITY OF ALL TRADES. WHERE REQUIREMENTS ARE SHOWN IN ONE SECTION OF THE SPECIFICATIONS OR DRAWINGS BUT NOT ANOTHER, THE CONTRACTOR IS NOT RELIEVED FROM PROVIDING COMPLETELY FINISHED, COORDINATED AND PROPERLY FUNCTIONING SYSTEMS.
4. ANY MISCELLANEOUS ITEMS OR MATERIALS NOT SPECIFICALLY NOTED, BUT REQUIRED FOR THE PROPER EXECUTION, INSTALLATION, OR PERFORMANCE OF THE WORK, SHALL BE PROVIDED BY THE CONTRACTOR.
5. CONTRACTOR IS RESPONSIBLE FOR THE LAYOUT AND COORDINATION OF DIMENSIONS IN THE FIELD.
6. THE PRESENCE OF THE ARCHITECT OR AN ARCHITECT'S REPRESENTATIVE ON THE JOB SITE DOES NOT IMPLY CONCURRENCE OR APPROVAL OF THE WORK. THE CONTRACTOR SHALL CALL SPECIFIC ITEMS TO THE ATTENTION OF THE ARCHITECT IF THE CONTRACTOR WISHES TO OBTAIN THE ARCHITECT'S REVIEW.
7. IF DISCREPANCIES OCCUR BETWEEN DRAWINGS OR BETWEEN THE DRAWINGS AND SPECIFICATIONS, NOTIFY THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING.
8. SEQUENCING OF WORK, TEMPORARY BRACING AND SHORING ARE THE RESPONSIBILITY OF THE CONTRACTOR. PROVIDE SHORING DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE THE PROJECT IS LOCATED.
9. USE ONLY DIMENSIONS INDICATED IN THE CONTRACT DOCUMENTS. DO NOT SCALE DOCUMENTS OR USE ANY DIMENSIONS TAKEN FROM PHYSICAL OR ELECTRONIC DRAWING FILES. WRITTEN DIMENSIONS GOVERN. IF CRITICAL DIMENSIONS DO NOT NOT APPEAR ON DOCUMENTS, OR CONFLICT WITH DIMENSIONS, NOTIFY THE ARCHITECT FOR CLARIFICATION.
10. VERIFY EQUIPMENT ROUGH-IN DIMENSIONS WITH MANUFACTURER FOR EQUIPMENT THAT IS EXISTING, REUSED, OR FURNISHED BY OWNER.
11. ALL PENETRATIONS THROUGH FLOORS, WALLS AND RATED ASSEMBLIES AS WELL AS ALONG NUMB PERIMETERS AND SEPARATION WALL PERIMETERS, SHALL BE SEALED AND PROTECTED WITH U.L. APPROVED ASSEMBLIES AND / OR PROTECTIVE DEVICES HAVING THE SAME OR GREATER TESTED RATING AS THAT REQUIRED FOR THE ASSEMBLY BEING PENETRATED. ALL PENETRATIONS TO BE PROTECTED TO MAINTAIN FIRE RATED ASSEMBLY INTEGRITY.
12. PROVIDE ELECTROLYTIC PROTECTION / ISOLATION BETWEEN ALL DISIMILAR METALS, WHERE THEY OCCUR TO PREVENT ELECTROLYTIC REACTION AND / OR CORROSION.
13. PROVIDE ADEQUATE BLOCKING, BACKING OR STRUCTURAL SUPPORT AS REQUIRED TO PROPERLY INSTALL ALL MOUNTED ASSEMBLIES, INCLUDING ALL ATTACHED EQUIPMENT (OWNER AND CONTRACTOR FURNISHED ITEMS). PLUMBING FIXTURES, MILLWORK, AND CASEWORK.
14. PROVIDE ALL TEMPORARY BRACING AND SHORING AS REQUIRED FOR CONTRACT WORK.
15. PROTECT ALL NEWLY INSTALLED MATERIALS AND FINISHES UNTIL WORK IS FORMALLY ACCEPTED BY THE ARCHITECT OR THE OWNER'S REPRESENTATIVE AND TRANSFERRED TO THE OWNER.
16. THE CONSTRUCTION SITE IS TO BE KEPT CLEAN AND FREE OF DEBRIS. THE CONTRACTOR IS RESPONSIBLE FOR ALL PHASING, SECURING, HANDLING, TRANSPORTING AND DISPOSING OF DEBRIS.
17. STAGING AND STORAGE AREAS, AND LOCATIONS OF TEMPORARY FACILITIES TO BE COORDINATED WITH THE OWNER/ARCHITECT.
18. COORDINATE LOCATIONS OF CONSTRUCTION DUMPSTER ON SITE AND ACCESS TO BUILDING WITH OWNER.
19. PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION AS REQUIRED.
20. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. UTILITIES DISTURBED BY THE CONTRACTOR SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR REPAIR ACCORDING TO THE OWNER'S SPECIFICATIONS AND REQUIREMENTS AT NO COST TO THE OWNER.
21. VERIFY THE EXISTENCE AND LOCATION OF UTILITIES PRIOR TO STARTING WORK.
22. MAINTAIN UTILITY SERVICES AND PROTECT THEM AGAINST DAMAGE DURING CONSTRUCTION OPERATIONS.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE UTILITIES - KNOWN AND UNKNOWN (OVERHEAD AND BURIED) WHICH MAY OCCUR DUE TO THEIR ACTION OR LACK OF ACTION ON THE PROJECT SITE DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL SEEK ASSISTANCE OF LOCAL UTILITIES IN LOCATING THE UTILITIES PRIOR TO PERFORMING OPERATIONS IN ANY AREA.
24. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE OWNER'S SECURITY REQUIREMENTS FOR THE AREA OF CONSTRUCTION.
25. INSTALL ALL NEW MATERIALS AND EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS.
26. ALL NEW BUILDING MATERIALS AND PRODUCTS SHALL NOT CONTAIN LEAD, CADMIUM, OR ASBESTOS.
27. KEYNOTES WHERE INDICATED ARE FOR REFERENCE ONLY AND MAY NOT BE AT ALL LOCATIONS THAT CORRESPOND TO THAT NOTE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITY OF MATERIALS REQUIRED FOR DEMOLITION AND NEW CONSTRUCTION.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY APPROVALS, PERMITS AND INSPECTION. PAYING REQUIRED FEES AND POSTING ANY REQUIRED BONDS, PRIOR TO BEGINNING ANY DEMOLITION OR CONSTRUCTION.
29. FINAL COLOR SELECTIONS TO BE MADE BY OWNER/ARCHITECT UPON RECEIPT OF ALL MATERIAL SUBMITTALS. REVIEW CANNOT BEGIN UNTIL ALL MATERIALS HAVE BEEN RECEIVED.
30. FINISH GRADE TO SLOPE AWAY FROM BUILDING, TYPICAL GRADE TO FACILITATE DRAINAGE.
31. THE LOCATION OF DUCTS, PIPE AND EQUIPMENT, AS SHOWN ON THE DRAWINGS, ARE DIAGRAMMATIC AND SCHEMATIC AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES BEFORE PERFORMING ANY WORK. LIGHT FIXTURE LOCATIONS SUPERSEDE HVAC DUCTWORK, GRILLES AND DIFFUSERS.
32. CLEAN INTERIOR AND EXTERIOR OF ALL WINDOW GLAZING.
33. PROVIDE NEW ESCUTCHEONS AT ALL PLUMBING PENETRATION AREAS AND FASTEN IN PLACE WITH JOINT SPACER.

GENERAL DEFINITIONS

ALIGN	TO ACCURATELY LOCATE FACE BASED ON ADJACENT ITEMS OR CONSTRUCTION
CLEAR	MINIMUM DIMENSION BETWEEN FINISHED CONDITION. SHALL BE TREATED AS A PRIORITY TO HOLD BEFORE OTHER DIMENSIONS
MAXIMUM	THE CONDITION MAY NOT VARY TO A DIMENSION GREATER THAN THAT SHOWN WITHOUT THE APPROVAL OF THE ARCHITECT
MINIMUM	THE CONDITION MAY NOT VARY TO A DIMENSION SMALLER THAN THAT SHOWN WITHOUT THE APPROVAL OF THE ARCHITECT
SIMILAR	NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES, DETAILS AND NOTES ARE TYPICAL. SIMILAR DETAILS AND NOTES APPLY IN ALL APPLICABLE CONDITIONS. THE WORD "SIMILAR" MEANS THAT ITEMS IN EACH CASE ARE NOT IDENTICAL, BUT HAVE COMPARABLE, WORKED OUT TO THAT CONDITIONS IN A MANNER LIKE OR SIMILAR TO THE EXAMPLE REFERRED TO AND DOES NOT MEAN IDENTICAL
TYPICAL	THE CONDITION APPLIES TO THE SAME CONDITIONS THROUGHOUT UNLESS NOTED OTHERWISE

blue river ARCHITECTS
A Native American Owned Firm

STATE OF OKLAHOMA
THOMAS C. HOLT
No. 21631
TULSA, OK
LICENSED ARCHITECT
07/26/22

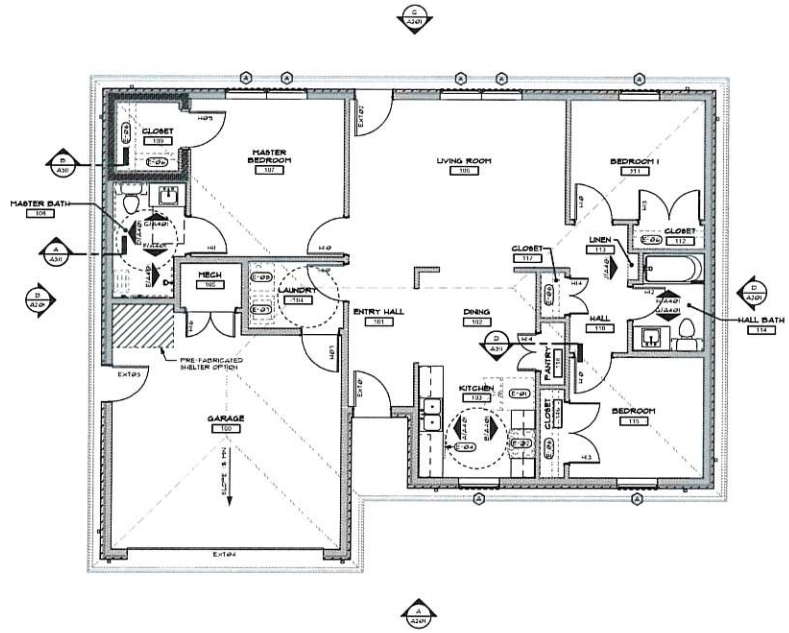
CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3
ADDRESS HERE
G001 PROJECT INFORMATION

blueriver ARCHITECTS
A Native American Owned Firm

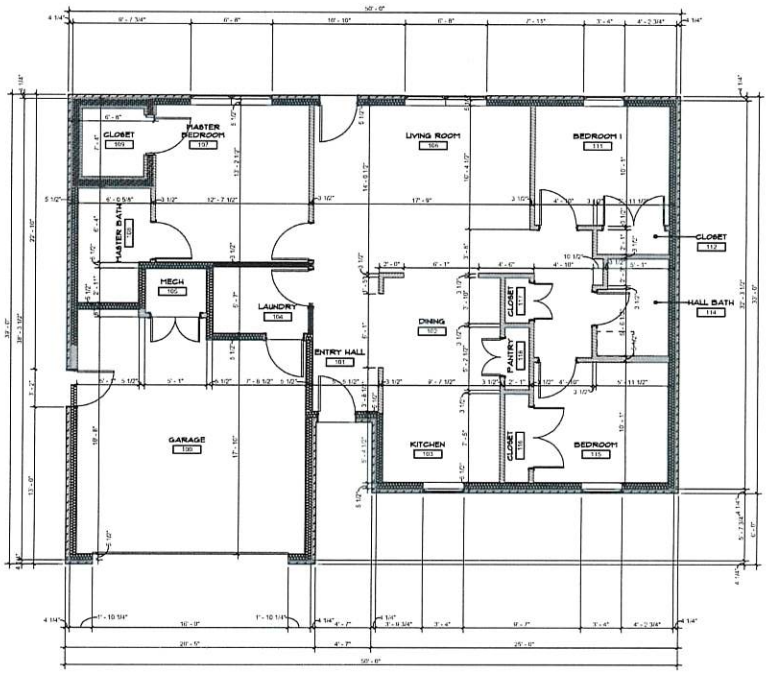
BLUE RIVER PROJECT NUMBER
20230079
ISSUE DATE
7/26/22
FOR:
CONSTRUCTION DOCUMENTS
OTHER ISSUE DATES

NO	DESCRIPTION	DATE

SHEET NAME
PROJECT INFORMATION
SHEET NUMBER
G001



B FLOOR REFERENCE PLAN
1/4" = 1'-0"



A FLOOR DIMENSION PLAN
1/4" = 1'-0"

blue river ARCHITECTS
A Native American Owned Firm

STATE OF OKLAHOMA
NORMAN C. BLUE
No. 4165
TULSA
REGISTERED ARCHITECT
07/26/22

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

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A101
FLOOR PLANS

blueriver ARCHITECTS
A Native American Owned Firm

BLUE RIVER PROJECT NUMBER
20230079
ISSUE DATE
7/26/22
FOR
CONSTRUCTION DOCUMENTS

OTHER ISSUE DATES
NO. DESCRIPTION DATE

SHEET NAME
FLOOR PLANS

SHEET NUMBER
A101

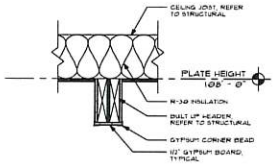
ROOF PLAN GENERAL NOTES

1. ALL ROOFTOP MECHANICAL, ELECTRICAL AND / OR PLUMBING EQUIPMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. REFERENCE MEP DOCUMENTS AND SPECIFICATIONS FOR FURTHER DESIGN INFORMATION.
2. INSTALL ROOFING IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS
3. INSTALL GUTTERS AND DOWNSPOUTS IN ACCORDANCE WITH SMACNA GUIDELINES
4. PROVIDE RIDGE CAPS AT ALL ROOF RIDGES
5. PIPE AND VENT PENETRATIONS: PROVIDE PRE-MOLDED PIPE SLEEVES ONLY, FOR ALL PENETRATIONS, AS RECOMMENDED BY MANUFACTURER FOR SIZE, TYPE AND APPLICATION. PITCH PANS ARE NOT ALLOWED.

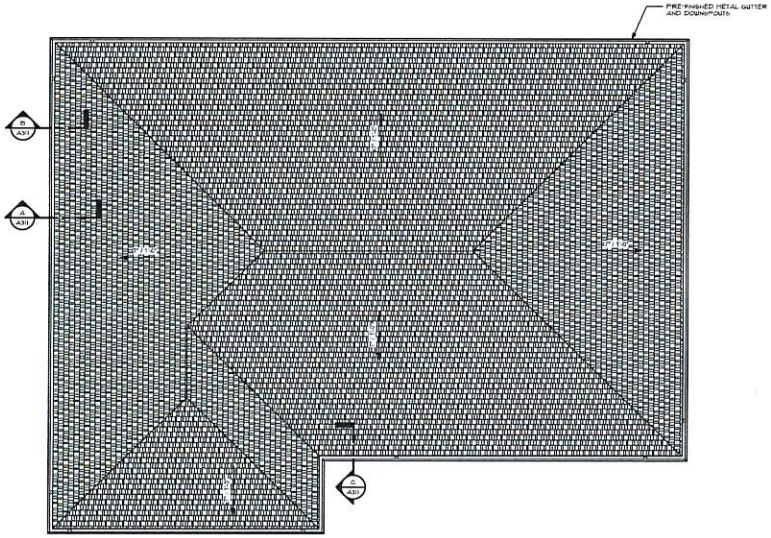
REFLECTED CEILING PLAN LEGEND

- 1X4 SURFACE MOUNT FIXTURE
- RECESSED CAN LIGHT
- WALL MOUNT VANITY FIXTURE
- SURFACE MOUNT FIXTURE
- CEILING FAN
- EXTERIOR WALL MOUNT FIXTURE
- VINYL SOFFIT PANELS
- GYPSUM BOARD
- SUPPLY DIFFUSER
- RETURN
- EXHAUST FAN
- SMOKE DETECTOR
- 10'-2" AFF — CEILING HEIGHT
- ALIGN — ALIGN FINISHED SURFACES
- MELAMINE

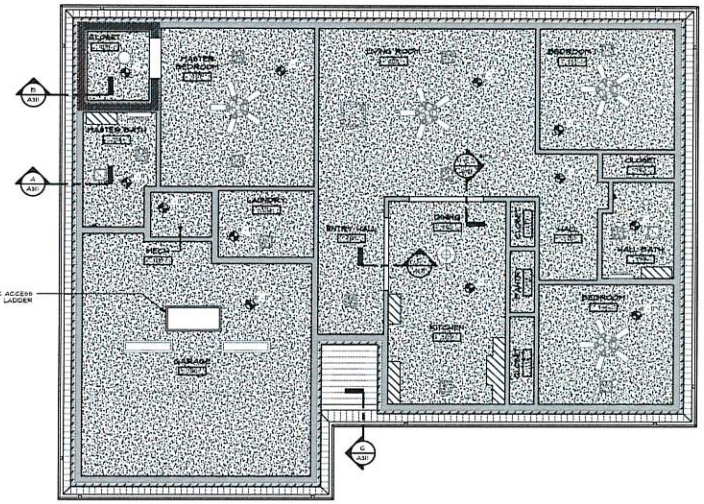
NOTE: REFER TO STRUCTURAL, ELECTRICAL AND MECHANICAL DRAWINGS FOR SYMBOLS NOT NOTED HERE



C CEILING DETAIL
1 1/2" = 1'-0"



B ROOF PLAN
1/4" = 1'-0"



A REFLECTED CEILING PLAN
1/4" = 1'-0"

blue river ARCHITECTS
A Native American Owned Firm

STATE OF OKLAHOMA
THOMAS C. GRAY
No. 17857
TULSA, OK
LICENSED ARCHITECT
07/26/22

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

ADDRESS HERE

A121
REFLECTED CEILING PLAN AND ROOF PLAN

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A Native American Owned Firm

BLUE RIVER PROJECT NUMBER
20230079

ISSUE DATE
7/26/22

ISSUE
CONSTRUCTION DOCUMENTS

OTHER ISSUE DATES

NO.	DESCRIPTION	DATE

SHEET NAME
REFLECTED CEILING PLAN AND ROOF PLAN

SHEET NUMBER
A121

EXTERIOR ELEVATION GENERAL NOTES

1. REFER TO SHEET A401 FOR WINDOW TYPES
2. REFER TO SHEET A401 FOR DOOR SCHEDULE
3. REFER TO A3XX SERIES SHEETS FOR EXTERIOR WALL SECTIONS
4. ALL EXTERIOR DIMENSIONS ARE FROM FACE OF EXTERIOR FINISH, UNLESS NOTED OTHERWISE
5. MASONRY DIMENSIONS ARE NOMINAL UNLESS NOTED OTHERWISE
6. REFER TO CIVIL DRAWINGS FOR FINISH GRADE ELEVATIONS
7. DETAILS ON EXTERIOR ELEVATIONS ARE GENERAL IN NATURE AND FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO WALL DETAILS AND SECTIONS FOR DETAILED INFORMATION CONCERNING EXTERIOR CONSTRUCTION
8. REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION AT EXTERIOR LIGHTING
9. PROVIDE CONTROL JOINTS PER MANUFACTURER'S SPECIFICATIONS

EXTERIOR MATERIAL LEGEND

BRICK VENEER - BR

(BR-1) BRICK, VENEER, BOLESE GRAYSTONE BRICK - WICHITA CO.

ASPHALT SHINGLE ROOF - R

(R-1) ASPHALT SHINGLES, ATLAS PROLAM - BLACK SHADOW

VINYL SOFFIT

(VS-1) VINYL SOFFIT, NORANDEX - LINEN

METAL PRODUCTS

(MF-1) METAL FASCIA, NORANDEX - LINEN

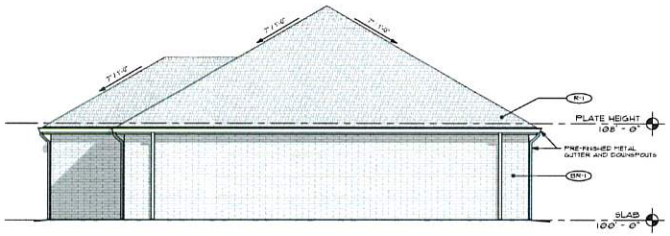
(G-1) METAL GUTTER AND DOWNSPOUTS, NORANDEX - LINEN

OTHER ITEMS

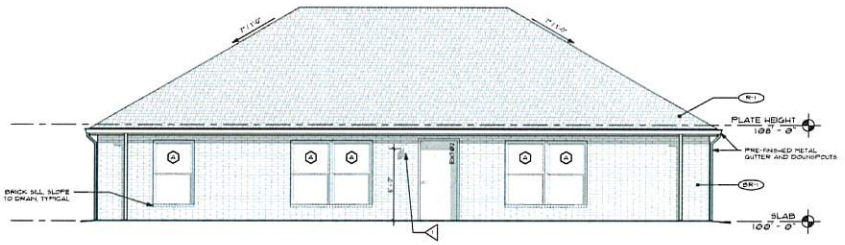
(W) WINDOW TYPE

LIGHTING, REFER TO ELECTRICAL

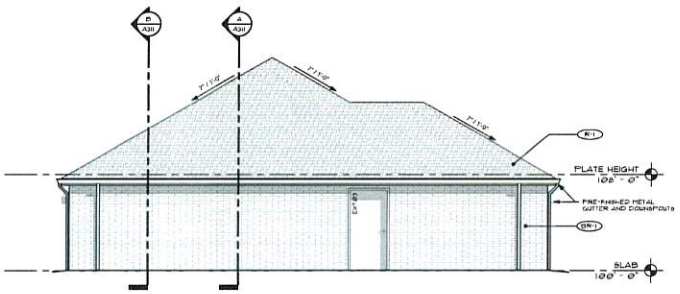
LOUVER, REFER TO MECHANICAL



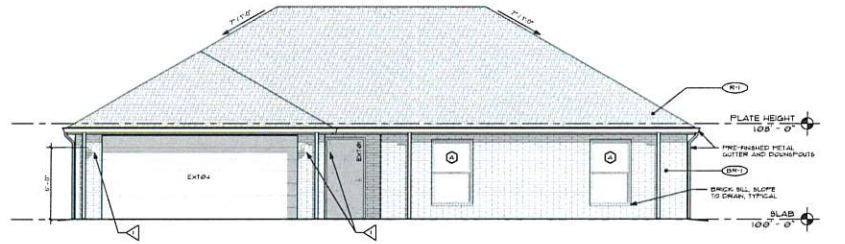
D EXTERIOR ELEVATION
1/4" = 1'-0"



C EXTERIOR ELEVATION
1/4" = 1'-0"



B EXTERIOR ELEVATION
1/4" = 1'-0"



A EXTERIOR ELEVATION
1/4" = 1'-0"

blue river ARCHITECTS
A Native American Owned Firm

STATE OF OKLAHOMA
THOMAS C. GRAY
No. 14183
TULSA, OK
LICENSED ARCHITECT
07/26/22

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

ADDRESS HERE

A201 EXTERIOR ELEVATIONS

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A Native American Owned Firm

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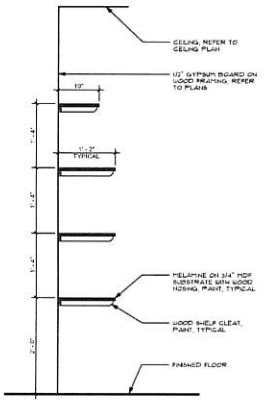
ISSUE
CONSTRUCTION DOCUMENTS

OTHER ISSUE DATES

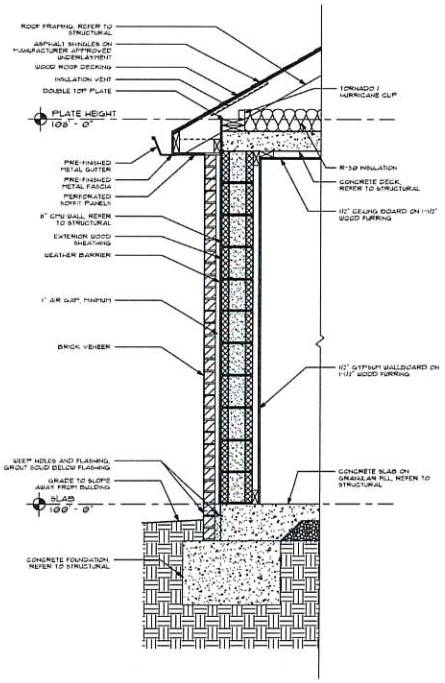
NO.	DESCRIPTION	DATE

SHEET NAME
EXTERIOR ELEVATIONS

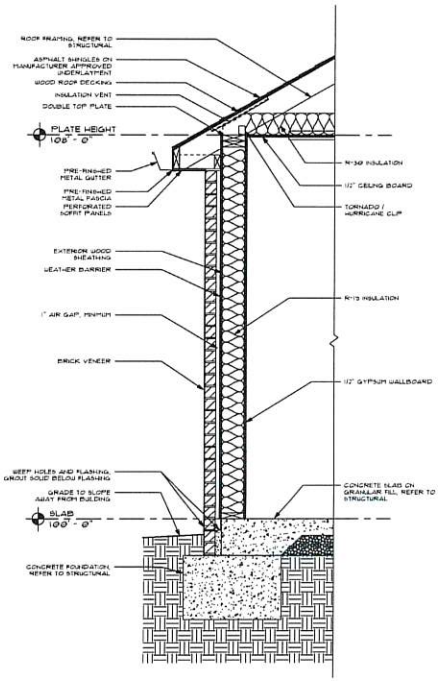
SHEET NUMBER
A201



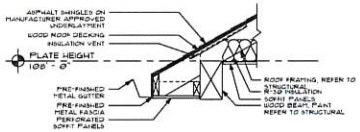
D CASEWORK SECTION
1" = 1'-0"



B WALL SECTION
1" = 1'-0"



A WALL SECTION
1" = 1'-0"



C WALL SECTION
1" = 1'-0"

blue river ARCHITECTS
A Native American Owned Firm

STATE OF OKLAHOMA
THOMAS C. GRAY
No. 14184
LICENSED ARCHITECT
01/26/22

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

ADDRESS HERE

A311
WALL SECTIONS

blueriver ARCHITECTS
A Native American Owned Firm

BLUE RIVER PROJECT NUMBER
20230079

ISSUE DATE
7/26/22

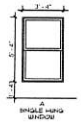
ISSUE
CONSTRUCTION DOCUMENTS

OTHER ISSUE DATES

NO.	DESCRIPTION	DATE

SHEET NAME
WALL SECTIONS

SHEET NUMBER
A311



WINDOW TYPES
1/4" = 1'-0"

DOOR SCHEDULE ABBREVIATIONS

AL	ALUMINUM	SC	SOLID CORE
HM	HOLLOW METAL	OH	OVERHEAD
PF	PRE-FINISHED	PR	PAIR
ST	STEEL	WD	WOOD

DOOR SCHEDULE

REV	DOOR NO	ROOM	DOOR WIDTH	DOOR HEIGHT	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	HARDWARE	COMMENTS	DOOR NO
	EXT01	ENTRY HALL	3'-0"	6'-8"	WD	PT-2	WD	PT-2	SECURITY		EXT01
	EXT02	LIVING ROOM	3'-0"	6'-8"	WD	PT-2	WD	PT-2	SECURITY		EXT02
	EXT03	GARAGE	3'-0"	6'-8"	WD	PT-2	WD	PT-2	SECURITY		EXT03
	EXT04	GARAGE	6'-0"	7'-0"	OH	-	OH	-	-		EXT04
	HM1	GARAGE	3'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		HM1
	HM5	CLOSET	3'-0"	6'-8"	MR	-	MR	-	-		HM5
	H10	BEDROOM 1	3'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		H10
	H09	BEDROOM	3'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		H09
	H08	LAUNDRY	3'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		H08
	H07	MASTER BEDROOM	3'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		H07
	H11	MASTER BATH	3'-0"	6'-8"	WD	PT-2	WD	PT-2	PRIVACY		H11
	H12	HALL BATH	2'-8"	6'-8"	WD	PT-2	WD	PT-2	PRIVACY		H12
	H13	CLOSET	5'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		H13
	H03	BEDROOM 1	5'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		H03
	H14	HALL	3'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		H14
	H04	DINING	3'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		H04
	H06	MECH	4'-0"	6'-8"	WD	PT-2	WD	PT-2	PASSAGE		H06

ROOM FINISH SCHEDULE

#	ROOM NAME	FLOOR	BASE	WALL FINISH
169	GARAGE	SC-1	WB-1	PT-1
167	ENTRY HALL	SC-1	WB-1	PT-1
162	DINING	SC-1	WB-1	PT-1
163	KITCHEN	SC-1	WB-1	PT-1
164	LAUNDRY	SC-1	WB-1	PT-1
165	MECH.	SC-1	WB-1	PT-1
166	LIVING ROOM	SC-1	WB-1	PT-1
161	MASTER BEDROOM	LVT-1	WB-1	PT-1
108	MASTER BATH	SC-1	WB-1	PT-1
160	CLOSET	LVT-1	WB-1	PT-1
110	HALL	SC-1	WB-1	PT-1
111	BEDROOM 1	LVT-1	WB-1	PT-1
112	CLOSET	LVT-1	WB-1	PT-1
113	LINEN	SC-1	WB-1	PT-1
114	HALL BATH	SC-1	WB-1	PT-1
115	BEDROOM	LVT-1	WB-1	PT-1
116	CLOSET	LVT-1	WB-1	PT-1
117	CLOSET	SC-1	WB-1	PT-1
118	PANTRY	SC-1	WB-1	PT-1

FINISH LEGEND

FLOOR FINISH

LVT-1: LUXURY VINYL TILE
MANUF: MOHAWK GROUP
STYLE: GRAINLAC
SIZE: 6" x 48"
COLOR: 143 BEECH BLONDE

C-1: SEALED CONCRETE

PT-1: FLOOR TILE
MANUF: DALTILE
STYLE: PORTFOLIO
SIZE: 12 x 24
COLOR: DOVE GREY PR04

BASE FINISH

WB-1: WOOD BASE
FINISH: PAINTED
COLOR: PT-1

WALL FINISH

PT-1: GENERAL WALL PAINT
MANUF: SHERWIN WILLIAMS
STYLE: SHEEN
COLOR: WHITE DUCK 7010

PT-2: DOOR AND FRAME PAINT
MANUF: SHERWIN WILLIAMS
STYLE: SHEEN
COLOR: GREEK VILLA 7551

WT-1: WALL TILE
MANUF: DALTILE
STYLE: ARTICOLO
SIZE: 6" x 18"
COLOR: EDITORIAL WHITE AR06

CEILING FINISH

PT-3: GYPSUM CEILING PAINT
MANUF: SHERWIN WILLIAMS
STYLE: FLAT
COLOR: WHITE DUCK

MISCELLANEOUS

PLAM-1: PLASTIC LAMINATE (COUNTER)
MANUF: WILSONART
PRODUCT: WHITE CARRARA 4924
FINISH: FINE VELVET FINISH 28

PLAM-2: PLASTIC LAMINATE (CASEWORK)
MANUF: WILSONART
PRODUCT: GRAY SAGE
FINISH: MATTE FINISH 60

GENERAL FINISH NOTES

1. ALL NEW BUILDING MATERIALS AND PRODUCTS SHALL NOT CONTAIN LEAD, CADMIUM, OR ASBESTOS
2. REFER TO ROOM FINISH SCHEDULE FOR ADDITIONAL INFORMATION AT ON-ELEVATED AREAS
3. PROVIDE CORNER AND EXPANSION CONTROL JOINTS IN OUTSIDE GYPSUM BOARD CORNERS
4. WALL FINISHES TO HAVE MINIMUM CLASS 'C' RATING FOR FLAME SPREAD AND SMOKE DEVELOPMENT
5. FINISH HATCHES AND PATTERNS ARE FOR GRAPHIC PURPOSES ONLY, AND ARE NOT INTENDED TO SHOW EXACT PATTERN OR SIZES OF FINISHES

PAINT

1. ALL GYPSUM BOARD WALLS TO BE PAINTED PT-1, UNLESS NOTED OTHERWISE
2. DOORS AND FRAMES TO BE PT-2, UNLESS NOTED OTHERWISE
3. SWITCH PLATES AND ELECTRICAL DEVICES ARE NOT TO BE PAINTED

FLOORING

1. CHANGES IN FLOORING HEIGHTS UP TO 1/4" MAY BE VERTICAL AND WITHOUT REDUCING EDGE TREATMENT. CHANGES IN FLOORING HEIGHTS BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2. IF CHANGES IN FLOORING LEVEL ARE GREATER THAN 1/2", NOTIFY ARCHITECT FOR DETAILS TO PROVIDE ADA COMPLIANT RAMP.
2. ALL FLOORING TRANSITIONS ARE TO OCCUR AT THE CENTERLINE OF DOOR, UNLESS NOTED OTHERWISE

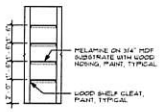
CASEWORK

1. CONTRACTOR TO FIELD MEASURE AND VERIFY ALL DIMENSIONS PRIOR TO FABRICATION AND INSTALLATION OF CASEWORK.
2. REFER TO FLOOR PLANS AND INTERIOR ELEVATIONS FOR EXACT LOCATIONS OF CASEWORK.
3. COUNTERTOPS AND BACKSPLASHES TO RECEIVE CLEAR SEALANT AT WALL WHERE REQUIRED
4. ALL EDGES TO BE PLAM-1 UNLESS NOTED OTHERWISE
5. PROVIDE SIDE, TOP, & BOTTOM TOY FILLER PIECES AS REQUIRED TO COMPLETE THE CASEWORK AS INDICATED ON THE PLANS AND INTERIOR ELEVATIONS
6. PROVIDE FINISHED END PANELS AT ALL EXPOSED CABINET ENDS, KNEE SPACES, AND BANQUETTE ENDS
7. PROVIDE FILLER STRIPS TO MATCH ADJACENT CABINETS AT ALL NOTED LOCATIONS. MAXIMUM FILLER WIDTH 3".

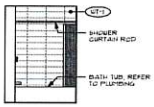
EQUIPMENT SCHEDULE

NO	DESCRIPTION	MANUFACTURER	MODEL	NOTES
E-01	REFRIGERATOR	FRIGIDAIRE	FFTR1814TS/SB	
E-02	RANGE	GE	JS760SPSS/WW 30"	
E-03	RANGE HOOD	BROAN	F40000	
E-04	ADA DISHWASHER	FRIGIDAIRE	FFBD2406US	
E-05	BLINDS	NAP CONTRACT		
E-06	CLOSET ROD AND SHELF			
E-07	WASHER			2
E-08	DRYER			3
E-09	SHOWER CURTAIN ROD			4
E-10	24" GRAB BAR	BOBRICK	B-5806 24	
E-11	36" GRAB BAR	BOBRICK	B-5806 36	
E-12	42" GRAB BAR	BOBRICK	B-5806 42	
E-13	SHOWER SEAT	BOBRICK	B-5151	

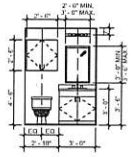
NOTES:
1. INSTALL AT ALL WINDOWS
2. OWNER PROVIDED CONTRACTOR TO PROVIDE ELECTRICAL, WATER AND DRAIN AS REQUIRED
3. OWNER PROVIDED CONTRACTOR TO PROVIDE ELECTRICAL AND VENT AS REQUIRED
4. PROVIDE AT EACH SHOWER AND BATH TUB



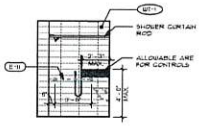
J INTERIOR ELEVATION
1/4" = 1'-0"



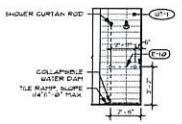
H INTERIOR ELEVATION
1/4" = 1'-0"



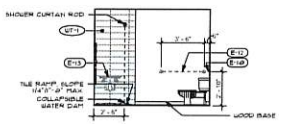
G INTERIOR ELEVATION
1/4" = 1'-0"



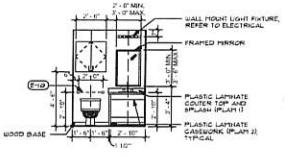
F INTERIOR ELEVATION
1/4" = 1'-0"



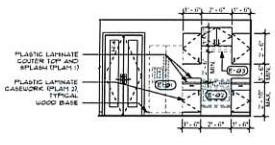
E INTERIOR ELEVATION
1/4" = 1'-0"



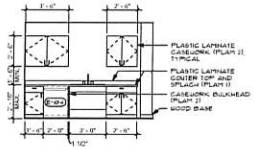
D INTERIOR ELEVATION
1/4" = 1'-0"



C INTERIOR ELEVATION
1/4" = 1'-0"



B INTERIOR ELEVATION
1/4" = 1'-0"



A INTERIOR ELEVATION
1/4" = 1'-0"

blue river ARCHITECTS
A Native American Owned Firm

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

ADDRESS HERE

A401
INTERIOR ELEVATIONS AND SCHEDULES

blueriver ARCHITECTS
A Native American Owned Firm

BLUE RIVER PROJECT NUMBER
20230079

ISSUE DATE
7/26/22

GOAL
CONSTRUCTION DOCUMENTS

WHEN ISSUE DATES		
NO	DESCRIPTION	DATE

SHEET NAME
INTERIOR ELEVATIONS AND SCHEDULES

SHEET NUMBER
A401

DESIGN PARAMETERS

1. DESIGN CODES AND STANDARDS
   A. BUILDING CODE: IRC [illegible]
      RISK CATEGORY — II
   B. MATERIAL CODES AND STANDARDS
      DESIGN LOADS:
      ASCE 7-10 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
      CONCRETE:
      ACI 318-14 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
      MASONRY:
      ACI 530-13 - BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
      WOOD:
      AF&PA NDS-2015 - NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION
      AF&PA SDPWS-2015 - SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC

2. GRAVITY LOADS
   A. ROOF DEAD LOADS

ROOFING AND INSULATION	5 PSF
WOOD SHEATHING	2 PSF
MECH., ELEC.	2 PSF
CEILINGS	3 PSF
MISCELLANEOUS	3 PSF
TOTAL SUPERIMPOSED ROOF DEAD LOAD	15 PSF
ROOF STRUCTURE	ACTUAL WEIGHT
MINIMUM ROOF DEAD LOAD (TO BE USED WITH GROSS UPLIFT)	9 PSF

   B. LIVE LOADS (UNIFORM/CONCENTRATED)

ROOF	20 PSF / 300 LB
UNINHABITABLE ATTIC WITH STORAGE	20 PSF
UNINHABITABLE ATTIC WITHOUT STORAGE	10 PSF

3. ROOF SNOW LOAD
   A. GROUND SNOW LOAD, Pg — 10 PSF

4. WIND DESIGN DATA
   A. ULTIMATE DESIGN WIND SPEED (3 SECOND GUST), Vult — 115 MPH
      NOMINAL DESIGN WIND SPEED (3 SECOND GUST), Vasd — 90 MPH
   B. WIND EXPOSURE CATEGORY — C
   C. INTERNAL PRESSURE COEFFICIENT, GCpi — +/-0.18
   D. DESIGN WIND PRESSURE ON COMPONENTS AND CLADDING

ROOF PRESSURES (1.0W)	EFFECTIVE WIND AREA ≤10 SQ. FT.	EFFECTIVE WIND AREA ≥100 SQ. FT.
ZONE 1	-25.8 PSF	-24.0 PSF
ZONE 2	-33.9 PSF	-28.6 PSF
ZONE 3	-33.9 PSF	-28.6 PSF
ZONE 1, 2 & 3	26.4 PSF	24.0 PSF

WALL PRESSURES (1.0W)	EFFECTIVE WIND AREA ≤10 SQ. FT.	EFFECTIVE WIND AREA ≥500 SQ. FT.
ZONE 4	-28.3 PSF	-24.0 PSF
ZONE 5	-33.6 PSF	[illegible]
ZONE 4 & 5	25.8 PSF	21.5 PSF

NOTES:
1. RE: ASCE 7-10 FIGURES 30.4-1 AND 30.4-2C
2. REFER TO CODE FOR EFFECTIVE TRIBUTARY AREAS NOT LISTED
3. POSITIVE VALUES SIGNIFY PRESSURES ACTING TOWARD THE NOTED SURFACE AND NEGATIVE VALUES SIGNIFY PRESSURES ACTING AWAY FOR THE NOTED SURFACE

   E. WIDTH OF END ZONE — 4.7 FT

5. EARTHQUAKE DESIGN DATA

A. SEISMIC IMPORTANCE FACTOR, Ie	1.0
B. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETER, Ss	0.162
C. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETER, S1	0.081
D. SITE CLASS	D
E. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETER, Sds	[illegible]
F. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETER, Sd1	[illegible]
G. SEISMIC DESIGN CATEGORY	B
H. STRUCTURAL SYSTEM	
1.) VERTICAL ELEMENT TYPE	BEARING WALL SYSTEM
2.) BASIC SEISMIC FORCE-RESISTING SYSTEM TYPE	LIGHT-FRAME (WOOD) WALLS SHEATHED WITH WOOD STRUCTURAL PANELS
3.) RESPONSE MODIFICATION FACTOR, R	6.5
4.) SEISMIC RESPONSE COEFFICIENT, Cs	0.025
5.) DESIGN BASE SHEAR, 1.0E	0.025W
I. ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE

GENERAL NOTES

GENERAL

1. STRUCTURAL ELEMENTS ARE NON-SELF SUPPORTING AND REQUIRE INTERACTION WITH OTHER ELEMENTS FOR STABILITY AND RESISTANCE TO LATERAL FORCES. FRAMING AND WALLS SHALL BE TEMPORARILY BRACED BY THE CONTRACTOR UNTIL PERMANENT BRACING, FLOOR AND ROOF DECKS, AND WALLS HAVE BEEN INSTALLED AND CONNECTIONS BETWEEN THESE ELEMENTS HAVE BEEN MADE.
2. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION, UNLESS NOTED OTHERWISE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATION OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO.
3. THE STRUCTURE HAS BEEN DESIGNED FOR THE INDICATED LOADS ONLY. USE OF HEAVY EQUIPMENT AND SCAFFOLDING, OR STORAGE OF MATERIALS THAT TRANSFER EXCESSIVE LOADS TO THE STRUCTURE SHALL BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED TO VERIFY THE ADEQUACY OF THE STRUCTURE FOR ALL APPLIED CONSTRUCTION LOADS THAT EXCEED THE LOADS INDICATED IN THE CONSTRUCTION DOCUMENTS AND SHALL BE APPROVED BY THE ARCHITECT AND ENGINEER-OF-RECORD PRIOR TO ANY CONSTRUCTION ACTIVITY.
4. THE SPECIFICATIONS ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS AND SHALL BE USED IN CONJUNCTION WITH THE CONTRACT DRAWINGS. WHERE REQUIREMENTS INDICATED ON THE CONTRACT DRAWINGS DIFFER FROM THE SPECIFICATIONS, NOTIFY THE ARCHITECT AND THE ENGINEER-OF-RECORD.
5. STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND DRAWINGS FROM OTHER DISCIPLINES. THE CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS INTO SHOP DRAWINGS AND WORK.
6. ALL WELDS SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (A.W.S) SPECIFICATIONS.
7. THE SIZE AND LOCATION OF EQUIPMENT PADS AND PENETRATIONS THROUGH THE STRUCTURE FOR MECHANICAL, ELECTRICAL, AND PLUMBING WORK SHALL BE VERIFIED BY THE CONTRACTOR. PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT AND THE ENGINEER-OF-RECORD. REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR OPENING LOCATIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
8. USE ONLY DIMENSIONS INDICATED IN THE CONTRACT DOCUMENTS. DO NOT SCALE CONTRACT DOCUMENTS OR USE ANY DIMENSIONS TAKEN FROM ELECTRONIC DRAWING FILES. CONTRACTOR SHALL COORDINATE IN-PLACE DIMENSIONS BASED ON TOLERANCES OF THE RESPECTIVE TRADES.
9. ASSUME EQUAL SPACING IF NOT INDICATED IN CONTRACT DOCUMENTS.
10. REFERENCE ARCHITECTURAL DRAWINGS FOR NON-LOAD BEARING PARTITION FRAMING. CONNECTION OF NON-LOAD BEARING PARTITION FRAMING TO THE PRIMARY STRUCTURE SHALL ALLOW FOR VERTICAL LIVE LOAD DEFLECTIONS OF THE FLOOR AND ROOF FRAMING.
11. CONTRACTOR SHALL COORDINATE ALL DIMENSIONS, OPENINGS, BLOCKOUTS, RECESSES, ELEVATIONS, ANCHOR RODS AND EMBED LOCATIONS PRIOR TO CONSTRUCTION.

GENERAL NOTES

FOUNDATIONS

1. FOUNDATION DESIGNS, SUBGRADE PREPARATION NOTES, AND STRUCTURAL EARTH MOVING SPECIFICATION ARE BASED ON THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT NUMBER TU220145, BY: BUILDING AND EARTH DATED: 05/10/2022
2. FOOTING DESIGNS ARE BASED ON A NET ALLOWABLE SOIL BEARING CAPACITY OF 2500 PSF.
3. CONTRACTOR AND TESTING LABORATORY REPRESENTATIVE SHALL READ THE GEOTECHNICAL REPORT AND BECOME THOROUGHLY FAMILIAR WITH SITE AND SUBGRADE INFORMATION GIVEN THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT QUANTITIES OF CUT AND FILL FOR ESTIMATING AND CONSTRUCTION. SUBGRADE SHALL BE PREPARED AS NOTED IN THE STRUCTURAL EARTH MOVING SPECIFICATION.
4. A QUALIFIED AND REGISTERED GEOTECHNICAL ENGINEER, LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED AND WORKING FOR THE TESTING LABORATORY, SHALL DETERMINE CONFORMANCE OF THE FOUNDATION BEARING STRATA WITH THE FOUNDATION DESIGN CRITERIA ABOVE, AND ALL OTHER CONTRACT DOCUMENTS. TESTING LABORATORY SHALL NOTIFY CONTRACTOR, ARCHITECT AND ENGINEER-OF-RECORD OF ANY CONDITIONS NOT IN ACCORDANCE WITH FOUNDATION DESIGN CRITERIA OR CONTRACT DOCUMENTS.
5. ALL VEGETATION, ROOTS, TOPSOIL AND ANY OTHER DELETERIOUS MATERIALS SHALL BE REMOVED FROM THE CONSTRUCTION AREA. MATERIALS DISTURBED DURING CLEARING OPERATIONS SHALL BE STABILIZED IN PLACE OR UNDERCUT TO UNDISTURBED MATRIALS AND BACKFILLED WITH PROPERLY COMPACTED, APPROVED STRUCTURAL FILL.
6. FOUNDATIONS, TANKS, BASEMENT WALLS AND ABANDONED UTILITY LINES FROM EXISTING STRUCTURES SHALL BE REMOVED.
7. THE EXPOSED GRADE SHALL BE SCARIFIED TO A DEPTH OF AT LEAST 12 INCHES AND PROOF-ROLLED USING A FULLY LOADED TANDEM AXLE DUMP TRUCK (20-TON MINIMUM). ANY SOFT / LOOSE SOILS, ORGANIC MATERIALS, DEBRIS, OVER-SIZED ROCK FRAGMENTS, OR ANY OTHER UNSUITABLE MATERIALS ENCOUNTERED SHALL BE REMOVED FROM THE PROPOSED BUILDING AREA AND REPLACED WITH APPROVED STRUCTURAL FILL.
8. PRIOR TO PLACEMENT OF NEW FILL, THE EXPOSED SUBGRADE SHALL BE MOISTURE CONDITIONED AND COMPACTED TO AT LEAST 95% STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698) AT A MOISTURE CONTENTS WITHIN 2% BELOW TO 2% ABOVE THE OPTIMUM.
9. A REGISTERED GEOTECHNICAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED AND WORKING FOR THE TESTING LABORATORY SHALL VERIFY CONFORMANCE OF THE FOUNDATION BEARING STRATA TO THE CRITERIA LISTED AND SHALL VERIFY ALL FILL COMPACTION AND PLACEMENT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT QUANTITIES OF CUT AND FILL FOR ESTIMATING AND CONSTRUCTION.
11. STRUCTURAL FILL SHALL CONSIST OF LOW-PLASTICITY APPROVED MATERIALS THAT ARE FREE OF VEGETATION, TOPSOIL AND OTHER DELETERIOUS MATERIALS. THE ORGANIC CONTENT SHALL BE LESS THAN 05 PERCENT. STRUCTURAL FILL SHALL HAVE A LIQUID LIMIT (LL) LESS THAN 40, A PLASTICITY INDEX (PI) LESS THAN 20, A MAXIMUM DRY DENSITY GREATER THAN 100 PCF AND MORE THAN 15% PASSING THE NO. 200 SIEVE. FILL SHALL BE LABORATORY TESTED TO VERIFY CONFORMANCE.
12. FILL SHALL BE PLACED IN 8 INCH TO 12 INCH LOOSE LIFTS AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698) AT A MOISTURE CONTENT WITHIN 2% BELOW TO 2% ABOVE THE OPTIMUM. EACH LIFT OF COMPACTED ENGINEERED FILL SHALL BE TESTED BY A GEOTECHNICAL ENGINEER.
13. THE EDGES OF COMPACTED FILL SHALL EXTEND A MINIMUM OF 5 FEET BEYOND THE EDGES OF THE STRUCTURE.
14. ALL BEARING MATERIAL SHALL BE INSPECTED BY THE INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT. THE INDEPENDENT TESTING AGENCY SHALL CONFIRM THE SUITABILITY OF THE BEARING MATERIAL.
15. AVOID DAMAGE TO UNDERGROUND UTILITIES INCLUDING, BUT NOT LIMITED TO, WATER MAINS, SANITARY SEWERS AND BURIED CABLES WHICH MIGHT EXTEND ACROSS OR ADJOIN SITE.
16. FOUNDATIONS ARE EXPECTED TO SLIGHTLY DEFORM AND MOVE DUE TO MOISTURE VARIATIONS IN THE SOIL. IT SHOULD BE NOTED THAT NON-LOAD BEARING OR LIGHTLY LOADED WALLS SUPPORTED ON THE FLOOR SLAB COULD EXPERIENCE TOTAL AND DIFFERENTIAL MOVEMENTS SIMILAR TO THAT OF THE FLOOR SLAB. THEREFORE, WE RECOMMEND THAT A VOID SPACE BE CONSTRUCTED ABOVE THE NON-LOAD BEARING PARTITION WALLS PLACED ON THE FLOOR SLAB. SPECIAL FRAMING DETAILS SHOULD BE PROVIDED AT DOOR JAMBS AND FRAMES WITHIN PARTITION WALLS TO AVOID POTENTIAL DISTORTION. JOINTS SHOULD BE PLACED IN THE PARTITION WALLS TO HELP TOLERATE THE EFFECTS OF DIFFERENTIAL MOVEMENTS. PARTITION WALLS SHOULD BE ISOLATED FROM CEILINGS.
17. HIGHLY ACTIVE SOILS SHALL BE MOISTURE CONDITIONED TO REDUCE OR PREVENT FUTURE SWELL.
18. ADEQUATE POSITIVE DRAINAGE SHALL BE PROVIDED SLOPING AWAY FROM THE FOUNDATION WITH A MINIMUM SLOPE OF 2-5% (1/4 INCH TO 5/8 INCH PER FOOT) FOR A MINIMAL DISTANCE OF 10 FEET FROM EDGE OF FOUNDATION. ADEQUATE POSITIVE DRAINAGE TO PREVENT PONDING NEAR THE FOUNDATION SHALL BE MAINTAINED AT ALL TIMES, BOTH DURING AND AFTER CONSTRUCTION.
19. VEGETATION SHALL NOT BE PLANTED CLOSER TO THE FOUNDATION THAN ONE HALF THE HEIGHT EXPECTED AT MATURITY (20 FEET OR MORE RECOMMENDED FOR TREES UNLESS A ROOT BARRIER IS INSTALLED), AND WATERING IS CONTROLLED TO PREVENT SATURATION AND PONDING (IT IS RECOMMENDED TO MOISTEN THE ENTIRE PERIMETER EACH TIME). PLANTING BEDS SHALL BE DESIGNED TO DRAIN. SOIL MOISTURE CONTENT SHALL BE REVIEWED AND ADDRESSED UPON TREE REMOVAL WITHIN THE BUILDING PLAN AREA.
20. OWNER MUST ENSURE THAT THE SOIL'S MOISTURE CONTENT IS MAINTAINED AT A CONSTANT LEVEL SURROUNDING THE FOUNDATION. DO NOT ALLOW THE SOIL TO DRY OUT AND DO NOT ALLOW WATER TO COLLECT WITHIN 10 FEET OF BUILDING FOUNDATION. DOWNSPOUTS SHOULD DISCHARGE A MINIMUM OF 10 FEET FROM BUILDING FOUNDATION. SIDEWALKS AND EXTERIOR PAVEMENT NOT INCLUDED IN THE DESIGN SHALL BE CONNECTED WITH WATER-PROOFED EXPANSION JOINTS AND SHALL BE PLACED AND DRAINED SUCH THAT SURFACE WATER IS NOT TRAPPED NEAR THE FOUNDATION.

CONCRETE

1. MINIMUM COMPRESSIVE STRENGTH (f'c) AT THE END OF 28 DAYS SHALL BE AS FOLLOWS:

A. FOOTINGS	3000 PSI
B. PEDESTALS	4500 PSI
C. INTERIOR SLABS-ON-GRADE	3000 PSI
D. EXTERIOR STRUCTURAL CONCRETE	4500 PSI

MAXIMUM WATER/CEMENT RATIO = 0.40, MAXIMUM SLUMP = 5 INCHES, PLUS OR MINUS 1 INCH FOR CONCRETE WITH VERIFIED SLUMP OF 3 INCHES PLUS OR MINUS 1 INCH BEFORE ADDING HIGH-RANGE WATER-REDUCING ADMIXTURE OR PLASTICIZING ADMIXTURE AT PROJECT SITE. AIR CONTENT = 6 PERCENT, PLUS OR MINUS 1.5 PERCENT AT POINT OF DELIVERY FOR CONCRETE CONTAINING 1-INCH NOMINAL MAXIMUM AGGREGATE SIZE. CONCRETE SHALL BE NORMAL WEIGHT (145 PCF), UNLESS NOTED OTHERWISE.

2. EXTERIOR CONCRETE AND CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL BE AIR-ENTRAINED. REFERENCE CAST-IN-PLACE CONCRETE SPECIFICATION FOR AIR CONTENT.
3. MATERIALS OR ADMIXTURES SHALL NOT CONTAIN ANY CALCIUM CHLORIDE.
4. REINFORCING STEEL SHALL MEET THE FOLLOWING:

	ASTM SPECIFICATION
A. DEFORMED BARS	A615, GRADE 60
B. WELDABLE DEFORMED BARS	A706, GRADE 60
C. WELDED WIRE REINFORCEMENT	A1064
D. STEEL FIBERS	A820

5. PROVIDE MINIMUM CONCRETE CLEAR COVER FOR REINFORCEMENT PER ACI 318, UNLESS NOTED OTHERWISE.
6. WELDING SHALL MEET ANSI / AWS D1.1, STRUCTURAL WELDING CODE AND ANSI / AWS D1.4 "STRUCTURAL WELDING CODE FOR REINFORCING STEEL" LATEST REVISION. ELECTRODES FOR DEFORMED BAR ANCHORS SHALL BE 80 KSI, LOW HYDROGEN.
7. WHERE DOWELS ARE INDICATED BUT NOT SIZED, PROVIDE DOWELS THAT MATCH SIZE AND LOCATION OF MAIN REINFORCING STEEL AND LAP SPLICE WITH THE MAIN REINFORCING STEEL. REINFORCING STEEL SHALL BE SPLICED AS NOTED IN THE REINFORCING LAP SCHEDULE.
8. PROVIDE CORNER BARS THAT MATCH AND LAP CONTINUOUS REINFORCEMENT SIZE AND QUANTITY AT INTERSECTIONS AND CORNERS OF WALLS AND FOUNDATIONS.
9. ANCHOR BOLTS AND EMBED PLATES SHALL BE TIED INTO THE REINFORCING STEEL CAGE AND HELD IN PLACE WITH A RIGID TEMPLATE TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT.

MASONRY

1. CONCRETE MASONRY UNITS SHALL MEET ASTM SPECIFICATION C90, WITH A MINIMUM UNIT COMPRESSIVE STRENGTH = 1900 PSI. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF THE CONCRETE MASONRY ASSEMBLY (f'm) SHALL BE 1500 PSI.
2. MORTAR SHALL BE A PREBLENDED DRY MIX CONFORMING TO ASTM C1714 AND MEETING THE PROPERTY SPECIFICATIONS OF ASTM C270 TYPE "S" MORTAR. MASONRY CEMENT SHALL NOT BE USED FOR MORTAR.
3. GROUT SHALL MEET ASTM SPECIFICATION C476 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI.
4. SOLID GROUT HOLLOW MASONRY CELLS AS NOTED ON STRUCTURAL DRAWINGS. USE GROUT METHOD OF CONSTRUCTION CONFORMING TO REQUIREMENTS OF CURRENT MSJC. GROUT SPACE DIMENSIONS AND MAXIMUM POUR HEIGHTS SHALL COMPLY WITH MSJC.
   A. LIMIT THE HEIGHT OF VERTICAL GROUT POURS TO 12'-8" OR THE DISTANCE BETWEEN BOND BEAMS, WHICHEVER IS LESS. PROVIDE CLEANOUTS AT THE GROUT LIFTS THAT EXCEED 5'-4" IN HEIGHT.
   B. PROVIDE CLEANOUTS AT THE BOTTOM COURSE OF MASONRY FOR EACH GROUT POUR OVER 5'-4" IN HEIGHT. PROVIDE CLEANOUTS AT 32 INCHES ON CENTER ALONG THE BOTTOM COURSE OF THE GROUT LIFTS IN FULLY GROUTED MASONRY. USE CLEANOUTS TO REMOVE ALL MORTAR DROPPINGS AND DEBRIS AND ENSURE PROPER PLACEMENT OF REINFORCEMENT.
   C. DO NOT PLACE GROUT UNTIL HEIGHT OF MASONRY TO BE GROUTED HAS ATTAINED ENOUGH STRENGTH TO RESIST GROUT PRESSURE. ALLOW MASONRY TO CURE A MINIMUM OF 4 HOURS PRIOR TO PLACING GROUT FOR LIFTS BETWEEN 5'-4" AND 12'-8". INCREASE CURING TIME TO A MINIMUM OF 8 HOURS IN COLD OR DRY WEATHER CONDITIONS. THE GROUT SLUMP SHALL BE MAINTAINED BETWEEN 10 AND 11 INCHES FOR GROUT LIFTS BETWEEN 5'-4" AND 12'-8".
   D. GROUTING SHALL BE A CONTINUOUS PROCEDURE FOR EACH LIFT. DO NOT ALLOW HORIZONTAL CONSTRUCTION JOINT TO FORM BY DISCONTINUING GROUTING.
   E. VERTICAL GROUT POUR EXCEEDING 12 INCHES SHALL BE MECHANICALLY CONSOLIDATED USING A VIBRATOR WITH A MAXIMUM 3/4 INCH DIAMETER HEAD.
5. CONTRACTOR SHALL CLEAN THE GROUT SPACES SUCH THAT THEY ARE FREE OF MORTAR DROPPINGS, DEBRIS, LOOSE AGGREGATES AND ANY MATERIAL THAT WOULD PREVENT CONTINUITY OF THE GROUT.
6. HORIZONTAL JOINT REINFORCEMENT SHALL BE LADDER TYPE. JOINT REINFORCEMENT SHALL BE SPACED AT 8 INCHES ON CENTER BELOW FINISHED FLOOR AND IN PARAPETS, AND 16 INCHES ON CENTER ABOVE FINISHED FLOOR.
7. CONCRETE MASONRY SHALL BE LAID IN RUNNING BOND.
8. CONCRETE MASONRY BELOW FINISHED FLOOR SHALL BE NORMAL WEIGHT UNITS AND SHALL HAVE ALL THE CELLS FULLY GROUTED. CONCRETE MASONRY ABOVE FINISHED FLOOR SHALL BE MEDIUM WEIGHT AND IS TO BE GROUTED ONLY AT REINFORCED CELLS AND BOND BEAMS, UNLESS NOTED OTHERWISE. ALL CELLS WITH REINFORCING OR EMBEDDED ITEMS SHALL BE GROUTED SOLID.
9. REFERENCE WALL SECTIONS AND DETAILS FOR MISCELLANEOUS BOND BEAM LOCATIONS AND EMBEDDED ITEMS. USE OPEN KNOCK OUT BOND BEAM BLOCK. DO NOT USE TROUGH TYPE BLOCKS FOR BOND BEAMS. DO NOT CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS, UNLESS NOTED OTHERWISE.
10. REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A615, GRADE 60. REINFORCING STEEL SHALL BE SPLICED AS NOTED IN THE REINFORCING LAP SCHEDULE.
11. PROVIDE TEMPORARY BRACING FOR WALLS, LINTELS, AND OTHER MASONRY DURING ERECTION. BRACING SHALL BE DESIGNED IN ACCORDANCE WITH THE MASON CONTRACTORS ASSOCIATION OF AMERICA STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION. DESIGN SHALL BE PERFORMED BY AN ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. BRACING SHALL REMAIN UNTIL ROOFING AND OTHER STRUCTURAL ELEMENTS ARE COMPLETE AND PROVIDE PERMANENT STABILITY.

GENERAL NOTES

WOOD FRAMING

1. WOOD FRAMING SHALL MEET THE NDS MINIMUM STRESS PROPERTIES UNLESS NOTED OTHERWISE IN CONTRACT DOCUMENTS.
   A. DOUGLAS FIR SOUTH, PER THE NDS
      1. ROOF RAFTERS AND CEILING FRAMING: #2 OR BETTER
      2. WALL STUD FRAMING: STUD GRADE OR BETTER
   B. LAMINATED VENEER LUMBER (LVL):
      1. Fb = 2,600 PSI
      2. Ft = 1,895 PSI
      3. Fc = 2,510 PSI (PARALLEL TO GRAIN)
      4. Fc = 750 PSI (PERPENDICULAR TO GRAIN)
      5. Fv = 285 PSI (PARALLEL TO GRAIN)
      6. E = 2,000,000 PSI
2. PROVIDE SIMPSON STRONG-TIE CONNECTORS OR EQUIVALENT FOR WOOD FRAMING CONNECTING TO SUPPORTING MEMBERS. INSTALL WITH MANUFACTURER'S SPECIFIED FASTENERS ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. SUBSTITUTION REQUESTS FOR CONNECTORS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER-OF-RECORD ALONG WITH CALCULATIONS THAT ARE SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION AND LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERTINENT EQUIVALENT PERFORMANCE VALUES OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARDS AS REQUIRED BY THE BUILDING CODE.
3. ALL ROOF AND EXTERIOR WALL SHEATHING SHALL BE APA RATED EXPOSURE 1 SHEATHING (U.N.O.) AND SHALL BEAR THE STAMP OF AN APPROVED TESTING AGENCY.
4. INSTALL ROOF SHEATHING WITH THE LONG DIMENSION OF THE PANEL PERPENDICULAR TO SUPPORTS UNLESS NOTED OTHERWISE IN CONTRACT DOCUMENTS, AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS. STAGGER END JOINTS, UNLESS NOTED OTHERWISE. SPACE PANELS 1/8" APART AT EDGES AND ENDS.
5. ALL EXTERIOR WALL SHEATHING SHALL HAVE A MINIMUM THICKNESS OF 15/32 INCH AND BE FASTENED TO WALL STUDS WITH 8d GALVANIZED COMMON NAILS AT 6 INCHES ON CENTER AT EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS. PROVIDE BLOCKING AT UNSUPPORTED PANEL EDGES. 8d COMMON NAILS SHALL HAVE A MINIMUM 0.131 INCH DIAMETER AND 1 3/8 INCH MINIMUM PENETRATION INTO SUPPORTING FRAMING.
6. INSTALL ALL JOISTS, RAFTERS, HEADERS AND BEAMS CROWN UP.
7. ALL JOISTS SHALL HAVE DIAGONAL BRIDGING OR FULL DEPTH BLOCKING AT 8'-0" ON CENTER MAXIMUM ALONG THE SPAN AND AT SUPPORTING BEAMS OR WALLS.
8. REFERENCE DETAILS FOR CUTTING, BORING OR NOTCHING OF FRAMING MEMBERS, WALL STUDS AND TOP PLATES.
9. FASTEN PLIES OF ENGINEERED WOOD PRODUCTS TOGETHER PER THE MANUFACTURER'S RECOMMENDATIONS OR AS DETAILED IN THE CONSTRUCTION DOCUMENTS. REFERENCE BUILT-UP COLUMN AND BEAM DETAILS FOR NAILED BUILT-UP COLUMN AND BEAM REQUIREMENTS. SPLICES IN MULTIPLE BUILT-UP MEMBERS ARE NOT PERMITTED, U.N.O.
10. PROVIDE SLIP CONNECTION AT TOP OF ALL NON-LOAD BEARING WALLS TO ALLOW FOR 1 1/2" DEFLECTION OF FRAMING ABOVE.
11. ALL WOOD IN CONTACT WITH CONCRETE AND EXTERIOR MASONRY SHALL BE PRESERVATIVE TREATED.
12. ALL STEEL CONNECTORS AND FASTENERS USED WITH PRESERVATIVE TREATED WOOD SHALL BE GALVANIZED (G90).
13. NAILING SHALL COMPLY WITH REQUIREMENTS OF NAILING SCHEDULE UNLESS NOTED OTHERWISE IN CONTRACT DOCUMENTS.
14. ALL NAILS SHOWN ON PLAN ARE 'COMMON', UNLESS NOTED OTHERWISE. REFERENCE NAIL SIZE SCHEDULE FOR REQUIRED COMMON NAIL SIZES.

POST INSTALLED ANCHORS

1. ANCHORS SHALL ONLY BE INSTALLED WHERE SPECIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER PRIOR TO INSTALLING POST INSTALLED ANCHORS IN PLACE OF MISSING OR MIS-PLACED CAST-IN-PLACE ANCHORS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REINFORCING. ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE EOR PRIOR TO COMPLETION OF WORK.
2. THE CONTRACTOR SHALL SUBMIT PRODUCT DATA WITH DESIGN VALUES AND PHYSICAL PROPERTIES FOR ALL POST INSTALLED ANCHORS. ADDITIONALLY, THE CONTRACTOR SHALL SUBMIT CERTIFIED ICC ES OR ESR REPORTS WHICH VERIFY COMPLIANCE WITH THE SPECIFIED CRITERIA.
3. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE SPECIFIED ON THE CONTRACT DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER ALONG WITH CALCULATIONS THAT ARE SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION AND LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERTINENT EQUIVALENT PERFORMANCE VALUES OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARDS AS REQUIRED BY THE BUILDING CODE.
4. ALL HOLES SHALL BE DRILLED, DRY AND CLEANED AND ANCHORS SHALL BE INSTALLED IN ACCORDANCE PER ANCHOR MANUFACTURER'S WRITTEN SPECIFICATIONS. THE LATEST VERSION OF THE WRITTEN SPECIFICATION SHALL BE ON-SITE AND FOLLOWED DURING THE INSTALLATION OF THE ANCHORS.
5. THE ANCHOR EMBEDMENT DEPTH SHALL BE DEFINED AS THE DEPTH FROM THE SURFACE FACE OF THE LOAD BEARING BASE MATERIAL TO THE DEEPEST PART OF THE ANCHOR AFTER THE ANCHOR HAS BEEN FULLY INSTALLED INTO THE HOLE PER MANUFACTURER'S SPECIFICATIONS.
6. ANCHORS EXPOSED TO WEATHER SHALL BE STAINLESS STEEL.
7. CONTRACTOR SHALL FOLLOW THE LATEST VERSION OF MANUFACTURER'S SPECIFICATION DURING INSTALLATION OF ANCHORS.
8. OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED BY PERSONNEL CERTIFIED BY THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM.

STRUCTURAL OBSERVATION REQUIREMENTS (IBC 2015 SECTION 1704.6)

1. A REPRESENTATIVE OF THE ENGINEER OF RECORD WILL PERFORM THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTION REQUIRED OF THE BUILDING OFFICIAL OR THE SPECIAL INSPECTOR.
2. A PRE-CONSTRUCTION MEETING SHALL BE HELD AND ATTENDED BY THE ARCHITECT, ENGINEER OF RECORD, GENERAL CONTRACTOR, SUBCONTRACTORS, AND SPECIAL INSPECTORS.
3. THE GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 48 HOURS PRIOR TO COMPLETING CONSTRUCTION OPERATIONS THAT REQUIRE STRUCTURAL OBSERVATION BY CALLING (918) 584-5858 TO SCHEDULE A SITE VISIT.
4. AT A MINIMUM, THE FOLLOWING SIGNIFICANT CONSTRUCTION STAGES REQUIRE A SITE VISIT AND AN OBSERVATION REPORT FROM THE STRUCTURAL OBSERVER:
   A. AFTER INSTALLATION OF FIRST FOUNDATION REINFORCING AND BEFORE CONCRETE PLACEMENT.
   B. AFTER ERECTION OF FIRST LIFT OF CMU WALL AND BEFORE GROUT PLACEMENT.
   C. AFTER INSTALLATION AND FASTENING OF WOOD ROOF SHEATHING AND BEFORE PLACING INSULATION.
5. AT THE CONCLUSION OF THE WORK INCLUDED IN THE PERMIT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

DEFERRED STRUCTURAL SUBMITTALS

1. THE FOLLOWING STRUCTURAL COMPONENTS SHALL BE DESIGNED AND SUBMITTED BY OTHERS FOR APPROVAL IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
   A. POST-TENSIONED SLAB ON GRADE AND FOUNDATIONS
2. DOCUMENTS FOR DEFERRED STRUCTURAL SUBMITTAL ITEMS SHALL BE DESIGNED, SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. THE DEFERRED SUBMITTAL DOCUMENTS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER-OF-RECORD WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL AS REQUESTED WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED FOR DESIGN LOADS AND BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN CRITERIA OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

SPECIAL INSPECTION REQUIREMENTS (2015)

SPECIAL INSPECTIONS REQUIREMENTS (IBC 2015 CHAPTER 17)

1. THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS PER SECTION 1704 OF THE IBC. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN THE PROJECT SPECIFICATIONS.
2. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON BY THE PERMIT APPLICANT AND THE BUILDING OFFICIAL PRIOR TO THE START OF WORK.
3. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE SPECIAL INSPECTOR REGARDING INDIVIDUAL INSPECTION FOR ITEMS LISTED ON THE STATEMENT OF SPECIAL INSPECTIONS AND AS NOTED ON THE BUILDING DEPARTMENT APPROVED PLANS. ADEQUATE NOTICE AND ACCESS TO APPROVED PLANS SHALL BE PROVIDED SO THAT THE SPECIAL INSPECTOR HAS TIME TO BECOME FAMILIAR WITH THE PROJECT.
4. FABRICATORS OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES SHALL CONFORM TO THE REQUIREMENTS OF SECTION 1704.2.5 OF THE IBC.

IBC 2015 REQUIRED SPECIAL INSPECTIONS

		CONTINUOUS	PERIODIC
	CONCRETE CONSTRUCTION (IBC TABLE 1705.3)		
1.	INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	—	X
2.	INSPECTION OF REINFORCING BAR WELDING IN ACCORDANCE WITH TABLE 1705.2 ITEM 2.	X	—
3.	INSPECT ANCHORS CAST IN CONCRETE.	—	X
4.	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.	X	—
5.	VERIFY USE OF REQUIRED DESIGN MIX.	—	X
6.	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	—
7.	INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	—
8.	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	—	X
9.	INSPECT PRESTRESSED CONCRETE FOR:		
A.	APPLICATION OF PRESTRESSING FORCES; AND	X	—
B.	GROUTING OF BONDED PRESTRESSING TENDONS.	X	—
10.	INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	—	X
11.	VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	—	X
12.	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	—	X
	SOILS (IBC TABLE 1705.6)		
1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	—	X
2.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	—	X
3.	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	—	X
4.	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	—
5.	PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	—	X
*	CONTINUOUS SPECIAL INSPECTION: SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS PRESENT WHEN AND WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED.		
*	PERIODIC SPECIAL INSPECTION: SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED.		

ACI 530/ACI 530.1 SPECIAL INSPECTION REQUIREMENTS

			CONTINUOUS	PERIODIC
		MASONRY CONSTRUCTION - LEVEL A QUALITY ASSURANCE (ACI 530 TABLE 3.1.1)		
1.		PRIOR TO CONSTRUCTION, VERIFY CERTIFICATES OF COMPLIANCE USED IN MASONRY CONSTRUCTION.		
		MASONRY CONSTRUCTION - LEVEL B QUALITY ASSURANCE (ACI 530 TABLE 3.1.2 - RISK CATEGORY I, II OR III)		
1.		VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.5B.1.b.3 FOR SELF-CONSOLIDATING GROUT.	—	X
2.		VERIFICATION OF f'm AND f'aac IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.4B PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THIS CODE.	—	X
3.		VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS.	—	X
4.		AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:		
	A.	PROPORTIONS OF SITE-PREPARED MORTAR.	—	X
	B.	CONSTRUCTION OF MORTAR JOINTS.	—	X
	C.	GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.	—	X
	D.	LOCATION OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.	—	X
	E.	PRESTRESSING TECHNIQUE.	—	X
	1.	REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY.	X	—
	2.	REQUIRED AFTER THE FIRST 5000 SQUARE FEET OF AAC MASONRY.	—	X
5.		PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:		
	A.	GROUT SPACE	—	X
	B.	GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES.	—	X
	C.	PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.	—	X
	D.	PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS.	—	X
	E.	CONSTRUCTION OF MORTAR JOINTS.	—	X
6.		VERIFY DURING CONSTRUCTION:		
	A.	SIZE AND LOCATION OF STRUCTURAL ELEMENTS.	—	X
	B.	TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION.	—	X
	C.	WELDING OF REINFORCEMENT.	X	—
	D.	PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEG. F) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEG. F).	—	X
	E.	APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.	X	—
	F.	PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE.	X	—
	1.	REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY.	X	—
	2.	REQUIRED AFTER THE FIRST 5000 SQUARE FEET OF AAC MASONRY.	—	X
7.		OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	—	X

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.O.R.	ARCHITECT OF RECORD
A.R.	ANCHOR RODS
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
ARCH.	ARCHITECTURAL
B.L.	BLOCK LINTEL
B.O.D.	BOTTOM OF DECK
B.O.S.	BOTTOM OF STEEL
B.P.	BASE PLATE
BAL.	BALANCE
BLDG.	BUILDING
BRG.	BEARING
C.J.	CONTRACTION JOINT
C.L.	CENTER LINE
CFMF	COLD FORMED METAL FRAMING
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
D.B.A.	DEFORMED BAR ANCHOR
D.B.E.	DECK BEARING ELEVATION
DIA.	DIAMETER
DTL.	DETAIL
DWG.	DRAWING
E.F.	EACH FACE
E.J.	EXPANSION JOINT
E.O.D.	EDGE OF DECK
E.O.R.	ENGINEER OF RECORD
E.O.S.	EDGE OF SLAB
E.W.	EACH WAY
EA.	EACH
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EQ.	EQUAL
EXIST.	EXISTING
F.F.E.	FINISHED FLOOR ELEVATION

ABBREVIATIONS

F.S.	FAR SIDE
F.V.	FIELD VERIFY
FDN.	FOUNDATION
FT.	FOOT/FEET
FTG.	FOOTING
G.B.	GRADE BEAM
G.C.	GENERAL CONTRACTOR
GA.	GAGE
GALV.	GALVANIZED
H.S.A.	HEADED STUD ANCHOR
HORIZ.	HORIZONTAL
I.F.	INSIDE FACE
IN.	INCH/INCHES
INFO.	INFORMATION
J.B.E.	JOIST BEARING ELEVATION
JT.	JOINT
K	UNIT OF 1,000 POUNDS (KIP)
KSI	KIPS PER SQUARE INCH
LBS.	POUNDS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG.	LONGITUDINAL
LSH	LONG SIDE HORIZONTAL
LSL	LONG SLOT
LSV	LONG SIDE VERTICAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MEP	MECHANICAL/ELECTRICAL/PLUMBING
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MTL.	METAL
N.I.C.	NOT IN CONTRACT
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.F.	OPPOSITE FACE
O.H.	OPPOSITE HAND
OPP.	OPPOSITE

ABBREVIATIONS

P.A.F.	POWER/POWDER ACTUATED FASTENER
PCF	POUNDS PER CUBIC FOOT
PEMB	PRE-ENGINEERED METAL BUILDING
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PLUMB.	PLUMBING
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
R	RADIUS
R.O.	ROUGH OPENING
RE:	REFER
REINF.	REINFORCING
REQD.	REQUIRED
RTU	ROOF TOP UNIT
S.D.S.	SELF-DRILLING SCREWS
S.S.	STAINLESS STEEL
SCHED.	SCHEDULE
SIM.	SIMILAR
SP.	SPACE/SPACING
SPECS.	SPECIFICATIONS
SSL	SHORT SLOT
STD.	STANDARD
STL.	STEEL
T&B	TOP AND BOTTOM
T.O.	TOP OF
T.O.C.	TOP OF CONCRETE
T.O.M.	TOP OF MASONRY
T.O.P.	TOP OF PIER
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TRANS.	TRANSVERSE
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W.P.	WORK POINT
W.S.	WATERSTOP
W.W.R.	WELDED WIRE REINFORCEMENT
WT.	WEIGHT

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STRUCTURAL ENGINEER — ANDREW M. KERN — 22289 — OKLAHOMA

wallace design collective

OK C.A. #1460
EXP. 06/2023

CHEROKEE NATION HOUSING DEVELOPMENT - TYPES 1 TO 4

S-001
GENERAL NOTES AND STRUCTURAL SPECIAL INSPECTIONS

blueriver ARCHITECTS

ISSUE DATE
08/18/22

ISSUE
100% CONSTRUCTION DOCUMENTS

OTHER ISSUE DATES
NO. DESCRIPTION DATE

SHEET NAME
GENERAL NOTES AND STRUCTURAL SPECIAL INSPECTIONS

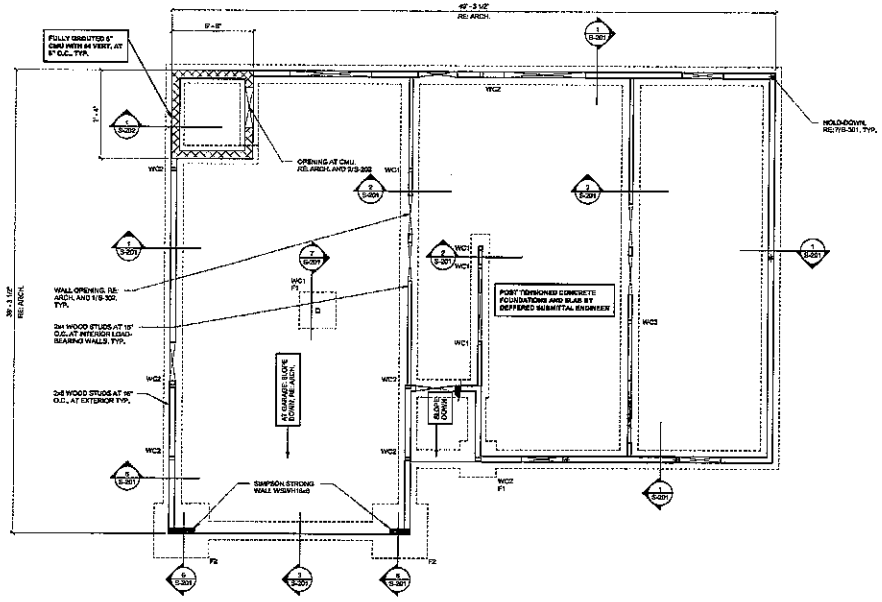
SHEET NUMBER
S-001

FOUNDATION PLAN NOTES

1. TOP OF SLAB ELEVATIONS ARE INDICATED ON PLANS.
2. REFERENCE ARCHITECTURAL PLANS FOR DIMENSIONS NOT SHOWN. COORDINATE SLAB ELEVATIONS AND SLOPES WITH ARCHITECTURAL PLANS.
3. REFERENCE ARCHITECTURAL AND MEP DRAWINGS FOR SIZE AND LOCATION OF SLAB AND FOUNDATION PENETRATIONS. ALL PENETRATIONS SHALL BE APPROVED BY ARCHITECT AND DESIGNED SUBMITTAL FOR PRIOR TO PLACEMENT. REFERENCE S-201 FOR TYPICAL DETAILS.
4. REFERENCE ARCHITECTURAL PLANS FOR SIZE AND LOCATION OF EXTERIOR CONCRETE PADS AND STOOPS.
5. REFERENCE S-202 FOR TYPICAL CMU WALL DETAILS AND S-201 AND S-202 FOR TYPICAL WOOD DETAILS.
6. REFERENCE S-201 FOR WOOD COLUMN SCHEDULE.

T.O. SLAB ELEVATION
ARCHITECTURAL=100'-0"
STRUCTURAL=TO BE DETERMINED BY CIVIL ENGINEER
CIVIL=REFER TO PLANS

PER GEOTECHNICAL REPORT, PLACE POST-TENSIONED SLAB BY DEFERRED SUBMITTAL ENGINEER OVER A 15 MIL CLASS A VAPOR RETARDER OVER 4" CLEAN GRANULAR STONE, OVER 12" LOW VOLUME CHANGE FILL.



1 FOUNDATION PLAN - TYPE 3
1/4" = 1'-0"

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CHEROKEE NATION HOUSING DEVELOPMENT - TYPES 1 TO 4

S-103
TYPE 3 - FOUNDATION PLAN

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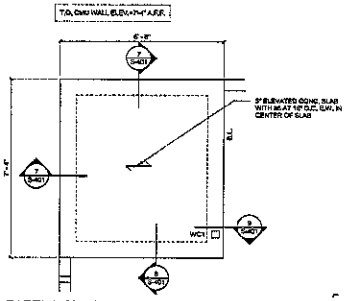
NO.	DATE	DESCRIPTION

SHEET NAME
TYPE 3 - FOUNDATION PLAN

SHEET NUMBER
S-103

ROOF FRAMING PLAN NOTES

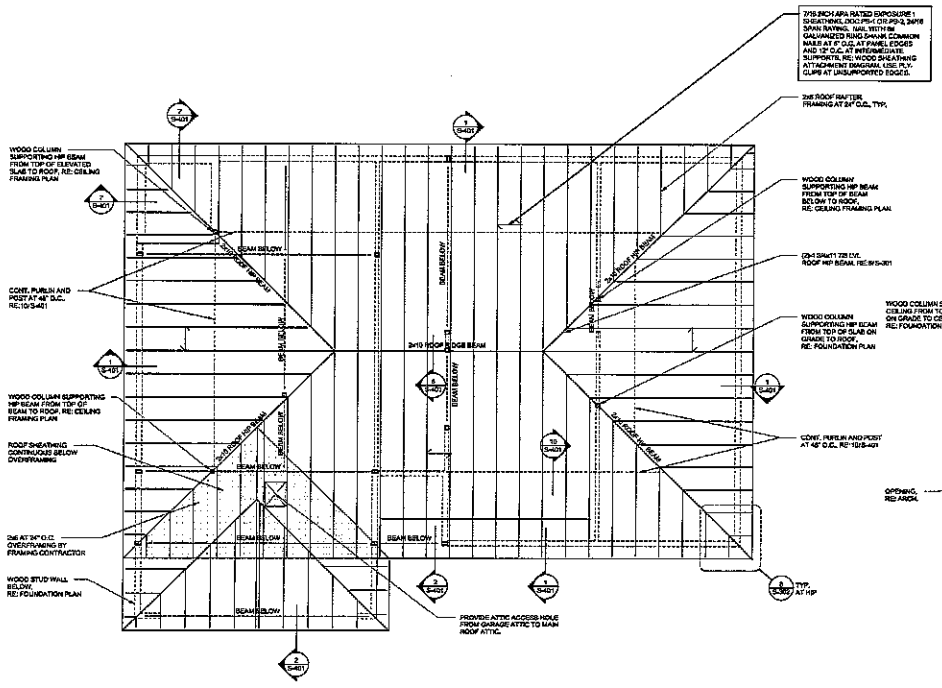
1. REFERENCE ARCHITECTURAL AND MEP DRAWINGS FOR SIZE AND LOCATION OF DECK PENETRATIONS.
2. REFERENCE S-301 AND S-302 FOR TYPICAL WOOD DETAILS.
3. REFERENCE S-501 FOR WOOD COLUMN SCHEDULE.
4. "SLL" DENOTES CMU BLOCK LINTEL. REFERENCE 2/S-202 FOR LINTEL AND JAMB SIZE AND REINFORCEMENT.



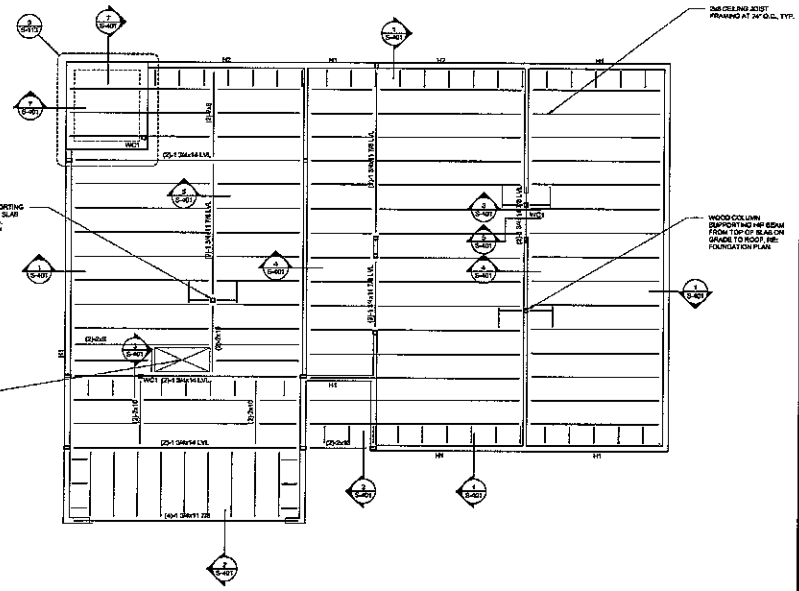
3 PARTIAL PLAN
1/2" = 1'-0"

T.O. WALL ELEVATION=XX'-X" A.F.F.

REFER TO ARCH. FOR ROOF SLOPE



2 ROOF FRAMING PLAN - TYPE 3
1/4" = 1'-0"



1 CEILING FRAMING PLAN TYPE 3
1/4" = 1'-0"

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CHEROKEE NATION HOUSING DEVELOPMENT - TYPES 1 TO 4

S-113
TYPE 3 - CEILING FRAMING PLAN / ROOF FRAMING PLAN

blueriver ARCHITECTS

BLUE RIVER PROJECT NUMBER:
1

ISSUE DATE:
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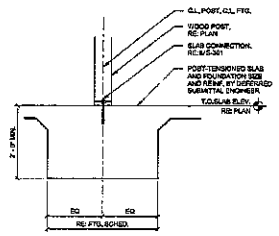
NO.	DESCRIPTION	DATE

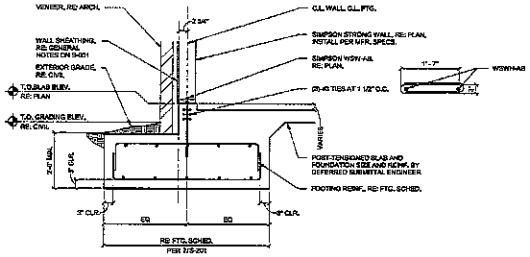
SHEET NAME:
TYPE 3 - CEILING FRAMING PLAN / ROOF FRAMING PLAN

SHEET NUMBER:
S-113

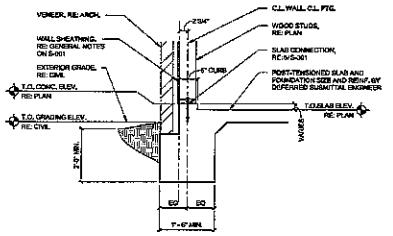
FOOTING SCHEDULE					
MARK	SIZE			REINFORCING	NOTES
	LENGTH	WIDTH	THICKNESS		
F1	3'-0"	3'-0"	1'-0"	BY DEFERRED SUBMITTAL ENGINEER	
P2	4'-0"	4'-0"	1'-0"	#5@8 E.W. T&B WITH (4) STD HOOKS	



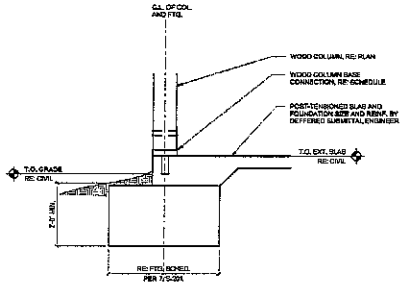
7 FOUNDATION DETAIL
3/4" = 1'-0"



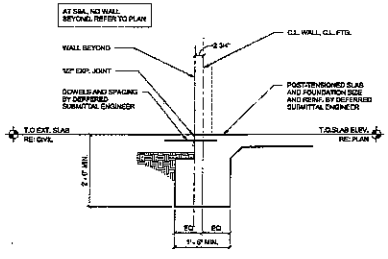
6 FOUNDATION DETAIL
3/4" = 1'-0"



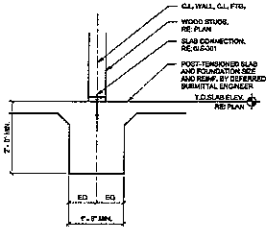
5 FOUNDATION DETAIL
3/4" = 1'-0"



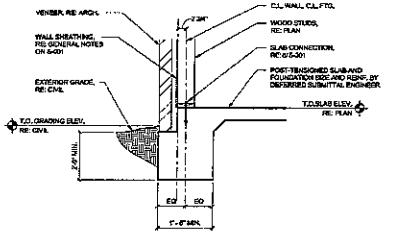
4 FOUNDATION DETAIL
3/4" = 1'-0"



3 FOUNDATION DETAIL
3/4" = 1'-0"



2 FOUNDATION DETAIL
3/4" = 1'-0"



1 FOUNDATION DETAIL
3/4" = 1'-0"

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CHEROKEE NATION HOUSING DEVELOPMENT - TYPES 1 TO 4

S-201
FOUNDATION DETAILS

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BLUE RIVER PROJECT NUMBER
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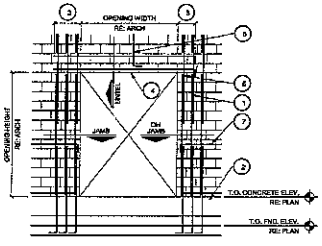
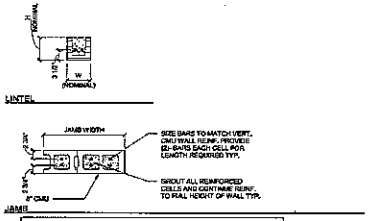
SHEET NAME
FOUNDATION DETAILS

SHEET NUMBER
S-201

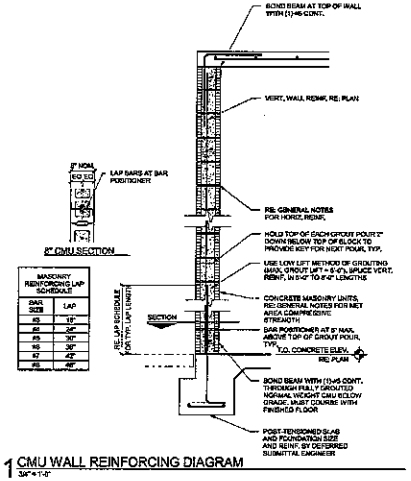
CMU LINTEL SCHEDULE					
CMU WIDTH (W)	OPENING WIDTH	HEIGHT (H)	LINTEL REINF.	JAMB WIDTH	JAMB REINF.
8"	3'-4" MAX.	8"	(2)#4	16"	(2)#4 EA CELL





NOTES:
1. REFERENCE MASONRY REINFORCING LAP SCHEDULE FOR SPLICES IN VERTICAL REINFORCING.
2. BOND BEAM, REFERENCE CMU WALL REINFORCING DIAGRAM.
3. EXTEND GROUTED LINTEL A MINIMUM OF 2'-0" OR 40 BAR DIAMETERS (WHICHEVER IS GREATER) BEYOND FACE OF OPENING EACH SIDE (EXTEND BARS THROUGH CONTROL JOINTS OR AROUND CORNERS AS REQUIRED).
4. USE LINTEL BLOCKS ONLY FOR BOTTOM COURSE OF LINTEL BEAMS OVER OPENINGS, U.N.O.
5. CONTINUE VERTICAL WALL REINFORCING OVER OPENING, ANCHOR VERTICAL REINFORCING INTO LINTEL BEAM WITH STANDARD ACI 90° HOOK.
6. ALL VERTICAL BARS AT OPENING JAMBS TO BE FULL HEIGHT.
7. WHERE HORIZONTAL REINFORCING IS TERMINATED BY OPENING OR CONTROL JOINT PROVIDE STANDARD ACI HOOK WITH VERTICAL WALL REINFORCING IN THE END CELL.

2 TYPICAL MASONRY WALL OPENING DIAGRAM AND SCHEDULE
3/8" = 1'-0"



MASONRY REINFORCING LAP SCHEDULE	
BAR SIZE	LAP
#3	16"
#4	24"
#5	30"
#6	36"
#7	42"
#8	48"

1 CMU WALL REINFORCING DIAGRAM
3/8" = 1'-0"

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CHEROKEE NATION HOUSING DEVELOPMENT - TYPES 1 TO 4

S-202
TYPICAL CMU DETAILS

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"

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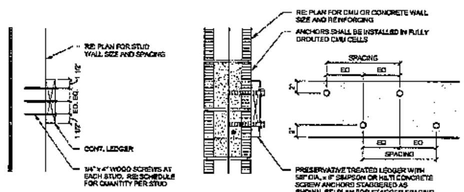
NO.	DESCRIPTION	DATE

SHEET NAME
TYPICAL CMU DETAILS

SHEET NUMBER
S-202

11 TYPICAL WOOD LEDGER DETAIL
1 1/2" = 1'-0"

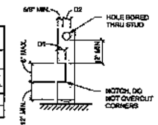
TYPICAL LEDGER ATTACHMENT		
LEDGER TO WOOD STUD		
LEDGER SIZE	NO. SCREWS TO EA. STUD	NOTES
2x6	2	
2x8	3	
2x10	4	
2x12	4	
2x14	4	
LEDGER TO CMU OR CONCRETE WALL		
LEDGER SIZE	SPACING OF STAGGERED SCREWS	NOTES
2x6	12" O.C.	
2x8	12" O.C.	
2x10	8" O.C.	
2x12	8" O.C.	
2x14	8" O.C.	



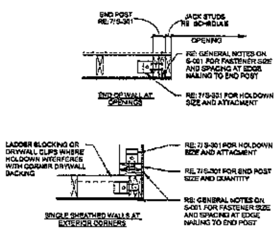
10 HOLES AND NOTCHES IN WOOD STUDS
NTS

ALLOWABLE NOTCH OR BORING SIZE IN WOOD STUDS				
STUD SIZE	BEARING WALLS		NON-BEARING WALLS	
	MAX. D1 NOTCH	MAX. D2 HOLE DIA.	MAX. D1 NOTCH	MAX. D2 HOLE DIA.
2x4	7/8"	1 3/8"	1 3/8"	2"
2x6	1 3/8"	2 3/16"	2 3/16"	3 1/4"

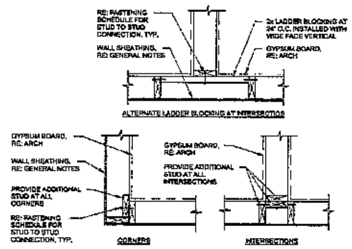
NOTES
1. NOTCHING AT SHEAR WALL END POSTS IS NOT PERMITTED.
2. CUT DIMENSION SHALL NOT EXCEED VALUES SHOWN IN TABLE
   - EXCEPTION: 2" DIA. PIPE THROUGH 2x4 AND 2x6 WALLS MAY HAVE NOTCH DIMENSION (D1) UP TO 2 1/2" WHERE SIMPSON HSS STUD SHOE IS INSTALLED PER MFR. RECOMMENDATIONS.
3. NOTCHING OF STUD PERMITTED ONLY WITHIN END 1/4 OF LENGTH. DO NOT NOTCH STUDS WITHIN MIDDLE 1/2 OF LENGTH.
4. HOLE AND NOTCH SIZES FOR NON-BEARING WALLS MAY BE USED FOR BEARING WALLS AT DOUBLED STUDS, PROVIDED NOT MORE THAN 2 SUCCESSIVE STUDS ARE SO BORED OR NOTCHED.
5. BORING OR NOTCHING IN EXCESS OF THESE LIMITATIONS WILL REQUIRE THE REPLACEMENT OF THE DAMAGED FRAMING MEMBER.



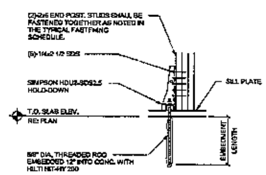
9 WALL INTERSECTION AT HOLD-DOWNS DETAILS
1" = 1'-0"



8 TYPICAL WALL INTERSECTION DETAIL
1" = 1'-0"



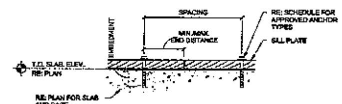
7 TYPICAL FOUNDATION HOLDOWN
1" = 1'-0"



6 SILL PLATE ANCHOR SCHEDULE
1 1/2" = 1'-0"

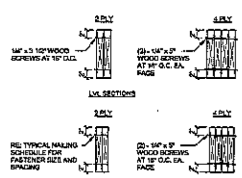
SILL PLATE ANCHOR SCHEDULE					
ATTACHMENT ANCHOR TYPE	EMBEDMENT	LOCATION AND SPACING			MIN/MAX. END DISTANCE
		EXTERIOR WALLS	INTERIOR BEARING WALLS	INTERIOR NON LOAD BEARING WALLS	
5/8" DIA. CONCRETE SCREW ANCHORS	6"	48" O.C.	72" O.C.	N/A	3" MIN. 12" MAX.
5/8" DIA. HEADED ANCHOR BOLTS	7"	48" O.C.	72" O.C.	N/A	3" MIN. 12" MAX.
1/2" DIA. EXPANSION ANCHORS	2 1/4"	N/A	72" O.C.	N/A	3" MIN. 12" MAX.
0.177" DIA. P.A.F	1 1/2"	N/A	24" O.C. STAGGERED	48" O.C. STAGGERED	2" MIN. 6" MAX.
0.099" DIA. P.A.F.	1"	N/A	12" O.C. STAGGERED	12" O.C. STAGGERED	2" MIN. 6" MAX.

NOTES:
1. EACH SILL PLATE PIECE SHALL HAVE (2) ANCHORS MIN.
2. EXPANSION ANCHORS SHALL NOT BE ALLOWED WITHIN 6 INCHES OF SLAB EDGE.
3. ALL HARDWARE IN CONTACT WITH PRESERVATIVE TREATED FRAMING SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL.
4. OVERSIZED WASHERS AT TOP OF SILL PLATE SHALL BE USED FOR ALL ANCHOR TYPES.
5. RE: PLAN AND 7/S-301 FOR HOLD-DOWN INFORMATION



5 BUILT-UP BEAM SCHEDULE AND DETAIL
NTS

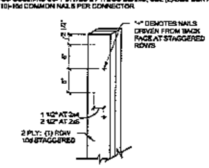
REFER TO PLAN FOR WOOD BEAM SIZES



4 BUILT-UP COLUMN SCHEDULE AND DETAIL
NTS

WOOD COLUMN SCHEDULE				
MARK	SIZE	BASE CONNECTION	TOP CONNECTION	NOTES
WC1	(2)-2x4	SIMPSON ABU44Z	SIMPSON (2)-LCE4	
WC2	(2)-2x6	SIMPSON ABU46Z	SIMPSON (2)-LCE4	
WC3	4x4	SIMPSON ABU44Z	SIMPSON (2)-LCE4	2, 3

NOTES:
1. WHERE NO BASE CONNECTION IS INDICATED, REFER TO TYPICAL NAILING SCHEDULE FOR STUD TO BOTTOM PLATE CONNECTION.
2. MEMBERS SHALL BE PRESERVATIVE TREATED AT EXTERIOR.
3. AT WOOD COLUMNS SUPPORTED BY WOOD BEAMS, USE (2)-SIMPSON AC4 CONNECTORS WITH (10)-16d COMMON NAILS PER CONNECTOR.



3 FRAMING HANGER SCHEDULE
NTS

FRAMING HANGER SCHEDULE		
FRAMING MEMBER	TOP FLANGE HANGER	FACE MOUNT HANGER
2x6	JB26	LUS26
(2)-2x6	HUS210-2TF	LUS26-2
(2) 1 3/4"x11 7/8" LVL	HGLTV4, H=11.188	HGUS410
(2) 1 3/4"x14" LVL	HGLTV4, H=13.938	HGUS410

NOTES:
1. THE ABOVE ARE MINIMUM HANGER REQUIREMENTS. REFER TO DETAILS FOR FRAMING MEMBERS NOT SHOWN.
2. ALL JOIST HANGERS ARE SIMPSON STRONG-TIE PRODUCTS. ALTERNATE HANGERS MAY BE USED THAT MEET OR EXCEED THE LISTED SIMPSON CAPACITY. ALTERNATE CONNECTIONS SHALL BE APPROVED BY THE ENGINEER OF RECORD.
3. ONLY USE FACE MOUNTED HANGERS WHERE ALL FACE NAILING CAN BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS.
4. FILL ALL HOLES WITH FASTENERS PER MANUFACTURER'S REQUIREMENTS.
5. PROVIDE CONCEALED FASTENERS AND FINISH FOR EXPOSED CONNECTORS TO COMPLY WITH ARCHITECT'S OR OWNER'S REQUIREMENTS.

2 TYPICAL FASTENING SCHEDULE
NTS

TYPICAL NAILING SCHEDULE	
CONNECTION	NAILING
ROOF RAFTER/CEILING JOIST/RAFTER TO TOP PLATE OR GIRDER	(3)-8d TOENAIL
BRIDGING OR BLOCKING TO JOIST	(2)-8d TOENAIL EA. END
BRIDGING OR BLOCKING BETWEEN JOIST TO TOP PLATE	(3)-8d TOENAIL EA. END
STUD TO TOP PLATE	(2)-16d END NAIL
STUD TO BOTTOM PLATE	(4)-8d TOENAIL
STUD TO STUD AND BUILT-UP CORNER STUDS	10d AT 16" O.C. FACE NAIL OR 16d AT 24" O.C. FACE NAIL
DOUBLE TOP PLATES, MIN. 24" OFFSET OF END JOINTS	10d AT 12" O.C. FACE NAIL OR 16d AT 16" O.C. FACE NAIL
DOUBLE TOP PLATES AT END JOINTS, MIN. 24" OFFSET	(8)-16d EA. SIDE OF JOINT FACE NAIL
TOP PLATES, LAPS AND INTERSECTIONS	(2)-16d FACE NAIL
BUILT-UP HEADER (2x TO 2x WITH 1/2" MAX. SPACER)	16d AT 12" O.C. FACE NAIL EA. EDGE
BUILT-UP BEAM	16d AT 16" O.C. FACE NAIL EA.
CONTINUOUS HEADER TO STUD	(4)-8d TOENAIL
CEILING JOIST TO TOP PLATE	(3)-8d TOENAIL
CEILING JOIST LAP OVER SUPPORT	(4)-10d FACE NAIL
CEILING JOIST TO PARALLEL RAFTERS	(4)-16d
COLLAR TIE TO PARALLEL RAFTERS	(3)-10d FACE NAIL
RAFTER TO 2x RIDGE BEAM	(3)-16d END NAIL / (4) 10d TOENAIL
RAFTER TO VALLEY OR HIP RAFTER	(3)-16d END NAIL / (4) 10d TOENAIL

NOTES:
1. THE ABOVE ARE MINIMUM NAILING REQUIREMENTS. REFER TO GENERAL NOTES, DETAILS, AND SCHEDULES FOR MORE STRINGENT REQUIREMENTS.
2. PROVIDE COMMON WIRE NAILS FROM U.S.A. OR CANADIAN MFR. REFER TO NAIL SIZE SCHEDULE FOR NAIL SIZE.
3. REFER TO "FASTENER SCHEDULE" IN CHAPTER 23 OF THE IBC FOR MINIMUM WOOD FASTENING REQUIREMENTS NOT SHOWN.
4. PROVIDE HOT-DIPPED ZINC-COATED GALVANIZED NAILS AT EXTERIOR FACE OF WALLS.
5. REFER TO GENERAL NOTES AND SHEAR WALL SCHEDULE FOR SHEATHING ATTACHMENT.

1 NAIL SIZE SCHEDULE
NTS

NAIL SIZE SCHEDULE	
6d COMMON	0.113" DIA. x 2"
8d COMMON	0.131" DIA. x 2 1/2"
10d COMMON	0.148" DIA. x 3"
12d COMMON	0.148" DIA. x 3 1/4"
16d COMMON	0.162" DIA. x 3 1/2"
20d COMMON	0.192" DIA. x 4"
30d COMMON	0.207" DIA. x 4 1/2"

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OK C.A. #1460

CHEROKEE NATION HOUSING DEVELOPMENT - TYPES 1 TO 4
S-301 TYPICAL WOOD DETAILS

blueriver ARCHITECTS

ISSUE DATE: 08/18/22
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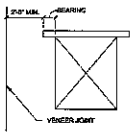
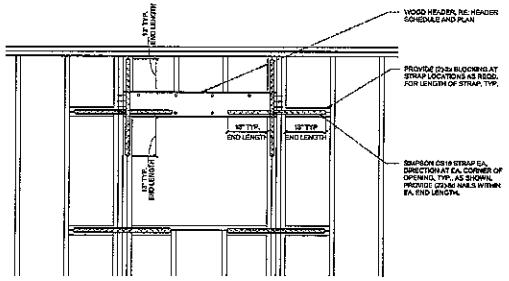
SHEET NAME: TYPICAL WOOD DETAILS
SHEET NUMBER: S-301



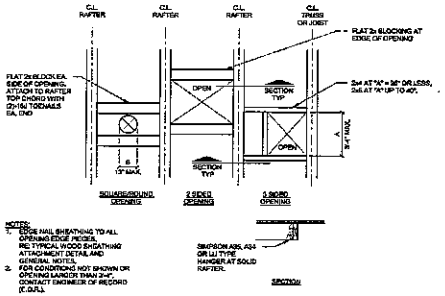
MASONRY VENEER LOOSE LINTEL ANGLE SCHEDULE		
CLEAR SPAN	ANGLE SIZE	BEARING
UP TO 6'-0"	L4x4x1/4	8"

12 MASONRY LOOSE LINTEL ANGLE SCHEDULE
3/4" = 1'-0"



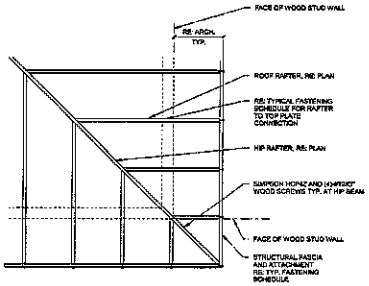
11 FORCE TRANSFER AROUND OPENINGS
3/4" = 1'-0"

10 TYPICAL BEAM TO STUD WALL CONNECTIONS
3/4" = 1'-0"

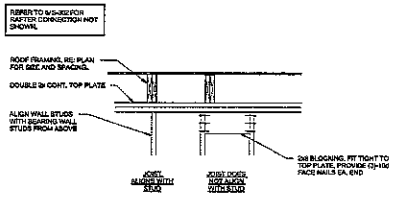


NOTES:
1. EDGE NAIL SHEATHING TO ALL OPENING EDGE PIECES. RE: TYPICAL WOOD SHEATHING ATTACHMENT DETAIL AND GENERAL NOTES.
2. FOR CONDITIONS NOT SHOWN OR OPENING LARGER THAN 2'-0", CONTACT ENGINEER OF RECORD (E.O.R.).

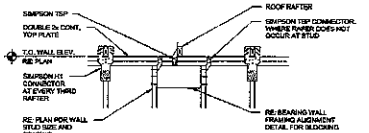
9 SMALL OPENING IN WOOD SHEATHING
3/4" = 1'-0"



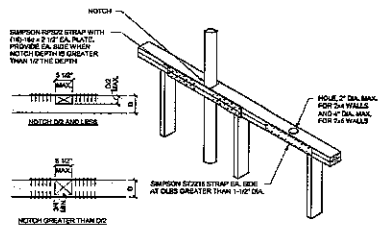
8 HIP FRAMING DETAIL
1/2" = 1'-0"



7 BEARING WALL FRAMING ALIGNMENT DETAIL
NTS

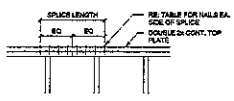


6 TYPICAL ROOF RAFTER TIE DOWN DETAIL
3/4" = 1'-0"



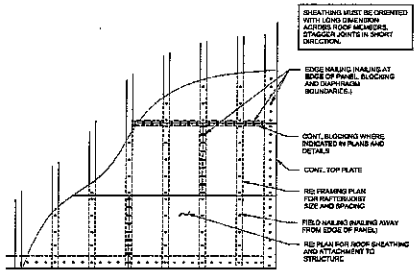
5 HOLES AND NOTCHES IN TOP PLATE
NTS

LOCATION	SPLICE LENGTH	NAILS EA. SIDE OF SPLICE
TYPICAL	4'-0"	(8)-16d

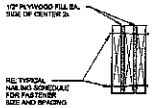


NOTES:
1. END JOINTS IN DOUBLE TOP PLATES SHALL OFFSET A MINIMUM OF 48".
2. INSTALL DOUBLE TOP PLATE SPLICE AT EXTERIOR WALLS AND BEARING WALLS.
3. SPECIFIC SPLICE REQUIREMENTS DO NOT APPLY TO INTERIOR WALLS UNLESS NOTED OTHERWISE

4 TYPICAL TOP PLATE SPLICE
NTS



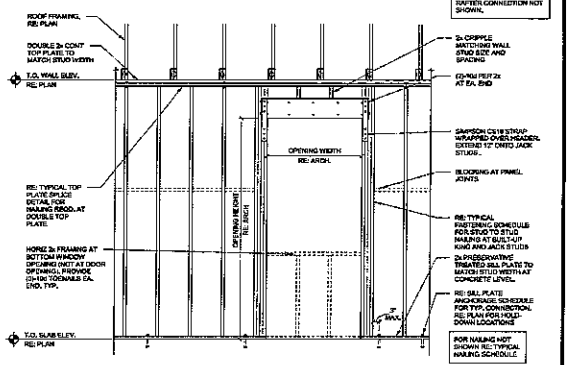
3 TYPICAL WOOD SHEATHING ATTACHMENT DIAGRAM
3/4" = 1'-0"



OPENING SCHEDULE					
MARK	HEADER	JACK STUDS	KING STUDS	SILL STUDS	MAX. OPENING WIDTH
H1	(2)-2x8	(1)-2x	(1)-2x	(1)-2x	3'-4"
H2	(2)-2x8	(1)-2x	(2)-2x	(1)-2x	6'-8"

NOTES:
1. HEADER MEMBERS SHALL BE CONTINUOUS. SPLICES ARE NOT PERMITTED IN HEADER FRAMING MEMBERS.
2. JACK AND KING STUDS SHALL BE FASTENED TOGETHER PER THE TYPICAL BUILT-UP COLUMN DETAIL.

2 OPENING SCHEDULE
NTS



1 TYPICAL WALL OPENING DETAIL
NTS

blue river ARCHITECTS
A Native American Owned Firm
ANDREW M. BERG 22250
wallace design collective
ON, C.A. #9488 EXP. 06/30/23

CHEROKEE NATION HOUSING DEVELOPMENT - TYPES 1 TO 4

S-302 TYPICAL WOOD DETAILS

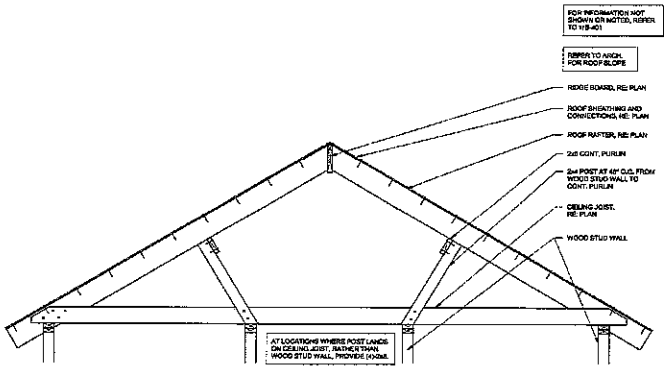
blue river ARCHITECTS

ISSUE DATE: 06/01/22
ISSUE: 100% CONSTRUCTION DOCUMENTS

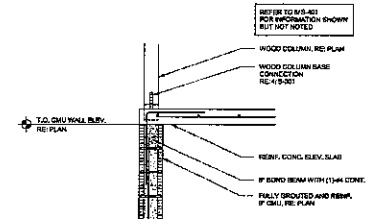
NO.	DESCRIPTION	DATE

SHEET NAME: **TYPICAL WOOD DETAILS**

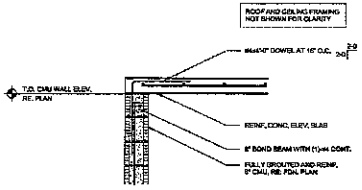
SHEET NUMBER: **S-302**



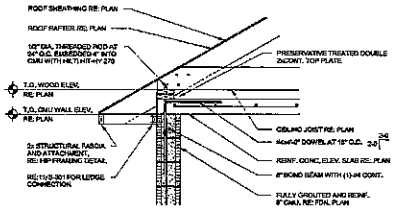
10 FRAMING DETAIL
3/4" = 1'-0"



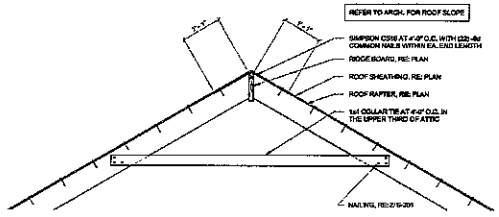
9 ROOF FRAMING AT SHELTER
3/4" = 1'-0"



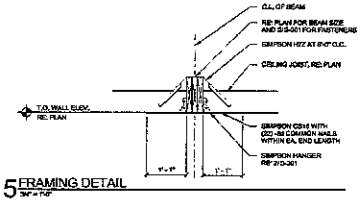
8 FRAMING DETAIL
3/4" = 1'-0"



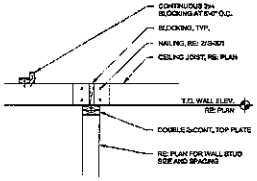
7 FRAMING DETAIL
3/4" = 1'-0"



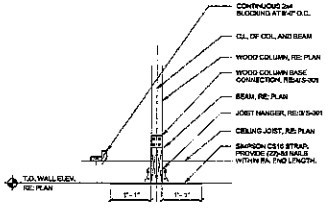
6 FRAMING DETAIL
3/4" = 1'-0"



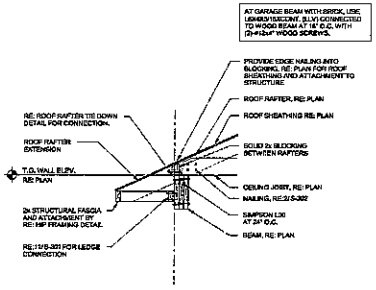
5 FRAMING DETAIL
3/4" = 1'-0"



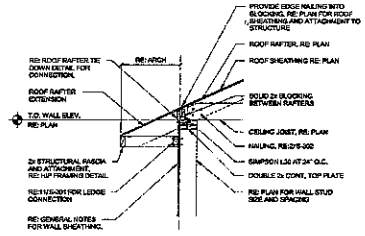
4 FRAMING DETAIL
3/4" = 1'-0"



3 FRAMING DETAIL
3/4" = 1'-0"



2 FRAMING DETAIL
3/4" = 1'-0"



1 FRAMING DETAIL
3/4" = 1'-0"

blue river ARCHITECTS
A Native American Owned Firm
wallace design collective
OK, CA, #4459
EXP. 06/30/23

CHEROKEE NATION HOUSING DEVELOPMENT - TYPES 1 TO 4

S-401
FRAMING DETAILS

blueriver ARCHITECTS
A Native American Owned Firm

BLUE RIVER PROJECT NUMBER
—

ISSUE DATE
03/15/22

ISSUE:
100% CONSTRUCTION DOCUMENTS

OTHER ISSUE DATES
NO. DESCRIPTION DATE

SHEET NAME:
FRAMING DETAILS

SHEET NUMBER:
S-401

P3 PANELBOARD

120/240 Single, 1PH, 3W
200 A, M.C.B.
(8) AIC
SURFACE
EQUIPMENT GROUND BUS

SERVES: HOUSE
LOCATION: GARAGE

	DESCRIPTION	WIRE	BRKR	PL	A		B		PL	BRKR	WIRE	DESCRIPTION	
1	LIGHTING GARAGE / MASTER (6)	12	20 A	1	0.89	2.32			2	35 A		HP-1	2
3	LIGHTING LIVING AREA (6)	12	20 A	1			0.71	2.32	–	–	–	–	4
5	LIGHTING BEDROOMS (6)	12	20 A	1	1.27	4.58			2	60 A	4	FCU-1	6
7	RECEPT KITCHEN (6)	12	20 A	1			0.54	4.58	–	–	–	–	8
9	RECEPT KITCHEN COUNTER (5)	12	20 A	1	1.50	2.25			2	30 A	10	WH-1	10
11	RECEPT KITCHEN COUNTER (5)	12	20 A	1			1.50	2.25	–	–	–	–	12
13	REFRIGERATOR (6)	12	20 A	1	1.08	4.00			2	20 A		RANGE	14
15	DISHWASHER / DISPOSAL (6)	12	20 A	1			1.20	4.00	–	–	–	–	16
17	RANGE HOOD OR MICROWAVE (6)	12	20 A	1	1.20	2.20			2	30 A	10	DRYER	18
19	RECEPTS DINING ROOM (6)	12	20 A	1			0.54	2.20	–	–	–	–	20
21	RECEPTS LIVING ROOM (6)	12	20 A	1	0.72	1.50			1	20 A	12	WASHER (6)	22
23	RECEPTS LIVING ROOM (6)	12	20 A	1			0.72	1.20	1	20 A	12	GARAGE DOOR OPENER (6)	24
25	RECEPTS MASTER BDRM (6)	12	20 A	1	0.54	0.90			1	20 A	12	RECEPTS EXTERIOR (6)	26
27	RECEPTS MASTER BDRM (6)	12	20 A	1			0.72	0.54	1	20 A	12	RECEPTS GARAGE (6)	28
29	RECEPT MASTER BATH (6)	12	20 A	1	0.18	0.54			1	20 A	12	RECEPTS GARAGE (6)	30
31	RECEPTS BEDROOM 2 (6)	12	20 A	1			0.90	0.18	1	20 A	12	RECEPTS ENTRY / LAUNDRY (6)	32
33	RECEPT BATHROOM (6)	12	20 A	1	0.18	0.06			1	20 A	12	SMOKE DETECTORS (6)	34
35	RECEPTS BEDROOM 3 (6)	12	20 A	1			1.08	0.71	1	20 A	12	MASTER CLOSET (6)	36
37	SPACE	–	–	1	–	0.00			1	20 A	–	SPARE (6)	38
39	SPACE	–	–	1			–	–	1	–	–	SPACE	40
41	SPACE	–	–	1	–	–			1	–	–	SPACE	42
			TOTAL CONNECTED		27.91		27.54		KVA				
			TOTAL CONNECTED		232.55		229.50		AMPS			SEE RESIDENTIAL LOAD CALCS	

LIGHTING FIXTURE SCHEDULE

TYPE	QTY	MANUFACTURER	CATALOG NUMBER	VOLT	WATT	LAMP	DESCRIPTION
A	12	ELITE	REL637-1200L-DIMTR-120-30K-90-WH	120V	16 VA	LED	6" RECESSED CAN LIGHT, DAMP LOCATION RATED, RT-CL-WH
B	1	GOLDEN	HOMESTEAD 4 LIGHT MINI CHANDELIER	120V	48 VA	LED	DECORATIVE DINING ROOM LIGHT, PROVIDE 100W EQV E26 3000K LED BULBS
D	2	COMMERCIAL	9IN 120W EQU MUSHROOM FLUSH MOUNT	120V	32 VA	LED	9" DOME LIGHT
E	2	VOGUE	WS-3127-3000K	120V	39 VA	LED	3' VANITY LIGHT
F	4	EELP	CGF7-19L-120V-30K	120V	480 VA	LED	CEILING FAN W/ LIGHT - VERIFY COLOR W/ ARCHITECTURAL
G	2	ELITE	4-OED-LED-5000L-DIM10-40K-65	120V	37 VA	LED	4' GARAGE LIGHT
H	4	HAMPTON	WICKFORD 1-LIGHT WALL LANTERN	120V	16 VA	LED	WALL MOUNTED PORCH LIGHT, PROVIDE 100W EQV E26 4000K LED BULB
J	2	BROAN	678	120V	240 VA	LED	BATHROOM EXHAUST FAN W/ LIGHT - REF MECHANICAL

PANELBOARD NOTES (#):

1. TERMINATE GROUND ON ISOLATED GROUND BUS.
2. PROVIDE LOCKING DEVICE (LOCK-OFF FOR MAINTENANCE).
3. PROVIDE LOCKING DEVICE (LOCK-ON FOR CRITICAL LOAD).
4. PROVIDE GFCI BREAKER (PERSONNEL PROTECTION 5 mA).
5. PROVIDE GFCI BREAKER (EQUIPMENT PROTECTION 30 mA).
6. PROVIDE COMBINATION ARC FAULT CIRCUIT BREAKERS WHERE INDICATED PER NEC 210.12(A).
7. CONDUCTOR SIZE HAS BEEN INCREASED TO ACCOUNT FOR VOLTAGE DROP. SIZE GROUNDING CONDUCTOR PROPORTIONALLY PER NEC.
8. COORDINATE PANELBOARD AIC RATING WITH UTILITY.
9. REFERENCE ONE-LINE DIAGRAM FOR WIRE SIZE/QUANTITY.

TYPICAL MOUNTING HEIGHTS

ALL HEIGHTS ARE FROM FINISHED FLOOR TO THE CENTERLINE OF THE DEVICE UNLESS NOTED OTHERWISE. DEVICES ABOVE A COUNTERTOP SHALL BE MOUNTED 4" ABOVE THE BACKSPLASH TO THE CENTERLINE.

RECEPTACLES	+12"
TELEPHONE JACKS	+48"
DATA JACKS	+16"
SWITCHES	+44"

RESIDENTIAL LOAD CALCULATION

PANELBOARD VOLTAGE	=	240 V
DWELLING UNIT AREA	=	1190 SQFT
GENERAL LIGHTING/POWER (3W/SQFT)	=	3570 VA
SMALL APPLIANCE CIRCUIT (2 CIRCUITS)	=	3000 VA
WASHER	=	1500 VA
DRYER	=	4400 VA
REFRIGERATOR	=	1080 VA
VENT HOOD / MICROWAVE	=	1200 VA
DISHWASHER / GARBAGE DISPOSAL	=	1200 VA
RANGE	=	8000 VA
WATER HEATER	=	4500 VA
SUBTOTAL	=	28450 VA
FIRST 10KVA AT 100%	=	10000 VA
REMAINDER AT 40%	=	7380 VA
CONDENSING UNIT / HEAT PUMP	=	4546 VA
FURNACE (65%)	=	13110 VA
HVAC LOAD PER NEC 220.82(C)	=	13168 VA
TOTAL FEEDER LOAD PER NEC 220.85	=	30548 VA
	=	127 A

KEYNOTES

E01	REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT.
E02	MOUNT FIXTURE HORIZONTALLY AND CENTER ABOVE VANITY MIRROR.
E03	SEAL FIXTURE TO CEILING WITH WEATHERPROOF SILICONE PER MANUFACTURERS INSTRUCTION. PROVIDE SHOWER LENS AND TRIM FOR FIXTURE.
E04	WHERE POSSIBLE, SWITCH INTEGRAL LIGHT AND FAN SEPERATELY.
E05	DISCONNECT SWITCH SIZED PER MANUFACTURERS MOCP RATING MAXIMUM OVER-CURRENT PROTECTION.
E06	PROVIDE CONNECTION OF THERMOSTAT TO FCU USING 18/7 THERMOSTAT WIRING. COORDINATE WITH MECHANICAL CONTRACTOR FOR FINAL LOCATION PRIOR TO ROUGH-IN.
E07	LOCATION OF PUSHBUTTON CONTROLS FOR GARAGE DOOR OPENER.
E08	DISHWASHER RECEPTACLE TO BE GFCI TYPE. GARBAGE DISPOSAL SWITCH FOR STANDARD RECEPTACLE SHALL BE INTALLED AFTER DISHWASHER RECEPTACLE TO ENSURE SWITCH OPERATION DOES NOT CONFLICT WITH GFCI FUNCTIONALITY.
E09	RECEPTACLE FOR RANGE HOOD OR OVER THE RANGE MICROWAVE SHALL BE INTALLED IN CABINETRY OVER RANGE. COORDINATE ROUTING OF CORD THROUGH MILLWORK IN FIELD.
E10	COORDINATE METER CAN LOCATION AND REQUIREMENTS WITH UTILITY PRIOR TO SITE WORK OR ROUGH-IN.
E11	TRANSFER CENTER WITH MANUAL TRANSFER SWITCH CONTAINING A MINIMUM OF TWO BREAKERS, GENERATOR TWIST LOCK RECEPTACLE LOCATION IN GW.
E12	CONNECT LIGHT AND RECEPTACLE IN HANDICAPPED SPACE ON A DEDICATED CIRCUIT TO BE ROUTED THROUGH TRANSFER CENTER PRIOR TO LANDING ON ELECTRICAL PANEL.

GENERAL NOTES:

1. NOT ALL SYMBOLS MAY APPLY TO ALL SHEETS.
2. PROVIDE ALL POWER CIRCUITS, WIRING, CONDUIT, OUTLETS, DISCONNECT SWITCHES, ETC. AND PROVIDE FINAL ELECTRICAL CONNECTIONS TO ALL EQUIPMENT.
3. PROVIDE A GROUNDING CONDUCTOR FOR ALL CIRCUITS IN ACCORDANCE WITH N.E.C. ARTICLE 250. VERIFY EXACT CONNECTIONS REQUIRED FOR ALL EQUIPMENT PRIOR TO ROUGH-IN.
4. THE USE OF EXTENSION CORDS OR POWER STRIPS AS PERMANENT WIRING TO EQUIPMENT, LIGHTING, FANS, ETC. IS PROHIBITED. ALL ELECTRICAL WIRING SHALL BE IN COMPLIANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE.
5. ALL ELECTRICAL DEVICE AND COVER PLATE COLORS TO BE COORDINATED WITH ARCHITECTURAL FINISH PLANS.
6. ALL DEVICES LOCATED WITHIN CLOSE PROXIMITY TO ONE ANOTHER SHALL BE COVERED BY A SINGLE FACE PLATE WHENEVER POSSIBLE.
7. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES. WHERE CONFLICTS ARISE, THE MOST STRINGENT REQUIREMENTS SHALL TAKE PRECEDENCE.
8. BIDDERS SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS TO FULLY UNDERSTAND THE NATURE AND SCOPE OF THE WORK PRIOR TO SUBMITTING A BID. THE SUBMISSION OF A BID IS CONSIDERED EVIDENCE THAT SUCH EXAMINATION HAS BEEN PERFORMED AND THAT COMPLIANCE WITH ALL GOVERNING CODES/REQUIREMENTS IS INCLUDED IN BID. LATER CLAIMS FOR LABOR, EQUIPMENT, MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED SHALL NOT BE ALLOWED. ALL PERMIT AND INSPECTION FEES SHALL BE INCLUDED IN BASE BID.

GENERAL POWER NOTES:

1. PROTECT ALL ADJACENT SURFACES DURING CONSTRUCTION. ANY SURFACES DAMAGED SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
2. CONTRACTOR SHALL COORDINATE INSTALLATION OF ELECTRICAL SYSTEMS WITH OTHER TRADES. SEE MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS OF MECHANICAL AND PLUMBING EQUIPMENT.
3. PROVIDE A IN-GROUND PULL BOX EVERY 200' FOR ALL UNDERGROUND CONDUIT RUNS.
4. WIRING DEVICES: DEVICE MOUNTING HEIGHTS ARE FROM FINISHED FLOOR TO CENTER OF OUTLET BOX UNLESS NOTED OTHERWISE ON PLANS. COORDINATE THE STANDARD MOUNTING HEIGHTS WITH MASONRY. REFERENCE TYPICAL MOUNTING HEIGHT SCHEDULE FOR MOUNTING HEIGHTS.
5. WIRING SHALL INCLUDE FINAL CONNECTIONS TO ALL EQUIPMENT IN CONFORMANCE WITH EQUIPMENT SUPPLIER WIRING DIAGRAMS.
6. CONTRACTOR IS RESPONSIBLE FOR PROVIDING COMPLETE PANELBOARD IDENTIFICATION SCHEDULES UPON COMPLETION.
7. WHERE BRANCH CIRCUITS ARE GROUPED, SIZE CONDUITS AND DE-RATE CURRENT CARRYING CONDUCTORS PER NEC.
8. PROVIDE APPROPRIATE HANDLE TIES FOR TWO SINGLE POLE CIRCUIT BREAKERS AS REQUIRED WHEN USING MULTI-WIRE BRANCH CIRCUITS PER NEC ARTICLE 210.4 PART (B).
9. PROVIDE BLANK FILLERS FOR ALL UNUSED SPACES IN PANELBOARDS WHERE FACTORY KNOCKOUTS HAVE BEEN REMOVED.
10. FEEDERS SHALL CONFORM TO NEC 215.2. BRANCH CIRCUITS AND VOLTAGE DROP REQUIREMENTS SHALL CONFORM TO NEC 210.19(A).
11. ONLY FEEDER CIRCUITS SPECIFICALLY NOTED AS UNDERGROUND ON THE ONE-LINE DIAGRAM AND BRANCH CIRCUITS NOTED BY LEGEND SHALL BE INSTALLED UNDER SLAB. ALL OTHER FEEDER AND BRANCH CIRCUITS SHALL BE INSTALLED OVERHEAD WHERE POSSIBLE. ALL SITE CONDUITS SHALL BE INSTALL AT A MINIMUM OF 24" UNDER FINISHED GRADE.
12. HOME RUNS ARE SHOWN SEPARATELY TO PRESERVE DRAWING CLARITY. COMBINE HOME RUNS SERVING LIGHTING AND WIRING DEVICES AS ALLOWED BY THE NEC.
13. NO EXPOSED CONDUIT OR WIRING IN FINISHED SPACES SHALL BE ALLOWED WITHOUT WRITTEN PERMISSION FROM ARCHITECT/ENGINEER.

GENERAL LIGHTING NOTES:

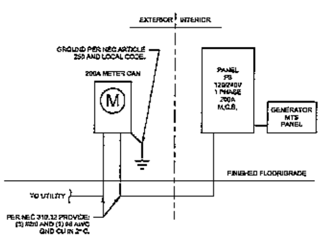
1. PROVIDE ALL ACCESSORIES REQUIRED FOR FUNCTIONAL ELECTRICAL INSTALLATION AND SUPPORT.
2. PROVIDE DRY WALL/PLASTER KIT FOR FIXTURES MOUNTED ON GYPBOARD PER CEILING PLAN.
3. LIGHT FIXTURES SHALL BE SUPPORTED IN ACCORDANCE WITH NEC ARTICLE 300; SPECIFICALLY PARAGRAPH 300.11(A).
4. COORDINATE EXACT FIXTURE LOCATIONS WITH STRUCTURE, DIFFUSERS, ETC.
5. THE LOCATION OF DUCTS, PIPE AND EQUIPMENT AS SHOWN ON THE DRAWINGS IS DIAGRAMMATIC AND SCHEMATIC. IT IS THE RESPONSIBILITY OF OF THE CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES BEFORE INSTALLATION. LIGHT FIXTURE LOCATIONS SUPERSEDE HVAC DUCTWORK, GRILLES AND DIFFUSERS. OFFSET TO AVOID STRUCTURE AND/OR ANY OTHER PIPING.
6. REFER TO LIGHT FIXTURE SCHEDULE FOR ALL LIGHT FIXTURES THAT ARE IC RATED. ALL RECESSED FIXTURES SHALL ADHERE TO ARTICLE 410.116 OF THE NATIONAL ELECTRICAL CODE (NEC).
7. PROVIDE TWO COPIES OF OPERATION AND MAINTENANCE MANUALS FOR ALL LIGHT FIXTURES AND LIGHT CONTROLS.

ELECTRICAL LEGEND

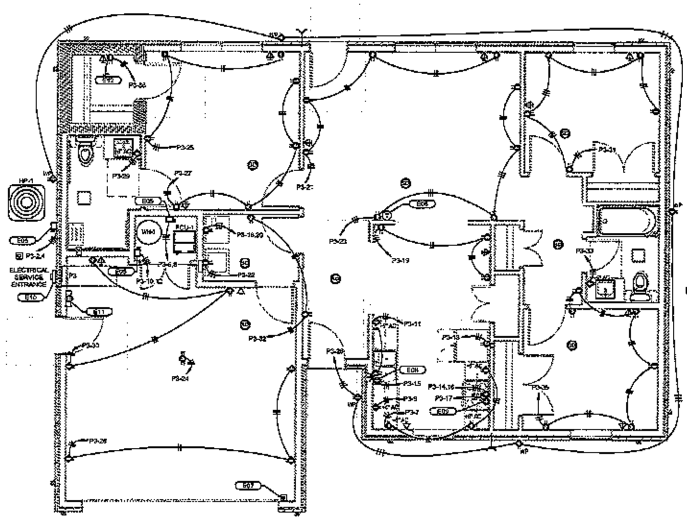
(NOT ALL SYMBOLS MAY BE USED)

SYMBOL	DESCRIPTION
Ⓙ	JUNCTION BOX
	RECEPTACLE, 120V DUPLEX
	RECEPTACLE, 120V GFI DUPLEX
	RECEPTACLE, 240V SIMPLEX
	RECEPTACLE, 120V QUADPLEX
	PANELBOARD
	DISCONNECT SWITCH, NON-FUSED
	DISCONNECT SWITCH, FUSED
$	SWITCH, SINGLE POLE
$3	SWITCH, 3-WAY
$4	SWITCH, 4-WAY
$D	SWITCH, DIMMER
	LIGHT FIXTURE, LINEAR
○	LIGHT FIXTURE, CEILING MOUNTED
	LIGHT FIXTURE, WALL MOUNTED
	CIRCUIT, CONCEALED IN WALLS OR CEILING
	CIRCUIT, CONCEALED IN SLAB
▽	TELEPHONE
▼	DATA
	DATA AND COAXIAL CONNECTION UNDER SINGLE FACE PLATE
(SD)	SMOKE / CARBON MONOXIDE DETECTOR

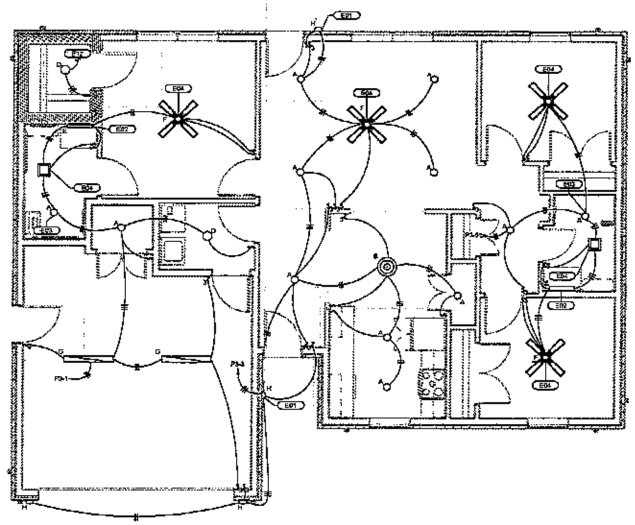
ABBREVIATIONS
AFF – ABOVE FINISHED FLOOR
WP – WEATHER PROOF
AFCI – ARC FAULT CIRCUIT INTERUPTING
GFCI – GROUND FAULT CIRCUIT INTERRUPTING
AC – ABOVE COUNTER
TR – TAMPER RESISTANT
CF – CEILING FAN
EC – ELECTRICAL CONTRACTOR
EF – EXHAUST FAN
NTS – NOT TO SCALE
FCU – FAN COIL UNIT (INDOOR)
HP – HEAT PUMP (OUTDOOR)
WH – WATER HEATER
UNO – UNLESS OTHERWISE NOTED



3 ELECTRICAL ONE-LINE
N.T.S.



2 POWER PLAN
1/4" = 1'-0"



1 LIGHTING PLAN
1/4" = 1'-0"

blue river ARCHITECTS
A Native American Owned Firm

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

E101
TYPE 3 ELECTRICAL PLAN

MPW
MPW ENGINEERING, LLC
110 W. 7TH STREET - SUITE 600
TULSA, OK 74119
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OK COA #2940 • EXP 06/30/2022

BLUE RIVER PROJECT NUMBER
20220104
ISSUE DATE:
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NO. DESCRIPTION DATE

SHEET NAME:
TYPE 3
ELECTRICAL PLAN

SHEET NUMBER:
E101

MECHANICAL

	SUPPLY AIR DUCT, SECTION
	RETURN AIR DUCT, SECTION
	EXHAUST AIR DUCT, SECTION
	OUTDOOR AIR INTAKE, SECTION
	DUCT, WIDTH X DEPTH, PLAN
	INCLINE DUCT RISE
	INCLINE DUCT DROP
	FLEXIBLE CONNECTION
	LONG RADIUS ELBOW
	VOLUME DAMPER
	SQUARE ELBOW W/ TURNING VANES, BRANCH TAKEOFF WITH ADJUSTABLE EXTRACTOR
	SPLITTER DAMPER
T	THERMOSTAT
	SPACE TEMPERATURE SENSOR
	EXHAUST AIR INLET
	CEILING RETURN INLET
	CEILING SUPPLY DIFFUSER
	DUCT WITH INTERNAL LINING
	ELECTRIC DUCT HEATER
	SQUARE OR RECTANGULAR BRANCH TAKEOFF WITH MANUAL BALANCING DAMPER
	ROUND BRANCH TAKEOFF WITH SCOOP EXTRACTOR, AND MANUAL BALANCING DAMPER
	CONICAL TEE WITH ROUND DUCTWORK
	STATIC PRESSURE SENSOR
	UNIT HEATER
	SMOKE DETECTOR
	SUPPLY AIR FLOW
	RETURN AIR OR EXHAUST AIR FLOW
	DOOR UNDER CUT
	FIXED LOUVER W/BIRD SCREEN
	OPPOSED BLADE DAMPER
	PARALLEL BLADE DAMPER
	BACKDRAFT DAMPER
	FIRE DAMPER
M	MOTORIZED DAMPER
	POINT OF CONNECTION
PT	PRESSURE TRANSMITTER
	AIR OUTLET
CO2	CARBON DIOXIDE SENSOR
CO	CARBON MONOXIDE SENSOR
NOX	NITROGEN OXIDE SENSOR

PIPE AND FITTINGS

	GATE VALVE
	GLOBE VALVE
	ANGLE GATE VALVE
S	SOLENOID VALVE
	NON SLAM CHECK VALVE
	BUTTERFLY VALVE
	PLUG VALVE
	BALL VALVE
	TWO WAY CONTROL VALVE
	PRESSURE REGULATOR
	THREE WAY CONTROL VALVE
	PRESSURE REDUCING VALVE
	SUTTERFLY VALVE
	AUTOMATIC AIR VENT
	STRAINER, Y TYPE W/GATE VALVE OR HOSE BIBB
	FLEXIBLE CONNECTION
	JOINT
	EXPANSION JOINT
	FLOW METER
	FLOW DIRECTION
	ELBOW BASE
	ELBOW REDUCING
	UNION
	PRESSURE GAUGE WITH TRI-COCK
	PRESSURE INDICATOR
	TEST PLUG
	TEMPERATURE INDICATOR
	FLOW SWITCH
	METERED BALANCING VALVE WITH PRESSURE TAP
	PRESSURE/TEMPERATURE TEST PLUG
	THERMOMETER
	THERMOMETER, DIAL
	THERMOWELL
	AUTO FLOW BALANCING VALVE
	FLOOR DRAIN W/P-TRAP
	FLOOR CLEANOUT
	WALL CLEANOUT
	BACKFLOW PREVENTER
	LUBRICATED PLUG COCK
	HOSE BIBB W/VACUUM BREAKER
	CAPPED END
	DIRUGS VALVE
	PIPE SWAY BRACING
	PIPE ANCHOR SUPPORT
	BALANCING VALVE

ABBREVIATIONS

A	AIR	K KW	KILOWATT
ABV	ABOVE	L LAB	LABORATORY
ACCU	AIR COOLED CONDENSING UNIT	LAT	LEAVING AIR TEMPERATURE
ACL	ACETYLENE GAS	LAV	LAVATORY
ACU	AIR CONDITIONING UNIT	LB	POUND
AD	ACCESS DOOR	LD	LINEAR DIFFUSER
AF	AIR FILTER	LDB	LEAVING DRY BULB
AFF	ABOVE FINISHED FLOOR	LT	LINEAR SLOT
AFH	AIR FILTER, HIGH EFFICIENCY	LFD	LAMINAR FLOW DIFFUSER
AHU	AIR HANDLING UNIT	LP	LIQUID PROPANE
APD	AIR PRESSURE DROP	LTR	LITERS PER SECOND
AR	ACID RESISTANT	LWB	LEAVING WET BULB
ASSY	ASSEMBLY	LWT	LEAVING WATER TEMPERATURE
AUX	AUXILIARY		
AV	AUTOMATIC AIR VENT	M MAU	MAKE-UP AIR UNIT
		MAX	MAXIMUM
B BDD	BACKDRAFT DAMPER	MB	MIXING BOX/MIXOP BASIN
BHP	BRAKE HORSE POWER	MBH	THOUSAND BTU/H
BFP	BACKFLOW PREVENTER	MD	MOTORIZED DAMPER
BS	BIRD SCREEN	MECH	MECHANICAL
		MIN	MINUTE/MINIMUM
C C	CONDENSATE	MM	MILLIMETERS
CL	CENTER LINE	MO	MOTOR OPERATOR
CD	CEILING DIFFUSER		
CFM	CUBIC FEET PER MINUTE	N N	NITROGEN
CH	CHILLER	NC	NORMALLY CLOSED
CHCW	CHEMICAL DRAIN	NG	NATURAL GAS
CHP	CHILLED WATER PUMP	NIC	NOT IN CONTRACT
CLG	CEILING	NO	NUMBER
CO	CLEANOUT	NOX	NITROGEN OXIDE
CONC	CONCRETE	NTS	NOT TO SCALE
CONN	CONNECTION		
CONT	CONTINUATION/CONTINUOUS	O O	OXYGEN
CPTW	CLEAN OUT TO GARAGE	OA	OUTSIDE AIR
CU	CONDENSING UNIT/COPPER	OAL	OUTSIDE AIR LOUVER
CV	CONSTANT VOLUME	OBD	OPPOSED BLADE DAMPER
CW	COLD WATER	OC	ON CENTER
		OE	OVERFLOW ELEMENT
D BDC	DIRECT DIGITAL CONTROL	OSHY	OUTSIDE SCRFW & YOKE
DG	DOOR GRILLE		
DIA	DIAMETER	P PD	PRESSURE DROP
DIM	DIMENSION	POC	POINT OF CONNECTION
DMPR	DAMPER	PRESS	PRESSURE
DN	DOWN	PRV	PRESSURE REGUCING VALVE
DPS	DIFFERENTIAL PRESSURE SWITCH	PSIG	POUNDS PER SQUARE INCH
DR	DRAIN	PVC	POLYVINYL CHLORIDE
DSD	DUCT SMOKE DETECTOR		
DSW	DISTILLED WATER	R RA	RETURN AIR
DWG	DRAWING	RAG	RETURN AIR GRILLE
		RAR	RETURN AIR REGISTER
E EAT	ENTERING AIR TEMPERATURE	RC	RAIN CONDUCTOR
ED	EXPANSION DRAIN	RD	ROOF DRAIN
EDB	ENTERING DRY BULB	REF	REFRIGERANT
EER	ENERGY EFFICIENCY RATIO	RF	RETURN FAN
EF	EXHAUST FAN	RL	RAIN LEADER
EG	EXHAUST GRILLE	RM	ROOM
EL	ELEVATION	RTN	RETURN
ELEC	ELECTRICAL		
ENT	ENTERING	S SA	SUPPLY AIR
ER	ENERGY RECOVERY	SAG	SUPPLY AIR GRILLE
EWB	ENTERING WET BULB	SANI	SANITARY
EWC	ENTERING WATER COOLER	SAR	SUPPLY AIR REGISTER
EWT	ENTERING WATER TEMPERATURE	SD	SMOKE DAMPER
EXH	EXHAUST	SD/FD	COMBINATION SMOKE/FIRE DAMP.
EWS	EYE WASH/SHOWER STATION	SF	SUPPLY FAN
		SIM	SIMILAR
F FCO	FLOOR CLEANOUT	SP	STATIC PRESSURE
FD	FIRE DAMPER/FLOOR DRAIN	SQ FT	SQUARE FEET
FH	FUME HOOD	SST	STAINLESS STEEL
FL	FLOOR		
FLEX	FLEXIBLE	T TCU	TERMINAL CONTROL UNIT
FOR	FUEL OIL RETURN	TEMP	TEMPERATURE
FOS	FUEL OIL SUPPLY	TG	TRANSFER GRILLE
FP	FIRE PUMP	TP	TRAP PRIMER
FPI	FINS PER INCH	TYP	TYPICAL
FPM	FEET PER MINUTE		
FT	FEET	U UC	UNDERCUT
FV	FACE VELOCITY		
		V V	VENT
G GA	GAUGE	VAV	VARIABLE AIR VOLUME
GV	GRAVITY INTAKE VENTILATOR	VD	VOLUME DAMPER
GND	GROUND	VEL	VELOCITY
GPM	GALLONS PER MINUTE	VERT	VERTICAL
GV	GRAVITY RELIEF VENTILATOR	VFD	VARIABLE FREQUENCY DRIVE
		VSD	VARIABLE SPEED DRIVE
H HB	HOSE BIBB	VTR	VENT THRU ROOF
HORIZ	HORIZONTAL		
HP	HORSE POWER/HEAT PUMP	W W	WITH
HTG	HEATING	WO	WITHOUT
HUMD	HUMIDISTAT	WCO	WALL CLEANOUT
HWS	HOT WATER SUPPLY	WC	WATER COLUMN
HWB	HOT WATER BOILER	WH	WATER HYDRANT
HWP	HOT WATER PUMP	WHA	WATER HAMMER ARRESTORS
HWR	HOT WATER RETURN	WM	WATER METER
		WTR	WATER
I ID	INSIDE DIAMETER		
IN	INCHES		
INV EL	INVERT ELEVATION		

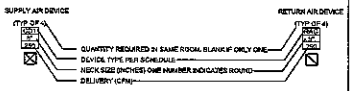
NOTE:
THIS IS A STANDARD SYMBOLS & ABBREVIATIONS SHEET, THEREFORE, SOME SYMBOLS & ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT ON THE PLANS.

PIPE LINES

- POTABLE COLD WATER
- POTABLE HOT WATER
- POTABLE HOT WATER RETURN
- VENT

DUCT LAGS

XX" SA	SUPPLY AIR
XX" RA	RETURN AIR
XX" EXH,	EXHAUST AIR
XX" OA	OUTSIDE AIR
XX" TA	TRANSFER AIR



GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE AND OPERABLE SYSTEM IN ACCORDANCE WITH THESE DOCUMENTS. THE APPLICABLE BUILDING CODES AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LATEST EDITION OF THE FOLLOWING PUBLICATIONS: INTERNATIONAL BUILDING CODE-MECHANICAL, SMACNA, ASHRAE, NFPA USA, SCS, 54 & ANSI B-9.1 MECHANICAL REFRIGERATION.

2. THE TERM "PROVIDE" USED IN THIS AND SPECIFICATIONS AND DRAWINGS SHALL MEAN TO FURNISH, INSTALL, CONNECT, AND PLACE IN SERVICE COMPLETELY IN THE SPECIFIED OR APPROVED MANNER THE ITEM AND/OR MATERIAL DESCRIBED.

3. THE MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL & STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. ALL EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFIED GUIDELINES. DUCT AND PIPING OFFSETS, RISES AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CHANGES IN FACTUAL SIZE AND ROUTE WILL BE REQUIRED TO AVOID STRUCTURAL, PLUMBING, FIRE SPRINKLER, AND ARCHITECTURAL BUILDING FEATURES. DUCTWORK CHANGES MAY BE MADE BY CONTRACTOR USING EQUIVALENT SIZED DUCT. CONTACT ENGINEER IN WRITING IF MECHANICAL SYSTEMS WILL NOT FIT IN AREA ALLOTTED.

4. SYMBOLS ON THE LEGEND ARE APPLICABLE GENERALLY, FOR EXACT REQUIREMENTS SEE THE APPLICABLE SCHEDULES, LAYOUTS, DETAILS, AND THE SPECIFICATIONS, UNLESS OTHERWISE NOTED. ALL DUCTS, EQUIPMENT, PIPE SIZES AND DIMENSIONS ARE IN ENGLISH UNITS.

5. THE CONTRACTOR SHALL PAY ALL COSTS OR PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.

6. ENGINEER OF RECORD RECOGNIZES THE GENERAL CONTRACTOR AND ALL OTHER CONTRACTORS TO BE LICENSE PROFESSIONALS IN THE STATE IN WHICH WORKS TO BE PERFORMED. GENERAL CONTRACTOR SHALL CONSIDER THE PROJECT AS ONE SET OF DOCUMENTS. GENERAL CONTRACTOR SHALL PROVIDE AN ENTIRE SET OF DOCUMENTS SHOWING ALL TRADES TO EACH SUBCONTRACTOR PRIOR TO BIDDING AND CONSTRUCTION. GENERAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER CONTRACTORS TO INFORM ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR POSSIBLE CONFLICTS ON THE DOCUMENTS PRIOR TO SUBMITTING FINAL BID AND COMMENCING ANY WORK. CONTRACTOR SHALL MAKE PAPERLESS AVAILABLE FOR REVIEWING DOCUMENTS WITH ARCHITECT/ENGINEER UPON REQUEST.

7. THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES.

8. THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH "AS-BUILT" REDLINE DRAWINGS, UPON COMPLETION OF THE PROJECT AND AUTOCAD SHOP DRAWING FILES (IF APPLICABLE).

9. THE GENERAL CONTRACTOR SHALL PROVIDE IN WRITING AND ON COMPANY LETTER HEAD, ALL ITEMS VALUE ENGINEERED OR OMITTED FROM PROJECT BIDS. THIS DOCUMENT SHALL HAVE DETAILED DESCRIPTION AND TRANSPARENCY OF ALL ITEMS IN EACH DISCIPLINE AND FOR EACH TRADE. INFORMATION SHALL BE PROVIDED TO ARCHITECT AND ENGINEER FOR REVIEW PRIOR TO SUBMITTING FINAL BID. CONTRACTOR SHALL MAKE HIMSELF AVAILABLE FOR RECEIVING DOCUMENTS WITH ARCHITECT/ENGINEER/OWNER UPON REQUEST.

DUCTWORK:

10. INTERIOR METAL DUCT SHALL BE CONSTRUCTED OF GALVANIZED SHEET STEEL; LOCK-FORMING QUALITY, ASTM A653/A653M, COATING DESIGNATION G90, MILL PHOSPHATIZED FINISH FOR SURFACES OF DUCT EXPOSED TO VIEW. FABRICATE DUCTS, ELBOWS, TRANSITIONS, OFFSETS, BRANCH CONNECTIONS AND OTHER CONSTRUCTIONS ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE". COMPLY WITH REQUIREMENTS FOR METAL THICKNESS, REINFORCING TYPES AND INTERVALS, SEALING APPLICATIONS, AND JOINT TYPES AND INTERVALS. SUPPLY DUCTWORK DOWNSTREAM OF AHUS AND MAUS SHALL BE SMACNA 2"wg. CLASSIFICATION, SEAL CLASS B. ALL OUTSIDE AIR DUCTWORK SHALL BE LOW PRESSURE CONSTRUCTION (SMACNA 2"w.g. CLASSIFICATION). ALL RETURN AIR AND EXHAUST AIR DUCTWORK SHALL BE LOW PRESSURE CONSTRUCTION (SMACNA 2"w.g. CLASSIFICATION).

11. RIGID DUCT SHALL COMPLY UL 181 CLASS 1, FACTORY FABRICATED, INSULATED, ROUND DUCT, WITH A POLYETHYLENE FILM OUTER JACKET ENCLOSING GLASS FIBER INSULATION (R4) AROUND A CONTINUOUS POLYETHYLENE INNER LINER. THE INNER LINER SHALL HAVE AN ENCAPSULATED STEEL WIRE HELIX. FLEXIBLE DUCT SHALL BE INSTALLED IN ACCORDANCE WITH NAIMA'S "FIBROUS GLASS DUCT CONSTRUCTION STANDARDS". INSULATION SHALL BE 1" (R-4.2) FOR USE IN CONDITIONED SPACE AND 1 1/2" (R-6) FOR USE IN UNCONDITIONED SPACE.

12. EXTERNAL RECTANGULAR METAL DUCT AND FITTINGS SHALL BE DOUBLE WALL CONSTRUCTION. THE OUTER SHELL SHALL BE FABRICATED WITH GALVANIZED SHEET STEEL LOCK-FORMING QUALITY, ASTM A653/A653M, WITH ASTM G-90 GALVANIZE COATING THE INSULATION SHALL BE 2" R-4.2 FIBERGLASS DUCT WRAP. THE INNER SHELL SHALL BE 24 GA PERFORATED METAL WITH 3/32" DIAMETER HOLES ON A 9/32" STAGGERED CENTERS. AN AIR SPACE SHALL BE INSTALLED BETWEEN THE FIBERGLASS DUCT WRAP AND THE PERFORATED INNER SHELL. ALL JOINT CONNECTORS SHALL BE YARD ANGLE FLANGES WITH APPROPRIATE GASKETS. METAL GAUGES SHALL CONFORM TO SMACNA'S 2"W.G. STANDARDS. ALL DUCTWORK SHALL HAVE SEALANT ON BOTH SIDES. ALL SEAMS TO BE "PITTSBURGH" AND SEALED WITH SMACNA APPROVED EXTERIOR JOINT SEALANT. ALL 90 DEGREE ELBOWS SHALL HAVE DOUBLE TURNING VANES. APPROVED MANUFACTURERS: AUTOMATIC/ACME.

13. EXTERNAL DUCT INSULATION SHALL BE MINERAL FIBER BLANKET WITH GLASS FIBERS BONDED WITH THERMO SETTING RESIN. THE DUCT WRAP SHALL COMPLY WITH ASTM C553, TYPE II WITH BOTT FACING AND WITH ALL SERVICE JACKET MANUFACTURED FROM KRAFT PAPER, REINFORCED SCRIM, ALUMINUM FOIL AND VINYL FILM. APPLY INSULATION MATERIALS, ACCESSORIES AND FINISHES ACCORDING TO THE MANUFACTURER'S WRITTEN INSTRUCTIONS. WITH SMOOTH, STRAIGHT AND EVEN SURFACES; MAKE TIGHT JOINTS; AND MAKE CONTINUOUS THE LENGTH OF DUCTS AND FITTINGS. INSULATION SHALL BE 1" (R-4) FOR USE IN CONDITIONED SPACE AND 1-1/2" (R-6) FOR USE IN UNCONDITIONED SPACE.

14. ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.

15. LAVATORY EXHAUST DUCTS SHALL BE GALVANIZED SHEET METAL OR CORRUGATED ALUMINUM FLEX DUCT WITH SEALED SEAMS AND JOINTS. ALL EXHAUST AIR DUCTS LOCATED IN AREAS WHERE DEWPOINT CONDITIONS COULD OCCUR SHALL BE INSULATED WITH EXTERNAL BLANKET INSULATION'S WITH A MINIMUM OF R-6.

16. ALL EXHAUST AIR FANS AND VENTS SHALL BE LOCATED BEYOND 10'-0" OF ANY OUTSIDE AIR INTAKE OR FAN. ALL EXHAUST AIR FANS SHALL BE MARKED WITH A PERMANENT PLATE STATED "EXHAUST FAN FOR UNIT NUMBERS(OR AREA", (E.G. "EF-1 FOR LOCKER ROOM", "EF-1 FOR RESTROOM, TOILET", ETC.)

17. ALL DUCT DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSIONS.

18. ALL BRANCH TAKE-OFFS TO BE PROVIDED WITH MANUAL VOLUME DAMPERS. ALL ELBOWS AND TEES MUST BE PURCHASED WITH TURNING VANES. PROVIDE MANUAL VOLUME DAMPERS WITH EXTRACTOR AT ALL TAKE-OFFS.

THERMOSTAT/CONTROLS:

19. LOCATION OF THERMOSTATS SHALL BE ON INTERIOR WALLS APPROXIMATELY 48" AFF AND SHALL BE COORDINATED WITH SWITCHES, ETC. AT LOCATION SHOWN ON DRAWINGS.

20. VALVES SERVING DOMESTIC WATER SYSTEMS SHALL BE BALL VALVES OR APPROVED EQUAL. ALL VALVES SHALL BE LOCATED SO AS TO BE ACCESSIBLE BY MAINTENANCE PERSONNEL. VALVES LOCATED ABOVE ACCESSIBLE CEILINGS SHALL BE LOCATED WITHIN 15" OF THE CEILING. VALVES LOCATED IN SPACES WITHOUT CEILINGS SHALL BE ACCESSIBLE FROM THE FLOOR OR WITH A SIX OR EIGHT FOOT LADDER.

21. CONTRACTOR SHALL PROVIDE OWNER/BUILDING MANAGER/BUILDING ENGINEER WITH 40 HOURS OF ONSITE AND/OR OFF SITE TRAINING IN THE CONTROL AND OPERATION OF THE HVAC SYSTEM. TIME AND LOCATION TO BE DETERMINED BY OWNER.

22. PROVIDE FYPE "S" DYNAMIC FIRE DAMPERS IN ALL DUCTS OR OPENINGS PENETRATING FIRE-RATED ASSEMBLIES. PROVIDE SMOKE DAMPERS IN ALL DUCTS OR OPENINGS PENETRATING SMOKE RATED ASSEMBLIES. PROVIDE ADDITIONAL DAMPERS IN DUCTWORK OR PIPING AS REQUIRED TO MAINTAIN RATED CEILINGS. REFER TO ARCHITECTURAL LIFE SAFETY DRAWINGS FOR RATED ASSEMBLIES.

23. FOR ELECTRICAL OR CONTROL PANELS PROVIDE CLEARANCE PER NEC ARTICLE 110. DUCTS, PIPES AND OTHER EQUIPMENT ARE NOT ALLOWED TO RUN OVER PANELS PER NEC.

24. THE GENERAL CONTRACTOR SHALL TEST AND BALANCE THE AIR SIDE SYSTEM UPON COMPLETION. THE FINAL TEST AND BALANCE MUST BE PERFORMED BY AN INDEPENDENT FIRM CONTRACTED BY THE GENERAL CONTRACTOR AND NOT THE MECHANICAL CONTRACTOR. THE TEST AND BALANCE FIRM SHALL HOLD A CURRENT CERTIFICATION FROM A RECOGNIZED TEST AND BALANCE ORGANIZATION. THE TEST AND BALANCE OPERATION SHALL INCLUDE ALL AIR SIDE SYSTEMS REGARDLESS OF SIZE OF EQUIPMENT AND A TEST TO CONFIRM BUILDING IS NEUTRAL OR POSITIVELY PRESSURIZED. THE T & B FIRM SHALL PROVIDE A WRITTEN REPORT TO THE ARCHITECT AND THE ENGINEER UPON COMPLETION.

25. ALL OPERATIONS / MAINTENANCE MANUALS FOR EQUIPMENT SPECIFIED SHALL BE PROVIDED TO OWNER UPON COMPLETION OF PROJECT.

blue river ARCHITECTS
A Native American Owned Firm

SCOTT C. WEBB 19011 OKLAHOMA 6-14 REGISTERED PROFESSIONAL ENGINEER

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

M001 HVAC NOTES

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CA, COA # 2540 • EXP 06/30/2022

BLUE RIVER PROJECT MANAGER: 20220104

ISSUE DATE: 08/18/2022

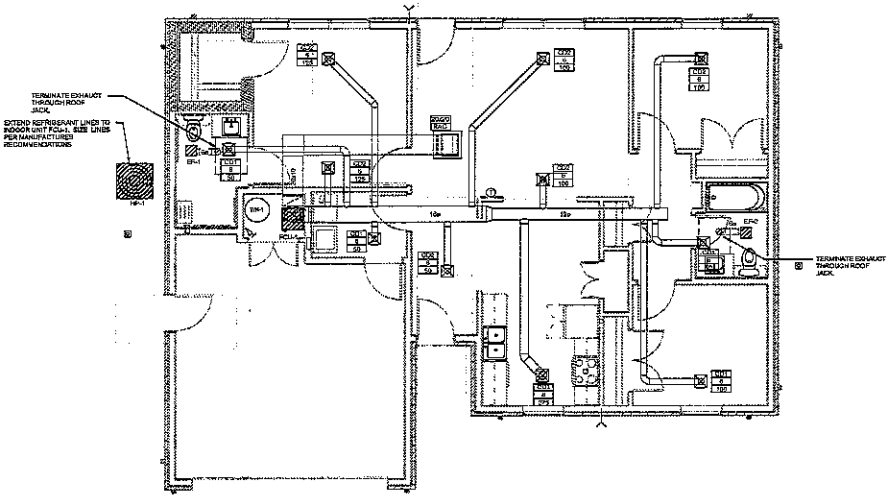
ISSUE: CONSTRUCTION DOCUMENTS

OTHER ISSUE DATES:

NO.	DESCRIPTION	DATE

SHEET NAME: HVAC NOTES

SHEET NUMBER: M001



1 FIRST FLOOR HVAC PLAN
1/4" = 1'-0"

HEAT PUMP SCHEDULE

MARK	MANUFACTURER & MODEL	RATED COOLING CAPACITY (BTU/H)	HEATING CAPACITY 5 deg/47F (BTU/H)	ELECTRICAL VOLTS	ELECTRICAL PHASE	ELECTRICAL HZ	ELECTRICAL MCA	ELECTRICAL MOCP	ELECTRICAL FLA	SEER	WEIGHT	NOTES
HP-1	DAIKIN DZ48SA18	34,400	15,600/19,000	230 V	1	60 Hz	19 A	35 A	15 A	14.5	327 lb	1,2,3,4,5

NOTES:
1. ALL UNITS SHALL BE SUPPLIED ASCOMPLETE SYSTEMS WITH EXPANSION VALVES (TXV), FILTER-DRYERS, SIGHT GLASS, LOW AMBIENT HEATER, CRANKCASE HEATER AND R410A REFRIGERANT PIPING IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
2. CONTRACTOR SHALL VERIFY WITH THE UNIT MANUFACTURER THAT REFRIGERANT LINES ARE WITHIN THE RECOMMENDED ALLOWABLE LINE LINGTHS OF RUN AND RISE. CONTACT THE ENGINEER IF LINE LENGTHS EXCEED THESE REQUIREMENTS.
3. INSTALL HEP UNITS ON 4" THICK CONCRETE PAD SUITABLE FOR HVAC SYSTEMS, ANCHOR UNIT TO PAD.
4. INSTALLING CONTRACTOR SHALL BE CERTIFIED BY THE MANUFACTURER TO SELAND INSTALL THE EQUIPMENT.
5. FIELD INSTALLED DISCONNECT SWITCH 60V DP, 20 FUPOTHICAL CONTRACTOR, REFER TO ELECTRICAL DRAWINGS.

FAN/COIL UNIT SCHEDULE

MARK	MANUFACTURER	MODEL #	SA CFM	ESP	COOLING CAPACITY (BTU/H)	ELECTRICAL V	ELECTRICAL HZ	ELECTRICAL MCA	ELECTRICAL MOCP	SUPPLY FAN MOTOR HP	SUPPLY FAN FLA	ELECTRIC HEATER WATTS	ELECTRIC HEATER VOLTAGE	CONFIG	NOTES
FCU-1	DAIKIN	DV07F1CC14	1200	0.5	18,000	208 V	60 Hz	7 A	15 A	0.75	5 A	15000 W	240 V	VERTICAL	1,2,3,4

NOTES:
1. INSTALL REFRIGERANT LINES PER MANUFACTURER GUIDELINES BASED ON RUN LENGTH.
2. EXTEND CONDENSATE DRAIN PIPING TO NEARES FLOOR DRAIN WITH CODE APPROVED AIR CAP.
3. PROVIDE MANUFACTURER RECOMMENDED 7 DAY PROGRAMMABLE THERMOSTAT.
4. PROVIDE SUPPLEMENTAL 15KW ELECTRIC HEATER.

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER & MODEL	LOCATION	MOUNTING	CFM	ESP	SONES	ELECTRICAL V	ELECTRICAL P	ELECTRICAL HZ	ELECTRICAL WATTS	SPEEDS	REMARKS
EF-1	BROAN 679	BATHROOM	CEILING	79	0.1	2.5	120 V	1	60 Hz	240 W	1	A, B, C, F
EF-2	BROAN 679	BATHROOM	CEILING	79	0.1	3.5	120 V	1	60 Hz	240 W	1	A, B, C, E

NOTES:
1. REFER TO DIVISION 23 SPECIFICATIONS.
2. REFER TO SPECIFICATIONS FOR ACCEPTABLE ALTERNATE MANUFACTURERS.
3. INSTALL FAN SYSTEM COMPLETE PER MANUFACTURER'S INSTRUCTIONS.
4. MECHANICAL CONTRACTOR SHALL COORDINATE FAN OPERATION AND RELAYS REQUIRED WITH THE ELECTRICAL WORK.
5. PROVIDE LABEL FOR EACH PIECE OF MECHANICAL EQUIPMENT. COORDINATE LABEL NAMING CONVENTION WITH OWNER.

REMARKS:
A. STANDARD DISCONNECT. COORDINATE LOCATION WITH ELE RICAL CONTRACTOR.
B. PROVIDE ROUND WALL CAP.
C. INTEGRAL BACKDRAFT DAMPER.
D. FAN CONTROLLED BY TIME CLOCK TO RUN CONTINUOUSLY DURING HOURS OF OPERATION. REFER TO ELECTRICAL DRAWINGS.
E. FAN CONTROLLED BY WALL SWITCH. REFER TO ELECTRICAL DRAWINGS FOR LOCATION BY BAR. PROVIDE LABEL FOR SWITCH ON SWITCH PLATE.
F. FLEXIBLE CONNECTIONS AT DISCHARGE. DUCT CONNECTIONS TO MINIMIZE VIBRATION.

AIR DEVICE SCHEDULE

MARK	MANUFACTURER & MODEL #	SERVICE	MATERIAL	FACE TYPE	MOUNTING LOCATION	FACE SIZE	NECK SIZE	NOISE CRITERIA (NC)	NUMBER OF SLOTS	SLOT WIDTHS	NOTES
CD1	TITUS TMS	SUPPLY AIR	ALUMINUM	ROUND NECK	SURFACE	12"X12"	6	25	–	–	1,3,4,6,7
CD2	TITUS TMS	SUPPLY AIR	STEEL	ROUND NECK	SURFACE	12"X12"	6	25	–	–	1,3,4,6,7
CD3	TITUS TMS	SUPPLY AIR	STEEL	ROUND NECK	SURFACE	12"X12"	6	25	–	–	1,3,4,6,7
RAG	TITUS 350FL/FL	RETURN AIR	STEEL	SQUARE NECK	SURFACE	24X24	20	25	–	–	1,3,4,7,8

NOTES:
1. COORDINATE FRAME TYPE WITH CEILING MATERIALS. DUCT MOUNT WHERE SPIRAL DUCTWORK EXPOSED.
2. NOT ALL GRILLE AND DIFFUSERS SHOWN ARE NECESSARILY USED. REFER TO HVAC PLAN FOR LOCATION AND QUANTITY.
3. FOR SURFACE MOUNTED LAY-IN TYPE DIFFUSERS OR GRILLES PROVIDE TRIM RINGS. REFER TO ARCHITECTURAL DRAWINGS AND COORDINATE CEILING TYPES WITH AIR DEVICE MOUNTING STYLE.
4. WHERE BACK PAN OF DIFFUSER IS EXPOSED TO NON-CONDITIONED ATTIC TYPE SPACES, PROVIDE FACTORY R-6 FOIL BACKED INSULATION TO MINIMIZE CONDENSATION.
5. COORDINATE LOCATION OF GRILLES, REGISTERS AND DIFFUSERS WITH CEILING GRID, LIGHT LOCATIONS, STRUCTURAL MEMBERS AND ARCHITECTURAL FEATURES.
6. FINAL FINISH OF ALL AIR DEVICES SHALL BE VERIFIED WITH ARCHITECTS FINISH AND PAINTING SCHEDULE.
7. ACCEPTABLE ALTERNATE MANUFACTURERS: MARS & COOLLY, TRUAIRE, AND METALAIRE.
8. PROVIDE 1 INCH THICK 20X20 FILTER.

blue river ARCHITECTS
A Native American Owned Firm

SCOTT C. WEBB OKLAHOMA 28071 REGISTERED ARCHITECT 6-15-22

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

M101
TYPE 3 HVAC PLAN AND SCHEDULES

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OK COA #2349 • EXP 06/30/2022

BLUE RIVER PROJECT NUMBER
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SHEET NAME
TYPE 3 HVAC PLAN AND SCHEDULES

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M101

PIPE AND FITTINGS

	GATE VALVE
	GLOBE VALVE
	ANGLE GATE VALVE
	SOLENOID VALVE
	NON SLAM CHECK VALVE
	BUTTERFLY VALVE
	PLUG VALVE
	BALL VALVE
	TWO WAY CONTROL VALVE
	PRESSURE REGULATOR
	THREE WAY CONTROL VALVE
	PRESSURE REDUCING VALVE
	BUTTERFLY VALVE
	AUTOMATIC AIR VENT
	STRAINER, Y TYPE W/GATE VALVE OR HOSE BIBB
	FLEXIBLE CONNECTION
	JOINT
	EXPANSION JOINT
	FLOW METER
	FLOW DIRECTION
	ELBOW BASE
	ELBOW REDUCING
	UNION
	PRESSURE GAUGE WITH TRICOCK
	PRESSURE INDICATOR
	TEST PLUG
	TEMPERATURE INDICATOR
	FLOW SWITCH
	FLOW INDICATOR
	REDUCER, CONCENTRIC
	REDUCER, ECCENTRIC STRAIGHT CROWN
	REDUCER, ECCENTRIC EXHAUST INVERT
	AUTO FLOW BALANCING VALVE
	FLOOR DRAIN W/P-TRAP
	FLOOR CLEANOUT
	WALL CLEANOUT
	BACKFLOW PREVENTER
	LUBRICATED PLUG COCK
	HOSE BIBB W/VACUUM BREAKER
	CAPPED END
	SIDEWALL SPRINKLER HEAD
	PENDENT SPRINKLER HEAD
	UPRIGHT SPRINKLER HEAD
	SIAMESE FIRE DEPARTMENT CONNECTION
	ALARM CHECK VALVE
	DELUGE VALVE
	PIPE ENDAY BRACING
	PIPE ANCHOR SUPPORT
	BALANCING VALVE

ABBREVIATIONS

A	A		K	KW	KILOWATT
	ABV	ABOVE			
	ACCU	AIR COOLED CONDENSING UNIT	L	LAB	LABORATORY
	AC	ACETYLENE GAS		LAT	LEAVING AIR TEMPERATURE
	ACU	AIR CONDITIONING UNIT		LAV	LAVATORY
	AD	ACCESS DOOR		LB	POUND
	AF	AIR FILTER		LD	LINEAR DIFFUSER
	AFF	ABOVE FINISHED FLOOR		LDB	LEAVING DRY BULB
	AFH	AIR FILTER, HIGH EFFICIENCY		LF	LINEAR FEET
	AHU	AIR HANDLING UNIT		LFD	LAMINAR FLOW DIFFUSER
	APD	AIR PRESSURE DROP		LP	LIQUID PROPANE
	AR	ACID RESISTANT		LPS	LITERS PER SECOND
	ASSY	ASSEMBLY		LWB	LEAVING WET BULB
	AUX	AUXILIARY		LWT	LEAVING WATER TEMPERATURE
	AV	AUTOMATIC AIR VENT			
			M	MAU	MAKE-UP AIR UNIT
B	BDD	BACKDRAFT DAMPER		MAR	MARKER
	BHP	BRAKE HORSE POWER		MB	MIXING BOX/MIX BOX
	BP	BACKFLOW PREVENTER		MBH	THOUSAND BTU/HR
	BS	BAND SAWSEN		MD	MOP/WORLD SINK/FLR
				MECH	MECHANICAL
C	C	CONDENSATE		MIN	MINUTE/MINIMUM
	CL	CENTER LINE		MIN	MIN/MIN
	CD	CEILING DIFFUSER		MS	MOTOR STARTER
	CFM	CUBIC FEET PER MINUTE			
	CH	CHILLER	N	N	NITROGEN
	CHEM	CHEMICAL DRAIN		NC	NORMALLY CLOSED
	CHP	CHILLED WATER PUMP		NG	NATURAL GAS
	CLG	CEILING		NIC	NOT IN CONTRACT
	CO	CLEANOUT		NO	NUMBER
	CONC	CONCRETE		NOX	NITROGEN OXIDE
	CONN	CONNECTION		NTS	NOT TO SCALE
	CONT	CONTINUING/CONTINUATION/CONTINUOUS			
	COTG	CLEAN OUT TO GRADE	O	O	OXYGEN
	CU	CONDENSING UNIT/COOPER		OA	OUTSIDE AIR
	CV	CONSTANT VOLUME		OAL	OUTSIDE AIR LOUVER
	CW	COLD WATER		OBD	OPPOSED BLADE DAMPER
				OD	OUTSIDE DIA
D	DDC	DIRECT DIGITAL CONTROL		OF	OVERFLOW SCUPPER
	DG	DOOR GRILLE		OSHY	OUTSIDE SCREW & YOKE
	DIA	DIAMETER			
	DIM	DIMENSION	P	PD	PRESSURE DROP
	DMPR	DAMPER		POC	POINT OF CONNECTION
	DN	DOWN		PRESS	PRESSURE
	DPS	DIFFERENTIAL PRESSURE SWITCH		PRV	PRESSURE REDUCING VALVE
	DR	DRAIN		PSIG	POUNDS PER SQUARE INCH
	DSD	DUCT SMOKE DETECTOR		PVC	POLYVINYL CHLORIDE
	DSW	DISTILLED WATER			
	DWG	DRAWING	R	RA	RETURN AIR
				RAG	RETURN AIR GRILLE
E	EAT	ENTERING AIR TEMPERATURE		RAR	RETURN AIR REGISTER
	ED	EQUIPMENT DRAIN		RC	RAIN CONDUCTOR
	EDB	ENTERING DRY BULB		RD	ROOF DRAIN
	EER	ENERGY EFFICIENCY RATIO		REF	REFRIGERANT
	EF	EXHAUST FAN		RF	RETURN FAN
	EFF	EFFICIENCY		RL	RAIN LEADER
	EG	EXHAUST GRILLE		RM	ROOM
	EL	ELEVATION		RTH	RETURN
	ELEC	ELECTRICAL			
	ENT	ENTERING	S	SA	SUPPLY AIR
	ER	EXHAUST REGISTER		SAG	SUPPLY AIR GRILLE
	EWB	ENTERING WET BULB		SAN	SANITARY
	EWC	ELECTRIC WATER COOLER		SAR	SUPPLY AIR REGISTER
	EWT	ENTERING WATER TEMPERATURE		SD	SMOKE DAMPER
	EXH	EXHAUST		SD/FD	COMB. SMOKE DAMPER/FIRE DAMP.
	EWB	EYE WASH/SHOWER STATION		SF	SUPPLY FAN
				SH	SHEET
F	FCO	FLOOR CLEANOUT		SP	STATIC PRESSURE
	FD	FIRE DAMPER/FLOOR DRAIN		SQ FT	SQUARE FEET
	FH	FUMEHOOD		SST	STAINLESS STEEL
	FL	FLOOR			
	FLEX	FLEXIBLE	T	TCU	TERMINAL CONTROL UNIT
	FOR	FUEL OIL RETURN		TEMP	TEMPERATURE
	FOS	FUEL OIL SUPPLY		TG	TRANSFER GRILLE
	FP	FIRE PUMP		TP	TRAP PRIMER
	FR	FIRE PER AVOI		TYP	TYPICAL
	FPM	FEET PER MINUTE			
	FT	FEET	U	UC	UNDERCUT
	FV	FACE VELOCITY			
			V	V	VENT
G	GA	GAUGE		VAV	VARIABLE AIR VOLUME
	GV	GRAVITY INTAKE VENTILATOR		VD	VOLUME DAMPER
	GND	GROUND		VEL	VELOCITY
	GPM	GALLONS PER MINUTE		VERT	VERTICAL
	GRV	GRAVITY RELIEF VENTILATOR		VFD	VARIABLE FREQUENCY DRIVE
				VSD	VARIABLE SPEED DRIVE
H	HB	HOSE BIBB		VTR	VENT THRU ROOF
	HORIZ	HORIZONTAL			
	HP	HORSE POWER/HEAT PUMP	W	W	WITH
	HTG	HEATING		WOB	WITHOUT
	HUMID	HUMIDISTAT		WCO	WALL CLEANOUT
	HWS	HOT WATER SUPPLY		WC	WATER COLUMN
	HWB	HOT WATER BOILER		WH	WALL HYDRANT
	HWP	HOT WATER PUMP		WHA	WATER HAMMER ARRESTORS
	HWR	HOT WATER RETURN		WR	WATER RISER
				WTR	WATER
I	ID	INSIDE DIAMETER			
	IN	INCHES			
	INV EL	INVERT ELEVATION			

DOMESTIC WATER GENERAL NOTES:

1. CUTOFF VALVES AND STOPS SHALL BE PROVIDED WHERE SHOWN ON DRAWINGS AND AT FIXTURE CONNECTIONS.

2. TEST ALL WATER SYSTEM IN PRESENCE OF OWNERS REPRESENTATIVE AT MIN. 100 PSIG FOR 8 HOURS, SANITARY, WASTES, AND VENTS SHALL BE TESTED WITH 10' HEAD OF WATER FOR 8 HOURS WITH LEVEL OF WATER REMAIN UNCHANGED.

3. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.

4. INSTALL ALL WATER PIPING SYSTEMS SO THAT THEY WILL NOT BE SUBJECT TO ANY UNDUE STRAINS OR STRESSES. PROVISIONS SHALL BE MADE FOR EXPANSION, CONTRACTION AND STRUCTURAL SETTLEMENT.

5. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOOR CEILING ASSEMBLY SHALL BE INSTALLED AND SEALED TO MAINTAIN FIRE RATING WITH U.L. LISTED ASSEMBLIES, MATERIALS AND SEALANTS.

6. BELOW GROUND PIPE SHALL BE INSTALLED NO LESS THAN 6" BELOW FROST LINE, REFER TO STRUCTURAL DETAILS FOR FOUNDATION PENETRATION.

7. DRAWING IS DIAGRAMMATIC IN NATURE AND IS NOT INTENDED TO BE SCALED FOR DIMENSIONS.

8. COORDINATE LOCATION OF PLUMBING WORK WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES.

9. ALL TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR, WITHOUT EXTRA COST FOR THE OWNER.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A WATER FLOW AND PRESSURE TEST FOR EVALUATING INCOMING DOMESTIC AND FIRE PROTECTION SERVICE PRESSURES.

11. WHERE STREET WATER MAIN PRESSURES FLUCTUATE, THE BUILDING WATER DISTRIBUTION SYSTEM SHALL BE DESIGNED FOR MINIMUM PRESSURE AVAILABLE. WHEREVER WATER PRESSURE FROM THE STREET MAIN OR OTHER SOURCE OF SUPPLY IS LESS THAN 65 PSI, A WATER PRESSURE BOOSTER SYSTEM SHALL BE INSTALLED ON THE BUILDING WATER SUPPLY SYSTEM. WHERE WATER PRESSURE WITHIN A BUILDING EXCEEDS 80 PSI STATIC, AN APPROVED WATER PRESSURE REDUCING VALVE WITH STRAINER CONFORMING TO ASSE 1003 SHALL BE INSTALLED TO REDUCE THE PRESSURES TO BELOW 80 PSI.

PIPE LINES

——— A ———	POTABLE COLD WATER
——— — ———	POTABLE HOT WATER
——— — ———	POTABLE HOT WATER RETURN
— — — — —	VENT

PIPE TAGS

XX" CW	POTABLE COLD WATER
XX" HW	POTABLE HOT WATER
XX" HWR	POTABLE HOT WATER RETURN
XX"V	VENT
XX" CA	COMPRESSED AIR
XX" SS	SANITARY SEWER
XX" OW	OIL/WASTE WATER
XX" G	NATURAL GAS
XX" VTR	VENT THROUGH ROOF

SANITARY SEWER GENERAL NOTES:

1. PROVIDE CLEANOUTS AT LOCATIONS AND WITH CLEARANCES AS REQUIRED BY THE CODE NOT EXCEEDING 80 FEET IN HORIZONTAL RUNS AT EACH CHANGE OF DIRECTION, VERTICAL OR HORIZONTAL GREATER THAN 45°, AT THE BASE OF EACH WASTE OR VENT STACK, 5 FEET AFF. PROVIDE WALL CLEANOUTS IN LIEU OF FLOOR CLEANOUTS WHEREVER POSSIBLE. ALL INTERIOR CLEANOUTS SHALL BE ACCESSIBLE FROM WALLS OR FLOORS.

2. THE FLOOR DRAIN IN TOILETS AND MECHANICAL ROOMS SHALL BE PROVIDED WITH BACKWATER VALVES.

3. MAINTAIN MINIMUM OF 10 FEET CLEARANCE BETWEEN ANY VTR AND OUTSIDE AIR INTAKES. WHERE HORIZONTAL CLEARANCE CANNOT BE PROVIDED, EXTEND VENTS A MIN OF 24" ABOVE EACH OUTSIDE AIR INTAKE.

4. VERIFY ROOF PENETRATIONS, WATER PROOFING AND FLASHINGS SHALL BE PROVIDED BY ROOF CONTRACTOR.

5. ALL TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR. TEST ALL SEWER AND VENT SYSTEMS IN PRESENCE OF OWNERS REPRESENTATIVE.

6. INVERT ELEVATION SHOWN BASED ON 1000 FT, FF ELEVATION. REFER TO CIVIL DRAWINGS FOR ACTUAL ELEVATIONS.

7. SEWER PIPE SHALL BE INSTALLED NO LESS THAN 6" BELOW THE FROST LINE.

NOTE:
THIS IS A STANDARD SYMBOLS & ABBREVIATIONS SHEET, THEREFORE, SOME SYMBOLS & ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT ON THE PLANS.

blue river ARCHITECTS
A Native American Owned Firm

SCOTT C. WEBB 19011 6-15-22 REGISTERED PROFESSIONAL ENGINEER OKLAHOMA

CHEROKEE NATION HOUSING DEVELOPMENT - TYPE 3

P001 PLUMBING NOTES

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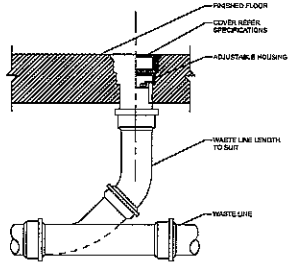
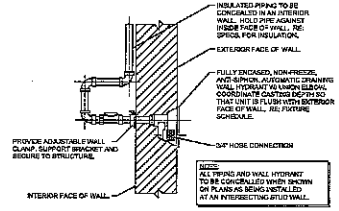
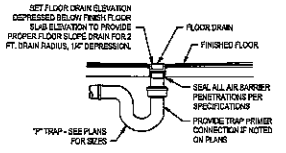
P001



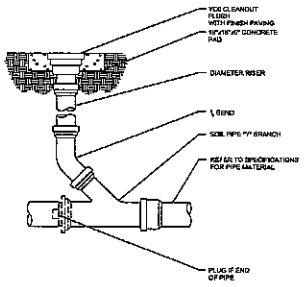
5 FLOOR CLEAN-OUT (FCO)
NTS



4 FREEZE PROOF WALL HYDRANT (FPWH)
NTS



5 FLOOR DRAIN DETAIL
NO SCALE



6 YARD CLEAN-OUT (YCO)
NTS

PLUMBING FIXTURE SCHEDULE

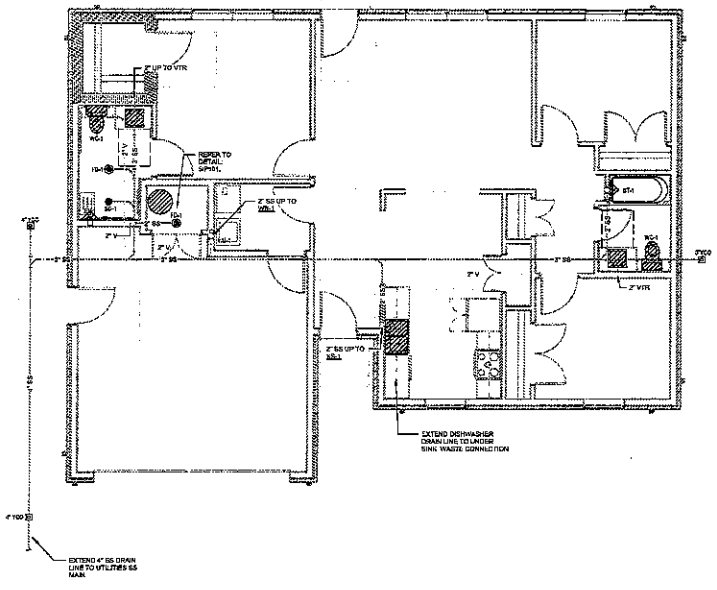
MARK	UNIT TYPE	BRANCH SIZE (MIN) WASTE	VENT	CW	HW	MANUFACTURER & MODEL	FAUCET/TRIM	DESCRIPTION
SV-1	SHOWER VALVE	2"	2"	1/2"	1/2"	AMERICAN STANDARD 8475005.	(1)3610.002 RELIANT 3 BATH/SHOWER TRIM	FLUSH ROUGH VALVE BODY
FD-1	FLOOR DRAIN	2"	1 1/2"			JAY R. SMITH 2005Q		FLOOR DRAIN SQUARE
FP/WH-1	WALL HYDRANT			1/2"		WOODFORD 26F		FREEZELESS WALL HYDRANT
IVB-1	ICE MAKER BOX	1"	1"	1/2"	1/2"	SIOUX CHIEF 696-STRMP		DOUBLE HOSE BIBB OUTLET CONNECTION OUTLET BOX WITH DRAIN BOX
KS-1	KITCHEN SINK	2"	1 1/2"	1/2"	1/2"	AMERICAN STANDARD 3209.8.0332/20CY.S/293	AMERICAN STANDARD 4175.300.FIS	COLONY 15 x 25 ADA DOUBLE BOWL STAINLESS STEEL KITCHEN SINK KIT
LAV-1	DROP IN	2"	1 1/2"	1/2"	1/2"	AMERICAN STANDARD 0476.028.020	AMERICAN STANDARD 7074.020	AQUALYN DROP IN SINK WITH BOUS CHINA
SD-1	SHOWER DRAIN	2"	1 1/2"			JAY R. SMITH 210		
SHV-1	SHOWER VALVE	0"	0"	1/2"	1/2"	AMERICAN STANDARD Ru#855	TU555.20.FSH SHOWER TRIM	FLUSH ROUGH VALVE BODY
WB-1	WASHER WALL BOX	3"	1 1/2"	1/2"	1/2"	SIOUX CHIEF 696		1/4" COMPRESSION OUTLET CONNECTION OUTLET BOX
WC-1	TANK TYPE RIGHT FLUSH	3"	2"	3/4"		AMERICAN STANDARD 2514AA.004		1/2" COMPRESSION OUTLET CONNECTION/OUTLET BOX WITH DRAIN BOX CONSULT 18 TOILET WITH ARK AND SEAT HYDRAPRO MODEL #PHPTSSSC
SYCO	YARD CLEAN-OUT	3"				ZURN Z1469		CAST IRON FERRULE AND PLUG, DURA-COATED CAST IRON, DOUBLE-FLANGED HOUSING, AND EXTRA HEAVY DUTY SCORIATED CAST IRON COVER WITH LIFTING DEVICE, VANDAL-PROOF SCREWS.
4" YCO	YARD CLEAN-OUT	4"				ZURN Z1469		CAST IRON FERRULE AND PLUG, DURA-COATED CAST IRON, DOUBLE-FLANGED HOUSING, AND EXTRA HEAVY DUTY SCORIATED CAST IRON COVER WITH LIFTING DEVICE, VANDAL-PROOF SCREWS.

NOTES:
1. CONTRACTOR TO COORDINATE FINAL SELECTIONS OF ALL PLUMBING FIXTURES WITH OWNER PRIOR TO ORDERING.
2. NOT USED.

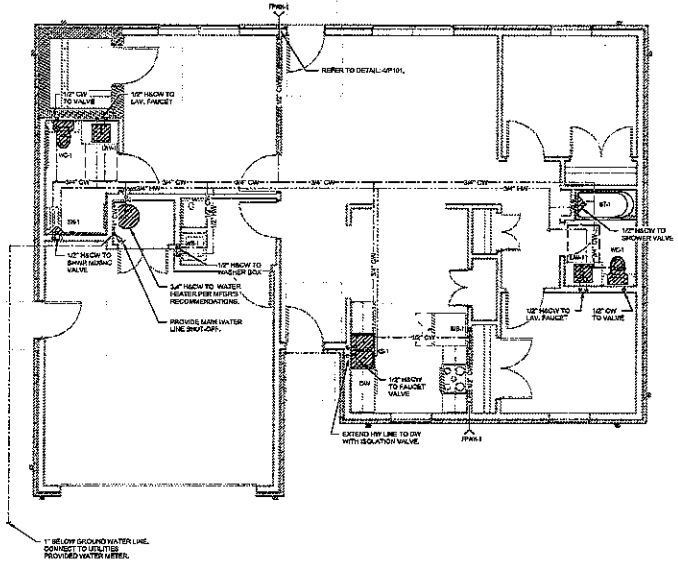
WATER HEATER SCHEDULE

MARK	SERVICE	MANUFACTURER & MODEL	TANK VOLUME	WATTS	RECOVERY GPH @90 RISE	VOLTAGE	FREQUENCY	PHASE	WEIGHT	NOTES
WH-1	HOT WATER	A.O. SMITH EN50-HJE	50.0 gal	4,500	29	120 V	60 Hz	1	150 lb	1,2,3,4,5

NOTES
1. WH-1 ELECTRIC WATER HEATER INSTALL PER MANUFACTURERS RECOMMENDATIONS. PROVIDE ALL CODE REQUIRED SAFETY DEVICES.
2. PROVIDE CIRCULATION PUMP AS REQUIRED PER CODE.
3. PROVIDE OVERFLOW PAN GATEY MODEL 34172.
4. PROVIDE EXPANSION TANK, EACH SIZED PER MANUFACTURE'S RECOMMENDATION.
5. ROUTE PRESSURE RELIEF TO NEAREST FLOOR DRAIN WITH CODE APPROVED AIR GAP.



1 FIRST FLOOR SANITARY PLAN
1/4" = 1'-0"



2 FIRST FLOOR DOMESTIC WATER PLAN
1/4" = 1'-0"

blue river ARCHITECTS
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SCOTT G. WEBB 10017 OKLAHOMA REGISTERED ARCHITECT

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