

SPECIAL INSPECTIONS	
STRUCTURAL SPECIAL INSPECTIONS ARE REQUIRED PER SECTION 1705 OF THE 2021 ARKANSAS FIRE PREVENTION CODE. REFER TO SHEETS S12 AND S13 FOR THE FOLLOWING INFORMATION REGARDING THE REQUIREMENTS OF SPECIAL INSPECTIONS:	
1.	THE MATERIALS, SYSTEMS, COMPONENTS AND WORK REQUIRED TO HAVE SPECIAL INSPECTION OR TESTING BY THE BUILDING OFFICIAL OR BY THE REGISTERED DESIGN PROFESSIONAL RESPONSIBLE FOR EACH PORTION OF THE WORK.
2.	THE TYPE AND EXTENT OF EACH SPECIAL INSPECTION.
3.	THE TYPE AND EXTENT OF EACH TEST.
4.	ADDITIONAL REQUIREMENTS FOR SPECIAL INSPECTION OR TESTING FOR WIND OR SEISMIC RESISTANCE AS SPECIFIED IN SECTIONS 1705.10, 1705.11 AND 1705.12, (WHEN APPLICABLE) FOR EACH TYPE OF SPECIAL INSPECTION, IDENTIFICATION AS TO WHETHER IS WILL BE CONTINUOUS SPECIAL INSPECTION OR PERIODIC SPECIAL INSPECTION.

JLA ENGINEERS INC. DOES NOT PERFORM SPECIAL INSPECTIONS.

7 SPECIAL INSPECTIONS

1/8" = 1'-0"

FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F2.5	2'-6"xSQ.x14" T.	(3)-#5 EA. WAY BOTTOM
F3	3'-0"xSQ.x14" T.	(3)-#5 EA. WAY BOTTOM
F3.5	3'-6"xSQ.x14" T.	(4)-#5 EA. WAY BOTTOM
F4	4'-0"xSQ.x14" T.	(4)-#5 EA. WAY BOTTOM
F4.5	4'-6"xSQ.x14" T.	(5)-#5 EA. WAY BOTTOM
F4.5A	4'-6"xSQ.x16" T.	(6)-#5 EA. WAY T. & B.
F5	5'-0"xSQ.x14" T.	(5)-#5 EA. WAY BOTTOM
F5.5	5'-6"xSQ.x14" T.	(6)-#5 EA. WAY BOTTOM
F5.25	5'-3"xSQ.x14" T.	(6)-#5 EA. WAY BOTTOM
F5A	5'-0"xSQ.x16" T.	(6)-#5 EA. WAY T. & B.
F5B	5'-0"xSQ.x28" T.	(10)-#5 EA. WAY T. & B.
F6	6'-0"xSQ.x14" T.	(6)-#5 EA. WAY BOTTOM
F6.75	6'-9"xSQ.x18" T.	(7)-#6 EA. WAY T. & B.
WF2	2'-0"xCONT.x14" T.	(3)-#5 CONT. BOTT.; #4 AT 48" O.C. BOTT. TRANS.
WF5.75	5'-9"xCONT.x22" T.	(8)-#6 CONT. T.&B.; #5 AT 24" O.C. TRANS. T.&B.
WF6	6'-0"xCONT.x28" T.	(8)-#7 CONT. T.&B.; #5 AT 24" O.C. TRANS. T.&B.
WF7	7'-0"xCONT.x28" T.	(8)-#7 CONT. T.&B.; #5 AT 24" O.C. TRANS. T.&B.

COLUMN SCHEDULE				
MARK	SIZE	BASE PLATE	BASE PLATE TYPE (SEE DTL. 1054 U.N.O.)	ANCHOR BOLTS
C4	H554x4x1/4	10"x3/4"x0'-10"	TYPE 1	(4)-3/4" DIA. x 9" EMBED
C4A	H554x4x5/16	10"x3/4"x1'-5"	TYPE 2	(6)-3/4" DIA. x 12" EMBED (W ANCHOR PLATES)
C5	H555x5x1/4	11"x3/4"x0'-11"	TYPE 1	(4)-3/4" DIA. x 9" EMBED
C5A	H555x5x5/16	12"x1'x1'-8"	TYPE 3	(6)-1" DIA. x 15" EMBED (W ANCHOR PLATES)
C5B	H555x5x1/4	12"x1'x1'-8"	TYPE 3	(6)-1" DIA. x 15" EMBED (W ANCHOR PLATES)
C6	H556x6x1/4	12"x3/4"x1'-0"	TYPE 1	(4)-3/4" DIA. x 9" EMBED
C6A	H556x6x5/16	12"x7/8"x1'-0"	TYPE 1	(4)-3/4" DIA. x 9" EMBED
C6C	H556x6x1/4	13"x1'x1'-0"	TYPE 4	(6)-1" DIA. x 14" EMBED (W ANCHOR PLATES)
C6D	H556x6x5/16	15"x1 1/2"x2'-1"	TYPE 5	(6)-1 1/2" DIA. x 22" EMBED (W ANCHOR PLATES)
C6E	H556x6x1/4	15"x1 1/2"x2'-1"	TYPE 5	(6)-1 1/2" DIA. x 22" EMBED (W ANCHOR PLATES)
P5	H555.000x0.312	12"x3/4"x1'-0"	TYPE 1	(4)-3/4" DIA. x 12" EMBED

STRUCTURAL NOTES

- ALL ELEVATIONS ARE GIVEN WITH REFERENCE TO FINISH FLOOR DATUM 100'-0".
- ALL STRUCTURAL SELECT FILL WITHIN THE BUILDING FOOTPRINT, SHALL BE APPROVED MATERIAL PLACED IN 9" LOOSE LIFTS AND COMPACTED TO 98% OF THE MAXIMUM DRY DENSITY PER STANDARD PROCTOR TEST (ASTM D-698). BASE COURSE MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY PER MODIFIED PROCTOR (ASTM D-1557). FLOWABLE FILL, IF USED TO BACKFILL FOUNDATION TRENCH OVER EXCAVATIONS, (WHERE APPROPRIATE), SHOULD HAVE A MINIMUM COMPRESSIVE STRENGTH OF 400 PSI AND BE TESTED FOR COMPRESSIVE STRENGTH EACH DAY OF PLACEMENT.
- FOOTINGS ARE TO BEAR DIRECTLY ON TESTED AND APPROVED, NATIVE, STIFF TO VERY STIFF LEAN CLAYS (PORTION OF STRATUM II), AND/OR NEW SELECT FILL PLACED AND COMPACTED UPON TESTED AND APPROVED NATIVE SOILS. ALL EXCAVATIONS SHALL BE CLEAN CUT AND SQUARE.
- FOOTING ELEVATIONS NOTED ARE FOR BIDDING PURPOSES AND SHALL BE LOWERED AS NECESSARY TO REACH THE SPECIFIED BEARING STRATA AND COVER.
- THE FOUNDATION IS DESIGNED FOR A BEARING CAPACITY OF 2000 PSF FOR CONTINUOUS FOOTINGS AND 2500 PSF FOR ISOLATED COLUMN FOOTINGS BASED ON GEOTECHNICAL REPORT DATED MAY 18, 2026 BY GTS, INC. PROVIDE 18" MIN. FROM FINISH GRADE OR PAVING TO BOTTOM OF FOOTING AT EXTERIOR CONDITIONS. FOOTING EXCAVATIONS SHALL BE APPROVED BY OWNER'S GEOTECHNICAL CONSULTANT PRIOR TO PLACING RE-BAR.
- CONCRETE SHALL HAVE A 28 DAY STRENGTH. MAXIMUM SLUMP AND MAXIMUM AGGREGATE SIZE AS FOLLOWS:

FOOTINGS AND STEMWALLS:	3000 PSI - 6" SLUMP - 1 1/2" AGG.
INTERIOR SLAB:	3000 PSI - 4" SLUMP - 1" AGG.
EXTERIOR SLAB:	3500 PSI - 4" SLUMP - 1" AGG.
ELEVATED DECK:	3000 PSI - 4" SLUMP - 3/4" AGG.

ALL CONCRETE EXPOSED TO FREEZE/THAW SHALL HAVE APPROX. 5% AIR ENTRAINMENT. REINF. STEEL SHALL CONFORM TO GRADE 60 ASTM A-615. LAP ALL CONCRETE REINFORCING 44 BAR DIAMETERS, 12" MINIMUM, UNLESS NOTED OTHERWISE. LAP ALL UNDER-SLAB VAPOR BARRIER SHEETS A MINIMUM OF 6" AT ALL SPICES.

- VERIFY ALL DIMENSIONS, SLOPES, DEPRESSIONS, EMBEDMENTS ETC. BEFORE PLACING CONCRETE.
- PROVIDE SLAB CONTROL JOINTS (CJ) WHERE INDICATED ON PLAN. C.J.'s SHALL BE APPROX. 1/4 OF THE SLAB DEPTH AND SHALL BE ONE OF THE FOLLOWING:

A. SAWCUT AS SOON AS POSSIBLE (WITHIN 12 HOURS OF POUR).
B. ZIP CAP TYPE JOINT FORMER.
C. TOOLED JOINTS FOR EXTERIOR SLAB.

CONST. JOINTS W/ 3/8"x4 1/2"x4 1/2" PNA DIAMOND DOWELS AT 18" O.C. MAY BE SUBSTITUTED FOR ANY CONTROL JOINT AND SHALL BE USED WHERE INDICATED ON THE PLAN.

- STRUCTURAL STEEL SHALL MEET THE FOLLOWING CRITERIA:

WIDE FLANGE SHAPES:	ASTM A-992, 50 KSI
SHAPES, BARS AND PLATES:	ASTM A-36, 36 KSI
STRUCTURAL PIPE (HSS):	ASTM A-500, 42 KSI
STRUCTURAL TUBING (HSS):	ASTM A-500, 46 KSI

ALL BOLTED STEEL CONNECTIONS SHALL BE MADE USING ASTM A-325N H.S. BOLTS UNLESS NOTED OTHERWISE. CONCRETE ANCHOR BOLTS SHALL BE F1554 (GR. 36) UNLESS NOTED OTHERWISE. WELDING SHALL MEET LATEST AWS CODE. E70 ELECTRODES. GROUT BENEATH COLUMN BASE PLATES SHALL BE NON-METALLIC MEETING ASTM C-827, 5000 PSI AT 28 DAYS.

- OPEN WEB JOISTS:
DESIGN, FABRICATION AND ERECTION OF STEEL JOISTS SHALL CONFORM WITH THE LATEST EDITION OF THE STEEL JOIST INSTITUTE SPECIFICATION.
USE "SPECIAL" JOISTS AT ROOF TOP UNITS AND OTHER LOCATIONS WHERE ADDITIONAL LOADS ARE SHOWN ON THE FRAMING PLAN. REFER TO FRAMING PLAN FOR WEIGHTS AND LOCATIONS. ROOF TOP UNIT WEIGHTS AND WEIGHTS NOTED ON FRAMING PLAN MUST BE ADDED TO THE TOTAL LOAD ON THE JOISTS. COORDINATE WITH MECHANICAL AND ARCH. DRAWINGS. WELD EACH JOIST TO BEAM, JOIST GIRDER OR WELD PLATE WITH A 1/8" FILLET WELD EACH SIDE OF JOIST. WELD LENGTH SHALL BE A MINIMUM OF 2" UNLESS NOTED OTHERWISE.
USE BRIDGING AS INDICATED ON THE DRAWINGS OR AS REQUIRED BY THE STEEL JOIST INSTITUTE.
CONTINUE ALL BRIDGING TO ROLLED STEEL SHAPES AND/OR WALLS WHICH ARE PARALLEL TO THE JOISTS AND ANCHOR IN ACCORDANCE WITH STEEL JOIST INSTITUTE SPECIFICATIONS. ALL BRIDGING SHALL BE SECURED TO TOP AND BOTTOM OF ALL JOISTS AND BEAMS AND SHALL BE IN ACCORDANCE WITH STEEL JOIST INSTITUTE SPECIFICATIONS. JOISTS SHALL BEAR 4" MINIMUM ON MASONRY AND 2-1/2" MINIMUM ON STEEL. PROVIDE ANCHORAGE AT MASONRY BEARING IN ACCORDANCE WITH STEEL JOIST INSTITUTE SPECIFICATIONS. JOIST MANUFACTURER MUST CHECK ROOF JOISTS AND JOIST GIRDERS FOR A 20 PSF NET UPLIFT PRESSURE (30 PSF AT 14 FOOT WIDE ZONE AT ROOF PERIMETER), AND PROVIDE BRIDGING AND BOTTOM CHORD EXTENSIONS AS REQUIRED TO ADEQUATELY BRACE THE BOTTOM CHORDS AGAINST LATERAL MOVEMENT.

- ALL CONCRETE MASONRY UNITS SHALL BE ASTM C-90 GRADE N LIGHT WT. ABOVE FLOOR SLAB, NORMAL WT. BELOW. COMPRESSION STRENGTH, F_m, SHALL BE 1500 PSI. CMU MORTAR SHALL BE ASTM TYPE S WITH A MINIMUM COMPRESSION STRENGTH OF 1800 PSI. CMU GROUT SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 2000 PSI AT 28 DAYS. CMU REINFORCING SPLICES SHALL BE LAPPED 48 BAR DIA. UNLESS NOTED OTHERWISE. GROUT ALL CELLS THAT CONTAIN REINF. AND GROUT SOLID BELOW F.F.E. PROVIDE HORIZ. REINF. AT 16" O.C. (8" O.C. BELOW GRADE). SPECIAL INSPECTIONS SHALL BE PROVIDED FOR ALL CMU CONSTRUCTION PER THE 2021 AFPC, CHAPTER 17 (SECTION 1705.4).

STRUCTURAL NOTES CONT.

- ALL COLD-FORMED STEEL FRAMING SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" BY THE AMERICAN IRON AND STEEL INSTITUTE. STEEL FOR 14 AND 16 GAGE STUDS SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI, STEEL FOR ALL 18 AND 20 GAGE STUDS, JOISTS, AND FOR ALL GAGE TRACK, ACCESSORIES AND BRIDGING SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI. STEEL SHALL BE GALVANIZED WITH A MINIMUM G-60 COATING.

ALL STUDS SHALL BE SECURELY SEATED FOR FULL END BEARING ON TOP AND BOTTOM TRACK. UNLESS NOTED OTHERWISE, PROVIDE DOUBLE STUDS AT ALL JAMBS, CORNERS AND INTERSECTIONS. BRIDGING SHALL BE INSTALLED PER RECOMMENDATIONS WITH THE FOLLOWING MINIMUM REQUIREMENTS: PROVIDE BRIDGING AT MID-HEIGHT FOR WALLS LESS THAN OR EQUAL TO 10'-0" HIGH, AND AND 4'-0" O.C. MAXIMUM FOR WALLS GREATER THAN 10'-0" HIGH. IN ADDITION, BRIDGING SHALL BE PROVIDED AT ROOF LINES AND ELSEWHERE AS NOTED ON THE DRAWINGS. SOLID BLOCKING SHALL BE INSTALLED IN LIEU OF BRIDGING WHERE NOTED ON THE DRAWINGS.

- STEEL DECKING:
ROOF DECK SHALL BE 1 1/2" x 22 GAGE TYPE B PAINTED. CONNECT TO ALL SUPPORTS W/ 5/8" DIA. PUDDLE WELDS AT 6" O.C. (6" O.C. AT ALL BOUNDARY ANGLES) (3/6"7 PATTERN). CONNECT SIDELAPS W/ (3)-#10 TEKs PER SPAN.

ELEVATED SECOND FLOOR DECK SHALL BE 1"x24 GAGE PAINTED FORM DECK. CONNECT TO ALL SUPPORTS W/ 3/8" WELDS AND WASHERS OR APPROVED MECHANICAL FASTENERS AT 11" O.C. (33/4 PATTERN). CONNECT SIDELAPS W/ (2)-#10 TEKs PER SPAN.

- ROOF AND SECOND FLOOR JOIST DEFLECTION LIMITS:
ROOF LIVE LOAD DEFLECTION LIMIT: U/360
ROOF TOTAL LOAD DEFLECTION LIMIT: U/240

SECOND FLOOR LIVE LOAD DEFLECTION LIMIT: U/480
SECOND FLOOR TOTAL LOAD DEFLECTION LIMIT: U/360

- SIMPSON STRONG-TIE PRODUCTS AND HILTI PRODUCTS (OR EQUIVALENT EQUALS) SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

DESIGN CRITERIA	2021 ARKANSAS FIRE PREVENTION CODE
ROOF LIVE LOAD:	22 PSF
ROOF DEAD LOAD:	30 PSF
SECOND FLOOR LIVE LOAD:	80 PSF
SECOND FLOOR DEAD LOAD:	64 PSF
MAIN ENTRY CANOPY ROOF DEAD LOAD:	30 PSF
MAIN ENTRY CANOPY ROOF LIVE LOAD:	40 PSF
RAIN LOAD	
15 - MINUTE INTENSITY:	6.1 IN./H
60 - MINUTE INTENSITY:	3.22 IN./H
SNOW LOAD	
GROUND SNOW LOAD, P _g :	20 PSF
FLAT ROOF SNOW LOAD, P _f :	14 PSF
SNOW EXPOSURE FACTOR, C _e :	1.0
SNOW LOAD IMPORTANCE FACTOR, I _s :	1.0
THERMAL FACTOR, C _t :	1.0
DESIGN SNOW LOAD:	22 PSF
WIND LOAD	
DESIGN WIND SPEED, V _{ult} :	106 MPH
DESIGN WIND SPEED, V _{asd} :	90 MPH
RISK CATEGORY:	II
WIND EXPOSURE CATEGORY:	C
INTERNAL PRESSURE COEFF.:	+0.18, -0.18
COMPONENTS & CLADDING (UNFACTORED):	
WALL PRESSURE (10 square feet)	
ZONE 4:	28.1 PSF
ZONE 5:	34.6 PSF
WALL PRESSURE (100 square feet)	
ZONE 4:	24.3 PSF
ZONE 5:	26.9 PSF
SEISMIC LOAD	
RISK CATEGORY:	II
IMPORTANCE FACTOR, I _e :	1.00
MAPPED SPECTRAL RESPONSE COEFF.:	S _a =0.160, S ₁ =0.087
DESIGN SPECTRAL RESPONSE COEFF.:	S _{ds} =0.139, S _{d1} =0.087
SITE CLASS:	C
DESIGN CATEGORY:	B
BASIC SEISMIC FORCE RESISTING SYSTEM:	STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC
DESIGN BASE SHEAR:	V=0.0462W
SEISMIC RESPONSE COEFF., C:	0.0462
RESPONSE MODIFICATION COEFF., R:	3.0
ANALYSIS PROCEDURE:	EQUIV. LATERAL FORCE

THIS DESIGN COMPLIES WITH THE ARKANSAS SEISMIC STANDARDS.



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FOR PERMIT & CONSTRUCTION

Revision Schedule	
Rev. #	Date

NEW Arcare MEDICAL OFFICE BUILDING
2709 Massard Rd
FT. SMITH, AR 72903

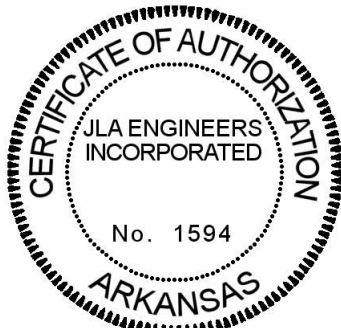
Arcare
117 S. 2ND ST.
AUGUSTA, AR 72006

DATE 06/15/26	DRAWN BY LCG
PROJECT # 2517	CHECKED BY LCG

SHEET
S0

STRUCT. NOTES AND DTLs.

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