



Santa Fe Implementation Plan



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Logistics/Planning Phase

Dalkia has developed an upgrade plan and phasing schedule to complete the conversion of all 3,499 City-owned luminaires to LED technology within 6 months from project commencement. The upgrade plan was developed with consideration for the following factors:

- Improvement of the lighting performance and look and feel of the City
- Reduction of traffic and lane closure requirements by scheduling a majority of disruptive work overnight or during low volume periods

Equipment and Workforce

In order to complete the project within a six-month period from the project commencement, Dalkia anticipates the need for four-six field crews. Each crew will be composed of two workers: a Journeyman Electrician (EL-01J or EE-98J) and a ground man.

- Depending on the nature of work and location of poles, crews will be equipped with either forty-foot or sixty-five-foot bucket trucks for luminaire replacement, and derrick trucks will be available when pole replacement is necessary. Dalkia will run all operations out of a centrally located warehouse, where we will store equipment, vehicles, and the inventory upgrade materials.

The proposed six-month timeline is based on the following variables:

- 3,499 City-owned light points
- 4-6 teams, 12 light points upgraded per day per team
- 6-8 weeks of material lead time
- 4 months field work, 20 working days per month

These numbers are estimates based on Dalkia's performance commitment to conduct all upgrade tasks within six months, including for mobilization and material supply availability.

<p align="center">Santa Fe Contract Unit Prices as of January 27, 2021 Revision as needed</p>							
Line	Item	Description	Unit	Road Type	Total	Road Type	Total
1	Fixture Installation: <i>Cobra head</i>	Installation of (1) LED cobra head. Price includes luminaire, photocell, rewiring, and labor.	EA	Residential	\$342.26	Local	\$462.89
2	Fixture Installation: <i>Cobra head</i>	Installation of (1) LED cobra head. Price includes luminaire, photocell, rewiring, and labor.	EA	Major/Highway			\$607.65
3	Arm Installation: <i>6 ft or less</i>	Installation of (1) arm made of aluminum, steel or comparable material. Price includes labor and wiring.	EA	Pipe	\$610.77	Davit	\$1,016.00
4	Arm Installation: <i>Greater than 6 ft</i>	Installation of (1) arm made of aluminum, steel or comparable material. Price includes labor and wiring.	EA	Davit	\$1,100.97	Twin Davit	\$2,177.60
5	Pole Installation: <i>Less than 25 ft</i>	Installation of pole made of aluminum, steel, or comparable material. Price includes labor and wiring.	EA	Local			\$2,484.36
6	Pole Installation: <i>25 to 35 ft</i>	Installation of pole made of aluminum, steel, or comparable material. Price includes labor and wiring.	EA	Local			\$3,101.85
7	Pole Installation: <i>Greater than 35 ft</i>	Installation of pole made of aluminum, steel, or comparable material. Price includes labor and wiring.	EA	Up to 45 ft	\$3,911.12	Greater than 45 ft	\$5,957.64
8	Pole Base: <i>18"</i>	Installation of an 18" pole base. Price includes base and labor	EA	All			\$778.91
9	Pole Base: <i>24"</i>	Installation of a 24" pole base. Price includes base and labor	EA	All			\$942.31
10	Wiring Material: <i>Copper Wire</i>	Underground Copper 10/2 UF Wire. Price per foot, material only.	FT	All			\$1.12
11	Wiring Material: <i>Aluminum Wire</i>	Underground Aluminum Triplex Wire. Price per foot, material only.	FT	All			\$1.48
12	Overhead Wiring Material: <i>Copper Wire</i>	Overhead #8 Copper THHN Wire. Overhead requires 2 wires per pole. Price per foot, material only.	FT	All			\$0.45
13	Overhead Wiring Material: <i>Aluminum Wire</i>	Overhead #4 ACSR Wire. Overhead requires 2 wires per pole. Price per foot, material only.	FT	All			\$0.77
14	Pole Installation: <i>Reusable</i>	Installation of a reusable pole. Price includes labor and wiring.	EA	All			\$1,188.45
15	Arm Installation: <i>Reusable</i>	Installation of a reusable arm. Price includes labor and wiring.	EA	All			\$564.64
16	Fixture Installation: <i>Reusable</i>	Installation of a reusable fixture. Price includes labor and wiring.	EA	All			\$191.49
18	Materials for Repair	Extra materials needed to complete works will be itemized and priced on an individual basis	EA	All			TBD
17	General Labor	Hourly rate for an electrician team composed of 1 Journeyman, 1 Groundman, 1 bucket truck plus equipment. MoT not included.	HR	All			\$174.48
19	Excavation	Hourly rate for an electrician team composed of 1 Journeyman, 1 Groundman, 1 bucket truck plus mini excavator	HR	All			220.96
20	Locating	Hourly rate for 1 technician, 1 vehicle, plus line locating machine	HR	All			204.48
21	Boring	Boring w/2-2" dia conduit & 2-#2 triplex, does not include set up fee	FT	All			\$27.69
22	Troubleshooting	Hourly rate for a troubleshooting team composed of 1 Journeyman, 1 Groundman, 1 bucket truck. MoT not included.	HR	All			165.85
23	Maintenance of Traffic	Traffic control comprised of 1 Groundman, 1 truck, 1 arrow board, and additional equipment for 1 hour.	HR	City	\$89.17	DOT	\$178.33
24	Labor for Smart Ready Controls	Hourly rate for a Smart Ready Control team composed of 1 Journeyman, 1 Groundman, 1 bucket truck plus	HR	All			\$230.80
25	IT Support	Hourly rate for technical support of Smart Ready Controls	HR	Basic	\$126.00	Expert	\$205.00

Deferred Maintenance

Budget

- \$89k budgeted for deferred maintenance during Works Phase
- Priorities
 - Priority 1: Brittle/Damaged Wiring in Pole Infrastructure
 - Priority 2: Pole Components: Hand-hole covers, vandal deterrent banding

Action Plan (Planned Maintenance)

- Throughout the Works Phase, Dalkia will record detailed notes around future planned maintenance that falls outside of the plan for deferred maintenance
- Priorities
 - Log vandalism, damage to build plan for proposed maintenance
 - Allow city to properly budget for upcoming maintenance in the Service Phase

City of Santa Fe NM – LED Implementation Plan
Dalkia Schedule of Works Phase



Date	Event
March 15 th 2021 (Day 0)	<ul style="list-style-type: none"> Commencement Date of Works Phase
March 18 th 2021 – September 2 nd 2021 (Week 0 – 24)	<ul style="list-style-type: none"> Bi-Weekly Construction Meeting (Every other Thursday, time TBD)

May 14 th 2021 (Week 8)	<ul style="list-style-type: none"> • Delivery of Product • Begin Installation of Phase 1
June 11 th 2021 (Week 12)	<ul style="list-style-type: none"> • Closeout of Phase 1
July 9 th 2021 (Week 16)	<ul style="list-style-type: none"> • Closeout of Phase 2
August 6 th 2021 (Week 20)	<ul style="list-style-type: none"> • Closeout of Phase 3
September 3 rd 2021 (Week 24)	<ul style="list-style-type: none"> • Closeout of Phase 4
September 15 th 2021 (Week 26)	<ul style="list-style-type: none"> • Closeout of Phase 5 • Project Completion/Commencement of Services Phase

Lighting Plan/Energy Savings

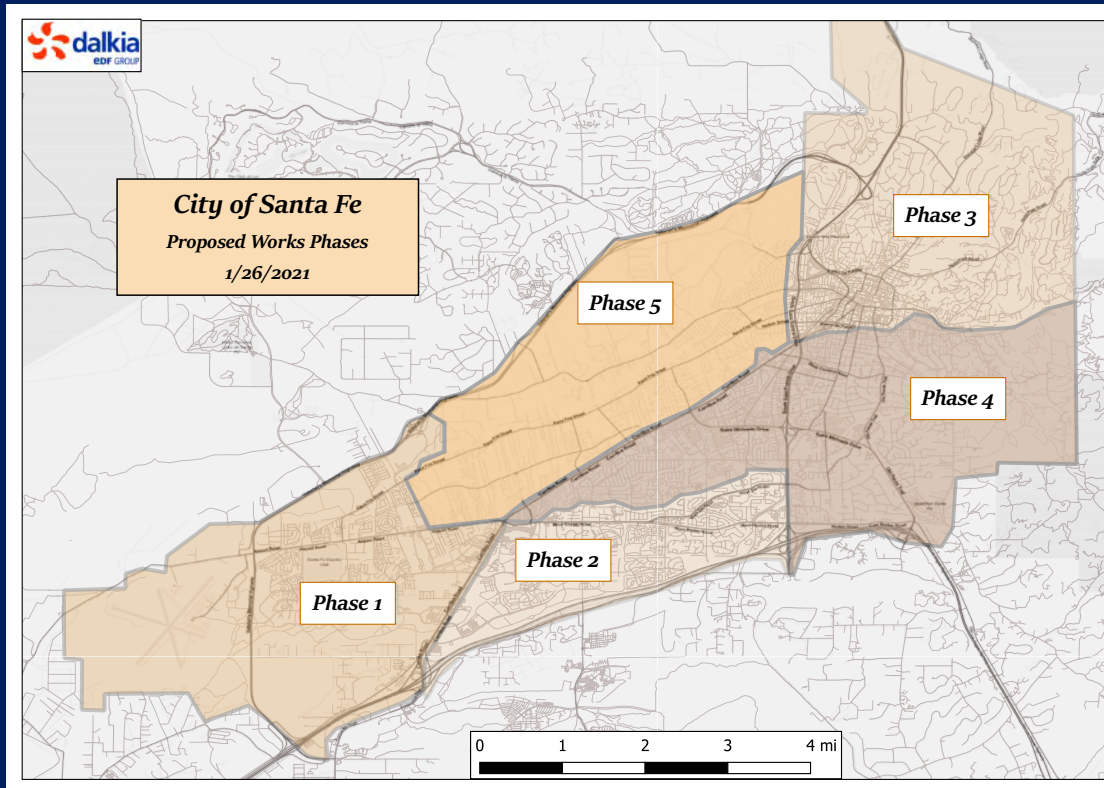
Energy Savings

Streetlight Type	Units	kWh/Month	Current kWh/Year	Non-Fuel Rate/Month	Current Non-Fuel Charge/Year	LED Equivalent Wattage	LED Equivalent kWh/Month	LED kWh/Year	Non-Fuel Rate/Month	LED Non-Fuel Charge/Year	LED kWh/Year Savings	LED Non-Fuel Savings/Year
100W HPS	1,316	45.0	710,640	\$3.42	\$54,008.64	28	14.2	224,246	\$0.60	\$9,475.20	486,394	\$ 44,533.44
250W HPS	1,404	107.0	1,802,736	\$8.12	\$136,805.76	118	42.7	719,410	\$2.40	\$40,435.20	1,083,326	\$ 96,370.56
400W HPS	635	165.0	1,257,300	\$12.53	\$95,478.60	190	92.4	704,088	\$3.79	\$28,879.80	553,212	\$ 66,598.80
175W MV	0	73.0	0	\$5.54	\$0.00	40	14.2	0	\$0.80	\$0.00	0	\$ -
400W MV	0	162.0	0	\$12.30	\$0.00	120	42.7	0	\$2.40	\$0.00	0	\$ -
Decorative 250W	144	107.0	184,896	\$8.12	\$14,031.36	118	42.7	73,786	\$0.60	\$1,036.80	111,110	\$ 12,994.56
Subtotal	3,499	94.2	3,955,572		\$286,293.00		41.0	1,721,530		79,827	2,234,042	\$ 220,497.36

LED Models

Streetlight Type	Model #	LED Wattage	LED Qty
100W HPS	ATBX P40 MVOLTR2 3K MP P7	28.0	1316
250W HPS	ATBM P30 MVOLT R2 3K/4K MP P7	118.0	1404
400W HPS	ATBM P70 MVOLT R2 3K/4K MP P7	190.0	635
Decorative 250W	MSPL2 P50 30K AS SN6SS P7 PCS	120.0	144

Comprehensive Install Plan/Mapping



Phased Install Approach

Phase 1/2 - South

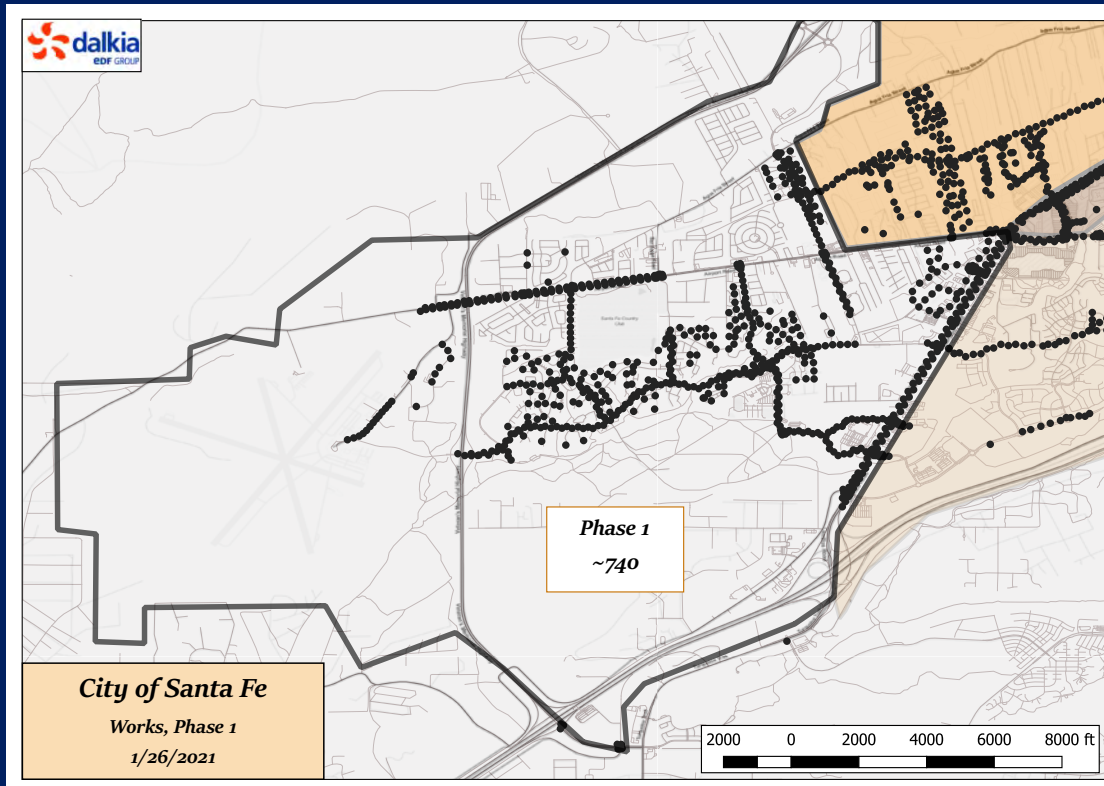
Phase 3 - Downtown

Phase 4 - East

Phase 5 - North

Based on the priorities of the City of Santa Fe, Dalkia will implement the upgrade in phases to convert existing lighting to LED

Phase 1



Details

OVERVIEW
South/Southwest

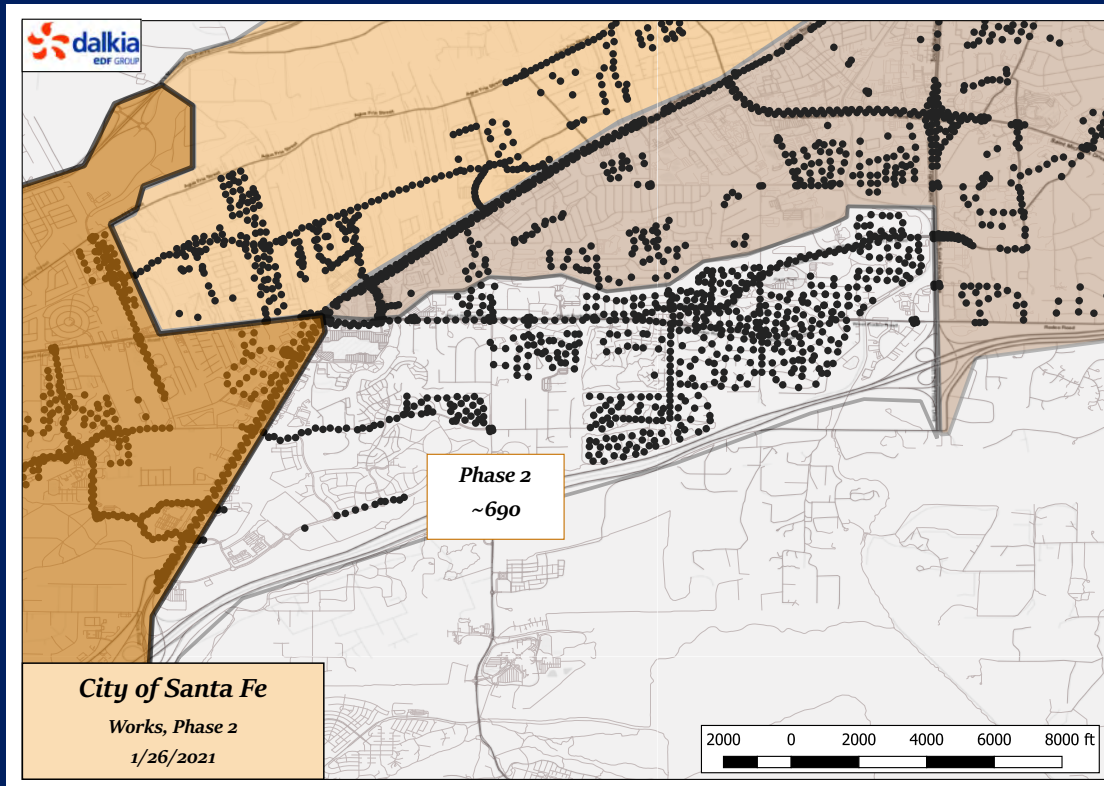
NUMBER OF TEAMS/TIME OF DAY
All teams/Day

DESCRIPTION
North of I-25, South of 284, West of 14

NUMBER OF POLES
740

DURATION
1 month

Phase 2



Details

OVERVIEW
South

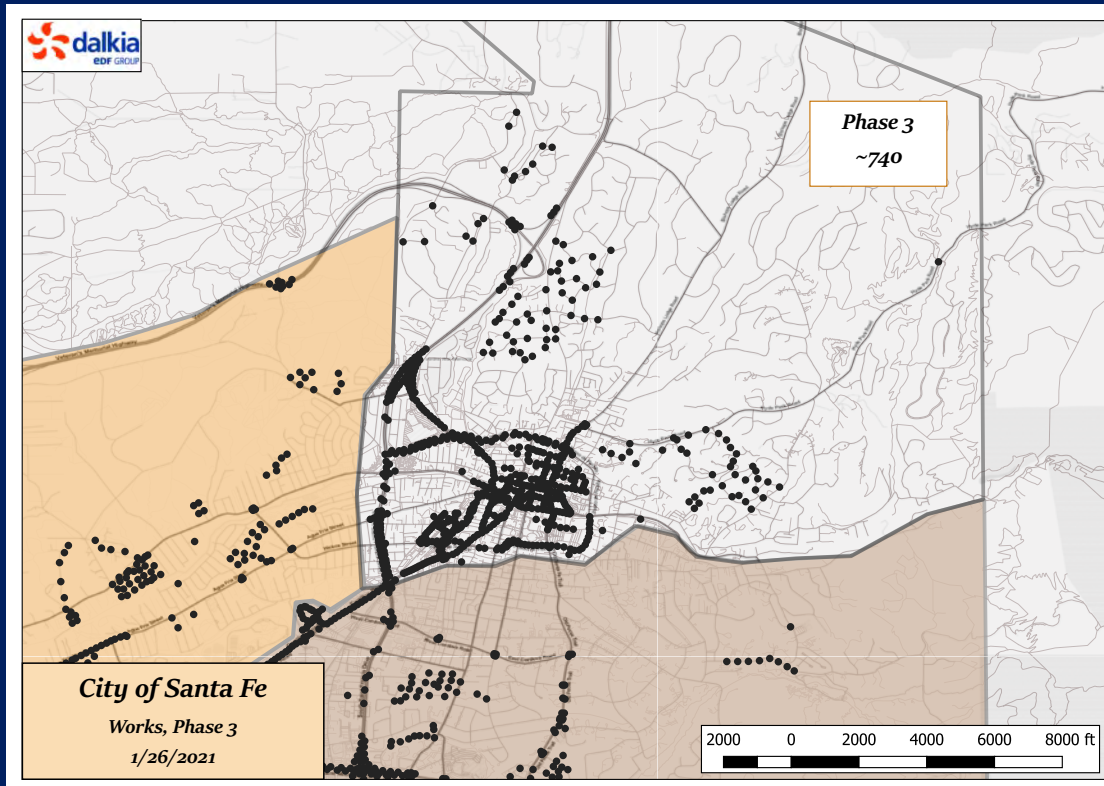
NUMBER OF TEAMS/TIME OF DAY
All teams/Day

DESCRIPTION
North of I-25, South of 14 and 466, West of 285

NUMBER OF POLES
690

DURATION
1 month

Phase 3



Details

OVERVIEW
Downtown

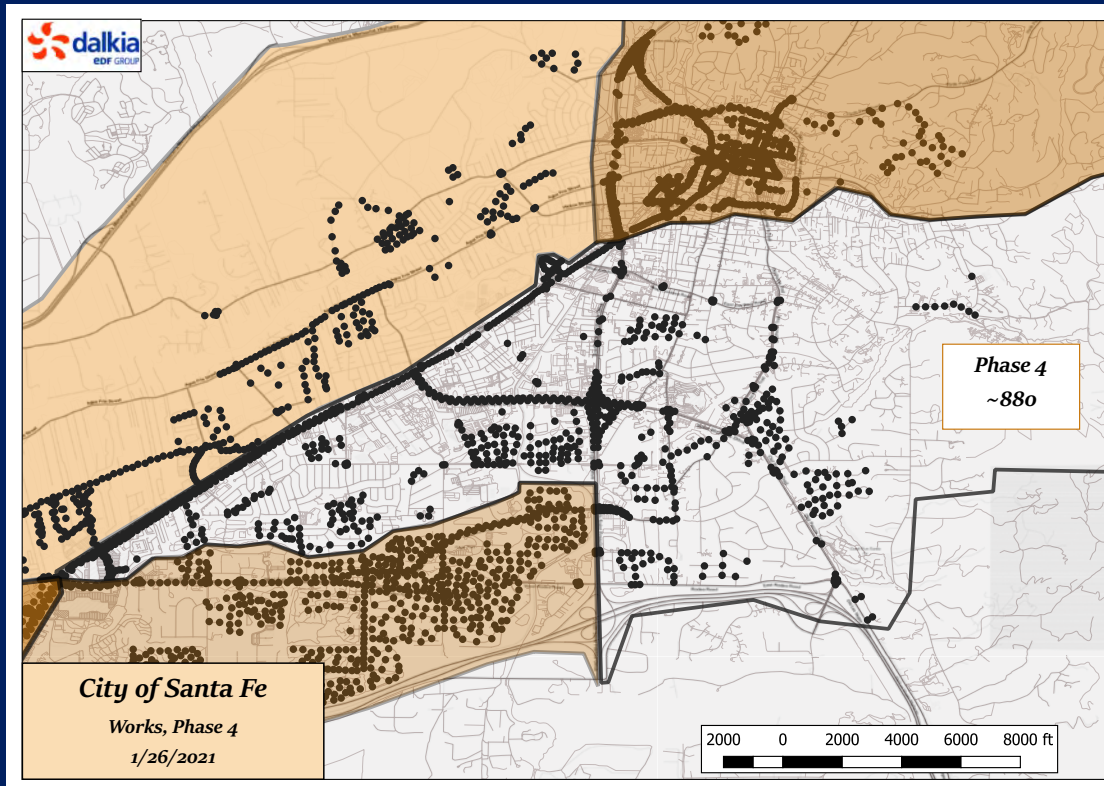
NUMBER OF TEAMS/TIME OF DAY
All teams/Day

DESCRIPTION
Downtown and North of Downtown

NUMBER OF POLES
740

DURATION
1 month

Phase 4



Details

OVERVIEW
East

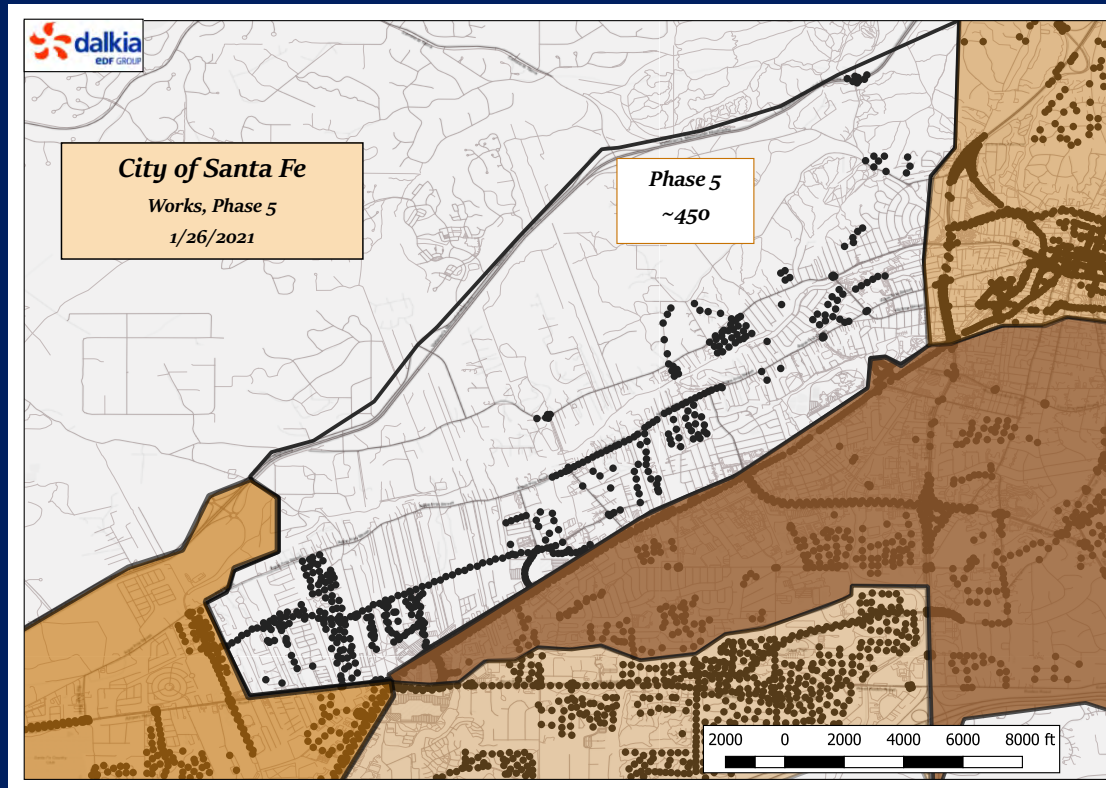
NUMBER OF TEAMS/TIME OF DAY
All teams/Day

DESCRIPTION
South of 14 and 475, North of I-25

NUMBER OF POLES
880

DURATION
1 month

Phase 5



Details

OVERVIEW
South/Southwest

NUMBER OF TEAMS/TIME OF DAY
All teams/Day

DESCRIPTION
North of 14, South of 599, West of 285

NUMBER OF POLES
450

DURATION
2 weeks

Maintenance of Traffic (MoT)

Dalkia and its subcontractors will implement Maintenance of Traffic (MoT) procedures based on roadway type according to the following tiers:

- Tier 1: Local/Residential; low traffic. Assumed that Curb Side Parking is allowed.
- Tier 2: Collector Roads; congested residential areas where street parking is limited and there is medium to occasionally high traffic
- Tier 3: Major/Arterial; medium to high traffic volumes and will require personnel with a Traffic Control Supervisor (TCS) Certification and a Mobile Utility Traffic Vehicle following the bucket truck.
- Tier 4: High traffic, congested areas, freeways, high traffic arterial, state highways. Will require personnel with TCS Certification and a Mobile Uniform Traffic Vehicle following the bucket truck.

ASSETS REQUIRING MOT DURING UPGRADE

ROADWAY TYPE	MOT REQUIRED	
Local	NO	55% (Based on ABQ)
Local High	NO	
Collector Low	YES	45% (Based on ABQ)
Collector Medium	YES	
Collector High	YES	
Major Low	YES	
Major Medium	YES	
Major High	YES	
Ramp	YES	
Highway	YES	



Consistent with LEED® goals
& Green Globes™ criteria
for light pollution reduction

Autobahn Series ATBM Roadway

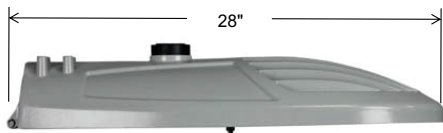
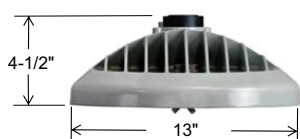
PRODUCT OVERVIEW



Applications:

Residential streets
Parking lots
High speed roadways

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the ATBM is 0.3 sq. ft.,
Approx. Wt. = 21 lbs. (9.5 kg)

STANDARDS

Color temperatures of $\leq 3000\text{K}$ must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Features:

OPTICAL

Same Light: Performance is comparable to 150W – 250W HPS

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

IP66 rated borosilicate glass optics ensure longevity and minimize dirt depreciation. Unique IP66 rated LED light engines provide 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing.

Available distributions are Type II, III, IV, & V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated $>100,000$ hours at 25°C , L70.

Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected 40-60% over comparable HID luminaires.

Robust Surge Protection: Standard surge protection is 20kV/10kA "Extreme Level" per ANSI C136.2. An optional MOV pack provides 10kV/5kA "Enhanced Level."

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. The 2 – bolt and optional 4 bolt clamping mechanism provide 3G vibration rating per ANSI C136.31.

The Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 7 pin receptacle optionally available.

Premium solid state locking-style photocontrol – PCSS (10 year rated life) Extreme long life solid state locking-style photocontrol – PCL1 (20 year rated life).

Extreme long life solid state locking-style photocontrol with on demand remote on/off control – PCCC (15 year rated life).

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

Autobahn Series ATBM

Roadway

ORDERING INFORMATION

ATBM	P30	MVOLT	R2	
Series	Performance Packages	Voltage	Optics	Mounting
ATBM Autobahn LED Roadway	P05 9,700 lumens P10 11,000 lumens P20 12,800 lumens P30 15,500 lumens P40 17,400 lumens P50 18,700 lumens P60 20,000 lumens P70 21,500 lumens	MVOLT Multi-volt, 120-277V 347 347V 480 480V	R2 Roadway Type II R3 Roadway Type III R4 Roadway Type IV R5 Roadway Type V	(Blank) 2 Bolt Mounting 4B 4 Bolt Mounting

3K MP P7

Options

Color Temperature (CCT)

(Blank)	4000K CCT, 70 CRI Min.
3K	3000K CCT, 70 CRI Min.
5K	5000K CCT, 70 CRI Min.

Paint

(Blank)	Gray
BK	Black
BZ	Bronze
DDB	Dark Bronze
GI	Graphite
WH	White

Surge Protection

(Blank)	Standard 20kV/10kA SPD
MP	MOV Pack

Miscellaneous Options

HSS	House Side Shield
NL	NEMA Label Indicating Wattage
XL	Not CSA Certified – No Terminal Block Cover
UMR-XX	8" Horizontal Arm for Round Pole, Painted to match Fixture
UMS-XX	8" Horizontal Arm for Square Pole, Painted to match Fixture
UMR-GALV	8" Horizontal Arm for Round Pole, Galvanized
UMS-GALV	8" Horizontal Arm for Square Pole, Galvanized

Control Options

(Blank)	3 Pin NEMA Photocontrol Receptacle
P7	7 Pin Photocontrol Receptacle (dimmable driver included) ¹
NR	No Photocontrol Receptacle
A0	Field Adjustable Output ³
DM	0-10V Dimmable Driver ²
PCSS	Solid-State Lighting Photocontrol ⁴
PCLL	Solid-State Long Life Photocontrol
PCCC	Solid-State Long Life Photocontrol with remote control on/off ⁴
SH	Shorting Cap

Packages

(Blank)	Standard Pack
JP	Job Pack (36/pallet)

Accessories

ATBMHSS	House Side Shield
ATBMLTS	Light Trespass Shield
RKATBMMVOLTSPD	ATBM Acuity SPD, MVOLT
RKATBMHVSPD	ATBM Acuity SPD, 347/480V
RKATBMMVOLTMP	ATBM MOV Pack, MVOLT
RKATBMHVMP	ATBM MOV Pack, 347/480V

Notes:

- 1 Dimmable Driver included. Not available with DM or NR.
- 2 Controls by others. Not available with P7 or A0.
- 3 Not available with DM.
- 4 MVOLT only.



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

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Warranty Five-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

Please contact your sales representative for the latest product information. Page 17

ATBM

Autobahn Series ATBM

Roadway

PERFORMANCE PACKAGE															
Performance Package	Distribution	Input Watts	3K (3000K CCT, 70 CRI)					4K/5K (4000K/5000K CCT, 70 CRI)					LLD @ 25°C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	25k Hours	75k Hours	100k Hours
P05	R2	68	9,396	138	1	0	2	9,718	143	1	0	2	0.93	0.86	0.83
	R3		9,366	138	1	0	3	9,688	142	1	0	3			
	R4		9,030	133	1	0	3	9,340	137	1	0	3			
	R5		10,334	152	3	0	2	10,689	157	3	0	2			
P10	R2	81	10,635	131	2	0	3	11,299	139	2	0	3	0.93	0.86	0.83
	R3		10,675	132	2	0	3	11,302	140	2	0	3			
	R4		10,391	128	2	0	4	10,994	136	2	0	4			
	R5		11,504	142	3	0	2	12,086	149	3	0	2			
P20	R2	94	12,073	128	2	0	3	12,874	137	2	0	3	0.93	0.86	0.83
	R3		12,065	128	2	0	3	12,818	136	2	0	3			
	R4		11,946	127	2	0	4	12,525	133	2	0	4			
	R5		13,085	139	4	0	2	13,776	147	4	0	2			
P30	R2	118	14,637	124	2	0	3	15,514	131	2	0	3	0.93	0.86	0.83
	R3		14,631	124	2	0	3	15,452	131	2	0	3			
	R4		14,317	121	2	0	4	15,151	128	2	0	5			
	R5		15,775	134	4	0	2	16,685	141	4	0	2			
P40	R2	135	16,233	120	2	0	3	17,493	130	2	0	3	0.93	0.86	0.83
	R3		16,402	121	2	0	3	17,367	129	2	0	3			
	R4		15,911	118	2	0	5	17,008	126	2	0	5			
	R5		17,507	130	4	0	2	18,595	138	4	0	2			
P50	R2	152	17,541	115	2	0	3	18,748	123	2	0	3	0.93	0.86	0.83
	R3		17,677	116	2	0	4	18,712	123	2	0	4			
	R4		17,154	113	2	0	5	18,246	120	2	0	5			
	R5		19,008	125	4	0	2	20,088	132	4	0	2			
P60	R2	168	18,770	112	2	0	3	20,095	120	3	0	3	0.93	0.86	0.83
	R3		18,830	112	2	0	4	20,094	120	3	0	4			
	R4		18,369	109	2	0	5	19,648	117	2	0	5			
	R5		20,350	121	4	0	2	21,505	128	4	0	2			
P70	R2	190	20,190	106	3	0	3	21,565	114	3	0	3	0.93	0.86	0.83
	R3		20,142	106	3	0	4	21,504	113	3	0	4			
	R4		19,660	103	2	0	5	21,024	111	3	0	5			
	R5		21,988	116	4	0	2	23,076	121	4	0	2			

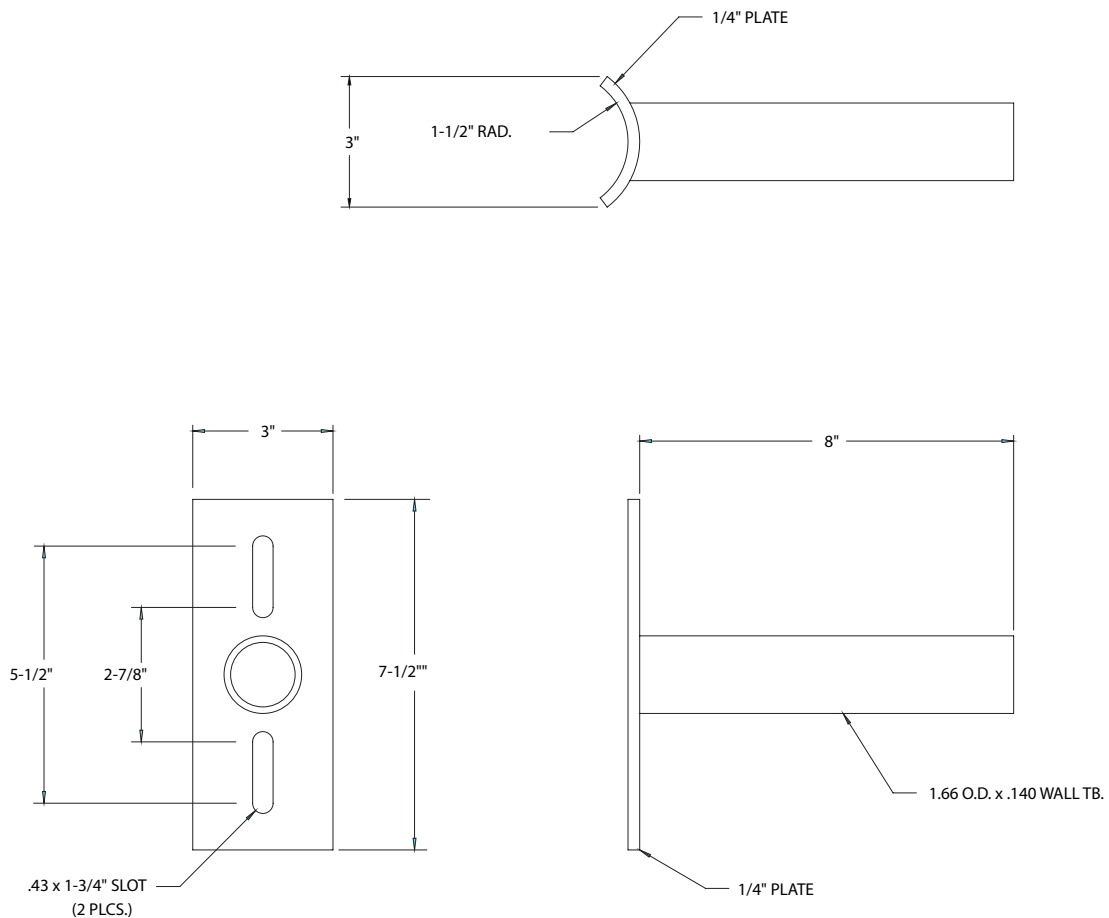
Note: Individual fixture performance may vary. Specifications subject to change without notice.

Autobahn Series ATBM

Roadway

UMR POLE ADAPTOR

RECOMMENDED FOR USE WITH POLES OF 4" DIAMETER OR SMALLER



UMS POLE ADAPTOR



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

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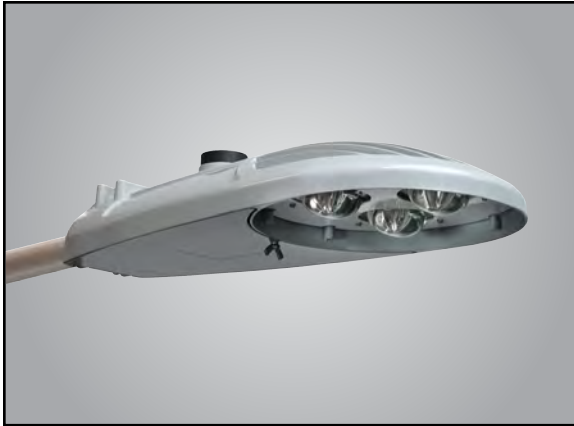
ATBM



Consistent with LEED® goals
& Green Globes™ criteria
for light pollution reduction

Autobahn Series ATBM Roadway

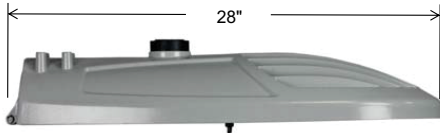
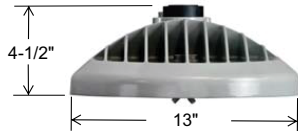
PRODUCT OVERVIEW



Applications:

Residential streets
Parking lots
High speed roadways

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the ATBM is 0.3 sq. ft.,
Approx. Wt. = 21 lbs. (9.5 kg)

STANDARDS

Color temperatures of $\leq 3000\text{K}$ must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Features:

OPTICAL

Same Light: Performance is comparable to 150W – 250W HPS

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

IP66 rated borosilicate glass optics ensure longevity and minimize dirt depreciation. Unique IP66 rated LED light engines provide 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing.

Available distributions are Type II, III, IV, & V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated $>100,000$ hours at 25°C , L70.

Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected 40-60% over comparable HID luminaires.

Robust Surge Protection: Standard surge protection is 20kV/10kA "Extreme Level" per ANSI C136.2. An optional MOV pack provides 10kV/5kA "Enhanced Level."

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. The 2 – bolt and optional 4 bolt clamping mechanism provide 3G vibration rating per ANSI C136.31.

The Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 7 pin receptacle optionally available.

Premium solid state locking-style photocontrol – PCSS (10 year rated life) Extreme long life solid state locking-style photocontrol – PCL1 (20 year rated life).

Extreme long life solid state locking-style photocontrol with on demand remote on/off control – PCCC (15 year rated life).

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

Autobahn Series ATBM

Roadway

ORDERING INFORMATION

ATBM	P30	MVOLT	R2	
Series	Performance Packages	Voltage	Optics	Mounting
ATBM Autobahn LED Roadway	P05 9,700 lumens P10 11,000 lumens P20 12,800 lumens P30 15,500 lumens P40 17,400 lumens P50 18,700 lumens P60 20,000 lumens P70 21,500 lumens	MVOLT Multi-volt, 120-277V 347 347V 480 480V	R2 Roadway Type II R3 Roadway Type III R4 Roadway Type IV R5 Roadway Type V	(Blank) 2 Bolt Mounting 4B 4 Bolt Mounting

3K MP P7

Options

Color Temperature (CCT)

(Blank)	4000K CCT, 70 CRI Min.
3K	3000K CCT, 70 CRI Min.
5K	5000K CCT, 70 CRI Min.

Paint

(Blank)	Gray
BK	Black
BZ	Bronze
DDB	Dark Bronze
GI	Graphite
WH	White

Surge Protection

(Blank)	Standard 20kV/10kA SPD
MP	MOV Pack

Miscellaneous Options

HSS	House Side Shield
NL	NEMA Label Indicating Wattage
XL	Not CSA Certified – No Terminal Block Cover
UMR-XX	8" Horizontal Arm for Round Pole, Painted to match Fixture
UMS-XX	8" Horizontal Arm for Square Pole, Painted to match Fixture
UMR-GALV	8" Horizontal Arm for Round Pole, Galvanized
UMS-GALV	8" Horizontal Arm for Square Pole, Galvanized

Control Options

(Blank)	3 Pin NEMA Photocontrol Receptacle
P7	7 Pin Photocontrol Receptacle (dimmable driver included) ¹
NR	No Photocontrol Receptacle
A0	Field Adjustable Output ³
DM	0-10V Dimmable Driver ²
PCSS	Solid-State Lighting Photocontrol ⁴
PCLL	Solid-State Long Life Photocontrol
PCCC	Solid-State Long Life Photocontrol with remote control on/off ⁴
SH	Shorting Cap

Packages

(Blank)	Standard Pack
JP	Job Pack (36/pallet)

Accessories

ATBMHSS	House Side Shield
ATBMLTS	Light Trespass Shield
RKATBMMVOLTSPD	ATBM Acuity SPD, MVOLT
RKATBMHVSPD	ATBM Acuity SPD, 347/480V
RKATBMMVOLTMP	ATBM MOV Pack, MVOLT
RKATBMHVMP	ATBM MOV Pack, 347/480V

Notes:

- 1 Dimmable Driver included. Not available with DM or NR.
- 2 Controls by others. Not available with P7 or A0.
- 3 Not available with DM.
- 4 MVOLT only.



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ATBM

Autobahn Series ATBM

Roadway

P E R F O R M A N C E P A C K A G E															
Performance Package	Distribution	Input Watts	3K (3000K CCT, 70 CRI)					4K/5K (4000K/5000K CCT, 70 CRI)					LLD @ 25°C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	25k Hours	75k Hours	100k Hours
P05	R2	68	9,396	138	1	0	2	9,718	143	1	0	2	0.93	0.86	0.83
	R3		9,366	138	1	0	3	9,688	142	1	0	3			
	R4		9,030	133	1	0	3	9,340	137	1	0	3			
	R5		10,334	152	3	0	2	10,689	157	3	0	2			
P10	R2	81	10,635	131	2	0	3	11,299	139	2	0	3	0.93	0.86	0.83
	R3		10,675	132	2	0	3	11,302	140	2	0	3			
	R4		10,391	128	2	0	4	10,994	136	2	0	4			
	R5		11,504	142	3	0	2	12,086	149	3	0	2			
P20	R2	94	12,073	128	2	0	3	12,874	137	2	0	3	0.93	0.86	0.83
	R3		12,065	128	2	0	3	12,818	136	2	0	3			
	R4		11,946	127	2	0	4	12,525	133	2	0	4			
	R5		13,085	139	4	0	2	13,776	147	4	0	2			
P30	R2	118	14,637	124	2	0	3	15,514	131	2	0	3	0.93	0.86	0.83
	R3		14,631	124	2	0	3	15,452	131	2	0	3			
	R4		14,317	121	2	0	4	15,151	128	2	0	5			
	R5		15,775	134	4	0	2	16,685	141	4	0	2			
P40	R2	135	16,233	120	2	0	3	17,493	130	2	0	3	0.93	0.86	0.83
	R3		16,402	121	2	0	3	17,367	129	2	0	3			
	R4		15,911	118	2	0	5	17,008	126	2	0	5			
	R5		17,507	130	4	0	2	18,595	138	4	0	2			
P50	R2	152	17,541	115	2	0	3	18,748	123	2	0	3	0.93	0.86	0.83
	R3		17,677	116	2	0	4	18,712	123	2	0	4			
	R4		17,154	113	2	0	5	18,246	120	2	0	5			
	R5		19,008	125	4	0	2	20,088	132	4	0	2			
P60	R2	168	18,770	112	2	0	3	20,095	120	3	0	3	0.93	0.86	0.83
	R3		18,830	112	2	0	4	20,094	120	3	0	4			
	R4		18,369	109	2	0	5	19,648	117	2	0	5			
	R5		20,350	121	4	0	2	21,505	128	4	0	2			
P70	R2	190	20,190	106	3	0	3	21,565	114	3	0	3	0.93	0.86	0.83
	R3		20,142	106	3	0	4	21,504	113	3	0	4			
	R4		19,660	103	2	0	5	21,024	111	3	0	5			
	R5		21,988	116	4	0	2	23,076	121	4	0	2			

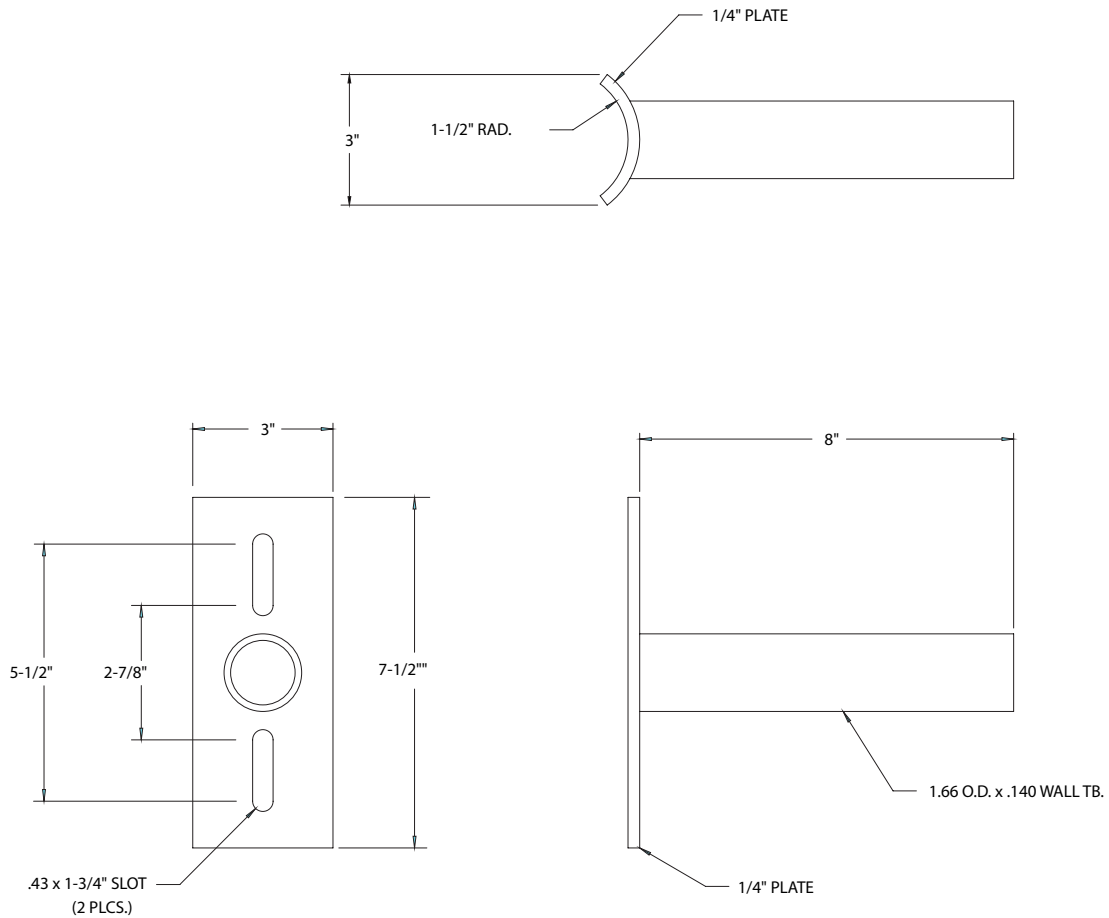
Note: Individual fixture performance may vary. Specifications subject to change without notice.

Autobahn Series ATBM

Roadway

UMR POLE ADAPTOR

RECOMMENDED FOR USE WITH POLES OF 4" DIAMETER OR SMALLER



UMS POLE ADAPTOR



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ATBM



Consistent with LEED® goals
& Green Globes™ criteria
for light pollution reduction

Autobahn Series ATBX

Roadway & Security Lighting

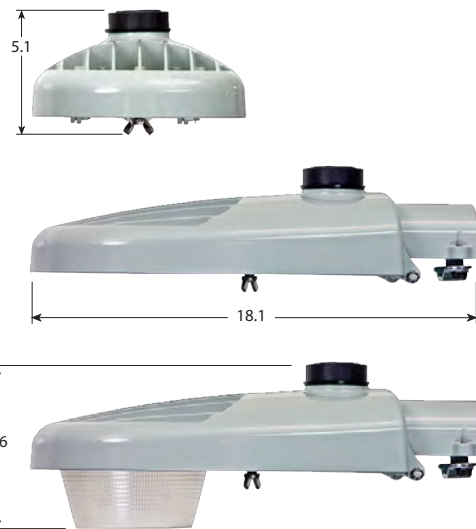
PRODUCT OVERVIEW



Applications:

Residential streets
Parking lots
General security lighting

DIMENSIONS



Effective Projected Area (EPA) The EPA for the ATBX is .26 sq. ft.
Approx. Wt. = 8lbs.

STANDARDS

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Color temperatures of $\leq 3000\text{K}$ must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

Features:

OPTICAL

Same Light: Performance is comparable to 50W – 150W HPS and up to 175W Mercury Vapor roadway and security lighting luminaires.

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

IP66 rated borosilicate glass optics ensure longevity and minimize dirt depreciation. Unique IP66 rated LED light engines provide 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing.

Available distributions are Type II, III, IV, and V roadway distributions. When used with the optional acrylic refractor the unit provides approximately 10% uplight and increased vertical foot-candles

ELECTRICAL

Expected Life: LED light engines are rated $>100,000$ hours at 25°C , L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected 40-60% over comparable HID luminaires.

Standard surge protection is 20kV/10kA "Extreme Level" per ANSI C136.2. An optional MOV pack provides 10kV/5kA "Enhanced Level."

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. The 2 – bolt clamping mechanism provides 3G vibration rating per ANSI C136.31.

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 7 pin receptacle optionally available.

Premium solid state locking-style photocontrol – PCSS (10 year rated life) Extreme long life solid state locking-style photocontrol – PCL1 (20 year rated life)

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

Autobahn Series ATBX

Roadway & Security Lighting

ORDERING INFORMATION

P30	MVOLT		3K MP P7
Series	Performance Packages	Voltage	Optics
ATBX Autobahn LED Roadway & Security	P10 2,000 lumens P20 2,500 lumens P30 3,200 lumens P40 3,900 lumens P50 5,600 lumens P60 6,600 lumens P70 7,400 lumens	MVOLT Multi-volt, 120-277V	R2 Roadway Type II R3 Roadway Type III R4 Roadway Type IV R5 Roadway Type V D3 Type III, Drop Refractor included D5 Type V, Drop Refractor included

MP 3K P7

Options		
<u>Color Temperature (CCT)</u> (Blank) 4000K CCT, 70 CRI Min. 3K 3000K CCT, 70 CRI Min. 5K 5000K CCT, 70 CRI Min. <u>Paint</u> Blank Gray (Standard) BK Black WH White BZ Bronze <u>Surge Protection</u> Blank Standard 20kV/10kA SPD MP MOV Pack <u>Misc.</u> VR Visual Comfort Refractor HSS House Side Shield NL NEMA Label XL Not CSA Certified	<u>Controls</u> (Blank) 3 Pin NEMA Photocontrol Receptacle NR¹ No Photocontrol Receptacle DM² 0V-10V Dimmable Driver P7 7 Pin Photocontrol Receptacle (dimmable driver included) PCSS¹ DTL DSS Photocontrol PCLL¹ DTL DLL Photocontrol 120-277V AO Field Adjustable Output SH Shorting Cap <u>Packages</u> (Blank) Standard Pack JP Job Pack <u>Install Packages</u> PKGS DTL DSS Photocontrol PKGL DTL DLL Photocontrol Packages ship with selected photocontrol, 24", 1 1/4" diameter arm, 5' of prewire and mounting hardware	<u>Accessories</u> ATBXREF Drop Refractor for field installation ATBXHSS House Side Shield for field installation ATBXLTS Light Trespass Shield for field installation ATBXVR-XX Comfort Refractor & Uplight Skirt, Select Paint (XX) to Match Fixture

Notes

1. Not available with Install Packages.
2. Not available with AO option.



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Autobahn Series ATBX

Roadway & Security Lighting

PERFORMANCE PACKAGE															
Performance Package	Distribution	Input Watts	3000K CCT, 70 CRI					4000K & 5000K CCT, 70 CRI					LLD @ 25C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	50K Hours	75K Hours	100K Hours
P10	R2	14	1,956	140	1	0	1	2,030	145	1	0	1	0.92	0.89	0.85
	R3		1,955	140	0	0	1	2,011	144	0	0	1			
	R4		1,982	142	1	0	1	1,974	141	1	0	1			
	R5		2,145	153	1	0	0	2,160	154	1	0	0			
	D3		1,908	136	1	2	1	1,963	140	1	2	1			
	D5		2,077	148	1	2	1	2,092	149	1	2	1			
P20	R2	18	2,455	136	1	0	1	2,575	143	1	0	1	0.92	0.89	0.85
	R3		2,473	137	1	0	1	2,547	142	1	0	1			
	R4		2,505	139	1	0	1	2,497	139	1	0	1			
	R5		2,715	151	2	0	0	2,735	152	2	0	0			
	D3		2,414	134	1	2	1	2,486	138	1	2	1			
	D5		2,629	146	1	2	1	2,648	147	1	2	1			
P30	R2	23	3,102	135	1	0	1	3,243	141	1	0	1	0.92	0.89	0.85
	R3		3,125	136	1	0	1	3,232	141	1	0	1			
	R4		3,153	137	1	0	1	3,150	137	1	0	1			
	R5		3,422	149	2	0	1	3,431	149	2	0	1			
	D3		3,050	133	1	2	1	3,155	137	1	2	1			
	D5		3,314	144	1	2	1	3,322	144	1	2	1			
P40	R2	28	3,603	129	1	0	1	3,790	135	1	0	1	0.92	0.89	0.85
	R3		3,705	132	1	0	1	3,890	139	1	0	1			
	R4		3,640	130	1	0	2	3,817	136	1	0	2			
	R5		3,971	142	2	0	1	4,167	149	2	0	1			
	D3		3,617	129	1	2	2	3,797	136	1	2	2			
	D5		3,845	137	2	2	1	4,035	144	2	2	1			
P50	R2	41	5,426	132	2	0	2	5,425	132	2	0	2	0.92	0.89	0.85
	R3		5,248	128	1	0	2	5,615	137	1	0	2			
	R4		5,300	129	1	0	2	5,462	133	1	0	2			
	R5		5,647	138	3	0	1	6,033	147	3	0	1			
	D3		5,123	125	1	3	2	5,481	134	1	3	2			
	D5		5,468	133	2	3	2	5,842	142	2	3	2			
P60	R2	51	6,392	125	2	0	2	6,416	126	2	0	2	0.92	0.88	0.84
	R3		6,208	122	1	0	2	6,635	130	1	0	2			
	R4		6,207	122	1	0	2	6,432	126	1	0	2			
	R5		6,690	131	3	0	1	7,127	140	3	0	1			
	D3		6,059	119	1	3	2	6,477	127	1	3	2			
	D5		6,478	127	2	3	2	6,901	135	3	3	2			
P70	R2	60	7,133	140	2	0	2	7,246	142	2	0	2	0.92	0.88	0.84
	R3		6,967	137	1	0	2	7,449	146	1	0	2			
	R4		6,957	136	1	0	2	7,235	142	1	0	2			
	R5		7,492	147	3	0	1	7,939	156	3	0	1			
	D3		6,800	133	2	3	2	7,271	143	2	3	2			
	D5		7,255	142	3	3	2	7,688	151	3	3	2			



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Autobahn Series ATBX

Roadway & Security Lighting

PERFORMANCE DATA with VISUAL COMFORT REFRACTOR

Performance Package	Distribution	Input Watts	3000K CCT, 70 CRI					4000K & 5000K CCT, 70 CRI					LLD @ 25C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	50K Hours	75K Hours	100K Hours
P10	R2 with VR	14	1,686	120	1	0	1	1,747	125	1	0	1	0.92	0.89	0.85
	R3 with VR		1,669	119	1	0	1	1,698	121	1	0	1			
	R4 with VR		1,602	114	1	0	1	1,626	116	1	0	1			
	R5 with VR		1,814	130	1	0	1	1,862	133	1	0	1			
P20	R2 with VR	18	2,124	118	1	0	1	2,205	123	1	0	1	0.92	0.89	0.85
	R3 with VR		2,104	117	1	0	1	2,138	119	1	0	1			
	R4 with VR		2,019	112	1	0	1	2,053	114	1	0	1			
	R5 with VR		2,290	127	1	0	1	2,346	130	1	0	1			
P30	R2 with VR	23	2,684	117	1	0	1	2,788	121	1	0	1	0.92	0.89	0.85
	R3 with VR		2,659	116	1	0	1	2,699	117	1	0	1			
	R4 with VR		2,553	111	1	0	1	2,594	113	1	0	1			
	R5 with VR		2,892	126	2	0	1	2,969	129	2	0	1			
P40	R2 with VR	28	3,240	116	1	0	1	3,369	120	1	0	1	0.92	0.89	0.85
	R3 with VR		3,204	114	1	0	1	3,261	116	1	0	1			
	R4 with VR		3,081	110	1	0	2	3,124	112	1	0	2			
	R5 with VR		3,495	125	2	0	1	3,584	128	2	0	1			
P50	R2 with VR	41	4,633	113	1	0	2	4,818	118	1	0	2	0.92	0.89	0.85
	R3 with VR		4,499	110	1	0	2	4,617	113	1	0	2			
	R4 with VR		4,343	106	1	0	2	4,504	110	1	0	2			
	R5 with VR		4,869	119	2	0	1	5,117	125	2	0	1			
P60	R2 with VR	51	5,495	108	2	0	2	5,710	112	2	0	2	0.92	0.88	0.84
	R3 with VR		5,330	105	1	0	2	5,490	108	1	0	2			
	R4 with VR		5,145	101	1	0	2	5,328	104	1	0	2			
	R5 with VR		5,771	113	3	0	1	6,061	119	3	0	1			
P70	R2 with VR	60	6,167	121	2	0	2	6,396	125	2	0	2	0.92	0.88	0.84
	R3 with VR		5,978	117	1	0	2	6,110	120	1	0	2			
	R4 with VR		5,772	113	1	0	2	5,962	117	1	0	2			
	R5 with VR		6,482	127	3	0	1	6,799	133	3	0	2			



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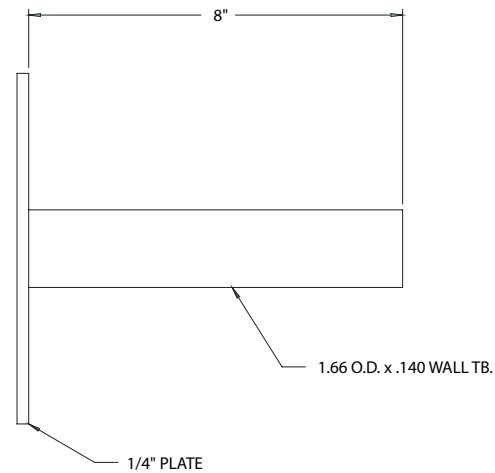
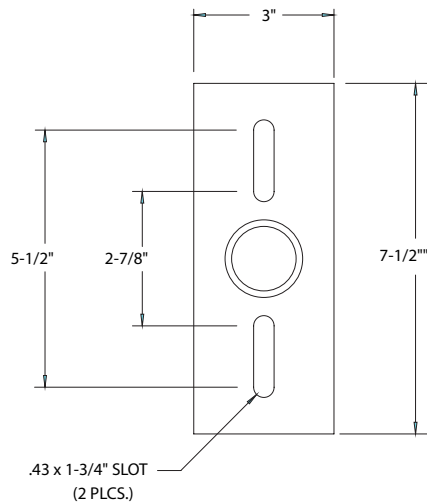
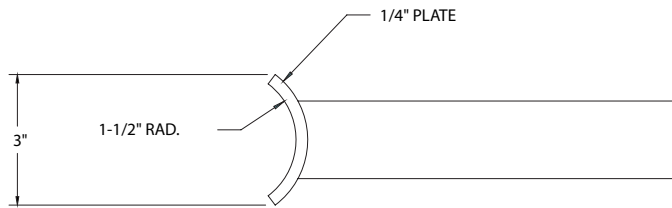
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Autobahn Series ATBX

Roadway & Security Lighting

UMR POLE ADAPTOR

RECOMMENDED FOR USE WITH POLES OF 4" DIAMETER OR SMALLER



UMS POLE ADAPTOR



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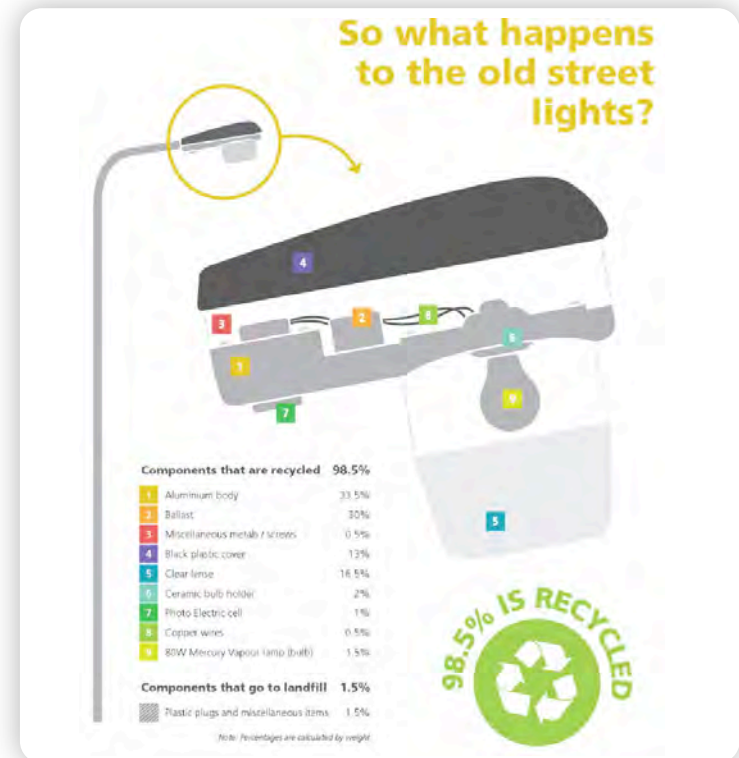
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Project Recycling

Concurrent with the upgrade installations, Dalkia will dismantle and recycle all parts of the existing luminaires. Components that will be recycled include the fixture housing, lamp, ballast, and all internal wiring as shown in the image. Dalkia will work with the City of Santa Fe to properly dispose of recyclables with licensed local vendors.

Dalkia will provide recycling certificates for recycled components to the City of Santa Fe.



Community/Public Outreach

Dalkia will begin a process of public outreach. Methods of outreach could include a press release and a regularly updated webpage. The goals of this public outreach will be to:

- 1) Educate the Citizens of Albuquerque about the benefits of upgrading existing lamps to LED technology
- 2) Provide regular updates to the upgrade phasing schedule
 - a. Including neighborhoods and anticipated road closures
 - b. Significant road closures will be announced with additional press releases beyond publication on the website
- 3) Provide a means for public feedback and FAQs
- 4) Establish means for public communication post install



Commissioning/Acceptance of Work

Within forty-five (45) days of the Commencement Date, Dalkia will provide a written Commissioning and Quality Assurance Plan to include testing, inspection, and operational validation procedures. The Commissioning and Quality Assurance Plan will establish procedures for commissioning each Segment. Upon completion of a Segment of the Works Phase, Dalkia will commission the completed work in partnership with the City in accordance with the agreed upon plan. Key elements of this plan may include:

- Detailed micro-schedules to inform the City of Santa Fe and PNM of weekly activity and forecast of upcoming conversions.
- Coordinated inspections for Traffic Safety and Quality of Work.
- Formal transmittal of completed assets to the City of Santa Fe and PNM.
- Real-time data entry into Dalkia's CMMS system for tracking inventory and maintenance.
- Electronic transmission of asset conversion completion to PNM for billing rate changes.

Dalkia will run two concurrent processes of acceptance and commissioning. One with the City to validate completion of the works and hand off ownership, and one with PNM in order to commence billing under the LED tariff.

- The City will participate with Dalkia in the commissioning plan on a bi-weekly basis



Liberty Mutual Surety
175 Berkeley Street, Boston MA 02116

January 27, 2021

Re: Bonding Capacity for - Dalkia Energy Solutions, LLC
200 Cummings Center, Suite 177-C
Beverly, MA 01915

To whom it may concern:

It has been the privilege of Liberty Mutual Insurance Company to provide surety bonds for Dalkia Energy Solutions, LLC for many years. During that time they have completed and we have bonded various projects in size and scope. At present time, Liberty Mutual Insurance Company provides a \$5,000,000 single/\$20,000,000 aggregate surety program for Dalkia Energy Solutions, LLC.

This letter is not to be construed as an agreement to provide surety bonds for any particular project but is offered as an indication of Liberty Mutual Insurance Company's past experience and confidence in the firm. We reserve the right to review terms and conditions of any proposals, contract documents, bond forms, financial arrangements and other underwriting considerations at the time the contract is awarded. We assume no liability to third parties or to you if for any reason we do not execute the said bond.

Liberty Mutual Insurance Company is listed on the U.S. Treasury Departments list of acceptable sureties and is rated "A" by A.M. Best.

If you have any questions or need any additional information, please do not hesitate to contact me.

Sincerely,

Liberty Mutual Insurance Company

Melissa L. Fortier

Melissa L. Fortier
Attorney In Fact

Member of Liberty Mutual Group

PUBLIC SERVICE COMPANY OF NEW MEXICO
ELECTRIC SERVICES

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APPLICABILITY: Applicable to any municipal corporation or other political subdivision within the State of New Mexico (for purposes of this Rate Schedule, "Customer") that receives service for streetlighting and floodlighting systems within all areas served by the company in New Mexico.

x
x
x

AVAILABILITY: Available within all areas served by the company in New Mexico.

A. Appendix A: Appendix A shall be a list of Company-owned LED streetlights that are operational substitutes for standard Mercury Vapor ("MV"), Low Pressure Sodium ("LPS") and High Pressure Sodium ("HPS") fixtures. Appendix A shall be publicly available on the Company's website and shall be updated periodically by the Company to reflect updates for operational substitutes currently available from suppliers.

x
x
x
x
x

B. Operational Substitute No. 1: Operational Substitute No. 1 shall be a Company-owned LED light identified in Appendix A to this tariff that is an operational substitute for the existing 175W MV, 55W LPS, 70W HPS and 100W HPS streetlight fixtures.

x
x

C. Operational Substitute No. 2: Operational Substitute No. 2 shall be a Company-owned LED light identified in Appendix A to this tariff that is an operational substitute for the existing 400W MV, 135W LPS, 200W HPS and 250W HPS streetlight fixtures.

x
x
x

D. Operational Substitute No. 3: Operational Substitute No. 3 shall be a Company-owned LED light identified in Appendix A to this tariff that is an operational substitute for a 400W HPS streetlight fixture.

x
x
x

MINIMUM CHARGE: Payment for lamps, standards, and lighting fixtures installed in accordance with the rates specified below.

TERMS OF PAYMENT: All bills are net and payable within twenty (20) days from the date of bill. If payment for any or all electric service rendered is not made within thirty (30) days from the date the bill is rendered, the Company shall apply an additional late payment charge as defined in Rate 16 Special Charges.

NET RATE PER MONTH OR PART THEREOF: The charge per month will be the sum of the applicable components of A, B, C, D, E, F and G. All monthly kWh listed for unmetered lighting assumes dusk-to-dawn operation at an average of 355.5 hours per month.

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BY Commission Order Case #16-00276-UT

Gérard T. Ortiz

Vice President, PNM Regulatory Affairs & Economic Development

GCG#524210

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A. LIGHT CHARGE (for unmetered lights where maintenance is provided by the Company and included in the Monthly Charge):

Standard Light Type	Monthly kWh Usage	Monthly Charge (Company Owned)	Monthly Charge (Customer Owned)
<u>Mercury Vapor Lights (1)</u>			
175W MV	73	\$14.14	\$ 5.54
400W MV	162	\$21.47	\$12.30
<u>Low Pressure Sodium Lights (1)</u>			
55W LPS	28	\$12.70	\$ 2.13
135W LPS	63	\$17.13	\$ 4.78
<u>High Pressure Sodium Lights</u>			
70W HPS	31	\$10.95	\$ 2.35
100W HPS	45	\$12.02	\$ 3.42
200W HPS	89	\$14.99	\$6.76
250W HPS	107	\$17.29	\$8.12
400W HPS	165	\$21.70	\$12.53

(1) Service under this rate is restricted to those installations and customers receiving service as of August 21, 2011.

B. METERED SERIES STREET LIGHTING: For PNM owned and maintained metered lights, and customer owned metered lights where maintenance is provided by the Company and is included in the monthly charge.

Description	Monthly Rate (Company Owned (1))	Monthly Rate (Customer Owned)
Metered Lighting	\$0.1940070	\$0.0561839

(1) Service under this rate is restricted to those installations receiving service as of August 21, 2011.

C. COMPANY OWNED AND MAINTAINED LED LIGHTING, AND CUSTOMER OWNED AND MAINTAINED LIGHTING (for unmetered lights where maintenance is not provided by the Company and is not included in the Monthly Charge):

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Fixture Wattage Range				Monthly kWh Usage (1), (2)	Company Owned And Maintained Option for LED Lighting-Monthly Charge Per Unit	Customer Owned and Maintained Lighting-Monthly Charge Per Unit
(Wattage includes all ballast or driver losses (if applicable))					Monthly kWh Usage * (\$0.0561839 per kWh + \$0.1441851 per kWh)	Monthly kWh Usage * \$0.0561839 per kWh
0.0	to	10.0	Watts	3.6	\$ 0.71	\$ 0.20
10.1	to	20.0	Watts	7.1	\$ 1.42	\$ 0.40
20.1	to	30.0	Watts	10.7	\$ 2.14	\$ 0.60
30.1	to	40.0	Watts	14.2	\$ 2.85	\$ 0.80
40.1	to	50.0	Watts	17.8	\$ 3.56	\$ 1.00
50.1	to	60.0	Watts	21.3	\$ 4.27	\$ 1.20
60.1	to	70.0	Watts	24.9	\$ 4.99	\$ 1.40
70.1	to	80.0	Watts	28.4	\$ 5.70	\$ 1.60
80.1	to	90.0	Watts	32.0	\$ 6.41	\$ 1.80
90.1	to	100.0	Watts	35.6	\$ 7.12	\$ 2.00
100.1	to	110.0	Watts	39.1	\$ 7.84	\$ 2.20
110.1	to	120.0	Watts	42.7	\$ 8.55	\$ 2.40
120.1	to	130.0	Watts	46.2	\$ 9.26	\$ 2.60
130.1	to	140.0	Watts	49.8	\$ 9.97	\$ 2.80
140.1	to	150.0	Watts	53.3	\$ 10.68	\$ 3.00
150.1	to	160.0	Watts	56.9	\$ 11.40	\$ 3.20
160.1	to	170.0	Watts	60.4	\$ 12.11	\$ 3.40
170.1	to	180.0	Watts	64.0	\$ 12.82	\$ 3.60
180.1	to	190.0	Watts	67.5	\$ 13.53	\$ 3.79
190.1	to	200.0	Watts	71.1	\$ 14.25	\$ 3.99
200.1	to	210.0	Watts	74.7	\$ 14.96	\$ 4.19
210.1	to	220.0	Watts	78.2	\$ 15.67	\$ 4.39
220.1	to	230.0	Watts	81.8	\$ 16.38	\$ 4.59
230.1	to	240.0	Watts	85.3	\$ 17.10	\$ 4.79
240.1	to	250.0	Watts	88.9	\$ 17.81	\$ 4.99

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250.1	to	260.0	Watts	92.4	\$ 18.52	(5)	\$ 5.19
260.1	to	270.0	Watts	96.0	\$ 19.23		\$ 5.39
270.1	to	280.0	Watts	99.5	\$ 19.94		\$ 5.59
280.1	to	290.0	Watts	103.1	\$ 20.66		\$ 5.79
290.1	to	300.0	Watts	106.7	\$ 21.37		\$ 5.99
300.1	to	310.0	Watts	110.2	\$ 22.08		\$ 6.19
310.1	to	320.0	Watts	113.8	\$ 22.79		\$ 6.39
320.1	to	330.0	Watts	117.3	\$ 23.51		\$ 6.59
330.1	to	340.0	Watts	120.9	\$ 24.22		\$ 6.79
340.1	to	350.0	Watts	124.4	\$ 24.93		\$ 6.99
350.1	to	360.0	Watts	128.0	\$ 25.64		\$ 7.19
360.1	to	370.0	Watts	131.5	\$ 26.36		\$ 7.39
370.1	to	380.0	Watts	135.1	\$ 27.07		\$ 7.59
380.1	to	390.0	Watts	138.6	\$ 27.78		\$ 7.79
390.1	to	400.0	Watts	142.2	\$ 28.49		\$ 7.99

(1) Monthly kWh usage = Maximum Wattage in range x 355.5 hours per month / 1,000 Watts per kW.

For lights larger than 400W, the applicable usage and rate shall be the sum of the 390.1 - 400.0 Watts row in the table above plus a wattage range such that the resulting range encompasses the actual wattage of the light (Example: for a 600 Watt light, the applicable usage and charge is determined by adding the 390.1 - 400.0 Watts row and the 190.1 - 200.0 Watts row together, resulting in a 590.1 - 600.0 Watt Range with a monthly usage of 213.300 kWh.).

C.1 CUSTOMER OWNED AND MAINTAINED METERED LIGHTING: For Customer-owned metered lights (excluding B above) where maintenance is not provided by the Company and is not included in the monthly charge:

Description	Monthly Rates (Customer Owned)
Metered Lighting	\$ 0.0561839

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- D. POLE CHARGE: For company owned lighting attached to a dedicated street lighting pole.

<u>Description</u>	<u>Monthly Charge (Company Owned)</u>
Wood Pole	\$ 4.86
Non-Wood Pole	\$ 9.45

- E. FUEL AND PURCHASED POWER COST ADJUSTMENT: All kWh usage under this tariff will be subject to the Fuel and Purchase Power Cost Adjustment Clause ("FPPCAC") factors calculated according to the provisions in PNM's Rider 23.

The appropriate FPPCAC factors will be applied to all kWh appearing on bills rendered under this tariff.

- F. OTHER APPLICABLE RIDERS: Any other PNM riders that may apply to this tariff shall be billed in accordance with the terms of those riders.

- G. SPECIAL TAX AND ASSESSMENT ADJUSTMENT: Billings under this Schedule may be increased by an amount equal to the sum of the taxes payable under the Gross Receipts and Compensating Tax Act and of all other taxes, fees, or charges (exclusive of ad valorem, state and federal income taxes) payable by the utility and levied or assessed by any governmental authority on the public utility service rendered, or on the right or privilege of rendering the service, or on any object or event incidental to the rendition of the service.

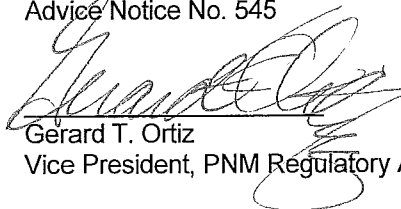
SPECIAL CONDITIONS:

- I. Installation and Ownership of Lighting Facilities:

- a) Company Owned Lighting Facilities-

Upon request from the Customer, the Company shall convert or install Company owned streetlighting fixtures at its own expense up to the limits provided by the Installation Allowance Table below, with any remaining expenses being the responsibility of the Customer. All lighting facilities shall be and remain the property of the Company.

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Company Owned Light & Pole Installation Allowances

High Pressure Sodium Lighting Facilities

70W High Pressure Sodium Street Light	\$ 920.00
100W High Pressure Sodium Street Light	\$ 920.00
200W High Pressure Sodium Street Light	\$ 880.00
250W High Pressure Sodium Street Light	\$ 980.00
400W High Pressure Sodium Flood Light	\$ 980.00
400W High Pressure Sodium Street Light	\$ 980.00

Light Emitting Diode ("LED") Lighting Facilities

Operational Substitute No. 1	\$ 160.00
Operational Substitute No. 2	\$ 480.00
Operational Substitute No. 3	\$ 1,040.00

Dedicated Streetlight Poles

Wood Pole	\$ 520.00
Non-Wood Pole	\$ 1,010.00

b) Customer Owned Lighting Facilities-

- i. The Customer shall be obligated to install its own streetlighting fixtures and poles at its own expense. The Company shall inspect and approve all Customer installed streetlighting prior to it being placed under this Rate.
- ii. If requested by the Customer, poles or fixtures may be installed by the Company or an agent approved by the Company. Customer shall pay the Company for all installation costs of the facilities where such installation is done by the Company or the Company's agent.
- iii. All facilities installed to provide electric service to customer owned streetlights under this tariff shall be and remain the property of the Company.
- iv. The Customer is required to provide specific performance data on the total energy consumption of each non-standard fixture installed.

II. Highway Signs:

No service to or maintenance of highway signs connected to the lighting system is included under this schedule.

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INTEGRATED SYSTEM STREETLIGHTING AND FLOODLIGHTING SERVICE

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B. Customer-owned:

1. If requested by the Customer, Company agrees to make all repairs, alterations, fixture replacements or knock-downs replacements of Customer-owned Lights and Poles necessitated by accidents, vandalism, projectiles, thefts, acts of nature or existing or future laws or ordinances. The Customer shall pay all costs associated with such replacements.
2. Customer agrees to coordinate recovery efforts with Company in instances where Company has potential legal liability from claims of the parties responsible for Customer-owned Light and Pole damage.

The Company will, upon receipt of any information pertaining to the identity and circumstances of a knock-down or a copper theft associated with a Customer-owned Light or Pole, furnish to the customer a copy of that information.

X
X
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X

IV. Operation and Maintenance:

A. Total Company-Owned System:

The Company will perform normal operation and maintenance of the lighting system which includes routine maintenance, repairs and fixture servicing including all spot lamp replacement required by faulty lamps.

Mandatory replacement of or alterations to working luminaire to bring them into compliance with existing or future laws or ordinances that are not otherwise specifically addressed by other provisions of this tariff will be performed by the Company at the expense of the customer.

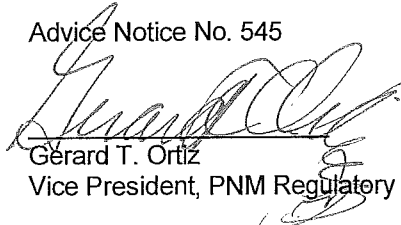
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It shall be the duty of the customer to report to the Company the failure of any lamp covered by the Rate to burn, or to burn adequately, and it shall thereafter be the obligation of the Company to at once restore such lamp to service subject, however, to the provisions of Special Conditions I, above and to subsequent provisions of this item as to replacements. Any lamp so reported as failing to burn, or to burn adequately, shall be replaced or repaired and returned to regular operation within seventy-two (72) hours from the time of notice of such failure to the Company. Pole hits and failures due to the loss of underground conductors or control equipment are excluded from the 72 hour requirement and shall be repaired as material availability and scheduling permits.

B. Total Customer-Owned System:

Page 1; Section A - "Light Charge (for unmetered lights where maintenance is provided by the Company and included in the Monthly Charge": Maintenance under this section includes faulty photoelectric cell replacement, faulty lamp replacement, faulty fixture fuse replacement, and

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incidental lens cleaning.

Page 2; Sections B - "Metered Series Street Lighting", and C - "Customer Owned and Maintained Lighting". Maintenance under these sections is the responsibility of the customer.

All other operation and maintenance, including traffic control costs and troubleshooting customer owned systems may be done by the Company at the request and expense of the customer. The Company will not stock maintenance items that are considered nonstandard by the Company for use in maintaining customer-owned lighting systems. Stocking of these nonstandard items is the sole responsibility of the customer.

V. Termination:

Service to any lamp installed hereunder shall be terminated by the Company upon receipt of thirty (30) days notice and coincident with such notice, payment of the Company's depreciated investment for any lamp and/or pole associated with the removal of any Company owned lighting facilities.

VI. In the event of a conflict between the terms of this rate schedule and any provision contained in the streetlighting contract in effect, the relevant terms of the rate schedule shall control.

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