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Architectural Review Board Staff Report

Project Type:	Site Development Section Plan
Meeting Date:	February 13, 2014
From:	Purvi Patel Project Planner
CC:	Aimee Nassif, Planning & Development Services Director
Location:	North of Chesterfield Parkway East, south of Interstate 64/US Highway 40 (SE Quadrant)
Applicant:	Mercy Health Systems
Description:	Mercy Health Systems (Virtual Care Center): A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and an Architect's Statement of Design for a 43.35 acre tract of land zoned "UC" Urban Core District located north of Chesterfield Parkway East, south of Interstate 64/US Highway 40 (SE Quadrant).

PROPOSAL SUMMARY

The request is for a four story, 124,000 square foot Virtual Care Center located in the southeast quadrant of Chesterfield Village, east of Elbridge Payne Road. The subject site is zoned "UC" Urban Core District and is governed under the terms and conditions of City of Chesterfield Ordinance Number 2749. The exterior building materials will be comprised of glass (high performance glazing), precast concrete, stone, brick, wood, steel and copper. The proposed building elevations, which include floor to ceiling glass, are articulated by setbacks, projections, balconies and a roof-top terrace.

HISTORY OF SUBJECT SITE

There have been several smaller planned developments over the years for this 43.35 acre tract of land; however, none of the plans reached the construction phase and the site remains undeveloped. At the request of Mercy Health Systems, who submitted a request for a zoning map amendment, the City of Chesterfield approved Ordinance 2721 in September of 2012. This ordinance approved the change of zoning for an area covered by a "C-8" Planned Commercial District and two "PC" Planned Commercial Districts to an "UC" Urban Core District for a 40.040 acre area of land. Furthermore, in 2013 Mercy Health Systems submitted a request for an ordinance amendment to the "UC" Urban Core District to include two additional parcels of land zoned "C-8" Planned Commercial District. This request was approved by the City of Chesterfield by Ordinance 2749, which is the current ordinance governing this site. The aerial below, Figure 1, depicts the area governed by this ordinance.



Figure 1

A Site Development Concept Plan was approved for the original 40 acres covered under the "UC" Urban Core District in 2012. However, an Amended Site Development Concept Plan is currently under review with Staff. The applicant is amending the approved Concept Plan to include the two additional parcels added to the development by the approval of Ordinance 2749.

STAFF ANALYSIS

The proposal for the development of the Virtual Care Center, also known as Phase One of the Mercy development, substantially complies with the approved Preliminary Development Plan on file (see Preliminary Development Plan on following page).



General Requirements for Site Design:

A. Site Relationships

The Virtual Care Center site sits across from the Drury Plaza and Hyatt Place Hotels at the southwest corner of Interstate 64/US Highway 40 and Clarkson Road. While vehicular traffic to the site will be provided from Elbridge Payne Road and Clarkson Road, the site has direct visibility from Interstate 64/US Highway 40. The parcel to the west of the proposed Virtual Care Center is an office building, which is slated to be torn down and rebuilt as future phases of the Mercy development are approved.

B. Circulation System and Access

There are two proposed access points to the Virtual Care Center: an improved entrance off Clarkson Road and a second entry from Chesterfield Parkway East/Elbridge Payne Road. Future improvements planned for this site include a ring road around the development with two direct access points to South Outer Forty Road and an additional access off of Chesterfield Parkway East. A landscaped drop-off area is proposed off of the easternmost entrance to the site in order to provide a clear arrival point for visitors to the building. The employee and service entrance is located near the northwestern portion of the site off of Elbridge Payne Road.

The proposal includes extending the existing sidewalk on Elbridge Payne Road all along the frontage of the site. This sidewalk will ultimately be tied into future sidewalks along the proposed ring road around the development. Additional sidewalks within the development will provide direct access from the parking areas to both the north and south entrances into the building. Furthermore, the beginnings of the future campus-wide path accessible system will be installed.

C. Topography

The design attempts to integrate the existing landscape into the proposal to minimize the development impacts. The design incorporates the existing twenty-three (23) feet of elevation change by locating the building just below the level of the Outer Road to take advantage of the visibility from both Clarkson Road and Interstate 64/US Highway 40 and to minimize the cutting of the existing grade. Additionally, the parking was laid out to reduce grading along the wood perimeters of the site.

D. Retaining Walls

The proposal includes a terrace retaining wall along the southern and eastern elevations to reduce the fill extents at the existing tree line as the building is designed to allow users "to be in the tree canopy and elevated within the preserved woodlands to the northeast, southwest and southern elevations" .¹ The varying height terrace wall will include an architectural concrete finish and aluminum frame cable guardrail where necessary. Furthermore, modular walls are proposed in the parking lot as well as site perimeters to preserve wood areas. The applicant chose modular walls for these areas due to their flexibility of alignment and design aesthetic.

General Requirements for Building Design:

A. Scale

The Applicant is proposing a four story building of approximately seventy (70) feet in height. The proposed height is harmonious with the wide ranging building heights in the surrounding area. The applicant is proposing human scaled spaces at all levels of the building, as noted in the Architect's Statement of Design. Additionally, the proposed building elevations, which include floor to ceiling glass, are articulated by setbacks, projections, balconies and a roof-top terrace. Balconies on the second and third floors provide a direct connection between the exterior and interior spaces and roof-top terrace on the fourth floor includes a roof overhang with an integrated trellis covering.

B. Design

The building is designed to link the interior and exterior spaces through the use of materials and formal elements. The proposal includes facades with strong horizontal lines and floor-to-ceiling glass to optimize the day lighting and engage the natural setting. Undulations in the glass wall create entries at the ground level and balconies on the floors above. And as discussed above, the top floor includes a roof-top terrace created by shifting the enclosure from the building edge. Stone walls are proposed on the first floor to ground the building while columns lift the upper floors to float above the site; furthermore, a protected pedestrian experience is provided by adding recesses at this level to create cantilevers. The building is centered by the glazed, vertical atrium on the north elevation, which marks both the main entrance and a vertical connection to the four story building.

C. Materials and Color

As mentioned earlier, the building materials will be primarily comprised of glass (high performance glazing), precast concrete, stone, brick, wood, steel, and copper. These materials are proposed to provide a highly sustainable project while still providing expansive views, natural light exposure and integrating materials consistent with the natural woodlands setting. The applicant is proposing sandstone textured precast panels in two warm tones for the floor slabs which not only create the horizontal element in the design but also serve to shade the glass (especially on the South elevation). The design also includes vertical precast panels on the West elevation to increase shading and enliven the facade. At the lower level, stone masonry walls ground the building with brick pillars and columns in

¹ Mercy Virtual Care Center (VCC) Architectural Design Statement, 2014.

similar colors to provide additional texture and definition. The proposed vertical glass atrium will be enhanced with wood cladding on the inner surface and copper panels on the exterior face. Additionally, the deck surface of the balconies and fourth floor terrace will be comprised of wood. The roof overhang on the terrace will be covered by painted steel trellis framed in precast panels.

D. Landscape Design and Screening

The proposed building location takes advantage of the existing woodlands on the site, most of which will be preserved in this phase of the development. Furthermore, the entrance plaza is not only designed to take advantage of the existing woodlands, but with additional plantings is designed to soften the primary arrival point for visitors to the site. Supplementary landscaping is proposed in various locations, such as the parking fields and bio-retention areas, to enhance the overall experience of the site and to create separation from the building where necessary.

As discussed above, stone masonry walls are proposed on the first floor to ground the building. However, these walls will serve as the screening for the mechanical units, as well as the service areas on the western end of the building.

E. Signage

Signage is not part of the proposal before the Architectural Review Board and will be reviewed by Staff.

F. Lighting

Site lighting is proposed for walkways and parking fields to assure security and safe travel while on the site and not contribute to light pollution. The applicant is proposing light column bollards along the walkways and LED area lights for the parking fields. Additional can building lighting is proposed to accentuate building features such as the vertical atrium, cantilevers, and terraces.

DEPARTMENTAL INPUT

Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design. Be advised, this project is still going through development review by City Staff and will not proceed to the Planning Commission until all outstanding items have been addressed. All recommendations made by the ARB will be included in Staff's report to the Planning Commission.

Staff requests action on the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Mercy Health Systems (Virtual Care Center).

MOTION

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

- 1) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Mercy Health Systems (Virtual Care Center) as presented, with a recommendation for approval (or denial) to the Planning Commission."
- 2) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Mercy Health Systems (Virtual Care Center), to the Planning Commission with the following recommendations..."

Attachments

1. Architectural Review Packet Submittal

City of Chesterfield ARCHITECTURAL REVIEW BOARD Project Statistics and Checklist
Date of First Comment Letter Received from the City of Chesterfield
Project Title:
Mercy Health System Forum Studio Civil: Stock & Associates, MEP: Heideman Associates, Inc., Structural: Uzun + Case Developer:
PROJECT STATISTICS: Size of site (in acres): 43.35 Acres Total Square Footage: 124,000 Building Height: 70'
Proposed Usage:
Exterior Building Materials:
Roof Material & Design:
Screening Material & Design:
Description of art or architecturally significant features (if any):
Undulating Glazing with Integrated Balconies, Horizontal Fins and Upper Level Terrace

ADDITIONAL PROJECT INFORMATION:

<u>Checklist:</u> Items to be provided in an 11" x 17" format

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

MERCY VIRTUAL CARE CENTER (VCC)

Architectural Design Statement Forum Studio

Designed by Forum Studio, the Mercy Virtual Care Center will be an interactive and collaborative work place that will accommodate the needs of a forward thinking healthcare provider for its most innovative programs. Set in a natural setting in Chesterfield, MO, the building will integrate sensitively into the lush woodland landscape of the site. The single, four story building will accommodate two floors of flexible work space devoted to virtual care, a pioneering demonstration lab linked to executive office space, and grounded by active amenities such as a café, gym, and conference facilities on the first floor. These programs, along with their support spaces, total 124,000 square feet of building area. As the first phase of development on the site, the proposed building will be a catalyst for its future sustainable development.

GENERAL REQUIREMENTS FOR SITE DESIGN

- Site Relationships: The project is set on a portion of the 43.35 acre site across from Chesterfield Mall, Drury Plaza and Hyatt Place Hotels at the southeast corner of I-64 & Clarkson Road. The building is placed such that it is visible as an icon from I-64 & Clarkson but still is nestled within the wooded areas of the site. This site was selected for development not only for the direct access and visibility from one of the busiest intersections in the St Louis area but also for the natural features including an existing water body and mature woodlands. Thus careful consideration was given to place the building within the surrounding natural environment
- Circulation System and Access: The site is initially accessed by an improved entrance off Clarkson and a second entry from Chesterfield Parkway. Future improvements planned for this development include by two entrances off of the improved South Outer Forty Road. The easternmost entrance off of the Outer Road will become the main entrance and leads to the building drop-off. This entrance would be heavily landscape and would include signage to provide a pleasing aesthetic upon arrival. The second employee and service vehicle entrance is located at the northwestern portion of the site off of the Outer Road / Elbridge Payne Rd. Pedestrian circulation and access is provided via a sidewalk from the Outer Road sidewalk as well as sidewalks providing direct access from parking areas to both the north and south entrances into the building. Additionally the beginnings of the campus wide path accessible system would be installed. These soft surface paths would allow the user to engage the natural surroundings
- **Topography:** The building was sited such that it is relatively level or just below the level of the Outer Road providing for visibility from I-64 and Clarkson Road. The finish floor elevation of the building was selected at an elevation which allowed for little cutting of existing grade along the northeast and southern portions of the site. The site has an overall elevation change of 7' from the Outer Road to the building and 16' from the southwestern corner of the parking to the building. Parking was laid out such that minimal grading was necessary along the wooded perimeters.
- Retaining Walls: The finish floor elevation of the building was set to allow for users to be "in the tree canopy" or elevated within the preserved woodlands to the northeast, southwest and southern elevations. Therefore a terrace retaining wall will be provided along the eastern and southern elevations to minimize the fill extents at the existing trees. The terrace wall which varies in height would consist of an architectural finish with a metal guardrail where appropriate. To preserve other woodland areas both within the parking lot as well as the site perimeters modular walls will be constructed given their flexibility of alignment and design aesthetic. Screen walls would also be constructed at the loading/service area of the building. These screen walls would be clad in a stone veneer which integrates with the building elevations.
- **Storage:** There is no permanent on-site storage of goods or equipment for sale or service.
- Utilities: All utilities will be buried underground.
- Parking: The site consists of 409 parking spaces which includes 10 accessible spaces. Parking is provided such that there is a smaller lot at the northern portion of this site intended to lessen the impact of surface parking from Clarkson Road and the remaining surface parking along the western perimeter of the site. The current parking was laid out to avoid loss of significant mature woodland canopy. At the southwest portion of the parking lot parking was configured to avoid and protect a large portion of significant woodland trees.

1/24/2014



GENERAL REQUIREMENTS FOR BUILDING DESIGN

- Scale: The scale of the sleek four story building is compatible with the varied context formed by nearby buildings. The massing of the building is sculpted to create appropriately human scaled spaces at all levels of the building. Setbacks, balconies, projections, and a rooftop terrace serve to articulate the building elevations. The building is set back at the ground floor to create a protected entry and exterior gathering spaces. The second and third floors are articulated by balconies that provide a direct connection between the exterior and interior. Finally, the fourth floor includes a significant roof overhang with an integrated trellis covering a large terrace.
- **Design:** The design of the building expresses Mercy's forward thinking vision for the VCC while integrating materials consistent with the site. The highly efficient and technologically advanced work space is articulated on the exterior through thoughtful material and formal elements that link the interior and exterior. The strong horizontal lines of the façade represent the strength of Mercy's platform. Floorto-ceiling glass between these bands optimizes day-lighting, engages the natural setting, and reinforces Mercy's transparency. The glass wall undulates to form entries at the ground level and balconies above. This formal articulation adds a dynamic fluidity and progressiveness that is a reflection of the VCC program. It is most evident on the top floor as the enclosure shifts back from the building edge to create a large covered terrace. At the ground floor, stone walls ground the building into the site while columns and pilasters lift the upper floors to float above the site. Recesses at the ground floor create cantilevered projections that provide a protected pedestrian experience. Finally, the consistent language of the building is punctuated at its center by a glazed, vertical lantern that marks both the main entry and vertical connectivity. It is accentuated by a recess at the entry and a projected canopy that welcomes pedestrians.
- Materials & Colors: The materiality of the project is dictated by the desire of the project to be highly sustainable while providing expansive views, exposure to natural light, and integrating materials consistent with the natural setting. In order to meet these goals, the glazing is highly efficient and clear in order to maintain a direct connection to the exterior from the work space. The horizontal elements at the floor slabs are rendered in sandstone textured precast panels in two warm tones. These projections also serve to shade the glass, especially on the South elevation. On the West elevation, vertical precast fins further mitigate challenging solar conditions and enliven the façade. At the ground floor, warm stone wall masonry grounds the building while brick pilasters and columns in a similar tone add texture and definition at the pedestrian level. The glazed lantern and canopy are framed in painted steel, wood cladding on its inner surface, and copper panels on the exterior face. The wood also lines the soffit and serves as the deck surface at the balconies and the 4th floor terrace. The terrace, supported by steel and wood columns, is covered by a painted steel trellis framed in precast panels.
- Landscape Design & Screening: The building is sited to take advantage of the physical attributes of the property. The site plan preserves old growth trees that envelop the new building while setting up an advantageous relationship with a future pond. It provides a main entrance consisting of a naturalized landscape that integrates existing trees and is supplemented by new native plantings. The effect is to screen the building from the highway. This entrance experience extends to the arrival drop-off and ends in a paved plaza terrace that wraps the North, East and South of the building. The ground level terrace is framed by large, existing trees and a native, sustainable woodland landscape. The east overlook provides views to the pond and south side includes a café with exterior seating that activates the employee entry. The raised terrace provides access down to a path network that provides nature walks as well as circulation to parking areas separated from the building by lush landscapes. Stone masonry walls screen mechanical and service areas at the Western end of the building.
- Lighting: Site lighting will provide illumination along pedestrian walkways including guest parking. It is deployed in a sensitive manner that assures security while not contributing to light pollution in this natural environment. Subtle building lighting that will accentuate significant features including the lantern, cantilevers, and terraces are included.

• Facades & Exterior Elements: The building is strategically arranged in a manner that takes advantage of solar orientation, optimizes both views and experience of the surrounding landscape. The longest building faces have a favorable southern exposure and the shortest faces have the less favorable eastern/western exposures and feature an environmentally responsive envelope consisting of high-performance glazing, horizontal projections, shaded overhangs, vertical fins, and a horizontal trellis. Collectively, they form a consistent high performance skin that wraps the building in a carefully considered approach to both sustainability and form. These systems supplement the environmental advantages of preserving old growth trees adjacent to the building, specifically along the Southern face. The result is a forward-looking building that expresses Mercy's vision for the VCC by utilizing clean detailing and honest expressions of program, form and material to create a dynamic architectural language based in performance and efficiency.

MERCY VIRTUAL CARE CENTER

CHESTERFIELD HEALTH CAMPUS





















MERCY VIRTUAL CARE CENTER

CHESTERFIELD HEALTH CAMPUS



PLAN OF ADJACENT USES





MERCY VIRTUAL CARE CENTER



CHESTERFIELD HEALTH CAMPUS











SOUTH ELEVATION 1/16" = 1'-0"

MERCY VIRTUAL CARE CENTER

CHESTERFIELD HEALTH CAMPUS

NORTH ELEVATION 1/16" = 1'-0"



BUILDING ELEVATIONS











WEST ELEVATION 1/16" = 1'-0"

EAST ELEVATION 1/16" = 1'-0"

MERCY VIRTUAL CARE CENTER

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BUILDING ELEVATIONS





MERCY VIRTUAL CARE CENTER

BUILDING SECTION TRANSVERSE LOOKING NORTH 1/16" = 1'-0"



BALCONY —

BALCONY —

_____ __ ___ __

BUILDING SECTION TRANSVERSE LOOKING EAST 1/16" = 1'-0"

CHESTERFIELD HEALTH CAMPUS

BUILDING SECTIONS

MERCY VIRTUAL CARE CENTER

CHESTERFIELD HEALTH CAMPUS

RETAINING WALL & SCREEN WALL DETAILS

MERCY VIRTUAL CARE CENTER

CHESTERFIELD HEALTH CAMPUS

EXTERIOR RENDERING -VIEW FROM NORTH

MERCY VIRTUAL CARE CENTER

CHESTERFIELD HEALTH CAMPUS

DEC	IDU	OUS TREES					MATURE		
SYM	QTY	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	METHOD	HEIGHT	DETAIL	COMMENTS
AC PL	2	Acer platinoides		Norway Maple	2.5" Cal.	B&B	45'+		Medium Growth Rate
AC RU	14	Acer rubrum F	Red Sunset	Red Maple	2.5" Cal.	B & B	45'+		Fast Growth Rate
AC SA	12	Acer saccharum L	egacy	Sugar Maple	2.5" Cal.	B & B	45'+		Slow / Medium Growth Rate
GI BI	15	Ginkgo biloba A	Autumn Gold	Maidenhair Tree	2.5" Cal.	B&B	45'+		Slow / Medium Growth Rate
JL TR	17	Gleditsia triacanthos v	var. Inermis Moraine	Thomless Common Honeylocust	2.5" Cal.	B&B	45'+		Fast Growth Rate
JU BI	21	Quercus bicolor		Swamp White Oak	2.5" Cal.	B&B	45'+		Medium Growth Rate
qu ru	14	Quercus rubra		Red Oak	2.5" Cal.	B&B	45'+		Medium / Fast Growth Rate
ta di	10	Taxodium distichum S	Shawnee Brave	Baldcypress	2.5" Cal.	B&B	45'+		Medium Growth Rate
DEC	IDU	OUS UNDERSTORY TR	EES				MATURE		
SYM	QTY	BOTANICAL NAME 0	CULTIVAR	COMMON NAME	SIZE	METHOD	HEIGHT	DETAIL	COMMENTS
CE CA	13	Cercis canadensis		Eastern Redbud	2.5" Cal.	B&B	20' - 30'		Single stem, Fast Growth Rate
CO FL	10	Cornus florida		Flowering Dogwood	2.5" Cal.	B&B	15' - 25'		Slow / Medium Growth Rate
CRLA	10	Crataegus laevigata 'S	Superba'	Crimson Cloud Hawthorn	2.5" Cal.	B&B	15' - 25'		Medium Growth Rate
ha Vi	8	Harnamelis virginiana		Common Witchhazel	10' HL	B & B	15' - 30'		Multi-Stemmed, Medium Growth Rate
MA VI	15	Magnolia virginiana N	WOONGLOW Jim Wilson	Sweetbay Magnolia	10' HL	B&B	15' - 25'		Multi-Stemmed, Medium Growth Rate
EVE	RGR	EEN TREES		00000000			MATURE		
<u>SYM</u>		BOTANICAL NAME	CULTIVAR		SIZE	METHOD	HEIGHI	DETAIL	
	7			Eastern Red Cedar	8' Ht.	B&B	30' - 40'		Medium Growth Rate
PIGL	11	Pinus glauca		White Spruce	8' Ht.	B&B	30' - 40'		Medium Growth Rate
TS CA	19	Tsuga canadensis		Canadian Hemlock	8' Ht.	B&B	45'+		Medium Growth Rate
EVE	RGR	REEN SHRUBS							
SYM	QTY	BOTANICAL NAME 0	CULTIVAR	COMMON NAME	SIZE	METHOD	SPACING	DETAIL	COMMENTS
hy ka	89	Hypericum kalmianum A	Arnes	Kalm's St. John's Wort	18" HL	Container	36" O.C.		
ju ch	25	Juniperus chinensis	Grey Owl	Juniper	24" HL	Container	36" O.C.		
DEC	IDU	OUS SHRUBS							
SYM	QTY	BOTANICAL NAME (CULTIVAR	COMMON NAME	SIZE	METHOD	SPACING	DETAIL	COMMENTS
ca am	85	Callicarpa americana		American Beautyberry	24" HL	Container	36" O.C.		
co se	44	Cornus sericea A	Arctic Fire	Red Twig Dogwood	24" HL	Container	36" O.C.		
fo ga	125	Fothergilla gardenii		Dwarf Fothergilla	24" HL	Container	36" O.C.		
hy qu	146	Hydrangea quercifolia S	Sikes Dwarf	Oakleaf Hydrangea	24" HL	Container	36" O.C.		
it vi	358	Itea virginica L	Little Henry	Virginia Sweetspire	18" HL	Container	36" O.C.		
il ve	111	Ilex varticillate	Red Sprite Nana	Winterberry Holly	24" HL	Container	36" O.C.		
rh ar	259	Rhus aromatica 0	Gro-Low	Gro-Low Sumac	12-18" Ht.	Container	36" O.C.		
vi de	65	Viburnum dentatum C	Christom Blue Muffin	Arrowwood Viburnum	36" HL	Container	36" O.C.		
ORN	IAME	ENTAL GRASSES & SE	DGES					-	-
SYM	QTY	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	METHOD	SPACING	DETAIL	COMMENTS
pa	102	Panicum virgatum S	Shenandoah	Switch Grass	1 Gal.	Container	30" O.C.		
	2 059	Sporobolus heterolegis		Prairie Dropseed	1 Quart	Container	24" O.C.		

BR1			P1
BIO-RETENTIO	N MIX		PARKING ISL
FULL SUN - PART SUN			FULL SUN - PART SUN
QTY: 8,694			QTY: 527
All plants to be Deep Co to be installed in a rand at a minimum of 3-7 per	ell, Plug, 18" O.C. A om triangular spacin r area % and plant ty	ll plants g, varied pe.	All plants to be Quart to be installed in a rar at a minimum of 3-7 p
Grasses /Sedges		40% by Area	Grasses /Sedges
Carex muskingumensis	Palm Sedge	25%	Bouteloua curtipendula
Carex vulpinoidea	Brown Fox Sedge	25%	Carex shortiana
Chasmanthium latifolium	River Oats	10%	Sporobolus heterolopsis
Juncus effusus	Soft Rush	15%	
Schizachyrium scoparium	Little Bluestern	25%	Forbs
			Aster obiongitolius
Forbs		60% by Area	
Amsonia illustris	Shining Bluestar	20%	Echinacea purpurea
Chelone obliqua	Rose Turtleheed	10%	Pendemon digitalia
Eupatorium coelestinum	Mist Flower	10%	Pensiemen uigitails
Iris virginica	Southern Blue Flag	10%	
Liatris spicata	Marsh Blazing Star	10%	
Rudbeckia fulgida var. umbrosa	Orange Coneflower	20%	
Solidago rugosa	Rough-leaved Goldenrod	10%	
Symphystrichum poyoo opalico	New England Aster	10%	

File = Date

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STALE: 1" = 50'-0"

С

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ufactur	Catalog Number	Description	Lamp	Number	Filename	Lumens Per	Light Loss Factor	Wattage
onia ting	DSX1 LED 30C 700 40K T5M MVOLT	DSX1 LED WITH (1) 30 LED LIGHT ENGINES, TYPE T5M OPTIC, 4000K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _T5M_MVOL T.ies	7042.423	0.95	68
onia ting	DSX1 LED 30C 700 40K T3M MVOLT	DSX1 LED WITH (1) 30 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _T3M_MVOL T.ies	6723.812	0.95	68
onia ting	DSX1 LED 30C 700 40K TFTM MVOLT	DSX1 LED WITH (1) 30 LED LIGHT ENGINES, TYPE TFTM OPTIC, 4000K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _TFTM_MVO LT.ies	6633.359	0.95	68
onia ting	DSX1 LED 30C 700 40K TFTM MVOLT HS	DSX1 LED WITH (1) 30 LED LIGHT ENGINES, TYPE TFTM OPTIC, 4000K, @ 700mA WITH HOUSE SIDE SHIELD	LED	1	DSX1_LED_3 0C_700_40K _TFTM_MVO LT_HS.ies	4511.538	0.95	68
onia ting	DSX1 LED 30C 700 30K T3S MVOLT	DSX1 LED WITH (1) 30 LED LIGHT ENGINES, TYPE T3S OPTIC, 3000K, @ 530mA	LED	1	DSX1_LED_3 0C_700_30K _T3S_MVOLT .ies	5478.582	0.95	68
onia ting	DSX1 LED 30C 700 40K T2M MVOLT	DSX1 LED WITH (1) 30 LED LIGHT ENGINES, TYPE T2M OPTIC, 4000K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _T2M_MVOL T.ies	6610.803	0.95	68
onia ting	DSX1 LED 30C 700 40K T3M MVOLT	DSX1 LED WITH (1) 30 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _T3M_MVOL T.ies	6723.812	0.95	136
t Column ard	LBLCO-604	FLUORESCENT BOLLARD	L FLUORESCENT	2		35	0.95	40

Α

scription	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
X1 LED WITH (1) 30 D LIGHT ENGINES, PE T5M OPTIC, 10K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _T5M_MVOL T.ies	7042.423	0.95	68
X1 LED WITH (1) 30) LIGHT ENGINES, PE T3M OPTIC, 0K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _T3M_MVOL T.ies	6723.812	0.95	68
K1 LED WITH (1) 30) LIGHT ENGINES, PE TFTM OPTIC, 0K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _TFTM_MVO LT.ies	6633.359	0.95	68
K1 LED WITH (1) 30 D LIGHT ENGINES, PE TFTM OPTIC, 0K, @ 700mA WITH USE SIDE SHIELD	LED	1	DSX1_LED_3 0C_700_40K _TFTM_MVO LT_HS.ies	4511.538	0.95	68
K1 LED WITH (1) 30 D LIGHT ENGINES, PE T3S OPTIC, 0K, @ 530mA	LED	1	DSX1_LED_3 0C_700_30K _T3S_MVOLT .ies	5478.582	0.95	68
K1 LED WITH (1) 30 0 LIGHT ENGINES, PE T2M OPTIC, 0K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _T2M_MVOL T.ies	6610.803	0.95	68
X1 LED WITH (1) 30 D LIGHT ENGINES, PE T3M OPTIC, 0K, @ 700mA	LED	1	DSX1_LED_3 0C_700_40K _T3M_MVOL T.ies	6723.812	0.95	136

SITE AND ROADWAY LIGHTING TYPES A - G NTS

NTS

1/24/2014

Ratio Canopy 1.5 TLROC15 LED Canopy Luminaire

Introduction

The unique look and unparalleled performance of the Ratio provides a comprehensive solution for

any architectural project. The Ratio Canopy 1.5 offers a wide variety of LED packages, drive currents, distributions and color temperatures in a pendant or surface mounted platform. This highly configurable luminaire features specialized lenses that allow for outstanding optical control and produce sites with remarkable uniformity. It is ideal for replacing 50W to 150W metal halide lamps with typical energy savings of

TIM () 224111135

Consistent with LEED* goals & Green Globes** onteria for light pollution reduction

_____ D _____

55% and delivered lumens of 2,300 - 7,500. EXAMPLE: TLROC15 72LED 100MA 41K SYM 120 PDM FG SF DWH

lering In [.]	formation	

Specifications

Height

Weight

18-1/4

(12.7 cm)

19 lbs

TLROC15												
Series	LEDs	Color temperature	Distribution	Voltage	Mount	ing	Accessorie	S	Options		Finish	
TLROC15	72LED 100MA 72LED 220MA 72LED 350MA	35K 41K 56K	SYM ASY	120 ¹ 208 ¹ 240 ¹ 277 ¹ 347 ² 480 ²	PDM SRM TNM	Pendant ³ Surface ⁴ Trunnion ⁵	FG STEM12 STEM18 STEM22 SLVRD SLVSQ	Fowl guard ⁶ 12" stem ⁷ 18" stem ⁷ 22" stem ⁷ Self Leveling swivel plate for rd. or oct. J-box ⁸ Self leveling swivel plate for sq. J-box ⁸	SF DF SPD6KV SPD10KV OCD ADC LDIM	Single fuse Double fuse Surge protection Surge protection Occ control dim Occ auto-set O-10V dimming ⁹	DDB DNA DWH	Dark bronze Natural alum White

	NOTES
	1 120-277 uses MVOLT driver. (Asking for specific voltage for surge protection.) 2 347 and 480 volt include a remote transformer box.
	3 Pendant mounts to 3/4" NPT stem by others or as a separate optional accessory.
	4 Surface mounts to J-Box by others. Mounting plate and cable included. Ships with fixture.
	 5 Trunnion mounting hardware not finish painted and shipped separately. 6 FG: Fowl guard for pendant mount only. Shipped separately.
	 STEMx: 3/4" NPT stem. Not finish painted. Shipped separately. SLVRD or SLVSQ: Self leveling pendant mount swivel plate for round/ octagonal or square J-Box. Not finish painted. Shipped separately.
	9 Not available with 72LED 100MA.
t	INSTALLATION Mounting: Fully silicone-gasketed, galvanized steel plate. Surface mounts to recessed box or pendant mounts to industry standard J-boxes. The quick-mounting bracket includes a tether for the fixture, allowing for trouble-free electrical connections. The fixture twist-locks into place in a firm, secure fashion.

The luminaire is tested to and meets all NRTL outdoor requirement standards, wet location use, through the fully accredited and approved CSA laboratory. VARRANTY

Five-year limited warranty. Full warranty terms located at:

Note: Specifications subject to change without notice.

LIGHTING

FEATURES & SPECIFICATIONS

resistant and hangers are galvanized steel.

CONSTRUCTION

rinse and sealant.

FINISH

OPTICS

ELECTRICAL

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One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • Fax: 770.918.1209 • www.lithonia.com

directional, uni-directional and pedestrian walk/ drive lanes.

TLROC15 Rev. 12/19/13

PRODUCT DATA

NOMINAL DIMENSIONS (SECURITY CORE)

1/11/

BASE PLATE MOUNTING DETAILS (SERIES 600)

-A

(673mm) 2

bolt circle

(610n

stainless steel compression cap

linear fluorescent lamps (2x

- ballast mounting plate

stainless steel column

lamp holder and wiring channe

electronic ballast multi-voltage

_____9" (229mm)

1/2" (13mm) thick stainless steel base

-embedded heavy-wall security core

poured concrete security footer 18"

_x 18" x 30" (457mm x 457mm x

welded cross supports (2x)

762mm) minimum

— 0.63" (16mm)

9.00" (229mm)

_____6 (154mm)

FORMS+SURFACES®

page 2 of 5 | Rev. 03-01-11

base plate

acrylic lens

assembly

(120/277V)

plate with cover

LOADING DOCK LIGHTING NTS

Die-cast, low copper (<0.6%) aluminum alloy housing. All mechanical fasteners are corrosion

The powder coated finish uses TGIC polyester powder. The finish is a three-stage process the

consists of drying, powder application and curing. Before curing, the parts are treated with a

Precision injection molded acrylic optics are designed to meet multiple applications, bi-

live-stage pretreatment process, consisting of a heated alkaline cleaner, rinse, phosphate coatin

Il electrical components are UL recognized and mounted directly to the electrical housing for

maximum heat dissipation. Fixture includes a driver with optional fusing and surge protector.

MERCY VIRTUAL CARE CENTER

CHESTERFIELD HEALTH CAMPUS

DESCRIPTION

6 inch LED recessed medium beam downlight with 50° cut off specially designed for LED technology. Two-stage reflector system produces smooth distribution with excellent light control and low aperture brightness. Lumen packages include 2000 delivered lumens with color temperatures of 2700K, 3000K, 3500K, 4000K. Suitable for commercial construction and exceeds high efficacy requirements (with designated trims) for IECC-2009, and T24-2008.

SPECIFICATION FEATURES

Lower Shielding Reflector Self-flanged, spun .050" thick aluminum lower reflector in combination with a lensed upper optical chamber provides superior lumen output with minimal source conductors and feed thru branch brightness. Available in all Portfolio wiring. Alzak® finishes.

Trim Retention

Lower reflector is retained with two torsion springs holding the flange tightly to the finished ceiling surface.

Plaster Frame / Collar New Construction Housing: Die

cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2". Remodel Housing: Galvanized steel plaster ring adjusts to accept up to 1" ceiling thickness.

Universal Mounting Bracket Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling (new construction housing only).

www.cooperlighting.com

NTS

CANOPY LIGHTING

Junction Box (4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG (four in, four out) 90°C

Thermal

Extruded aluminum heat sink conducts heat away from the LED module for improved performance and longer life.

LED LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and convex transitional lens producing even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Auto

esetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded. Color variation within 3-step MacAdam ellipses. Flexible disconnect allows for tool-less replacement of LED engine from below ceiling.

Fixture should not be operated in ambient temperatures above 40° C

Code Compliance Thermally protected and cULus listed for protected wet locations. IP54 Certified. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. Non-IC rated - Insulation must be kept 3" from top and sides of housing. RoHS Compliant. Title 24 2008 Compliant with designated trims. ARRA Compliant. Photometric testing completed in

accordance with IES LM 79 standards. LED life testing completed in accordance with LM 80 standards.

Warranty 5 year warranty.

Consult your representative for additional options and finishes.

New Constructin or Remodel Can be used for **T24 2008** C-lifornia Tife 24 High Efficacy Compliance Qualified & Compliant with designate LED modules and trims. Energy Data l Rating: Class A standards ting Temperature: 40°C (104°F 2000 Lumen 0-10V (Values at non-dimming line voltag nimum Starting Temp: -30°C (-22°F) MI/RFI: FCC Title 47 CFR, Part 18, Class B put Voltage: UNV (90V - 305V) Power Factor: >0.90 (at nominal input 120/230/240/277 VAC & 100% of Rated Ouput Pov put Power: 36W THD: <21% 0V Input Current: .3A 277V Input Current: . Maximum Non-IC Ambient put Frequency: 47-63Hz ated Wattage: 36W

6 Inch

Medium Downlight

ADP110815 2012-02-02

EXTERIOR LIGHTING CUT SHEETS

PORTFOLIO[™]

Catalog #	Туре
Project	
Comments	Date