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SYMBOL	DESCRIPTION
	INCANDESCENT, COMPACT FLUORESCENT OR H.I.D. TYPE LIGHTING FIXTURE "A" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "B" - CONTROLLED BY SWITCH "B" "3" - CIRCUIT NUMBER
	FLUORESCENT TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	WALL MOUNTED INCANDESCENT, COMPACT FLUORESCENT OR H.I.D. TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	CROSS HATCH INDICATES LIGHTING FIXTURE THAT IS UNSWITCHED AND SHALL REMAIN ON AT ALL TIMES. NOTATIONS SAME AS ABOVE.
	SHADED AREA INDICATES LIGHTING FIXTURE THAT IS EQUIPPED WITH EMERGENCY BACKUP POWER SOURCE. NOTATIONS SAME AS ABOVE.
	POLE MOUNTED AREA H.I.D. TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	POLE MOUNTED ROADWAY H.I.D. TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	EMERGENCY LIGHTING BATTERY UNIT WITH TWO LAMP HEADS "EM" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "3" - SUPERVISORY CIRCUIT "*" - FIXTURE TAG #
	REMOTE EMERGENCY ADJUSTABLE WALL LIGHTING FIXTURE WITH TWO LAMP HEADS "R-2" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "BU-1" - HOME RUN TO BATTERY UNIT INDICATED. CONDUIT SHALL BE 3/4" AND CONTAIN (2) NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND (1) NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE INDICATED.
	COMBINATION BATTERY UNIT AND EXIT SIGN. FILLED QUADRANT REPRESENTS FACE SIDE OF SIGN.
	CEILING MOUNTED EXIT SIGN, NOTATIONS SAME AS ABOVE. WHEN USED, ARROW INDICATES DIRECTION OF EGRESS. FILLED QUADRANT REPRESENTS FACE SIDE OF SIGN. (DOUBLE FACE DOUBLE CHEVRONS SHOWN)
	WALL MOUNTED EXIT SIGN, NOTATIONS SAME AS ABOVE. WHEN USED, ARROW INDICATES DIRECTION OF EGRESS. FILLED QUADRANT REPRESENTS FACE SIDE OF SIGN.
	REMOTE EMERGENCY CEILING LIGHTING FIXTURE "RH-3" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "3" - SUPERVISORY CIRCUIT "BU-1" - HOME RUN TO BATTERY UNIT INDICATED. CONDUIT SHALL BE 3/4" AND CONTAIN 2 NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND 1 NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE INDICATED.
	HOME RUN TO DESIGNATED EQUIPMENT. BRANCH CIRCUIT CONDUIT WITH 2 NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND 1 NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE NOTED. NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS. FOR MINIMUM SIZE CONDUIT PERMITTED REFER TO THE SPECIFICATIONS.
	CONDUIT CONCEALED IN WALL, IN SLAB ABOVE, OR ABOVE CEILING.
	CONDUIT CONCEALED IN OR BELOW FLOOR OR UNDERGROUND.
	CONDUIT RUN EXPOSED. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL.
	"X" INDICATES EXPLOSION PROOF CONDUIT SEAL FITTING.
	CONCRETE ENCASED DUCTBANK. WIDTH VARIES, SEE DUCTBANK SECTION/DETAILS FOR REQUIREMENTS AND WIDTH
	CONDUIT STUBBED OUT AND CAPPED
	DENOTES A QUANTITY OF TWO (2) 3-INCH CONDUITS EACH CONTAINING THREE NO. 3/0 AWG CONDUCTORS AND 1 NO. 2 AWG GROUND CONDUCTOR.
	DENOTES A QUANTITY OF TWO INSTRUMENT CABLES. EACH CABLE TO CONSIST OF TWO NO. 16 AWG CONDUCTORS TWISTED TOGETHER AND COVERED WITH A METALLIC SHIELD AND AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
	SAME AS ABOVE EXCEPT CABLE TO CONSIST OF THREE NO. 16 AWG CONDUCTORS TWISTED, SHIELDED AND COVERED WITH AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
	THREE 4-INCH CONDUITS
	FLEXIBLE METAL CONDUIT "WHIP" (3/4", 2#12, 1#12G UNLESS OTHERWISE NOTED) FOR LIQUID TIGHT MOTOR CONNECTIONS
	"X" INDICATES CONDUIT SEAL FITTING IN OTHER THAN CODE REQUIRED LOCATIONS.
	INDICATES MOTOR STARTER AND/OR MOTOR CONTROL EQUIPMENT WITHIN THE ENCLOSURE.

SYMBOL	DESCRIPTION
	SINGLE POLE SWITCH "a" INDICATES FIXTURES CONTROLLED.
	DOUBLE POLE SWITCH "a" INDICATES FIXTURES CONTROLLED.
	THREE WAY SWITCH "c" INDICATES FIXTURES CONTROLLED.
	FOUR WAY SWITCH "a" INDICATES FIXTURES CONTROLLED.
	DIMMER SWITCH "a" INDICATES FIXTURES CONTROLLED
	SINGLE POLE SWITCH "OS" INDICATES A PASSIVE INFRARED OCCUPANCY SENSOR
	DOUBLE POLE SWITCH "OS" INDICATES PROGRAMMABLE OCCUPANCY SENSOR CAPABLE OF INBOARD/OUTBOARD SWITCHING
	SINGLE POLE SWITCH "OT" INDICATES DUAL TECHNOLOGY PROGRAMMABLE OCCUPANCY SENSOR CAPABLE OF SENSING MOTION AND SOUND
	LIGHTING CONTACTOR WITH NUMBER OF POLES AS INDICATED
	TIME SWITCH
	PUSH BUTTON STATION
	INDICATES ALL LIGHTING FIXTURES WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE TYPE "A" UNLESS OTHERWISE NOTED. SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	LIGHTING PANELBOARD (LP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	POWER PANELBOARD (PP-#) OR DISTRIBUTION PANELBOARD (DP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	LIGHTING CONTACTOR PANELBOARD (LCP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W * GFCI - GROUND FAULT CIRCUIT INTERRUPTER TYPE WP - WEATHERPROOF T - TRANSIENT VOLTAGE SURGE SUPPRESSOR IC - ISOLATED GROUND 4 - CIRCUIT NUMBER
	SPECIAL PURPOSE RECEPTACLE * - VOLT RATING "3" - NUMBER OF POLES "60" - AMPERE RATING "4W" - 4 WIRES IN ADDITION TO GROUND
	MULTI-OUTLET ASSEMBLY, SYMBOL DENOTES RECEPTACLE TYPE
	FLUSH FLOOR OUTLET BOX WITH TYPE OUTLET INDICATED
	UNDER FLOOR DUCT SYSTEM WITH TYPE OUTLETS INDICATED
	THREE CELL UNDER FLOOR DUCT SYSTEM JUNCTION BOX
	JUNCTION BOX
	PULL BOX
	TERMINAL CABINET
	OCCUPANCY SENSOR
	PHOTOCELL
	INDICATED EQUIPMENT AND MATERIALS TO BE DEMOLISHED
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 12 CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR CORROSION RESISTANT CONSTRUCTION SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL CONFORM TO N.E.C. REQUIREMENTS FOR THE HAZARDOUS AREA CLASSIFICATION SHOWN.

SYMBOL	DESCRIPTION
	GROUND SYSTEM GRID OR LOOP, 36" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED.
	EXOTHERMIC WELD CONNECTION
	3/4" x 10'-0" GROUND ROD, UNLESS SPECIFIED OTHERWISE.
	GROUND ROD TEST WELL STATION (SEE DETAIL SHEET FOR REQUIREMENTS)
COMMUNICATION SYSTEMS	
	TELEPHONE OUTLET FOR DESK TYPE HANDSET K = KEY SYSTEM
	TELEPHONE OUTLET FOR WALL TYPE HANDSET (MOUNT UP 4'-6") K = KEY SYSTEM
	PAGE/PARTY TELEPHONE OUTLET FOR DESK TYPE HANDSET
	PAGE/PARTY TELEPHONE OUTLET FOR WALL TYPE HANDSET, MOUNT UP 4'-6"
	PAGING SPEAKER, WALL MOUNTED H = HORN TYPE W = WIDE ANGLE TYPE
	PAGING SPEAKER, WALL MOUNTED, BI-DIRECTIONAL, HORN TYPE W = WIDE ANGLE TYPE
	PAGING SPEAKER, FLUSH MOUNTED CEILING TYPE
	PAGING SPEAKER, SURFACE MOUNTED CEILING TYPE
	REMOTE WALL MOUNTED VOLUME CONTROL FOR CEILING SPEAKER, MOUNT UP 5'-0"
	PAGING SPEAKER AMPLIFIER ASSEMBLY
	TELEPHONE CABINET OR BACKBOARD AS NOTED
	"C" - DATA INPUT/OUTPUT CABLE OUTLET "P" - PROCESS COMPUTER SYSTEM (CAT6 RJ-45 JACK)
	GAS DETECTOR/VENTILATION FAILURE ALARM, # INDICATES TYPE OF UNIT, 1 = MASTER, 2 = REMOTE
	GAS DETECTION/VENTILATION FAILURE WEATHERPROOF DUAL-LITE BEACON MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
	GAS DETECTION/VENTILATION FAILURE HORN/STROBE MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
	GAS DETECTION/VENTILATION FAILURE HORN, MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
	GAS DETECTION/VENTILATION FAILURE STROBE, MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
SECURITY SYSTEMS	
	SECURITY ALARM CONTROL PANEL
	SECURITY ALARM DOOR SWITCH
	SECURITY ALARM KEY PAD
	SECURITY SYSTEM CARD ACCESS READER
	SECURITY ALARM WINDOW SWITCH
	SECURITY ALARM MOTION DETECTOR
	CLOSED CIRCUIT TV CAMERA
	PAN, TILT, ZOOM CAMERA LENS CONTROLS
	GLASS BREAK DETECTOR
FIRE ALARM SYSTEMS	
	FIRE ALARM HEAT DETECTOR 135 FIXED TEMPERATURE UNLESS OTHERWISE NOTED. "200" - 200 FIXED TEMPERATURE "R" - FIXED TEMPERATURE RATE-OF-RISE TYPE
	FIRE ALARM SMOKE DETECTOR PHOTOELECTRIC TYPE UNLESS OTHERWISE NOTED.
	"I" - IONIZATION TYPE.
	FIRE ALARM CONTROL PANEL
	FIRE ALARM VENTILATION PANEL WITH GRAPHIC PANEL
	REMOTE FIRE ALARM ANNUNCIATOR PANEL

SYMBOL	DESCRIPTION
	FIRE ALARM MASTER BOX
	FIRE ALARM HORN, MOUNT UP 7'-6"
	FIRE ALARM STROBE, MOUNT UP 6'-8" 15 = CANDELA RATING
	FIRE ALARM HORN AND STROBE LIGHT COMBINATION, MOUNT UP 6'-8" 15 = CANDELA RATING
	FIRE ALARM MANUAL PULL STATION, MOUNT UP 4'-0"
	SPRINKLER VALVE SUPERVISORY SWITCH
	SPRINKLER FLOW ALARM SWITCH
	FIRE ALARM BELL
	WEATHERPROOF HI-INTENSITY FIRE ALARM STROBE LIGHT WITH HORN
	PASSIVE INFRARED DETECTOR
	SMOKE BEAM DETECTOR (RECEIVER)
	SMOKE BEAM DETECTOR (TRANSMITTER)
	FIRE ALARM SMOKE DETECTOR REMOTE INDICATOR AND TEST SWITCH

ABBREVIATIONS (CONTINUED)	
ELEV	ELEVATION
EM	EMERGENCY ENCLOSURE OR ENCLOSED
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EW	ELECTRIC WATER HEATER
EX	EXISTING
FO	FIBER OPTIC
FU	FUSE
GCP	GENERATOR CONTROL PANEL
GEN	GENERATOR
G, GND	GROUND
GFI	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL
HACR	HEATING & AIR CONDITIONING RATED
HH	HANDHOLE
HT	HEIGHT
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HZ	HERTZ
ID	IDENTIFICATION
INSTR	INSTRUMENT
K	KILO (PREFIX)
kcml	1000 CIRCULAR MILS
KVA	KILOVOLT AMPERES
KW	KILOWATTS
LA	LIGHTING ARRESTER
LTG	LIGHTING
LP	LIGHTING PANEL
LV	LOW VOLTAGE
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
N	NEUTRAL
NC	NORMALLY CLOSED
NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OH	OVERHEAD
OL	OVERLOAD
PB	PULL BOX
PCP	PUMP CONTROL PANEL
PH	PHASE
PMH	POWER MANHOLE
PNL	PANEL OR PANELBOARD
PR	PAIR
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RECPT	RECEPTACLE
REQD	REQUIRED
QTY	QUANTITY
SA	SURGE ARRESTER
SEC	SECONDS OR SECONDARY
SH	SHIELDED OR SPACE HEATER
SHH	SIGNAL HANDHOLE
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
SV	SOLENOID VALVE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TC	TIME TO CLOSE OR TRAY CABLE
TEL	TELEPHONE
TO	TIME TO OPEN
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TS	TWISTED SHIELDED OR THERMAL SWITCH
TYP	TYPICAL
UG	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPS
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS, WIDTH, WITH, WIRE
WP	WEATHERPROOF
XP	EXPLOSION PROOF
XFMR	TRANSFORMER

ABBREVIATIONS	
A	AMPS
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
AIC	AMPERE INTERRUPTING CAPACITY
AMP	AMPERE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CGD	COMBUSTIBLE GAS DETECTOR
CKT	CIRCUIT
CLB	CURRENT LIMITING BREAKER
CLF	CURRENT LIMITING FUSE
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH/CONTROL STATION
CT	CURRENT TRANSFORMER
CU	COPPER
CWS	CONDUIT WALL SEAL
DC	DIRECT CURRENT
DIA	DIAMETER
DMU	DIGITAL METERING UNIT
DN	DOWN
EC	EMPTY CONDUIT
ELEC	ELECTRICAL

SHEET NO. WHERE DETAIL IS DRAWN

**SYMBOL WHERE THERE IS A DETAIL**

**DETAIL**  
1/4" = 1'-0"

SHEET NO. WHERE THERE IS A DETAIL

**SYMBOL WHERE DETAIL IS DRAWN**

**DETAIL SYMBOL**

SHEET NO. WHERE SECTION IS DRAWN

**SYMBOL WHERE THERE IS A SECTION**

**SECTION**  
1/4" = 1'-0"

SHEET NO. WHERE SECTION IS TAKEN

**SYMBOL WHERE SECTION IS DRAWN**

**SECTION SYMBOL**

**GENERAL NOTE**  
THIS IS A STANDARD LEGEND. SOME SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	J.VARGHESE
DRAWN BY:	J. VARGHESE
SHEET CHK'D BY:	M. HANDLEY
CROSS CHK'D BY:	M. HANDLEY
APPROVED BY:	I. PUETROVIC
DATE:	APRIL 2015



CITY OF WICHITA, KANSAS  
 WATER AND SEWER DEPARTMENT  
**SEWAGE TREATMENT PLANT NO.2 IMPROVMENTS  
 UV DISINFECTION**

**ELECTRICAL LEGENDS  
 AND ABBREVIATIONS II**

PROJECT NO.	2395-104609
FILE NAME:	E-2.DWG
SHEET NO.	E-2