



Application for URBAN DESIGN COMMITTEE Review

Department of Planning and Development Review
Planning & Preservation Division
900 E. Broad Street, Room 510
Richmond, Virginia 23219
(804) 646-6335

<http://www.richmondgov.com/CommitteeUrbanDesign>

Application Type

- Addition/Alteration to Existing Structure
 New Construction
 Streetscape
 Site Amenity

- Encroachment
 Master Plan
 Sign
 Other

Review Type

- Conceptual
 Final

Project Name: _____

Project Address: _____

Brief Project Description (this is not a replacement for the required detailed narrative) : _____

Applicant Information

(on all applications other than encroachments, a City agency representative must be the applicant)

Name: _____ Email: _____

City Agency: _____ Phone: _____

Address: _____

Main Contact (if different from Applicant): _____

Company: _____ Phone: _____

Email: _____

Submittal Deadlines

All applications and support materials must be filed no later than 21 days prior to the scheduled meeting of the Urban Design Committee (UDC). Please see the schedule on page 3 as actual deadlines are adjusted due to City holidays. **Late or incomplete submissions will be deferred to the next meeting.**

Filing

Applications can be mailed or delivered to the attention of "Urban Design Committee" at the address listed at the top of this page. **It is important that the applicant discuss the proposal with appropriate City agencies, Zoning Administration staff, and area civic associations and residents prior to filing the application with the UDC.**

UDC Background

The UDC is a ten member committee created by City Council in 1968 whose purpose is to advise the City Planning Commission on the design of projects on City property or right-of-way. The UDC provides advice of an aesthetic nature in connection with the performance of the duties of the Commission under Sections 17.05, 17.06 and 17.07 of the City Charter. The UDC also advises the Department of Public Works in regards to private encroachments in the public right-of-way.



PROJECT NARRATIVE

Urban Design Committee Submission
Richmond Police Canine Facility
28 October, 2014

The Richmond Police Department Canine Unit moved to a 3.5 acres complex located at 814 Forest Lawn Drive, Richmond, VA 23227 in 1965. The property consists of a small office building, fenced obstacle course, fenced kennel area, a large open field used for training, and various sheds. The Police Canine Complex is located within the Parks and Recreation's 104 acres Pine Camp Parcel. The canine complex is in the middle of the Pine Camp Parcel, surrounded by dense forest along the west and north, the Parks and Recreation's Facilities Maintenance Operations Center to the south, and a gravel parking lot and the North Side Dog park to the east.

A New Police Canine Facility is needed due to the current facility's age and condition. The current Canine office building has significant operational deficiencies and substantial ongoing facility maintenance problems. The new facility is scheduled to replace the existing deteriorated office building and kennel area. The new facility will be built within the existing Police Canine complex, adjacent to the existing office building. Upon completion of the new facility, the existing office building and kennel area will be demolished and the site restored.

The New 4060 s.f. Police Canine Facility will support the Richmond Police Department's Canine Unit. The new facility will have an administrative area and a kennel area. The administrative area will provide a well-organized space for the canine officers. Office/work stations and locker rooms will be provided for the twelve (12) RPD Canine Officers and for the Sergeant in charge. A training classroom will be provided for regional canine training. The administrative area will also provide a break room and storage areas for operational needs.

The kennel area will be located at the rear of the new facility; providing kennels, food storage, a canine examination/cleaning room, and an equipment storage room. The kennel area will be properly separated and secured from the administrative area by a breezeway and secure doors.

The New Police Canine Facility is funded through the City of Richmond's Capital Improvement Budget and a State Grant through the Office of the Attorney General. The City of Richmond's Capital Improvement Budget, adopted in FY-2014 and FY-2015, provides \$150,000.00 and \$50,000.00, respectively (\$200,000.00 total) for design services of the new facility. The State Grant through the Office of the Attorney General is providing \$1,184,177.00 for the construction of the new facility.

Construction of the New Police Canine Facility is scheduled to begin February 2015. The project is estimated to take ten (10) months to complete, with the final site work ending in November 2015. Working within the State Grant guidelines, the project must be closed-out before December 31, 2015.

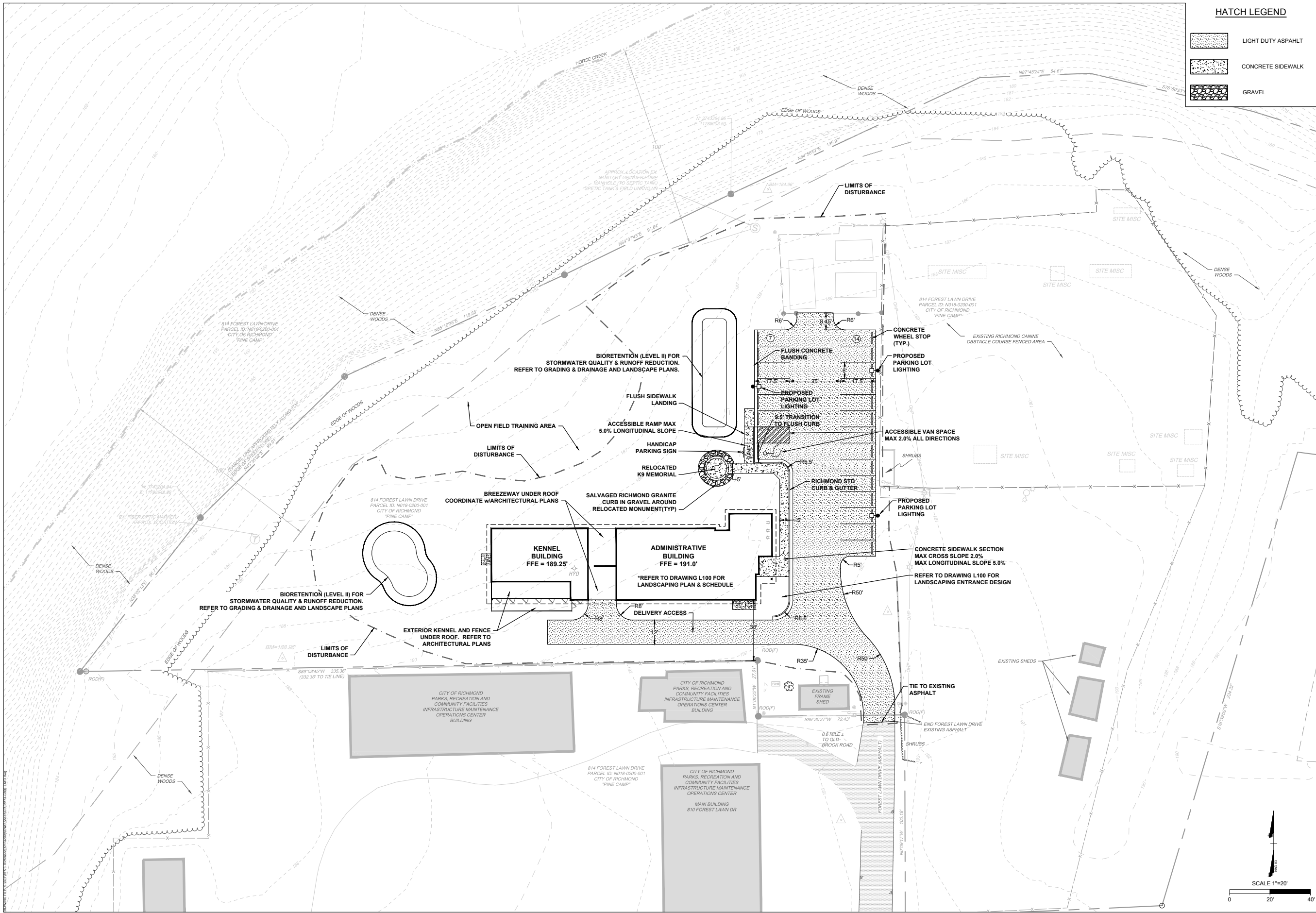
CITY OF RICHMOND
URBAN DESIGN COMMITTEE SUBMISSION

RICHMOND POLICE CANINE FACILITY

RICHMOND, VIRGINIA

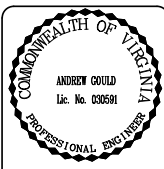


29 OCTOBER 2014



HATCH LEGEND

	LIGHT DUTY ASPHALT
	CONCRETE SIDEWALK
	GRAVEL



REVISIONS
1. REVISIONS PER COMMENTS - 10/29/2014

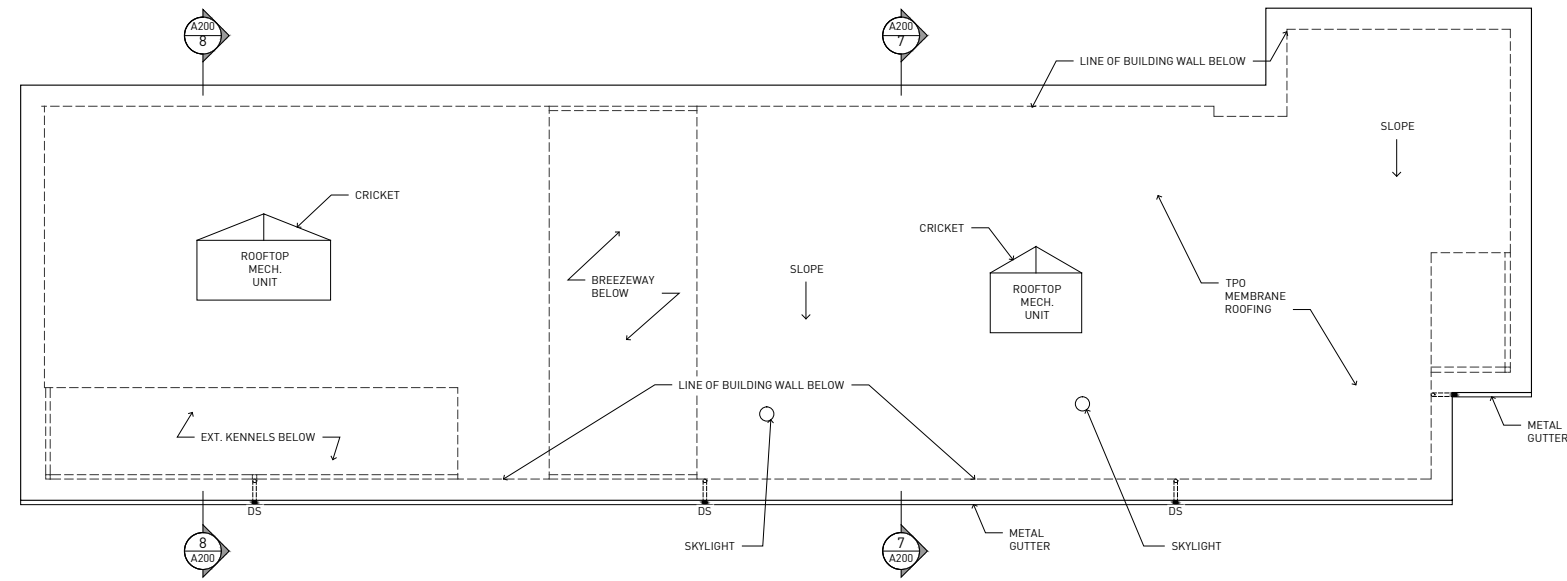
UDC SUBMITTAL

RICHMOND POLICE CANINE FACILITY
814 FOREST LAWN DR.
RICHMOND, VIRGINIA 23227

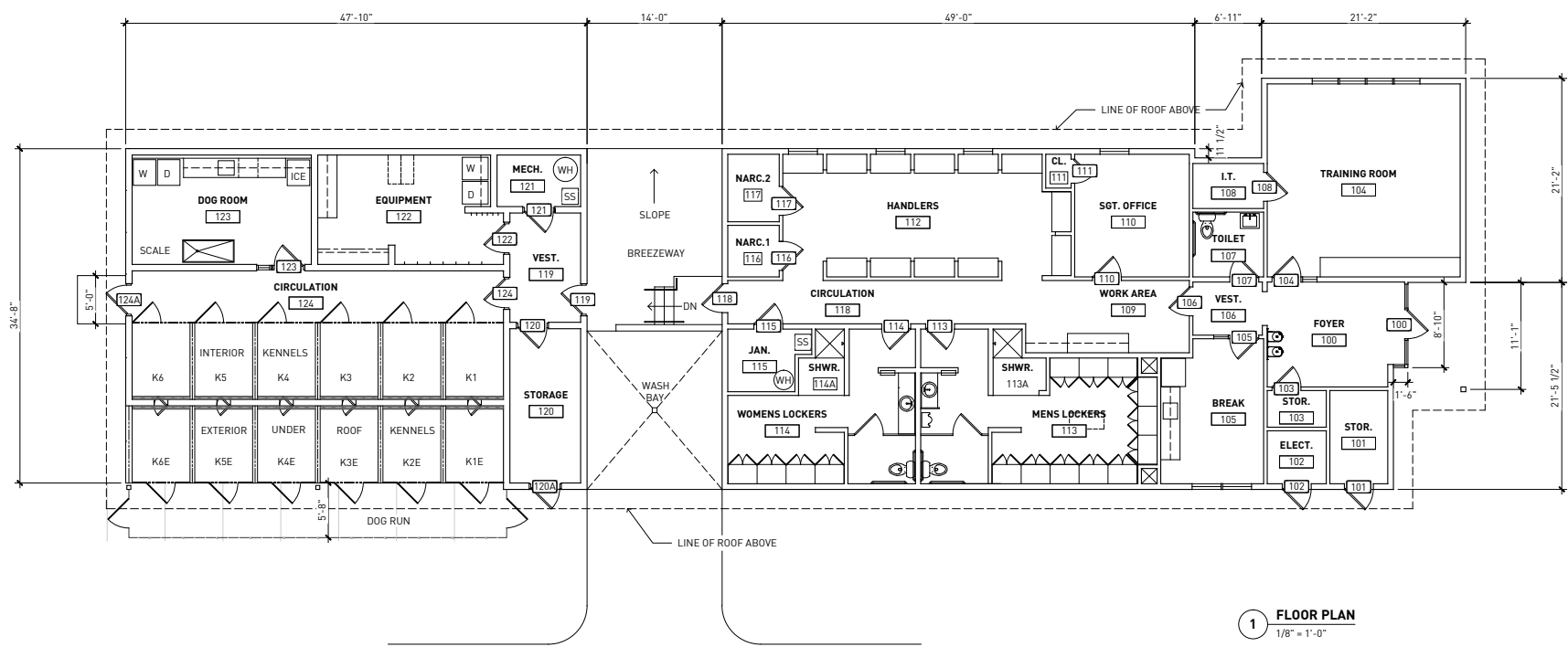
29 OCTOBER 2014

C300
SITE LAYOUT PLAN

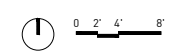
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1 ROOF PLAN
1/8" = 1'-0"



1 FLOOR PLAN
1/8" = 1'-0"



RICHMOND POLICE CANINE FACILITY
814 FOREST LAWN DR.
RICHMOND, VIRGINIA 23227

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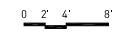
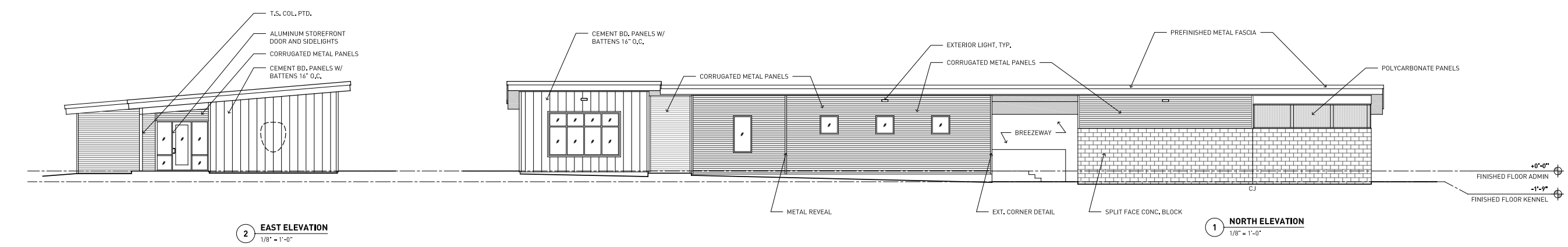
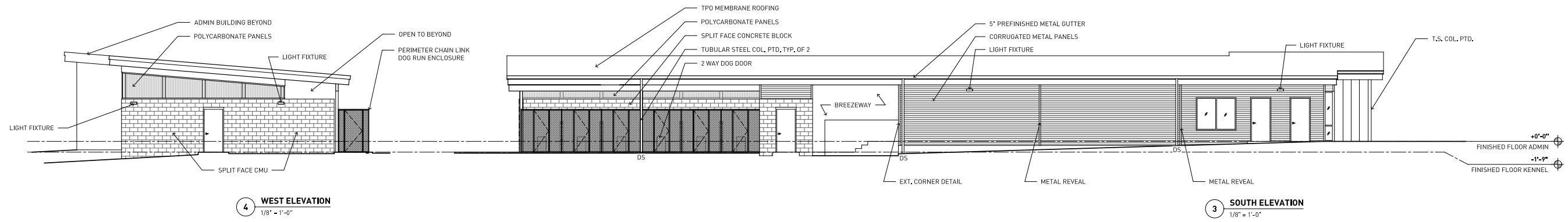
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A100
FLOOR PLAN, ROOF PLAN



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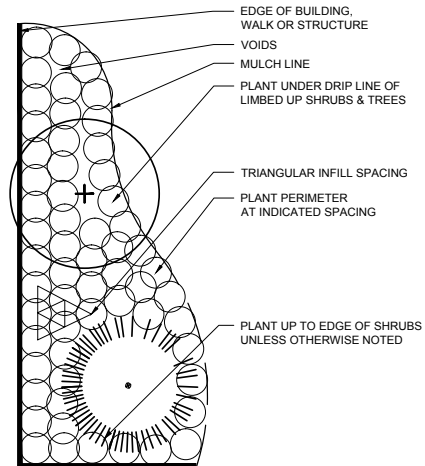
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A200
EXTERIOR ELEVATIONS

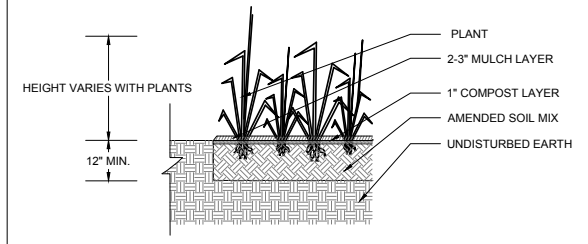


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PLAN VIEW



1 GROUND COVER/ PERENNIAL PLANTING
NOT TO SCALE

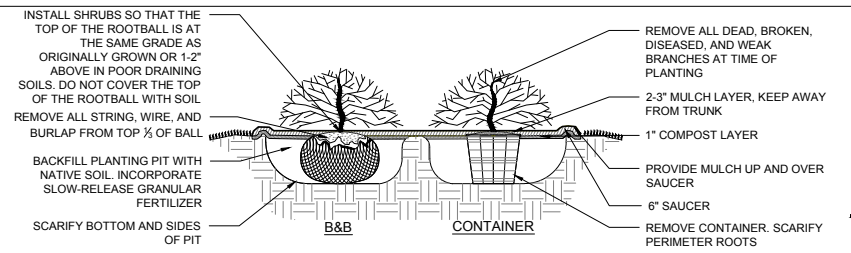
PLANT SCHEDULE						
TREES	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM INSTALLED SIZE	ROOT	REMARKS
LAG MUS	3	LAGERSTROEMIA X 'MUSKOGEE'	LAVENDER CRAPE MYRTLE MULTI-TRUNK	8' HT	B&B	3 - 5 STEM
QOU NUT	3	QUERCUS NUTTALLII	NUTTALL OAK	1.5" CAL	B&B	
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM INSTALLED SIZE	ROOT	REMARKS
ILE FOS	5	ILEX FOSTERI	FOSTER'S HOLLY	6'-7' HT.	B&B	DENSE & FULL
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM INSTALLED SIZE	ROOT	SPACING
JUN EFF	11	JUNCEUS EFFUSUS	DWARF BURFORD HOLLY	3 GAL	CONTAINER	42" O.C.
ITE VIR	70	ITEA VIRGINICA 'SPRICH'	VIRGINIA SWEETSPICE	3 GAL	CONTAINER	36" O.C.
RHA UMB	11	RHAPHICOLEPIS UMBELLATA 'MINOR'	YEDDA HAWTHORN	3 GAL	CONTAINER	
GRASSES	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM INSTALLED SIZE	ROOT	SPACING
PEN HAM	26	PENNISETUM ALOPECUROIDES 'HAMELN'	HAMELN DWARF FOUNTAIN GRASS	1 GAL	CONTAINER	3' O.C.
SHRUB AREAS	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM INSTALLED SIZE	ROOT	SPACING
CAR STR	180	CAREX STRICTA	TUSsock SEDGE	1 GAL	CONTAINER	18" O.C.
ECH PUR	43	ECHINACEA PURPUREA	PURPLE CONEFLOWER	1 GAL	CONTAINER	18" O.C.
JUN EFF	553	JUNCEUS EFFUSUS	SOFT RUSH	1 GAL	CONTAINER	12" O.C.
PAN VIR	191	PANICUM VIRGATUM 'HEAVY METAL'	BLUE SWITCH GRASS	1 GAL	CONTAINER	24" O.C.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM INSTALLED SIZE	ROOT	SPACING
LIR MUS	154	LIRIOPE MUSCARI 'MAJESTIC'	MAJESTIC LIRIOPE	4" POT	4" POT	12" O.C.

GENERAL NOTES

PRE-CONSTRUCTION
CONTRACTOR IS RESPONSIBLE FOR CONTACTING "MISS UTILITY" AT 1.800.552.7001 FOR LOCATION OF ALL UTILITY LINES. TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM SEWER/WATER CONNECTIONS. NOTIFY LANDSCAPE ARCHITECT OF CONFLICTS. VERIFY ALL PLANT MATERIAL QUANTITIES ON THE PLAN PRIOR TO BIDDING. PLANT LIST TOTALS ARE FOR CONVENIENCE ONLY AND SHALL BE VERIFIED PRIOR TO BIDDING. PROVIDE PLANT MATERIALS OF QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY INDICATED ON PLANS. ALL PLANT MATERIALS AND INSTALLATION SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". IF SPECIFIED PLANT MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON AVAILABILITY TO THE ARCHITECTS, TOGETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL. PROVIDE AND INSTALL ALL PLANTS AS IN ACCORDANCE WITH DETAILS AND CONTRACT SPECIFICATIONS.

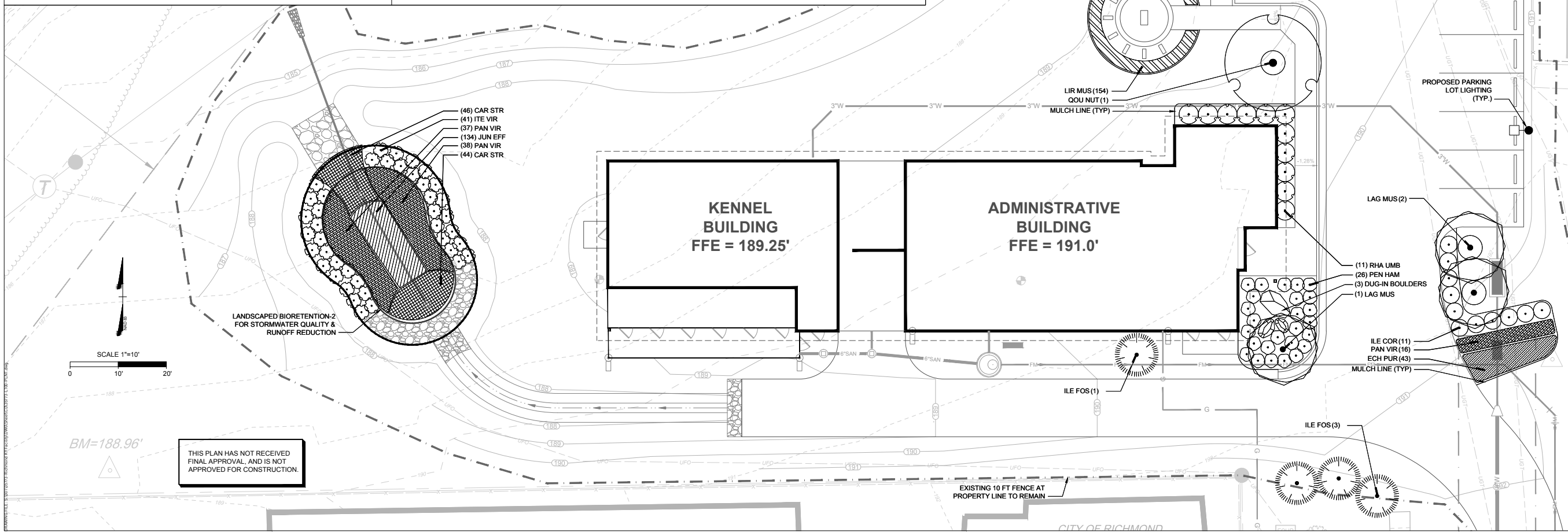
CONSTRUCTION/INSTALLATION
LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS AND MATERIALS THAT ARE IN AN UNHEALTHY OR UNSIGHTLY CONDITION, AS WELL AS PLANTS AND MATERIALS THAT DO NOT CONFORM TO ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK" LABEL AT LEAST ONE TREE AND ONE SHRUB OF EACH VARIETY AND CALIPER WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING THE DESIGNATION OF BOTANICAL AND COMMON NAME. INSTALL LANDSCAPE PLANTINGS AT ENTRANCES/EXITS AND PARKING AREAS ACCORDING TO PLANS SO THAT MATERIALS WILL NOT INTERFERE WITH SIGHT DISTANCES. CONTRACTOR IS RESPONSIBLE FOR WATERING ALL PLANT MATERIAL DURING INSTALLATION AND UNTIL FINAL INSPECTION AND ACCEPTANCE BY OWNER. CONTRACTOR SHALL NOTIFY OWNER OF CONDITIONS WHICH AFFECTS THE GUARANTEE.

INSPECTIONS/GUARANTEE
UPON COMPLETION OF LANDSCAPE INSTALLATION, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR WHO WILL VERIFY COMPLETENESS, INCLUDING THE REPLACEMENT OF ALL DEAD PLANT MATERIAL. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A FINAL INSPECTION BY THE LANDSCAPE ARCHITECT. ALL EXTERIOR PLANT MATERIALS SHALL BE GUARANTEED FOR ONE FULL YEAR AFTER DATE OF FINAL INSPECTION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. DEFECTS RESULTING FROM NEGLIGENCE BY THE OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS WHICH ARE BEYOND THE CONTRACTOR'S CONTROL ARE NOT THE RESPONSIBILITY OF THE CONTRACTOR. PLANT MATERIAL QUANTITIES AND SIZES WILL BE INSPECTED FOR COMPLIANCE WITH APPROVED PLANS BY A SITE PLAN REVIEW AGENT OF THE PLANNING DEPARTMENT PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY. REMOVE ALL GUY WIRES AND STAKES 12 MONTHS AFTER INSTALLATION.

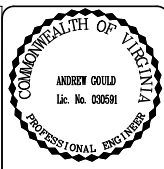


NOTE: FOR SHRUB PLANTINGS WITHIN BIORETENTION AREAS REFER TO TYPICAL BIORETENTION CROSS SECTION, SHEET C310

2 SHRUB PLANTING
NOT TO SCALE



THIS PLAN HAS NOT RECEIVED FINAL APPROVAL, AND IS NOT APPROVED FOR CONSTRUCTION.



REVISIONS

RICHMOND POLICE CANINE FACILITY
814 FOREST LAWN DR.
RICHMOND, VIRGINIA 23227

UDC SUBMITTAL

29 OCTOBER 2014

L100
LANDSCAPE PLAN, NOTES AND DETAILS



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LAGERSTROEMIA X MUSKOGEE



QUERCUS NUTTALII



ILEX X 'FOSTERI'



ILEX CORNUTA 'BURFORDII NANA'



ITEA VIRGINICA 'SPRICH'



RHAPHIOLEPIS UMBELLATA 'MINOR'



CAREX STRICTA



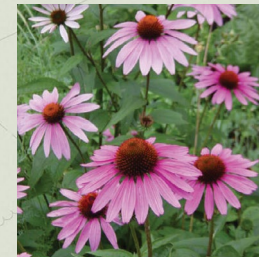
JUNCUS EFFUSUS



LIRIOPE MUSCARI 'MAJESTIC'



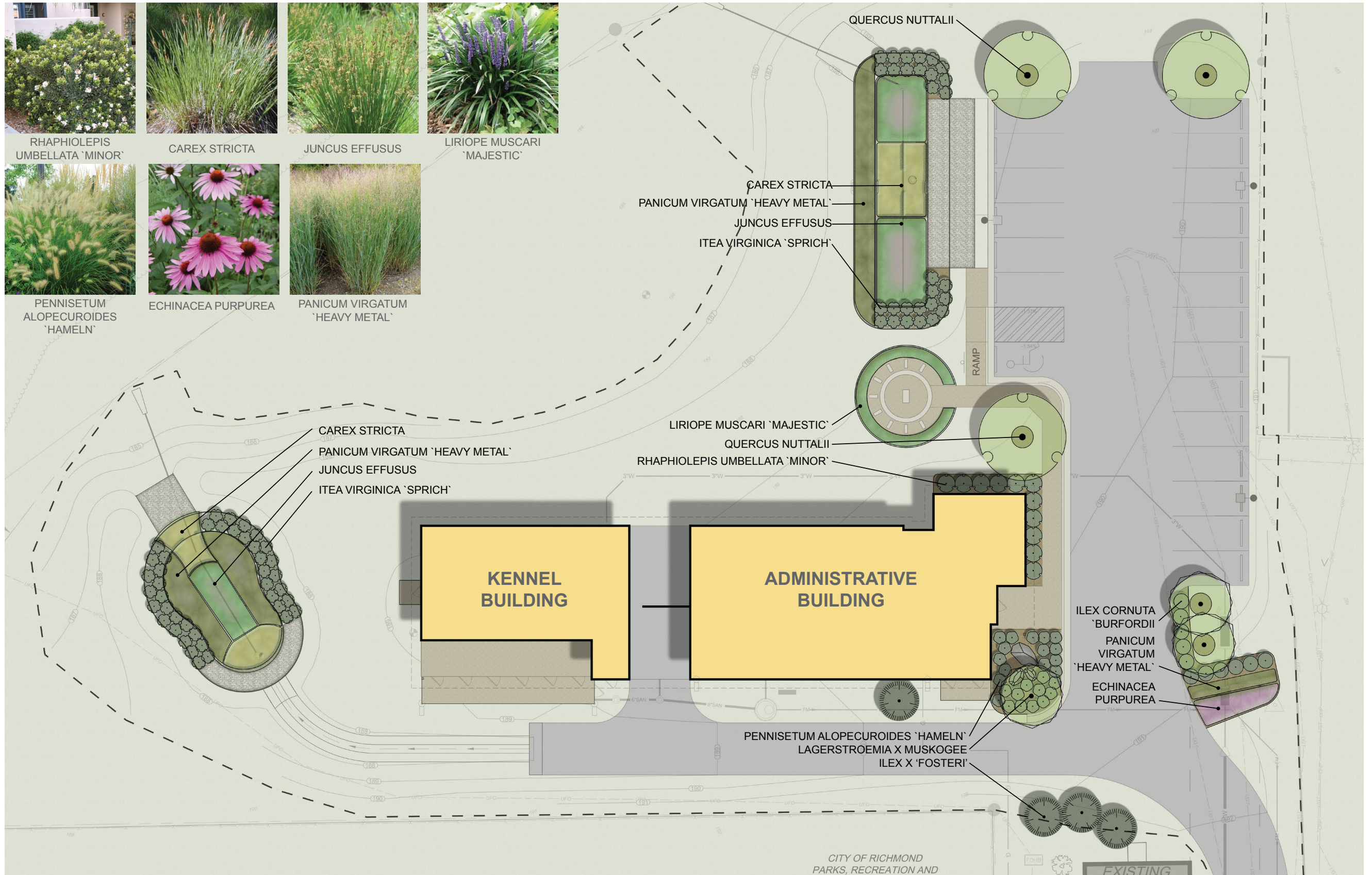
PENNISETUM ALOPECUROIDES 'HAMELN'



ECHINACEA PURPUREA



PANICUM VIRGATUM 'HEAVY METAL'



QUERCUS NUTTALII

CAREX STRICTA
PANICUM VIRGATUM 'HEAVY METAL'
JUNCUS EFFUSUS
ITEA VIRGINICA 'SPRICH'

LIRIOPE MUSCARI 'MAJESTIC'
QUERCUS NUTTALII
RHAPHIOLEPIS UMBELLATA 'MINOR'

CAREX STRICTA
PANICUM VIRGATUM 'HEAVY METAL'
JUNCUS EFFUSUS
ITEA VIRGINICA 'SPRICH'

ILEX CORNUTA 'BURFORDII'
PANICUM VIRGATUM 'HEAVY METAL'
ECHINACEA PURPUREA

PENNISETUM ALOPECUROIDES 'HAMELN'
LAGERSTROEMIA X MUSKOGEE
ILEX X 'FOSTERI'

CITY OF RICHMOND
PARKS, RECREATION AND

EXISTING



29 OCTOBER 2014

RICHMOND POLICE CANINE FACILITY
VIEW FROM ENTRANCE ROAD



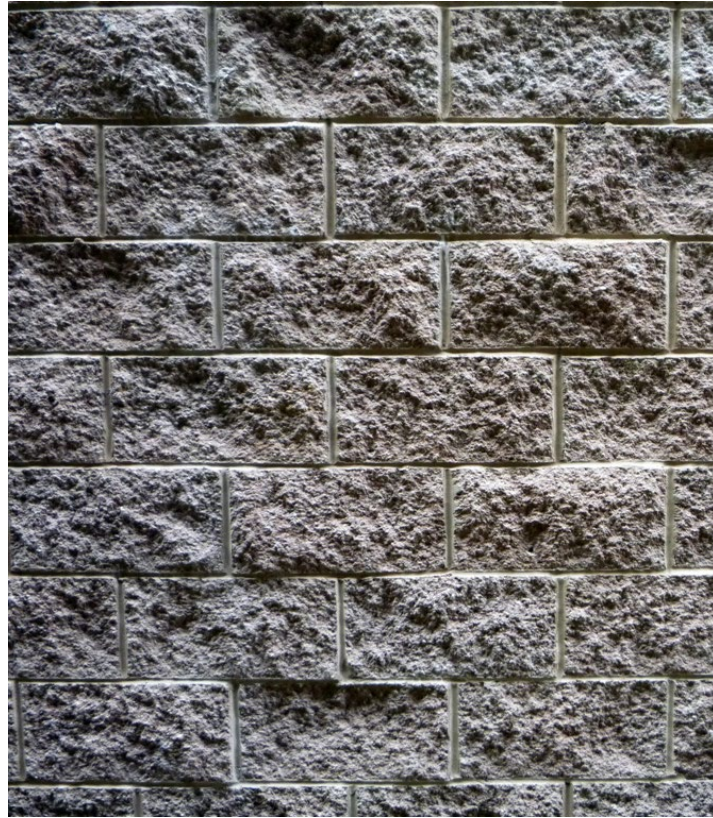


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RICHMOND POLICE CANINE FACILITY
VIEW FROM PARKING AREA




TIMMONS GROUP



SPLIT FACED CONCRETE BLOCK



CORRUGATED METAL PANELS



HARDIE BOARD AND BATTEN



POLYCARBONATE PANELS



PARKING LOT LIGHTS



WALL-MOUNTED BUILDING LIGHTS



ENTRY LIGHT



SOLATUBE SKYLIGHT

Surface-mounted ceiling with LED

BEGA

Housing: Two piece die-cast aluminum provided with means for direct attachment to the ceiling over a 3½" or 4" octagonal wiring box. Die castings are marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy.

Enclosure: Tempered clear glass, retained by a one piece, die-cast aluminum step baffle frame. Frame is secured by one stainless steel captive screw threaded into a stainless steel insert. Internal reflector made from pure, anodized aluminum. Fully gasketed for weather tight operation using molded silicone rubber "U-channel" gasket.

Electrical: 31 W LED luminaire, 36 total system watts, -20° C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. Standard LED color temperature is 3000K with an 80 CRI. Available in 4000K (80 CRI); consult factory.

Note: Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

UL listed for US and Canadian Standards, suitable for wet locations. Protection class IP65.

Weight: 4.0 lbs.

Luminaire Lumens: 1328
Tested in accordance with LM-79-08

Type: CANOPY
BEGA Product: 6503 LED
Project: K9
Voltage:
Color:
Options:
Modified:



	β	A	B
6503 LED	31 W LED	28°	7½ B

β = Beam angle

BEGA-US 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 FAX (805) 566-9474 www.bega-us.com
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ENTRY LIGHT



TWR2 LED LED Wall Luminaire

Catalog Number TWR2 LED 1-50K-MVOLT

Notes NORTH SIDE WALL MOUNT

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The popular TWR2 luminaire is now available with long-lasting, energy-efficient LED technology. Featuring a classic dayform, the TWR2 LED offers a traditional appearance and is powered by advanced LEDs.

The TWR2 LED luminaire is powerful yet energy efficient, capable of replacing up to a 400W metal halide luminaire while saving up to 82% in energy costs. Offering an expected service life of more than 20 years, the TWR2 LED eliminates frequent lamp and ballast replacements associated with traditional technologies.

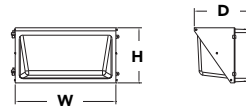
Specifications

Width: 17"
(43.2 cm)

Height: 9"
(22.9 cm)

Depth: 9-5/16"
(23.8 cm)

Weight: 17.2 lbs
(7.8 kg)



Ordering Information

EXAMPLE: TWR2 LED 1 50K MVOLT DDB

TWR2 LED				
Series	Performance Package	Color Temperature	Voltage	Finish
TWR2 LED	I 6979 lumens	50K 5000K ¹	MVOLT	DDB Dark bronze

NOTES

- Correlated color temperature (CCT) shown is nominal per ANSI C78, 377-2008.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).

FEATURES & SPECIFICATIONS

INTENDED USE

The TWR2 LED combines traditional wall pack design with high-output LEDs to provide an energy-efficient, low maintenance LED wall pack suitable for replacing up to 400W MH fixtures. The traditional shape helps maintain building aesthetics when replacing only a portion of your building's wall packs. TWR2 LED is ideal for outdoor applications such as carports, loading areas, driveways and parking areas.

CONSTRUCTION

Rugged cast-aluminum housing with bronze polyester powder paint for lasting durability. Door is hinged on the side so door swings out of the way during installation and service. Castings are sealed with a one-piece gasket to inhibit the entrance of external contaminants. MVOLT driver operates on any line voltage from 120-277V (50/60Hz). Rated for outdoor installations, -40°C minimum ambient.

OPTICS

High-performance LEDs maintain up to 86% of light output at 100,000 hours of service life (L86/100,000 hours). Prismatic glass lens designed for superior lighting distribution, uniformity and fixture spacing. See Lighting Facts label and photometry reports for specific fixture performance.

INSTALLATION

Designed for wall mounting above four feet from ground. Housing is configured for mounting directly over a standard 4" outlet box (by others) or for surface wiring via any of three convenient 1/2" threaded conduit entry hubs.

LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations. Tested in accordance with IESNA LM-79 and LM-80 standards.

WARRANTY

Five-year limited warranty. Full warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

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



One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • Fax: 770.918.1209 • www.lithonia.com
© 2013 Acuity Brands Lighting, Inc. All rights reserved.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application.

Performance Package	Drive Current (mA)	CCT	System Watts	50K (5000K, 67 CRI)			
				Lumens	B	U	C
I	530	5000K	79W	6,979	2	3	4
					8		89

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C	1.03
10°C	1.01
20°C	1.00
25°C	1.00
30°C	0.99
40°C	0.98

Electrical Load

Fixture Model No.	Drive Current (mA)	System Watts	Current (A)			
			120	208	240	277
TWR2 LED 1 50K MVOLT	530 mA	79W	0.75	0.43	0.38	0.33

Projected LED Lumen Maintenance

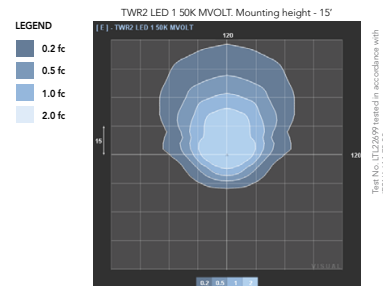
Data references the extrapolated performance projections in a 40°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LMF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

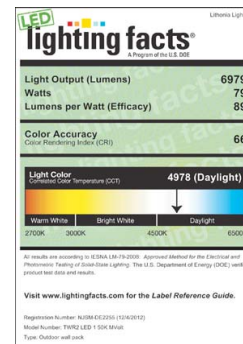
Operating Hours	0	25,000	50,000	60,000	100,000
LM Factor TWR2 LED 1	1.0	.95	.92	.90	.86

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting TWR2 LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.



Lighting Facts Labels



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Rev. 03/19/13

NORTH SIDE WALL LIGHT

+12'-0" MOUNTING HEIGHT



TWR1 LED LED Wall Luminaire

Catalog Number TWR1 LED 1-50K-MVOLT

Notes SOUTH SIDE WALL MOUNT

Type

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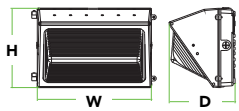
Introduction

The popular TWR1 luminaire is now available with long-lasting, energy-efficient LED technology. Featuring a classic dayform, the TWR1 LED offers a traditional appearance and is powered by advanced LEDs.

The TWR1 LED luminaire is powerful yet energy efficient, capable of replacing up to a 320W metal halide luminaire while saving up to 80% in energy costs. Offering an expected service life of more than 20 years, the TWR1 LED eliminates frequent lamp and ballast replacements associated with traditional technologies.

Specifications

Width: 12-15/16"
(32.9 cm)
Height: 9"
(22.9 cm)
Depth: 7-1/2"
(19 cm)
Weight: 11.95 lbs
(5.42 kg)



Ordering Information

EXAMPLE: TWR1 LED 2 50K MVOLT

Series	Performance Package	Color Temperature	Voltage	Controls	Finish
TWR1 LED	1 2 3	2100 lumens 3500 lumens 4900 lumens	40K 4000K ¹ 50K 5000K ²	MVOLT ³ (blank) No controls PE ¹ MVOLT Photo Control	(blank) Dark bronze

NOTES

- Correlated color temperature (CCT) shown is nominal per ANSI C78, 377-2008. Except TWR1 LED 1 50K which is 5400 CCT.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Photo control not available with 4000K.

FEATURES & SPECIFICATIONS

INTENDED USE

The TWR1 LED combines traditional wall pack design with high-output LEDs to provide an energy-efficient, low-maintenance LED wall pack suitable for replacing up to 320W MH fixtures. The traditional shape helps maintain building aesthetics when replacing only a portion of your building's wall packs. TWR1 LED is ideal for outdoor applications such as carpools, loading areas, driveways and parking areas.

CONSTRUCTION

Rugged cast-aluminum housing with bronze polyester powder paint for lasting durability. Door is hinged on the side so door swings out of the way during installation and service. Castings are sealed with a one-piece gasket to inhibit the entrance of external contaminants. MVOLT driver operates on any line voltage from 120-277V (50/60Hz); 6kV surge protection. Rated for outdoor installations, -40°C minimum ambient.

OPTICS

High-performance LEDs maintain up to 87% of light output at 100,000 hours of service life (L87/100,000 hours). Prismatic glass lens designed for superior lighting distribution, uniformity and fixture spacing. See Lighting Facts label and photometry reports for specific fixture performance.

INSTALLATION

Designed for wall mounting above four feet from ground. Housing is configured for mounting directly over a standard 4" outlet box (by others) or for surface wiring via any of three convenient 1/2" threaded conduit entry hubs.

LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations. Tested in accordance with IESNA LM-79 and LM-80 standards.

WARRANTY

Five-year limited warranty. Full warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

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



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Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application.

Fixture Model Number	CCT	Drive Current	System Watts	Lumens	B	U	G	LPW	CRB
TWR1 LED 1 40K MVOLT	4000K	960mA	33W	2161	0	3	2	66	75
TWR1 LED 1 50K MVOLT	5000K	960mA	33W	2126	0	3	2	62	70
TWR1 LED 2 40K MVOLT	4000K	530mA	39W	3497	1	3	3	90	73
TWR1 LED 2 50K MVOLT	5000K	530mA	41W	3527	1	3	3	86	66
TWR1 LED 3 40K MVOLT	4000K	530mA	55W	4966	1	3	3	91	73
TWR1 LED 3 50K MVOLT	5000K	530mA	59W	4875	1	3	3	83	66

Electrical Load

Fixture Model Number	Drive Current	System Watts	Current Load (A) @			
			120V	208V	240V	277V
TWR1 LED 1 40K MVOLT	960mA	33W	0.31	0.18	0.15	0.13
TWR1 LED 1 50K MVOLT	960mA	33W	0.34	0.20	0.17	0.15
TWR1 LED 2 40K MVOLT	530mA	39W	0.36	0.21	0.18	0.16
TWR1 LED 2 50K MVOLT	530mA	41W	0.40	0.23	0.20	0.17
TWR1 LED 3 40K MVOLT	530mA	55W	0.51	0.29	0.25	0.22
TWR1 LED 3 50K MVOLT	530mA	59W	0.56	0.32	0.28	0.24

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C	1.03
10°C	1.01
20°C	1.00
25°C	1.00
30°C	0.99
40°C	0.98

Projected LED Lumen Maintenance

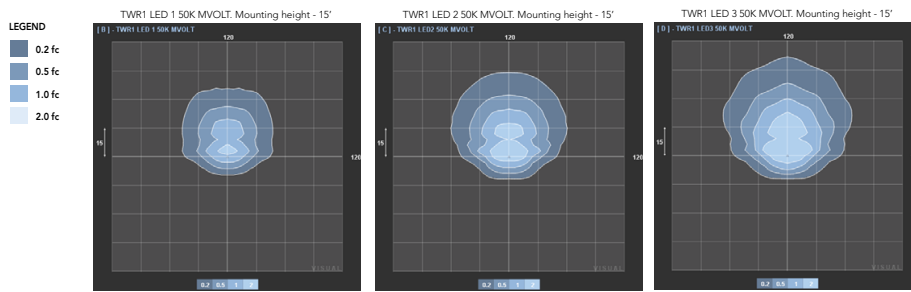
Data references the extrapolated performance projections in a 40°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

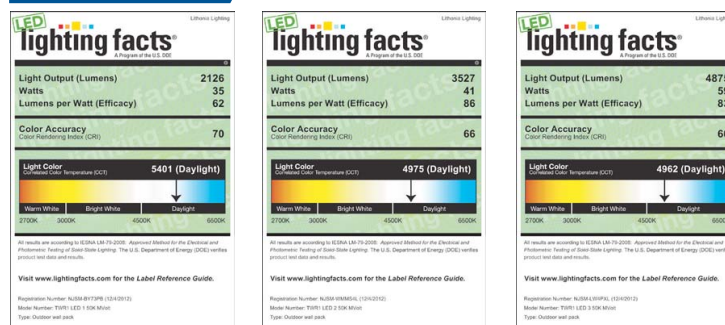
Operating Hours	0	25,000	50,000	60,000	100,000
LM Factor TWR1 LED 1	1.0	.93	.88	.86	.79
LM Factor TWR1 LED 2	1.0	.94	.91	.90	.86
LM Factor TWR1 LED 3	1.0	.94	.92	.91	.87

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting TWR1 LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.



Lighting Facts Labels



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TWR1 LED
Rev. 02/03/14

SOUTH SIDE WALL LIGHT

+10'-0" MOUNTING HEIGHT

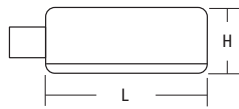


KAD LED LED Area Luminaire



Specifications

EPA: 1.2 ft²
(0.11 m²)
Length: 17-1/2"
(44.5 cm)
Width: 17-1/2"
(44.5 cm)
Height: 7-1/8"
(18.1 cm)
Weight (max): 36 lbs
(16.4 kg)



Catalog Number KADLED1-49B350/50K-SR3-

Notes -MVOLT-SPD9

Type OPTION (DLL127F 1.5 JU)

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The Contour® Series luminaires offer traditional square daylights with softened edges for a versatile look that complements many applications.

The KAD LED combines the latest in LED technology with the familiar aesthetic of the Contour® Series for stylish, high-performance illumination that lasts. It is ideal for replacing 100-250W metal halide in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

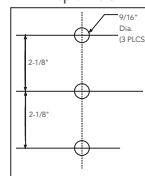
Ordering Information

EXAMPLE: KAD LED 1 63B350/40K SR5 MVOLT SPD04 DDBXD

KAD LED	Series	Light Engines	Performance Package ¹	Distribution	Voltage	Mounting	Options	Finish (required)
KAD LED	1	One engine (49 or 63 LEDs)	350 mA options: 49B350/30K 3000K 49B350/40K 4000K 49B350/50K 5000K 530 mA options: 63B350/30K 3000K 63B350/40K 4000K 63B350/50K 5000K	SR2 Type II SR3 Type III SR4 Type IV SR5 Type V	MVOLT ² 120 ³ 208 ⁴ 240 ⁵ 277 ⁶ 347 480	Shipped included Type SPD Square pole 04 4" arm RPD Round pole 06 6" arm WBD Wall bracket 09 9" arm WWD Wood pole or wall 12 12" arm	Shipped installed PER NEMA twist-lock receptacle only (no controls) SF Single fuse (120, 277, 347V) ¹ DF Double fuse (208, 240, 480V) ¹ DMG 0-10V dimming driver (no controls) ⁴ DFL Diffusing lens Shipped separately VG Vandal guard ⁵ WG Wire guard ⁵	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWBXD White DDBHXD Textured dark bronze DBLHXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Drilling

Template #5 Top of Pole



Accessories

Ordered and shipped separately

DLL127F 1.5 JU PhotoCell - SSL twist-lock (120-277V)¹
DLL347F 1.5 CUL JU PhotoCell - SSL twist-lock (347V)¹
DLL480F 1.5 CUL JU PhotoCell - SSL twist-lock (480V)¹
SCU Shorting cap¹
KMA DDBXD U Mast arm adapter (specify finish)
KADWG U Wire guard accessory
KADVG U Vandal guard accessory

For more control options, visit [DTL](#) and [RCAM](#) online.

Tenon Mounting Slipfitter^{*}

Series	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
2-3/8"	T25-180	T25-180	T25-180	T25-280	T25-280	T25-380	T25-380	T25-480
2-7/8"	T25-180	T25-180	T25-180	T25-280	T25-280	T25-380	T25-380	T25-480
4"	T25-180	T25-180	T25-280	T25-280	T25-380	T25-380	T25-380	T25-480

^{*} For round pole mounting (RPM) only. ¹ Requires 9" or 12" arm.

NOTES

- Configured with 4000K (40K) provides the shortest lead times. Consult factory for 3000K (30K) and 5000K (50K) lead times.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options).
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- Not available with 347 or 480V.
- Also available as a separate accessory; see Accessories information at left.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%. Contact factory for performance data on any configurations not shown here.

LEDs	Drive Current (mA)	Performance Package	System Watts	Dist. Type	40 K (4000 K, 67 CRI)				
					Lumens	B	G	LPW	
1 (49 LEDs)	350	49B350-K	59W	SR2	5068	1	0	1	86
				SR3	4663	1	0	1	80
				SR4	4667	1	0	1	80
				SR5	4853	3	0	1	82
				SR2	6148	1	0	1	83
1 (63 LEDs)	350	63B350-K	74W	SR3	6374	1	0	1	86
				SR4	6250	1	0	1	84
				SR5	6464	3	0	1	87
				SR2	8353	2	0	2	77
				SR3	8595	2	0	2	79
1 (63 LEDs)	530	63B350-K	109W	SR4	8246	2	0	2	76
				SR5	8452	3	0	1	78

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C	1.02
10°C	1.01
20°C	1.00
25°C	1.00
30°C	0.99
40°C	0.99

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the KAD LED 1 63B350 platform in a 40°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LMF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.95	0.92	0.87

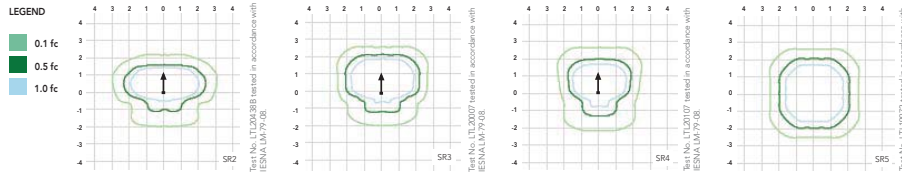
Electrical Load

Light Engines	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
1 (49)	350	59W	0.55	0.32	0.27	0.24	0.19	0.14
1 (63)	350	74W	0.69	0.40	0.34	0.30	0.24	0.17
	530	109W	1.01	0.58	0.50	0.44	0.35	0.25

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [KAD LED homepage](#).

Isocandela plots for the KAD LED 1 63B350/40K. Distances are in units of mounting height (20').



FEATURES & SPECIFICATIONS

INTENDED USE

The energy savings and long life of the KAD LED area luminaire make it a reliable choice for illuminating streets, walkways, parking lots, and surrounding areas.

CONSTRUCTION

Single-piece die-cast aluminum housing with contoured edges has a 0.12" nominal wall thickness. Die-cast door frame has an impact-resistant, tempered glass lens that is fully gasketed with one-piece tubular silicone.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

OPTICS

Precision-molded refractive acrylic lenses housed behind the door frame lens are available in four distributions. Light engines are available in standard 4000K (67 CRI) or optional 3000K (80 CRI) or 5000K (67 CRI) configurations.

ELECTRICAL

Light engine consists of 49 or 63 high-efficiency LEDs mounted to a metal-core circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate.

rate. Easily-serviceable surge protection device meets a minimum Category C Low (per ANSI/IEEE C62.41.2).

INSTALLATION

Extruded aluminum arm for pole or wall mounting.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. Rated for -40°C minimum ambient.

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

WARRANTY

Five year limited warranty. Full warranty terms located at [www.acuitybrands.com/CustomerResources/terms_and_conditions.aspx](#).

Note: Specifications subject to change without notice.



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KAD-LED
Rev. 01/30/14



Catalog Number
Notes
Type

FEATURES & SPECIFICATIONS

INTENDED USE — Square straight steel pole for up to 39-foot mounting height.

CONSTRUCTION — Weldable-grade, hot-rolled, commercial-quality carbon steel tubing with a minimum yield of 55,000 psi (11-gauge), or 50,000 psi (7-gauge). Uniform wall thickness of .1196" or .1793". Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformly square in cross-section with flat sides, small corner radii and excellent torsional qualities. Available shaft widths are 4, 5 and 6 inches.

Anchor base is fabricated from hot-rolled carbon steel plate conforming to ASTM A36, that meets or exceeds a minimum yield strength of 36,000 psi. Base plate and shaft are circumferentially welded top and bottom. Base cover is finished to match pole.

A handhole having nominal dimensions of 3" x 5" for all shafts. Included is a cover with attachment screws. Top cap provided with all drill-mount and open top "PT" poles.

Fasteners are high-strength galvanized, zinc-plated or stainless steel.

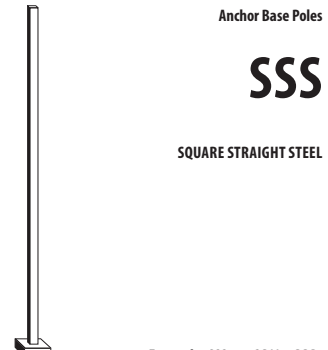
Finish: Must specify finish.

Grounding: Provision located immediately inside handhole rim. Grounding hardware is not included (provided by others).

Anchor bolts: Top portion of anchor bolt is galvanized per ASTM A-153. Made of steel rod having a minimum yield strength of 55,000 psi.

Note: Specifications subject to change without notice.

Actual performance may differ as a result of end-user environment and application.

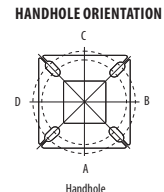


Anchor Base Poles
SSS
SQUARE STRAIGHT STEEL

ORDERING INFORMATION

Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness	Mounting ¹	Options	Finish ¹⁰
SSS	10 – 39 feet (See back page.)	(See back page.)	Tenon mounting PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) Drill mounting² DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° CSX/DSX/AERIS™/OMERO™ Drill mounting³ DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90°	AERIS™ Suspend drill mounting⁴ DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° OMERO™ Suspend drill mounting⁵ DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90° EHHxx Extra handhole ^{6,7} MAEX Match existing ⁷ USPOM United States point of manufacture ⁸ IC Interior coating ⁹	Standard colors DDB Dark bronze DWH White DBL Black DMB Medium bronze DNA Natural aluminum Classic colors DSS Sandstone DGC Charcoal gray DTG Tennis green DBR Bright red DSB Steel blue Architectural colors (powder finish)¹⁰

- NOTES:**
- PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
 - The drilling template to be used for a particular luminaire depends on the luminaire that is used. Refer to the Technical Data Section of the Outdoor Binder for Drilling Templates.
 - Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
 - Specify location and orientation when ordering option. For 1st "x": Specify the height in feet above base of pole. Example: 5ft = 5 and 20ft = 20. For 2nd "x": Specify orientation from handhole (A,B,C). Refer to the Handhole Orientation diagram above.
 - Horizontal arm is 18" x 2-3/8" O.D. tenon standard.
 - Combination of tenon-top and drill mount includes extra handhole.
 - Must add original order number.
 - Use when mill certifications are required.
 - Provides enhanced corrosion resistance.
 - Additional colors available; see www.lithonia.com/archcolors or Architectural Colors brochure (Form No. 794.3). Powder finish standard.



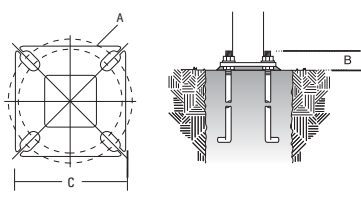
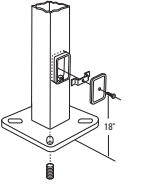
- HANDHOLE ORIENTATION**
- IMPORTANT INSTALLATION NOTES:**
- Do not erect poles without having fixtures installed.
 - Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
 - If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
 - Lithonia Lighting is not responsible for the foundation design.

OUTDOOR POLE-SSS

SSS Square Straight Steel Poles

Catalog Number	Nominal mount ht. (ft)	Pole Shaft Size (in x ft)	Wall Thickness (in)	Gauge	EPA (ft²) with 1.3 gust					Bolt Circle (in)	Bolt Size (in x in x in)	Approximate ship (lbs)	
					80 mph	Max. weight	90 mph	Max. weight	100 mph				Max. weight
SSS 10 4C	10	4.0 x 10.0	0.1196	11	30.6	765	23.8	595	18.9	473	8-9	3/4 x 18 x 3	75
SSS 12 4C	12	4.0 x 12.0	0.1196	11	24.4	610	18.8	470	14.8	370	8-9	3/4 x 18 x 3	90
SSS 14 4C	14	4.0 x 14.0	0.1196	11	19.9	498	15.1	378	11.7	293	8-9	3/4 x 18 x 3	100
SSS 16 4C	16	4.0 x 16.0	0.1196	11	15.9	398	11.8	295	8.9	223	8-9	3/4 x 18 x 3	115
SSS 18 4C	18	4.0 x 18.0	0.1196	11	12.6	315	9.2	230	6.7	168	8-9	3/4 x 18 x 3	125
SSS 20 4C	20	4.0 x 20.0	0.1196	11	9.6	240	6.7	167	4.5	150	8-9	3/4 x 18 x 3	140
SSS 20 4G	20	4.0 x 20.0	0.1793	7	14	350	11	275	8	200	8-9	3/4 x 30 x 3	198
SSS 20 5C	20	5.0 x 20.0	0.1196	11	17.7	443	12.7	343	9.4	235	10-12	1 x 36 x 4	185
SSS 20 5G	20	5.0 x 20.0	0.1793	7	28.1	703	21.4	535	16.2	405	10-12	1 x 36 x 4	265
SSS 25 4C	25	4.0 x 25.0	0.1196	11	4.8	150	2.6	100	1	50	8-9	3/4 x 18 x 3	170
SSS 25 4G	25	4.0 x 25.0	0.1793	7	10.8	270	7.7	188	5.4	135	8-9	3/4 x 30 x 3	245
SSS 25 5C	25	5.0 x 25.0	0.1196	11	9.8	245	6.3	157	3.7	150	10-12	1 x 36 x 4	225
SSS 25 5G	25	5.0 x 25.0	0.1793	7	18.5	463	13.3	333	9.5	238	10-12	1 x 36 x 4	360
SSS 30 4G	30	4.0 x 30.0	0.1793	7	6.7	168	4.4	110	2.6	65	8-9	3/4 x 30 x 3	295
SSS 30 5C	30	5.0 x 30.0	0.1196	11	4.7	150	2	50	--	--	10-12	1 x 36 x 4	265
SSS 30 5G	30	5.0 x 30.0	0.1793	7	10.7	267	6.7	167	3.9	100	10-12	1 x 36 x 4	380
SSS 30 6G	30	6.0 x 30.0	0.1793	7	19	475	13.2	330	9	225	11-13	1 x 36 x 4	520
SSS 35 5G	35	5.0 x 35.0	0.1793	7	5.9	150	2.5	100	--	--	10-12	1 x 36 x 4	440
SSS 35 6G	35	6.0 x 35.0	0.1793	7	12.4	310	7.6	190	4.2	105	11-13	1 x 36 x 4	540
SSS 39 6G	39	6.0 x 39.0	0.1793	7	7.2	180	3	75	--	--	11-13	1 x 36 x 4	605

BASE DETAIL



Shaft base size	Bolt circle A	Bolt projection B	Base square C	Template description	Anchor bolt description	Anchor bolt and template number
4"C	8-1/2"	2-3/4"-4"	8"	ABTEMPLATE P150004	AB18-0	ABSSS-4C
4"G	8-1/2"	2-3/4"-4"	8"	ABTEMPLATE P150004	AB30-0	ABSSS-4G
5"	10"-12"	3-3/8"-4"	11"	ABTEMPLATE P150010	AB36-0	ABSSS-5
6"	11"-13"	3-3/8"-4"	12-1/2"	ABTEMPLATE P150011	AB36-0	N/A

IMPORTANT:

- These specifications are intended for general purposes only. Lithonia reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.



POLE-SSS

PARKING LIGHT POLE