GENERAL STRUCTURAL CRITERIA

A. REF. SPECIFICATIONS FOR PAINTING OF EXPOSED STEEL FINISHES.

   a. SHOP DRAWINGS OF ALL FABRICATED ITEMS SHALL BE SUBMITTED FOR REVIEW ACCORDING TO DIVISION 1 OF THE SPECIFICATIONS, PRIOR TO FABRICATION. SHOP DRAWINGS FOR ELEMENTS THAT ARE TO BE DESIGNED BY THE CONTRACTOR SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MISSOURI, SUBMIT FOR REVIEW SEALED CALCULATIONS FOR ELEMENTS OR SYSTEMS REQUIRING ENGINEERING DESIGN.

B. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS. ALL DIMENSIONS AND EXISTING CONDITIONS SHOWN ON CONTRACT DRAWINGS ARE TO BE VERIFIED IN THE FIELD. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF DISCREPANCIES. REFER TO ARCHITECTURAL DRAWINGS TO VERIFY LOCATION OF INTERIOR WALLS.

C. THE CONTRACTOR SHALL CHECK AND COORDINATE SIZES AND LOCATIONS OF ALL BLOCK OUTS, CONDUIT, PIPE SLEEVES, EMBEDDED ITEMS, ETC., WITH MECHANICAL AND ELECTRICAL CONTRACTORS.

D. NO PIPES, SLEEVES, ETC. SHALL PASS THROUGH BEAMS UNLESS CLEARLY INDICATED ON STRUCTURAL PLANS.

E. CONTRACTOR'S GENERAL WARRANTY AND GUARANTEE SHALL BE IN STRICT COMPLIANCE WITH CITY OF KCMO GENERAL CONDITIONS OF THE PROJECT SPECIFICATIONS.

DESIGN CODES

A. I.B.C. (2006)
B. ASCE 7–05
C. ACI 350–06
D. A.C.I. 318 (2005)
E. A.I.S.C. (A.S.D.), 13TH EDITION
F. STEEL DECK INSTITUTE
G. A.C.I. 531 DESIGN REQUIREMENTS FOR CONCRETE MASONRY (LATEST REVISION)

DESIGN LIVE LOADS

A. BASIC LIVE LOAD. 20 PSF
B. GROUND SNOW LOAD. 20 PSF
C. FLOOR LIVE LOAD.
   a. OFFICE (GROUND FLOOR) 50 PSF
   b. STORAGE 250 PSF
   c. ELECTRICAL EQUIP FL SLAB 250 PSF OR 3000 POUND POINT LOAD
   d. SUBJECT TO VEHICLE TRAFFIC: 250 PSF OR HS–20 (AASHTO)
   e. ELEVATED FLOORS:
      1. PSF OR 2000 LB POINT LOAD
   f. GRATING FLOOR AND STAIR TREADS 250 PSF OR 300 LB POINT LOAD
D. DESIGN WIND LOADS (250 MPH, 50 YEAR MEAN RECURRENCE INTERVAL EXPOSURE C).
E. DESIGN SEISMIC LOADS AS DEFINED IN THE INTERNATIONAL BUILDING CODE, 2012 EDITION.
F. SEISMIC DESIGN DATA:
   a. N/A

SPECIAL INSPECTIONS

A. A SPECIAL INSPECTOR WILL BE RETAINED BY THE OWNER TO PERFORM INSPECTIONS OF WELDING, HIGH STRENGTH BOLTING, REINFORCEMENT PLACEMENT, AND REINFORCED CMU AS DURING OPERATIONS AS REQUIRED BY THE GOVERNING OFFICIAL.

STRUCTURAL SPECIFICATIONS:

DIVISION 3: CONCRETE

SECTION 3A: CAST–IN–PLACE CONCRETE

GENERAL PROVISIONS

1. SCOPE: FURNISH AND INSTALL ALL CONCRETE FOR FOOTINGS, SUBSLABS, OUTSIDE SLABS, BASES FOR LIGHT POLES, BASES FOR SIGNS, ALL OTHER CONCRETE ITEMS, ALL NECESSARY FORMS, AND GRAVEL FILL UNDER SLABS.

   INSTALL PERIMETER FOUNDATION INSULATION WHICH IS FURNISHED UNDER DIVISION 7 AND ANCHOR BOLTS WHICH ARE FURNISHED UNDER DIVISION 5.

2. NOTES: NOTIFY OWNER WHEN FORMS AND REINFORCING ARE IN PLACE PRIOR TO CONCRETE POURING.

3. QUALITY CONTROL: STANDARDS INCLUDE BY REFERENCE: EXCEPT AS OTHERWISE SPECIFIED, THE FOLLOWING PUBLICATIONS OF THE AMERICAN CONCRETE INSTITUTE ARE HEREBY INCORPORATED IN THIS SPECIFICATION:

   "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301) "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) "RECOMMENDED PRACTICE FOR SELECTING PROPORTIONS FOR CONCRETE" (ACI 613 AND 613A) "RECOMMENDED PRACTICE FOR MEASURING, MIXING, AND PLACING CONCRETE" (ACI 614) "RECOMMENDED PRACTICE FOR WINTER CONCRETING METHODS" (ACI 604) "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK" (ACI 347)

MATERIALS

A. CONCRETE: ALL CONCRETE FOR THIS WORK SHALL BE FURNISHED BY A CONCRETE MIXING PLANT. CEMENT SHALL BE ASTM C–175, TYPE IA AIR–ENTRAINED PORTLAND CEMENT. FINE AGGREGATE SHALL BE CRUSHED STONE OR GRAVEL HAVING HARD DURABLE UNCOATED PARTICLES RANGING IN SIZE FROM 1" DOWN TO 1/4".

B. CAST–IN–PLACE CONCRETE USED SHALL HAVE THE FOLLOWING MINIMUM ULTIMATE

   COMPRESSIVE STRENGTHS IN 28 DAYS:

STRUCTURAL SLABS ON GRADE WALLS & FOUNDATIONS	4500 PSI
ELEVATED STRUCTURAL SLABS	4500 PSI
	4500 PSI

C. NORMAL WEIGHT CONCRETE AGGREGATE SHALL BE SOUND, WELL GRADED CONFORMING TO ASTM C33.

D. EXTERIOR EXPOSED CONCRETE SHALL HAVE 6% TO 7% ENTRAINED AIR

E. CONCRETE SLUMP RANGES TO BE AS FOLLOWS: 3 INCHES PLUS OR MINUS 1 INCH

F. CONCRETE SHALL BE IN STRICT CONFORMANCE WITH THE CURRENT ACI MANUAL OF CONCRETE PRACTICE (ACI–318–05)

   CEMENT:
   MAX. WATER CEMENT RATIO: 0.42

G. NO ALUMINUM SHALL BE PLACED IN CONCRETE.

H. NO CALCIUM CHLORIDE SHALL BE USED IN CONCRETE.

I. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" U. N. O. (VERIFY WITH ARCHITECT)

J. PROVIDE CONCRETE BASES FOR MECHANICAL EQUIPMENT, AS REQUIRED ALL SHALL BE 4" THICK ON TOP OF THE FLOOR SLAB, WITH ONE LAYER OF #4 @ 12" O. C. EACH WAY, UNLESS OTHERWISE NOTED.

K. SLEEVES, OPENINGS, OR OTHER ATTACHMENTS NOT SHOWN ON DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO PLACING CONCRETE.

L. ALL CONCRETE TESTING TO BE PERFORMED BY ACI CERTIFIED PERSONNEL (INCLUDING ALL SLUMP TESTING AND TAKING OF CONCRETE TEST CYLINDERS).

M. EVERY EFFORT SHALL BE EXERCISED TO AVOID CRACKS IN CONCRETE WORK. IN THE EVENT SHRINKAGE CRACKS, ETC. DO OCCUR, THEY SHALL BE REPAIRED BY MEANS OF A STRUCTURAL EPOXY GROUT. COST OF SUCH REPAIR IF REQUIRED SHALL BE BORNE BY THE CONTRACTOR.

REINFORCING STEEL

A. ALL MESH SHALL MEET ASTM A185. LAP MINIMUM OF 6" MESH REINFORCEMENT FOR SUPPORTED SLAB ON DECK SHALL BE FURNISHED IN FLAT SHEETS.

B. ALL REINFORCEMENT SHALL MEET ASTM A615–60,000 AND BE OF THE FOLLOWING GRADES UNLESS NOTED OTHERWISE.

   a. #3 TIES GRADE 40
   b. ALL OTHER REINFORCING GRADE 60

C. REINFORCING STEEL SHALL BE CONTINUOUS AND LAPPED A MINIMUM OF CLASS "B" TENSION LAP SPLICE, UNLESS OTHERWISE NOTED.

D. REINFORCING STEEL SHALL BE DETAILED ACCORDING TO THE ACI DETAILING MANUAL, AND BAR SCHEDULES SEALED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MISSOURI.

E. LAP BARS ONLY AT LOCATIONS SHOWN ON THE DRAWINGS, OR AS APPROVED IN ADVANCE BY THE ENGINEER.

F. PROVIDE ADEQUATE BAR SUPPORT FOR ALL REINFORCING IN SLABS ON FORM DECK TO MAINTAIN PROPER BAR OR MESH POSITION DURING CONSTRUCTION. IT WILL NOT BE ACCEPTABLE TO "PULL–UP" MESH IN SLABS ON FORM DECK, MESH MUST BE SUPPORTED IN POSITION.

G. MARK EACH BUNDLE OF REINFORCING BARS WITH WEATHERPROOF TAGS.

H. REINFORCING BARS TO BE WELDED MUST EITHER MEET ASTM A706 (AND BE ACCOMPANIED BY APPROPRIATE MILL TEST REPORT), OR SHOULD BE ASSUMED TO HAVE A C.E. (CARBON EQUIVALENT) GREATER THAN 0.75, FOR DETERMINATION OF PROPER WELDING PROCEDURES. WELDING OF REINFORCING BARS TO BE DONE IN ACCORDANCE WITH CURRENT AWS CODES.

REINFORCING STEEL (CONT.)

I. FURNISH AN ADDITIONAL TWO THOUSAND (2000) POUNDS OF REINFORCING BARS, NOT INDICATED ON DRAWINGS, TO BE PLACED AS DIRECTED BY THE STRUCTURAL ENGINEER. ALL COSTS FOR MATERIAL AND PLACEMENT SHALL BE INCLUDED IN THE BASE BID. FABRICATE AND DELIVER ONLY WHEN ORDERED BY THE CONTRACTOR.

LENGTH OF LAPPED SPLICES FOR REINFORCEMENT (INCHES)

(UNLESS NOTED OTHERWISE ON THE DRAWINGS)

(f'c=4500 PSI)

BAR SIZE	BEAMS & COLUMNS		WALLS & SLABS		BAR SIZE
	*TOP BARS	OTHERS	*TOP BARS	OTHERS	
3	16	16	16	16	3
4	20	16	20	16	4
5	26	20	29	22	5
6	37	29	29	23	6
7	60	47	48	37	7
8	70	54	60	47	8
9	80	62	74	57	9
10	92	70	91	70	10
11	103	79	109	84	11

CONCRETE COVER FOR REINFORCEMENT

LOCATION	MINIMUM COVER
UNFORMED SURFACES ADJACENT TO EXCAVATION	3"
SURFACES INSIDE OF OZONE CONTACTORS EXPOSED TO OZONE IN WATER OR AIR	3"
FORMED OR TOP SURFACES EXPOSED TO WEATHER OR SATURATED AIR, SUBMERGED OR IN CONTACT WITH EARTH, INCLUDING STIRRUPS, TIES OR SPIRALS	2"
OTHER LOCATIONS: BARS IN BEAMS OR GIRDERS, INCLUDING STIRRUPS AND COLUMN SPIRALS OR TIES	1 1/2"
SLABS, WALLS AND JOISTS #6 AND LARGER	1 1/2"
#5 AND SMALLER	1"

NOTE:
TOLERANCES FOR CONCRETE COVER AND THE FABRICATION AND PLACING OF REINFORCEMENT SHALL CONFORM TO ACI 117.

* TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR. HORIZONTAL BARS IN WALLS ARE TO BE PROVIDED WITH LAP LENGTHS AS REQUIRED FOR TOP BARS. VERTICAL BARS MAY BE CONSIDERED AS OTHER BARS

C. EXPANSION JOINTS: 1/2" THICK ASPHALT–SATURATED CELOTEX EXPANSION JOINT MATERIAL.

D. METAL ACCESSORIES: SPACERS, CHAIRS, TIES, AND OTHER DEVICES NECESSARY FOR PROPERLY PLACING, SPACING, SUPPORTING AND FASTENING REINFORCING STEEL SHALL BE HICO CORP. OF AMERICA OR EQUAL.

E. GRAVEL FILL: GRAVEL FILL UNDER SLABS SHALL BE GRADED FROM 3/8" MINIMUM TO 1 1/2" MAXIMUM.

F. CONSTRUCTION JOINTS: 22 GAUGE FORMED TONGUE AND GROOVE JOINT NO. 95 BY HECKMANN, #8165 BY VULCAN OR EQUAL.

G. CONCRETE SEALER: POLYSEAL BY CHEM–MASTERS CORPORATION, CHAGRIN FALLS, OHIO, SEAL TIGHT CS–309 BY W. R. MEADOWS, INC. OR DRESS AND SEAL 18 BY L & M CONSTRUCTION CHEMICALS, INC. OR EQUAL.

H. VAPOR BARRIER UNDER CONCRETE FLOOR: 6 MIL. PLASTIC FILM "MOISTOP–2" BY SISALKRAFT, "NERVASTRAL SEAL PRUF H–D", "VAPOR CHAMP", OR "PLY–BAR PLUS BY GLAS KRAFT, INC., SLATERSVILLE, RI 02876 (401) 767–2470.

PERFORMANCE

1. INSTALLATION

   A. PREPARATION FOR CONCRETING: CONCRETE SHALL BE HANDLED FROM THE MIXER TRUCK TO PLACE OF FINAL DEPOSIT BY MEANS OF WHEELBARROWS AND SUITABLE RUNWAYS. NO CONCRETE SHALL BE PLACED UNTIL ALL REINFORCEMENT, CONDUIT, PLUMBING PIPES, AND SLEEVES ARE PROPERLY FASTENED IN THEIR CORRECT PLACES, ALL COPPER PIPES ARE WRAPPED WITH BUILDING PAPER, AND ALL CONDUIT PAINTED. COORDINATE WITH OTHER TRADES. CONCRETE SHALL BE DUMPED OR SPOUTED FROM A HEIGHT LESS THAN 3', IT SHALL BE THOROUGHLY SPADED OR VIBRATED TO EMBED ALL REINFORCEMENT AND FIXTURES. ANCHOR BOLTS SHALL BE ACCURATELY PLACED. DO NOT PLACE ANY CONCRETE WHEN THE SOIL IS FROZEN OR THE TEMPERATURE IS BELOW 40 DEGREES F UNLESS PROTECTIVE MEASURES ARE TAKEN TO PREVENT CONCRETE FROM FREEZING. PROTECT ALL CONCRETE FROM FREEZING TEMPERATURES AND FROM WASH BY RAIN FOR SEVENTY TWO (72) HOURS.

PERFORMANCE (CONT.)

B. CONCRETE SLABS: CONCRETE SLABS ON EARTH SHALL BE PLACED OVER WELL COMPACTED SUB–GRADE. PLACE AND COMPACT GRAVEL FILL AND INSTALL MOISTURE BARRIER OVER FILL WITH JOINTS WITH SLAB AFTER COMPLETING CONCRETE WORK. SET CONTINUOUS EXPANSION JOINTS WHERE EDGE OF SLABS ABUT VERTICAL SURFACES. SEAL JOINTS TIGHTLY AROUND OPENINGS AND PIPE PENETRATING FLOORS WITH JOINT SEALING COMPOUND. WHERE CONSTRUCTION JOINTS OCCUR, KEY SLABS WITH FORMED TONGUE AND GROOVE JOINT. WHERE FLOOR DRAINS OCCUR, FINISHED FLOOR SURFACES AND ROUGH SLAB SURFACES SHALL BE SLOPED TO THE FLOOR DRAINS TO INSURE POSITIVE DRAINAGE.

C. CONCRETE CURING AND SEALING: ALL EXPOSED CONCRETE SIDEWALKS, CURB AND GUTTERS, CONCRETE DRIVEWAYS, ETC. SHALL BE CURED AND SEALED 1/2 TO 1 HOUR AFTER FINAL TROWELING, AND LATER, WHEN THEY CAN BE WALKED ON WITHOUT HARM. THE SEALING MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.

D. FINISHES: SUB–SLAB IN BUILDING SHALL BE SCREEDED AND FLOATED TO REASONABLY SMOOTH SURFACE, FREE FROM STONE PROJECTIONS AND VOIDS. EXPOSED SLAB AROUND BUILDING SHALL BE SCREEDED, FLOATED AND STEEL TROWELED TO A UNIFORM SURFACE AND THEN BE LIGHTLY BROOMED BEFORE FINAL SET. EXPOSED EDGE SLAB SHALL HAVE RUBBED FINISH.

E. BASES: FORM AND POUR BASES FOR LIGHT POLES AND PRIME SIGN AS SHOWN, SETTING ANCHOR BOLTS AS CALLED FOR. ALL SURFACES TO HAVE RUBBED FINISH. ANCHOR BOLTS FOR LIGHT POLES SHALL BE PROVIDED BY THE PARTY PROVIDING THE LIGHT POLES.

F. CONCRETE CURBS: RUB, CURE, AND PROTECT CONCRETE CURBS AND/OR CURB AND GUTTER. PROVIDE EXPANSION AND CONTRACTION JOINTS AT A MAXIMUM OF 20' O.C.

G. EXPANSION JOINTS: JOINTS IN WALKS OR APPROACHES SHALL BE AS SHOWN, WHERE NOT SHOWN, SHALL BE 20' O.C. MAXIMUM. PROVIDE EXPANSION FILLERS WHERE CONCRETE ABUTS VERTICAL FACES OF BUILDING OR OTHER CONCRETE.

H. CONTROL JOINTS: JOINTS IN SLABS SHALL BE AS SHOWN.

I. CONCRETE FILL FOR CONCRETE MASONRY UNITS: FILL CONCRETE MASONRY UNITS WHERE INDICATED WITH CONCRETE IN LIFTS OF 2' OR LESS. INSTALL REINFORCEMENT SHOWN.

DIVISION 5: METALS

SECTION 5A: STRUCTURAL STEEL

GENERAL PROVISIONS

1. SCOPE: FURNISH AND INSTALL STRUCTURAL STEEL AND ALL INCIDENTAL ANCHOR BOLTS, EXPANSION BOLTS, HEX BOLTS, AND WALL TIES.
1. SHOP DRAWINGS: SUBMIT FOUR (4) COPIES OF SEALED ENGINEERING SHOP DRAWINGS TO THE OWNER'S FIELD REPRESENTATIVE.

MATERIALS

1. STRUCTURAL STEEL: STRUCTURAL STEEL FOR ALL WORK EXCEPT AS OTHERWISE INDICATED OR SPECIFIED SHALL CONFORM AT ASTM A36.
2. BOLTS: ASTM A325, USE HIGH–STRENGTH STEEL BOLTS FOR ALL LOCATIONS. ANCHOR BOLTS FOR BEARING STUD WALLS TO HAVE 1 1/2" O.D. STEEL WASHERS.
3. FILLER METAL FOR WELDING: WELDING ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING SHALL CONFORM TO ASTM A233, E–70 SERIES.
4. SHOP COAT: THE STANDARD SHOP PAINT SHALL CONFORM TO ONE (1) OF THE FOLLOWING:
   A. RUST INHIBITIVE PRIMER #476 RED, SOUTHERN COATINGS AND CHEMICAL CO.
   B. STEEL STRUCTURES PAINTING COUNCIL SPECIFICATIONS 15–6BT, TYPE I (RED OXIDE).
   C. FEDERAL SPECIFICATIONS TT–P–636 (RED OXIDE).

PERFORMANCE

1. FABRICATION:
   A. UNLESS OTHERWISE INDICATED OR SPECIFIED, THE FABRICATION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION – "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS." PUNCH AND DRILL STEEL FOR ATTACHMENT OF WOOD NAILERS AND OTHER MATERIALS INDICATED OR SPECIFIED TO BE ATTACHED TO STEEL.
   B. COMPLETE DESIGN OF MEMBERS AND CONNECTIONS FOR ANY PORTIONS OF THE STRUCTURE NOT INDICATED ON DESIGN DRAWINGS.
   C. PROVIDE BEARING PLATES FOR MEMBERS RESTING ON CONCRETE OR MASONRY, WITH THE EXCEPTION OF LOOSE LINTELS. BEARING STRESS SHALL NOT EXCEED THE FOLLOWING: (1) BRICKWORK – 250 P.S.I., (2) CONCRETE BLOCK – 80 P.S.I., GROSS AREA, AND (3) CONCRETE – 1,000 P.S.I.
   D. WHERE LINTEL ANGLES OCCUR IN PAIRS THEY SHALL BE BOLTED TOGETHER.
   E. SHOP PAINTINGS: APPLY ONE (1) SHOP COAT OF RUST INHIBITIVE PAINT TO ALL STEEL SURFACES, EXCEPT SURFACE AREAS TO BE IMBEDDED IN CONCRETE OR FIELD WELDED.
2. INSTALLATION:
   A. APPLICABLE STANDARDS: ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS, AND BRIDGES", AND WITH MODIFICATIONS AND OTHER SPECIFIC REQUIREMENTS DESCRIBED HEREIN.
   B. HIGH–STRENGTH STEEL BOLTS: WHERE STRUCTURAL JOINTS ARE MADE USING HIGH–STRENGTH BOLTS, HARDENED WASHERS, AND NUTS TIGHTENED TO A HIGH TENSION, MATERIALS, METHOD OF INSTALLATION AND TENSION CONTROL, TYPE OF WRENCHES TO BE USED, AND INSPECTION METHODS SHALL CONFORM TO AISC SPECIFICATIONS FOR "STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS."
   C. FIELD WELDS SHALL BE CLEANED AND PAINTED WITH RUST INHIBITIVE PRIMER PAINT. WHERE RUSTING OF STEEL MEMBERS OCCURS PRIOR TO ACCEPTANCE OF THE BUILDING, THE RUST SPOTS SHALL BE REMOVED BY SANDBLASTING TO BARE METAL AND REPAINTED WITH RUST INHIBITIVE PRIMER.
   D. CERTIFIED WELDING IS REQUIRED FOR ALL RIGID FRAME CONDITIONS. (SEE DRAWINGS.)

SECTION 5B: MISCELLANEOUS METAL FABRICATORS

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:
DRAWN BY:
SHEET CHK'D BY:
CROSS CHK'D BY:
APPROVED BY:
DATE: APRIL 2015

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CITY OF WICHITA, KANSAS
WATER AND SEWER DEPARTMENT

SEWAGE TREATMENT PLANT NO.2
IMPROVMENTS UV DISINFECTION

EFFLUENT UV DISINFECTION FACILITY
GENERAL NOTES

AJAMU KIJANA WEBSTER LICENSED 11744 KANSAS PROFESSIONAL ENGINEER

PROJECT NO. 2395–104609
FILE NAME:

SHEET NO.
S-1