VII. A.

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 Section Plan

Meeting Date: August 22, 2016

From: Justin Wyse
Senior Planner

CC: Aimee Nassif, Planning & Development Services Director

Location: 641 Spirit Valley Central Dr.

Applicant: Spirit Valley Development, LLC

Description: **Spirit Valley Business Park, Adjusted Lot 4**: A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 3.492 acre tract of land zoned "PI" Planned Industrial District located on the west side of Spirit Valley Central Dr. and north of Spirit Valley West Dr.

PROPOSAL SUMMARY

The request is for construction of a 35,000 square foot multi-tenant building for office and warehouse users. The proposed building will be constructed of tilt-up concrete with spandrel glass accent features and steel eyebrows above the windows.

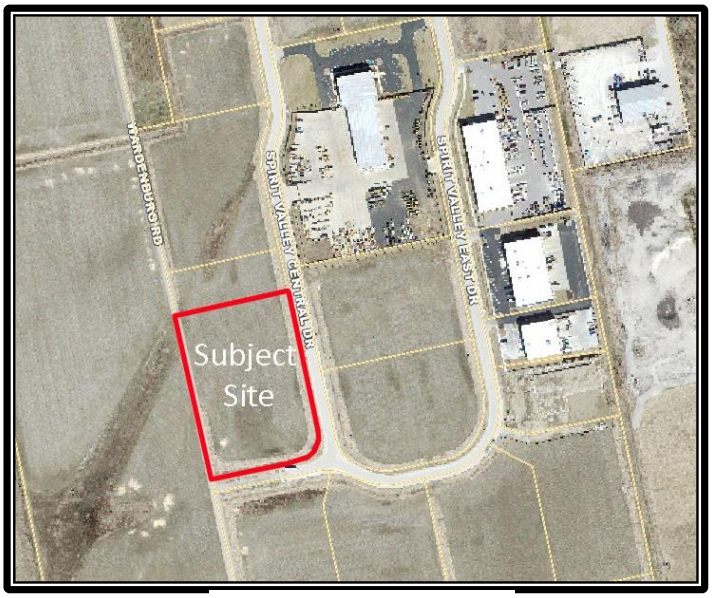


Figure 1: Aerial Photo

ZONING HISTORY OF SUBJECT SITE

The subject site was originally zoned "NU" Non-Urban District by St. Louis County in 1965 prior to the incorporation of the City of Chesterfield. The site was then rezoned from "NU" Non-Urban District to "PI" Planned

Industrial District in June of 2007 under terms and conditions of the City of Chesterfield Ordinance 2373. The ordinance has been amended twice to allow for additional permitted uses.

Land Use and Zoning of Surrounding Properties:

Direction	Land Use	Zoning
North	Vacant	PI – Planned Industrial District
East	Office / Warehouse (Chesterfield Fence)	PI – Planned Industrial District
South	Warehouse (The Place)	PI – Planned Industrial District
West	Vacant (Phase II of Spirit Valley)	PI – Planned Industrial District

STAFF ANALYSIS

Parking

Parking requirements are provided for both office and warehouse portions of the proposed buildings. The table below outlines the minimum, maximum, and proposed parking.

Min Parking Requirement	Max Parking Requirement	Proposed Parking	Future Parking
56 spaces	91 spaces	65 spaces	81 spaces

All building users are not known at this time, so interior allocation of office and warehouse use may change over time. In order to accommodate this, the applicant has shown an area of 16 additional parking spaces that can be added in the future if necessary to accommodate changes in the tenant mix.

Landscaping

The landscaping design is similar in design to adjacent buildings within Spirit Valley Business Park. Street trees are proposed along the eastern and southern frontages of the property and landscape islands with additional landscaping are also included. Various trees and shrubs are proposed in front of the building to highlight and soften architectural features proposed. Finally, a bio-retention area is proposed on the western property line that abuts Phase II of Spirit Valley Business Park (currently undeveloped).

Open space for the site is proposed at 31.41% open space. This percentage includes future addition of parking to ensure that the plans for future needs are accommodated. Without the additional parking being constructed, the site will provide 33.21% open space.

The Architectural Review Board, in reviewing the project, recommended that the northern patio area include the same landscape treatment as the patio on the southern end of the site. The plans have been amended to reflect this change and comply with ARB's recommendation.

Site Circulation and Access

The proposal includes three curbs cuts in compliance with the City's requirements regarding access management standards. The northern and southern curb cuts are designed to allow for safe and effective movement of truck traffic that would utilize the rear loading area of the

building and minimizing turning movements of trucks that could conflict with vehicular access to the site. This northern access also includes a proposed cross access easement that would be shared with the property to the north.

The design seeks to provide movements that allow for easy maneuvering of truck traffic on the site to prevent conflicts between passenger vehicles and trucks. The center curb cut is provided centrally within the building and allows for increased separation of vehicles accessing the site.

Architectural Elevations

The proposed building is thirty-three (33) feet in height, which is similar in height and scale with other existing structures within Spirit Valley Business Park. Concrete tilt-up panels will be used with dark (charcoal) color on vertical projected portals and light (beige) colors on the main portion of the façade. The primary façade is also accented with red colored steel eyebrows and vertical frosted glass sections.

Screening

A trash enclosure is proposed on the rear side of the building, at a location furthest from any public right-of-way. Building materials are proposed to match the materials used on the building, as recommended by the architectural design standards for the City of Chesterfield.

The building includes a raised parapet on all four sides of the building. The Architect's Statement of Design and the site plan all reference that building mechanical equipment will be fully screened by the raised parapet as required by Code.

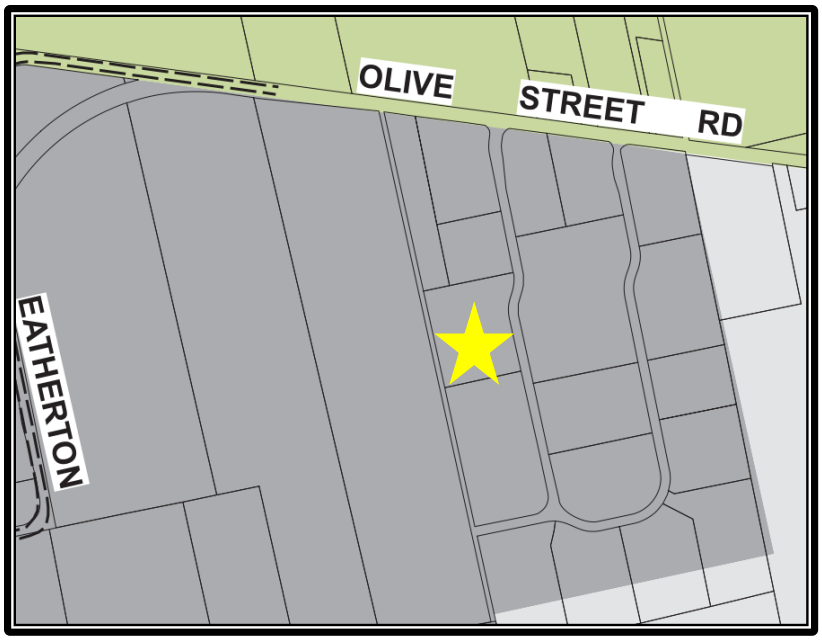
Several building related utilities are proposed on the southern façade of the building. The landscape plan shows additional landscaping in this are to provide screening for the required utilities. This screening will minimize the public view of an electric transformer adjacent to the building and electric / gas meters on the building.

Lighting

Lighting consists primarily of utilitarian lighting in compliance with the City of Chesterfield's lighting requirements. Proposed street lights will match the standards installed throughout the development. Accent lighting is utilized to highlight building entrances.

COMPREHENSIVE PLAN

The City of Chesterfield Comprehensive Plan Land Use Map delineates the property as Low Intensity Industrial, which permits manufacturing and assembly, as well as warehousing and distribution uses.



RECOMMENDATION

Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, Statement of Design, and Amended Architectural Elevations and the proposed project complies with the UDC requirements. The project was reviewed by the Architectural Review Board and received a recommendation for approval with the condition that the northern patio receive the same landscaping treatment as the southern patio. This change has been made. Staff recommends approval of the proposed Site Development Section Plan, Landscape Plan, Lighting Plan, Architect's Statement of Design, and Amended Architectural Elevations as all City Code requirements have been satisfied.

MOTION

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 Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Spirit Valley Business Park, Lot 4 as presented.

2) "I move to approve the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Spirit Valley Business Park, Lot 4 with the following conditions (Conditions may be added, eliminated, altered or modified):

cc: Aimee Nassif, Planning and Development Services Director

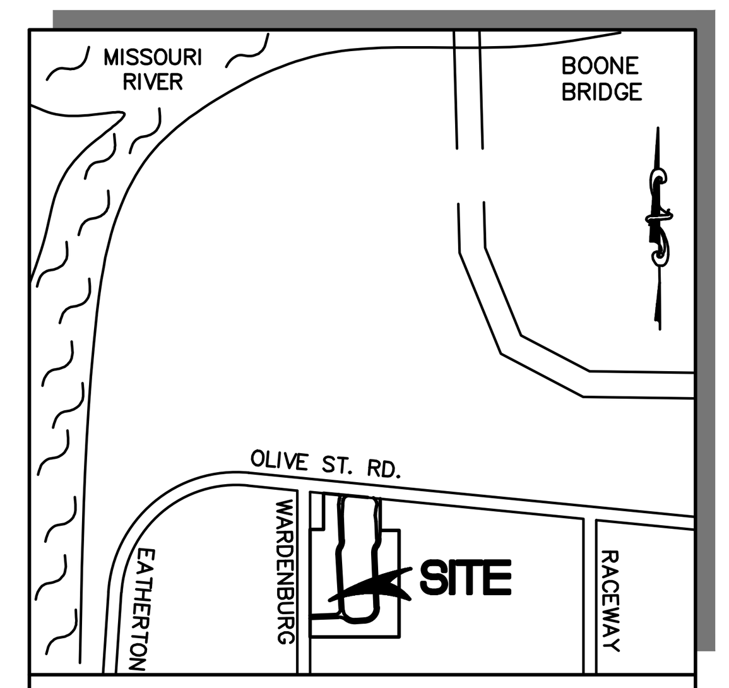
Attachments: Site Development Section Plan
Landscape Plan
Lighting Plan
Architectural Elevations
Architect's Statement of Design

ADJUSTED LOT 4A OF SPIRIT VALLEY BUSINESS PARK - SITE DEVELOPMENT SECTION PLAN

A TRACT OF LAND BEING PART OF ORIGINAL LOT 4 OF SPIRIT VALLEY BUSINESS PARK
AS RECORDED IN PLAT BOOK 356, PAGE 177
TOWNSHIP 45 NORTH, RANGE 3 EAST OF THE 5TH PRINCIPAL MERIDIAN
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

LEGEND

EXISTING CONTOURS
PROPOSED CONTOURS
EXISTING SANITARY SEWERS
EXISTING STORM SEWERS
PROPOSED SANITARY SEWERS
PROPOSED STORM SEWERS
EXISTING RIGHT-OF-WAY
PROPOSED RIGHT-OF-WAY
CENTERLINE
EASEMENT
NOTES PARKING SPACES
GUY WIRE
EXISTING SPOT ELEVATION
PROPOSED SPOT ELEVATION
SWALE
TO BE REMOVED — T.B.R.
TO BE REMOVED & RELOCATED — T.B.R. & R.
TO BE USED IN PLACE — U.I.P.
BACK OF CURB — B.C.
FACE OF CURB — F.C.
TRASH ENCLOSURE
EXISTING LIGHT STANDARD
GAS MAIN
WATER MAIN
UNDERGROUND TELEPHONE
UNDERGROUND TELEPHONE



LOCATION MAP
(NOT TO SCALE)

SHEET INDEX

PARKING CALCULATIONS

REQUIRED PARKING:

(MINIMUM)
OFFICE: 3.3/1,000 GFA = 3.3/1,000 x 7,000 = 23 SPACES
WAREHOUSE: 2 SPACES FOR EVERY 3 EMPLOYEES ON THE MAXIMUM SHIFT (50 EMPLOYEES = 33 SPACES)

TOTAL PERMITTED (MINIMUM): 56 SPACES

(MAXIMUM)
OFFICE: 4.5/1,000 GFA = 4.5/1,000 x 7,000 = 31 SPACES
WAREHOUSE: 1.2 SPACES PER EMPLOYEE ON THE MAXIMUM SHIFT (50 EMPLOYEES = 60 SPACES)

TOTAL PERMITTED: 91 SPACES

TOTAL PROVIDED: 65 SPACES (3 ACCESSIBLE) – 16 FUTURE SPACES

REQUIRED LOADING: 10x40 LOADING SPACE (2)
10x25 LOADING SPACE (2)

TOTAL REQUIRED: 4 SPACE
TOTAL PROVIDED: 7 SPACE

SITE INFORMATION

ADDRESS LOT 4	= 641 SPIRIT VALLEY CENTRAL DRIVE CHESTERFIELD, MO 63005
SITE AREA	= ADJUSTED LOT 4A: 3.492 ACRES
OWNER	= SPIRIT VALLEY DEVELOPMENT, LLC
CITY	= CITY OF CHESTERFIELD
ZONING	= "PI" PLANNED INDUSTRIAL
FLOOD MAP	= 29189C0145K
SEWER DISTRICT	= MSD
WATERSHED	= MISSOURI RIVER
FIRE DISTRICT	= MONARCH CHESTERFIELD
SCHOOL DISTRICT	= ROCKWOOD R-6
ELECTRIC SERVICE	= AMEREN
GAS SERVICE	= LACLEDE GAS
PHONE SERVICE	= ATT
WATER SERVICE	= MO. AMERICAN WATER CO.
CABLE SERVICE	= CHARTER COMMUNICATIONS

OPENSPACE CALCULATIONS

TOTAL SITE AREA: 152,123 S.F.

BUILDING: 35,645 S.F.
VEHICLE PAVEMENT: 68,695 S.F.

PERCENT OPENSPACE:
[(152,123 – (35,645+68,695)) / 152,123] x 100 = 31.41%

________________________, the owner(s) of the property
(Name of Owner(s))
shown on this plan for and in consideration of being granted approval of said plan to develop property under the provisions of section 03.

__________ ____P.I.____ of City of Chesterfield Unified Development
(applicable subsection) (present zoning)

Code, do hereby agree and declare that said property from the date of recording this plan shall be developed only as shown thereon, unless said plan is amended by the City of Chesterfield, or voided or vacated by order of ordinance of the City of Chesterfield Council.

(Signature): ____________________

(Name Typed): ____________________

STATE OF MISSOURI)
) SS.
COUNTY OF ST. LOUIS)

On this _____ day of __________, A.D., 2016, before me personally appeared

________________, to me known, who, being by me duly sworn in, did say
(Officer of Corporation)
that say he/she is the ____________ of ____________________,
(Title) (Name of Corporation)
a corporation in the State of Missouri, and that the seal affixed to the foregoing instruments is the corporate seal of said corporation, and that said instrument was signed on behalf of said corporation by authority of its Board of Directors, and the

____
(Officer of Corporation)
acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have signed and sealed the foregoing the day and year first above written.

____
Notary Public

____
Print Name

My commission expires: __________

This Site Development Section Plan was approved by the City of Chesterfield Planning Commission and duly verified on the_____day of________, of 2016, by the Chairperson of said Commission, authorizing the recording of this Site Development Section Plan pursuant to Chesterfield Ordinance Number 200, as attested to by the Planning and Development Services Director.

____
Aimee E. Nassif, AICP
Planning and Development Services Director
City of Chesterfield, Missouri

____
Vickie Hass, City Clerk
City of Chesterfield, Missouri

ABBREVIATIONS

W	– WATER	DB	– DEED BOOK
E	– ELECTRIC	PB	– PLAT BOOK
OE	– OVERHEAD ELECTRIC	PG	– PAGE
UE	– UNDERGROUND ELECTRIC	(_'W)	– RIGHT-OF-WAY WIDTH
G	– GAS	(REC)	– RECORD INFORMATION
T	– TELEPHONE	FT	– FEET
TBR	– TO BE REMOVED	N/F	– NOW OR FORMERLY
TBR & R	– TO BE REMOVED AND REPLACED	FND	– FOUND
UIP	– USE IN PLACE	SQ	– SQUARE
ATG	– ADJUST TO GRADE	CO	– CLEANOUT
BC	– BACK OF CURB	MH	– MANHOLE
FC	– FACE OF CURB	AI	– AREA INLET
TW	– TOP OF WALL	CI	– CURB INLET
BW	– BOTTOM OF WALL	GI	– GRATE INLET
PVMT	– PAVEMENT	YD	– YARD DRAIN
ASPH	– ASPHALT	PVC	– POLYVINYL CHLORIDE PIPE
CONC	– CONCRETE	RCP	– REINFORCED CONCRETE PIPE
GRND	– GROUND	CMP	– CORRUGATED METAL PIPE
FG	– FINISHED GRADE	VCP	– CLAY PIPE
FF	– FINISHED FLOOR	FL	– FLOWLINE
LL	– LOWER LEVEL	TS	– TAILSTAKE
TT	– TOP OF TURF	ELEV, EL	– ELEVATION
TC	– TOP OF CURB	PROP, PR	– PROPOSED
SG	– SUBGRADE	EXIST, EX	– EXISTING
MG	– METHANE GAS	TYP	– TYPICAL
		BMP	– BEST MANAGEMENT PRACTICES
		SWPPP	– STORMWATER POLLUTION PREVENTION PLAN

NOTES

1. BOUNDARY AND TOPOGRAPHICAL SURVEY BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. (BASIS OF BEARINGS: MISSOURI STATE PLANE, GRID NORTH)
2. SUBJECT PROPERTY LIES WITHIN FLOOD ZONE "X" (AREAS OF 500-YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD) ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP FOR ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS PER MAP NO. 29189C0145K WITH AN EFFECTIVE DATE OF FEBRUARY 4, 2015 WITH AN ELEVATION OF 460.
3. ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED. SHOULD ANY CONFLICTS BE EVIDENT, THE CONTRACTOR SHALL NOTIFY THE OFFICE OF THE ENGINEER IMMEDIATELY.
4. ON-SITE STORM WATER DRAINAGE REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CHESTERFIELD VALLEY MASTER STORM WATER DRAINAGE PLAN AND AS DIRECTED BY THE CITY OF CHESTERFIELD AND MSD.
5. ALL PROPOSED UTILITIES SHALL BE CONSTRUCTED TO THE CITY OF CHESTERFIELD STANDARDS.
6. ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH THE CITY OF CHESTERFIELD AND MSD STANDARDS.
7. STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
8. THE MAXIMUM HEIGHT OF BUILDINGS SHALL NOT EXCEED FORTY (40) FEET.
9. THIS SITE DEVELOPMENT SECTION PLAN WILL ADHERE TO THE PARKING AND LOADING REGULATIONS OF THE CITY OF CHESTERFIELD CODE.
10. NO PARKING SHALL BE PERMITTED ON ANY ROADWAY IN OR ADJACENT TO THE DEVELOPMENT AS REQUIRED BY THE SITE SPECIFIC ORDINANCE.
11. ALL UTILITIES WILL BE INSTALLED UNDERGROUND. THE DEVELOPMENT OF THIS PARCEL WILL COORDINATE THE INSTALLATION OF ALL UTILITES IN CONJUNCTION WITH THE CONSTRUCTION OF ANY ROADWAY.
12. SIGNAGE IN ACCORDANCE WITH THE REQUIRED SPIRIT VALLEY SIGN PACKAGE SHALL BE PROVIDED FOR THIS LOT.
13. ALL LIGHTING SHALL CONFORM TO THE LIGHTING ORDINANCE OF THE CITY OF CHESTERFIELD
14. PLANS SUBJECT TO CHANGE PENDING AGENCY REVIEWS AND FINAL ENGINEERING.
15. ALL UTILITY BOXES, INCLUDING TRANSFORMERS AND METERS, EXCEPT WHEN FLUSH WITH GROUND, WILL BE SCREENED AS REQUIRED BY CITY OF CHESTERFIELD CODE (APPENDIX A. SECTION 1003.177.11(D).
16. ALL ROOF TOP MOUNTED EQUIPMENT SHALL BE SCREENED.

BENCHMARK

SL-40: BRASS DISC STAMPED "SL-40, 1990" ON THE NORTH SIDE OF NORTH OUTER 40 RD, ACROSS FROM THE INTERSECTION OF SPIRIT OF ST. LOUIS BOULEVARD. ELEV.=486.55

SITE BENCHMARK

ELEV.=461.90
FND. IRON PIPE AT THE NORTHWEST CORNER OF SITE AS SHOWN HEREON.

SURVEYOR'S CERTIFICATION

THIS IS TO CERTIFY THAT STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. HAS PREPARED THIS SITE DEVELOPMENT SECTION PLAN FROM A FIELD SURVEY AND DOES NOT REPRESENT A PROPERTY BOUNDARY SURVEY. THIS SITE DEVELOPMENT SECTION PLAN IS A CORRECT REPRESENTATION OF ALL EXISTING AND PROPOSED LAND DIVISIONS.

STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC.

By: [signature] 5/23/16
DANIEL EHLMANN, MISSOURI L.S. NO. 2215

STATE OF MISSOURI · DANIEL EHLMANN · NUMBER PLS-2215 · PROFESSIONAL LAND SURVEYOR

GEOTECHNICAL STATEMENT

PSI, INC., at the request of Keystone Construction Company has provided geotechnical services for the project proposed hereon. A geotechnical investigation was conducted during June 2016 for the development proposed hereon. Our findings indicate that the earth-related aspects are suitable for the development proposed pursuant to the geotechnical recommendations set forth in our Geotechnical Report

____

____
Date

PREPARED FOR:

LANDOWNER: SPIRIT VALLEY DEVELOPMENT, LLC
8235 FORSYTH BOULEVARD, SUITE 210
ST. LOUIS, MO 63105
ATTN: DANIEL W. HAYES
PHONE: 314-994-4068
FAX: 314-994-4088
DHAYES@NAIDESCO.COM

PREPARED BY:
STOCK & ASSOCIATES Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO 63005 PH. (636)
530-9100 FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

SITE DEVELOPMENT SECTION PLANS FOR:
ADJUSTED LOT 4A - SPIRIT VALLEY BUSINESS PARK
641 SPIRIT VALLEY CENTRAL DRIVE
CHESTERFIELD, MO

STATE OF MISSOURI · GEORGE MICHAEL STOCK · NUMBER PE-25116 · PROFESSIONAL ENGINEER

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

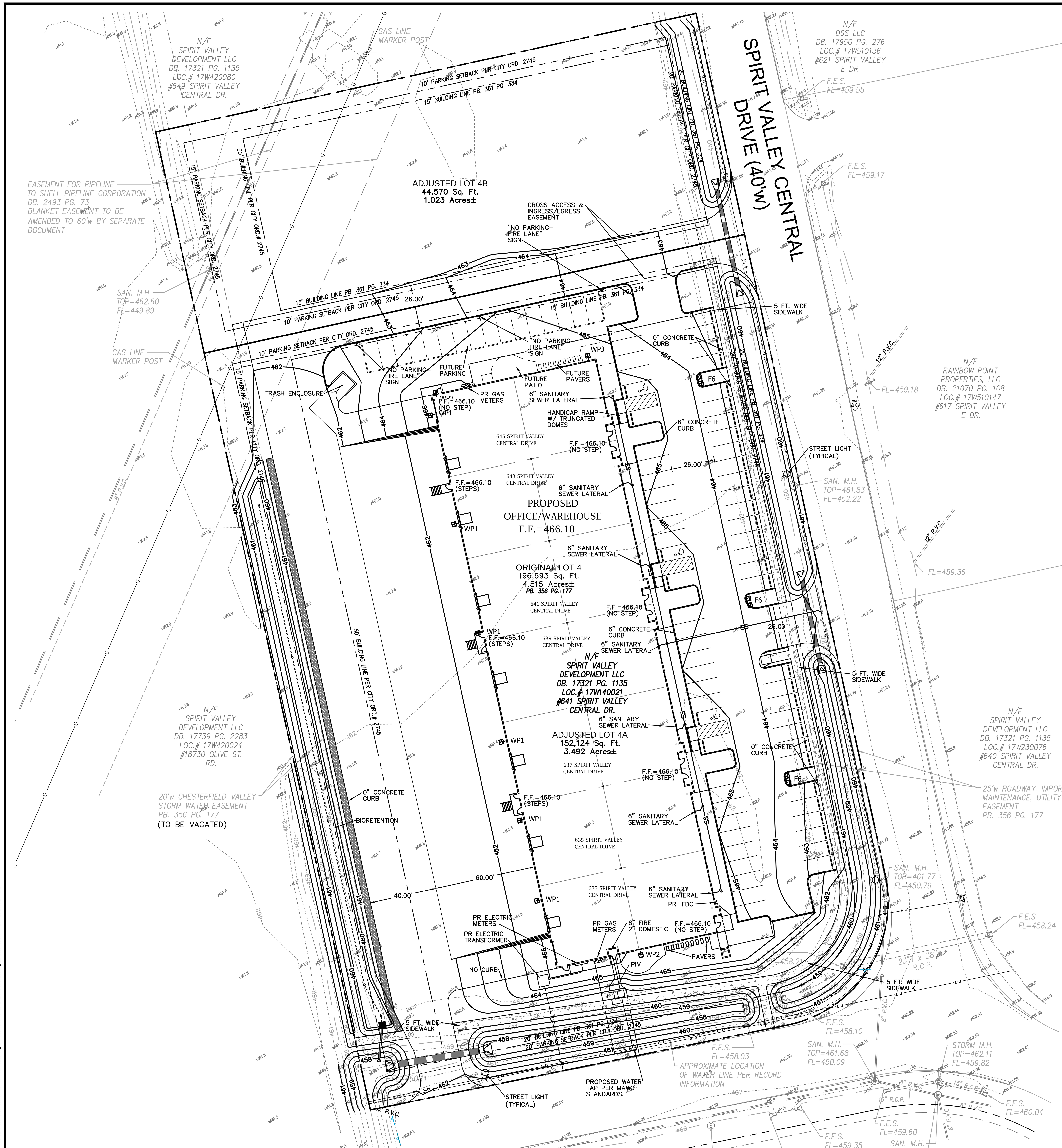
REVISIONS:

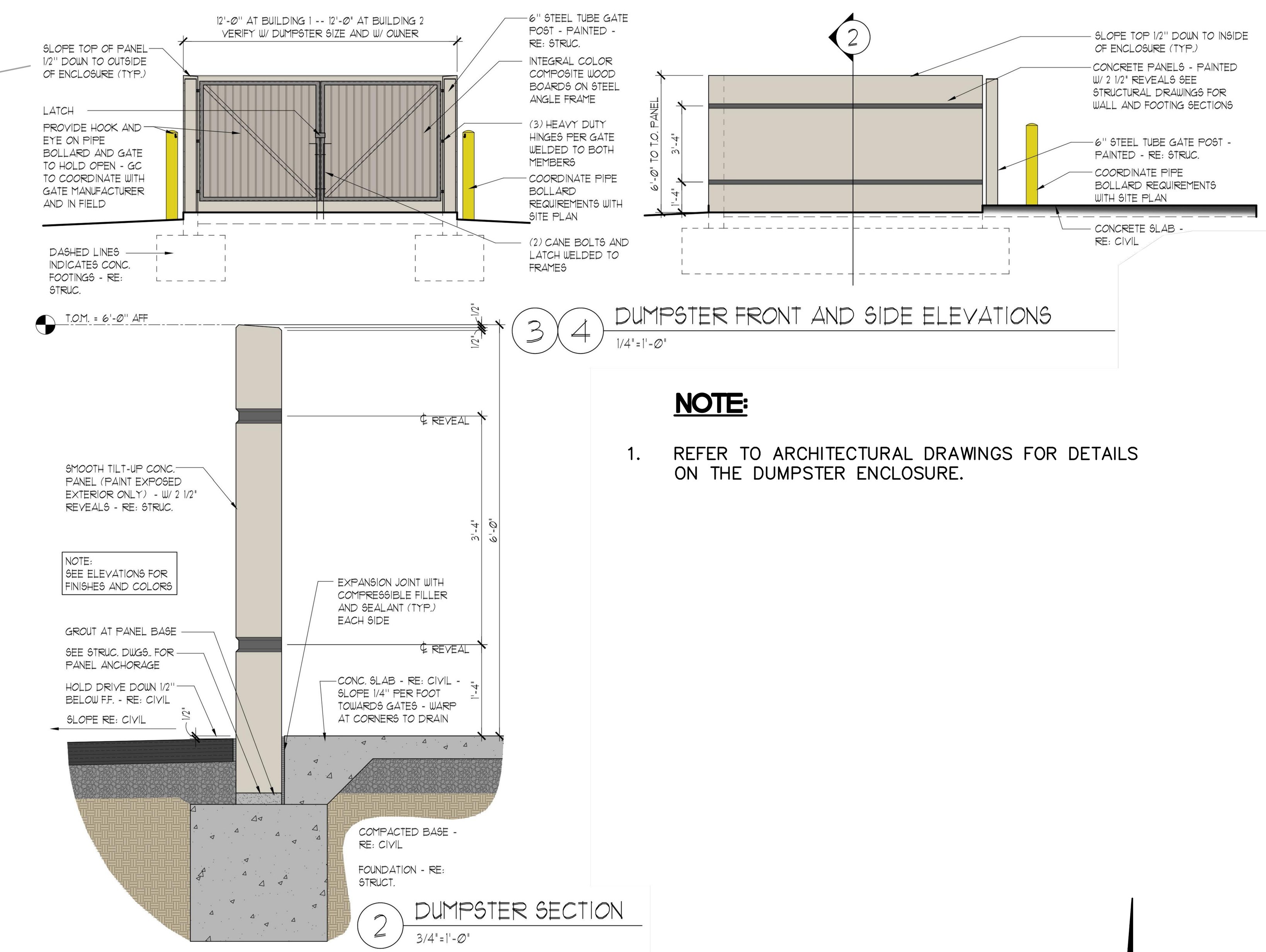
1. City Comments 06/27/16
2. City Comments 08/08/16
3. City Comments 08/15/16

DRAWN BY: E.J.F.	CHECKED BY: G.M.S.
DATE: 05/23/2016	JOB NO: 216-5789
M.S.D. P #: P-	BASE MAP #: 17W
S.L.C. H&T #: -	H&T S.U.P. #: -
M.D.N.R. #: MO-	

SHEET TITLE: TITLE SHEET

SHEET NO.: SDSP-1





NOTE:

1. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS ON THE DUMPSTER ENCLOSURE.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PREPARED BY:

STOCK & ASSOCIATES Consulting Engineers, Inc.

257 Chesterfield Business Parkway
St. Louis, MO 63005 PH. (636) 530-9100 FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

SITE DEVELOPMENT SECTION PLANS FOR:

ADJUSTED LOT 4A - SPIRIT VALLEY BUSINESS PARK

641 SPIRIT VALLEY CENTRAL DRIVE
CHESTERFIELD, MO

STATE OF MISSOURI
GEORGE MICHAEL STOCK
NUMBER PE-25116
PROFESSIONAL ENGINEER

GEORGE M. STOCK E-25116
CIVIL ENGINEER
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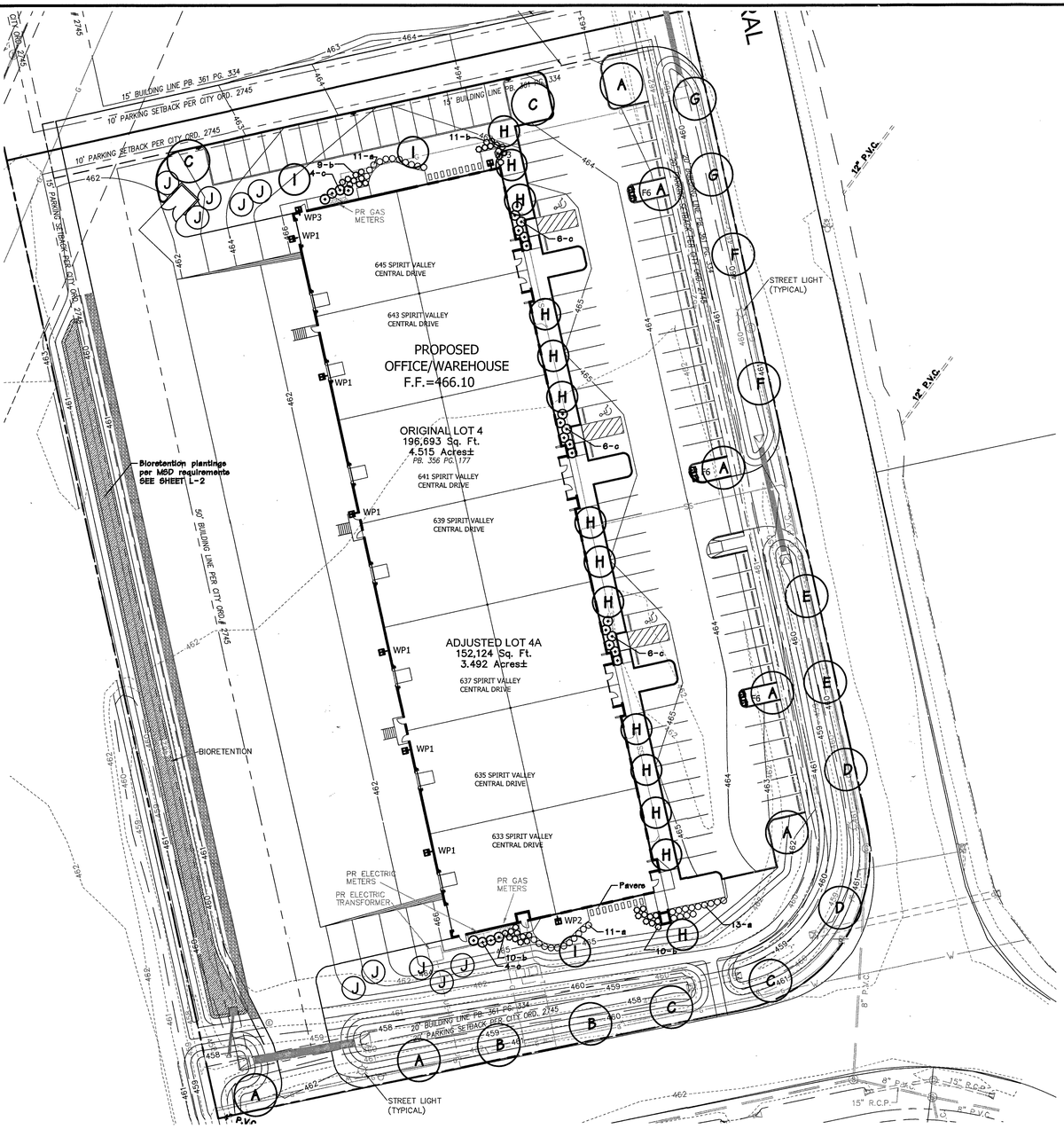
M.S.D. P #: P–	BASE MAP #: 17W
S.L.C. H&T #: –	H&T S.U.P. #: –
M.D.N.R. #: MO–	

SHEET TITLE: SITE PLAN

SHEET NO.: SDSP-2



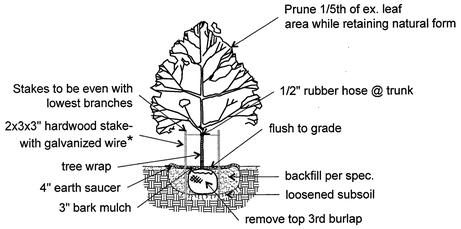
LANDSCAPE PLAN

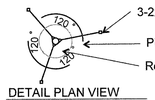
SCALE 1" = 30'

0 30 60 120

PLANTING SCHEDULE							
SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	TYPE	GROWTH RATE/SIZE CLASS	MATURE HT/FEET
TREES							
A	7	Acer rubrum 'Frankered'	Red Sunset Maple	2.5" cal	Deciduous	Fast/Large	45+
B	2	Quercus bicolor	Swamp White Oak	2.5" cal	Deciduous	Med/Large	45+
C	4	Tilia cordata	Littleleaf Linden	2.5" cal	Deciduous	Slow-Med/Large	45+
D	2	Zelkova serrata	Zelkova	2.5" cal	Deciduous	Fast/Large	45+
E	2	Gleditsia triacanthos 'Shademaster'	Shademaster Honeylocust	2.5" cal	Deciduous	Fast/Large	45+
F	2	Platanus x acerifolia	London Planetree	2.5" cal	Deciduous	Fast/Large	45+
G	2	Quercus muehlenbergii	Chinkapin Oak	2.5" cal	Deciduous	Med/Large	45+
H	14	Betula nigra 'BNMTF' (Single Stem)	Dura Heat River Birch	2.5" cal	Deciduous	Med/Medium	20-30
I	3	Cercis canadensis	Redbud	2.5" cal	Ornamental	Fast/Medium	25-30
J	10	Picea glauca	White Spruce	6'	Evergreen	Med/Medium	30-40
SHRUBS/PERENNIALS							
a	35	Buxus sinica var. insularis 'Wintergreen'	Wintergreen Boxwood	5 gal	Evergreen	-	-
b	40	Spirea japonica 'Magic Carpet'	Magic Carpet Spirea	5 gal	Deciduous	-	-
c	26	Viburnum carlesii 'Compactum'	Dwarf Koreanspice Viburnum	5 gal	Deciduous	-	-
		Bioretention plantings	-	-	-	-	-

Open Space Percentage: 31.41%

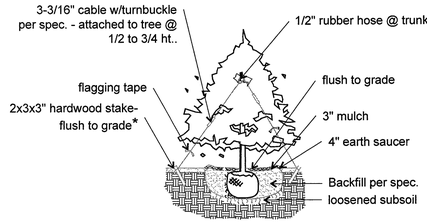




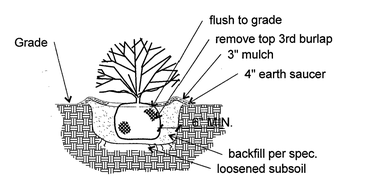
DETAIL PLAN VIEW

CANOPY TREE PLANTING

* Staking should only be done when:
- Planting in soft, loose soils
- Root balls in sandy soils, or wet clay
- Trees located in an extremely windy location

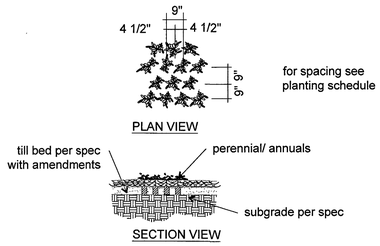


TYPICAL EVERGREEN PLANTING

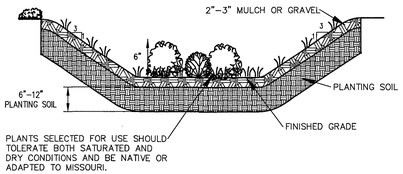


SCARIFY ROOT BALL OF ALL CONTAINER STOCK

TYPICAL SHRUB PLANTING



TYPICAL PERENNIAL PLANTING



BIORETENTION PLANTINGS (n.t.s.)

STATE OF MISSOURI JERALD SAUNDERS NUMBER LA-7 LANDSCAPE ARCHITECT

Jerald Saunders, Landscape Architect
MO License # LA-007

Consultants:

Adjusted Lot 4A
Spirit Valley Business Park

Chesterfield, Missouri

Revisions:

Date	Description	No.
6-27-16	Revised Plan	1
7-8-16	Revised Plan	2
7-11-16	Revised Plan	3
8-08-16	City Comments	4

Drawn: BR
Checked: RS

loomisAssociates

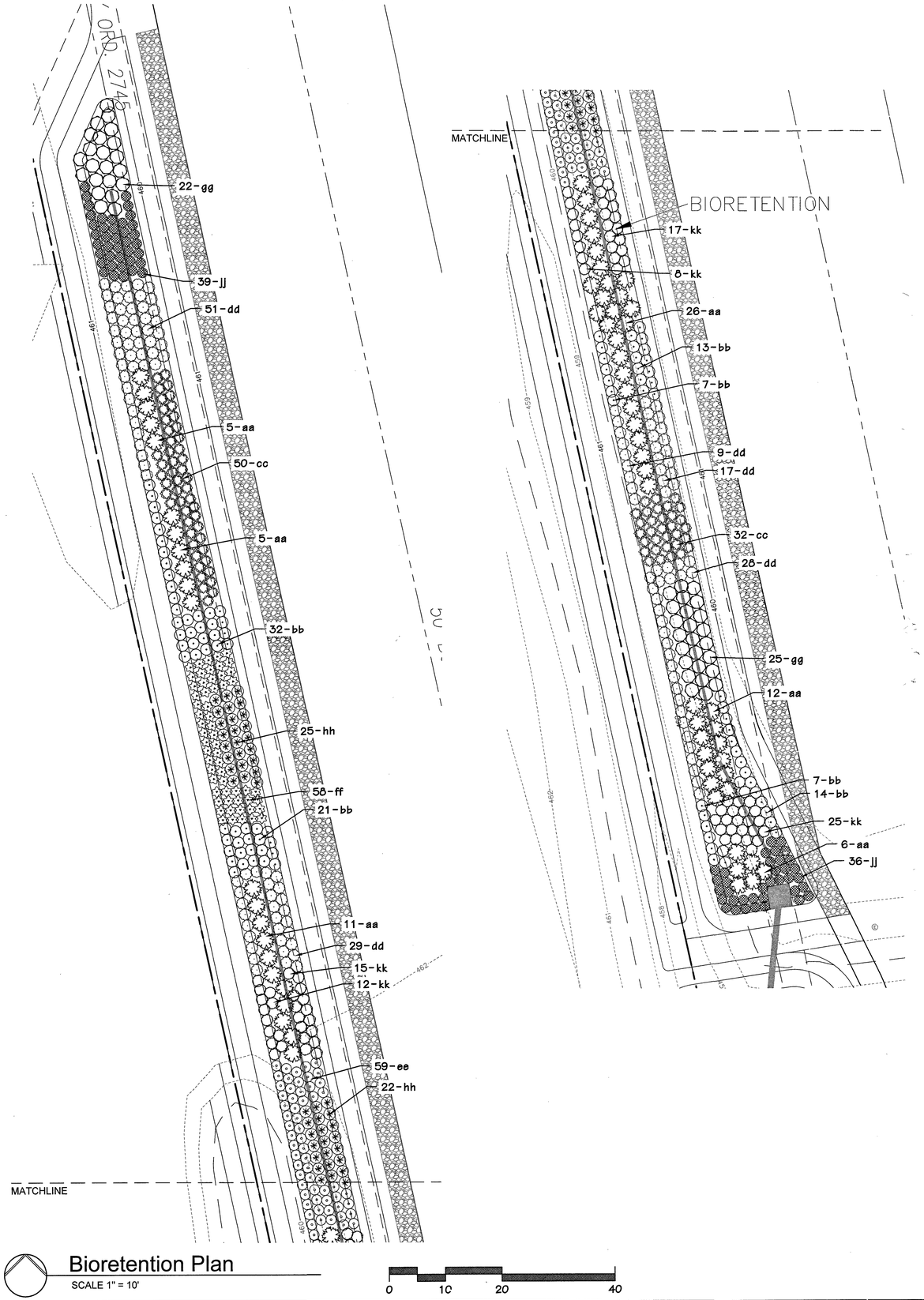
landscapeArchitects/planners
707 Spirit 40 Park Drive, Suite 135
Chesterfield, Missouri 63005-1194
636/519-8668 Fax 636/519-0797
e-mail: larry@loomis-associates.com

Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Landscape Plan

Sheet No: L-1

Date: 05/20/16
Job #: 667.014



Bioretention Plan

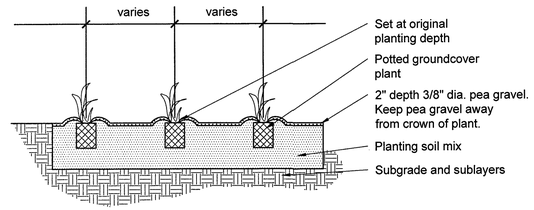
SCALE 1" = 10'

0 10 20 40

WATER AVAILABILITY	REQUIRED PLANTING PERIOD	MINIMUM CONTAINER SIZE	WATER REQUIREMENT FIRST 3 WEEKS	WATER REQUIREMENT AFTER 3 WEEKS*	MAXIMUM MULCH DEPTH****
No ability to water after initial planting	Late Feb.-April only	2.25"x3.75" or larger (plug)	Water each plug immediately after planting		1.5" for pluge
Manual watering with standard sprinkler	Late Feb.-Early June Sept.-October	4.5"x5" (quart) or larger in summer and fall	1" (60 min) every 4 days	1" (60 min) every 7 days until plants established***	1.5" for pluge 2.5" for quarts
Automatic irrigation (set to water more frequently than normal during first two months after planting)	Late Feb.-Early Oct.	2.25"x3.75" (plug) or larger in spring 4.5"x5" (quart) or larger in summer and fall	1" (60 min) every 4 days in spring and fall 1" (60 min) every 3 days in summer)	1" (60 min) every 7 days until plants established***	1.5" for pluge 2.5" for quarts

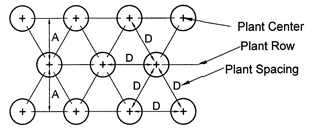
*This water amount includes natural rainfall. If you get a ½ inch of natural rain, then you will need to add a ½ inch of water to meet the 1 inch requirement.
**Requires transport of water to the planting site in large containers and pouring enough water onto each plant (after planting) to moisten the entire planting pit.
***Plants are established when roots have grown out of the container soil and into the native soil by 3-5 inches. This normally takes 3-4 months for most perennials and grasses and up to 6-7 months for trees and shrubs.
****Shredded leaf compost is recommended for use with perennials and grasses. Shredded bark mulch is recommended for tree and shrub plantings at a depth of 3 inches.

Groundcover Spacing
See planting schedule for plant spacing



Notes:
1. Remove spent flowers prior to planting.
2. Loosen root mass at bottom of rootball.
3. Top of rootball stripped of 1/4" surface growing media and covered with 1/4" landscape bed mix plus surface mulch.

BIORETENTION PLANT SPACING SECTION



BIORETENTION PLANT SPACING

BIORETENTION PLANTING SCHEDULE

SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
PERENNIALS AND GRASSES					
aa	65	Amsonia illustris	Shining Bluestar	3B DCP	36" o.c.
bb	94	Aster novae-angliae	New England Aster	3B DCP	24" o.c.
cc	82	Iris virginica	Southern Blueflag Iris	3B DCP	24" o.c.
dd	134	Rudbeckia fulgida	Orange Coneflower	3B DCP	24" o.c.
ee	59	Carex shortiana	Short's Sedge	3B DCP	18" o.c.
ff	58	Carex vulpinoidea	Fox Sedge	3B DCP	18" o.c.
gg	47	Panicum virgatum	Switchgrass	3B DCP	30" o.c.
hh	47	Schizachyrium scoparium	Little Bluestem	3B DCP	18" o.c.
jj	75	Sporobolus heterolopsis	Prairie Dropseed	3B DCP	18" o.c.
kk	77	Penstemon digitalis	Beardtongue	3B DCP	24" o.c.

STATE OF MISSOURI
JERALD K. SAUNDERS
NUMBER LA-7
LANDSCAPE ARCHITECT
7/11/16
Jerald Saunders - Landscape Architect
MO License # LA-007

Consultants:

Adjusted Lot 4A
Spirit Valley Business Park

Chesterfield, Missouri

Revisions:

Date	Description	No.
7-11-16	Revised Plan	1

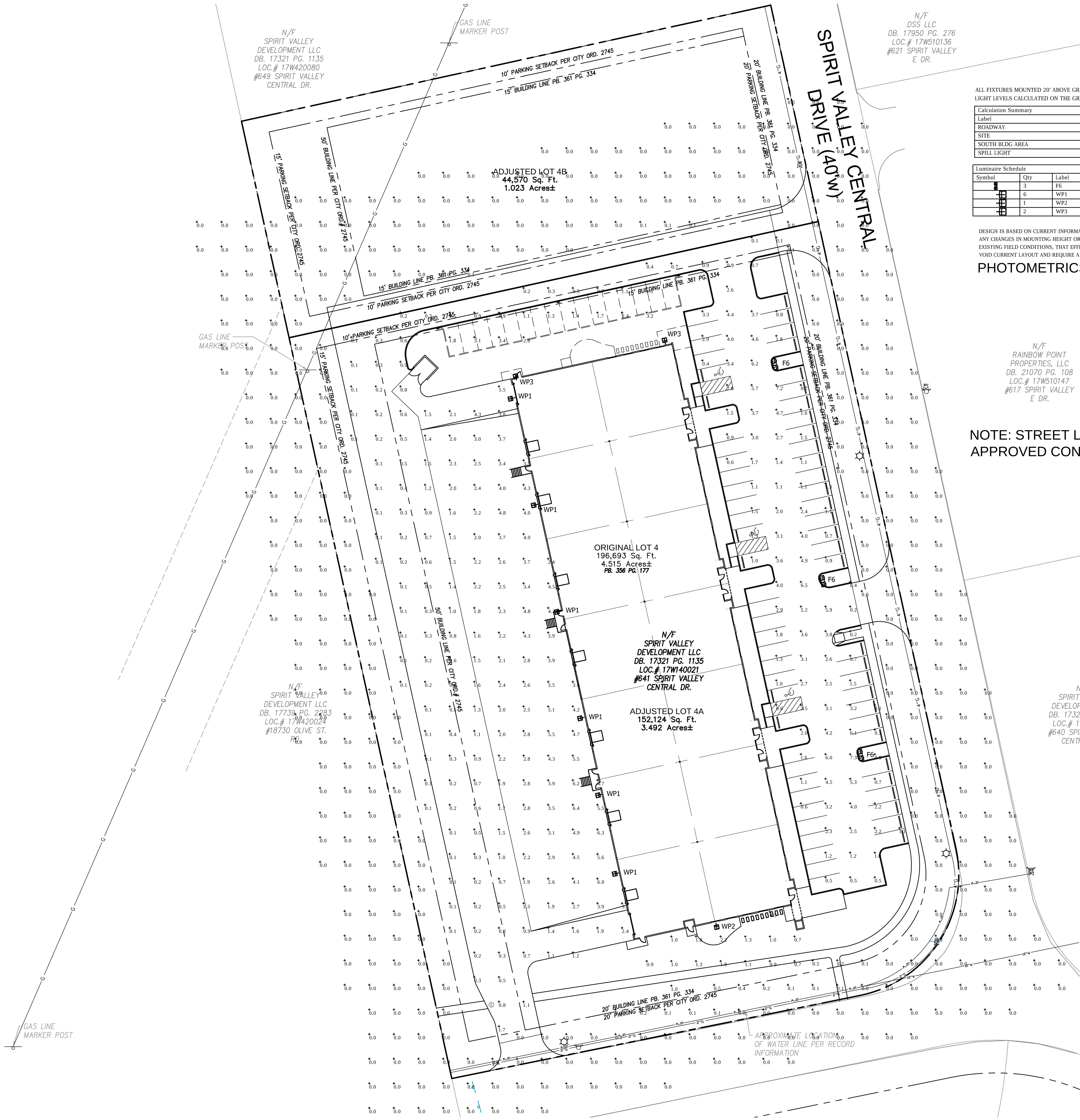
Drawn: BB
Checked: RS

loomisAssociates
landscape-Architects/planners
107 Spirit 40 Park Drive, Suite 125
Chesterfield, Missouri 63005-1194
636/519-8668 fax: 636/519-0797
e-mail: larry@loomis-associates.com
Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Bioretention Plan

Sheet No: L-2

Date: 05/20/16
Job #: 687.014



ALL FIXTURES MOUNTED 20' ABOVE GRADE
LIGHT LEVELS CALCULATED ON THE GROUND

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ROADWAY	Illuminance	Fc	0.97	5.3	0.0	N.A.	N.A.
SITE	Illuminance	Fc	1.96	7.3	0.0	N.A.	N.A.
SOUTH BLDG AREA	Illuminance	Fc	1.15	2.2	0.5	2.30	4.40
SPILL LIGHT	Illuminance	Fc	0.28	5.0	0.0	N.A.	N.A.

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	Description
	3	F6	ROTATED OPTICS	107	642	1.000	GLEON-AE-02-LED-E1-SL3-HSS
	6	WP1	SINGLE	157	942	1.000	GLEON-AE-03-LED-E1-T4FT
	1	WP2	SINGLE	56	56	1.000	GLEON-AE-01-LED-E1-SL3 WALL MOUNT
	2	WP3	SINGLE	107	214	1.000	GLEON-AE-02-LED-E1-T3

DESIGN IS BASED ON CURRENT INFORMATION PROVIDED AT THE TIME OF REQUEST. ANY CHANGES IN MOUNTING HEIGHT OR LOCATION, LAMP WATTAGE, LAMP TYPE, AND EXISTING FIELD CONDITIONS, THAT EFFECT ANY OF THE PREVIOUSLY MENTIONED, WILL VOID CURRENT LAYOUT AND REQUIRE A CHANGE REQUEST AND RECALCULATION.

PHOTOMETRICS PROVIDED BY OTHERS

NOTE: STREET LIGHTS ARE SHOWN PER APPROVED CONCEPT PLAN

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PREPARED BY:
Stock & Associates Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO 63005 PH. (636) 530-9100 FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

SITE DEVELOPMENT SECTION PLANS FOR:

ADJUSTED LOT 4A - SPIRIT VALLEY BUSINESS PARK

641 SPIRIT VALLEY CENTRAL DRIVE
CHESTERFIELD, MO

STATE OF MISSOURI
GEORGE MICHAEL STOCK
NUMBER PE-25116
PROFESSIONAL ENGINEER

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

1. City Comments 06/27/16
2. City Comments 08/08/16
3. City Comments 08/15/16

DRAWN BY: E.J.F.	CHECKED BY: G.M.S.
DATE: 05/23/2016	JOB NO: 216-5789
M.S.D. P #: P–	BASE MAP #: 17W
S.L.C. H&T #: –	H&T S.U.P. #: –
M.D.N.R. #: MO–	

SHEET TITLE: PHOTOMETRIC PLAN

SHEET NO.: SDSP-3

McGraw-Edison

DESCRIPTION

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

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast 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. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

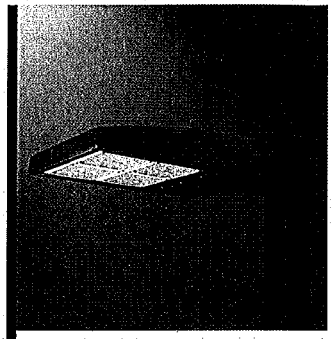
Optics
Choice of 16 patented, high-efficiency AccuLED Optics. The optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 6000K CCT and 3000K CCT. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed. The house side shield is designed to seamlessly integrate with the SL2, SL3, SL4 or AFL optics.

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 Wye 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 530mA and 700mA drive currents.

Mounting
Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during assembly. Designed for pole or wall mounting. When mounting two or more luminaires at 90° or 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table on page 3. Round pole top adapter included. For wall mounting, specify wall mount bracket option. 3G vibration rated.

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 colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty
Five-year warranty.



GLEON
GALLEON LED

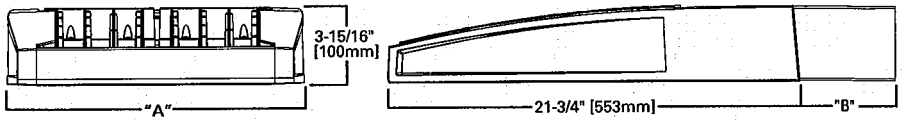
1-10 Light Squares

Solid State LED

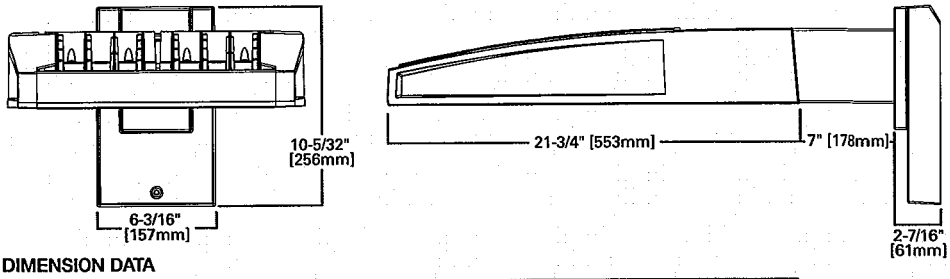
AREA/SITE LUMINAIRE

DIMENSIONS

POLE MOUNT



WALL MOUNT



DIMENSION DATA

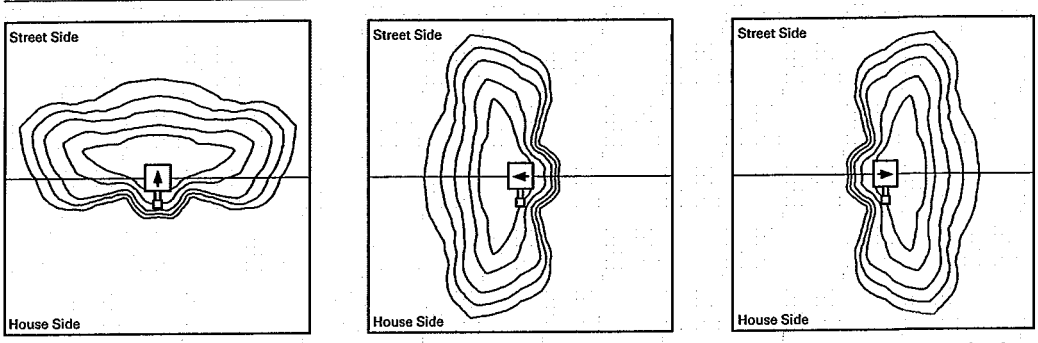
Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length [1]	Weight with Arm (lbs.)	EPA with Arm [2] (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)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

NOTES: 1 Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. **2** EPA calculated with optional arm length.

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)

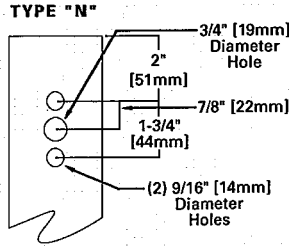
OPTIC ORIENTATION



Standard | **Optics Rotated Left @ 90° [L90]** | **Optics Rotated Right @ 90° [R90]**

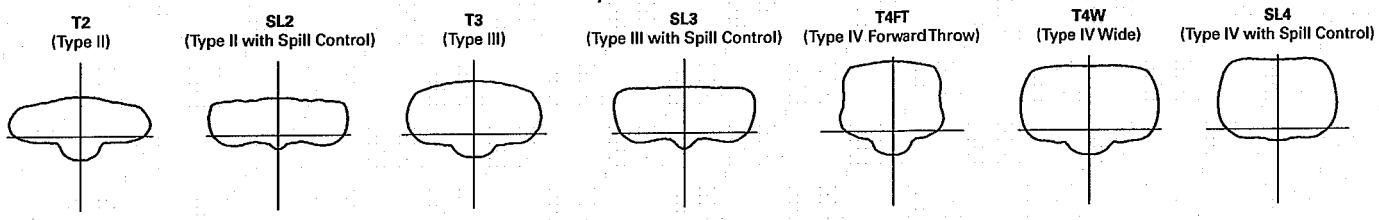
DRILLING PATTERN

TYPE "N"



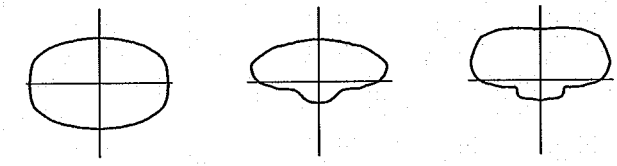
OPTICAL DISTRIBUTIONS

Asymmetric Area Distributions



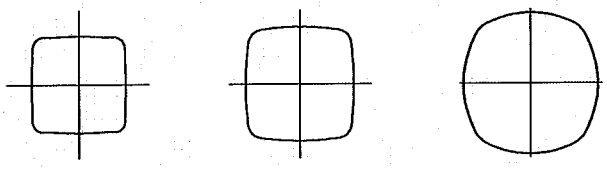
T2 (Type II) | **SL2** (Type II with Spill Control) | **T3** (Type III) | **SL3** (Type III with Spill Control) | **T4FT** (Type IV Forward Throw) | **T4W** (Type IV Wide) | **SL4** (Type IV with Spill Control)

Asymmetric Roadway Distributions



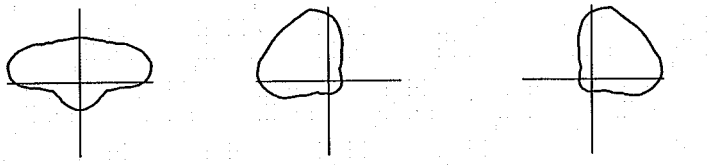
RW (Rectangular Wide Type I) | **T2R** (Type II Roadway) | **T3R** (Type III Roadway)

Symmertric Distributions



5NQ (Type V Square Narrow) | **5MQ** (Type V Square Medium) | **5WQ** (Type V Square Wide)

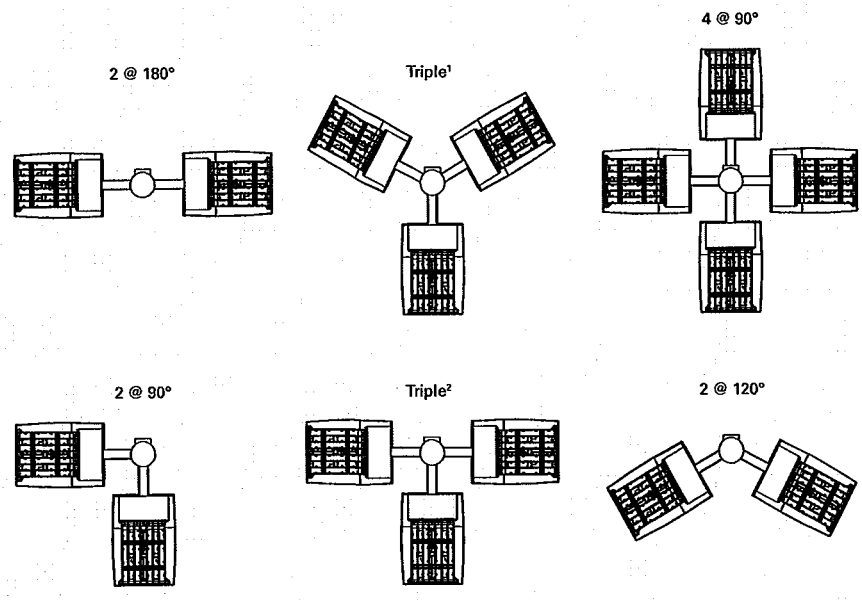
Specialized Distributions



AFL (Automotive Frontline) | **SLL** (90° Spill Light Eliminator Left) | **SLR** (90° Spill Light Eliminator Right)

ARM MOUNTING REQUIREMENTS

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



NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. **2** Round poles are 3 @ 90°.

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

NOMINAL POWER AND LUMENS (1A)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Drive Current		1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
Nominal Power (Watts)		56	107	157	213	264	315	370	421	475	528
Input Current @ 120V (A)		0.47	0.90	1.31	1.79	2.21	2.64	3.09	3.51	3.96	4.41
Input Current @ 208V (A)		0.28	0.51	0.74	1.02	1.25	1.48	1.76	1.99	2.22	2.50
Input Current @ 240V (A)		0.25	0.45	0.65	0.90	1.10	1.30	1.55	1.75	1.95	2.20
Input Current @ 277V (A)		0.23	0.41	0.59	0.82	1.00	1.18	1.41	1.59	1.77	2.00
Optics											
T2	Lumens	5,272	10,303	15,373	20,313	25,168	30,118	35,618	40,357	45,018	49,842
	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
T2R	Lumens	5,597	10,938	16,321	21,565	26,719	31,974	37,813	42,844	47,792	52,914
	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-G4	B4-U0-G5
T3	Lumens	5,374	10,501	15,669	20,704	25,652	30,697	36,303	41,134	45,884	50,802
	BUG Rating	B1-U0-G2	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
T3R	Lumens	5,493	10,735	16,017	21,164	26,222	31,379	37,110	42,048	46,904	51,930
	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
T4FT	Lumens	5,405	10,562	15,760	20,824	25,801	30,875	36,514	41,372	46,150	51,096
	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	B3-U0-G5
T4W	Lumens	5,335	10,426	15,556	20,555	25,468	30,476	36,042	40,838	45,554	50,436
	BUG Rating	B1-U0-G2	B2-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
SL2	Lumens	5,263	10,285	15,347	20,278	25,124	30,066	35,556	40,288	44,940	49,756
	BUG Rating	B1-U0-G2	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
SL3	Lumens	5,373	10,500	15,667	20,701	25,649	30,693	36,298	41,128	45,878	50,794
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL4	Lumens	5,105	9,976	14,886	19,669	24,370	29,163	34,488	39,078	43,591	48,262
	BUG Rating	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	Lumens	5,542	10,830	16,160	21,352	26,455	31,658	37,439	42,421	47,320	52,392
	BUG Rating	B2-U0-G1	B3-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
5MQ	Lumens	5,644	11,029	16,457	21,745	26,942	32,241	38,128	43,202	48,191	53,356
	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-G4	B5-U0-G5
5WQ	Lumens	5,659	11,059	16,501	21,803	27,014	32,327	38,230	43,317	48,320	53,498
	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
SLL/SLR	Lumens	4,722	9,227	13,767	18,191	22,539	26,971	31,897	36,141	40,315	44,635
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	Lumens	5,492	10,732	16,014	21,159	26,216	31,372	37,101	42,038	46,893	51,918
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
AFL	Lumens	5,512	10,771	16,072	21,236	26,311	31,486	37,236	42,191	47,063	52,107
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4

* Nominal data for 4000K CCT.

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

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000
50°C*	> 90%	> 170,000

* 50°C lumen maintenance data applies to 530mA and 700mA drive currents.

NOMINAL POWER AND LUMENS (700MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Drive Current		700mA	700mA	700mA	700mA	700mA	700mA	700mA	700mA	700mA	700mA
Nominal Power (Watts)		38	72	105	138	176	210	243	276	314	348
Input Current @ 120V (A)		0.32	0.59	0.86	1.14	1.45	1.72	2	2.28	2.58	2.86
Input Current @ 208V (A)		0.21	0.36	0.51	0.67	0.87	1.02	1.18	1.34	1.53	1.69
Input Current @ 240V (A)		0.19	0.32	0.45	0.59	0.77	0.90	1.04	1.18	1.35	1.49
Input Current @ 277V (A)		0.20	0.29	0.40	0.51	0.69	0.80	0.91	1.02	1.20	1.31
Optics											
T2	Lumens	3,854	7,531	11,237	14,847	18,395	22,013	26,033	29,497	32,904	36,430
	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
T2R	Lumens	4,091	7,995	11,929	15,762	19,529	23,370	27,638	31,316	34,932	38,676
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
T3	Lumens	3,928	7,676	11,453	15,133	18,750	22,437	26,534	30,065	33,537	37,132
	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
T3R	Lumens	4,015	7,846	11,707	15,469	19,166	22,936	27,124	30,733	34,283	37,957
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T4FT	Lumens	3,951	7,720	11,519	15,221	18,858	22,567	26,688	30,240	33,732	37,347
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	Lumens	3,900	7,620	11,370	15,024	18,615	22,276	26,343	29,849	33,296	36,864
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL2	Lumens	3,847	7,518	11,217	14,821	18,364	21,975	25,988	29,447	32,847	36,368
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
SL3	Lumens	3,927	7,675	11,451	15,131	18,747	22,434	26,531	30,061	33,533	37,126
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL4	Lumens	3,731	7,292	10,880	14,376	17,812	21,315	25,208	28,562	31,861	35,275
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5	B2-U0-G5	B3-U0-G5
5NQ	Lumens	4,051	7,916	11,811	15,606	19,336	23,139	27,365	31,006	34,587	38,294
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
5MQ	Lumens	4,125	8,062	12,029	15,894	19,692	23,565	27,869	31,577	35,224	38,999
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
5WQ	Lumens	4,136	8,083	12,061	15,936	19,745	23,628	27,943	31,661	35,318	39,103
	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
SLL/SLR	Lumens	3,451	6,744	10,063	13,296	16,474	19,714	23,314	26,416	29,467	32,625
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
RW	Lumens	4,014	7,844	11,704	15,465	19,162	22,930	27,118	30,726	34,274	37,948
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
AFL	Lumens	4,029	7,873	11,747	15,522	19,231	23,014	27,216	30,838	34,399	38,086
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 4000K CCT.

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

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000
50°C*	> 90%	> 170,000

* 50°C lumen maintenance data applies to 530mA and 700mA drive currents.

NOMINAL POWER AND LUMENS (530MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Drive Current		530mA	530mA	530mA	530mA	530mA	530mA	530mA	530mA	530mA	530mA
Nominal Power (Watts)		30	54	80	105	130	159	184	209	234	259
Input Current @ 120V (A)		0.25	0.45	0.66	0.86	1.07	1.32	1.52	1.72	1.93	2.14
Input Current @ 208V (A)		0.17	0.28	0.39	0.51	0.63	0.78	0.9	1.02	1.14	1.26
Input Current @ 240V (A)		0.17	0.25	0.35	0.45	0.55	0.70	0.80	0.90	1.00	1.10
Input Current @ 277V (A)		0.19	0.24	0.32	0.40	0.49	0.64	0.72	0.80	0.89	0.98
Optics											
T2	Lumens	3,079	6,017	8,978	11,862	14,697	17,588	20,800	23,567	26,289	29,106
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4
T2R	Lumens	3,269	6,388	9,531	12,593	15,603	18,672	22,082	25,020	27,909	30,900
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4
T3	Lumens	3,138	6,133	9,150	12,091	14,980	17,926	21,200	24,021	26,795	29,667
	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
T3R	Lumens	3,208	6,269	9,354	12,359	15,313	18,325	21,671	24,555	27,390	30,326
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
T4FT	Lumens	3,156	6,168	9,203	12,161	15,067	18,030	21,323	24,160	26,950	29,839
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
T4W	Lumens	3,116	6,088	9,084	12,004	14,872	17,797	21,047	23,848	26,602	29,453
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
SL2	Lumens	3,074	6,006	8,962	11,842	14,672	17,558	20,764	23,527	26,244	29,056
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
SL3	Lumens	3,138	6,132	9,149	12,089	14,978	17,924	21,197	24,018	26,791	29,662
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
SL4	Lumens	2,981	5,826	8,693	11,486	14,231	17,030	20,140	22,820	25,456	28,184
	BUG Rating	B0-U0-G1	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5
5NQ	Lumens	3,236	6,324	9,437	12,469	15,449	18,487	21,863	24,773	27,634	30,595
	BUG Rating	B1-U0-G0	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2
5MQ	Lumens	3,296	6,441	9,610	12,698	15,733	18,828	22,266	25,229	28,142	31,158
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3
5WQ	Lumens	3,305	6,458	9,636	12,732	15,775	18,878	22,325	25,296	28,217	31,241
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
SLL/SLR	Lumens	2,757	5,388	8,040	10,623	13,162	15,751	18,627	21,105	23,543	26,066
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4
RW	Lumens	3,207	6,267	9,351	12,356	15,309	18,320	21,666	24,549	27,384	30,319
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3
AFL	Lumens	3,219	6,290	9,385	12,401	15,365	18,387	21,745	24,638	27,484	30,429
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3

* Nominal data for 4000K CCT.

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

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000
50°C*	> 90%	> 170,000

* 50°C lumen maintenance data applies to 530mA and 700mA drive currents.

ORDERING INFORMATION

Sample Number: GLEON-AE-04-LED-E1-T3-GM-700

Product Family [1]	Light Engine	Number of Light Squares [2]	Lamp Type	Voltage	Distribution	Color	Mounting
GLEON=Galleon	**AE**=1A Drive Current	**01**=1 **02**=2 **03**=3 **04**=4 **05**=5 **06**=6 **07**=7 **08**=8 **09**=9 **10**=10	**LED**=Solid State Light Emitting Diodes	**E1**=120-277V **347**=347V [3] **480**=480V [3,4]	**T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T3R**=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 Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=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 [5] **MA**=Mast Arm Adapter [6] **WM**=Wall Mount

Options (Add as Suffix)

2L=Two Circuits [7,8]
7030=70 CRI 3000K [9]
8030=80 CRI 3000K [10]
7050=70 CRI 5000K [10]
7060=70 CRI 6000K [9]
530=Drive Current Factory Set to 530mA [11]
700=Drive Current Factory Set to 700mA [11]
P=Button Type Photocontrol (120, 208, 240 or 277V)
PER7=NEMA 7-PIN Twistlock Photocontrol Receptacle
R=NEMA Twistlock Photocontrol Receptacle
HA=50°C High Ambient [8,12]
MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height [13,14,15,16,17]
MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height [13,14,15,16,17]
MS/DIM-L40=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height [13,14,15,16,19]
MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height (Wide Range) [13,14,15,16,20]
MS/X-L08=Bi-Level Motion Sensor, Maximum 8' Mounting Height [13,14,15,16,17,21]
MS/X-L20=Bi-Level Motion Sensor, 9' - 20' Mounting Height [13,14,15,16,18,21]
MS/X-L40=Bi-Level Motion Sensor, 21' - 40' Mounting Height [13,14,15,16,19,21]
MS/X-L40W=Bi-Level Motion Sensor, 21' - 40' Mounting Height (Wide Range) [13,14,15,16,20,21]
MS-L08=Motion Sensor for ON/OFF Operation, Maximum 8' Mounting Height [13,14,15,16,17]
MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height [13,14,15,16,18]
MS-L40=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height [13,14,15,16,19]
MS-L40W=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height (Wide Range) [13,14,15,16,20]
DIMRF-LW=LumaWatt Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [22]
DIMRF-LN=LumaWatt Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [22]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° Right
MT=Factory Installed Mesh Top
TH=Tool-less Door Hardware
LCF=Light Square Trim Plate Painted to Match Housing [23]
HSS=Factory Installed House Side Shield [24]
CE=CE Marking [25]

Accessories (Order Separately)

OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V
OA/RA1027=NEMA Photocontrol - 480V
OA/RA1201=NEMA Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
MA1252=10kV Surge Module Replacement
MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1037-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon
MA1197-XX=3@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1188-XX=4@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1189-XX=2@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1190-XX=3@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1191-XX=2@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1039-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1192-XX=3@120° Tenon Adapter for 3-1/2" O.D. Tenon
MA1193-XX=4@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1194-XX=2@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1195-XX=3@90° Tenon Adapter for 3-1/2" O.D. Tenon
FSIR-100=Wireless Configuration Tool for Occupancy Sensor [26]
GLEON-MT1=Field Installed Mesh Top for 1-4 Light Squares
GLEON-MT2=Field Installed Mesh Top for 5-6 Light Squares
GLEON-MT3=Field Installed Mesh Top for 7-8 Light Squares
GLEON-MT4=Field Installed Mesh Top for 9-10 Light Squares
LS/HSS=Field Installed House Side Shield [24,27]

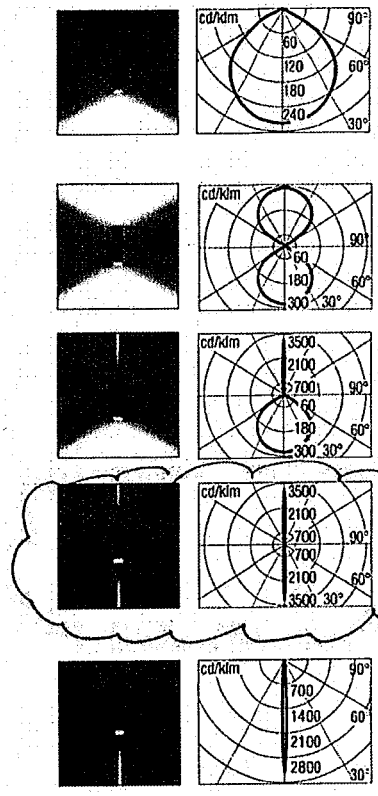
NOTES:
1. DesignLights Consortium™ Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2. Standard 4000K CCT and minimum 70 CRI.
3. Requires the use of a step down transformer when combined with MS/DIM, MS/X or DIMRF.
4. Only for use with 480V Wye systems. 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).
5. May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern. Refer to arm mounting requirement table.
6. Factory installed.
7. 2L is not available with MS, MS/X or MS/DIM at 347V or 480V. 2L in AE-02 through AE-04 requires a larger housing, normally used for AE-05 or AE-06. Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table.
8. Not available with LumaWatt wireless sensors.
9. Extended lead times apply. Use dedicated IES files for 3000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website.
10. Extended lead times apply. For 8030, factor 7030 IES files x .92 (8% lumen loss). For 7050, use 7060 IES files.
11. 1 Amp standard. Use dedicated IES files for 530mA and 700mA when performing layouts. These files are published on the Galleon luminaire product page on the website.
12. 50°C lumen maintenance data applies to 530mA and 700mA drive currents.
13. Consult factory for more information.
14. Utilizes internal step down transformer when 347V or 480V is selected.
15. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
16. Not available with HA option.
17. Approximately 22' detection diameter at 8' mounting height.
18. Approximately 40' detection diameter at 20' mounting height.
19. Approximately 60' detection diameter at 40' mounting height.
20. Approximately 100' detection diameter at 40' mounting height.
21. Replace X with number of Light Squares operating in low output mode.
22. LumaWatt wireless sensors are factory installed only requiring network components RF-EM-1, RF-GW-1 and RF-ROUT-1 in appropriate quantities. See www.eaton.com/lighting for LumaWatt application information.
23. Not available with house side shield (HSS).
24. Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected.
25. CE is not available with the DIMRF, MS, MS/X, MS/DIM, P, R or PER7 options. Available in 120-277V only.
26. This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information
27. One required for each Light Square.

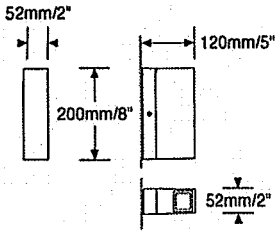
BLADE-S

WEB PIN™ 705

A SPECIFY LAMP/LUMINAIRE TYPE

Code:	Lamp type:	Lumens:	Color CCT:
66 1030	13W LED	960lm	3000K
66 1031	13W LED	1055lm	4000K
66 1040	2 x 13W LED	2 x 960lm	3000K
66 1041	2 x 13W LED	2 x 1055lm	4000K
66 1050	3W + 13W LED	110lm + 960lm	3000K
66 1051	3W + 13W LED	120lm + 1055lm	4000K
66 1060	3W + 3W LED	110lm + 110lm	3000K
66 1061	3W + 3W LED	120lm + 120lm	4000K
66 1070	3W LED	110lm	3000K
66 1071	3W LED	120lm	4000K





B SPECIFY FINISH

AL Aluminum Gray
GS Graphite Satin

C SPECIFY OPTIONS

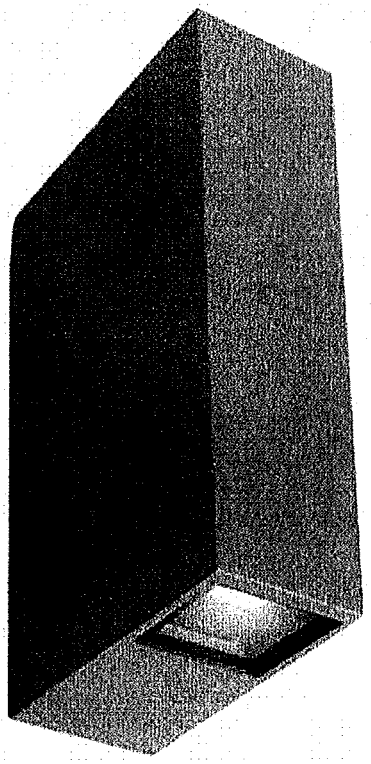
DB Dimming 3-6W, 120V only - Trailing Edge.
DB1 Dimming 13W and higher - 0-10V, 10%

Example Specification Code: 66 1030 • GR

Note: *Due to constant changes in LEDs, please check our website for current product specifications.*

BLADE-S

WEB PIN™ 705



GENERAL SPECIFICATION

Body and trim: Die-cast aluminum.
Finish: Powder coated, Aluminum Gray or Graphite Satin.
Lens: Tempered safety glass.
Gaskets: Heat resistant silicone.
External screws: 304 stainless steel.
Minimum Starting Temperature: -30°C.
Drivers for white LED: Integral, HPF electronic for 120/277V.
Mechanical: Mounts directly over a 2" x 3" electrical junction box (by others).
Approval: ETL. Wet location, IP65.

DESCRIPTION

The Halo Surface LED Downlight (SLD) incorporates WaveStream™ technology to create an ultra-low profile surface mounting luminaire with the performance and look of a traditional downlight. SLD6-1200 UNV series is designed for installation in many 4" x 2-1/8" deep square junction boxes. Accessory mounting kit allows retrofit in 5" and 6" IC and Non-IC recessed housings.* Suitable for residential or commercial installations. Ideal for closets, storage areas, attics and basements. Compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5).

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

SPECIFICATION FEATURES

CONSTRUCTION
- Die cast aluminum trim ring, and die formed aluminum frame

OPTICS
- WaveStream™ technology provides uniform luminance from a low profile flat lens
- AccuAim™ optics provide directional control for the "cone-of-light" beam distribution of a traditional downlight.
- Precision molded lens features high transmission polymer with UV stabilized protecting film

DESIGNER TRIMS
Accessories (sold separately)
SLD designer trims are accessory rings that attach to the SLD for a permanent finish.* Refer to SLD accessories specification sheet for details.
- White (Paintable)
- Satin Nickel
- Tuscan Bronze

*SLD accessory trims attach with permanent adhesion and are not interchangeable after installation.

ELECTRICAL JUNCTION BOX MOUNTING
- SLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Suitable for installation in many 4" x 2-1/8" deep square electrical junction boxes.
- Driver consumes 3 cubic inches of junction box.
- Compatible with other junction boxes with accessory SLD6EXT extension spacer ring.
- Surface mounting in a fire-rated ceiling using an appropriate electrical box offers a cost-effective alternative to fire-rated recessed housings
  Note: Fire-rating is per the rating of the ceiling and applicable junction box, not the SLD.
- Installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building codes.
- Proprietary Slot-N-Lock quick installation system for junction box installation
- T-bracket with Slot-N-Lock mounting tabs included

OPTIONAL - RECESSED HOUSING MOUNTING
- Accessory SLD6ACCKIT required for mounting in 5" and 6" enclosed recessed housings
- May be installed in IC recessed housings in direct contact with insulation

* **Note:** Not for use in recessed housings in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013
- The SLD6 may be used with any 5 or 6 inch diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 107.9 in^3.

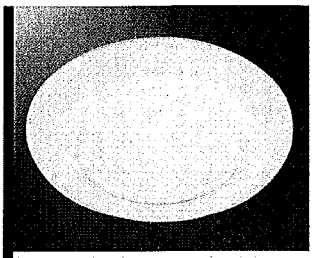
LED
- Linear LED arrays are integrated in trim perimeter
- Color Temperature: 2700K, 3000K, 3500K, 4000K
- CRI options: 80 and 90
  - 90 CRI can be used for California Title 24 compliance/ certified to Title 20
  - 80 CRI can be used to comply with California Title 24 Non-Residential Lighting Controls as a LED luminaire.

WARRANTY
Cooper Lighting provides a five year limited warranty on the SLD LED

LED CHROMATICITY
- A tight chromaticity specification ensures LED color uniformity, sustainable Color Rendering Index (CRI) and Correlated Color Temperature (CCT) over the useful life of the LED
- LED chromaticity of 3 SDCM exceeds ENERGY STAR® color standards per ANSI.
- 90 CRI model features high color performance with R9 greater than 50
- Every Halo LED is quality tested, measured, and serialized in a permanent record to register lumens, wattage, CRI and CCT.
- Halo LED serialized testing and measurement ensures color and lumen consistency on a per-unit basis, and validates long-term product consistency over time

ELECTRICAL CONNECTIONS
Junction Box
- Compatible with 4" x 2-1/8" deep square boxes
- Supply Wire Adapter with LED quick connector included
- LED connector is a non-screwbase luminaire disconnect for tool-less installation

Optional - Recessed Housings
- Accessory SLD6ACCKIT required.
- LED connector is compatible with Halo 5" H550 Series and 6" H750, H2750 Series LED Housings
- LED Connector meets California Title-24 high-efficacy luminaire standard as a non-screw base



SLD6 1200 UNV Series

Universal Voltage

SLD6128xxWHUNVJB
80CRI
2700K, 3000K, 3500K, and 4000K

SLD6129xxWHUNVJB
90CRI
2700K, 3000K, 3500K, and 4000K

6" Surface LED Downlight

High Lumen 1200 Series Universal Voltage 120V-277V

Suitable for ceiling or wall electrical junction boxes

ENERGY DATA

	80 CRI	90 CRI
Lumens (4000K models)	1215	1000
Input Voltage	120V-277V	120V-277V
Frequency	50/60 Hz	50/60 Hz
Input Current	0.12 A	0.12 A
Input Power	14.8 W	14.8 W
Efficiency (4000K models)	82 lm/W	68 lm/W
THD	≤ 20%	
Power Factor	≥ 0.90	
T Ambient	-30 - +40°C	
Sound Rating	Class A	

NOMENCLATURE

SLD 612 8 30 WH UNV JB
612 = 6" SLD 1200 Series
8 = >80 CRI
30 = 3000K
WH = Matte White
UNV = Universal Voltage 120V-277V
JB = Junction Box Kit only

80 CRI nominal CCT 2700K 3000K 3500K 4000K

ENERGY STAR | IECC | T24 | WSEC | RoHS Compliant | Shoolerlight

Refer to ENERGY STAR® Certified Products List.
Can be used to comply with California Title 24 Non-Residential Lighting Controls requirements as a LED Luminaire.

90 CRI nominal CCT 2700K 3000K 3500K 4000K

ENERGY STAR | IECC | T24 T20 | WSEC | RoHS Compliant | Shoolerlight

Refer to ENERGY STAR® Certified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Title 20 Appliance Efficiency Database.

LED DRIVER

- Driver is a 120V-277V universal voltage input, high efficiency, dimmable electronic power supply providing DC power to the LED arrays
- Driver features high power factor, low THD, and has integral thermal protection in the event of over temperature or internal failure
- Driver is replaceable if it should be required
- If dimming is not required the fixutre may be operated from a switch

DIMMING - PHASE CONTROL

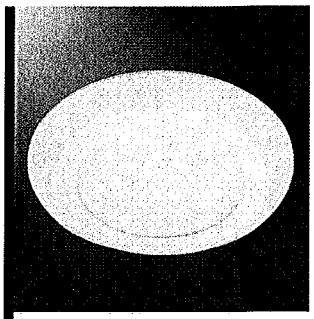
- Designed for continuous dimming capability to nominally 5% with many 120V Leading Edge (LE) and Trailing Edge (TE) Phase Control dimmers. (Dimmers with low end trim adjustment offer greater assurance of achieving 5% level.)
- Consult dimmer manufacturer for compatibility and conditions of use.
  (Note some dimmers require a neutral in the wallbox.)

DIMMING - 0-10V

- Dimmable to 10% in typical operation with compatible 0-10V DC low voltage dimmers.
- 0-10V DC dimmers operate using two low voltage dimming wires (color coded violet and gray). The low voltage dimming wires are separate from the 120V AC or 277V AC power.
- Switching on/off is controlled via the line voltage (120V AC or 277V AC) power, and dimming is controlled via the 2-wire 0-10V DC low voltage wiring.

COMPLIANCE

- cULus Listed ceiling and wall
- cULus Damp Location listed ceiling and wall
- cULus Wet Location Listed, ceiling only (shower rated)
- Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5)
- SLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- With accessory SLD6ACCKIT, may be installed in IC recessed housings in direct contact with insulation (Not for use in recessed housings in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013)
- EMI/RFI: meets FCC 47CFR Part 15 Class B limits, and is suitable for use in residential and commercial installations
- Airtight certified per ASTM E283 (not exceeding 2.0 CFM under 75 Pascals pressure difference)
- 90 CRI: Can be used to comply with California Title 24 High Efficacy requirements. Certified to California Title 20 Appliance Efficiency Database.
- 80 CRI: Can be used to comply with California Title 24 Non-Residential Lighting Controls requirements as a LED luminaire.
- Can be used for International Energy Conservation Code (IECC) and Washington State Energy Code high efficiency luminaire compliance
- ENERGY STAR® certified luminaire - consult ENERGY STAR® Certified Product List
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79
- Lumen maintenance projections in accordance with IES LM-80 and TM-21



SLD6 1200 UNV Series

Universal Voltage

SLD6128xxWHUNVJB
80CRI
2700K, 3000K, 3500K, and 4000K

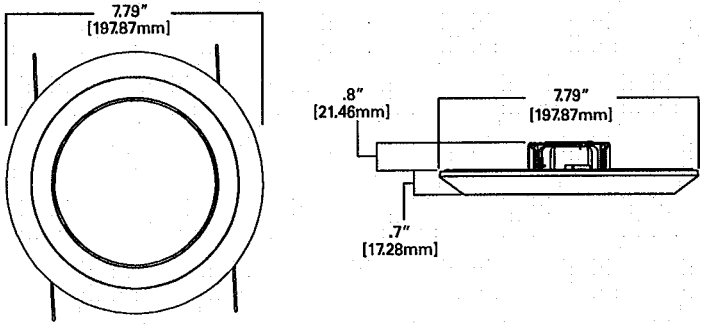
SLD6129xxWHUNVJB
90CRI
2700K, 3000K, 3500K, and 4000K

6" Surface LED Downlight

High Lumen 1200 Series Universal Voltage 120V-277V

Suitable for ceiling or wall electrical junction boxes

DIMENSIONS



ORDERING INFORMATION

SAMPLE NUMBER: SLD612927WHUNVJB SLD6TRMSN
Junction Box Installation: Order junction box separately, as supplied by others, to complete installation.
Recessed Installation: Order Halo recessed housing separately to complete installation.

Models	Color Rendering Index	Color Temperature (CCT)	Finish	Voltage	Junction Box
SLD612= 6" Surface LED Downlight, 1200 Series	**8**=80 CRI **9**=90 CRI	**27**=2700K **30**=3000K **35**=3500K **40**=4000K	**WH**=White	**UNV**=Universal Voltage 120V-277V	**JB**=Junction Box Kit only

Accessories

Designer Trims
Fit over the SLD for a designer finish
SLD6TRMSN=6" SLD Satin Nickel
SLD6TRMTBZ=6" SLD Tuscan Bronze
SLD6TRMWH=6" SLD White (paintable)
*SLD accessory trims attach with permanent adhesion and are not interchangable after installation

J-Box Spacer Extension Ring
Add 15/16" depth when SLD driver cannot fit into installed junction box
SLD6EXT=6" Surface LED J-Box Extender, 9.5" O.D.

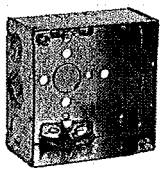
RAD Adapters
When junction box is mounted flat on a ceiling or beam surface (not recessed in ceiling)
SLD6RAD=6" SLD Round Surface J-Box Adapter, 7.92" O.D. (for 4-inch round or octagon junction boxes.)
SLD6SADPLT=6" SLD Square Surface J-Box Adapter Plate (For 4-inch square junction boxes, use with SLD6RAD.)

Hardware Kits
SLD6ACCKIT=6" Accessory Parts Replacement Kit (Screwbase adapter, torsion springs, friction blades)
SLD6BRKT=6" Junction Box Bracket & Screws

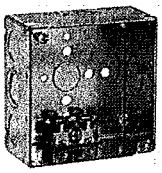
Refer to SLD Accessories specification sheet for further information.

Powering Business Worldwide

COMPATIBLE WITH EATON'S CROUSE-HINDS 4" SQUARE JUNCTION BOXES



TP450
for non-metallic cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

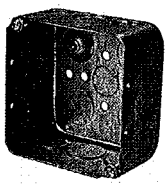


TP431†
for metal clad cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

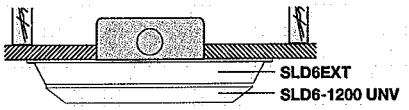
- **TP450** - for non-metallic cable
- **TP431** - for metal clad cable
- UL Listed
- Suitable for two-hour fire-rated ANSI/UL 263 when properly installed in a fire-rated ceiling or wall
- Refer to www.crouse-hinds.com

†UL approved for use with aluminum interlocking grounding metal clad cable, Type MCIA (Southwire MCAP™). MCAP™ is a registered trademark of Southwire Company.

COMPATIBLE WITH 4" SQUARE JUNCTION BOXES*



4" square deep steel box
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



Compatible with other boxes when used with SLD6EXT extension spacer ring.

Surface mounting in a fire-rated ceiling using an appropriate electrical box offers a cost-effective alternative to fire-rated recessed housings.

Note: Fire-rating is per the rating of the ceiling and applicable junction box, not the SLD.

*This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Eaton makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must determine that site conditions are suitable to allow proper installation of the SLD mounting bracket in the box.

PRODUCT DATA

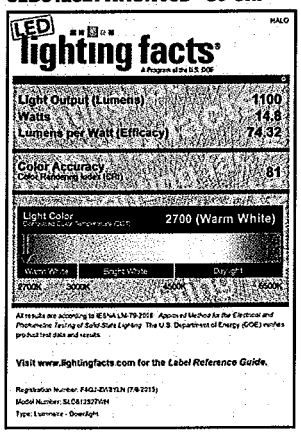
Cat No.	CRI	CCT	Lumens	Power (W)	LPW
SLD612827WHUNVJB	80	2700	1100	14.8	74
SLD612830WHUNVJB	80	3000	1150	14.8	78
SLD612835WHUNVJB	80	3500	1200	14.8	81
SLD612840WHUNVJB	80	4000	1215	14.8	82
SLD612927WHUNVJB	92	2700	880	14.8	59
SLD612930WHUNVJB	92	3000	925	14.8	63
SLD612935WHUNVJB	92	3500	965	14.8	65
SLD612940WHUNVJB	92	4000	1000	14.8	68

Performance values are presented as typical for the model(s) indicated. Field results may vary.

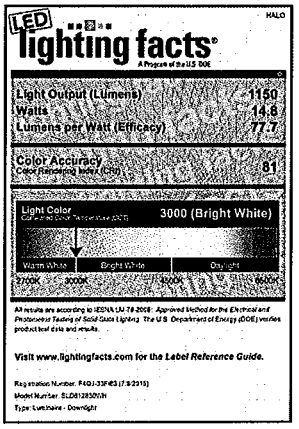
SLD6128xxWHUNVJB
SLD6129xxWHUNVJB

LIGHTING FACTS®

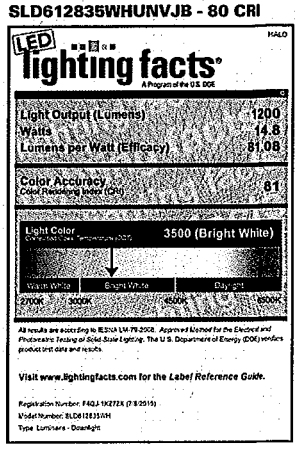
SLD612827WHUNVJB - 80 CRI



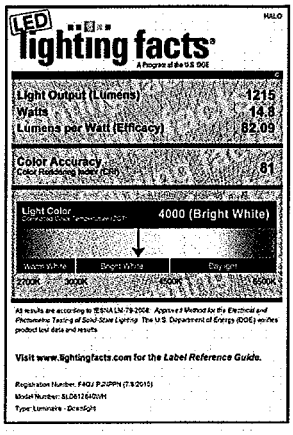
SLD612830WHUNVJB - 80 CRI



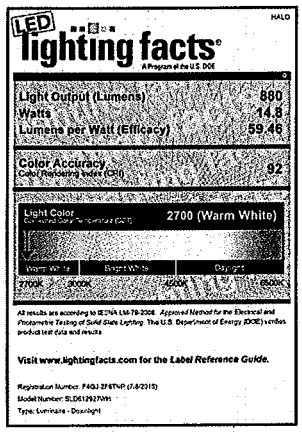
SLD612835WHUNVJB - 80 CRI



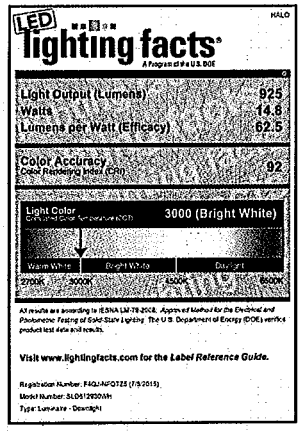
SLD612840WHUNVJB - 80 CRI



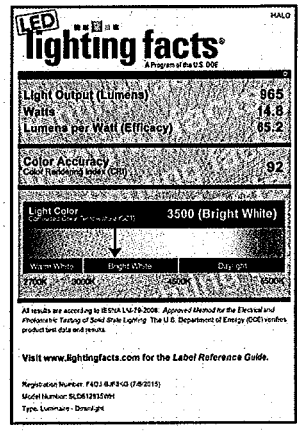
SLD612927WHUNVJB - 90 CRI



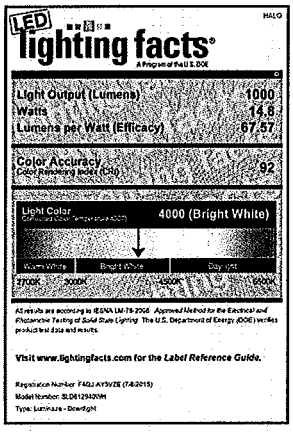
SLD612930WHUNVJB - 90 CRI



SLD612935WHUNVJB - 90 CRI



SLD612940WHUNVJB - 90 CRI



Powering Business Worldwide

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

dial architects

14364 Manchester Road
Manchester Missouri 63011
636 230 0400

June 14, 2016

City of Chesterfield
Department of Planning
690 Chesterfield Parkway West
Chesterfield, Missouri 63017-0760

Members of the Architectural Review Board

Re: Architectural Statement
Submittal for Approval of New Office/Warehouse Condo Facility
Spirit Valley Business Park, Lot-4

General Requirements for Site Design

This project consists of a single-story speculative office/warehouse condominium building designed for multiple tenants. The construction site is located on Spirit Valley Central Drive near Olive Street Road on the far west side of Chesterfield Valley across from Rombach's Pumpkin Farm in the Spirit Valley Business Park.

As you can see from the photos in this packet, the rectangular site is treeless and generally flat other than the drainage ditch and is otherwise featureless. The building is strategically located on the site to be compatible with the existing drainage system for the development while maintaining compatibility with neighboring developments.

The approved concept plan for the entire development shows a 5' wide side walk on the east and south sides of the property to provide pedestrian circulation. While we cannot control future development of neighboring sites, this specific site design forces a shared entrance with a future neighbor on the north side. This concept is key to the park owners desires for this overall development.

We are not proposing the use of fencing nor retaining walls at this time.

Landscaping is designed per city ordinance in a similar fashion to the adjacent developments. Please see attached landscape plan.

General Requirements for Building Design

The owner of this facility, being a long time and current resident of the City of Chesterfield, places a high priority on the appearance of his facility and has played a role in the design of this facility.

The modern front (east) elevation is articulated with towering monolithic dark vertical projected portals designating individual condo entries against a light background with glass, reveals, level changes and large architectural steel eyebrows with oversized contrasting nuts. The eyebrows and windows create rhythmically pleasing patterns accented with colors and opposing shapes to add depth and a sense of place. The recessed vertical frosted glass elements further divide up the light expanse between the entry portals encouraging one to explore the building further.

The building will utilize modern dark and light colors, rectangular windows with a boldly colored steel eyebrow, frosted glass vertical separators. The colors, glass and metal items are juxtaposed on the façades of the building to create a quality overall building design. These include a main building color of a warm light beige with a dark warm charcoal accent color.

The north and south sides of this building are treated in a similar fashion as the east and the working west side has high horizontal windows to provide natural light into the warehouse areas and a parapet with scuppers for drainage to conceal the flat sloped roof. The building materials are the same as all of the other buildings in this park, but are being used in more modern design way to deliver an aesthetically pleasing solution. A special elastomeric coating designed specifically for concrete will protect the concrete panels.

The windows for this project, in keeping with its strong design theme, are large fixed energy compliant windows. We have used the glass as an effective design element in the elevational articulation.

The design is respectful of the surrounding development in general and is harmonious in scale, material, and color. Nearby buildings are also constructed of tilt-up concrete and/or earth tone colors and materials similar to ours. Signage will be applied to the building in a similar fashion as adjacent buildings.

Site lighting is planned to be three light standards in the front of the building along Spirit Valley Central Drive with wall-mounted, shoebox type fixtures on the west and north elevations of the building that will not shine off of the property in an unnecessary fashion and lighting accenting the building entries.

Please see the site development section plan for drainage information.

The proposed HVAC system is planned to be roof mounted and fully screened by the building parapets.

Specific Requirements for the Chesterfield Valley

As stated above we encompass the building with reveals and colors for continuity while highlighting the visible front with glass. The trash receptacle will be screened from public view with tilt-up concrete to coordinate with the building.

The electrical service will be provided by a new transformer and has yet to be located. All utilities to this building are underground.

I-64/US-40 is to the north of this property and is not readily visible from the property. Automobile parking is east of the building and the service/loading area is on the west side of the building.

Street lighting is included in this project to match the existing industrial park street lighting and is located to the east of the building along Spirit Valley Central Drive.

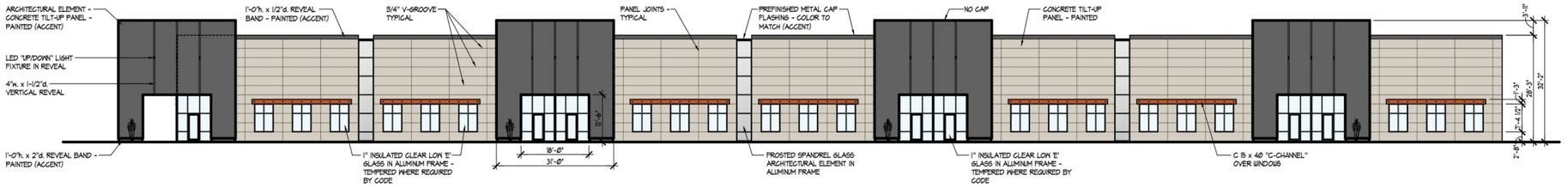
It remains our intention to provide a design that will enhance the local environment while blending with the building types already in Wings Corporate Estates. The owner is excited about providing a new quality designed facility for the City of Chesterfield.

Thank you for your assistance.

As required, building materials will be brought to the ARB meeting and will include:

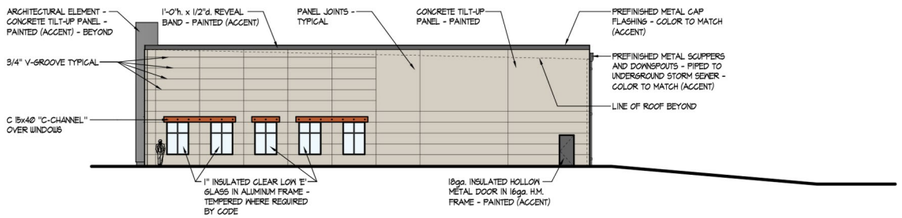
- Glass and frame samples
- Color samples of the concrete coatings

End of Architects Statement



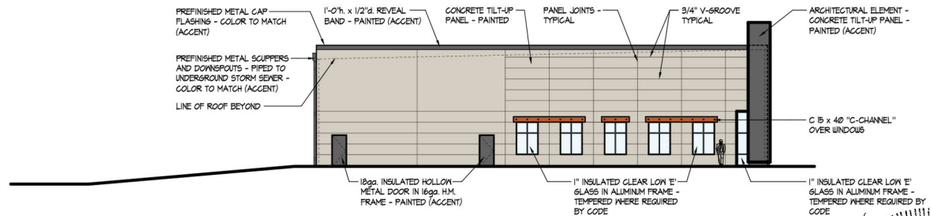
EAST ELEVATION

NOT TO SCALE



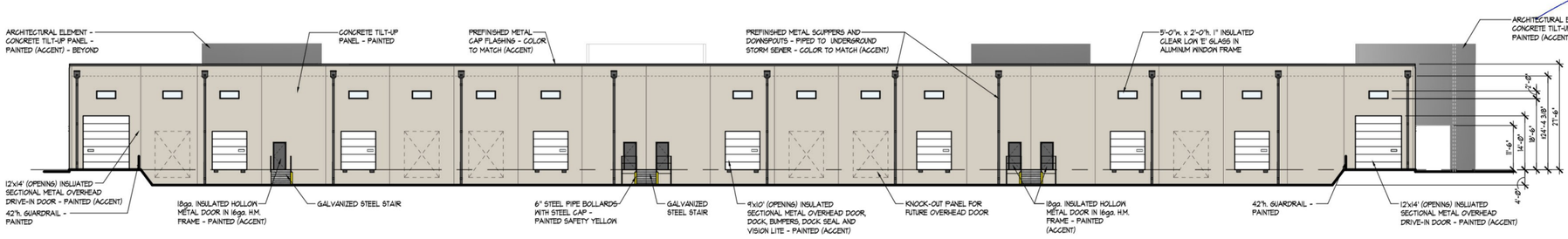
NORTH ELEVATION

NOT TO SCALE



SOUTH ELEVATION

NOT TO SCALE



WEST ELEVATION

NOT TO SCALE

General Contractor:

KEYSTONE
QUALITY DESIGN/BUILD CONSTRUCTION

Civil Engineer:

STOCK & ASSOCIATES
Consulting Engineers, Inc.
257 Chesterfield Business Parkway St. Louis, MO 63005
PH. (636) 530-9100 FAX (636) 530-9130
e-mail: general@stockassoc.com Web: www.stockassoc.com

Structural Engineer:

NEW BUILDING DESIGN FOR . . .

SPIRIT VALLEY BUSINESS PARK

LOT 4 - 641 SPIRIT VALLEY CENTRAL DRIVE
CHESTERFIELD, MISSOURI 63005

ISSUE DATES:

PRELIMINARY DESIGN:	05-24-16
PRELIMINARY DESIGN:	05-31-16
CITY SUBMITTAL:	06-14-16

06-13-2016
STATE OF MISSOURI
DAVID WILLIAM DIAL
NUMBER A-7331
REGISTERED ARCHITECT

STATE OF MISSOURI REGISTERED ARCHITECT:
DAVID WILLIAM DIAL – LICENSE NUMBER A-7331
DAVID W. DIAL ARCHITECTS, P.C.
ARCHITECTURAL CORPORATION #2000149091

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SHEET NUMBER:

BUILDING ELEVATIONS

PROJECT NUMBER: 16070 DATE: 06-14-16


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