

- STRUCTURAL GENERAL NOTES:**
- DESIGN AND CONSTRUCTION SHALL CONFORM TO THE INTERIM BUILDING CODE, 2000 EDITION, AS AMENDED AND ADOPTED BY THE CITY OF WICHITA, KANSAS.
 - DESIGN CRITERIA AND LOADS: ROOF LIVE LOAD - 20 PSF WITH CODE PROVISIONS FOR SNOW DRIFTING (GROUND SNOW $P_g = 20$ PSF); BUILDING SLAB ON GRADE LIVE LOAD = 150 PSF; BASIC WIND SPEED - 90 MPH, EXPOSURE B WITH IMPORTANCE FACTOR = 1.0; SEISMIC USE GROUP - I; SEISMIC DESIGN CATEGORY - A; SEISMIC SITE CLASS - D; SEISMIC IMPORTANCE FACTOR - 1.0.
 - THE TOTAL LOAD SOIL BEARING PRESSURE DOES NOT EXCEED 2000 PSF FOR ALL WALL AND COLUMN SPREAD FOOTINGS BEARING INTO UNDISTURBED NON-ORGANIC SOILS OR INTO ENGINEERED CONTROLLED FILL. THE CONTRACTOR SHALL PROVIDE SOIL TESTING SERVICES TO CONFIRM SOIL CONDITIONS/BEARING VALUES AND PROVIDE WRITTEN VERIFICATION TO THE ARCHITECT/ENGINEER. ALL PERIMETER AND EXTERIOR FOOTINGS SHALL EXTEND AT LEAST 3'-6" BELOW FINAL ADJACENT GRADE. IF ACTUAL SITE CONDITIONS DO NOT SATISFY THESE REQUIREMENTS COORDINATE ADJUSTMENTS WITH THE ARCHITECT/ENGINEER.
 - SURFACE WATER SHALL NOT BE ALLOWED TO STAND ADJACENT TO OR DRAIN TOWARDS THE FOUNDATION UNDER ANY CIRCUMSTANCES. PAVEMENTS OR GRADED SOIL AT THE PERIMETER OF THE BUILDING, EXCEPT AS REQUIRED AT EXITS OR AS NOTED, SHALL BE SLOPED AWAY AT 1/2 INCHES PER FOOT MINIMUM FOR THE FIRST 10 FEET.
 - FOOTINGS MAY BE POURED TO NEAT LINES OF EXCAVATIONS PROVIDING VERTICAL LINES OF EXCAVATIONS CAN BE MAINTAINED DURING CONCRETE PLACEMENT.
 - BEAMS, COLUMNS, WALLS AND FOOTINGS CENTERED UNDER SUPPORTING MEMBERS (TYPICAL UNLESS NOTED).
 - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" (VERIFY WITH THE ARCHITECT/OWNERS REPRESENTATIVE.)
 - NO ALUMINUM SHALL BE EMBEDDED IN ANY CONCRETE.
 - ALL STRUCTURAL REGULAR WEIGHT CAST-IN-PLACE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS (TYPICAL UNLESS NOTED). ALL CONCRETE SHALL BE IN CONFORMANCE WITH THE LATEST A.C.I. 301 STANDARDS PUBLICATION.
 - ALL REINFORCING BARS SHALL MEET ASTM A615 GRADE 60. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE 3/4" CLEAR FOR SLABS, 2" CLEAR FOR FORMED SURFACES AND 3" CLEAR FOOTINGS (TYPICAL UNLESS NOTED).
 - REINFORCING BARS QUANTITIES SHOWN ARE FOR ESTIMATING PURPOSES ONLY.
 - PROVIDE 200 LBS. OF EXTRA BARS OF VARIOUS SIZES TO BE USED AS DIRECTED: INCLUDE LABOR FOR PLACEMENT.
 - REINFORCEMENT SHALL BE CONTINUOUS AND LAPPED 40 BAR DIAMETERS (2' - 6" MIN.) EXCEPT AS NOTED AND PROVIDE CORNER BARS OF SAME SIZE AND SPACING.
 - REINFORCEMENT SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST A.C.I. DETAILING MANUAL BY A QUALIFIED AND EXPERIENCED FIRM AND PERSON. PLACE AND SUPPORT REINFORCEMENT WITH ACCESSORIES: MAXIMUM SPACING - 48" CENTERS (PLASTIC TIPPED LEGS FOR EXPOSED SURFACES). USE 3" SBP (SLAB BOLSTERS PLATED) SUPPORTS AT ALL FOOTINGS.
 - CONTRACTOR SHALL VERIFY THAT ALL REINFORCEMENT, INSERTS, SLEEVES AND EMBEDDED ITEMS ARE PROPERLY LOCATED AND RIGIDLY SECURED PRIOR TO CONCRETE PLACEMENT - "WET STICKING" EMBED ITEMS WILL NOT BE ALLOWED.
 - ALL ANCHORS WHERE NOTED SHALL BE MANUFACTURED BY HILTI, INC. AND INSTALLED PER HILTI SPECIFICATIONS. SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL WITH APPROPRIATE ICBO EVALUATION REPORTS.
 - ALL MESH SHALL MEET ASTM A-185; LAP A MINIMUM OF 8" OR ONE FULL MESH, WHICHEVER IS GREATER.
 - SLABS ON GRADE SHALL BE MINIMUM 4" THICK WITH 6x6-W1.4XW1.4 WWF AT THE CENTER OF SLAB THICKNESS, UNLESS NOTED.
 - STRUCTURAL STEEL ANCHOR RODS SHALL MEET - ASTM F1554 ($F_y = 36$ KSI, MIN.).
 - ALL NOMINAL STRUCTURAL LUMBER SHALL BE NO. 1/NO. 2 OR BETTER S-DRY SPRUCE - PINE - FIR WITH MINIMUM $F_b = 875$ PSI (SINGLE USE) AND MINIMUM $E = 1,400,000$ PSI (TYPICAL UNLESS NOTED OR REVIEWED EQUIVALENT). ALL EXTERIOR WALL STUDS AND LOAD BEARING STUDS, TOP PLATES AND BOTTOM PLATES SHALL BE NO. 1/NO. 2 OR BETTER S-DRY SPRUCE-PINE-FIR OR REVIEWED EQUIVALENT (TYPICAL UNLESS NOTED).
 - ALL NOMINAL STRUCTURAL LUMBER OR LUMBER IN DIRECT CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED NO. 2 OR BETTER SYP (SO. PINE) WITH TREATED VALUES MINIMUM $F_b = 1000$ PSI (SINGLE USE) AND MINIMUM $E = 1,300,000$ PSI (TYPICAL UNLESS NOTED OR REVIEWED EQUIVALENT).
 - THE PREFABRICATED WOOD TRUSS MANUFACTURER/SUPPLIER SHALL BE A CURRENT MEMBER OF THE TRUSS PLATE INSTITUTE (TPI) AND PARTICIPATE IN THEIR CERTIFICATION PROCESS. FOR WOOD ROOF SHEATHING AND WOOD TRUSS NOTES - REFER TO STRUCTURAL ROOF NOTES.
 - PROVIDE 1/8" GAP AT ALL SHEATHING PANEL EDGES AND END JOINTS UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER.
 - ALL BOLTS, NAILS, SCREWS, ETC. IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT DIP GALVANIZED PER ASTM A123 OR ASTM A153.
 - MINIMUM NAILING SHALL CONFORM TO I.B.C. TABLE NO. 2304.9.1. USE COMMON NAILS EXCEPT WHERE NOTED. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT DIP GALVANIZED.
 - LIGHT GAGE WOOD FRAMING CONNECTORS AS NOTED ON THE PLANS OR IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE "STRONG-TIE CONNECTORS WITH "ZMAX" G185 HOT DIP GALVANIZED COATING BY THE SIMPSON CO. OR REVIEWED EQUIVALENT.
 - STAINLESS STEEL FASTENERS, ANCHOR BOLTS, LIGHT GAGE FRAMING CONNECTORS, ETC. MAY BE SUBSTITUTED FOR HOT DIP GALVANIZED MATERIALS AT THE CONTRACTORS OPTION.

- COLUMNS, JOISTS, TRUSSES OR BEAMS SHALL NOT BE FIELD CUT OR TRIMMED FOR ANY REASON WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
- HOLES, PIPES, SLEEVES, ETC. NOT SHOWN ON THE DRAWINGS MUST BE REVIEWED BY THE ARCHITECT/OWNERS REPRESENTATIVE BEFORE PLACEMENT THROUGH STRUCTURAL MEMBERS.
- IF MECHANICAL AND ELECTRICAL EQUIPMENT SIZES, WEIGHTS, OR LOCATIONS DO NOT COINCIDE WITH EQUIPMENT SHOWN ON THE PLANS, COORDINATE ADJUSTMENTS WITH THE ARCHITECT/OWNERS REPRESENTATIVE.
- NO AREA OF THE STRUCTURE SHALL BE LOADED WITH CONSTRUCTION MATERIALS OR EQUIPMENT THAT EXCEEDS FINAL DESIGN CRITERIA.
- THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTORS RESPONSIBILITY TO EXECUTE AND DETERMINE FINAL ERECTION PROCEDURES, SEQUENCING AND TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUYING OR TIE DOWNS WHICH MIGHT BE NECESSARY.
- FABRICATORS AND SUPPLIERS SHALL CLEARLY NOTE CHANGES MADE IN SHOP DRAWINGS WHICH DIFFER FROM CONSTRUCTION DOCUMENTS.
- THE STRUCTURE IS NOT DESIGNED FOR FUTURE EXPANSION.
- IF DISCREPANCIES EXIST BETWEEN STRUCTURAL PLANS, ARCHITECTURAL PLANS, OR SPECIFICATIONS, THE CONTRACTOR OR SUB-CONTRACTOR SHALL PROVIDE A WRITTEN REQUEST FOR CLARIFICATION FROM THE ARCHITECT AND/OR ENGINEER BEFORE PROCEEDING WITH THE WORK.
- CONTRACTOR TO VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/OWNER'S REPRESENTATIVE IMMEDIATELY.

- STRUCTURAL ROOF NOTES:**
- WOOD ROOF DECKING SHALL BE 19/32" OR 5/8" APA RATED SHEATHING 40/20, EXPOSURE 1, MINIMUM 2 SPAN, STAGGERED 4' X 8' SHEETS WITH 10d COMMON NAILS AT 6" CENTERS AT ALL PANEL EDGES AND 12" CENTERS MAXIMUM AT INTERMEDIATE FRAMING MEMBERS (IN THE FIELD). NAILS IN CONTACT WITH TREATED LUMBER SHALL BE HOT DIP GALVANIZED. USE PLYCLIPS AT MIDSPAN.
 - THE WOOD PREFABRICATED TRUSS MANUFACTURER SHALL FURNISH SHOP DRAWINGS ALONG WITH SUPPORTING CALCULATIONS SEALED BY A LICENSED STRUCTURAL ENGINEER FOR ARCHITECTS REVIEW.
 - DESIGN WOOD TRUSSES FOR THE LIVE LOADS AS STATED IN THE STRUCTURAL GENERAL NOTES PLUS A 20 PSF DEAD LOAD (TOP CHORD - 10 PSF AND BOTTOM CHORD - 10 PSF; TRUSS WEIGHT NOT INCLUDED). TRUSSES TO BE SPACED AT MAXIMUM 2'-0" CENTERS.
 - TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED OR ALTERED IN ANY WAY WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER RESPONSIBLE FOR THE TRUSS DESIGN.
 - ALL PREFABRICATED WOOD TRUSSES SHALL BE ATTACHED TO BEARING PLATES WITH SIMPSON "STRONG-TIE" H3, HCP OR TBE FRAMING CONNECTORS AS REQUIRED OR REVIEWED EQUIVALENT.

- TRUSS SHOP DRAWINGS NOTE:**
- THE WOOD ROOF TRUSS MANUFACTURER SHALL SUBMIT 5 (FIVE) SETS MINIMUM OF SHOP DRAWINGS FOR REVIEW. THE SHOP DRAWINGS SHALL INCLUDE PLACING PLANS OF ALL TRUSSES CLEARLY LABELED, DETAILS OF TRUSS CONNECTIONS AND ANCHORAGES DETAILS OF METAL CONNECTORS USED AT JOINTS AND ENGINEERING DESIGN DATA. THE ENGINEERING DESIGN FOR EACH TYPE OF TRUSS SHALL INCLUDE: TRUSS LOCATION IDENTIFICATION, ALL LOADINGS AND REACTIONS, WOOD SPECIES AND STRESS GRADES, MEMBER STRESSES, JOINT CONNECTIONS, CONFIGURATION, TRUSS TO TRUSS CONNECTIONS, BRACING FOR LATERAL STABILITY OF THE COMPLETED FRAMING SYSTEM AND THE KANSAS PROFESSIONAL ENGINEERS SEAL OF THE PERSON RESPONSIBLE FOR THE DESIGN OF THE TRUSSES/TRUSS SYSTEM.

THE TRUSS MANUFACTURER/SUPPLIER SHALL SUPPLY AND DESIGN CONNECTION HARDWARE FOR ALL TRUSS TO TRUSS CONNECTIONS.

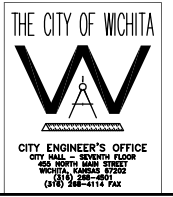
- INSULATED CONCRETE FORM (ICF) WALL NOTES:**
- ICF WALLS SHALL BE REINFORCED WITH 1 - #4 VERTICAL, CENTERED IN WALL, AT 16 INCHES O.C. MAX., AT ENDS, AT CORNERS, AT EACH SIDE OF OPENINGS AND EACH SIDE OF CONTROL JOINTS. PROVIDE 1 - #4 HORIZONTAL AT 16 INCHES O.C. MAX., AND AT TOP AND BOTTOM OF OPENINGS (TYPICAL UNLESS NOTED). COORDINATE LINTEL REINFORCING WITH THE LINTEL SCHEDULE/DETAIL.
 - VERTICAL REINFORCEMENT AT JAMBS OF OPENINGS SHALL EXTEND THE FULL HEIGHT OF WALL, UNLESS NOTED).
 - PROVIDE DOWELS FROM CONCRETE FOUNDATION THAT ARE THE SAME SIZE AND SPACING AS WALL VERTICALS.
 - ALL REINFORCING SHALL BE PROPERLY POSITIONED WITH CENTERING AND CAGING DEVICES.

NO.	BY	DATE	DESCRIPTION
0	DLM	10/17/05	ISSUE FOR CONSTRUCTION
	MJV	4/26/07	CONFORMING TO CONSTRUCTION RECORDS DELETED AIR RELEASE VAULT, ADDED 1'-0" TO EAST SIDE OF VALVE VAULT.



CITY OF WICHITA, KANSAS
15th STREET PUMP STATION
AND FORCE MAIN
GENERATOR BLDG. FOUNDATION
& ROOF FRAMING PLANS

CONFORMING TO
CONSTRUCTION RECORDS
4/20/07



DESIGNED BY	AR	CHECKED BY	AR
DRAWN BY	JMC	DATE	JUNE, 2005
PROJECT	0301030310		
DRAWING	S1	REVISION	0

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