



690 Chesterfield Pkwy W • Chesterfield MO 63017-0760 Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

# **Planning Commission Staff Report**

Project Type:	Site Development Concept Plan
Meeting Date:	January 28, 2019
From:	Mike Knight, Planner JMK
Location:	A 22 acre tract of land located northeast of the intersection of Wild Horse Creek Road and Old Chesterfield Road.
Description:	<b>Downtown Chesterfield, (Category C), SDCP:</b> A Site Development Concept Plan, Landscape Concept Plan, Signage Concept Plan, and Lighting Fixture Concept Plan for the 22 acre tract of land located north of Wild Horse Creek road, east of its intersection with Old Chesterfield Road and west of its intersection with Chesterfield Parkway.

# PROPOSAL SUMMARY

Stock and Associates Consulting Engineers, Inc. has submitted a Site Development Concept Plan for Planning Commission review. This request depicts a phased development of 5 lots that total 22 acres. The subject site is located in what is known as "Category C" of Downtown Chesterfield. The subject site is zoned "PC&R" Planned Commercial and Residence District and governed under the terms and conditions of City of Chesterfield Ordinance 3023. A Site Development Concept Plan, Landscape Concept Plan, Signage Concept Plan, and Lighting Fixture Concept Plan have all been submitted for review and approval in accordance to the governing ordinance.

# **HISTORY OF SUBJECT SITE**

On March 19<sup>th</sup>, 2008, the City of Chesterfield City Council approved Ordinance 2449. This ordinance amended the previous governing zoning ordinance of the City of Chesterfield by changing the boundaries of 99 acres of the following: an "R-8" Residence District with a Planned Environmental Unit Procedure, "R-5" Residence District, "FPR-5" Residence District, "R-6A" PEU Residence District with a Planned Environmental Unit Procedure, "C-8" Planned Commercial District, "NU" Non-Urban District and "M-3" Planned Industrial District to one 99 acre "PC&R" Planned Commercial & Residence District known as Downtown Chesterfield.

City of Chesterfield Ordinance 2449 created one PC&R district that defined specific development criteria into three specific categories. The three categories were labeled in Ordinance 2449 as

Category A, Category B, and Category C. They were also defined by location, having specific category standards, and with a specific streetscape.

On February 21<sup>st</sup>, 2018, the City of Chesterfield approved Ordinance 2990. This ordinance solely amended the legal description of the entire 99 acre PC&R district.

On November 5<sup>th</sup>, 2018, City Council approved the governing Ordinance 3023. This ordinance amendment had two main objectives. The first was to incorporate and re-zone a 0.4 acre Non-Urban "NU" parcel to the "PC&R" District. **The second was to amend the development criteria of the governing ordinance in which separate Concept Plans would be submitted by defined Category vs. for the entire District.** It essentially allows for 2 phases of development within Downtown Chesterfield. **The Site Development Concept Plan is the 22 acres that make up Category C, which is one of three categories that make up the 99 acres known as Downtown Chesterfield.** 



Figure 1: Aerial Image of Subject Site

# **STAFF ANALYSIS**

The subject site is located north of Wild Horse Creek Road (WHCR), east of its intersection with Old Chesterfield Road (OCR) and west of the intersection with Chesterfield Parkway. The subject site is located directly south of Interstate 64. Given that WHCR and I-64 are both classified as major arterials according to the City's functional classification system, and Chesterfield Parkway and OCR are classified as minor arterials, all facades will be highly visible to a large number of users. The area is designated Urban Core within the City of Chesterfield Comprehensive Land Use Plan and the subject site would be 22 acres of the 99 acre PC&R zoning district known as Downtown Chesterfield.

The governing ordinance is unique in the fact that there are four specific concept plans to be submitted and approved by Planning Commission with automatic Power of Review. These plans include the Site Development Concept Plan, Landscape Concept Plan, Signage Concept Plan, and Lighting Fixture Concept Plan that are required to be submitted in conjunction with the overall Site Development Concept Plan process. Category C has specific standards outlined in the governing ordinance that reference building placement, building volume, floor heights, façade elements, outdoor space, building function, and a specific exhibit that details a streetscape to which the development should adhere to.

# Site Development Concept Plan:

The Subject Site is composed of five total lots (A-E) for the phased development of Category C as seen on Figure 2. All of the lots are currently undeveloped except for a Sachs building that currently resides on Lot D. There is also a Site Development Section Plan submitted for Lot A.

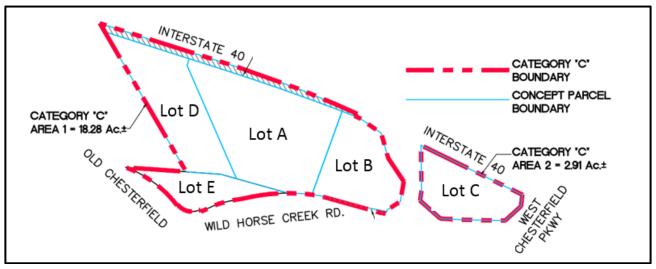


Figure 2: Category C Lot Breakdown

The Concept Plan provides general areas for lot lines, potential roadways, building foot prints, and parking areas. The Site Development Section Plan (Lot A) that is currently submitted within the City of Chesterfield is requesting a modification to utilize the streetscape outlined for Category C along an internal drive vs. WHCR. Staff acknowledges and is supportive of the center drive aisle dictating an urban "Downtown" streetscape vs. the major arterial of WHCR in between Lots A and B. Although Staff is supportive, the SDCP requires the remaining Lots (E and C) that front Wild Horse Creek Road to follow the streetscape designated within the governing ordinance. All lots either conform to the criteria outlined within the governing ordinance or are consistent with the modification request within the Site Development Section Plan. Both the Site Development Concept Plan and Site Development Section Plan for Lot A will be submitted to Planning Commission on January 28<sup>th</sup> and their approval will be inherently linked through the modification request.

Primary vehicular access for Lots A and B is provided by one access point off of Wild Horse Creek Road. There is a cross access easement provided between both Lots A and B and also with Lots D and E directly to the west. Lots D and E will have one primary access point off of Old Chesterfield Road at the existing location of the current private drive. Lot C will have one access point off of Wild Horse Creek Road at the existing curb cut between the intersection of Chesterfield Parkway and the I-64 off ramp. The future Concept Plan for Categories A and B will be reviewed with the Concept Plan for cohesiveness.

Pedestrian Circulation is a key component of the Urban Core and was specifically addressed during the Public Hearing for the governing ordinance. The Site Development Concept Plan includes an 8 foot sidewalk within a 12 foot sidewalk easement completely across the frontage of both Wild Horse Creek Road and Old Chesterfield Road. Emphasis will be placed on achieving pedestrian circulation both internally within Category C and externally between adjacent sites upon each time a Site Development Section Plan is submitted.

# Landscape Concept Plan:

The Landscape Concept Plan outlines areas for street trees along the minor arterial roadway Old Chesterfield Road, and major arterial roadway Wild Horse Creek Road. Adequate spacing was created for the future street lights along both roadways. Given a modification request is to create a streetscape along the center drive aisle within the development, street trees have been placed along the center drive with the appropriate spacing. There are five existing monarch trees located on the site. They are all White Oaks and reside on the north end of Lot D behind the existing building.

# Lighting Fixture Concept Plan:

The applicant has submitted the required Lighting Fixture Concept Plan. The primary purpose of the Lighting Fixture Concept Plan is to establish a cohesive appearance in regards to lighting within Category C of Downtown Chesterfield. Below are the fixtures chosen by the applicant to be utilized consistently through Category C. These fixtures consist of a bollard (A.), pedestrian scale lighting (B.), and parking (C.) and can all be seen in Figure 3 below with the associated cut sheets located within the attached Site Development Concept Plan Packet.

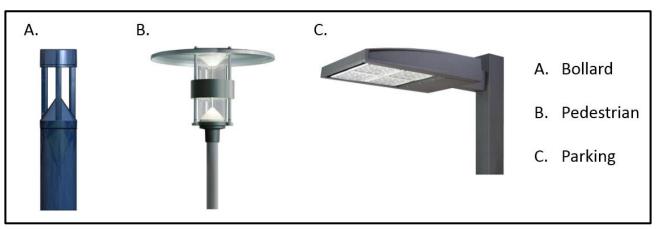


Figure 3: Lighting Fixture Concept

# Signage Concept Plan:

The applicant submitted the required Signage Concept Plan. The primary purpose of the Signage Concept Plan is to establish a cohesive appearance in regards to signage within Category C of

Downtown Chesterfield. This conceptual document will then be utilized when each Site Development Section Plan is submitted (including Lot A) to assure that each Section substantially conforms to the Concept Plans. The governing ordinance states sign packages shall be required for each Site Development Section Plan in this development and approved by the City of Chesterfield Planning Commission. The individual sign packages must be consistent with the Signage Concept Plan.

The applicant supplied a narrative statement along with defined criteria for both building and site signage. In regards to the site signage, the applicant defines specific criteria in regards to the background or cabinet, the message/graphic, the landscaping, and illumination source. In regards to the building signage, the applicant defines specific criteria in regards to the raceway, the letter return, and the illumination source. The plan attached to this packet also contains two examples for both the site and building signage to further describe criteria set forth in the Concept Plan.

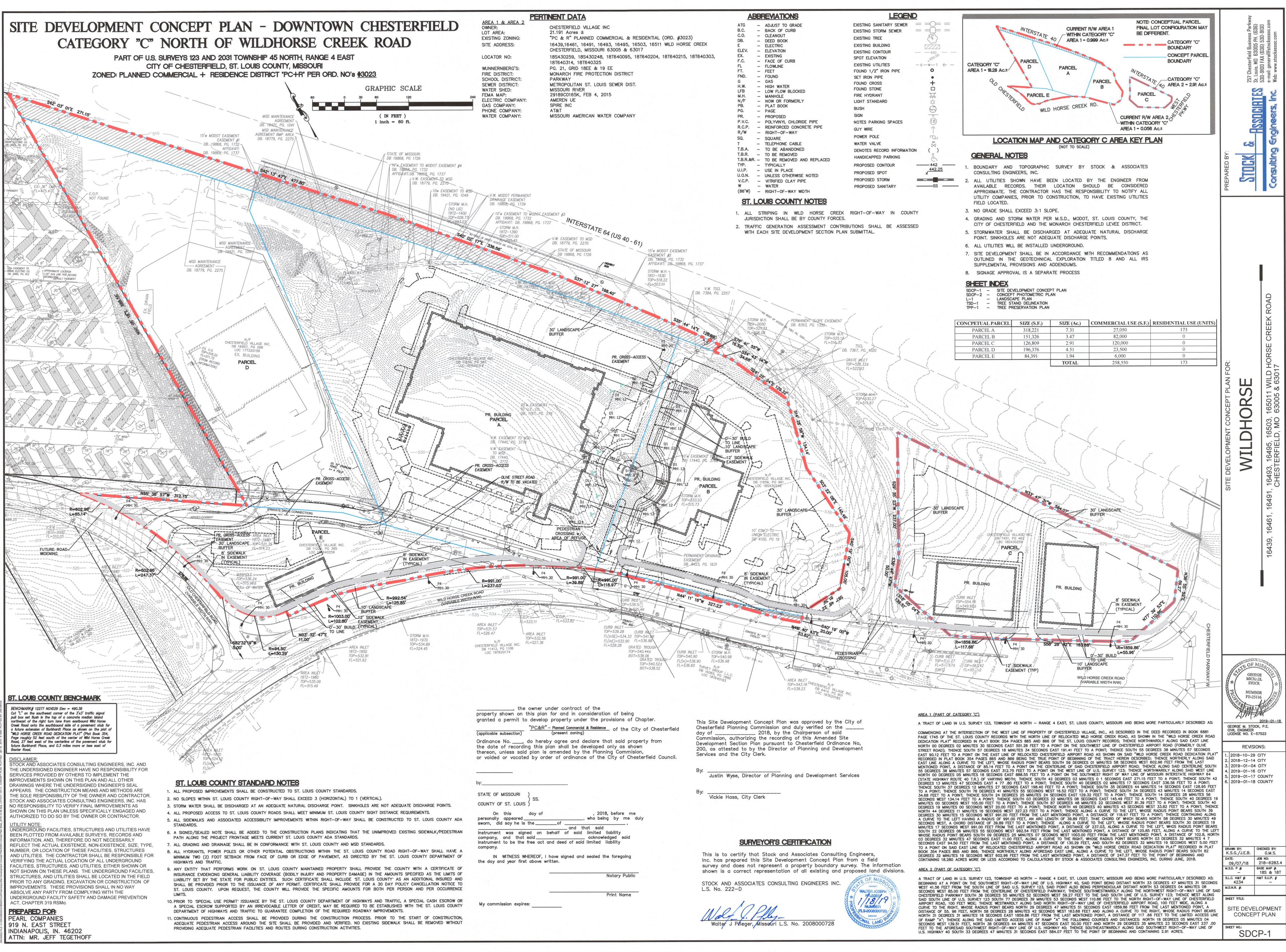
# DEPARTMENTAL INPUT

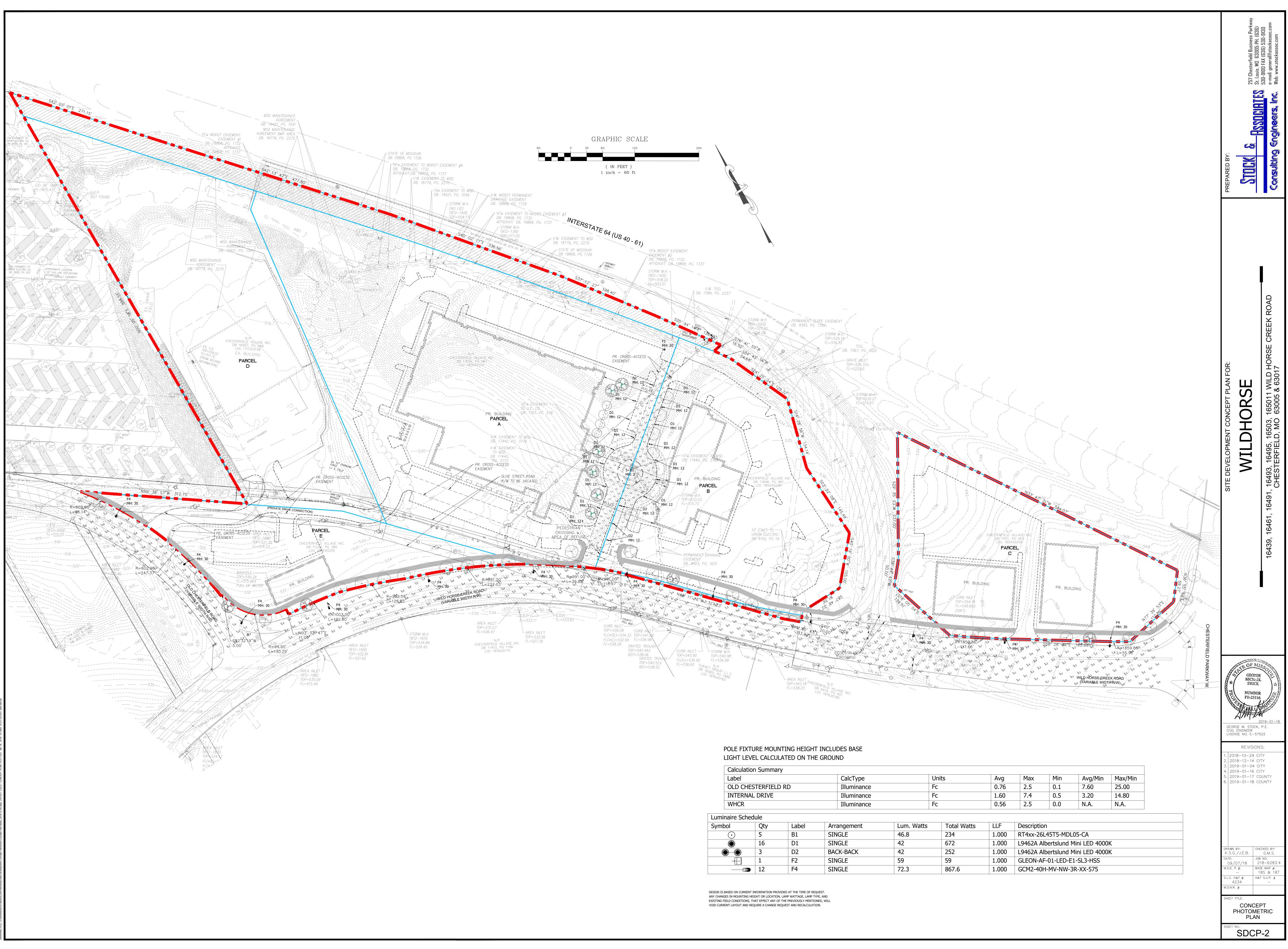
Staff has reviewed the submittal and has found the application to be in conformance with the City of Chesterfield Unified Development Code and Ordinance 3023. Staff recommends approval of the Site Development Concept Plan for the Downtown Chesterfield (Category C) development.

# <u>MOTION</u>

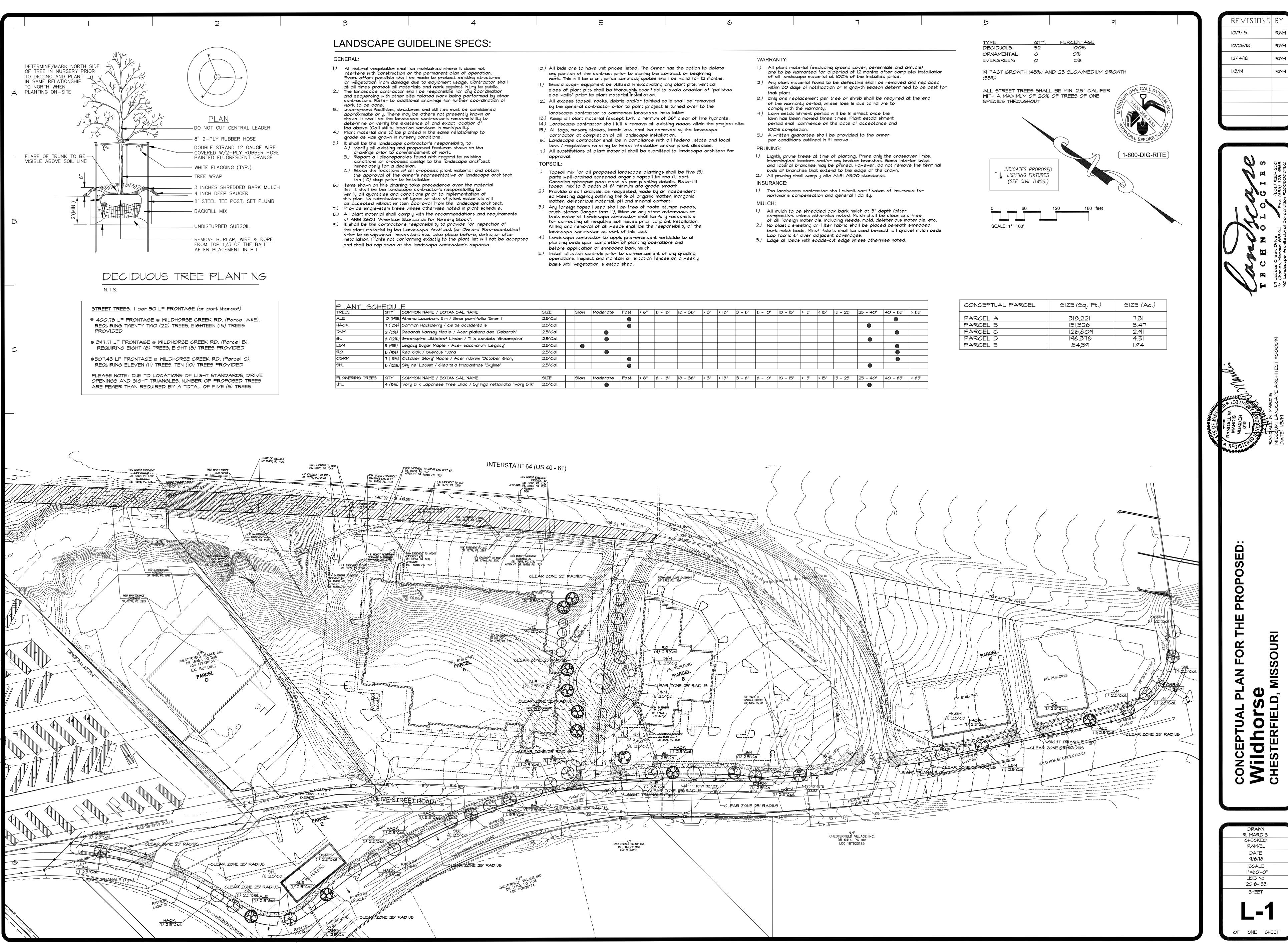
The following options are provided to the Planning Commission for consideration relative to this application:

- 1) "I move to approve (or deny) the Site Development Concept Plan, Landscape Concept Plan, Signage Concept Plan, and Lighting Fixture Concept Plan for the Downtown Chesterfield (Category C) development."
- "I move to approve the Site Development Concept Plan, Landscape Concept Plan, Signage Concept Plan, and Lighting Fixture Concept Plan for the Downtown Chesterfield (Category C) development with the following conditions..." (Conditions may be added, eliminated, altered or modified)
- Attachments: Site Development Concept Plan Landscape Concept Plan Lighting Fixture Concept Plan Signage Concept Plan



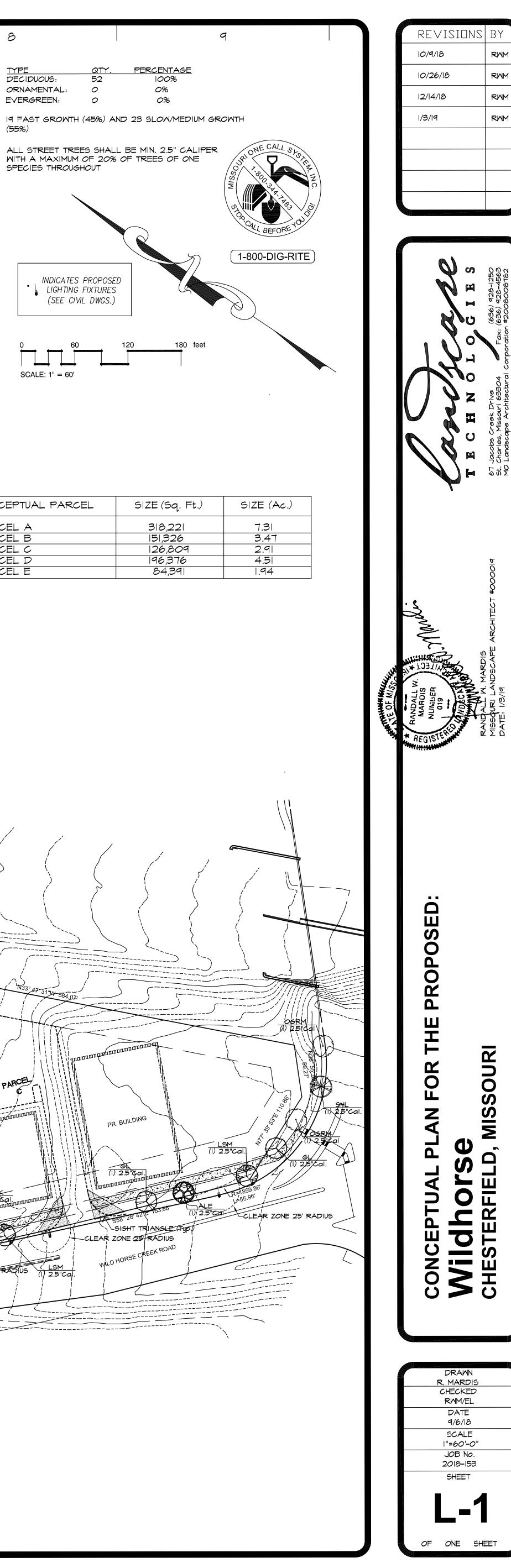


	,								
		CalcType		Units	Avg	Max	Min	Avg/Min	Max/Min
STERFIEL	LD RD	Illuminance		Fc	0.76	2.5	0.1	7.60	25.00
L DRIVE		Illuminance		Fc	1.60	7.4	0.5	3.20	14.80
		Illuminance		Fc	0.56	2.5	0.0	N.A.	N.A.
dule Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	Descriptio	on		
Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	Descriptio	on		
5	B1	SINGLE	46.8	234	1.000	RT4xx-26	L45T5-MDI	_05-CA	
16	D1	SINGLE	42	672	1.000	L9462A A	lbertslund	Mini LED 4000	К
3	D2	BACK-BACK	42	252	1.000	L9462A A	lbertslund	Mini LED 4000	К
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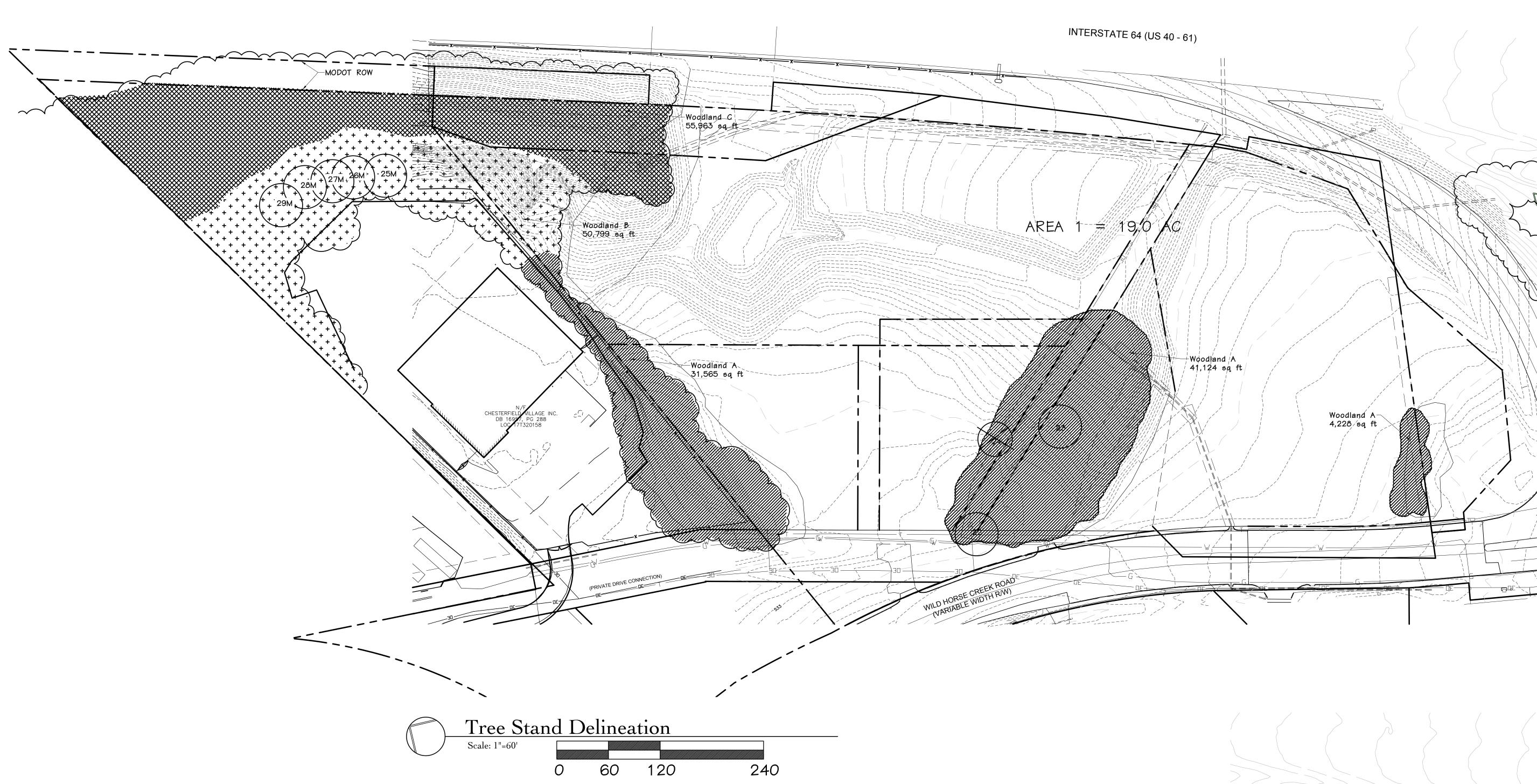


4	5 6	7	8 9
SCAPE GUIDELINE SPECS:			<u>TYPE QTY. PERCENTAGE</u> DECIDUOUS: 52 100%
:		WARRANTY:	ORNAMENTAL: O 0%
tural vegetation shall be maintained where it does not ere with construction or the permanent plan of operation. effort possible shall be made to protect existing structures getation from damage due to equipment vsage. Contractor shall times protect all materials and work against injury to public. indscape contractor shall be responsible for any coordination equencing with other site related work being performed by other actors. Refer to additional drawings for further coordination of to be done. ground facilities, structures and utilities must be considered ximate only. There may be others not presently known or . It shall be the landscape contractor's responsibility to mine or verify the existence of and exact location of to as was grown in nursery conditions. I be the landscape contractor's responsibility to: erify all existing and proposed features shown on the rawings prior to commencement of work. eport all discrepancies found with regard to existing onditions or proposed design to the landscape architect in (IO) days prior to installation. shown on this drawing take precedence over the material shall be the landscape contractor's responsibility to any days prior to installation. shown on this drawing take precedence over the material shall be the landscape contractor's responsibility to all quantities and conditions prior to implementation of an. No substitutions of types or size of plant materials will capted without written approval from the landscape architect. is single-stem trees unless otherwise noted in plant schedule. ant material shall comply with the recommendations and requirements Si Z60.1 "American Standards for Nursery Stack". I be the contractor's responsibility to provide for inspection of ant material by the Landscape Architect (or Onners' Representative) to acceptance, inspections may take place before, during or after ation. Plants not conforming exactly to the plant list will not be accepted hall be replaced at the landscape contractor's expense.	<ul> <li>IO.) All bids are to have unit prices listed. The Owner has the option to delete any portion of the contract prior to signing the contract or begining work. This will be a unit price contract; quotes shall be valid for 12 months.</li> <li>II.) Should auger equipment be utilized in excavating any plant pits, vertical sides of plant pits shall be thoroughly scarified to avoid creation of "polished side walls" prior to plant material installation.</li> <li>I2.) All excess topsoil, rocks, debris and/or tainted soils shall be removed by the general contractor prior to point project is turned over to the landscape contractor to commence landscape installation.</li> <li>I3. Keep all plant material (except turf) a minimum of 36" clear of fire hydrants.</li> <li>I4.) Landscape contractor shall kill 4 remove all existing weeds within the project site.</li> <li>I5. All tags, nursery stakes, labels, etc. shall be removed by the landscape contractor shall be in compliance with all federal, state and local laws / regulations relating to insect infestation and/or plant diseases.</li> <li>I7.) All substitutions of plant material shall be submitted to landscape architect for approval.</li> <li>TOPSOIL:</li> <li>I.) Topsoil mix for all proposed landscape plantings shall be five (5) parts well-drained screened organic topsoil to one (I) part Canadan sphagnum peat moss as per planting details. Roto-till topsoil mix to a depth of 6" minimum and grade smooth.</li> <li>Provide a soil analysis, as requested, made by an independent soil-testing agency outlining the % of organic mater. Inorganic mater, longanic base shall be the responsible for correcting all negative soil issues prior to plant enstandeus or toxic material. Landscape contractor shall be the responsible for correcting all negative soil issues prior to plant installation.</li> <li>State and local landscape installation for a soil analysis, as requested, made by an independent soil-testing agency outlining the % of organic matter, inorganic matter, inorganic matte</li></ul>	<ol> <li>All plant material (excluding ground cover, perennials and annuals) are to be warranted for a period of 12 months after complete installation of all landscape material at 100% of the installed price.</li> <li>Any plant material found to be defective shall be removed and replaced within 30 days of notification or in growth season determined to be best for that plant.</li> <li>Only one replacement per tree or shrub shall be required at the end of the warranty period, unless loss is due to failure to comply with the warranty.</li> <li>Lawn establishment period will be in effect once the lawn has been mowed three times. Plant establishment</li> </ol>	EVERGREEN: 0 0% IG FAST GROWTH (45%) AND 23 SLOW/MEDIUM GROWTH (55%) ALL STREET TREES SHALL BE MIN. 2.5" CALIPER WITH A MAXIMUM OF 20% OF TREES OF ONE SPECIES THROUGHOUT (NDICATES PROPOSED LIGHTING FIXTURES (SEE CIVIL DWGS.) $0 \rightarrow 0 \rightarrow$

_SCH					<b>F</b>														
	QTY COMMON NAME / BOTANICAL NAME	SIZE	Slow	Moderate	Fast	< 6"	6 - 18"	18 - 36"	> 3'	< 18"	3 - 6'	6 - 10'	10 - 15'	> 15'	< 15'	15 - 25'	25 - 40'	40 - 65'	> 65'
	10 (19%) Athena Lacebark Elm / Ulmus parvifolia 'Emer 1'	2.5"Cal																	
	7 (13%) Common Hackberry / Celtis occidentalis	2.5"Cal.															•		
	2 (5%) Deborah Norway Maple / Acer platanoides 'Deborah'	2.5"Cal																	
	6 (12%) Greenspire Littleleaf Linden / Tilia cordata 'Greenspire'	2.5"Cal.		•													•		
	5 (9%) Legacy Sugar Maple / Acer saccharum 'Legacy'	2.5"Cal.																	
	6 (9%) Red Oak / Quercus rubra	2.5"Cal		•															
	7 (13%) 'October Glory' Maple / Acer rubrum 'October Glory'	2.5"Cal																	
	6 (12%) 'Skyline' Locust / Gleditsia triacanthos 'Skyline'	2.5"Cal.																	
						·	·				·			·					
TREES	QTY COMMON NAME / BOTANICAL NAME	SIZE	Slow	Moderate	Fast	< 6"	6 - 18"	18 - 36"	> 3'	< 18"	3 - 6'	6 - 10'	10 - 15'	> 15'	< 15'	15 - 25'	25 - 40'	40 - 65'	> 65'
	4 (8%) Ivory Silk Japanese Tree Lilac / Syringa reticulata 'Ivory Silk'	2.5"Cal.																	1



CONCEPTUAL PARCEL	SIZE (Sq. Ft.)	SIZE (Ac.)
PARCEL A	3 8,22	7.31
PARCEL B	151,326	3.47
PARCEL C	126,809	2.91
PARCEL D	196,376	4.51
PARCEL E	84,391	1.94



Project Tree ID	Latin Name	Common Name	DBH	Height (ft.)	Canopy Spread (ft.)
1	Gleditsia triacanthos var inermis	honeylocust thornless	26	41-50	41-50
2	Quercus palustris	oak pin	38	51-60	41-50
3	Morus species	mulberry	12	31-40	31-40
4	Liquidambar styraciflua	sweetgum	26	41-50	31-40
5	Liquidambar styraciflua	sweetgum	30	51-60	41-50
6	Prunus serotina	cherry black	26	41-50	31-40
7	Betula nigra	birch river	8	21-30	13-20
8	Betula nigra	birch river	6	21-30	13-20
9	Betula nigra	birch river	9	21-30	13-20
10	Betula nigra	birch river	10	21-30	21-30
11	Betula nigra	birch river	10	21-30	21-30
12	Prunus serotina	cherry black	10	21-30	21-30
13	Unmusical rubra	elm slippery	14	31-40	31-40
14	Quercus velutina	oak black	14	31-40	31-40
15	Quercus velutina	oak black	12	31-40	31-40
16	Betula nigra	birch river	10	31-40	21-30
17	Morus species	mulberry	12	31-40	21-30
18	Unmusical rubra	elm slippery	12	31-40	21-30
19	Crataegus phaenopyrum	hawthorn washington	6	20-Nov	13-20
20	Crataegus phaenopyrum	hawthorn washington	6	20-Nov	13-20
21	Unmusical rubra	elm slippery	28	41-50	41-50
22	Juglans nigra	walnut black	42	51-60	41-50
23	Juglans nigra	walnut black	40	51-60	41-50
24	Juglans nigra	walnut black	32	41-50	41-50

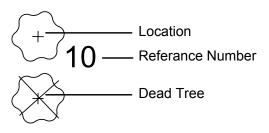
NOTE: These larger trees were located and identified. However, it was determined that none of these met two or more of the criteria to be classified as Monarch trees.

# MONARCH TREE LIST

Project Tree ID	Latin Name	Common Name	DBH	Condition
25	Quercus alba	White Oak	28	Monarch
26	Quercus alba	White Oak	28	Monarch
27	Quercus alba	White Oak	28	Monarch
28	Quercus alba	White Oak	28	Monarch
29	Quercus alba	White Oak	28	Monarch

ft.)	Condition	Number of Stems
	Dead (0)	1
	Poor (50-59)	1
	Fair (60-69)	
	Good (70-79)	1
	Good (70-79)	1
	Fair (60-69)	1
	Fair (60-69)	<b>Multiple Stems</b>
	Fair (60-69)	Multiple Stems
	Fair (60-69)	1
	Fair (60-69)	1
	Fair (60-69)	1
	Poor (50-59)	<b>Multiple Stems</b>
	Fair (60-69)	1
	Poor (50-59)	1
	Fair (60-69)	1
	Fair (60-69)	
	Critical (10-49)	1
	Critical (10-49)	1
	Dead (0)	1

LEGEND



# Tree Stand Delineation Narrative October 22, 2018

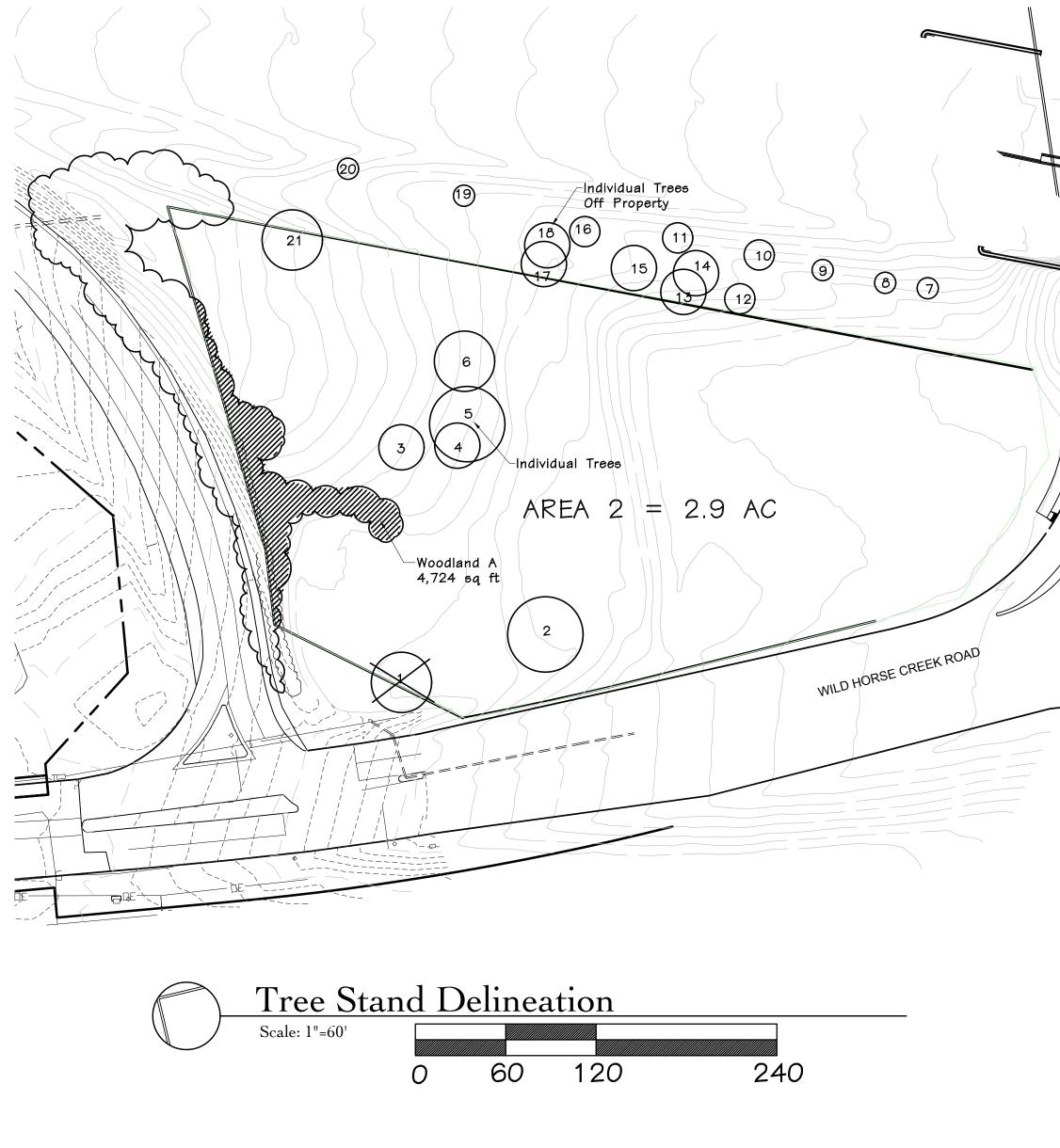
The overall properties comprises a total of 21.91 Ac and has a total of 4.5 AC. of Woodlands. The attached detailed Tree Stand Delineation map was completed by field inspection.

Woodland A : The Woodlands are second growth with scattered canopy trees that are 10-14" diameter and a dense understory of honeysuckle. Canopy species include walnut, elm, Honeylocust and black locust.

Woodland B : The Woodlands are scattered large canopy trees of White and Red oak that are 18-28" diameter. The understory is primarily Sugar Maple that are 3-8" diameter and honeysuckle.

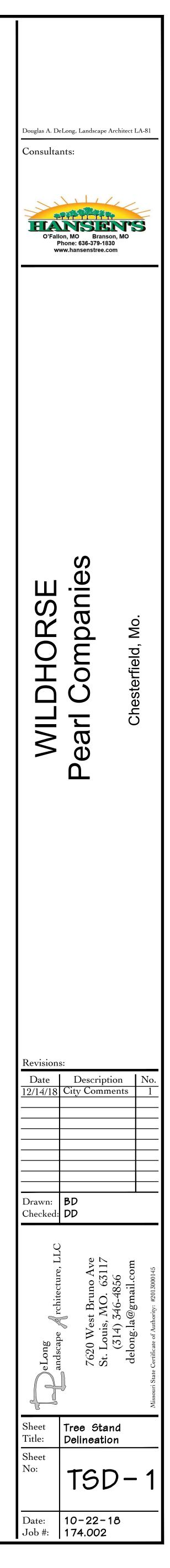
Wodland C : The Woodlands are second growth with scattered canopy trees that are 6-10" diameter and a dense understory of honeysuckle. Canopy species include sycamore, cottonwood, and black locust.

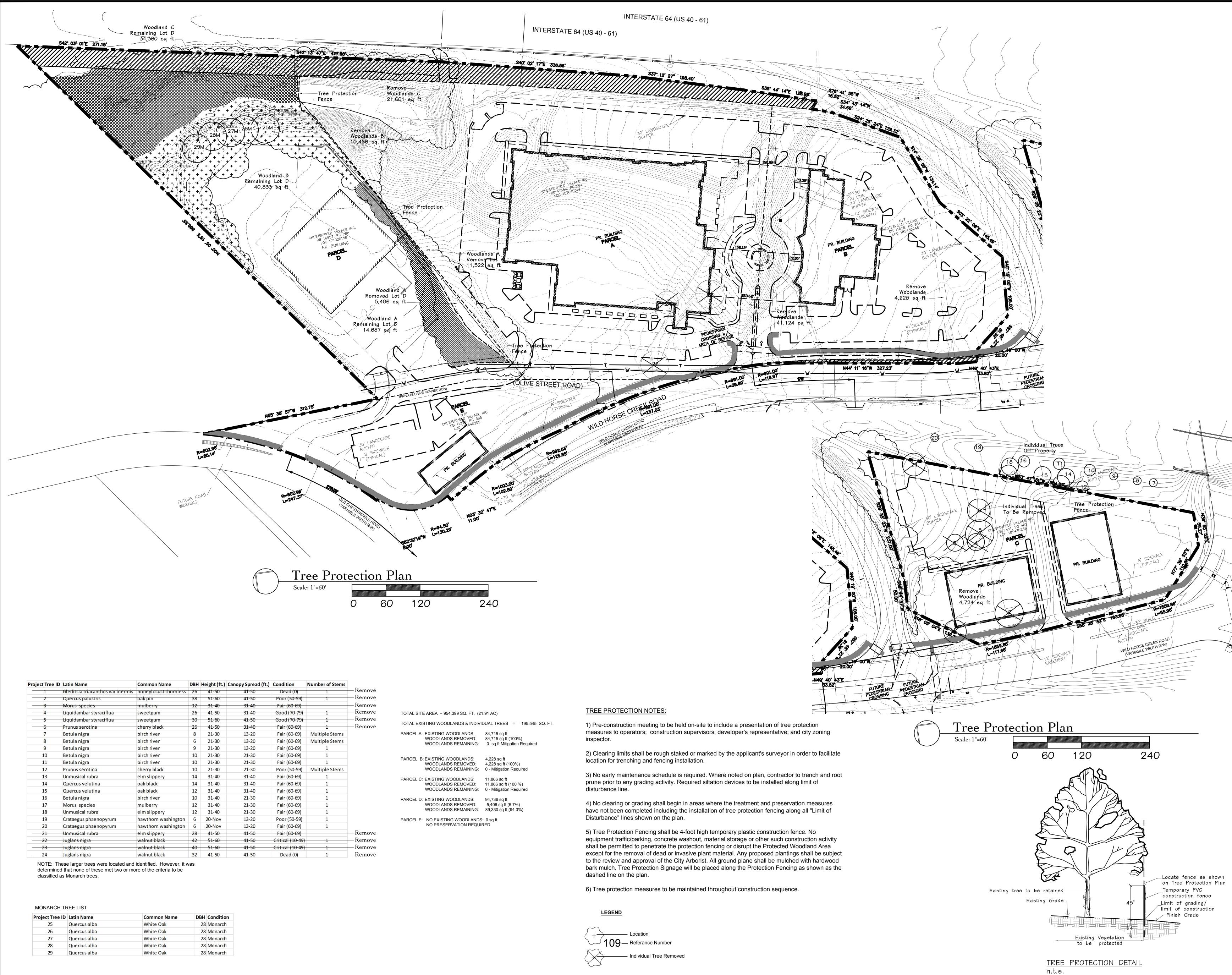
WOODLAND Area 1 = 4.2 Ac. (183,679 sq. ft.) Woodland A = 76,917 sq ft Woodland B = 50,799 sq ft Woodland C = 55,963 sq ft WOODLAND Area 2 = 0.1 Ac. ( 4,724 sq. ft.) INDIVIDUAL TREES = 0.2 Ac. (7,142 sq. ft.) Total Existing Canopy 4.5 Ac (195,545 sq. ft.)



Tree Stand Delineation Prepared under direction of Skip Kincaid of Hansen's Tree Service Certified Arborist MW-0155BW

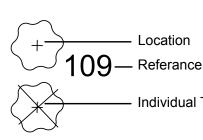


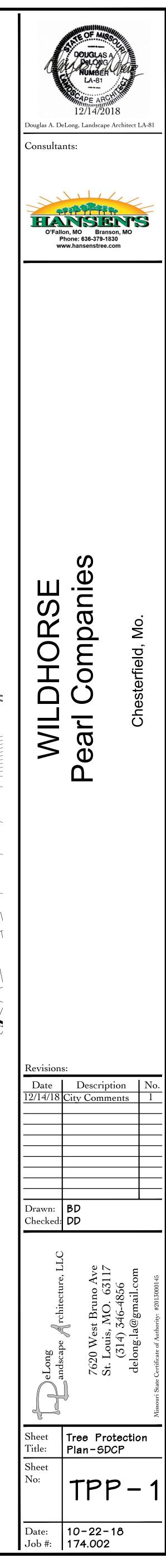




Project Tree ID	Latin Name	Common Name	DBH	Height (ft.)	Canopy Spread (ft.)	Condition	Number of Stems
	Gleditsia triacanthos var inermis	honeylocust thornless	26	41-50	41-50	Dead (0)	1
2	Quercus palustris	oak pin	38	51-60	41-50	Poor (50-59)	1
	Morus species	mulberry	12	31-40	31-40	Fair (60-69)	
4	Liquidambar styraciflua	sweetgum	26	41-50	31-40	Good (70-79)	1
	Liquidambar styraciflua	sweetgum	30	51-60	41-50	Good (70-79)	1
6	Prunus serotina	cherry black	26	41-50	31-40	Fair (60-69)	1
7	Betula nigra	birch river	8	21-30	13-20	Fair (60-69)	Multiple Stems
8	Betula nigra	birch river	6	21-30	13-20	Fair (60-69)	Multiple Stems
9	Betula nigra	birch river	9	21-30	13-20	Fair (60-69)	1
10	Betula nigra	birch river	10	21-30	21-30	Fair (60-69)	1
11	Betula nigra	birch river	10	21-30	21-30	Fair (60-69)	1
12	Prunus serotina	cherry black	10	21-30	21-30	Poor (50-59)	Multiple Stems
13	Unmusical rubra	elm slippery	14	31-40	31-40	Fair (60-69)	1
14	Quercus velutina	oak black	14	31-40	31-40	Fair (60-69)	1
15	Quercus velutina	oak black	12	31-40	31-40	Fair (60-69)	1
16	Betula nigra	birch river	10	31-40	21-30	Fair (60-69)	1
17	Morus species	mulberry	12	31-40	21-30	Fair (60-69)	1
18	Unmusical rubra	elm slippery	12	31-40	21-30	Fair (60-69)	1
19	Crataegus phaenopyrum	hawthorn washington	6	20-Nov	13-20	Poor (50-59)	1
20	Crataegus phaenopyrum	hawthorn washington	6	20-Nov	13-20	Fair (60-69)	1
	Unmusical rubra	elm slippery	28	41-50	41-50	Fair (60-69)	
	Juglans nigra	walnut black	42	<u>51-60</u>	41-50	Critical (10-49)	1
	Juglans nigra	walnut black	40	51-60	41-50	Critical (10-49)	1
	Juglans nigra	walnut black	32	41-50	41-50	Dead (0)	1

Project Tree ID	Latin Name	Common Name	DBH	Condition
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26	Quercus alba	White Oak	28	Monarch
27	Quercus alba	White Oak	28	Monarch
28	Quercus alba	White Oak	28	Monarch
29	Quercus alba	White Oak	28	Monarch







January 17, 2019

Joseph M. Knight City Planner **City of Chesterfield** 

# Re: Category Area C – Signage Concept Plan TR,i Project #: 18-030

To Whom it may concern,

Chesterfield's Unified Development Code requires the development team to submit a Signage Concept Plan for review and approval by the City of Chesterfield. The concepts proposed in this signage plan are intended to be utilized by neighboring Area C sites to promote a consistent approach to signage. It is our intent to create a high quality and unique development that enhances the Chesterfield community. There are two components to our approach to the Signage Concept Plan; building signage and site signage.

The building signage is generally being utilized by our commercial tenants having frontage along streets or internal drives. Our intent is to maintain the flexibility that the Chesterfield Sign Code provides these types of tenants. This flexibility is important to maintain parity with other developments in the marketplace when competing for tenants. All building signage will be constructed of quality industry standard materials and components consistent with the City sign ordinance.

The site signage has been designed to integrate into the landscape, as well as, relate to the building architecture. The dark metal utilized in the signs relates to the proposed building materials, while the use of random boulder bases ties the signage to the landscaping. This approach will aid in facilitating a unified approach to site signage of adjacent developments due to the emphasis on the landscaping rather than the building architecture, as design style is likely to change and evolve as sites are developed over time.

I trust this information meets your needs. Please advise if you have any questions or comments.

Respectfully,

Daniel Tate Senior Design Architect

City Planner City of Chesterfield Category Area C – Concept Signage Plan Page 2 January 18, 2019

# Section Area C – Signage Concept Plan

Signage for developments located in Section Area C are to comply with the following criteria and guidelines. Individual sign packages for each site development are to be submitted to the City of Chesterfield for approval.

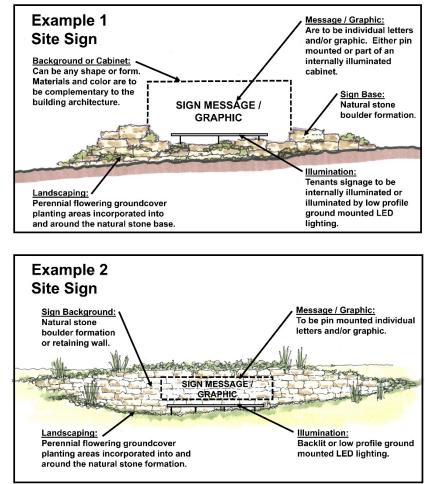
# Free Standing Site Signage

Free standing signs are to integrate into the landscape as a common theme throughout Area C. All free standing signs are to utilize large scale natural stone for the base of the sign, or as the background for the sign message. The sign background or cabinet can be any shape or form. The materials and color are to be complementary to the building architecture. The signage message and/or graphic are to be comprised of individual letters or symbols. All text and graphic are to be pin mounted to the sign background or be cut out letters and graphics in an opaque panel integral to the sign cabinet. A sign mounted to a background is to be either to be illuminated by ground mounted LED lighting or be backlit. Signage integral to a sign cabinet is to be internally illuminated. Reference example site sign 1 and 2 for clarification.

Landscaping is an important component of the site signage concept. Perennial flowering groundcover planting areas are to be incorporated into and around the base of each site sign to add color and texture. The types of groundcover planting selected are to be compatible for growth within the USDA Plant Hardiness Zones 6b and 7a. Suggested species of perennial groundcover are as follows by common name:

- Creeping Thyme
- Creeping Phlox
- Sedum
- Campaula Portenschlagiana
- Lamb's Ear
- Whitewell Gem Rock
   Cress

Planting and groundcover are not limited to the list above. All proposed signage landscaping will be review based on merit at the time of submission.



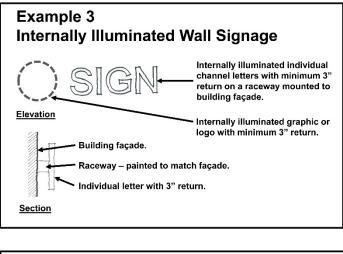
City Planner City of Chesterfield Category Area C – Concept Signage Plan Page 3 January 18, 2019

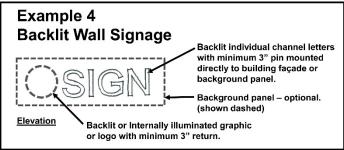
# Attached Wall Building Signage

Building wall signs are to be complementary to the building architecture. All wall signage will be constructed of quality industry standard materials and components consistent with the City sign ordinance.

Wall signs are to be internally illuminated individual letters with acrylic translucent face and 3" opaque return. An internally illuminated graphic or logo may be part of an individual tenant sign. Internally illuminated wall signs are to be mounted on a raceway, painted to match the building façade. Reference example 3 for internally illuminated wall signs.

Individual tenants or developments may choose to utilize backlit wall signage. Backlit wall signs are to be individual metal letters with a minimum 3" return. These signs are to be either pin mounted directly to the building façade or mounted to a background panel that is attached to the façade. An internally illuminated or backlit graphic or logo may be part of an individual tenant sign. Reference example 4 for backlit signs.





Cabinet signs and blade signs are allowed within Section Area C pending review and approval by the City of Chesterfield through the Concept Sign Package process. Unique design, superior quality and appropriateness of the proposed cabinet or blade sign will be the primary consideration.



# RIALTA<sup>®</sup> RT4xx

The **RIALTA® RT4xx** luminaire is a cylindrical, three legged, open cage ground mounted luminaire designed to bring ambiance to any project by providing a performance lighting package in a vertical form. The 8" cast aluminum cage cylinder adds a 12" high luminous element that adds visual interest by illuminating from the top casting and giving the effect of moon light from within its cage form. The RT4xx uses one round LED array configuration with a choice of Clear Acrylic or SV2 lens to deliver IES types 5, 4, 3, 3R and 2 distribution with high efficiency and low wattage consumption. A variety of LED color temperatures are available. A choice of several popular polyester powder coat colors are also available.



PROJECT:

B1

# ORDERING EXAMPLE: BL-RT442-26L45T5-MDL05-CA-FHD/UGMT

	RT4										
MOUNTING CONFIG.	SERIES	HEIGHT (H) IN.	NO. OF Leds	COLOR TEMP K	Distribution Type	DRIVER	LENS	CONTROLS	DUAL FUSE & HOLDER	COI	_OR
BL		36	26L	27(00) K	T2	MDL03	CA	ОРТ	IONS	UGMT	UGM
		42		35(00) K	Т3	MDL05	SV2	PEC	FHD	UBT	UB
	Post Top	48		45(00) K	T3R	MDH03		PEC4		ULBT	ULB
	Mounted				T4	MDH05				USLT	USL
	Luminaire				T5					UWHT	UWH
										UCHS	BKT

 $\mathbf{BL} = \mathbf{Bollard}$ 

# **Product Specs**

### **Optical**

- IP66 rated optic module.
- Available in IES Types 2, 3, 3R, 4 and 5 distribution.
- Utilizes high output, high brightness LEDs.
- -Minimum of 70 CRI, CCT 2700, 3500 and 4500K. Call factory for custom CCT.
- LM-79 and LM-80 tests in accordance with IESNA standards.
- Lumen depreciation rating L70>100,000 hrs. projected per TM-21 guideline using 525mA drive at 25°C ambient.
   RoHS Compliant.

# **Electrical**

- 120-277 volt and 347-480 volt available.
- Minimum drivers power factor: >0.9.
- Electrical surge protection in accordance with IEEE/ANSI C62.41.2 guidelines.
- UL listed in U.S. and Canada.

### Mechanical

- Cast aluminum heat sink, cylindrical lens and twist lock housing.
- Spun aluminum heat sink cover.
- Twist-lock housing installs on 8" OD welded tenon.
- Pole door driver access and removeable driver tray.

### Controls

- Supplied with dimmable driver.
- **PEC:** Optional electronic button photocell (120v-277v).
- **PEC4:** Optional electronic button photocell (480v).

### Finish

- Durable, color retentive powder coat finish.

# Warranty & Standards

LED Systems and Drivers - 7 years.

All fixtures shall be free from defects in materials and workmanship for a period of 7 years from the date of manufacture. The luminaire manufacturer shall warrant the LED boards/system, during the stated warranty period, against failure defined as more than 10 percent of non-operating LEDs.

# Housing

Housing shall consist of 0.188" wall extruded aluminum and A360 cast top and bottom lens retaining assemblies. Minimum height overall with shaft is 36".

# Drivers:

MDL03: 350mA, 120-277V MDL05: 525mA, 120-277V MDH03: 350mA, 347-480V MDH05: 525mA, 347-480V

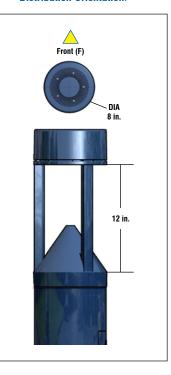
### Lens:

**CA** - Clear Flat Acrylic **SV2** - Flat heavy diffuse acrylic

### **Colors:**

UGMT - Urban Gun Metal Textured UBT - Urban Bronze Textured ULBT - Urban Light Bronze Textured USLT - Urban Silver Textured UWHT - Urban White Textured UCHS - Urban Champagne Satin Smooth UGM - Urban Gun Metal Matte UB - Urban Bronze Matte ULB - Urban Light Bronze Matte USL - Urban Silver Matte UWH - Urban White Matte BKT - Black Textured

# Distribution Orientation:



# Performance

MODEL #	T3 DELIVERED LUMENS	EFFICACY (LPW)	T3R DELIVERED LUMENS	EFFICACY (LPW)	T4 DELIVERED LUMENS	EFFICACY (LPW)	T5 DELIVERED LUMENS	EFFICACY (LPW)	WATTAGE
RT436CA-26L27TMD_03	1995	64.5	2130	68.8	2160	69.7	2095	67.6	31
RT436CA-26L35TMD_03	2280	73.6	2430	78.5	2465	79.6	2390	77.1	31
RT436CA-26L45TMD_03	2560	82.6	2735	88.2	2770	89.4	2685	86.7	31
RT436CA-26L27TMD_05	2825	60.2	3010	64.0	2955	62.9	2980	63.4	47
RT436CA-26L35TMD_05	3225	68.7	3435	73.1	3375	71.8	3400	72.4	47
RT436CA-26L45TMD_05	3625	77.1	3855	82.1	3790	80.7	3820	81.3	47

# **Product Dimensions and Features**



- 8"



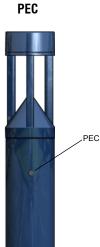


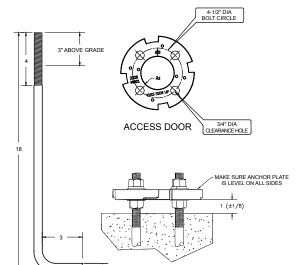


# **Options**

8

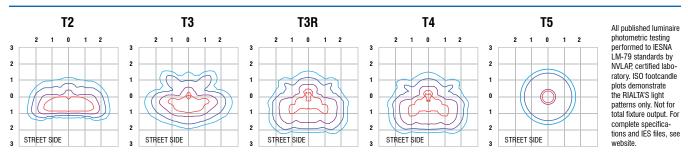
**Bolt Circle** 





5/8

# **ISO Footcandle Plots**

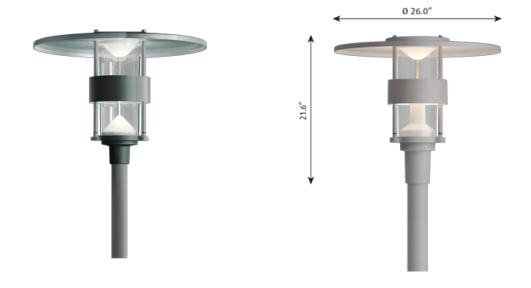




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D1 & D2

# Albertslund Mini Post



The design is based on an anti-glare ring, conical reflectors and a circular top shade, which serves as the primary reflector. Terse design Different colour variants. Part of a product family.

US: Mounting tenon of die-cast aluminum, 4mm (0.18") thickness for T-DRA-5"-3" or T-RSA-4.5" poles.

### Light description

The fixture emits symmetrical glare-free light directed downwards. The top shade helps direct the light downwards and prevent light from being emitted upwards. The white painted reflectors result in diffuse and comfortable light distribution. The reflector ring protects against direct glare and does also serves as a heat sink. Provides a high level of vertical light for people to feel safe and comfortable. Two LEDs ensures a good balance between the uplight and downlight. The fixture design is identifiable when the light is on. LED technology with more options of standard CCTs. Electronic dimmable driver

# Design

Jens Møller-Jensen

### Mounting

EU: Aluminium coloured with textured surface, graphite with textured surface or grey, powder coated. US: Aluminium coloured, grey, graphite grey, or white, powder coated. Top shade: High pressure moulded fiber glass, 3mm (0. 12") thick. Lower surfaces with high-reflectance white finish. Enclosure: Injection moulded clear polycarbonate, U. V. stabilized, 3mm (0. 12") thick. Heat sink: Die-cast aluminium, 6mm (0. 24") thicness typical, includes hidden fins for thermal transfer to atmosphere. Console: Die-cast aluminium, 3mm (0. 12") thick. Struts: Stainless steel. Inside reflectors of white polycarbonate, 2mm (0. 08") thick. Lower LED cover of opal polycarbonate, 2mm (0. 08") thick.

Weight Min: 22 lbs Max: 22 lbs

Finish Graph, Grey, Nat paint alu, Wht Finish

Graphite grey, grey, white or natural painted aluminum, powder coated.

### Materials

Top shade: Die formed fiber glass. Enclosure: Injection molded clear U.V. stabilized polycarbonate. Heat sink: Die cast aluminum. Base: Die cast aluminum. Struts: Aluminum.

**Mounting** Post top: Mounted on dual round aluminum (DRA) or round straight aluminum (RSA) pole.

# Sizes and weight

Width x Height x Length (in.) 26 x 19.3 x 26 Max 22.0 lbs

Compliance cULus, Wet location.

# **Specification notes**

a. Surge protector only available with T-RSA-4.5 transition to pole. b. Consult factory for product spefications for Photo Sensor and Wireless Control options.

Light source Light source 57W LED/3000K

Light source	Voltage frequency	Color	Class	Transition to pole	Lighting control	Variant number
42W LED/4000K	120-277V/60HZ	Graph	I/II	T-RSA-4.5 IN	DIM 0-10V	10000108764
57W LED/3000K	120-277V/60HZ	Graph	I/II	T-DRA-5 IN-3 IN	DIM 0-10V	10000108771
57W LED/3000K	120-277V/60HZ	Graph	I/II	T-RSA-4.5 IN	DIM 0-10V	10000108762
57W LED/3000K	120-277V/60HZ	Grey	I/II	T-DRA-5 IN-3 IN	DIM 0-10V	10000108773
57W LED/3000K	120-277V/60HZ	Grey	I/II	T-RSA-4.5 IN	DIM 0-10V	10000108765
57W LED/3000K	120-277V/60HZ	Nat paint alu	I/II	T-RSA-4.5 IN	DIM 0-10V	10000108760
57W LED/3000K	120-277V/60HZ	Nat paint alu	I/II	T-DRA-5 IN-3 IN	DIM 0-10V	10000108769
57W LED/3000K	120-277V/60HZ	Wht	I/II	T-DRA-5 IN-3 IN	DIM 0-10V	10000108775
57W LED/3000K	120-277V/60HZ	Wht	I/II	T-RSA-4.5 IN	DIM 0-10V	10000108767
57W LED/4000K	120-277V/60HZ	Graph	I/II	T-DRA-5 IN-3 IN	DIM 0-10V	10000108772
57W LED/4000K	120-277V/60HZ	Grey	I/II	T-DRA-5 IN-3 IN	DIM 0-10V	10000108774
57W LED/4000K	120-277V/60HZ	Grey	I/II	T-RSA-4.5 IN	DIM 0-10V	10000108766
57W LED/4000K	120-277V/60HZ	Nat paint alu	I/II	T-DRA-5 IN-3 IN	DIM 0-10V	10000108770
57W LED/4000K	120-277V/60HZ	Nat paint alu	I/II	T-RSA-4.5 IN	DIM 0-10V	10000108761
57W LED/4000K	120-277V/60HZ	Wht	1/11	T-DRA-5 IN-3 IN	DIM 0-10V	10000108776
57W LED/4000K	120-277V/60HZ	Wht	I/II	T-RSA-4.5 IN	DIM 0-10V	10000108768

# Spareparts & accessories

ALB. MINI, POLYCARBON. DIFF. 5747291096

#### DESCRIPTION

The Galleon<sup>™</sup> LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics<sup>™</sup> system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

# **McGraw-Edison**

Catalog #	GLEON-AF-01-LED-E1-SL3-HSS	Туре
Project		F2
Comments		Date
Prepared by		

#### SPECIFICATION FEATURES

### Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, diecast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

#### Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

# Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wve systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA. 800mA and 1200mA drive currents (nominal).

#### Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

#### Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

#### Warranty

Five-year warranty.

"B"

2

[51mm]

1-3/4"

[44mm]

DRILLING PATTERN

TYPE "N"



# **GLEON** GALLEON LED

1-10 Light Squares Solid State LED

#### **AREA/SITE LUMINAIRE**



CERTIFICATION DATA UL/cUL Wet Location Listed ISO 9001 LM79 / LM80 Compliant 3G Vibration Rated IP66 Rated DesignLights Consortium® Qualified\*

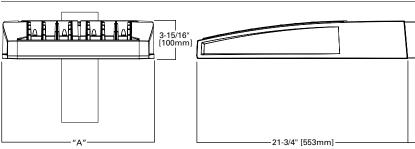
ENERGY DATA

Electronic LED Driver >0.9 Power Factor <20% Total Harmonic Distortion 120V-277V 50/60Hz 347V & 480V 60Hz -40°C Min. Temperature 40°C Max. Temperature 50°C Max. Temperature (HA Option)



#### TD500020EN November 30, 2018 2:24 PM

# DIMENSIONS



#### DIMENSION DATA

Number of Light Squares	"A" Width	"B″ Standard Arm Length	"B" Optional Arm Length <sup>1</sup>	Weight with Arm (Ibs.)	EPA with Arm ²(Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.



(2) 9/16" [14mm]

Diameter Holes

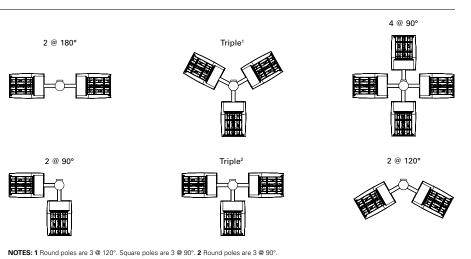
3/4" [19mm]

Diameter Hole

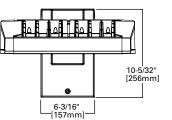
7/8" [22mm]

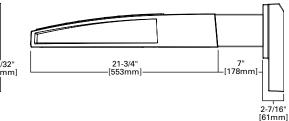
### ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AF-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AF-10	16" Extended Arm (Required)	16" Extended Arm (Required)

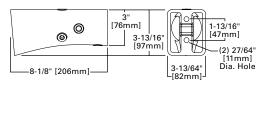


STANDARD WALL MOUNT

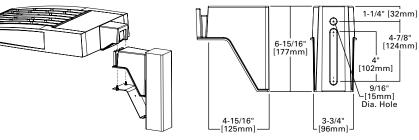




MAST ARM MOUNT



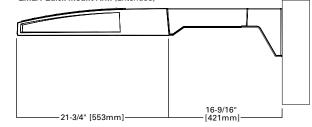
#### QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



QM Quick Mount Arm (Standard) 3-15/16" [100mm] "A" - 21-3/4" [553mm]–

QMEA Quick Mount Arm (Extended)

4-7/8" [124mm]



#### QUICK MOUNT ARM DATA

Number of Light Squares <sup>1, 2</sup>	"A" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	15-1/2" (394mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	
5-6 <sup>3</sup>	21-5/8" (549mm)	46 (20.91 kgs.)	49 (22.27 kgs.)	1.11
7-8	27-5/8" (702mm)	56 (25.45 kgs.)	59 (26.82 kgs.)	

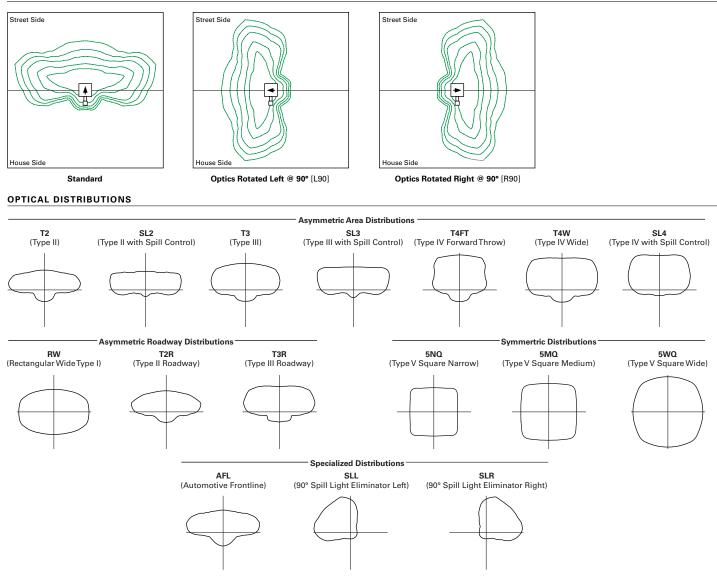
10-5/8" -[269mm]-

NOTES: 1 QM option available with 1-8 light square configurations. 2 QMEA option available with 1-6 light square configurations. 3 QMEA arm to be used when mounting two fixtures at 90° on a single pole.



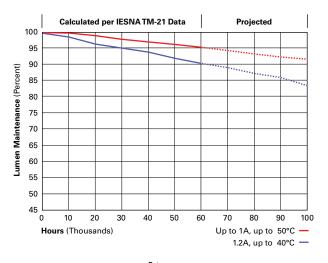
Specifications and dimensions subject to change without notice.

### OPTIC ORIENTATION



#### LUMEN MAINTENANCE

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)	
Up to 1A	Up to 50°C	> 95%	416,000	
1.2A	Up to 40°C	> 90%	205,000	



#### LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97



Eaton 1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800 www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

TD500020EN November 30, 2018 2:24 PM

# NOMINAL POWER LUMENS (1.2A)

Number o	of Light Squares	1	2	3	4	5	6	7	8	9	10
Nominal F	Power (Watts)	67	129	191	258	320	382	448	511	575	640
Input Curi	rent @ 120V (A)	0.58	1.16	1.78	2.31	2.94	3.56	4.09	4.71	5.34	5.87
Input Curi	rent @ 208V (A)	0.33	0.63	0.93	1.27	1.57	1.87	2.22	2.52	2.8	3.14
Input Curi	rent @ 240V (A)	0.29	0.55	0.80	1.10	1.35	1.61	1.93	2.18	2.41	2.71
Input Curi	rent @ 277V (A)	0.25	0.48	0.70	0.96	1.18	1.39	1.69	1.90	2.09	2.36
Input Curi	rent @ 347V (A)	0.20	0.39	0.57	0.78	0.96	1.15	1.36	1.54	1.72	1.92
Input Curi	rent @ 480V (A)	0.15	0.30	0.43	0.60	0.73	0.85	1.03	1.16	1.28	1.45
Optics		l	l	I	I	l					
	4000K/5000K Lumens	6,709	13,111	19,562	25,848	32,026	38,325	45,324	51,355	57,286	63,424
T2	3000K Lumens	5,939	11,606	17,316	22,881	28,349	33,925	40,121	45,459	50,710	56,143
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	7,122	13,919	20,769	27,442	34,000	40,687	48,117	54,519	60,816	67,333
T2R	3000K Lumens	5,939	11,606	17,316	22,881	28,349	33,925	40,121	45,459	50,710	56,143
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,838	13,363	19,939	26,346	32,642	39,062	46,196	52,343	58,388	64,646
тз	3000K Lumens	6,053	11,829	17,650	23,321	28,895	34,578	40,893	46,334	51,685	57,225
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,990	13,660	20,382	26,931	33,368	39,930	47,223	53,506	59,686	66,081
T3R	3000K Lumens	6,188	12,092	18,042	23,839	29,537	35,346	41,802	47,364	52,834	58,495
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,878	13,440	20,055	26,499	32,832	39,289	46,464	52,646	58,726	65,020
T4FT	3000K Lumens	6,088	11,897	17,753	23,457	29,063	34,779	41,130	46,602	51,984	57,556
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,789	13,267	19,795	26,156	32,408	38,781	45,864	51,967	57,968	64,180
T4W	3000K Lumens	6,010	11,744	17,523	23,153	28,688	34,329	40,599	46,001	51,313	56,812
1400	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,697	13,088	19,529	25,804	31,970	38,259	45,245	51,267	57,186	63,315
SL2	3000K Lumens	5,928	11,585	17,287	22,842	28,300	33,867	40,051	45,382	50,621	56,046
312	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	40,051 B4-U0-G5	43,382 B4-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,837	13,361		26,342	32,639	39,057	46,189	52,336	58,380	64,636
SL3		6,052	11,827	19,936 17,647	23,318	28,892	39,057	40,189	46,328		57,216
313	3000K Lumens	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	40,887 B3-U0-G5	40,328 B4-U0-G5	51,678 B4-U0-G5	B4-U0-G5
	BUG Rating										
014	4000K/5000K Lumens	6,496	12,695	18,943	25,029	31,011	37,110	43,886	49,727	55,470	61,414
SL4	3000K Lumens	5,750	11,238	16,768	22,156	27,451	32,850	38,848	44,018	49,102	54,364
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	4000K/5000K Lumens	7,052	13,781	20,564	27,171	33,664	40,285	47,641	53,981	60,215	66,669
5NQ	3000K Lumens	6,242	12,199	18,203	24,052	29,799	35,660	42,172	47,784	53,302	59,015
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	4000K/5000K Lumens	7,182	14,034	20,942	27,671	34,284	41,027	48,518	54,975	61,323	67,896
5MQ	3000K Lumens	6,358	12,423	18,538	24,494	30,348	36,317	42,948	48,664	54,283	60,102
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	4000K/5000K Lumens	7,201	14,073	20,998	27,744	34,375	41,136	48,648	55,121	61,487	68,077
5WQ	3000K Lumens	6,374	12,457	18,587	24,559	30,429	36,414	43,063	48,793	54,428	60,262
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	4000K/5000K Lumens	6,009	11,741	17,519	23,148	28,681	34,321	40,589	45,990	51,301	56,798
SLL/SLR	3000K Lumens	5,319	10,393	15,508	20,491	25,388	30,381	35,929	40,710	45,412	50,278
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,989	13,657	20,378	26,925	33,360	39,921	47,211	53,494	59,672	66,066
RW	3000K Lumens	6,187	12,089	18,039	23,834	29,530	35,338	41,791	47,353	52,822	58,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
	4000K/5000K Lumens	7,014	13,706	20,452	27,023	33,481	40,066	47,383	53,688	59,888	66,306
AFL	3000K Lumens	6,209	12,133	18,104	23,921	29,637	35,466	41,943	47,525	53,013	58,694
		B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4



# NOMINAL POWER LUMENS (1A)

Number o	f Light Squares	1	2	3	4	5	6	7	8	9	10
	Power (Watts)	59	113	166	225	279	333	391	445	501	558
	rent @ 120V (A)	0.51	1.02	1.53	2.03	2.55	3.06	3.56	4.08	4.6	5.07
-	rent @ 208V (A)	0.29	0.56	0.82	1.11	1.37	1.64	1.93	2.19	2.46	2.75
-	rent @ 240V (A)	0.26	0.48	0.71	0.96	1.19	1.41	1.67	1.89	2.12	2.39
-	rent @ 277V (A)	0.23	0.40	0.61	0.83	1.03	1.23	1.45	1.65	1.84	2.09
-	rent @ 347V (A)	0.17	0.32	0.50	0.64	0.82	1.00	1.14	1.32	1.50	1.68
-	rent @ 480V (A)	0.14	0.24	0.37	0.48	0.61	0.75	0.91	0.99	1.12	1.28
Optics		0.14	0.24	0.07	0.40	0.01	0.70	0.01	0.00	1.12	1.20
0000	4000K/5000K Lumens	6,116	11,951	17,833	23,563	29,195	34,937	41,317	46,814	52,221	57,817
T2	3000K Lumens	5,414	10,579	15,786	20,858	25,843	30,926	36,574	41,440	46,226	51,180
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,493	12,688	18,932	25,015	30,994	37,090	43,863	49,699	55,439	61,380
T2R	3000K Lumens	5,748	11,231	16,759	22,143	27,436	32,832	38,828	43,994	49,075	54,334
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,234	12,181	18,176	24,017	29,756	35,609	42,111	47,715	53,225	58,930
тз	3000K Lumens	5,518	10,783	16,089	21,260	26,340	31,521	37,277	42,237	47,115	52,165
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	42,237 B4-U0-G5	47,115 B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,372	12,453	18,580	24,550	30,418	36,400	43,048	48,776	54,409	60,239
T3R	3000K Lumens	5,640	12,453	16,447	24,550	26,926	32,221	38,106	43,177	48,163	53,324
1311	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,270	12,252	18,282	24,156	29,929	35,815	42,356	47,992	53,534	59,271
T4FT	3000K Lumens	5,550	10,845	16,183	24,150	26,493	31,703	37,494	42,483	47,388	52,467
1461	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	42,483 B3-U0-G5	47,388 B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,189	12,094	18,045	23,844	29,543	35,352	41,809	47,372	52,843	58,506
T4W	3000K Lumens	5,479	12,094	15,973	23,844	29,543	31,294	37,009	41,934	46,777	51,790
1400	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	4000K/5000K Lumens	6,105	11,931	17,803	23,522	29,144	34,877	41,245	46,734	52,130	57,717
SL2	3000K Lumens	5,404	10,561	15,759	20,822	25,798	30,873	36,510	40,734	46,145	51,091
312		5,404 B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	84-U0-G5	B4-U0-G5
	BUG Rating 4000K/5000K Lumens	6,233		18,174		29,753	35,604	42,106	47,708		
SL3	3000K Lumens		12,180 10,782	16,088	24,013	29,755	31,517	37,272	47,708	53,218	58,921
313		5,517 B1-U0-G2	B2-U0-G3	B2-U0-G3	21,256 B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	42,231 B3-U0-G5	47,109 B4-U0-G5	52,157 B4-U0-G5
	BUG Rating 4000K/5000K Lumens	5,922	11,572	17,268	22,816	28,269	33,829	40,006	45,330	50,566	55,984
SL4	3000K Lumens	5,922	10,244	15,286	22,818	25,024	29,945	35,413	40,126	44,761	49,557
314			B1-U0-G3							B3-U0-G5	
	BUG Rating	B1-U0-G2		B2-U0-G3	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5		B3-U0-G5
5NQ	4000K/5000K Lumens 3000K Lumens	6,429 5,691	12,563 11,121	18,746 16,594	24,768 21,925	30,688 27,165	36,723 32,507	43,429 38,443	49,208 43,559	54,891 48,590	60,775 53,798
5110	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	4000K/5000K Lumens	6,547	12,794	19,090	25,224	31,253	37,400	44,228	50,114	55,902	61,893
5MQ	3000K Lumens	5,795	11,325	16,898	22,328	27,665	33,106	39,151	44,361	49,484	54,788
51112	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	4000K/5000K Lumens	6,564	12,828	19,141	25,291	31,336	37,499	44,347	50,248	56,051	62,058
5WQ	3000K Lumens	5,810	12,828	16,944	23,291	27,739	37,499	39,256	44,480	49,616	54,934
5112	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	4000K/5000K Lumens	5,478	10,703	15,970	21,102	26,145	31,286	37,001	41,924	46,765	51,777
SLL/SLR	3000K Lumens	4,849	9,474	14,137	18,679	23,145	27,694	32,753	37,111	40,705	45,833
JLL/JLN	BUG Rating	4,849 B1-U0-G2	9,474 B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	45,833 B3-U0-G5
	4000K/5000K Lumens	6,371	12,449	18,576	24,544	30,411	36,392	43,037	48,764	54,396	60,225
RW	3000K Lumens	5,640	12,449	16,443	24,544	26,920	32,214	38,096	43,166	48,151	53,311
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	4000K/5000K Lumens	6,394	12,494	18,644	24,634	30,521	36,524	43,194	48,942	54,593	60,444
AFL	3000K Lumens	5,660	12,494	16,504	24,634	27,017	30,524	38,235	48,942	48,326	53,505
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	38,235 B3-U0-G3	43,323 B3-U0-G3	48,326 B4-U0-G4	B4-U0-G4
	Bod nating	B1-00-G1	B2-00-G2	B2-00-G2	B3-00-G2	53-00-63	03-00-03	60-00-63	53-00-63	54-00-64	D4-00-G4



# NOMINAL POWER LUMENS (800MA)

4000K/5000K Lumens         5,246         10,251         15,290         20,211         25,041         29,066         35,439         40,184         44,711         49,592           3000K Lumens         4,644         3,074         13,400         12,819         22,166         25,526         33,71         35,544         39,049         43,889           3000K Lumens         4,649         8,10-62         82-0-63         83-0-63         83-0-63         83-0-63         83-0-63         83-0-63         83-0-63         83-0-63         83-0-64							_					
Importance + 2207 (A)         0.33         0.77         1.13         1.54         1.53         2.20         2.47         3.23         3.39         3.39           Importane-ret # 2007 (A)         0.37         0.44         0.87         0.88         1.56         1.16         1.57         1.61         1.27         2.77           Importane-ret # 207 (A)         0.77         0.38         0.38         0.48         0.40         0.40         0.50         1.10         1.30         1.42         1.17           Importane-ret # 207 (A)         0.57         0.44         0.80         0.40         0.80         0.59         0.31         1.12         1.12           Importane-ret # 207 (A)         0.57         0.44         0.80         0.408         0.808         2.208         2.22.27         2.3.28         2.7.22         4.2.31         4.2.17           2000 Lumma         4.544         0.571         1.534         1.581         1.581         1.581         1.581         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541         3.541 <th></th> <th></th> <th></th> <th></th> <th> </th> <th></th> <th></th> <th>-</th> <th></th> <th>-</th> <th></th> <th></th>								-		-		
peq Let with a set of the set												
Ipper Current # 247V (A)         0.19         0.39         0.36         0.37         0.32         0.34         0.37         0.39         0.36         1.19         1.31         1.42         1.37           Input Current # 049V (A)         0.10         0.20         0.32         0.37         0.48         0.68         0.77         0.68         0.77         0.68         0.87           Statistic Murrent # 049V (A)         0.10         0.85         0.44         0.68         0.68         0.77         0.68         0.88           Statistic Murrent # 049V (A)         0.10         0.856         14.40         10.08         2.5588         2.627         3.532         3.743         4.747         4.757           Mode School Lumons         4.44         0.757         17.78         2.568         3.810-63         8.340-64         8.737         4.737         4.739         4.807           Mode School Lumons         5.444         10.71         15.546         12.71         2.564         3.717         5.546         3.713         5.554         3.737         3.454         4.809         4.206           Mode School Lumons         4.444         5.77         1.683         8.50-64         8.50-64         8.50-64         8.50-64	-											
Instr         TYY (A)         0.57         0.58         0.47         0.87         0.88         0.97         0.58         1.19         1.13         1.42         1.57           Instr Currer # 07V (A)         0.51         0.18         0.23         0.40         0.58         0.57         0.58         0.57         0.58         0.57         0.58         0.57         0.58         0.59         0	-											
Impact Server 4 897 (A)         0.15         0.24         0.33         0.48         0.53         0.77         0.87         1.07         0.87         0.80           Imate Server         4.0005 (Scook Lumes)         4.44         9.680         1.72         0.88         0.77         0.88         0.80           Stop Server         5.000 Server         5	-											
hptpt Current # 489V [A]0.110.880.290.370.480.590.660.770.880.56OpticT23000K lumont4.9419.06614.40919.0387.3.6897.3.6897.3.6877.3.8377.7.824.7.1114.0.7133000K lumont4.9410.06610.0268.1.00 C48.1.00 C4 <td>-</td> <td></td>	-											
Option         Addit Model Lummen         4.91         9.666         14.408         19.898         23.688         23.688         23.382         23.888         23.382         23.888         23.382         23.888         23.382         23.888         23.382         23.888         23.382         23.888         23.382         23.888         23.382         23.888         23.382         23.888         23.382         23.888         23.382         23.888         23.382         23.888         23.332         43.184         44.14         44.731         44.589           3000K Lummer         4.644         8.071         13.540         17.261         22.166         28.3926         31.371         35.544         39.046         43.048         43.048         43.048         43.048         43.048         43.048         43.048         43.048         43.048 <t< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td>0.63</td><td></td><td></td><td></td><td></td><td></td></t<>	-						0.63					
4000K 5000K Lumenie         4,641         9,858         14,469         19,039         23,588         28,227         33,382         27,823         42,191         46,713           3000K Lumenie         4,374         6,874         12,764         16,852         20,858         28,497         23,582         23,481         37,347         41,350           4000K M000K Lumma         5,464         19,274         15,598         72,011         25,041         29,366         39,349         40,114         44,471         43,599           3000K Lumma         5,464         19,224         15,490         72,821         22,166         29,126         83,10-64         83,10-65         83,10-64         83,10-64         83,10-64         83,10-65         83,10-65         83,10-65         83,10-65         83,10-65         83,10-65         83,10-65         83,10-65         83,10-65         83,10-65	Input Curr	ent @ 480V (A)	0.11	0.18	0.29	0.37	0.48	0.59	0.66	0.77	0.88	0.96
1         1	Optics	1		1	1	1	1	1		r	1	
bitB		4000K/5000K Lumens	4,941	9,656	14,408	19,038	23,588	28,227	33,382	37,823	42,191	46,713
4000K5000K Lumens         6.240         10.251         15.296         20.211         26.041         29.860         8.4,89         40.64         44.791         46.852           3000K Lumens         4.644         0,704         15.340         77.80         22.666         26.523         15.71         35.644         38.940         48.950           13         4000K5000K Lumens         5.07         8.842         14.685         16.404         29.1071         25.043         35.0404         38.910-6         38.910-6         38.910-6         38.910-6         38.910-6         38.910-6         38.910-6         8.910-6	T2	3000K Lumens	4,374	8,547	12,754	16,852	20,880	24,987	29,550	33,481	37,347	41,350
bit         bit<         bit<         bit<         bit<		BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5
Buß Ann,         Bul-ue         Bul-u		4000K/5000K Lumens	5,246	10,251	15,296	20,211	25,041	29,966	35,439	40,154	44,791	49,592
4000K/5000K Lumens         5,037         8,842         14,685         19,404         24,041         28,770         34,024         38,551         43,003         47,612           3000K Lumens         4,489         8,772         12,989         17,176         21,281         25,467         30,106         38,10-05         83,10-05 <td< td=""><td>T2R</td><td>3000K Lumens</td><td>4,644</td><td>9,074</td><td>13,540</td><td>17,891</td><td>22,166</td><td>26,526</td><td>31,371</td><td>35,544</td><td>39,649</td><td>43,899</td></td<>	T2R	3000K Lumens	4,644	9,074	13,540	17,891	22,166	26,526	31,371	35,544	39,649	43,899
101000 Lunem4.4.594.7.1012.9.9917.109.7.1		BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
Image         Image <th< td=""><td></td><td>4000K/5000K Lumens</td><td>5,037</td><td>9,842</td><td>14,685</td><td>19,404</td><td>24,041</td><td>28,770</td><td>34,024</td><td>38,551</td><td>43,003</td><td>47,612</td></th<>		4000K/5000K Lumens	5,037	9,842	14,685	19,404	24,041	28,770	34,024	38,551	43,003	47,612
400K/500KLumen         5.148         10.061         15.011         19.835         24,576         29,049         34,780         39,478         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,781         49,771         15,781         20,701         45,714         49,703         49,781	Т3	3000K Lumens	4,459	8,712	12,999	17,176	21,281	25,467	30,118	34,125	38,066	42,146
B00K Lumen         4,557         8,969         13,280         17,580         21,755         26,033         30,797         48,484         38,391         43,302           B00K Lumen         61,050         18-10-02		BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
BUG RatingB1-Uo-GB1-Uo-GB2-Uo-GB2-Uo-GB3-Uo-GB3-Uo-GB3-Uo-GB3-Uo-GB3-Uo-GB3-Uo-GA000K 5000 K LumensJ.4.84B.7.00B.7.0011,77011,570Z.1.00Z.5.0130.2.031,27032,37332,37332,37332,37332,37332,37332,37332,37332,37332,37332,37342,89442,393A000K 5000 K LumensG.1000B1-Uo-GB1-Uo-GB1-Uo-GB1-Uo-GB1-Uo-GB1-Uo-GB1-Uo-GB1-Uo-GB1-Uo-GB1-Uo-GB1-Uo-GB1-UO-G<		4000K/5000K Lumens	5,148	10,061	15,011	19,835	24,576	29,409	34,780	39,408	43,959	48,669
4000K/500K Lumens         5.060         9.899         14.707         19.516         24.111         28.305         34.221         38.774         43.282         47.888           74FT         3000K Lumens         4.444         8.783         13.074         17.276         21.405         25.614         30.292         34.333         38.287         42.389           8UG Rating         B1-U0-C2         B1-U0-C2         B1-U0-C2         B2-U0-C3         B2-U0-C4         B3-U0-C4         B3-U0-C4         B3-U0-C4         B3-U0-C4         B3-U0-C4         B3-U0-C4         B3-U0-C4         B3-U0-C4         B3-U0-C4         B3-U0-C5         B3-U0-C4         A3.773         41.843           1000 K5000K Lumens         4.420         B2-U0-C2         B2-U0-C3         B3-U0-C4         B3-U0-C4         B3-U0-C4         B3-U0-C5         B3-U0-C5         B4-U0-C5	T3R	3000K Lumens	4,557	8,906	13,288	17,558	21,755	26,033	30,787	34,884	38,913	43,082
T4F3000Lumen4.4.406.4.6013.0.4013.0.4017.0.7021.0.4083		BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
BUG RatingB1:Uo:QB1:Uo:QB2:Uo:QB2:Uo:QB2:Uo:QB3:UO:QB3:UO:QB3:UO <q< th="">B3:UO<q< td="" th<=""><td></td><td>4000K/5000K Lumens</td><td>5,066</td><td>9,899</td><td>14,770</td><td>19,516</td><td>24,181</td><td>28,936</td><td>34,221</td><td>38,774</td><td>43,252</td><td>47,888</td></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<></q<>		4000K/5000K Lumens	5,066	9,899	14,770	19,516	24,181	28,936	34,221	38,774	43,252	47,888
4000K/5000Klumens5.0009.77114.57919.24423.86928.56233.77938.27442.89447.289TMW3000Klumens4.4268.64912.90517.05221.12925.28329.90133.80037.79341.843BUG RatingB1-U-G2B2-U-G2B2-U-G2B2-U-G3B3-U-G4B3-U-G4B3-U-G4B3-U-G5B3-U-G5B4-U-G5B4-U-G5S124000K/5000Klumens4.3339.63914.38319.00523.54728.17833.32437.78342.18446.83BUG RatingB1-U-G2B2-U-G2B2-U-G3B3-U-G3B3-U-G3B3-U-G4B3-U-G4B3-U-G5B4-U-G5B4-U-G5BUG RatingB1-U-G2B2-U-G2B2-U-G3B3-U-G3B3-U-G3B3-U-G4B3-U-G4B3-U-G4B3-U-G5B4-U-G5B4-U-G5MOK/5000Klumens5.0369.84114.68319.40124.03928.7643.01138.64442.99747.605S13B00K S000Klumens4.789B1-U-G2B1-U-G3B2-U-G4B3-U-G4B3-U-G4B3-U-G5<	T4FT	3000K Lumens	4,484	8,763	13,074	17,276	21,405	25,614	30,292	34,323	38,287	42,390
TAWe300K Lumens4.42e8.48e12.90c12.90c21.12921.20229.20c.381.00-6483.00-6483.00-6483.00-6683.00-6583.00		BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
HereBud RatingBud WeigBud Weig<		4000K/5000K Lumens	5,000	9,771	14,579	19,264	23,869	28,562	33,779	38,274	42,694	47,269
4000K/5000K Lumens4.9339.63914.38319.00523.54728.17833.24337.75842.11846.632SL23000K Lumens4.3678.53212.7216.82320.84424.94329.49833.42337.28341.719BLG Rating81-Uo-C2B2-Uo-C2B2-Uo-C3B2-Uo-C3B3-Uo-C3B3-Uo-C4B3-Uo-C4B3-Uo-C4B3-Uo-C5B4-Uo-C5B4-Uo-C5A000K/5000K Lumens4.4588.71112.97727.73427.87633.62438.54642.71738.64642.99747.876BUG RatingB1-Uo-C2B1-U0-C2B2-U0-C3B2-U0-C3B2-U0-C3B2-U0-C3B3-U0-C4B3-U0-C4B3-U0-C5	T4W	3000K Lumens	4,426	8,649	12,905	17,052	21,129	25,283	29,901	33,880	37,793	41,843
SL2300K Lumens4,3678,56217,73216,82320,84424,94329,94833,42537,28341,737BUG Rating81-U0-C282-U0-C382-U0-C383-U0-C383-U0-C383-U0-C483-U0-C483-U0-C483-U0-C584-		BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
HereBer ConstraintBer Constraint </td <td></td> <td>4000K/5000K Lumens</td> <td>4,933</td> <td>9,639</td> <td>14,383</td> <td>19,005</td> <td>23,547</td> <td>28,178</td> <td>33,324</td> <td>37,758</td> <td>42,118</td> <td>46,632</td>		4000K/5000K Lumens	4,933	9,639	14,383	19,005	23,547	28,178	33,324	37,758	42,118	46,632
A000K/500K Lumens5,0369,84114,68319,40124,03928,76634,01938,54642,99747,665SL3300K Lumens4,4588,71112,97717,17421,27925,46430,11434,12138,06142,140BUG RatingB1-U-G2B1-U-G2B2-U-G3B2-U-G3B3-U-G4B3-U-G4B3-U-G4B3-U-G5B3-U-G5B3-U-G5B3-U-G447,297SL43000K Lumens4,7849,35013,95118,43422,84027,32332,22336,62440,85440,054BUG RatingB1-U-G2B1-U-G3B1-U-G312,34916,31822,04022,37232,22336,62440,85440,054M00K/5000K Lumens51,14015,15420,01422,16422,16682,U-G583,U-G583,U-G583,U-G583,U-G583,U-G584,34949,102M00K/5000K Lumens51,90411,05015,15420,01421,94429,67035,08839,75744,34949,102M00K/5000K Lumens51,90413,05013,05017,71421,94826,26431,06035,19339,25843,455M00K S5000K Lumens5,29010,33715,42420,38025,25030,21735,73440,48945,16550,006M00K S5000K Lumens5,30413,05013,65014,04025,25630,21735,73440,58744,26550,198M00K S5000K Lumens5,30413,05014,65624,44<	SL2	3000K Lumens	4,367	8,532	12,732	16,823	20,844	24,943	29,498	33,423	37,283	41,279
SLA300K Lumens4.4588,71112.99717.17421.27925.46430.11434.12138.06142.10BG RatingB1-0-G2B1-0-G2B2-0-G3B2-0-G3B3-0-GB3-0-		BUG Rating		B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
SLA300K Lumens4.4588,71112.99717.17421.27925.46430.11434.12138.06142.10BG RatingB1-0-G2B1-0-G2B2-0-G3B2-0-G3B3-0-GB3-0-		4000K/5000K Lumens	5,036	9,841	14,683	19,401	24,039	28,766	34,019	38,546	42,997	47,605
BUG RatingB1-U0-C2B1-U0-C2B2-U0-C3B2-U0-C3B3-U0-C4B3-U0-C4B3-U0-C5B3-U0	SL3	3000K Lumens					21,279					
A000K/500K Lumens4.7849.35013.95118.43422.84027.32232.32336.62440.85445.232SLA3000K Lumens4.2358.27712.34916.31820.21824.19428.61232.42036.64440.039BUG RatingB1-U0-G2B1-U0-G3B1-U0-G3B1-U0-G3B2-U0-G4B2-U0-G4B2-U0-G5B2-U0-G5B3-U0-		BUG Rating										B3-U0-G5
SL43000K Lumens4,2558,27712,34916,31820,21824,19426,61232,42036,16440,039BUG RatingB1-UG-G2B1-UG-G2B1-UG-G3B1-UG-G3B2-UG-G4B2-UG-G4B2-UG-G5B3		-				18,434						
BUG RatingB1-U0-G2B1-U0-G3B1-U0-G3B2-U0-G4B2-U0-G4B2-U0-G5B2-U0-G5B3-U0	SL4											
4000K/5000K Lumens5,19410,15015,14520,01124,79429,67035,08839,75744,3949,1025NQ3000K Lumens4,5988,98513,40617,71421,94826,26431,00035,19339,25843,465BUG RatingB2-U0-C1B3-U0-C1B3-U0-C2B4-U0-C2B4-U0-C2B5-U0-C2B5-U0-C3B5-U0												
SNQ300K Lumens4,5986,98513,40617,71421,94826,26431,06035,19339,25843,465BG Rating82-U0-GI83-U0-GI83-U0-GI84-U0-CI84-U0-CI85-U0-GI85-U												
BUG RatingB2-U0-citB3-U0-citB3-U0-citB4-U0-citB4-U0-citB5-U0-cit <td>5NO</td> <td></td>	5NO											
4000K/5000K Lumens         5,290         10,337         15,424         20,380         25,250         30,217         35,734         40,489         45,165         50,006           5M0         3000K Lumens         4,683         9,150         13,653         18,040         22,351         26,748         31,632         35,841         39,980         44,265           BUG Rating         B3-U0-G1         B3-U0-G2         B4-U0-G2         B4-U0-G2         B5-U0-G3         B5-U0-G3         B5-U0-G3         B5-U0-G4	51442											
SMQ300K Lumens4,6839,15013,65318,04022,35126,74831,62035,84139,80044,265BUG RatingB3-UGB3-UGB4-UGB4-UGB5		-										
BUG Rating         B3-U0-GI         B3-U0-GI         B4-U0-GI         B4-U0-GI         B5-U0-GI	EMO											
4000K/5000K Lumens         5,304         10,365         15,465         20,434         25,318         30,297         35,830         40,597         45,286         50,139           5WQ         3000K Lumens         4,695         9,175         13,690         18,088         22,411         26,819         31,717         35,936         40,087         44,383           BUG Rating         B3-U0-G1         B4-U0-G2         B4-U0-G2         B5-U0-G3         B5-U0-G3         B5-U0-G4         B3-U0-G4	510102											
SWQ $300K Lumens$ $4,695$ $9,175$ $13,690$ $18,088$ $22,411$ $26,819$ $31,717$ $35,936$ $40,087$ $44,383$ BUG Rating $B3-U0-G1$ $B4-U0-G2$ $B4-U0-G2$ $B5-U0-G3$ $B5-U0-G3$ $B5-U0-G4$ <td></td> <td>-</td> <td></td>		-										
BUG Rating         B3-U0-G1         B4-U0-G2         B4-U0-G2         B5-U0-G3         B5-U0-G3         B5-U0-G4	514/0											
4000K/5000K Lumens         4,426         8,648         12,903         17,049         21,124         25,278         29,894         33,872         37,784         41,832           SLL/SLR         3000K Lumens         3,918         7,655         11,422         15,092         18,699         22,376         26,462         29,983         33,466         37,030           BUG Rating         B1-U0-G2         B1-U0-G2         B2-U0-G3         B2-U0-G3         B2-U0-G4         B3-U0-G4         B3-U0-G5         B3-U0-G5 <td>5000</td> <td></td>	5000											
SLL/SLR         300K Lumens         3,918         7,655         11,422         15,092         18,699         22,376         26,462         29,983         33,446         37,000           BUG Rating         B1-U0-G2         B1-U0-G2         B2-U0-G3         B2-U0-G3         B2-U0-G4         B3-U0-G4         B3-U0-G5		-										
BUG Rating         B1-U0-G2         B1-U0-G2         B2-U0-G3         B2-U0-G3         B2-U0-G3         B3-U0-G3	011/01-											
4000K/5000K Lumens         5,147         10,058         15,009         19,830         24,570         29,402         34,771         39,399         43,949         48,658           RW         3000K Lumens         4,556         8,903         13,286         17,554         21,749         26,027         30,779         34,876         38,904         43,072           BUG Rating         B2-U0-G1         B3-U0-G1         B3-U0-G2         B4-U0-G2         B4-U0-G2         B5-U0-G3	SLL/SLR											
RW         3000K Lumens         4,556         8,903         13,286         17,554         21,749         26,027         30,779         34,876         38,904         43,072           BUG Rating         B2-U0-G1         B3-U0-G1         B3-U0-G2         B4-U0-G2         B4-U0-G2         B5-U0-G3         B5-U0-G3 <t< td=""><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>B3-U0-G5</td></t<>		-										B3-U0-G5
BUG Rating         B2-U0-G1         B3-U0-G1         B3-U0-G2         B4-U0-G2         B4-U0-G2         B5-U0-G3												48,658
4000K/5000K Lumens 5,166 10,095 15,063 19,903 24,659 29,509 34,898 39,542 44,108 48,835	RW											
												B5-U0-G4
AFL         3000K Lumens         4,573         8,936         13,334         17,618         21,828         26,121         30,892         35,003         39,044         43,229		4000K/5000K Lumens	5,166				24,659	29,509				
	AFL	3000K Lumens	4,573	8,936	13,334	17,618	21,828	26,121	30,892	35,003	39,044	43,229
BUG Rating B1-U0-G1 B1-U0-G1 B2-U0-G2 B2-U0-G2 B3-U0-G2 B3-U0-G3 B3-U0-G3-U0-G3 B3-U0-G3 B3-U		-	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3



### NOMINAL POWER LUMENS (600MA)

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f Light Squares	1	2	3	4	5	6	7	8	9	10
ower (Watts)	34	66	96	129	162	193	226	257	290	323
ent @ 120V (A)	0.30	0.58	0.86	1.16	1.44	1.73	2.03	2.33	2.59	2.89
ent @ 208V (A)	0.17	0.34	0.49	0.65	0.84	0.99	1.14	1.30	1.48	1.63
ent @ 240V (A)	0.15	0.30	0.43	0.56	0.74	0.87	1.00	1.13	1.30	1.43
ent @ 277V (A)	0.14	0.28	0.41	0.52	0.69	0.81	0.93	1.04	1.22	1.33
ent @ 347V (A)	0.11	0.19	0.30	0.39	0.49	0.60	0.69	0.77	0.90	0.99
ent @ 480V (A)	0.08	0.15	0.24	0.30	0.38	0.48	0.53	0.59	0.71	0.77
4000K/5000K Lumens	4,029	7,874	11,749	15,525	19,235	23,019	27,222	30,844	34,406	38,093
3000K Lumens	3,566	6,970	10,400	13,743	17,027	20,376	24,097	27,303	30,456	33,720
BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
4000K/5000K Lumens	4,278	8,360	12,474	16,482	20,421	24,437	28,900	32,745	36,527	40,441
3000K Lumens	3,787	7,400	11,042	14,590	18,077	21,632	25,582	28,986	32,334	35,798
BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
4000K/5000K Lumens	4,107	8,026	11,976	15,824	19,605	23,461	27,746	31,438	35,068	38,827
3000K Lumens	3,636	7,105	10,601	14,007	17,354	20,768	24,561	27,829	31,042	34,370
BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
4000K/5000K Lumens	4,198	8,205	12,242	16,175	20,041	23,982	28,363	32,137	35,848	39,689
										35,133
										B3-U0-G5
										39,052
										34,569
										B3-U0-G5
-										
										38,547
										34,122
-										B3-U0-G5
										38,028
										33,662
-										B3-U0-G5
										38,821
										34,364
-										B3-U0-G5
4000K/5000K Lumens	3,902	7,624	11,377		18,626	22,289	26,359		33,316	36,886
3000K Lumens	3,454	6,749	10,071		16,488	19,730	23,333		29,491	32,651
BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-110-G4	B2-110-G4	B2-110-G4	B2-U0-G5	B3-U0-G5	
4000K/5000K Lumens					D2 00 04	B2-00-04	D2 00 04	52 00 00	00 00 00	B3-U0-G5
	4,236	8,277	12,351	16,319	20,219	24,196	28,614	32,422	36,166	B3-U0-G5 40,042
3000K Lumens	4,236 3,750	8,277 7,327	12,351 10,933	16,319 14,446						
					20,219	24,196	28,614	32,422	36,166	40,042
3000K Lumens	3,750	7,327	10,933	14,446	20,219 17,898	24,196 21,418	28,614 25,329	32,422 28,700	36,166 32,014	40,042 35,445
3000K Lumens BUG Rating	3,750 B2-U0-G1	7,327 B3-U0-G1	10,933 B3-U0-G2	14,446 B3-U0-G2	20,219 17,898 B4-U0-G2	24,196 21,418 B4-U0-G2	28,614 25,329 B4-U0-G2	32,422 28,700 B5-U0-G2	36,166 32,014 B5-U0-G3	40,042 35,445 B5-U0-G3
3000K Lumens BUG Rating 4000K/5000K Lumens	3,750 B2-U0-G1 4,314	7,327 B3-U0-G1 8,429	10,933 B3-U0-G2 12,578	14,446 B3-U0-G2 16,619	20,219 17,898 B4-U0-G2 20,591	24,196 21,418 B4-U0-G2 24,641	28,614 25,329 B4-U0-G2 29,141	32,422 28,700 B5-U0-G2 33,019	36,166 32,014 B5-U0-G3 36,832	40,042 35,445 B5-U0-G3 40,779
3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens	3,750 B2-U0-G1 4,314 3,819	7,327 B3-U0-G1 8,429 7,461	10,933 B3-U0-G2 12,578 11,134	14,446 B3-U0-G2 16,619 14,711	20,219 17,898 B4-U0-G2 20,591 18,227	24,196 21,418 B4-U0-G2 24,641 21,812	28,614 25,329 B4-U0-G2 29,141 25,796	32,422 28,700 B5-U0-G2 33,019 29,228	36,166 32,014 B5-U0-G3 36,832 32,604	40,042 35,445 B5-U0-G3 40,779 36,098
3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens BUG Rating	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4
3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens BUG Rating 4000K/5000K Lumens	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1 4,325	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2 8,452	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2 12,611	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2 16,664	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2 20,646	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3 24,707	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3 29,219	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4 33,106	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4 36,930	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4 40,888
3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1 4,325 3,828	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2 8,452 7,482	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2 12,611 11,163	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2 16,664 14,751	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2 20,646 18,276	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3 24,707 21,871	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3 29,219 25,865	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4 33,106 29,305	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4 36,930 32,690	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4 40,888 36,194
3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens BUG Rating 3000K Lumens BUG Rating	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1 4,325 3,828 B3-U0-G1	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2 8,452 7,482 B3-U0-G2	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2 12,611 11,163 B4-U0-G2	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2 16,664 14,751 B4-U0-G2	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2 20,646 18,276 B5-U0-G3	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3 24,707 21,871 B5-U0-G3	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3 29,219 25,865 B5-U0-G4	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4 33,106 29,305 B5-U0-G4	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4 36,930 32,690 B5-U0-G4	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4 40,888 36,194 B5-U0-G4
3000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating BUG Rating 4000K/5000K Lumens	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1 4,325 3,828 B3-U0-G1 3,609	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2 8,452 7,482 B3-U0-G2 7,052	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2 12,611 11,163 B4-U0-G2 10,522	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2 16,664 14,751 B4-U0-G2 13,903	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2 20,646 18,276 B5-U0-G3 17,226	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3 24,707 21,871 B5-U0-G3 20,613	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3 29,219 25,865 B5-U0-G4 24,378	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4 33,106 29,305 B5-U0-G4 27,622	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4 36,930 32,690 B5-U0-G4 30,812	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4 40,888 36,194 B5-U0-G4 34,114
3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1 4,325 3,828 B3-U0-G1 3,609 3,195	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2 8,452 7,482 B3-U0-G2 7,052 6,242	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2 12,611 11,163 B4-U0-G2 10,522 9,314	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2 16,664 14,751 B4-U0-G2 13,903 12,307	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2 20,646 18,276 B5-U0-G3 17,226 15,248	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3 24,707 21,871 B5-U0-G3 20,613 18,247	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3 29,219 25,865 B5-U0-G4 24,378 21,579	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4 29,305 B5-U0-G4 27,622 24,451	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4 36,930 32,690 B5-U0-G4 30,812 27,275	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4 40,888 36,194 B5-U0-G4 34,114 30,198
3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens BUG Rating 3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens BUG Rating	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1 4,325 3,828 B3-U0-G1 3,609 3,195 B1-U0-G1	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2 8,452 7,482 B3-U0-G2 7,052 6,242 B1-U0-G2	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2 12,611 11,163 B4-U0-G2 10,522 9,314 B1-U0-G3	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2 16,664 14,751 B4-U0-G2 13,903 12,307 B2-U0-G3	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2 20,646 18,276 B5-U0-G3 17,226 15,248 B2-U0-G3	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3 24,707 21,871 B5-U0-G3 20,613 18,247 B2-U0-G4	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3 29,219 25,865 B5-U0-G4 24,378 21,579 B3-U0-G4	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4 29,305 B5-U0-G4 27,622 24,451 B3-U0-G4	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4 36,930 32,690 B5-U0-G4 30,812 27,275 B3-U0-G5	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4 40,888 36,194 B5-U0-G4 34,114 30,198 B3-U0-G5
3000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating BUG Rating 4000K/S000K Lumens	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1 4,325 3,828 B3-U0-G1 3,609 3,195 B1-U0-G1 4,197	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2 8,452 7,482 B3-U0-G2 6,242 B1-U0-G2 8,202	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2 12,611 11,163 B4-U0-G2 10,522 9,314 B1-U0-G3 12,239	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2 16,664 14,751 B4-U0-G2 13,903 12,307 B2-U0-G3 16,171	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2 20,646 18,276 B5-U0-G3 17,226 15,248 B2-U0-G3 20,036	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3 24,707 21,871 B5-U0-G3 20,613 18,247 B2-U0-G4 23,977	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3 29,219 25,865 B5-U0-G4 24,378 21,579 B3-U0-G4 28,356	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4 33,106 29,305 B5-U0-G4 27,622 24,451 B3-U0-G4 32,129	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4 36,930 32,690 B5-U0-G4 30,812 27,275 B3-U0-G5 35,839	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4 40,888 36,194 B5-U0-G4 34,114 30,198 B3-U0-G5 39,680
3000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1 4,325 3,828 B3-U0-G1 3,609 3,195 B1-U0-G1 4,197 3,715	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2 8,452 7,482 B3-U0-G2 8,202 6,242 B1-U0-G2 8,202 7,260	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2 12,611 11,163 B4-U0-G2 10,522 9,314 B1-U0-G3 12,239 10,834	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2 16,664 14,751 B4-U0-G2 13,903 12,307 B2-U0-G3 16,171 14,315	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2 20,646 18,276 B5-U0-G3 17,226 15,248 B2-U0-G3 20,036 17,736	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3 24,707 21,871 B5-U0-G3 20,613 18,247 B2-U0-G4 23,977 21,224	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3 29,219 25,865 B5-U0-G4 24,378 21,579 B3-U0-G4 28,356 25,101	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4 33,106 29,305 B5-U0-G4 27,622 24,451 B3-U0-G4 32,129 28,441	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4 36,930 32,690 B5-U0-G4 30,812 27,275 B3-U0-G5 35,839 31,725	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4 40,888 36,194 B5-U0-G4 34,114 30,198 B3-U0-G5 39,680 35,125
3000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating 4000K/5000K Lumens 3000K Lumens BUG Rating 4000K/5000K Lumens BUG Rating BUG Rating	3,750 B2-U0-G1 4,314 3,819 B3-U0-G1 4,325 3,828 B3-U0-G1 3,609 3,195 B1-U0-G1 4,197 3,715 B2-U0-G1	7,327 B3-U0-G1 8,429 7,461 B3-U0-G2 8,452 7,482 B3-U0-G2 6,242 B1-U0-G2 8,202 7,260 B3-U0-G1	10,933 B3-U0-G2 12,578 11,134 B4-U0-G2 12,611 11,163 B4-U0-G2 10,522 9,314 B1-U0-G3 12,239 10,834 B3-U0-G2	14,446 B3-U0-G2 16,619 14,711 B4-U0-G2 16,664 14,751 B4-U0-G2 13,903 12,307 B2-U0-G3 16,171 14,315 B4-U0-G2	20,219 17,898 B4-U0-G2 20,591 18,227 B4-U0-G2 20,646 18,276 B5-U0-G3 17,226 15,248 B2-U0-G3 20,036 17,736 B4-U0-G2	24,196 21,418 B4-U0-G2 24,641 21,812 B5-U0-G3 24,707 21,871 B5-U0-G3 20,613 18,247 B2-U0-G4 23,977 21,224 B4-U0-G2	28,614 25,329 B4-U0-G2 29,141 25,796 B5-U0-G3 29,219 25,865 B5-U0-G4 24,378 21,579 B3-U0-G4 28,356 25,101 B4-U0-G2	32,422 28,700 B5-U0-G2 33,019 29,228 B5-U0-G4 33,106 29,305 B5-U0-G4 27,622 24,451 B3-U0-G4 32,129 28,441 B5-U0-G3	36,166 32,014 B5-U0-G3 36,832 32,604 B5-U0-G4 36,930 32,690 B5-U0-G4 30,812 27,275 B3-U0-G5 35,839 31,725 B5-U0-G3	40,042 35,445 B5-U0-G3 40,779 36,098 B5-U0-G4 40,888 36,194 B5-U0-G4 34,114 30,198 B3-U0-G5 39,680 35,125 B5-U0-G3
e	ent @ 120V (A) ent @ 208V (A) ent @ 240V (A) ent @ 240V (A) ent @ 277V (A) ent @ 347V (A) ent @ 347V (A) ent @ 347V (A) ent @ 347V (A) ent @ 3480V (A) ent @ 3	ant @ 120V (A)         0.30           ant @ 208V (A)         0.17           ant @ 240V (A)         0.15           ant @ 277V (A)         0.14           ant @ 347V (A)         0.11           ant @ 347V (A)         0.11           ant @ 347V (A)         0.08           4000K/5000K Lumens         4,029           3000K Lumens         3,566           BUG Rating         B1-U0-G1           4000K/5000K Lumens         4,278           3000K Lumens         3,787           BUG Rating         B1-U0-G1           4000K/5000K Lumens         4,107           3000K Lumens         3,636           BUG Rating         B1-U0-G1           4000K/5000K Lumens         4,198           3000K Lumens         3,716           BUG Rating         B1-U0-G1           4000K/5000K Lumens         4,131           3000K Lumens         3,657           BUG Rating         B1-U0-G1           4000K/5000K Lumens         4,022           3000K Lumens         3,659           BUG Rating         B1-U0-G1           4000K/5000K Lumens         3,560           BUG Rating         B1-U0-G1           4000K/5000K Lumens	ent @ 120V (A)         0.30         0.58           ent @ 208V (A)         0.17         0.34           ent @ 240V (A)         0.15         0.30           ent @ 240V (A)         0.14         0.28           ent @ 347V (A)         0.11         0.19           ent @ 347V (A)         0.08         0.15           4000K/5000K Lumens         4,029         7,874           3000K Lumens         3,566         6,970           BUG Rating         B1-U0-G1         B1-U0-G2           4000K/5000K Lumens         4,278         8,360           3000K Lumens         3,787         7,400           BUG Rating         B1-U0-G1         B1-U0-G2           4000K/5000K Lumens         4,107         8,026           3000K Lumens         3,636         7,105           BUG Rating         B1-U0-G1         B1-U0-G2           4000K/5000K Lumens         4,198         8,205           3000K Lumens         3,636         7,145           BUG Rating         B1-U0-G1         B1-U0-G2           4000K/5000K Lumens         4,077         7,968           3000K Lumens         3,669         7,053           BUG Rating         B1-U0-G1         B1-U0-G2	ent @ 120V (A)         0.30         0.58         0.86           ent @ 208V (A)         0.17         0.34         0.49           ent @ 240V (A)         0.15         0.30         0.43           ent @ 240V (A)         0.14         0.28         0.41           ent @ 240V (A)         0.11         0.19         0.30           ent @ 347V (A)         0.11         0.19         0.30           ent @ 347V (A)         0.08         0.15         0.24           4000K/5000K Lumens         4,029         7,874         11,749           3000K Lumens         3,566         6,970         10,400           BUG Rating         B1-U0-G1         B1-U0-G2         B2-U0-G2           4000K/5000K Lumens         4,278         8,360         12,474           3000K Lumens         3,787         7,400         11,042           BUG Rating         B1-U0-G1         B1-U0-G2         B2-U0-G2           4000K/5000K Lumens         4,107         8,026         11,976           3000K Lumens         3,636         7,105         10,601           BUG Rating         B1-U0-G1         B1-U0-G2         B2-U0-G2           4000K/5000K Lumens         4,131         8,072         12,045	ant @ 120V (A)         0.30         0.58         0.86         1.16           ant @ 208V (A)         0.17         0.34         0.49         0.65           ant @ 240V (A)         0.15         0.30         0.43         0.56           ant @ 240V (A)         0.14         0.28         0.41         0.52           ant @ 347V (A)         0.11         0.19         0.30         0.39           ant @ 340V (A)         0.10         0.19         0.30         0.39           ant @ 340V (A)         0.11         0.19         0.30         0.39           ant @ 340V (A)         0.10         0.17         0.30         0.39           ant @ 340V (A)         0.10         0.17         0.30         0.39           ant @ 340V (A)         0.08         0.15         0.24         0.30           4000K/5000K Lumens         4,029         7,874         11,749         15,525           3000K Lumens         3,566         6,970         10,400         13,743           BUG Rating         B1-U0-G1         B1-U0-G2         B2-U0-G2         B2-U0-G2           4000K/5000K Lumens         4,107         8,026         11,976         15,824           300K Lumens         3,716	ant @ 120V (A)         0.30         0.58         0.86         1.16         1.44           ant @ 208V (A)         0.17         0.34         0.49         0.65         0.84           ant @ 208V (A)         0.15         0.30         0.43         0.56         0.74           ant @ 277V (A)         0.14         0.28         0.41         0.52         0.69           ant @ 347V (A)         0.11         0.19         0.30         0.39         0.49           ant @ 480V (A)         0.08         0.15         0.24         0.30         0.38           4000K/5000K Lumens         4.029         7.874         11,749         15,525         19,235           3000K Lumens         3,566         6.970         10,400         13,743         17,027           BUG Rating         B1-U0-G1         B1-U0-G2         B2-U0-G2         B2-U0-G2         B2-U0-G3           4000K/5000K Lumens         3,787         7,400         11,042         14,580         18,077           BUG Rating         B1-U0-G1         B1-U0-G2         B2-U0-G2         B2-U0-G3         83-063           4000K/5000K Lumens         3,666         7,105         10,601         14,007         17,354           BUG Rating	ent @ 120V (A)         0.30         0.58         0.86         1.16         1.44         1.73           ant @ 208V (A)         0.17         0.34         0.49         0.65         0.84         0.99           ant @ 208V (A)         0.15         0.30         0.43         0.56         0.74         0.87           ant @ 277V (A)         0.14         0.28         0.41         0.52         0.69         0.81           ant @ 277V (A)         0.11         0.19         0.30         0.39         0.49         0.60           ant @ 37V (A)         0.11         0.19         0.30         0.39         0.49         0.60           ant @ 480V (A)         0.08         0.15         0.24         0.30         0.39         0.49         0.60           ant @ 480V (A)         0.08         0.15         0.24         0.30         0.39         0.49         0.60           ant @ 450V (A)         0.08         0.15         0.24         0.30         0.39         0.49         0.60           ant @ 450V (A)         0.08         0.15         0.24         0.30         0.39         0.49         0.60           ant @ 450V (A)         0.081         1.474         16.482         20.4	nt @ 120v (A)         0.30         0.58         0.86         1.16         1.44         1.73         2.03           ant @ 208V (A)         0.17         0.34         0.49         0.65         0.84         0.99         1.14           ant @ 208V (A)         0.15         0.30         0.43         0.56         0.74         0.87         1.00           ant @ 240V (A)         0.14         0.28         0.41         0.52         0.69         0.81         0.93           ant @ 347V (A)         0.11         0.19         0.30         0.39         0.49         0.60         0.69           ant @ 480V (A)         0.08         0.15         0.24         0.30         0.38         0.49         0.60         0.69           ant @ 480V (A)         0.08         0.15         0.24         0.30         0.38         0.49         0.60         0.69           ant @ 480V (A)         0.08         0.11         0.14         0.30         0.38         0.43         0.400         3.743         17.027         20.376         24.997           BUG Rating         B1-U0-G1         B1-U-G2         B2-U0-G2         B2-U0-G2         B3-U0-G3         B3-U0-G3         B3-U0-G3         B3-U0-G3         B3-U0-G3<	ant e         10.30         0.58         0.86         1.16         1.44         1.73         2.03         2.33           ant e         209V (A)         0.17         0.34         0.49         0.65         0.84         0.99         1.14         1.30           ant e         209V (A)         0.15         0.30         0.43         0.66         0.74         0.87         1.00         1.13           ant e         27V (A)         0.11         0.19         0.30         0.39         0.49         0.60         0.60         0.77           ant e         347V (A)         0.11         0.19         0.30         0.39         0.48         0.65         0.67         0.53         0.55           ant e         3400         0.86         0.15         0.24         0.30         0.38         0.48         0.53         0.53           a000K/5000K Lumens         4.029         7.874         11.749         15.525         19.235         23.019         24.097         27.333           BUG Rating         B1-U0-G1         B1-U0-G2         B2-U0-G2         B2-U0-G2         B3-U0-G3         B3-U0-G4         B3-U0-G4         B3-U0-G4         B3-U0-G4         B3-U0-G4         B3-U0-G4         B3-U0-G4	nn é 220V (A)         0.30         0.58         0.86         1.16         1.44         1.73         2.03         2.53         2.59           nn é 220V (A)         0.77         0.34         0.49         0.65         0.84         0.99         1.14         1.30         1.48           nn é 220V (A)         0.15         0.30         0.49         0.65         0.74         0.87         1.00         1.13         1.30         1.44           nn é 227V (A)         0.14         0.28         0.41         0.52         0.69         0.60         0.69         0.77         0.90           nn é 237V (A)         0.40         0.11         0.19         0.30         0.39         0.49         0.60         0.69         0.77         0.90           nn é 420V (A)         0.68         0.71         0.72         0.237         24.097         27.22         9.0844         34.06           3000K Lumens         3.566         6.970         10.40         13.743         17.027         20.376         24.097         27.333         30.46         30.0-64           800K Klimen         4.1076         8.306         11.474         15.55         19.235         21.063         83-0-63         83-0-64 <th< td=""></th<>



#### CONTROL OPTIONS

#### 0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

#### Photocontrol (P, R and PER7)

Optional button-type photocontrol (P) and photocontrol receptacles (R and PER7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

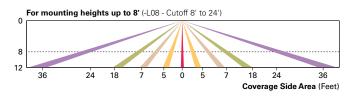
#### After Hours Dim (AHD)

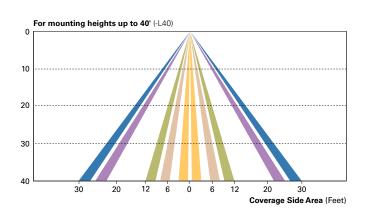
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

#### Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)

These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

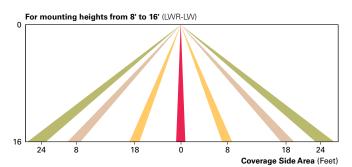
These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage. pattern for mounting heights from 8'-40'.



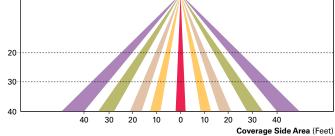




The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.



# For mounting heights from 16' to 40' (LWR-LN) 0



#### WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)

The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

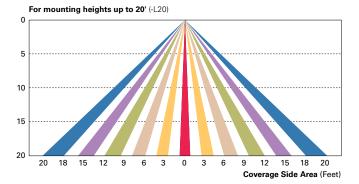
#### LumenSafe Integrated Network Security Camera (LD)

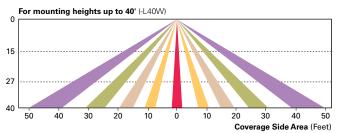
Eaton brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.



#### Eaton 1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800 www.eaton.com/lighting

Specifications and dimensions subject to change without notice.





Sample Number: GLEON-AF-04-LED-E1-T3-GM-QM

Product Family <sup>1, 2</sup>	Light Engine	Number of Light Squares <sup>3</sup>	Lamp Type	Voltage	Distribution		Color	Mounting
GLEON=Galleon)	( <b>AF=1A Drive</b> ) Current	01=1 02=2 03=3 04=4 05=5 <sup>4</sup> 06=6 07=7 <sup>5</sup> 08=8 <sup>5</sup> 09=9 <sup>6</sup> 10=10 <sup>6</sup>	(LED=Solid State) Light Emitting Diodes	E1=120-277V 347=347V <sup>7</sup> 480=480V <sup>7.8</sup>	T2=Type II T2R=Type II Roadway T3=Type III Roadway T3F=Type III Roadway T4FT=Type IV Forward Throw T4W=Type IV Wide 5NQ=Type V Narrow 5MQ=Type V Square Medium 5WQ=Type V Square Medium 5WQ=Type IV Spill Control SL3=Type II w/Spill Control SL4=Type IV w/Spill Control SL4=Sy0° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I AFL=Automotive Frontline		AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	[Blank]=Arm for Round or Square Pole EA=Extended Arm * MA=Mast Arm Adapter * WM=Wall Mount QM=Quick Mount Arm (Standard Length) * QMEA=Quick Mount Arm (Extended Length) *2
Options (Add as S	uffix)					Accessories (Order	Separately)	
SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I							<ul> <li>" O.D. Tenon</li> <li>(8" O.D. Tenon</li> <li>(8" O.D. Tenon</li> <li>" O.D. Tenon</li> <li>" O.D. Tenon</li> <li>" O.D. Tenon</li> <li>(8" O.D. Tenon</li> <li>(2" O.D. Tenon</li> <li>(3) Tenon</li> <li>(4) Light Squares</li> <li>(4) Light Squares</li> <li>(4) Light Squares</li> <li>(4) Light Squares</li> <li>(5) Light Squares</li> <li>(6) Light Squares</li> <li>(7) Light Squares</li> <li>(7) Light Squares</li> </ul>	

NOTES

NOTES: 1 Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. 2 DesignLights Consortium<sup>®</sup> Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3 Standard 4000K CCT and minimum 70 CRI. 4 Not compatible with MS/4-LXX or MS/1-LXX sensors. 5 Not compatible with extended quick mount arm (QMEA). 6 Not compatible with standard quick mount arm (QMI) or extended quick mount arm (QMEA). 7 Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A. 8 Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). 9 May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern. Refer to arm mounting requirement table. 10 Factory installed. 11 Maximum 8 light squares. 12 Maximum 6 light squares. 13 Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website. 15 I Amp standard. Use dedicated IES files for 600mA, 800mA and 1200mA when performing layouts. These files are published on the Galleon luminaire product page on the website. 18 Not available with MS, MS/X or MS/ 10 M at 347V or 480V. 21 n AF-20 transformation. 22 Not available with Maximum 8 light squares. 21 Not available if any "MS" sensor is selected. Motion sensor has an integral photocell. 22 Requires the use of P hotocontrol or the PER7 or R photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental 20' mounting height. 27 Approximately 60' detection diameter at 40'

#### LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul		
L=LumenSafe Technology*	<b>D</b> =Dome Camera	C=Cellular, Customer Installed SIM Card A=Cellular, Factory Installed AT&T SIM Card V=Cellular, Factory Installed Verizon SIM Card S=Cellular, Factory Installed Sprint SIM Card	R=Cellular, Factory Installed Rogers SIM Card W=Wi-Fi Networking w/ Omni-Directional Antenna E=Ethernet Networking	

\*Consult LumenSafe system pages for additional details and compatibility. Not available with 9-10 light square housing. Not available with 347V, 480V or high ambient options.



### Eaton 1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800 www.eaton.com/lighting

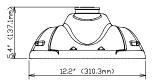
Specifications and dimensions subject to change without notice.

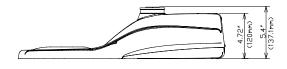


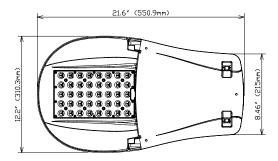
# GreenCobra™ Midsize LED Street Light **GCM H-Series** Specification Data Sheet

# Luminaire Data

**Weight** 10 lbs [4.6 kg] **EPA** 0.44 ft<sup>2</sup>







SPB<sup>11</sup>

RPB<sup>11</sup>

PTR<sup>11</sup>

# **Ordering Information**

Sample Catalog No. GCM2 30H MV NW 2R GY 700 PCR7 WL

Product	LED Code	Voltage	Color Temperature	Distribution	Finish <sup>1</sup>	<b>30H Drive</b> Current Code <sup>2</sup>		Options
GCM2	30Н <mark>40Н</mark>	MV 120-277V HV 347-480V	WW         3000K           NW         4000K           CW         5000K	<ul> <li>2S Type 2 Short</li> <li>2R Type 2 Medium</li> <li>3R Type 3 Medium</li> <li>4 Type 4</li> <li>5 Type 5</li> </ul>	GY Gray DB Dark Bronze BK Black	530 610 700 850 1A 40H Drive Current Code <sup>2</sup> 575 700 850 950 1A	FDC <sup>3</sup> FFA <sup>4</sup> LPCR PCR7 <sup>5</sup> PCR7-CR <sup>6</sup> WL 4B RWG SWTB BBL CF <sup>7</sup>	Fixed Drive Current Full field Adjustability Less Photocontrol Receptacle ANSI 7-wire Photo- control Receptacle Control Ready 7-wire PC Receptacle Utility Wattage Label 4-Bolt Mounting Bracket Rubber Wildlife Guard Straight Wire Terminal Block Bubble Level Coastal Paint Finish

#### Notes:

1 Gray, Black, and Dark Bronze standard. Consult factory for other finishes.

2 Specified drive current code is the factory set maximum drive current. Field adjustable current selector enables standard dimming to lower wattage drive currents only. Consult factory if wattage limits require a special drive current.

- 3 Non-field adjustable, fixed drive current. Specify required drive current. Not available with PCR7-CR option.
- 4 The FFA option enables full field adjustability from the specified drive current code to all drive currents available. This option is not DLC qualified.

5 Field adjustable current selector included to enable standard dimming to lower wattage drive currents only. Field changeable connectors included to enable connection to PCR7 (wireless node dimming is disabled by default).

- 6 Control-ready wired at factory for wireless node dimming. Supplied at maximum drive current. If a lower drive current is required, consult factory.
- 7 Specify the CF Option for coastal installation. See warranty for details.
- 8 Flush mounted house side shield. Shield cuts light off at 1/2 mounting height behind luminaire.
- 9 Flush mounted cul-de-sac shield. Shield cuts light off at 1/2 mounting height behind luminaire and 1-1/2 mounting height on either side of luminaire.

10 Flush mounted front side shield cuts light off at approximately one mounting height in front of luminaire (street side).

11 Specify Color (GY, DB, BK)

12 Specify MV (120-277V) or HV (347V-480V)

#### House Side Shield, Snap-On\* HSSGCM<sup>8</sup> CSSGCM<sup>9</sup> Cul-De-Sac Side Shield, Snap-On\* FSSGCM<sup>10</sup> Front Side Shield, Snap-On\* Square Pole Horizontal Arm Bracket Round Pole Horizontal Arm Bracket Pole Top Tenon Horizontal Arm Bracket **PTB2**<sup>11</sup> Pole Top Tenon Horizontal

Accessories\*

\*Accessories are ordered separately and not to be included in the catalog number. For factory installed HSS, CSS, and FSS consult factory.





# GreenCobra<sup>™</sup> Midsize LED Street Light GCM H-Series Specification Data Sheet

# **Luminaire Specifications**

# Housing

Die cast aluminum housing with universal two-bolt slip fitter mounts to 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter mast arm. One-piece aluminum housing provides passive heat-sinking of the LEDs and has upper surfaces that shed precipitation. Four-bolt mounting bracket is available. Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass. Mounting has leveling adjustment from  $\pm 5^{\circ}$  in 2.5° steps. Electrical components are accessed without tools via a high-strength, non-conductive polycarbonate door with quick-release latches. Polycarbonate material meets UL 746C for outdoor usage. Available rubber wildlife guard (RWG option) conforms to mast arm with no gaps.

# **Light Emitting Diodes**

High-flux/High-power white LEDs produce a minimum of 90% of initial intensity over 75,000 hours of life based on IES TM-21 (L90 ≥ 75k hours). LEDs are tested in accordance with IES LM-80 testing procedures. LEDs have correlated color temperature of 3000K (WW), 4000K (NW), or 5000K (CW) and 70 CRI minimum. LEDs are 100% mercury and lead free.

# **Field Adjustability**

LED drive current can be changed in the field to adjust light output for local conditions (not available with PCR7-CR option). The specified drive current code will be the factory set maximum drive current and field adjustments can only be made to available lower wattage drive currents. Select the FFA option if full field adjustability to all available drive currents (1A max) is desired. The FFA option is not DLC qualified.

# **Quality Control**

Every luminaire is performance tested before and after a 2-hour burn-in period. Assembled in the USA.

# **Optical Systems**

Micro-lens optical systems produce IESNA Type 2, Type 3, Type 4, or Type 5 distributions and are fully sealed to maintain an IP66 rating. Luminaire produces 0% total lumens above 90° (BUG Rating, U=0). Optional house side shield cuts light off at 1/2 mounting height behind luminaire. Cul-de-sac shield provides back and side light control for end of cul-de-sac applications. Both shields are field installable without tools.

# Electrical

Rated life of electrical components is 100,000 hours. Uses isolated power supply that is 1-10V dimmable. Power supply is wired with quick-disconnect terminals. Power supply features a minimum power factor of .90 and <20% Total Harmonic Distortion (THD). EMC meets or exceeds FCC CFR Part 15. Terminal block accommodates 6 to 14 gauge wire. Surge protection complies with IEEE/ANSI C62.41 Category C High, 20kV/10kA and ANSI C136.2-2015, 20kV/10kA.

# Controls

3-Wire photocontrol receptacle is standard. ANSI C136.41 7-wire (PCR7) photocontrol receptacle is available. All photocontrol receptacles have tool-less rotatable bases. Wireless control module is provided by others.

### Finish

Housing receives a durable, fade-resistant polyester powder coat finish with 3.0 mil nominal thickness. Standard finish tested to withstand 5000 hours in salt spray exposure per ASTM B117 and Coastal Finish per ASTM G85. Finish meets scribe creepage rating 8 per ASTM D1654. Finish tested 500 hours in UV exposure per ASTM G154 and meets ASTM D523 gloss retention.

# Listings/Ratings/Labels

Luminaires are UL listed for use in wet locations in the United States and Canada. DesignLights Consortium™ qualified product. Consult DLC QPL for Standard and Premium Classification Listings. International Dark Sky Association listed. Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C.

# Photometry

Luminaires photometrics are tested by certified independent testing laboratories in accordance with IES LM-79 testing procedures.

# Warranty

10-year limited warranty is standard on luminaire and components.

# Vandal Resistance

Housing and optics rated to IK10

# Standards

Luminaire complies with: ANSI: C136.2, C136.3, C136.10, C136.13, C136.15, C136.22, C136.31, C136.35, C136.37, C136.41, C62.41, C78.377, C82.77 Other: FCC 47 CFR, IEC 60598, ROHS II, UL 1449, UL 1598



# Performance Data: 3000K (WW)

All data nominal. IES files for all CCTs available at leotek.com.

Product	LED Code	Drive Current Code	System Wattage (W)	Delivered Lumens (Lm) <sup>1</sup>	Efficacy (Lm/W)
		530	48	5770	120
		610	58	6700	116
	30H	700	68	7620	112
		850	82	8800	107
GCM2		1A	101	10480	104
GCIVIZ		575	73	8780	120
	40H	700	88	10230	116
		850	107	11960	112
		950	121	13040	108
		1A	135	14080	104

Notes:

1 Nominal lumens. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.

# Performance Data: 4000K (NW) and 5000K (CW)

All data nominal. IES files for all CCTs available at leotek.com.

Product	LED Code	Drive Current Code	System Wattage (W)	Delivered Lumens (Lm) <sup>1</sup>	Efficacy (Lm/W)
		530	48	6330	132
		610	58	7440	128
	30H	700	68	8550	126
		850	82	9830	120
GCM2		1A	101	11720	116
GCIVIZ		575	73	9590	131
	40H	700	88	11260	128
		850	107	13270	124
		950	121	14390	119
		1A	135	15430	114

Notes:

1 Nominal lumens. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.



# **BUG Ratings**

3000K (WW)	3000K (WW)			Type 2R	Type 3R	Type 4	Type 5
Product	LED Code	Drive Current Code	BUG Rating	BUG Rating	BUG Rating	BUG Rating	BUG Rating
		530	B2 U0 G1	B1 U0 G1	B2 U0 G2	B2 U0 G1	B3 U0 G1
		610	B2 U0 G1	B1 U0 G1	B2 U0 G2	B2 U0 G2	B3 U0 G1
	30H	700	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1
		850	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
GCM2		1A	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
GCIVIZ	40H	575	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
		700	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
		850	B2 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B3 U0 G2
		950	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2
		1A	B2 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2

4000K (NW)			Type 2S	Type 2R	Type 3R	Type 4	Type 5
Product	LED Code	Drive Current Code	BUG Rating	BUG Rating	BUG Rating	BUG Rating	BUG Rating
		530	B2 U0 G1	B1 U0 G1	B2 U0 G2	B2 U0 G1	B3 U0 G1
		610	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1
	30H	700	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
		850	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
GCM2		1A	B3 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2	B3 U0 G2
GCIVIZ	40H	575	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
		700	B2 U0 G2	B2 U0 G2	B3 U0 G3	B2 U0 G2	B3 U0 G2
		850	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2
		950	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2
		1A	B3 U0 G2	B3 U0 G3	B3 U0 G3	B3 U0 G3	B4 U0 G2

5000K (	CW)
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5000K (CW)			Type 2S	Type 2R	Type 3R	Type 4	Type 5
Product	LED Code	Drive Current Code	BUG Rating	BUG Rating	BUG Rating	BUG Rating	BUG Rating
		530	B2 U0 G1	B1 U0 G1	B2 U0 G2	B2 U0 G1	B3 U0 G1
		610	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1
	30H	700	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
		850	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
GCM2		1A	B2 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B3 U0 G2
GCIVIZ		575	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
	40H	700	B2 U0 G2	B2 U0 G2	B3 U0 G3	B2 U0 G2	B3 U0 G2
		850	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2
		950	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2
		1A	B3 U0 G2	B3 U0 G3	B3 U0 G3	B3 U0 G3	B4 U0 G2