LIGHTING FIXTURE SCHEDULE

SYMBOL	MANUFACTURER	MODEL #	LAMP	COLOR TEMP	DIMMING	EMERGENCY	WATTS	VOLTAGE	FINISH	DESCRIPTION	LOCATION	NOTES
LO1	LANDSCAPE FORMS OR APPROVED EQUIVALENT	#LFI 241886	LED	3000 K	NONE	NONE	200 W MAX	120 V		CUSTOM POLE. GROUND FOLE PER NEC. REFER TO LIGHT COLUMN DETAILS SHEET.	EXTERIOR OF BRIDGE ON ROADWAY DIVIDERS	
LO2	WEEF OR APPROVED EQUIVALENT	#630-1220-MOD+630-8130 PENDANT KIT-MOD FOR SURFACE MOUNT BOX AND WITH 45 DEGREE CONE "HAT" TO DETER PIGEONS FROM SITTING ON FLAT TOP OF CYLINDER	LED, 1526 LUMENS	3000K	0-10VOLT DIMMING REFER TO NOTE 1	NONE	28 W	120 V	RAL 9007 GREY METALLIC	NOMINAL 6.06" (W) BY 6.93" (H) ROUND CYLINDER PENDANT WITH WALLWASH LENS. LENS AND LENS FRAME SHALL BE INSTALLED ON LUMINAIRE BODY AT FACTORY. REMOVABLE STICKER SHALL BE PROVIDED BY MANUFACTURER SHOWING CONTRACTOR ORIENTATION OF LUMINAIRE TO "X" STRUCTURE. ADAPTER SHALL BE PROVIDED THAT ENABLES STANDARD PENDANT KIT TO BE MOUNTED TO SURFACE JUNCTION BOX. 45 DEGREE CONE PAINTED TO MATCH CYLINDER SHALL BE PROVDE AS A TOP TO THE CYLINDER TO DETER BIRDS FROM SITTING ON FLAT TOP OF CYLINDER. BOTTOM OF FIXTURE TO ALIGN WITH BOTTOM OF GIRDER. PRIOR TO ORDERING LO2 AND LO3 PENDANTS, FIELD CONFIRM DIMENSION FROM BOTTOM OF CEILING DECK TO BOTTOM OF GIRDER. ELECTRICAL CONTRACTOR TO PROVIDE OVERALL HEIGHT OF SURFACE JUNCTION BOX, SO MANUFACTURE CAN PROVIDE FIXTURES WITH CORRECT OVERALL HEIGHT. INTEGRAL DRIVER. 0-10 VOLT DIMMING, 700mA. MAX OPERATING TEMPERATURE 50 DEGREE C. IP65.	WASH LIGHT FOR "X" STRUCTURE	1, 2
LO3	WEEF OR APPROVED EQUIVALENT	#630-1220-MOD+630-8130 PENDANT KIT-MOD FOR SURFACE MOUNT BOX AND WITH 45 DEGREE CONE "HAT" TO DETER PIGEONS FROM SITTING ON FLAT TOP OF CYLINDER	LED, 1526 LUMENS	3000K	0-10VOLT DIMMING REFER TO NOTE 1	NONE	28 W	120 V	RAL 9007 GREY METALLIC	NOMINAL 6.06" (W) BY 6.93" (H) ROUND CYLINDER PENDANT WITH WALLWASH LENS. LENS AND LENS FRAME SHALL BE INSTALLED ON LUMINAIRE BODY AT FACTORY. REMOVABLE STICKER SHALL BE PROVIDED BY MANUFACTURER SHOWING CONTRACTOR ORIENTATION OF LUMINAIRE TO WALL. ADAPTER SHALL BE PROVIDED THAT ENABLES STANDARD PENDANT KIT TO BE MOUNTED TO SURFACE JUNCTION BOX. 45 DEGREE CONE PAINTED TO MATCH CYLINDER SHALL BE PROVIDE AS A TOP TO THE CYLINDER TO DETER BIRDS FROM SITTING ON FLAT TOP OF CYLINDER. BOTTOM OF FIXTURE TO ALIGN WITH BOTTOM OF GIRDER. PRIOR TO ORDERING LO2 AND LO3 PENDANTS, FIELD CONFIRM DIMENSION FROM BOTTOM OF CEILING DECK TO BOTTOM OF GIRDER. ELECTRICAL CONTRACTOR TO PROVIDE OVERALL HEIGHT OF SURFACE JUNCTION BOX, SO MANUFACTURE CAN PROVIDE FIXTURES WITH CORRECT OVERALL HEIGH". INTEGRAL DRIVER. 0-10 VOLT DIMMING. 700mA. MAX OPERATING TEMPERATURE 50 DEGREE C. IP65.	WASH LIGHT FOR WALL ALONG WALKWAY	1, 2
LO4	ACCLAIM OR APPROVED EQUIVALENT	#FTB-12-AABN+FTUBELCH1M+CLG-150-24	LED, 120 LUMENS PER FOOT	3000K	NONE	NONE	3.75 W PER FOOT	120 V	SATIN ALUMINUM STANDARD	NOMINAL .5" (W) BY .81" (H) LINEAR LED TUBE MOUNTED IN NOMINAL .66" (W) BY .93" (H) CONTINUOUS CHANNEL. REMOTE OUTDOOR DRIVER 120-277V LOCATED IN PENTAIR BOX OR EQUAL. PROVIDE LOUVERS ON END OF BOX FOR AIR CIRCULATION AND VENTING. DRIVER NOMINAL 8.75" (W) BY 2.68" (L) BY 1.53" (H). LENGTH(S) TO BE COORDINATED WITH VERTICAL SUPPORTS OF GUARDRAIL. LENGTHS IN INCHES NOTED AFTER TYPE ON PLANS, BUT EXTRA SHOULD BE ORDERED AND CUT TO LENGTH, SO IT CAN BE COORDINATED IN FIELD. MAX OPERATING TEMPERATURE 55 C. IP68.	GUARDRAIL INTEGRAL LIGHTING	2

GENERAL NOTES:

A. MANUFACTURER TO PROVIDE PROJECT SPECIFIC SHOP DRAWINGS SHOWING EXACT MOUNTING, FINISH, LENGTH, SHAPE AND LAMPING OF LUMINAIRE. VERIFY CEILING CONDITONS AND COORDINATE LIGHT FIXTURE MOUNTING HARDWARE AND TRIMS NEEDED TO SUIT CEILING CONDITIONS PRIOR TO ORDERING.

B. VERIFY FINISH AND COLOR WITH ARCHITECT PRIOR TO PLACING ORDER.

LUMINAIRE SCHEDULE NOTES:
1. PROVIDE 0-10V WIRE BETWEEN DIMMER SWITCHES AND ALL DIMMABLE LUMINAIRES.
2. REFER TO ARCHITECTURAL DETAILS FOR SPECIFIC MOUNTING LOCATIONS AND DETAILS.

LOAD SUMMARY

CONTROLLER D LOAD ANALYSIS

CIRCUIT	EXISTING LOAD	LOAD REMOVED	LOAD ADDED	TOTAL LOAD	C/B SIZE
D1	1300	0	0	1300	30A
D2	2112	2112	1092	1092	30A
D3	1920	1920	380	380	30A
D4	2112	2112	380	380	30A
D5	1920	1920	1092	1092	30A

PANEL SCHEDULE (PANEL AND BREAKERS ARE EXISTING TO REMAIN)

PANEL **D** — 120/240 VOLTS — 225 A. BUS — SERVICE ENTRANCE
EXISTING TO REMAIN — 1 PHASE — 150 A. MAIN BREAKER — SUBFEED LUGS
3 WIRE — MAIN LUGS ONLY — FEED THRU LUGS
FEEDER LENGTH ____ FT — X SURFACE MOUNTING — FLUSH MOUNTING

VOLTAGE DROP LENGTH	I	%VD		CIRC. NO.	CIRCUIT DESCRIPTION	CIRC. BRKR. AMPS	POLES	WIRE SIZE	LOAD	CONNECTED PER PHASE A	B	LOAD	WIRE SIZE	CIRC. BRKR. AMPS	POLES	CIRCUIT DESCRIPTION	CIRC. NO.		VOLTAGE DROP LENGTH	Z	I	%VD
				D1	EXISTING LIGHTING	30	1		1300	1880		580	6CU	30	1	HANDRAIL/COLUMNS NORTH	D4	TC	185	0.51	30	2.4%
				-	-	-	-		0		1092	1092	6CU	30	1	WALLWASH/ACCENT NORTH	D5	TC	155	0.51	30	2.0%
95	30	3.064%	TC	D2	WALLWASH + ACCENT SOUTH	30	1	10CU	1092	1992		900	8CU	20	1	RAILROAD LIGHTING	D6	PC	170	0.81	20	2.3%
75	30	2.4%	TC	D3	HANDRAIL/POLES SOUTH	30	1	10CU	583		580	0										
									0	0		0										
									0		0	0										
									0	0		0										
									0		0	0										
									0	0		0										
					CONTROL	20	1		0		0	0		20	1	MISC						
					SUBTOTAL CONNECTED LOAD			WATTS		3872	1672		WATTS									

TOTAL CONNECTED LOAD (VA) = 5544
TOTAL CONNECTED LOAD (A) = 23.10
TOTAL PANELBOARD DEMAND (VA) = 6930
TOTAL PANELBOARD DEMAND (AMPS) = 28.88

TC=PHOTOCELL ON/TIMECLOCK OFF
GFI = GROUND FAULT INTERRUPTER
PC=PHOTOCELL

CONSTRUCTION NOTES

1. ALL WORK SHALL COMPLY WITH THE CITY OF WICHITA STANDARD CONSTRUCTION AND MATERIALS STANDARDS UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE PLANS.
2. ALL UNDERGROUND DISTRIBUTION CABLE SHALL BE INSTALLED IN MINIMUM SCHEDULE 40, 3/4" PVC CONDUIT. ALL EXPOSED CONDUIT SHALL BE RIGID METAL AND PAINTED TO MATCH ARCHITECTURAL SURROUND.
3. CONDUCTORS SHALL BE TYPE THHN/THWN, 600VOLTS RATED, COPPER STRANDED, U.L. LISTED AND COLOR CODED RED, BLACK AND GREEN ACCORDING TO THE NEC. SIZE PER PLANS.
4. ALL WIRING AND OTHER COMPONENTS OF THE ELECTRICAL SYSTEM CONSTRUCTION SHALL MEET OR EXCEED THE LATEST REVISION OF NATIONAL ELECTRICAL CODE (NEC) AND NATIONAL ELECTRICAL SAFETY CODE (NESC) STANDARDS.
5. INDIVIDUAL AND SYSTEM GROUNDS SHALL BE INSTALLED ON ALL CIRCUITS. GROUNDING SHALL COMPLY WITH THE LATEST REVISION OF THE NEC.
6. PRIOR TO ORDERING EQUIPMENT, SHOP DRAWINGS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING REQUIRED PERMITS, PAYMENTS OF ALL FEES AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
8. CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS, COORDINATES AND ELEVATIONS BEFORE PROCEEDING WITH NEW WORK, NOTIFY THE ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. NO NEW CONSTRUCTION SHOULD BE PERFORMED BY 'SCALING' FROM THE PLANS.
9. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. THE CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND PIPE LINES, CONDUITS, STRUCTURES AND OVERHEAD LINES BY CONTACTING THE OWNERS OF THE UTILITIES.

   THE UTILITIES AS SHOWN ON THIS DRAWING WERE DEVELOPED FROM THE INFORMATION AVAILABLE. THIS IS NOT IMPLIED NOR INTENDED TO BE THE COMPLETE INVENTORY OF THE UTILITIES IN THIS AREA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES (WHETHER SHOWN OR NOT) AND PROTECT SAID UTILITIES FROM ANY DAMAGE. CONTRACTOR SHALL CALL 1-800-DIG-SAFE PRIOR TO PROJECT EXCAVATION.

   CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BY THE RESPECTIVE UTILITY OWNERS PRIOR TO ANY ON-SITE EXCAVATION. KEY LOCATIONS AS NOTED SHALL BE LOCATED VERTICALLY BY UTILITY OWNERS AND/OR UTILITY OWNER SHALL BE PRESENT ON-SITE FOR LOCATION PRIOR TO EXCAVATION. CONTRACTOR SHALL COORDINATE ANY UTILITY CONFLICTS WITH RESPECTIVE UTILITY COMPANY, THE CITY, AND THE ENGINEER. REQUIRED RELOCATES WILL BE PAID BY THE CONTRACTOR.
10. PULL AND JUNCTION BOXES SHALL BE LOCATED AND SIZED IN ACCORDANCE WITH THE LATEST EDITION OF NEC AND SHALL BE INSTALLED SUCH THAT THEY ARE ACCESSIBLE. ALL SHALL BE WEATHERPROOF. IF THE DISTANCE BETWEEN THE CONTROLLER, PULL BOX, OR LIGHT POLES IS GREATER THAN 500FT (CABLE CONDUIT) OR 200FT (RIGID CONDUIT), A PULL BOX SHALL BE PROVIDED. A PULL BOX SHALL BE INSTALLED ON EACH END OF ANY PAVEMENT CROSSING UNLESS THE PAVEMENT CROSSING ENDS IN A LIGHT POLE. REFER TO STANDARD DETAILS.
11. DURING THE PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER, THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY NECESSARY REPAIRS ARISING OUT OF DEFECTIVE WORKMANSHIP OR MATERIALS. THE CONTRACTOR SHALL CONDUCT AN INSPECTION OF THIS PROJECT 11 MONTHS AFTER THE PROJECT HAS BEEN ACCEPTED TO DETERMINE WHAT REPAIRS NEED TO BE MADE.

LEGEND

	ELECTRICAL PANELBOARD (SURFACE MOUNT)
TC	TIME CLOCK
P	PHOTOCELL
J OR J	JUNCTION BOX
P1-3,5,7	HOMERUN TO PANELBOARD, ARROWS INDICATE NUMBER OF CIRCUITS, HASH MARKS INDICATE NUMBER OF CONDUCTORS. INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD.
	EQUIPMENT GROUNDING CONDUCTOR IN CONDUIT (GREEN INSULATION OR BARE)
	CONDUIT CONCEALED
	CONDUIT IN/UNDER FLOOR/GROUND CONSTRUCTION
	EXPOSED CONDUIT
ETR	CONDUIT AND WIRE - EXISTING TO REMAIN
	CONDUIT TURNING UP
LOx Dx	LINEAR LUMINAIRE; (SEE LUMINAIRE SCHEDULE) LOx = LUMINAIRE TYPE "LOx" D-x = CIRCUIT NUMBER
ETR	EXISTING TO REMAIN
M	METER

A	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CD	CANDELA
CT	CURRENT TRANSFORMER
CKT	CIRCUIT
DN	DOWN
EC	ELECTRICAL CONTRACTOR
ETR	EXISTING TO REMAIN
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
G, GND	GROUND
GRS	GALVANIZED RIGID STEEL
JB, PB	JUNCTION BOX
kcmil	1000 CIRCULAR MILS
kV	KILOVOLT
kVA	KILOVOLT-AMPS
kW	KILOWATT
LF	LINEAR FEET
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MFR	MANUFACTURER
MIN	MINIMUM
MTD	MOUNTED
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
OC	ON CENTER
PH, Ø	PHASE
PNL	PANEL
PNLBD	PANELBOARD
PROVIDE	FURNISH AND INSTALL
PT	PHOTOCELL ON/TIMECLOCK OFF
PT/Dx	CIRCUIT CONTROLLED VIA PHOTOCELL AND TIMECLOCK. WHEN CIRCUIT IS ON, CONTROLLED VIA DIMMABLE SWITCH.
QTY	QUANTITY
REV	REVISION
TYP	TYPICAL
U/G	UNDERGROUND
UL	UNDERWRITERS LABORATORIES, INC.
V	VOLT(S)
W	WIRE
UNO	UNLESS NOTED OTHERWISE
W/	WITH
W/O	WITHOUT
WP	WEATHERPROOF
XFMR	TRANSFORMER

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PRINTS ISSUED

DATE	PURPOSE	NO.
09.13.17	FOR CONSTRUCTION	

DOUGLAS AVE.-BNSF
RAILROAD UNDERPASS
IMPROVEMENTS
WICHITA, KS

LK Architecture • Engineering • Planning • Interior Design • Landscape Architecture

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CONTACT: --

PROJECT NUMBER:
17145

SHEET TITLE:
ELECTRICAL NOTES AND SCHEDULES

SHEET NUMBER:
25