THE STRUCTURAL DESIGN OF ALL POLES, MAST ARMS, HIGH-MAST POLES, AND OTHER SUPPORTS FOR SIGNS, LUMINAIRES, AND SIGNALS, AS WELL AS THEIR CONNECTIONS, SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS. THE MANUFACTURER SHALL ENSURE THE FOLLOWING ARE APPLIED TO THE DESIGN:

THE MINIMUM DESIGN WIND SPEED AND DESIGN LIFE AS REQUIRED IN THE AASHTO SPECIFICATIONS;

THE CALCULATED STRESSES AND FORCES FROM THE DESIGN LOADINGS DO NOT EXCEED THOSE REQUIRED IN THE AASHTO SPECIFICATIONS;

A CATEGORY I FATIGUE IMPORTANCE FACTOR (IF) FOR ALL STRUCTURES; NO VIBRATORY MITIGATION SHALL BE ALLOWED. TRUCK-INDUCED GUSTS SHALL BE APPLIED TO ALL OVERHEAD TRAFFIC SIGNAL SUPPORTS.

ALL MEMBERS ARE AT LEAST THE MINIMUM THICKNESS AS REQUIRED IN THE AASHTO SPECIFICATIONS;

LUMINAIRE MAST ARMS SHALL BE DESIGNED TO SUPPORT AT LEAST A 50 LB. (22.7 KG) LUMINAIRE WITH AN EFFECTIVE PROJECTED AREA OF 2.5 FT2 (0.23 M2); THE ANCHOR BOLT DESIGN AND AMOUNT OF ANCHOR BOLTS TO BE USED SHALL BE AS REQUIRED IN THE AASHTO SPECIFICATIONS.

SIGNAL MAST ARMS AND POLES SHALL BE DESIGNED FOR SPECIFIC SIGNAL HEAD AND SIGN PLACEMENT.

UNLESS SITE SPECIFIC GEOTECHNICAL DATA IS AVAILABLE, FOUNDATIONS SHALL BE DESIGNED UTILIZING THESE PARAMETERS: SHEAR STRENGTH OF COHESIVE SOIL (C) OF 500 PSF, ANGLE OF INTERNAL FRICTION (Ф) OF 22 DEGREES, AND EFFECTIVE UNIT WEIGHT OF SOIL (Г) OF 120 PCF.

MINIMUM HAND HOLE SIZE OF 3 INCH WIDTH BY 5 INCH HEIGHT.

SYMBOLS AND LEGENDS ARE DIAGRAMMATIC ONLY AND LOCATIONS SHALL BE ADJUSTED FOR EXISTING FIELD CONDITIONS, BUT NO MAJOR ALTERATIONS OR RELOCATIONS WILL BE MADE WITHOUT FIRST CONSULTING WITH THE TRAFFIC ENGINEERING DIMISION AT (405)521-2861.

ALL BROKEN CONCRETE, WASTE MATERIAL, AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER, NO PAYMENT WILL BE MADE FOR THE DISPOSAL OF THIS MATERIAL,

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC.... PRIOR TO DIGGING NEAR THE UTILITIES, THE CONTRACTOR SHALL CALL FOR A LIST OF ALL UNDERGROUND FACILITIES REGISTERED IN THE AREA OF CONSTRUCTION LISTED WITH THE FOLLOWING AGENCIES:

THE "OKIE" NOTIFICATION CENTER 811 OR (405)522-6543 OR WWW.CALLOKIE.COM OR THE LOCAL COUNTY CLERK'S OFFICE.

PAY QUANTITY NOTES

WITH THE COMPANY/CITY OF......PSO/AEP.
COMPANYS/CITY'S TELEPHONE NO...(918)424-7913.

- (TP-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY. SEE THE 2009 SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- (1) PAY ITEM IS TO BE USED FOR THE INSTALLATION OF THE UNDERPASS LIGHTING.
- (2) POLYMER CONCRETE PULL BOXES SHALL BE USED.
- (3) PAY ITEM IS FOR THE REMOVAL OF 44 EXISTING LIGHT POLES ALONG US 69 THAT WILL BE IN CONFLICT WITH THE ROADWAY REPLACEMENT AND 15 EXISTING LIGHT POLES ALONG US 69 THAT WILL BE IN CONFLICT WITH THE NEW LIGHTING SYSTEM TO BE INSTALLED ON THIS PROJECT. THE REMOVED POLES SHALL BECOME THE PROPERTY OF THE CITY OF MCALESTER AND SHALL BE DELIVERED TO A LOCATION IN THE CITY AS SPECIFIED BY THE ENGINEER. ALSO INCLUDED IN THE PRICE BID FOR THIS ITEM SHALL BE THE OBLITERATION AND REMOVAL OF THE EXISTING FOOTINGS BELOW GROUND LEVEL, AS APPROVED BY THE ENGINEER.
- (4) THE POLES TO BE INSTALLED ON THIS PROJECT SHALL BE 40' ROUND GALVANIZED STEEL POLES.

	REVISIONS	
NO.	DESCRIPTION	DATE

PAY QUANTITIES						
0301 LIGH	TING					
ПЕМ	DESCRIPTION		UNIT	TOTAL		
802(A) 8300	3/4" GALV. STEEL ELECTRICAL CONDUIT EXPOSED	(TP-1)(1)	LF	225		
802(A) 8306	1 1/4" GALV. STEEL ELECTRICAL CONDUIT EXPOSED	(TP-1)(1)	LF	560		
802(B) 8342	2" PVC SCH. 40 PLASTIC CONDUIT TRENCHED	(TP-1)	LF	2565		
802(E) 8372	JUNCTION BOX (8" X 8" X 6")	(1)	ĘΑ	6		
803(A) 8065	PULL BOX (SIZE I)	(2)	EA	7		
804(A) 2915	STRUCTURAL CONCRETE	(TP-1)	ÇY	8.7		
804(B) 2916	REINFORCING STEEL	(TP-1)	L B	501		
805(A) 8712	(PL) REMOVAL OF LIGHT POLE	(3)	EA	59		
806(D) 8989	40' MTG. HT. HL. PTP. (G.STL.)	(4)	EA	15		
807 8092	BREAKAWAY BASE (DES. B)		EA	3		
809(A) 8090	ROADWAY LUMINAIRE	(5)	EA	15		
809(B) 8098	UNDERPASS LUMINAIRE	(5)	EA	6		
B10(A) 3118	SERVICE POLE	(TL-35)	ĒΑ	1		
811 8038	1/C NO. 4 ELECTRICAL CONDUCTOR	(TP-1)	LF	6565		
811 8044	1/C NO. 10 ELECTRICAL CONDUCTOR	(TP-1)	ᄕ	600		
811 8046	1/C NO. 12 ELECTRICAL CONDUCTOR	(TP-1)	LF	1875		
890 7700	(PL) TRAFFIC ITEMS	(6)	LSUM	1		

(5) THE FIXTURES TO BE INSTALLED ON THIS PROJECT SHALL BE AS FOLLOWS.

15 - HOLOPHANE LED ROADWAY FIXTURES WITH MODEL NUMBER LEDG-120-53-4K-AH-H-L3. THESE FIXTURES SHALL INCLUDE 5' LUMINAIRE MOUNTING ARMS.

6 - HOLOPHANE LED WALLPACK FIXTURES WITH MODEL NUMBER W4G-LED-10C-1000-40K-T3M. THESE FIXTURES SHALL BE MOUNTED IN ACCORDANCE WITH ODOT STANDARD DRAWING UPD2-1-00. THE BRACKET TO BE USED ON THIS PROJECT IS LABELED AS "BRACKET NO. 1 DETAIL" IN THIS STANDARD DRAWING. EVERYTHING SHOWN IN THIS DETAIL SHALL BE INCLUDED IN THE PRICE BID FOR "UNDERPASS LUMINIARE".

THE CONTRACTOR SHALL CONTACT PSO/AEP REGARDING A PLAN TO KEEP THE LIGHT POLES BURNING THAT ARE ADJACENT TO THIS PROJECT ONCE THE CONFLICTING LIGHT POLES ARE REMOVED. PSO/AEP SHOULD DETERMINE THE LOCATIONS OF ADDITIONAL SERVICE POLES AND OTHER WORK THAT NEEDS TO BE DONE TO KEEP THESE LIGHTS BURNING AND THE CONTRACTOR SHALL INCLUDE THIS WORK AND EQUIPMENT IN THE PRICE BID FOR THIS ITEM. THIS PRICE BID FOR THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTIALS NECESSARY TO KEEP THE REMAINING LIGHTING CIRCUITS ADJACENT TO THIS PROJECT COMPLETELY OPERATIONAL TO THE SATISFACTION OF THE ENGINEER.

R. WAYNE RUSSELL, P.E. # 16030 C.A. # 1160. RENEWAL 06-30-17

UA I E
Traffic Engineering Consultants, Inc.
5000 S. Western, Suite 300 - Oklahama City, OK 73139,
Ph: 405-720-7721, Fax: 405-720-9848, Web: www.tecok.com



R. WAYNE

LIGHTING PAY QUANTITIES
AND NOTES

State Job No. 14999(04)

Sheet No. __17_