



## Notice of Statewide Contract Award

*Official signed contract documents are on file with OMES-Central Purchasing.*

**Contract Title:** FLASHING LED SIGNS

**Statewide Contract # :** SW 0685

**Contract Issuance Date:** July 11, 2019

**Total Number of Vendors:** Two (2) *(For details see: Vendor Information Sheet)*

**Contract Period:** July 15, 2019 through July 14, 2020

**Agreement Period:** July 15, 2019 through July 15, 2024

**Authorized Users:** **All State Departments, Boards, Commissions, Agencies and Institutions, in addition to Counties, School Districts and Municipalities which may avail themselves of this contract.**

**Contract Priority:** Mandatory

**Type of Contract:** Indefinite Quantity Contract

**OMES-CP Contact:** Theresa Johnson **Title:** Contracting Officer

**Phone:** 1 - 405 - 521 - 2289 **Email:** [theresa.johnson@omes.ok.us](mailto:theresa.johnson@omes.ok.us)



## Awarded Supplier Information

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**Supplier Name:** K & K SYSTEMS

**Supplier ID #:** 0000056000

**Supplier Address:** 687 Palmetto Road

**City:** Tupelo

**State:** MS

**Zip Code:** 38801

**Contact Person Name:** Harry Haney

**Phone #:** 1 - 662 - 791 - 1779

**Title:** Account managers

**Fax #:** 1 - 662 - 566 - 7123

**Email:** harry.haney@k-ksystems.com

**Website:** [www.k-ksystems.com](http://www.k-ksystems.com)

**Authorized Location:** ☐ Locations list attached as (*attachment title*)

☐ Address:

City:

State:

Zip Code:

**Contract ID #:** #5577

**Delivery:**

**Minimum Order:**

**P/Card Accepted:** ☒ Yes

☐ No

**Other:**

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**Supplier Name:** TRAFFICE & PARKING CONTROL CO., INC

**Supplier ID #:** 0000265591

**Supplier Address:** 5100 W Brown Deer Raod

**City:** Brown Deer

**State:**

**WI Zip Code:** 53223

**Contact Person Name:** Matt Ruemler

**Phone #:** 1 - 262 - 649 - 1140

**Title:** Account Manager

**Fax #:** 1 - 800 - 444 - 0331

**Email:** Mattr@tapconet.com

**Website:** [www.tapconet.com](http://www.tapconet.com)

**Authorized Location:** ☐ Locations listing attached as (*attachment title*)

☐ Address:

City:

State:

Zip Code:

**Contract ID #:** #5578

**Delivery:**

**Minimum Order:**

**P/Card Accepted:** ☒ Yes

☐ No

**Other:**

Central Purchasing · 5005 N. Lincoln Boulevard, Suite 300 · Oklahoma City, OK 73105  
Telephone: 405-521-0955 · Fax: 405-521-4475 · [www.omes.ok.gov](http://www.omes.ok.gov)

This Contract is to establish a five year statewide contract for Flashing Light Emitting Diode (LED) Signs for the State of Oklahoma governments.

Contract is for Flashing LED Signs, Flashing LED Beacon systems, and Rapid Response Flashing Beacons (RRFB) for the State of Oklahoma. Successful supplier will be required to furnish all such materials and services as may be ordered during this contract period. Orders for delivery will be issued directly to the successful supplier by various State entities on the order contract release from such as purchase order or other order type forms.

.Typical application for these materials is for highway signing, midblock and/or signalized pedestrian crosswalks, and school zones.

#### Deliverables

Successful supplier must provide Deliverables, staff, and otherwise do all things necessary for providing Flashing LED Signs, Flashing LED Beacon systems, and RRFB, for the State of Oklahoma requesting entities within 30 days of the request.

### PRODUCT QUALITY

#### Blinking LED Signs

##### Signs

All Signs shall conform to the section 850 of the 2009 Oklahoma Standard Specifications for Highway Construction. All signs shall be in compliance with MUTCD (latest edition) sign specifications. The State prefers all signs blanks be .080" gauge aluminum minimum. Sheeting used shall be 3M DG3 diamond grade or equivalent prismatic sheeting or better. The state prefers an anti-graffiti overlay protection and anti-vandal fasteners to mounting components. The State prefers signs with 5 or more sides to have one LED's in each corner. The State prefers signs with 4 sides or less to have one LED in each corner and one at the midsection of each side.

##### Light Emitting Diodes (LED)

The State prefers that each sign assembly shall consist of high powered 1 watt LEDs that provide a maximum light intensity of up to 600,000 mcd (millicandelas) with a viewing angle of 20°. All LEDs shall match the color, as per section 2A.07 of the MUTCD. The State prefers each LED sealed in 7/8" diameter, heat dissipating plastic enclosure to provide resistance to weather and vibration. The States preference is for all LED enclosures mounted in a 1" hole and ultrasonically welded to the sign assembly to provide maximum strength and rigidity.

All LEDs shall be wired in strings to activate simultaneously as per MUTCD standards and such that all LEDs continue to flash in the event of single failed LED. All wire used shall conform to military specifications, MIL-W-16878D, Type D, vinyl nylon jacket. Wiring shall be covered and secured to the sign assembly to provide weather resistance and protection.

All LED connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protect from temporary immersion in water up to 1 meter deep for 30 minutes.

#### School Zone and Crosswalk

##### Push Button:

ADA and MUTCD compliant Crosswalk Push Button with momentary (normally open) switch. Provide simple push buttons or optional Accessible Pedestrian Signal (APS) with visual (red LED) & audio confirmation or an audible voice message. Push buttons shall have the capability to communicate with other near-by devices as needed thru either wireless capability or additional controller. Push buttons should mount on any traffic poles or on remote pedestals.

#### Control Cabinet

Provide controller assembly in accordance with NEMA 3R rated aluminum enclosure and controller capable of wired and wireless communication with push buttons. Provide controllers with integrated time clock scheduler. For 24/7 only controllers, provide an option to upgrade with a separate time clock controller hardware. Equip controller with the option to manually switch on or off by using toggle switch, key switch and/or key fob.

#### Flashing Warning LED Beacon

Flashing LED beacon (amber or red) on yellow or black polycarbonate housing or plastic injected molded polystyrene tufted ultra violet impregnated with material for ultra violet rays flashing warning beacons to be installed in split heads vertically (top and bottom of signs). Some school zone signs may require additional LED beacon back-to-back to the top beacon (triple vertical beacon setup).

#### Rectangular Rapid Flashing Beacon (RRFB)

Provide RRFB that meets FHWA Interim Approval (IA)-21.

#### Control Circuit

The control circuit shall have the capability of independently flashing dual outputs. The flashing output current and duty cycle shall be programmable. The flashing output shall be 50 to 60 flashes per minute with 100msec duration on time. The State prefers outputs to reach the output current as programmed for the duration of the 100msec pulse. The State prefers the output current ability to individually programmable for day and night time operation.

The preference of the State is for day and night time mode to automatically be determined by solar panel charge input and adjust to match ambient lighting conditions. The State prefers controller that provide 6 levels of brightness control determined by ambient conditions. Except for LED signs, the controller shall manage the battery charge in order to accommodate at least 8 days of continuous use without any charge. For LED signs the controller shall manage the battery charge in order to accommodate at 30 days of continuous use without any charge. The control circuit shall operate between the temperatures of -40°C and +80°C. All circuit connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 1 meter deep for 30 minutes.

#### Solar Panel

The State prefers all panels to be mounted to an aluminum plate and bracket at an angle of 45° - 60°. All fasteners used shall be anti-vandal. Wire used shall conform to military specifications, MIL-W-16878D, Type D, vinyl nylon jacket. All solar panel connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 1 meter deep for 30 minutes.

#### Batteries

The State Prefers battery packs of 4.8 VDC 14Ah Nickel Metal Hydride (NiMH) for LED signs. For other application, except LED signs, the State prefers battery packs of 12 VDC 14Ah – 105Ah NiMH. All batteries shall be sealed in a plastic film to provide moisture and corrosion resistance. All batteries shall operate between the temperatures of -40°C and +80°C. All batteries shall have fusing between each cell and be protected from overheating using a thermocouple sensor. All battery connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 1 meter deep for 30 minutes. Other types of battery, such as Absorbent Glass Mat (AGM) may be acceptable if supporting documents that show comparative advantages in percent discharging, charging time, life cycle, environment, cost and others, are provided. The State to review and approve supporting document for battery types other than NiMH before adding them to the contract.

#### Radar

Radar Sensors shall have a pickup Distance of 300 feet with a beam angle between 38 and 45 degrees. The Radar shall operate between the temperature of -40°C and +80°C.

#### Foundation Anchor

Provide helical steel foundations designed to support advance warning signs and school zones, and pedestrian crosswalk with different types and sizes of poles (square and pipe). The helical foundation shall have a slip base plate welded to it and shall be able to with stand wind pressure for sign area up to 25 square feet at 12 feet centroid height.

#### Warranty

Manufacturer shall offer a one year or more unconditional warranty against all defects in material and workmanship.



# CONTRACT

State of Oklahoma

Dispatch via Print

**Supplier** 0000056000  
K & K SYSTEMS INC  
687 PALMETTO RD  
TUPELO MS 38801-7662  
USA

<b>Contract ID</b> 0000000000000000000000005577			Page 1 of 1	
<b>Contract Dates</b> 07/15/2019 to 07/14/2020		<b>Currency</b> USD	<b>Rate Type</b> CRRNT	<b>Rate Date</b> PO Date
<b>Description:</b> From Req ID - 0900013226			<b>Contract Maximum</b> 0.00	
<b>TYPE: STATEWIDE</b>				

Tax Exempt? Y Tax Exempt ID:736017987

## Contract Lines:

Line #	Cat CD / Item ID / Item Desc	UOM	Minimum Order		Maximum / Open	
			Qty	Amt	Qty	Amt
1	55121710 / FLASHING LED SIGNS	EA	1.00	0.00	0.00	0.00
Contract Base Pricing		1.00000	EA	0001		

COMMENTS:

Final = The price is final after adjustments  
Hard = Apply adjustments regardless of other adjustments  
Skip = Skip adjustments if any other adjustments have been applied

Authorized Signature



# CONTRACT

## State of Oklahoma

Dispatch via Print

**Supplier** 0000256591  
TAPCO  
5100 W BROWN DEER RD  
BROWN DEER WI 53223-2322  
USA

<b>Contract ID</b> 0000000000000000000000005578			Page 1 of 1	
<b>Contract Dates</b> 07/15/2019 to 07/14/2020		<b>Currency</b> USD	<b>Rate Type</b> CRRNT	<b>Rate Date</b> PO Date
<b>Description:</b> From Req ID - 0900013226			<b>Contract Maximum</b> 0.00	
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COMMENTS:

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Authorized Signature

		VENDOR NAME & ADDRESS		VENDOR NAME & ADDRESS	
SW0685 PRICE LIST		Traffic & Parking Control Co (TAPCO)		K&K Systems	
		Brown Deer, WI		Tupelo,MS	
DESCRIPTION FOR REPLACEMENT OR NEW INSTALLATION	UOM	Model/item #	PRICE	Model/item	PRICE
LED SIGN: 24” Blinker, any legend	EA	2180-DV24	1,220.00	WXXX-2424	775.00
LED SIGN: 30” Blinker, any legend	EA	2180-DV30	1,280.00	WXXX-3030	775.00
LED SIGN: 36” Blinker, any legend	EA	2180-DV36	1,360.00	WXXX-3636	875.00
LED SIGN: 48” Blinker, any legend	EA	2180-DV48	1,488.00	WXXX-4848	975.00
LED Sign: 2-3/8” Bracket	EA	101799	30.70	LSB-2-38	30.00
LED SIGN: 3” Bracket	EA	139914	37.60	LSB-3	30.00
LED SIGN; 4” Bracket	EA	133915	38.50	LSB-4	30.00
LED SIGN: 4.5” Bracket	EA	139916	42.75	LSB-4.5	30.00
Radar	EA	108767	960.00	RADAR	631.00
Blinder Paddle	EA	2180-00302	231.96	PADDLE	450.00
Standard Push Button without visual (LED) and audio (tone) confirmation.	EA	3380-00001	140.00	PB	150.00
Standard Push Button with visual (LED) confirmation.	EA	101620	160.00	PBL	200.00
Standard Push Button with visual (LED) and audio (tone) confirmation.	EA	101620	160.00	PBLT	215.00
APS push button (such as Polara’s XAV2E, or equivalent)	EA	106506	400.00	PBLT-K	712.00
XAV interface board	EA	107811	400.00	PBV	600.00
Accessible Pedestrian Signal (APS) push button with interface board (XAV2E or equivalent)	EA	106506	400.00	PBLT-K-PBV	1,100.00
Lens: 12” LED Beacon lens.	EA	100537/100536	88.00	LED-12	90.00
Black or yellow polycarbonate housing for 12” beacon. This is for beacon housing only.	EA	122-101ST/122-101BST	79.20	TPY-112-TCN-EVN-PN	90.00
12” beacon housing attachment to pipe (up to 4 ½” OD) or square post.	EA	2180-BBSAY	2,243.75	CTR-MH	58.00
A complete 12” LED beacon, polycarbonate housing, and attachment to post. Single assembly. Vertical mount.		2180-BBSAY-LU	400.00	ADD-LED-KIT	240.00
Wireless controller	EA	2180-10401	768.00	Crosstalk-CW-4	712.00
Controller with integrated time clock scheduler.	EA	2180-10403	1,148.00	Crosstalk-4	712.00
Controller 24/7 only	EA	2180-10400	488.00	SPLasher	185.00



	<b>ATTACHMENT A - ITEMS TO BID - CONTINUED</b>					
	<b>DESCRIPTION FOR REPLACEMENT OR NEW INSTALLATION</b>	<b>UOM</b>	<b>Model/item #</b>	<b>PRICE</b>	<b>Model/item # B</b>	<b>PRICE</b>
23	Controller 24/7 only	EA	134227	200.00	SPLasher	185.00
24	Time clock controller	EA	2180-TIMECLOCK	380.00	Crosstalk-4	712.00
25	Toggle switch	EA	2180-01800	360.00	TGL	50.00
26	Key switch	EA	127778	316.00	SWK	70.00
27	Wireless key fob	EA	2180-01600	676.00	CWKF	250.00
28	Solar charge controller	EA	101493	100.00		50.00
29	Cabinet*	EA	120652-PEM	484.70	ECO1-140703	160.00
	Size:					
	Battery capacity:					
30	Cabinet*	EA	108045-PEM	280.00	ECO2-141403	200.00
	Size:					
	Battery capacity:					
31	Cabinet*	EA	136921	108.75	ECO3-142103	225.00
	Size:					
	Battery capacity:					
32	Cabinet*	EA	108766-PEM	219.04	KKSL241509	230.00
	Size:					
	Battery capacity:					
33	Cabinet*	EA			KKSL241515	275.00
	Size:					
	Battery capacity:					
34	13.5W peak total output Solar Panel	EA	SLR-13-B	280.00	ADD15W	120.00
35	20W peak total output Solar Panel	EA	SLR-26-B	297.50	ADD20W	142.00
36	30W peak total output Solar Panel	EA	SLR-30-B	280.00	ADD30W	212.00
37	55W peak total output Solar Panel	EA	SLR-55-B	280.00	ADD50W	350.00
38	85W peak total output Solar Panel	EA	SLR-85-B	600.00	ADD80W	462.00
39	Battery pack, 4.8VDC,14Ah for LED Signs	EA	2795-00003	100.00		N/B

40	Battery pack, 12VDC,14Ah**	EA	100030	82.00	BAT-12-18A	65.00
41	Battery pack, 12VDC,27Ah**	EA	112308	145.00	BAT-12-55A	142.00
42	Battery pack, 12VDC,35Ah**	EA	2180-35AHAGN-B	110.00	BAT-12-18A2	140.00
	<b>ATTACHMENT A - ITEMS TO BID - CONTINUED</b>					
	<b>DESCRIPTION FOR REPLACEMENT OR NEW INSTALLATION</b>	<b>UOM</b>	<b>Model/item #</b>	<b>PRICE</b>	<b>Model/item #</b>	<b>PRICE</b>
43	Battery pack, 12VDC,48Ah**	EA	101494	200.00	BAT-12-18A3	210.00
44	Battery pack, 12VDC,105Ah**	EA	2180-35AHAGN-B	330.00	BAT-12-100A	222.00
45	Rectangular Rapid Flashing Beacon (RRFB)	EA	136761	400.00	ADD-RRFB	434.25
46	Mounting post, 4 ½" OD pipe	FT	373-15	275.00	PA-14-40	256.00
47	Mounting post, 2 3/8" OD pipe	FT	372-00001	51.96	PGR12	90.00
48	Mounting post, 2 ½" x 12ga Perforated Steel Square Tube (PSST)	FT	114830	47.96	PST25D-12	130.00
49	Mounting post, 2" x 12ga PSST	FT	1603-00004	35.96	PST20D-12	90.00
50	Slip base for 4 ½" OD pipe	EA	203-00014	140.00	PED-BASE	197.00
51	Slip base for 2 3/8" OD pipe	EA	129231	210.00	PGR-12	75.00
52	Slip base for 2 ½" PSST	EA	139224	19.50	PST-22F12A3	60.00
53	Slip base for 2" PSST	EA	1603-00008	15.95	PST-25F12A3	60.00
54	Helical foundation (steel)	EA	110085	516.00	DB-4-60	450.00
	Triple vertical beacon school zone bundle: This bundle shall include 3 LED Beacons, polycarbonate housing, 30W solar panel, cabinet, 12VDC 35Ah battery pack, wireless controller with time clock scheduler capability, and solar charge controller.			2,640.00	112-T12-30W	2,365.00
	Triple-vertical-beacon school zone bundle:			2,640.00	112-T12-50W	2,565.00
56	This bundle shall include 3 LED Beacons, polycarbonate housing, 55W solar panel, cabinet, 12VDC 48Ah battery pack, wireless controller with time clock scheduler capability, and solar charge controller.	EA				
57	Double-beacon school zone bundle:	EA	600417	2,080.00	ECO-112-D12	2,043.00
	Ped. Crosswalk bundle:			2,400.00	132-D12-BDPB	2,540.00

59	The bundle shall include 2 LED Beacons, polycarbonate housing, bulldog push button, 30W solar panel, cabinet, 12VDC 35Ah battery pack, wireless controller with time clock scheduler capability, and solar charge controller.	EA				
60	Ped. Crosswalk bundle:	EA		3,000.00	132-D12-APSPB	3,184.00
	This bundle shall include 2 LED Beacons, polycarbonate housing, APS push button with interface board, 30W solar panel, cabinet, 12VDC 35Ah battery pack, wireless controller with time clock scheduler capability, and solar charge controller.					
	<b>ATTACHMENT A - ITEMS TO BID - CONTINUED</b>					
	<b>DESCRIPTION FOR REPLACEMENT OR NEW INSTALLATION</b>	<b>UOM</b>	<b>Model/item #</b>	<b>PRICE</b>	<b>Model/item #</b>	<b>PRICE</b>
	This bundle shall include 2 LED Beacons, polycarbonate housing, APS push button with interface board, 30W solar panel, cabinet, 12VDC 35Ah battery pack, wireless controller with time clock scheduler capability, and solar charge controller.			3,000.00	132-D12-APSPB	3,184.00
	Ped. Crosswalk LED Sign bundle:	EA		3,080.00	SACW-APSPB	1,775.00
62	The bundle shall include LED sign 30", APS push button with interface board, 30W solar panel, cabinet, 12VDC 35Ah battery pack, wireless controller with time clock scheduler capability, and solar charge controller.					
	Ped. Crosswalk LED Sign bundle:	EA		2,480.00	SACW-BDBP	1,352.00
63	The bundle shall include LED sign 30", bulldog push button, 55W solar panel, cabinet, 12VDC 48Ah battery pack, wireless controller with time clock scheduler capability, and solar charge controller.					
64	Ped. Crosswalk LED Sign bundle:	EA				
	Ped. Crosswalk Single RRFB bundle:	EA			RRFB-BD-50	2,501.00
65	The bundle shall include single RRFB, bulldog push button, 55W solar panel, cabinet, 12VDC 48Ah battery pack, wireless controller and solar charge controller.					
	Ped. Crosswalk Single RRFB bundle:			2,600.00	RRFB-APS-50	3,092.00

66	The bundle shall include single RRFB, APS push button with interface board, 55W solar panel, cabinet, 12VDC 48Ah battery pack, wireless controller and solar charge controller.	EA				
67	Ped. Crosswalk Double RRFB bundle:	EA	600147	5,596.00	DRRFB-BD-50	2,877.00
	The bundle shall include two (2) RRFBs (back-to-back), bulldog push button, 55W solar panel, cabinet, 12VDC 48Ah battery pack, wireless controller and solar charge controller.					
68	Ped. Crosswalk Double RRFB bundle:	EA	600148	6,000.00	DRRFB-APS-50	3,467.00
	The bundle shall include two (2) RRFBs (back-to-back), bulldog push button, 55W solar panel, cabinet, 12VDC 48Ah battery pack, wireless controller and solar charge controller.					
	<b>ATTACHMENT A - ITEMS TO BID - CONTINUED</b>					
	<b>DESCRIPTION FOR REPLACEMENT OR NEW INSTALLATION</b>	<b>UOM</b>	<b>Model/item #</b>	<b>PRICE</b>	<b>Model/item #</b>	<b>PRICE</b>
69	System controller bundle: This bundle shall include cabinet, wireless controller with time clock scheduler capability, 30W solar panel and 12VDC 35Ah battery pack.	EA	500029	1,475.00	OK-PP-30	1,195.00
70	System controller bundle: This bundle shall include cabinet, wireless controller with time clock scheduler capability, 55W solar panel and 12VDC 48Ah battery pack.	EA	500029	1,475.00	OK-PP-50	1,495.00
71	System controller bundle: This bundle shall include cabinet, wireless controller with time clock scheduler capability, 85W solar panel and 12VDC 105Ah battery pack.	EA	500043	2,015.00	OK-PP-80	1,695.00