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Architectural Review Board Staff Report

Project Type: Amended Architectural Elevations

Meeting Date: June 14, 2012

From: Mara Perry, AICP
Senior Planner

Location: Northwest corner of Olive Boulevard and Arrowhead Estates Lane
(15201 Olive Boulevard)

Applicant: Friendship Village of West County

Description: **Friendship Village of West County (15201 Olive Boulevard):** 6th Partial Amended Site Development Plan, Amended Landscape Plan, Amended Lighting Plan, Architectural Elevations and an Architect's Statement of Design for a 34.5 acre tract of land zoned "R4" Residence District with a "CUP" Conditional Use Permit at the northwest corner of Olive Boulevard and Arrowhead Estates Lane.

PROPOSAL SUMMARY

THW Design and Saint Louis Design Alliance, on behalf of Friendship Village of West County, have submitted a request for a 6th Partial Amended Site Development Plan, Amended Landscape Plan, Amended Lighting Plan, Architectural Elevations and an Architect's Statement of Design. The request is for approval of a new thirty (30) unit independent living addition with underground parking and three (3) independent living villas. The materials for the addition are masonry and fiber-cement siding/panels. The roof is comprised of a sloped shingle metal roof and a single-ply membrane at the roof wells.

HISTORY OF SUBJECT SITE

The subject tract was zoned "NU" Non-Urban District by St. Louis County prior to the incorporation of the City of Chesterfield.

The site was granted CUP #264 from St. Louis County in 1973 for a "full life retirement center". The permit was amended by St. Louis County in March 1988 to increase the number of beds allowed in the nursing facility and to add setbacks for an addition. In August 1989, the City of Chesterfield City Council approved CUP #02 which allowed for limited service and retail commercial uses. In 2008, CUP #02 was repealed with the approval of City of Chesterfield CUP #29 which added additional property to the existing lot governed by the CUP.

A Boundary Adjustment Plat was approved by City Council in February of 2008 to add the additional lots into the development. The original Site Development Plan for the site has been amended multiple times for additions to the existing building, additional villas and for parking.

In January 2012, the site was rezoned to an “R4” Residence District and the existing CUP was reestablished within that district as CUP #35. CUP #35 was repealed and replaced with CUP #36 to allow for additional units within the development, additional square footage for the accessory commercial uses and changes to the landscape requirements.



STAFF ANALYSIS

Please note that the three (3) villas were before the Architectural Review Board and Planning Commission in 2007 as part of a larger approval for a Multi-Purpose Building and seven (7) villas. The plan was given unanimous approval by both the Board and Commission. The three units did get developed to building permit stage and then were put on hold. The permits have expired and will need to be reapproved.

General Requirements for Site Design:

A. Site Relationships

Addressed As Written

Addressed with Modification

Not Applicable

This phase of the project builds on the pattern of the existing independent living facility and villas. Pedestrian connections are being made to the other buildings on the site and connecting to the existing pathways and trails. A landscape entry courtyard with a water feature is being added to the south side of the new addition.

General Requirements for Building Design:

A. Scale

Addressed As Written *Addressed with Modification* *Not Applicable*

The overall scale of the proposed addition matches the height of the existing structures in the development. The villas are in keeping with the villas that have already been built within the development. The change of materials and articulation of the facades with fenestration and balconies provides a human scale to the structures.

B. Design

Addressed As Written *Addressed with Modification* *Not Applicable*

The proposed design builds on the existing structures in the development while improving on the articulation of the larger facades. The entry location on the east has a smaller pedestrian scale overhang. All rooftop equipment for the addition will be located within the roof well.

C. Materials and Color

Addressed As Written *Addressed with Modification* *Not Applicable*

The proposed elevations throughout the development include a mixture of materials and colors on the front elevations. The addition and villas match more recently built structures which have multiple materials and articulation.

D. Landscape Design and Screening

Addressed As Written *Addressed with Modification* *Not Applicable*

New landscaping for the addition and villas is intended to match the level of landscaping around the existing areas of the development. Low level plantings are provided in the courtyard and around the base of the buildings. Trees will provide shade along the pedestrian walkways.

E. Signage

Addressed As Written *Addressed with Modification* *Not Applicable*

Signage for the development has been approved.

F. Lighting

Addressed As Written *Addressed with Modification* *Not Applicable*

Pedestrian scale lighting, bollards and architectural lighting are being proposed. The lighting will be required to meet the City of Chesterfield Light Ordinance for fixture types.

Use Type: Multi-Family Residential

Access: The pedestrian pathways connect to the common areas throughout the development. Connections are also made to the trail system around the detention basin.

Exterior Elements: Individual units have fenestration and balconies along the façade articulating the units.

Landscaping and Screening: Addressed above in the Requirements for Site Design.

Scale: The scale of the addition is in keeping with the other multilevel structures on the site. The villas which are located on the outer edges of the development are similar in scale to adjacent single family homes.

Site Design: The primary site design for this development has already been addressed in previous Site Development Plan approval.

DEPARTMENTAL INPUT

Staff has reviewed the 6th Partial Amended Site Development Plan and has found the application to be in conformance with Conditional Use Permit #36, and all other applicable Zoning Ordinance requirements. Staff requests action on the 6th Partial Amended Site Development Plan for Friendship Village of West County.

MOTION

The following options are provided to the Architectural Review Board for consideration relative to this application:

- 1) "I move to forward the 6th Partial Amended Site Development Plan, Amended Landscape Plan, Amended Lighting Plan, Architectural Elevations and an Architect's Statement of Design for Friendship Village of West County, as presented, with a recommendation for approval (or denial) to the Planning Commission."
- 2) "I move to forward the 6th Partial Amended Site Development Plan, Amended Landscape Plan, Amended Lighting Plan, Architectural Elevations and an Architect's Statement of Design for Friendship Village of West County, to the Planning Commission with the following recommendations..."

Attachments

1. Architectural Review Packet Submittal

ARCHITECTURAL REVIEW BOARD SUBMITTAL
REDEVELOPMENT OF FRIENDSHIP VILLAGE CHESTERFIELD
MAY 29th, 2012



ARCHITECTURAL REVIEW BOARD
Project Statistics and Checklist

Date of First Comment Letter Received from the City of Chesterfield 5/23/12
Project Title: Friendship Village of West County Location: 1520 Olive Boulevard
Developer: Friendship Village Architect: THW Design Engineer: CEDC

PROJECT STATISTICS:

Size of site (In acres): 3.17 Total Square Footage: 65,250 Building Height: varies 45' to 55'
Proposed Usage: Multi-family Senior Adult Residential
Exterior Building Materials: masonry, fiber-concrete siding/panels, Residential windows
Roof Material & Design: sloped shingle/metal roofing, single-ply membrane at roof wells
Screening Material & Design: NA
Description of art or architecturally significant features (if any): _____

ADDITIONAL PROJECT INFORMATION:

Checklist: Items to be provided in an 11" x 17" format

- Color Site Plan with contours, site location map, and identification of adjacent uses.
- Color elevations for all building faces.
- Color rendering or model reflecting proposed topography.
- Photos reflecting all views of adjacent uses and sites.
- Details of screening, retaining walls, etc.
- Section plans highlighting any building off-sets, etc. (as applicable)
- Architect's Statement of Design which clearly identifies how each section in the Standards has been addressed and the intent of the project.
- Landscape Plan.
- Lighting cut sheets for any proposed building lighting fixtures. (as applicable)
- Large exterior material samples. (to be brought to the ARB meeting)
- Any other exhibits which would aid understanding of the design proposal. (as applicable)
- Pdf files of each document required.



May 29, 2012

RE: Friendship Village of West County Independent Living Building
Chesterfield, Missouri

ARCHITECTS STATEMENT

The following items identify how the City of Chesterfield Architectural Review Board guidelines are being addressed for the above mentioned project.

INTRODUCTION

Located at 15201 Olive Boulevard, Friendship Village of West County (also known as Friendship Village Chesterfield) provides quality living and continuing care for senior adults and consists of Independent Living Apartments, Cottages, Assisted Living, Skilled Nursing, and Memory Care facilities, along with multiple resident use facilities. In response to the anticipated demands of the senior living market, Friendship Village has developed a multi-phase masterplan to improve the overall quality and effectiveness of its services and facilities. Phase I of the masterplan consists of a new three-story Independent Living Building with one level of under-building parking below. The new building will contain 30 one and two bedroom apartments. The design will both complement and bridge the gap between the adjacent existing "modern" three and four story independent living buildings and the newer cottage-style Multi-purpose Wellness facility and the nearby duplex cottages through the use of scale, materials and site orientation.

GENERAL REQUIREMENTS FOR SITE DESIGN

A. Site Relationships

The disturbed site consists of 3.17 acres at the rear of the developed portion of the Friendship Village property. The building will attach to an existing Independent Living Building for interior pedestrian access to the remainder of the facilities and is bound on one side by a wooded hillside and the existing retention pond on the other and is adjacent to the Multi-purpose Wellness facility. The existing ring road runs through the site and will require relocation. The building's orientation and shape is intended to allow for easy access to the adjacent existing facilities and to clearly delineate a separation between pedestrian and vehicular circulation. The landscaping will further articulate the circulation paths and provide a transition from the roadway to the building. A bubbling fountain will be the focus of the new courtyard formed between the building and the existing Independent Living Building. The resident

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apartments are oriented to provide scenic views of the pond, the wooded hillside, or the landscaped courtyard.

B. Circulation System & Access

The circulation patterns are clear, safe, and direct. The ring road will be relocated to form the boundary for the new building pad. It drops one level in elevation as it moves around the new building so that the entrance to the under-building parking is at the far end of the building away from the pedestrian traffic and on-grade with the lower level parking. Parking is provided for the building residents at the parking level with excess resident and visitor parking provided along the ring road. The building's main pedestrian entrance is on the level above and faces the Multi-purpose Wellness facility. The building's L-shape forms a courtyard with the existing Independent Living Building (also at the level above the parking). The new sidewalks are integrated into the existing sidewalks to maintain direct access between buildings without crossing traffic. The new sidewalk on the pond side of the ring road connects with the existing walking trail that runs around the pond. Finally, the new building is connected to the existing building on all three resident floors so all the other facilities at Friendship Village are accessible without having to go out into the weather.

C. Topography

1. The topography slopes gently down and around the building following the slope of the relocated ring road along the hillside. There is no need for natural berms, screening, or buffering of equipment or structures.
2. The modifications to the topography will appear be a natural extension of the surrounding areas.
3. All grade changes will be smooth. There is a small retaining wall for grade transition between the new building and the adjacent Multi-purpose Wellness building and a substantial retaining wall on the outside edge of the ring road along the wooded hillside.

D. Retaining Walls

1. The height and length of the retaining wall at the outside of the ring road along the wooded hillside has been designed to meet the slope and radius requirements of the ring road. The retaining wall adjacent to the Multi-purpose Wellness building is minimized but necessary to accomplish the change in grade.
2. The top of the ring road retaining wall will be screened with landscaping from the ring road and a fence installed above grade. The Multi-purpose Wellness retaining wall will be screened on both sides with lush landscaping.

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3. Terracing was not used at the ring road because it would impact the adjacent wooded hillside by requiring that additional trees be removed. This is not considered a visual problem since the retaining wall is only visible from the unpopulated wooded area.
4. The retaining walls will be modular masonry segmental walls.

GENERAL REQUIREMENTS FOR BUILDING DESIGN

A. Scale

The building is designed to harmonize with the adjacent existing buildings while providing appropriate scale and detail for both pedestrians and viewing from a distance. The colors and materials are derived from the existing Independent Living Building and the Multi-purpose Wellness building, along with the detailing. The roof design and the entrances and building projections will identify the residential nature of the building and provides interest in the elevations.

B. Design

1. The building is shaped and oriented to be a natural extension of the existing Friendship Village campus. The simple use of a limited number of materials combined with the balconies and projecting living areas and the roof elements create variety and architectural rhythm appropriate to a residential building. The colors are neutral and have been selected to work with the adjacent buildings while giving an updated fresh appearance to the new building.
2. Variety in landscape and building elevation is provided along the ring road.
3. The building is a unique design created for this particular site.
4. The masonry, siding, and panels are articulated to provide interest and detail at the pedestrian level.
5. There are not any art elements currently proposed.
6. The building will have a state-of-the-art energy efficient mechanical and electrical systems and an energy efficient exterior building envelope. Energy Recovery Units will be located in the roof well to serve the resident units. A feasibility study is being performed to evaluate if a geothermal heat pump system is a viable alternative for the HVAC system.
7. A vestibule is provided to clearly identify the main building entrance and to provide shelter when entering and for visitors to process through security.
8. There are no current plans for temporary barriers/walls.
9. The rooftop equipment is located in a roof well and will not be visible from grade or adjacent buildings.

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C. Materials and Colors

The building incorporates a combination of masonry, fiber-cement siding, fiber-cement panels w/ battens, and residential scale windows and doors, painted aluminum balcony rails, along with architectural grade asphalt shingles and metal roofing at corner elements or building projections. The materials are durable and will require minimal maintenance over the lifetime of the building. The neutral colors will be integral other than on the painted fiber-cement materials.

D. Landscape Design and Screening

The landscape design compliments the sidewalks and provides a transition between the pedestrian areas and the new and existing buildings. The intent is to tie into the existing mature Friendship Village landscape through the use of trees, shrubs, and groundcover to provide interest and color throughout the year. The bubbler fountain in the courtyard will provide visual and auditory interest from the adjacent residential units and to passersby. There are also seating areas in the courtyard to encourage residents to enjoy the outdoors in nice weather.

E. Signage

The only signage will be either on-grade building identification signage or other site-circulation/vehicular/regulatory related signage matching the standard Friendship Village site signage requirements.

F. Lighting

The Site Lighting has been submitted and is being reviewed through a separate process.

CONCLUSION

The design for the new three story Independent Living Building has been thoughtfully developed to integrate into the existing campus while significantly improving the residential unit options. This building will set the stage for the future planned development at Friendship Village. The addition of the Phase I Independent Living Building at Friendship Village will have a positive impact on both Friendship Village and the City of Chesterfield.

Respectfully Submitted by:
THW Design

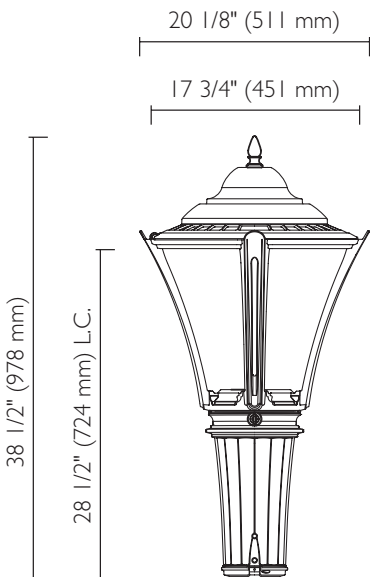
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ARCHITECTURE LAND PLANNING INTERIORS PURCHASING

MetroScape

Data Sheet



MPTR

Conform to the UL 1598 and CSA C22.2 No. 250.0-08 standards
 Suitable for operation in an ambient temperature up to 40°C / 104°F - UL certified
 (Runs cool in almost every climate).
 The MetroScape meets the ANSI C136.31-2001 table 2, American National Standard for
 Roadway Luminaire Vibration specifications for Bridge/overpass applications. (Tested for 3G
 over 100 000 cycles by an independent lab)

EPA:
 1.97 sq ft

Weight:
 31.1 lbs (14.1 kg)

MetroScape is approved by:



LED Lamp Details

Lamps #	Rated life hrs. ¹	LED Model	CRI	Color Temperature ²	Initial Lumens	Wattage		Max System AC current: 120v	LED mA	HPS equivalent ⁴
						Lamp	System ³			
35W32LED4KES	100,000	Philips Lumileds Rebel ES	70	4000K	3872	35W	40	0.36A	350mA	70W
42W32LED4KES	100,000		70	4000K	4576	42W	45	0.42A	400mA	100W
55W32LED4KES	100,000		70	4000K	5632	55W	60	0.54A	530mA	100W
55W48LED4KES	100,000		70	4000K	5808	55W	60	0.54A	350mA	100W
65W48LED4KES	100,000		70	4000K	6864	65W	72	0.63A	400mA	100W
80W48LED4KES	100,000		70	4000K	8448	80W	88	0.82A	530mA	150W
70W64LED4KES	100,000		70	4000K	7744	70W	77	0.72A	350mA	100W
85W64LED4KES	100,000		70	4000K	9152	80W	94	0.84A	400mA	150W
110W64LED4KES	100,000		70	4000K	11264	110W	120	1.9A	530mA	200W
90W80LED4KES	100,000		70	4000K	9680	90W	100	0.90A	350mA	150W
105W80LED4KES	100,000		70	4000K	11440	110W	115	1.05A	400mA	200W
135W80LED4KES	100,000		70	4000K	14080	135W	150	1.36A	530mA	250W

¹ Rated life represents the time it takes for the LED system to reach 70% of initial lumen output (as described in LM-80). Calculated with an ambient temperature of 25°C / 77°F
² On average.
³ System wattage includes the lamp and the LED driver.
⁴ Compared to the Philips Lumec Ancestra with SHA3M optic.

How to calculate the system lumen per watt ratio (LER): First, visit our website at www.lumec.com and download the IES file (photometric file) of your selected Philips Lumec product. Then, use a photometric software to get the absolute system lumens value and divide by the system wattage. (Example: 35W32LED4KES : Absolute system lumens / 42W = LER)

Optical System



LEDGINE

Composed of high performance acrylic refractors lenses to achieve desired distribution, optimized to get maximum spacing, target lumen and a perfect lighting uniformity. Performance shall be tested per LM63 and LM79 and TM15 (IESNA) certifying its photometric performance.

- LE2: Asymmetrical
- LE3: Asymmetrical
- LE4: Asymmetrical
- LE5: Symmetrical (square)

Voltages

120 / 208 / 240 / 277 / 347^{1,2} / 480^{1,2}

¹ Stepdown transformer required with Dynadimmer
² Stepdown transformer required with driver options listed below

Luminaire Options

PH8

Photoelectric cell
Complete with a decorative cap
Allows a 90° rotation

RC

Receptacle for
photoelectric cell

TN3

Fitter to fit over a 3" (76 mm) O.D.
by 4" (102 mm) long tenon

TN3.5

Fitter to fit over a 3 1/2" (89 mm) O.D.
by 4" (102 mm) long tenon

Finials



Smart luminaire options

MetroScape allows you many options in order to get different smart functionalities.

- DMG** → Driver is compatible with dimmer from 0 to 10 volts.
- CDMG** → Dynadimmer standard dimming functionalities including pre-programmed scenarios to suit many applications and needs from safety to maximum energy savings.
- CDMGP** → Dynadimmer custom dimming scenario allowing the user to program up to 5 time periods and multiple dimming levels from 100% to 10% of total wattage.
- OVR** → Dynadimmer override function offering the possibility to go back to full power at any time via an electrical signal of 120VAC to 277VAC from a motion sensor, a switch, a relay or else.
- CLO** → Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the lamp.
- AST** → Pre-set driver for progressive start-up of the lamp to optimize energy management and enhance user visual comfort at start-up.
- OTL** → Pre-set driver to signal end of life of the lamp for better fixture management.
- DALI** → Pre-set driver compatible with the DALI control system.

Smart system options

Different options are available according to your needs. Please contact us for more information.

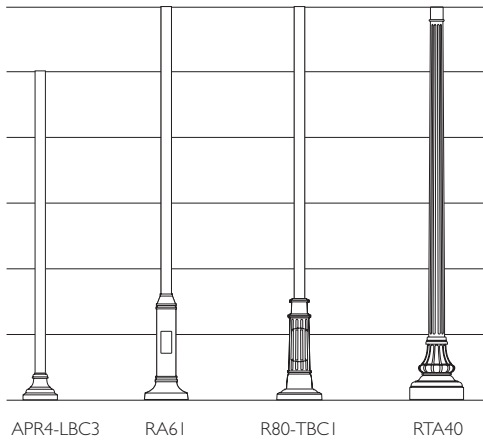
Smart city options

- AMPLIGHT** → Amplight is the intelligent monitoring and control, automated management system that delivers up to 35% streetlight energy savings and makes it easy to monitor and manage the entire system, in real time. Please contact us for more information.

Other options are also available according to your needs. Please contact us for more information.

Poles

Consult the Philips Lumec Pole Guide for details and the complete line of poles.



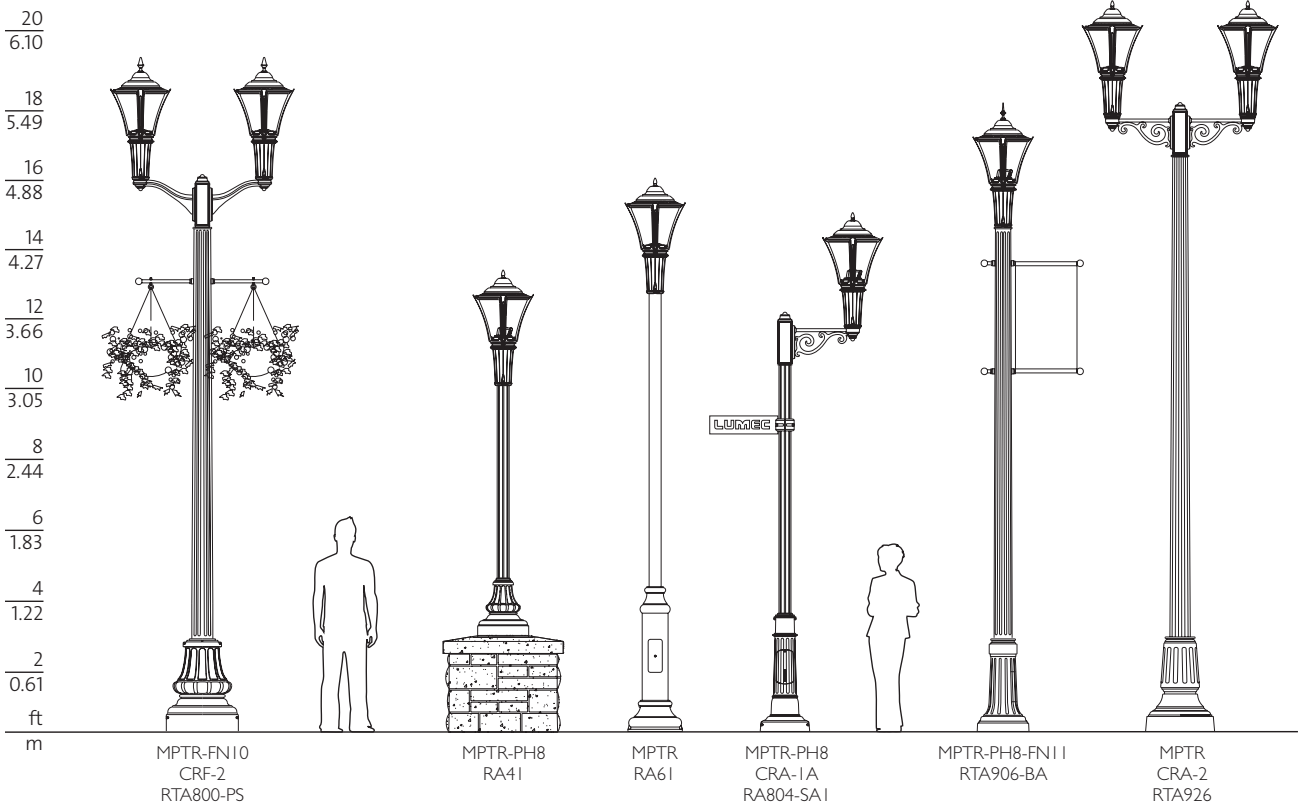
Finish

- GR Gray Sandtex
- WHTX Textured White
- BKTX Textured Black
- GY3TX Textured Medium Grey
- BRTX Textured Bronze
- BG2TX Textured Sandstone
- BE2TX Textured Midnight Blue
- BE6TX Textured Ocean Blue
- BE8TX Textured Royal Blue
- GNTX Textured Green
- GN4TX Textured Blue Green
- GN6TX Textured Forest Green
- GN8TX Textured Dark Forest Green
- RD2TX Textured Burgundy
- RD4TX Textured Scarlet
- TS Hammertone Silver
- TG Hammertone Gold
- NP Natural Aluminum

Ordering example

Luminaire	Lamp	Optical System	Voltage	Driver Options	Luminaire Options	Pole	Finish
MPTR	42W32LED4KES	LE3	120	DMG	PH8	APR4-LBC4-16	BKTX

Assembly examples



www.lumec.com

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Concord

Designed by Robert A.M. Stern Architects

Greater energy efficiency:
LED's use less energy,
consume fewer resources

Better color:
Warm white light supports
ecology and human health

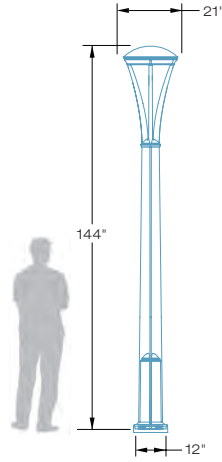
Better Light Control:
Engineered Awen™ optics
eliminate wasted light
and light pollution

Longer Life:
Exceptional thermal
management extends
useful life



Alcott
LED Pedestrian Lighting

Alcott



Alcott Pedestrian Lighting Dimensions

General Description

Pedestrian light for outdoor walkways. Light is highly designed using state-of-the-art LED lamp technology. Durable cast aluminum LED lamp housing sealed with thermoformed lens works with the integrated pole to provide outstanding heat management. Sealed housing uses the latest LED technology and improves lamp life by using more LEDs driven with less current; may be removed for servicing. Diffused lens technology provides exceptional performance against glare as evident in the BUG rating. A warm white 3,500°K lamp color was chosen for its warm aesthetic and ecological benefits.

Electrical

110V-277V 50/60 Hz Dimmable, Class 2 LED driver is standard and mounted within integrated cast aluminum base cabinet. Alcott ships prewired; fully assembled and ready for installation.

Finish

Pangard II®, offered exclusively by Landscape Forms, is a 19 step program of cleaning, priming, and powder-coating that produces the finest metal finish available for site furniture. In addition, Pangard II® contains no heavy metals and is free of Hazardous Air Pollutants.

Warranty

Six years (50,000hr) on LED cartridge and three years on finish and manufacturing defects.

To Order

Specify Alcott and powdercoat color for frame. Specify with Type 3 or Type 5 light. Specify optional cover plate. Alcott is surface mounted and ships with installation template and hardware. Mounting hardware can be pre-ordered.

Other

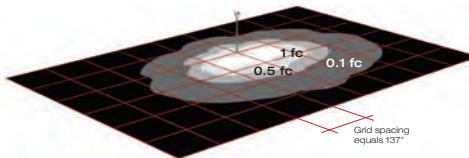
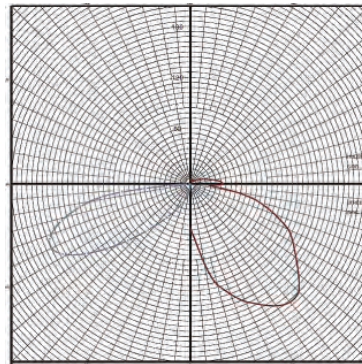
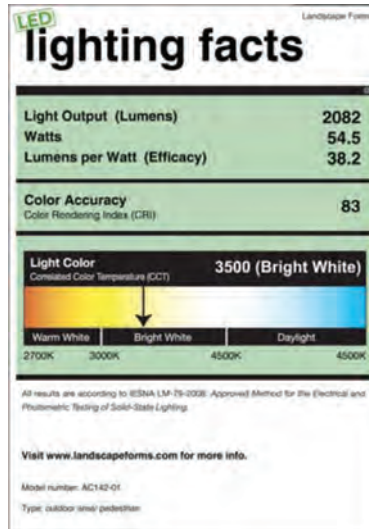
UL Listed, RoHS
International Dark Sky Pending
Patent #: US Pat Pending



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Type 3

Structure: Housing and cabinet are cast aluminum, pole is aluminum extrusion.
Lamp: 48 Cree XP-E
TM21 L70 Life: 60,500 h
Drive Current: 350mA
Optic: Proprietary Awen™ Optic
Diffuser: Impact Modified Acrylyte®
Power Supply: 110V-277V
LED Driver: 1 Dimmable TRC-075S210DT
BUG Rating: B0U1G1
IP Rating: IP66
Weight: 170 lbs (complete assembly)



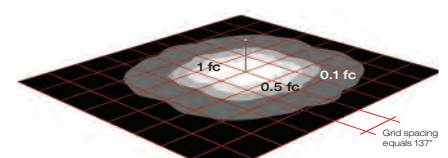
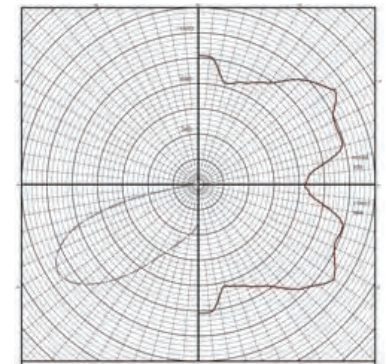
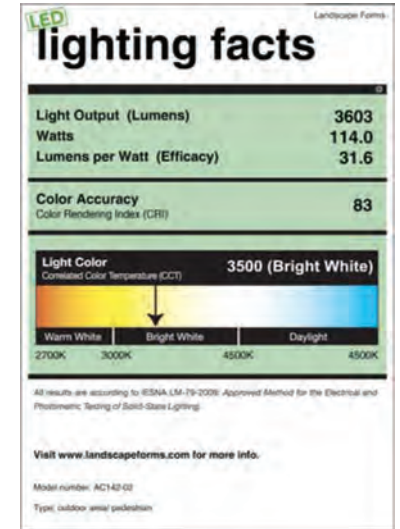
Alcott Light Distribution and Spacing

Alcott meets or exceeds the IESNA DG-5 standard for Park walkways, Class I bikeways, and Residential sidewalks at 80' pole spacing, Intermediate sidewalks at 60' pole spacing, and Commercial sidewalks at 50' pole spacing. Alcott, at 50' pole spacing, also meets the "Special Conditions" criteria where increased vertical illuminance levels are needed for safety by improving facial recognition. Outside of North America, Alcott meets CIE-136-2000 standard for Residential parks at 60' pole spacing, and City Center/Arcades at 50'.

Concord
landscapeforms®

Type 5

Structure: Housing and cabinet are cast aluminum, pole is aluminum extrusion.
Lamp: 96 Cree XP-E
TM21 L70 Life: 60,500 h
Drive Current: 350mA
Optic: Proprietary Awen™ Optic
Diffuser: Impact Modified Acrylyte®
Power Supply: 110V-277V
LED Driver: 2 Dimmable TRC-075S210DT
BUG Rating: B2U1G1
IP Rating: IP66
Weight: 170 lbs (complete assembly)



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Concord

Designed by Robert A.M. Stern Architects

Greater energy efficiency:
LED's uses less energy,
consume fewer resources

Better color:
Warm white light supports
ecology and human health

Better Light Control:
Engineered optics
eliminate wasted light
and light pollution

Longer Life:
Exceptional thermal
management extends
useful life



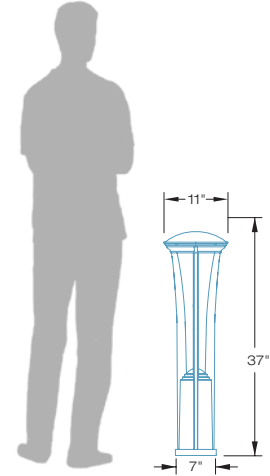
Hawthorne

LED Pathway Lighting



Hawthorne

Structure: Housing, LED cartridge and cabinet are cast aluminum. Base plate is stainless steel.
Lamp: 6 Cree XRE 1.3W LED's
Optic: 6 Khatod Collimators
Diffuser: 85% transmissive Cyro Acrylyte
Power Supply: 110V-277V
LED Driver: MagTech LP1020
BUG Rating: BOU1G1
IP Rating: 66 for sealed LED cartridge
Weight: 50 lbs
LED Working life: 60,000h



Hawthorne Pathway Lighting Dimensions

General Description

Pathway light for outdoor walkways. Light is highly designed using state-of-the-art LED lamp technology. Durable cast aluminum LED lamp housing sealed with thermoformed lens works with the integrated pole to provide outstanding heat management. Sealed housing uses the latest LED technology and improves lamp life by using more LED's driven with less current; may be removed for servicing. A warm white 3,500°K lamp color was chosen for its warm aesthetic and ecological benefits.

Electrical

110V-277V 50/60 Hz, Class 2 LED driver is standard and mounted within integrated cast aluminum base cabinet. Hawthorne ships prewired; fully assembled and ready for installation.

Finish

Pangard II®, offered exclusively by Landscape Forms, is a 19 step program of cleaning, priming, and powder-coating that produces the finest metal finish available for site furniture. In addition, Pangard II® contains no heavy metals and is free of Hazardous Air Pollutants.

Warranty

Six years (50,000hr) on LED cartridge and three years on finish and manufacturing defects.

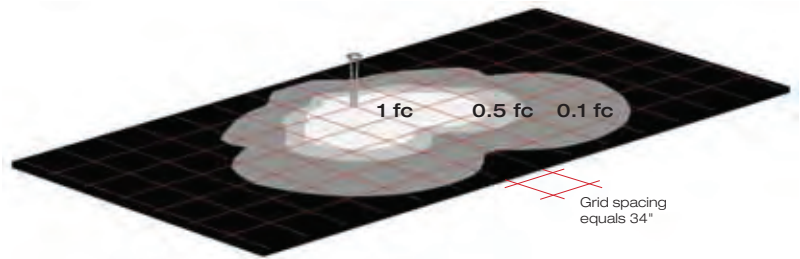
To Order

Specify Hawthorne and powdercoat color for frame. Surface mount only.

Other

UL Listed, RoHS
 International Dark Sky Pending
 Patent #: US Pat Pending

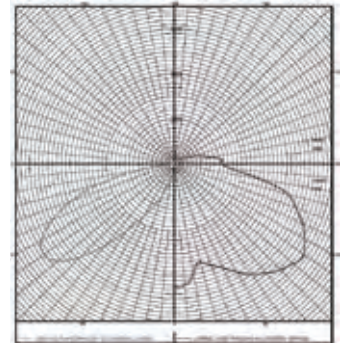
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Hawthorne Light Distribution and Spacing

Hawthorne distribution is an IES Type 4 pattern and meets or exceeds IESNA DG-5 for Park walkways, Class I bikeways, Residential sidewalks and Intermediate sidewalks at 25' pole spacing, and Commercial sidewalks at 15' pole spacing. Path Lights can also be spaced 15' apart on both sides of a 10' path for Public-Way Emergency Egress. Outside of North America, Hawthorne meets CIE-136-2000 for Residential Parks at 25' pole spacing.

lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	261
Watts	8
Lumens per Watt (Efficacy)	32
Color Accuracy Color Rendering Index (CRI)	80
Light Color Dominant Color Temperature (DCT)	3500 (Bright White)
<small>All results are according to IESNA LM-79-000: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) writes product test data and results.</small>	
<small>Visit www.lightingfacts.com for the Label Reference Guide.</small>	
<small>Registration Number: EY7-FKNCAR Model Number: HW140 Type: Outdoor pedestrian light</small>	



Concord

landscapeforms®

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 431 Lawndale Avenue
 Kalamazoo, MI 49048
www.landscapeforms.com
specify@landscapeforms.com

WINSCAPE™

Project: _____

Qty: _____

Type:

SH

Hoover LED • 12V LED-16

step



QUICK FIND #: QF-23

Construction: Body and cap machined from 6061-16 ALUMINUM; faceplate die cast from 356-16 ALUMINUM. Lens cut from tempered borosilicate glass for superior clarity and strength.

LED Unit:

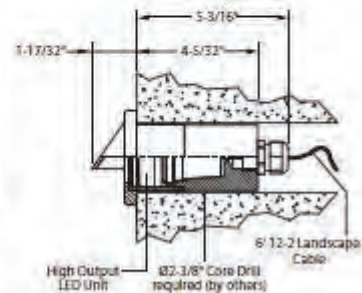
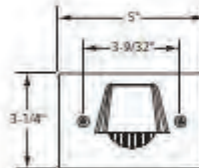
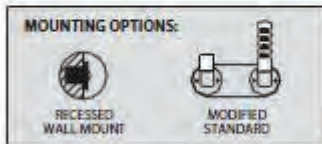
3002 & 3005: Winscape proprietary unit using three (3) High Output LEDs and an integral low voltage (10.5V-15.5V) AC LED driver. Available in Warm White (3000K) and Cool White (6500K) color temps. Units have constant light output when supplied with 10.5V-15.0V. Units are **not dimmable**.

3012 & 3015: Winscape proprietary unit using a single (1) High Output four (4) Diode LED with an integral low voltage (14.0V max) AC dimmable LED driver. Available in Warm White (3000K) and Cool White (5000K) color temps. Dimmable using standard LOW VOLTAGE MAGNETIC dimming systems.

Finishes: Available in 12 standard RAL polyester powder coat finishes. Custom powdercoat finishes available (contact factory for more information).

Features: Includes a linear spread lens for lateral distribution. Optional color filter held securely by a removable stainless steel clip ring. Fixture includes 6 feet of 12/2 landscape cable (UL rated for direct burial).

General: This fixture requires a low voltage MAGNETIC transformer to function properly. Magnetic transformer must be purchased separately (see Accessories section on our website). Mounting requires installer to drill a Ø2-3/8" hole, a minimum of 5-1/2" deep and a thru wiring hole of Ø1/4" or larger. Includes wall anchors and stainless mounting screws.



Fixture w/ LED units 3002 & 3005
 UL/cUL Listed: Wet Location Indoor/Outdoor

Fixture w/ LED units 3012 & 3015
 ETL Listed: Indoor/Outdoor Conforms to UL STD 2108

1. **HOLED**
 SERIES: HOLED - HOOPER LED
2. **3002**
 LIGHT SOURCE: Warm White, 3000K, 350 lumen ** 3002 - 7.5W/10' SP/WW LED
 Cool White, 6500K, 450 lumen ** 3005 - 7.5W/10' SP/CW LED
 Warm White, 3000K, 370 lumen ** 3012 - 3.5W/12' SP/WW LED - DIM
 Cool White, 5000K, 430 lumen ** 3015 - 3.5W/12' SP/CW LED - DIM
** Lumens are at the LED under ideal conditions.
3. **12V**
 VOLTAGE: 12V - 12 VOLT
4. **BKS**
 FINISH COLOR: BKS - BLACK SMOOTH BKT - BLACK TEXTURED BRS - BRONZE SMOOTH BRT - BRONZE TEXTURED WBS - WHITE SMOOTH WBT - WHITE TEXTURED SIS - SILVER SMOOTH
 IWS - IVORY SMOOTH CHS - CHROME SMOOTH NBS - NATURAL BRONZE SMOOTH NBT - NATURAL BRONZE TEXTURED SAT - SAND TEXTURED CPF - CUSTOM FINISH
5. **FO**
 COLOR FILTER: FO - NONE FM - MERCURY VAPOR FR - RED FRD - RED DICHROIC FP - PINK FA - AMBER
 FG - GREEN FGD - GREEN DICHROIC FLB - LIGHT BLUE FMB - MEDIUM BLUE FMBD - MEDIUM BLUE DICHROIC
6. **STD**
 SPECIAL: STD - STANDARD MOD - MODIFIED

Modification Descriptions: (if needed)



Note: Winscap Lighting reserves the right to make design revisions without prior notice.



3700 West Fourth Street • Winona, Minnesota 55901 • 507-454-5113 • fax: 507-454-1814
 www.winscaplighting.com

Revised: 9-05-11 Page 1 of 1

Type SH



4415 BASE OR YOKE MOUNT

LED FOUNTAIN FIXTURE

DESCRIPTION

The 4415 Fountain and Reflecting Pool light is a versatile light source offering a low profile and LED lamping.

FEATURES & SPECIFICATIONS

FIXTURE HOUSING, ROCK GUARD & BASE: Heavy wall cast bronze construction. Natural bronze finish.

LED: 6 LEDs driven at 615 mA with maximum power consumption of 12 watts. Lumen maintenance of individual LED light sources have been individually tested to IESNA LM-80 standards.

LENS: Tempered borosilicate clear glass.

GASKET: Single piece molded U-shaped silicone.

MOUNTING: **ALB** - Adjustable Locking Base. **BM** - Base Mount with pre-focus feature. **YM** - Yoke Mount with singlehole for 3/8" (10mm) fastener.

RISER: **RSR6** if no length specified and ALB is chosen. 4" -24" Riser stem, available in 2" increments.

CORD: Minimum of 10' of #16-3ST US standard submersible rated cord for 120V fixtures. Cord entrance is brass water-tight seal and epoxy encapsulated. **Cord length must be specified.**

LED DRIVER: 12 watt, 120 volt. **Driver included.**

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI (0.70kg/cm²) internal pressure while totally submerged in water.

LOW WATER CUT-OFF: Temperature sensing low water cut-off standard.

FASTENERS: Stainless steel.

LISTING: CSA, CSA_{UL}

TYPE	JOB NAME															
PART NUMBER																
<table border="1" style="width:100%; border-collapse: collapse; font-size: small;"> <tr> <td>Model</td> <td>Lamp Type</td> <td>Voltage</td> <td>Distribution</td> <td>Mounting</td> <td>Mounting Access</td> <td>Cord</td> <td>Lamp</td> <td>Option</td> </tr> </table>		Model	Lamp Type	Voltage	Distribution	Mounting	Mounting Access	Cord	Lamp	Option						
Model	Lamp Type	Voltage	Distribution	Mounting	Mounting Access	Cord	Lamp	Option								
ALB DIMENSIONS																
<table border="1" style="width:100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 20%;">A</th> <th style="width: 20%;">B</th> <th style="width: 20%;">C</th> <th style="width: 20%;">B MIN.</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">WIDTH</td> <td style="text-align: center;">INSIDE HEIGHT</td> <td style="text-align: center;">STANDARD CLEARANCE</td> <td style="text-align: center;">YOKE (CUT STEM)</td> <td style="text-align: center;">B MIN.</td> </tr> <tr> <td></td> <td style="text-align: center;">10 1/2</td> <td style="text-align: center;">12 5/8</td> <td style="text-align: center;">5 1/2</td> <td style="text-align: center;">8 5/8</td> </tr> </tbody> </table>			A	B	C	B MIN.	WIDTH	INSIDE HEIGHT	STANDARD CLEARANCE	YOKE (CUT STEM)	B MIN.		10 1/2	12 5/8	5 1/2	8 5/8
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	10 1/2	12 5/8	5 1/2	8 5/8												
APPROVALS																

NOTE: HYDREL RESERVES THE RIGHT TO MODIFY SPECIFICATION WITHOUT NOTICE. Any dimension on this sheet is to be assumed as a reference dimension. "Used for information purposes only. It does not govern manufacturing or inspection requirements." (ANSI Y14.5-1973)

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10/5/10
4415_BM_YM_LED

2960 Northhoff St., Suite B
Chatsworth, CA 91311
Phone: 866.532.9901
Fax: 866.533.5231
www.hydroil.com

Type SF

Cedar LED
12V LED-11



UL Listed: Wet location
Indoor/Outdoor
cUL Listed: Wet location
Indoor/Outdoor

QF#: 2

CELED - CEDAR LED

SERIES

CELED - Cedar LED

LIGHT SOURCE - 12V LED-11 - (see foldout after pg. 562)
1002 1003 1004 1005 1006 1007

VOLTAGE

12V - 12 Volt

ACCESSORY LENS - (see winscape technical section)

- L0 - None
- L1 - Prismatic
- L2 - Linear
- L3 - Softening
- L4 - Watershed™

FINISH - (see pg. 562)

BKS BKT BRS BRT WHS WHT SIS IVS CHS NBS VET SAT CPF

COLOR FILTER - (see foldout after pg. 562)

F0 FM FR FRD FF FA FG FGO FLB FMB FMBD

SHIELDING

- SH0 - None
- SH6 - Honeycomb Louver

CAP STYLE - (see foldout after pg. 562)

C1 C2 C3 C4

SPECIAL

- STD - Standard
- MOD - Modified
- 350R - 2 Piece 350° Rotation Knuckle

Cedar Brass LED
12V LED-11



UL Listed: Wet location
Indoor/Outdoor
cUL Listed: Wet location
Indoor/Outdoor

QF#: 2

CEBRLED - CEDAR BRASS LED

SERIES

CEBRLED - Cedar Brass LED

LIGHT SOURCE - 12V LED-11 - (see foldout after pg. 562)
1002 1003 1004 1005 1006 1007

VOLTAGE

12V - 12 Volt

ACCESSORY LENS - (see winscape technical section)

- L0 - None
- L1 - Prismatic
- L2 - Linear
- L3 - Softening
- L4 - Watershed™

FINISH - (see pg. 562)

POL NAT BRZ CPF

COLOR FILTER - (see foldout after pg. 562)

F0 FM FR FRD FF FA FG FGO FLB FMB FMBD

SHIELDING

- SH0 - None
- SH6 - Honeycomb Louver

CAP STYLE - (see foldout after pg. 562)

C1 C2 C3 C4

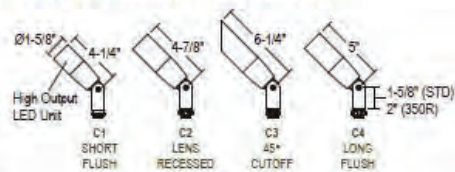
SPECIAL

- STD - Standard
- MOD - Modified

CEDAR LED / CEDAR BRASS LED

- Luminaire machined from ALUMINUM or BRASS
- LED unit uses one High Output LED with a integral low voltage driver
- Three beam spreads (10°, 20°, 36°)
- Warm White (3000K) and Cool White (6500K) color temps
- Field replaceable lens
- Tapered knuckle seat for infinite aiming and locking
- Any combination of up to three lens accessories/color filter/shielding
- **Low Voltage MAGNETIC TRANSFORMER** required to function properly (purchased separately, see winscape mounting and accessories section)
- **Mounting required** (purchased separately, see winscape mounting and accessories section)
- Technical lamp (pg. 558-559) / photometric information (www.winonalighting.com)
- Winona Lighting reserves the right to make design revisions without prior notice

CAP STYLE - CEDAR LED / CEDAR BRASS LED



PRODUCT SPECIFICATION

	12V							
Series	Light Source	Voltage	Accessory Lens	Finish	Color Filter	Shielding	Cap Style	Special



Type SD

NOVARA



www.hessamerica.com/3710

NOVARA 260 Illuminating Bollard

Cast aluminum and stainless steel create a synthesis of form and function in the NOVARA. The angular cast aluminum housing is punctuated by distinctive cooling fins. Mounting knobs are constructed of polished high-grade stainless steel. Single or twin configurations may be fitted with a clear, etched, or optional prismatic lens. Electrical conductor is housed in attractive braided stainless steel line. Straight round steel bollard shaft with flush handhole and mounting bracket are hot-dip galvanized prior to being finished in finely textured paint. All hardware is stainless steel. Standard color, matte silver grey metallic. Special colors available. [▲] Listed for Wet Locations.

NOVARA 260 VRB Illuminating Bollard

Vandal resistant model same as NV 260 bollard except with concealed wire way, rigid luminaire mounting, and larger diameter shaft. [▲] Listed for Wet Locations.

Model	Height	Lamp
NV260-B	35.4"	26 CFL / 100 Halogen
NV260-VRB	32.8"	26 CFL / 100 Halogen



80

Type SC2



Available Finishes: Anvil Iron, Anvil Iron

Leeds - Outdoor Wall 2Lt Fluorescent

49111AVIFL

Outdoor Wall 2Lt Fluorescent

Dia./Width: 5.75 IN

Body Height: 17.75 IN

This 2 light fluorescent wall lantern from the soft contemporary Leeds collection is a striking statement for any home. It features a Cased Opal glass rectangular shade with a distinctive rectangular accent. Width: 6, Height: 18, Extension: 5, Height from Center of Wall Opening: 9. Uses 2 18W (GU24) bulbs. Rated for wet locations. Meets Title 24 requirements. Bulb included.

Technical Information

Type	Outdoor Lights	Primary Bulb Count	2
Style	Contemporary / Modern	Primary Max Watt	18W
Finish Group	Metallic	Primary Lamp Type	MLS18GUWW
Weight	6.5 LBS	Switching	Photocell
Body Height	17.75 IN	UL CSA Listed	Yes
Width	5.75 IN	Diffuser Description	SATIN ETCHED CASED OPAL GLASS
Extension	5 IN	Body Material	Cast Aluminum
Height from Junction Box	8.75 IN	Title 24	Yes
Backplate Dimensions	17.6875 X 4.50 IN	Energy Efficient	Yes
Bulb Included	Included		



BRANDON A. HARP, P.E. E-28650
PROFESSIONAL ENGINEER
CEDC LICENSE NO.: 2003004674

11402 Gravois Road
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314.729.1400
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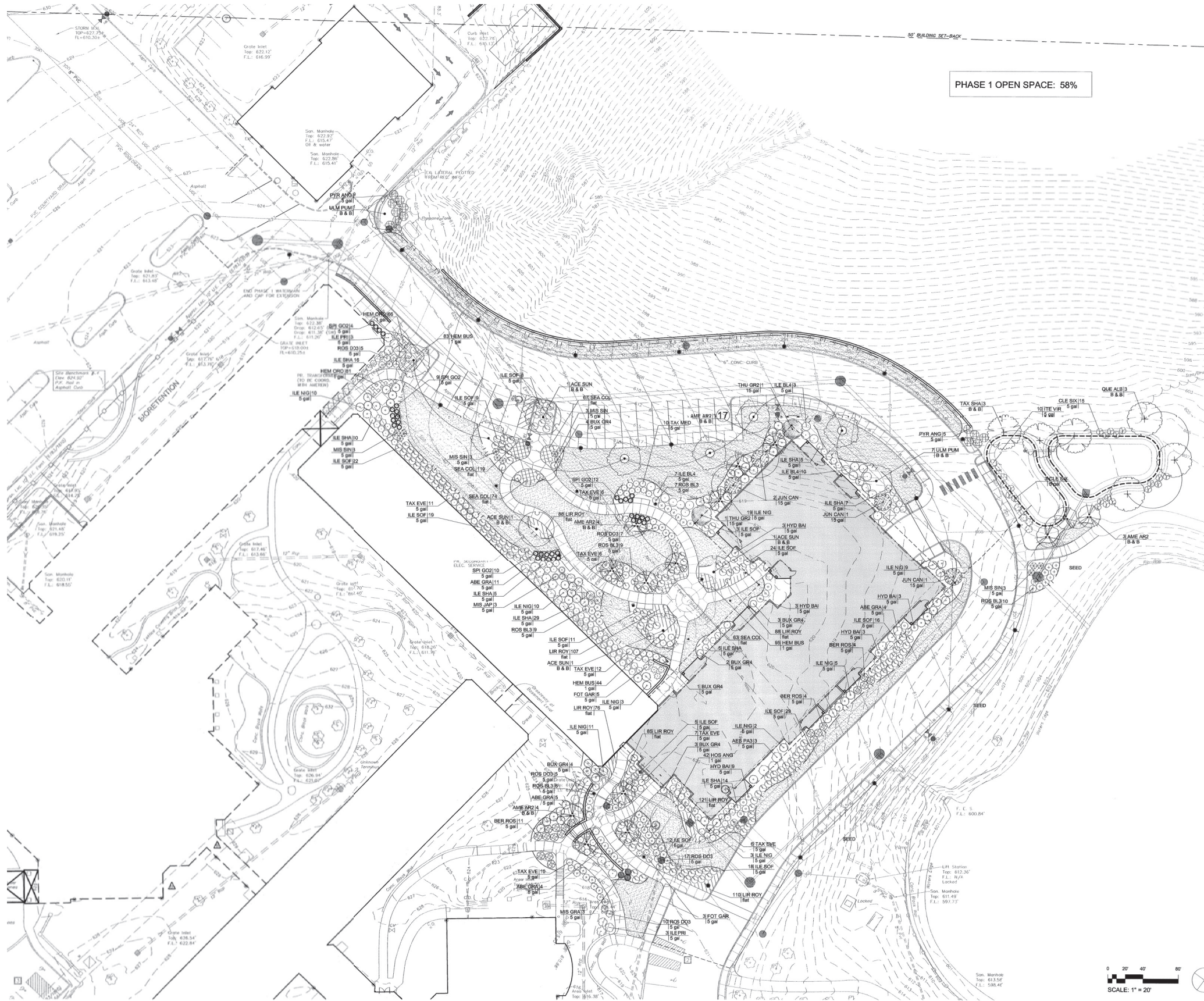
CEDC
CIVIL ENGINEERING
DESIGN CONSULTANTS

Site Development Section Plan
Friendship Village Chesterfield
15201 Olive Blvd.
Chesterfield, Missouri 63017

No.	Description	Date
CITY SUBMITTAL		05-04-12

Site Development Section Plan

SD2



PLANT SCHEDULE												
TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	FIELDS	FIELD6	Slow	Moderate	Fast
	ACE SUN	6	Acer rubrum 'Red Sunset'	Red Sunset Maple	B & B	3"Cal	14'-16'	45'+	Deciduous			X
	AME AR2	17	Amelanchier arborea 'Autumn Brilliance'	Downy Serviceberry	B & B	2"Cal		25-30'	Ornamental	X	X	
	ILE FOS	3	Ilex x attenuata 'Fosteri'	Foster's Holly	15 gal		8'-9'			X	X	
	JUN CAN	4	Juniperus virginiana 'Canaertii'	Canaerti Juniper	15 gal		8'-9'	30-40'	Evergreen		X	
	QUE ALB	3	Quercus alba	White Oak	B & B	2.5"Cal	14'-16'	45'+	Deciduous		X	
	QUE SHU	1	Quercus shumardii	Shumard Red Oak	3-3.5" CAL., B&B	2.5"Cal	14'-16'	45'+	Deciduous	X		X
	TAX SHA	3	Taxodium distichum 'Shawnee Brave' TM	Shawnee Brave Bald Cypress	B & B	2.5"Cal	14'-16'	45'+	Deciduous	X		
	THU GR2	2	Thuja standishii x plicata 'Green Giant'	Green Giant Arborvitae	15 gal		10'-12'					
	ULM PUM	6	Ulmus x 'Hummelsteas'	Hummelsteas Elm	B & B	3"Cal	14-16'	60-80'	Deciduous	X		X
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT					Slow	Moderate	Fast
	ABE GRA	24	Abelia x grandiflora	Glossy Abelia	5 gal						X	
	AES PA3	3	Aesculus parviflora	Bottlebrush Buckeye	5 gal							
	BER ROS	28	Berberis thunbergii 'Rose Glow'	Rose Glow Barberry	5 gal					X	X	
	BUX GR4	22	Buxus x 'Green Mountain'	Green Mountain Boxwood	5 gal					X	X	
	CLE SIX	26	Clethra alnifolia 'Sixteen Candles'	Summersweet Clethra	5 gal					X		
	FOT GAR	8	Fothergilla gardenii	Dwarf Fothergilla	5 gal					X		
	HYD BAI	21	Hydrangea macrophylla 'Endless Summer' TM	Endless Summer Hydrangea	5 gal						X	X
	ILE SOF	189	Ilex crenata 'Soft Touch'	Soft Touch Japanese Holly	5 gal					X		
	ILE NG	78	Ilex glabra 'Nigra'	Nigra Inkberry	5 gal					X		
	ILE SHA	135	Ilex glabra 'Shamrock'	Shamrock Inkberry	5 gal					X		
	ILE BL4	30	Ilex x meserveae 'Blue Princess' TM	Blue Princess Holly	5 gal					X	X	
	ILE PRI	6	Ilex x meserveae 'Blue Prince' TM	Blue Prince Holly	5 gal					X	X	
	ITE VIR	10	Itea virginica 'Henry's Garnet'	Henry's Garnet Sweetgum	5 gal					X		
	MIS JAP	3	Miscanthus sinensis	Japanese Silver Grass	5 gal							X
	MIS SIN	12	Miscanthus sinensis 'Adagio'	Adagio Eulalia Grass	5 gal							X
	MIS GRA	8	Miscanthus sinensis 'Gracillimus'	Maiden Grass	5 gal						X	
	PYR ANG	25	Pyracantha angustifolia 'Gnomm Gnome' TM	Gnome Pyracantha	5 gal							X
	ROS BL3	49	Rosa x 'Blushing Knockout'	Blushing Knockout Rose	5 gal					X		
	ROS DO3	51	Rosa x 'Double Knockout'	Double Knockout Rose	5 gal					X		
	SPI WAT	7	Spiraea japonica 'Anthony Waterer'	Spiraea	5 gal					X	X	
	SPI GO2	47	Spiraea japonica 'Goldmound'	Goldmound Spiraea	5 gal					X	X	
	TAX MED	10	Taxus x media 'Brownii'	Brown Hybrid Yew	5 gal					X	X	
	TAX EVE	58	Taxus x media 'Everlow'	Everlow Yew	5 gal					X	X	
SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT					Slow	Moderate	Fast
	HEM BUS	222	Hemerocallis x 'Little Business'	Little Business Daylily	1 gal @ 12" oc							X
	HEM ORO	174	Hemerocallis x 'Stella de Oro'	Stella de Oro Daylily	1 gal @ 12" oc							X
	HOS ANG	42	Hosta x 'Blue Angel'	Blue Angel Hosta	1 gal @ 12" oc							
	HOS GUA	19	Hosta x 'Guacamole'	Guacamole Hosta	1 gal @ 12" oc							
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT					Slow	Moderate	Fast
	LIR ROY	675	Liriope muscari 'Royal Purple'	Royal Purple Liriope	flat @ 12" oc							X
	SEA COL	323	Seasonal Color	Seasonal Color	flat @ 12" oc							
	TUR SOO	16,602 sf	Turf Sod	Drought Tolerant Fescue Blend sod								