VII. A.

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Planning Commission Staff Report

Project Type: Site Development Section Plan

Meeting Date: March 23, 2020

From: Annisa Kumerow, Planner AK

Location: South of Olive Street Road and east of Wardenburg Road

Description: **Spirit Valley Business Park, Lot 1 (Neff Power):** A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 2.893 acre tract of land zoned "PI" Planned Industrial District located south of Olive Street Road and east of Wardenburg Road.

PROPOSAL SUMMARY

Stock & Associates Consulting Engineers, Inc. on behalf of K&L Tech Properties, has submitted a Site Development Section Plan, Lighting Plan, Landscape Plan, Architectural Elevations, and Architect's Statement of Design. The request is for a 36,060 +/- square foot office and warehouse building to house a single tenant for a robotics headquarters. The subject site is zoned "PI" Planned Industrial District and is governed under the terms and conditions of City of Chesterfield Ordinance Number 3002.

Figure 1: Subject Site Aerial

HISTORY OF SUBJECT SITE

The site is currently vacant and located in the northern portion of the Spirit Valley Business Park development. In 2007, the City Council approved Ordinance 2373 which rezoned the subject site from "NU" Non-Urban District to "PI" Planned Industrial District. In 2008, Ordinance 2456 repealed Ordinance 2373 to allow for an additional permitted use; subsequently, in 2013 Ordinance 2745 repealed Ordinance 2456 to allow for an additional permitted use. The current governing City of Chesterfield Ordinance Number 3002 was approved by City Council in 2018.

LAND USE AND ZONING OF SURROUNDING PROPERTIES

Direction	Zoning	Land Use
North	"AG" Agricultural District	Farm
South	"PI" Planned Industrial District	Vacant
East	"PI" Planned Industrial District	Vacant
West	"NU" Non-Urban District	Single-family residential

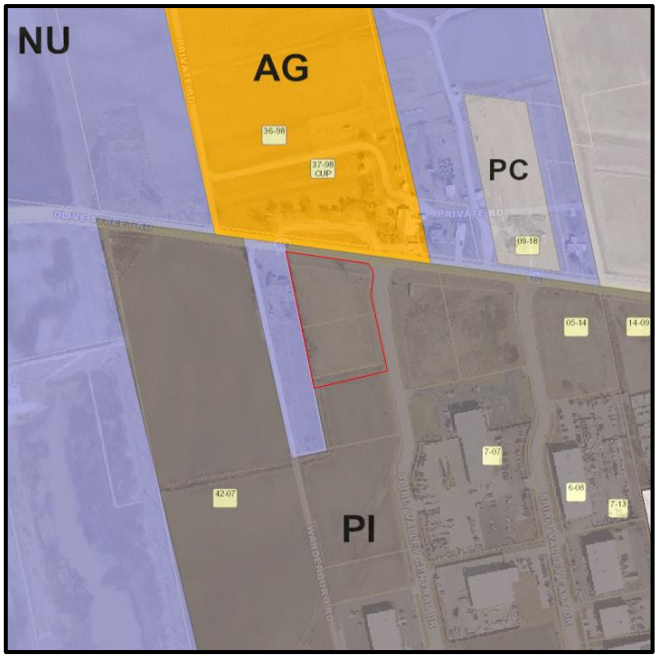


Figure 2: Zoning

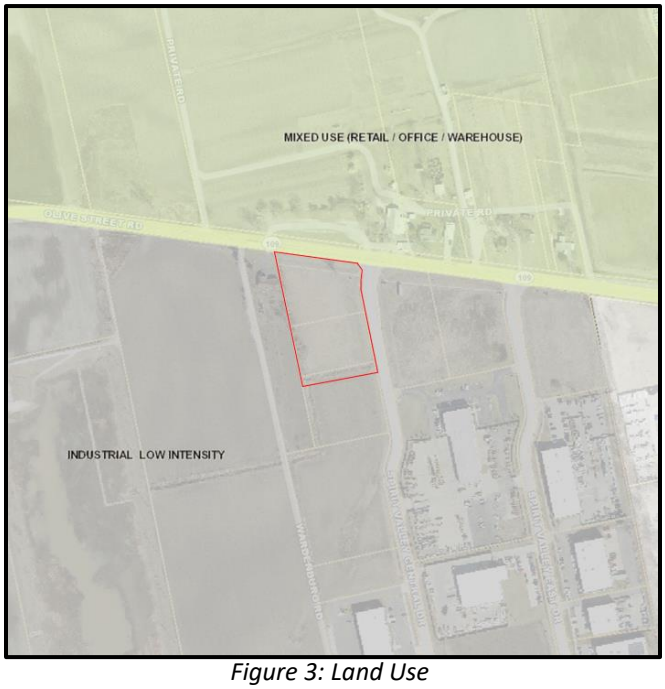


Figure 3: Land Use

COMPREHENSIVE PLAN ANALYSIS

The subject site is located within Ward 4 of the City of Chesterfield. The City of Chesterfield Comprehensive Land Use Plan indicates that this development is within the area designated as Industrial Low Intensity. As seen from the figures and table above, the subject site is bordered by other Industrial Low Intensity designated areas to the east, west, and south.

The City of Chesterfield's Comprehensive Plan also identifies specific plan policies. Outlined below are specific plan policies that are applicable to this request, followed by staff analysis in italics.

Plan Policies

- **6.1 Low-Intensity Industrial –** Low-intensity industrial development should be limited to Chesterfield Valley, including low-intensity industrial assembly, distribution, and research and development business parks, and corporate campuses.
  The location of the proposed office building complies with this policy as it will be located in Chesterfield Valley.

- **7.2.6 Cross-Access Circulation –** Internal vehicular and pedestrian connections between commercial developments should be encouraged.
  A cross access easement extends to the property to the south. Additionally, a 5' sidewalk is proposed along Spirit Valley Central Drive.

Chesterfield Valley Sub-Area and Chesterfield Valley Design Policies

- **3.5.1 Chesterfield Valley Region Retail and Low Intensity Industry—**Regional retail and low-intensity industrial developments should be located in Chesterfield Valley. These include mixed-use office/retail-planned developments and low-intensity industrial assembly.
  The location of the proposed office building complies with this policy as it will be located in Chesterfield Valley.

STAFF ANALYSIS

Zoning

The subject site is zoned "PI" Planned Industrial District and is governed under the terms and conditions of City of Chesterfield Ordinance Number 3002. The submittal was reviewed against the requirements of City of Chesterfield Ordinance 3002 and all applicable requirements of the Unified Development Code and the proposed development adheres to the applicable requirements.

Circulation System & Access

The subject site will be served by two access points on Spirit Valley Central Drive. A cross access easement extends to the neighboring property to the south. A 5' sidewalk along the west side of Spirit Valley Central Drive provides pedestrian circulation.

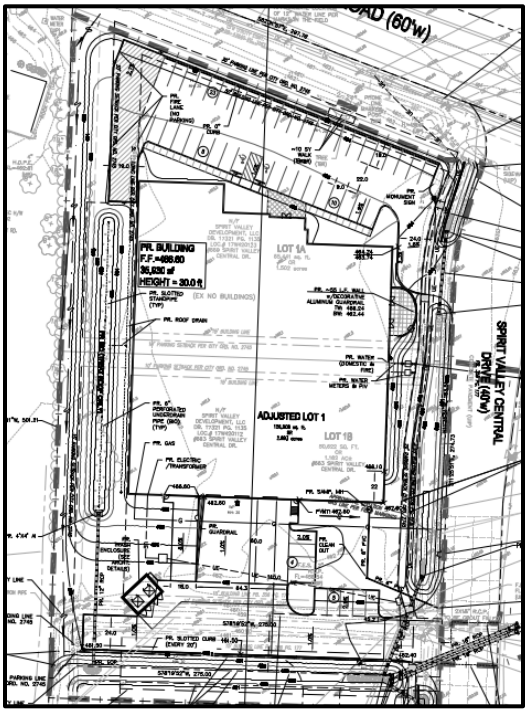


Figure 4: Site Plan

Parking

The minimum required number of parking spaces per the Unified Development Code is 50, while the maximum number of spaces is 69. There are 50 total spaces proposed with this development. Parking is primarily located to the north of the proposed building, with a few spaces located to the south of the building. The service and loading area is also located on the south side of the building.

Landscape Design and Screening

Several different areas of landscaping are proposed in accordance with City Code requirements and the governing ordinance for the site. These include a 30' landscape buffer along the western property line contiguous to the neighboring residential structure, and a 15' landscape buffer for the remainder of the western property line. A 30' landscape buffer is also proposed along Olive Street Road, consisting of a mix of canopy-shade street trees and ornamental trees.

Figure 5: Color Landscape Plan

There is one trash receptacle proposed at the rear of the building, to the southwest of the loading area. The receptacle is adequately screened by tilt-up concrete panel to match the proposed building. Additionally, several evergreen trees will screen the enclosure from public view on three of its sides.

Rooftop mechanical equipment is included on the building. There is a consistent height parapet around the perimeter of the roof; if additional screening beyond the parapets is required, the prefinished metal will be mounted directly to the mechanical unit in order to screen it.

Lighting

Site lighting is proposed for the parking area as required by City Code. Six total fixtures are proposed on the site, with one building-mounted fixture on the rear of the building. These fixtures are utilitarian in nature and feature fully shielded, flat lens, enclosed luminaires.

Architectural Elevations

The proposed building is one story, with top of wall being 30' in height. The exterior building materials will primarily consist of tilt-up concrete panel, insulated glass, Alucobond panels, and steel.

ARCHITECTURAL REVIEW BOARD INPUT

This project was reviewed by the Architectural Review Board on February 13, 2020. At that meeting, the Board made a motion to forward the project to the Planning Commission presented with the following condition:

- Introduce additional coordination (material, color, texture, etc.) with the front elevation and the east and west elevations with particular attention along Olive Street Road frontage.

The applicant has since responded with an updated submittal that captures this consideration. The stepping concrete walls from the initial submittal to the ARB have been replaced with Alucobond metal panels in a silver metallic finish. The project incorporates additional coordination between the northern façade and the eastern and western facades by adding an additional steel canopy to the northwest corner of the building. A recessed window has also been added to the northwest corner which allows for the metal panels to wrap around the west corner. The metal panels also wrap around the northeast corner of the building. Finally, a decorative aluminum guardrail has been added to the east elevation for human scale.

Figure 6: North elevations

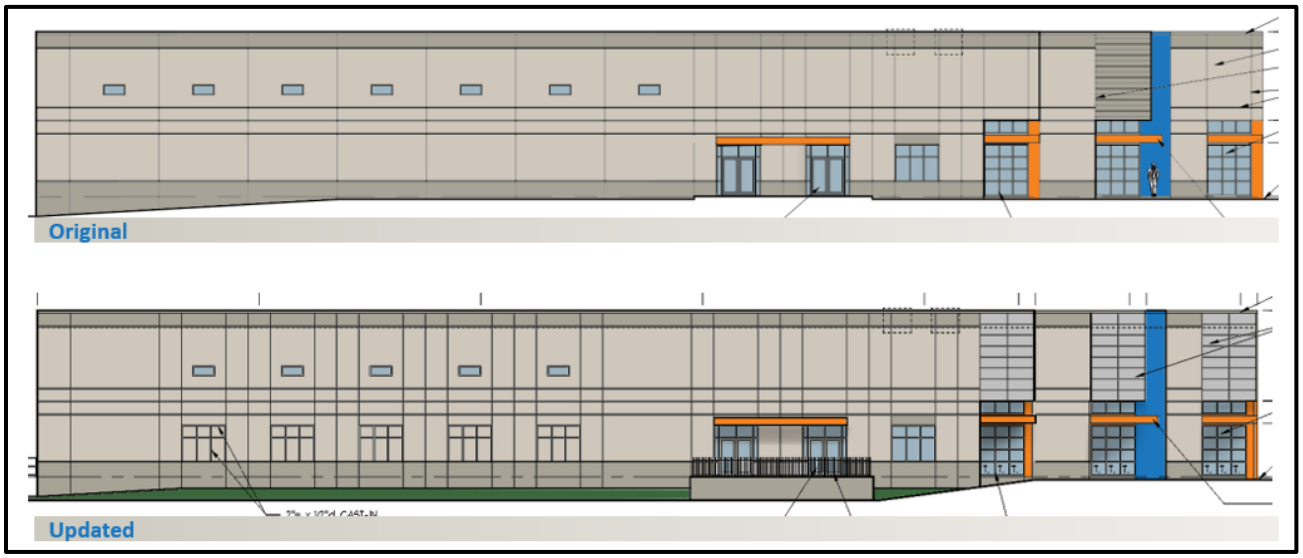


Figure 7: West elevations

STAFF RECOMENDATION

Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design and has found the proposal to be in compliance with the site specific ordinance, Comprehensive Plan, and City Code requirements. Staff recommends approval of the proposed development.

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 1 (Neff Power).

2) "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 1 (Neff Power) with the following conditions…"

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

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 and UL/cUL Listed for wet locations.

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 and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

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

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V 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 600mA, 800mA and 1200mA drive currents (nominal).

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

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

Warranty
Five-year warranty.

GLEON
GALLEON LED

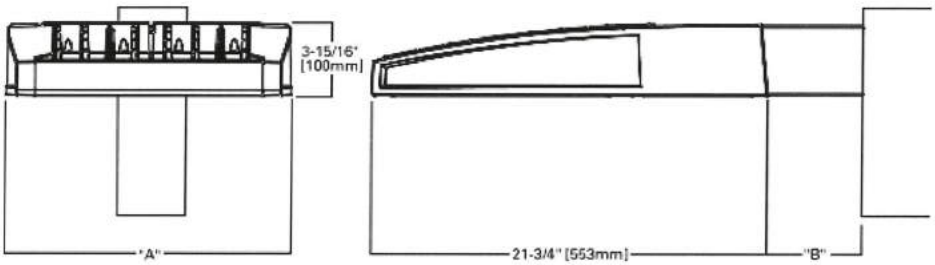
1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

LumenSafe Technology
CLICK HERE

WaveLinx

DIMENSIONS



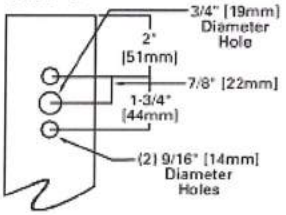
DIMENSION DATA

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

DRILLING PATTERN

TYPE "N"



CERTIFICATION DATA

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

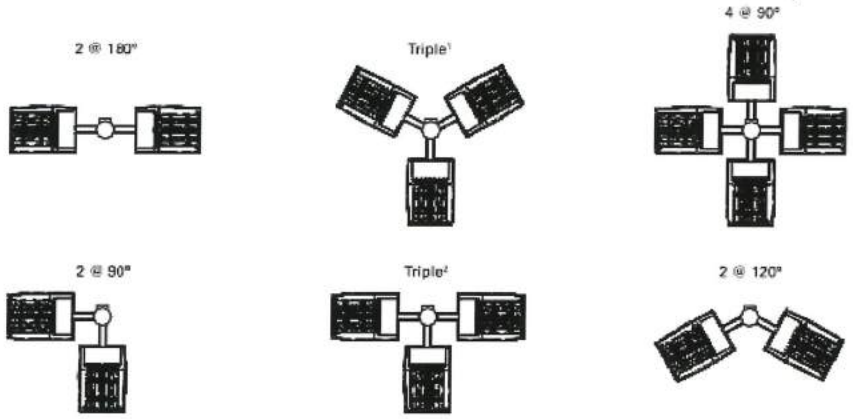
ENERGY DATA

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)

*www.designlights.org

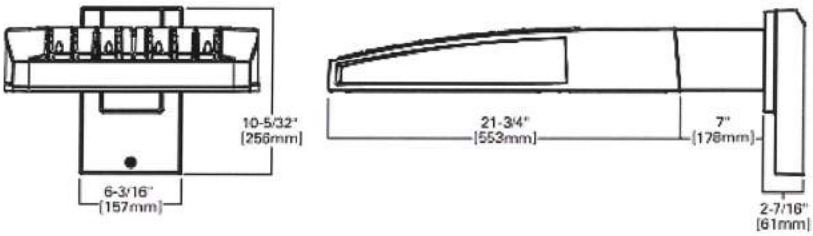
ARM MOUNTING REQUIREMENTS

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

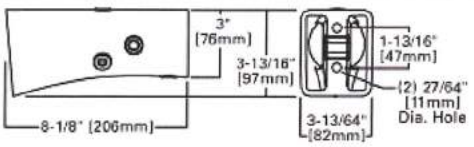


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. **2** Round poles are 3 @ 90°.

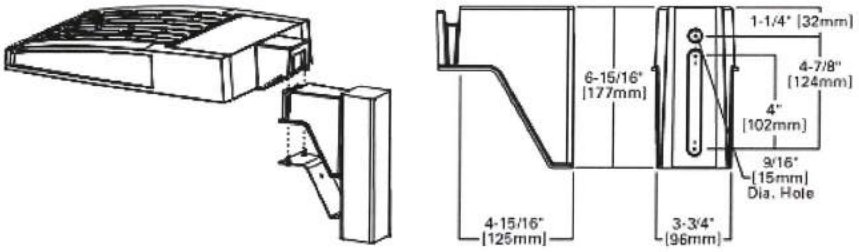
STANDARD WALL MOUNT

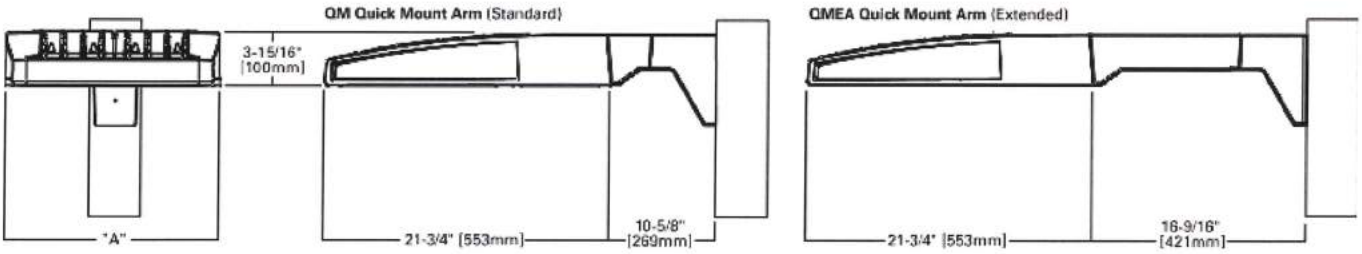


MAST ARM MOUNT



QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



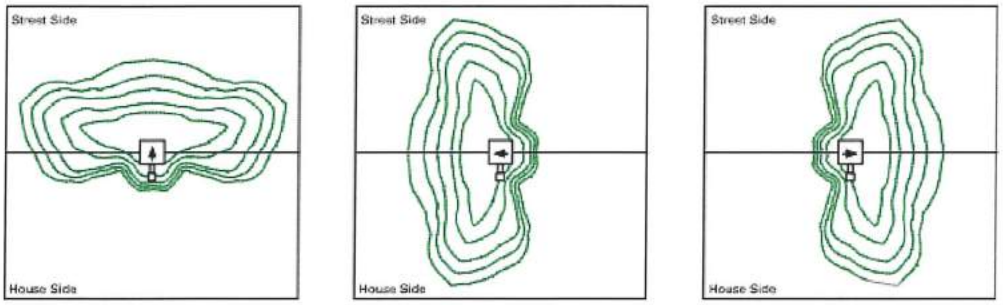


QUICK MOUNT ARM DATA

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

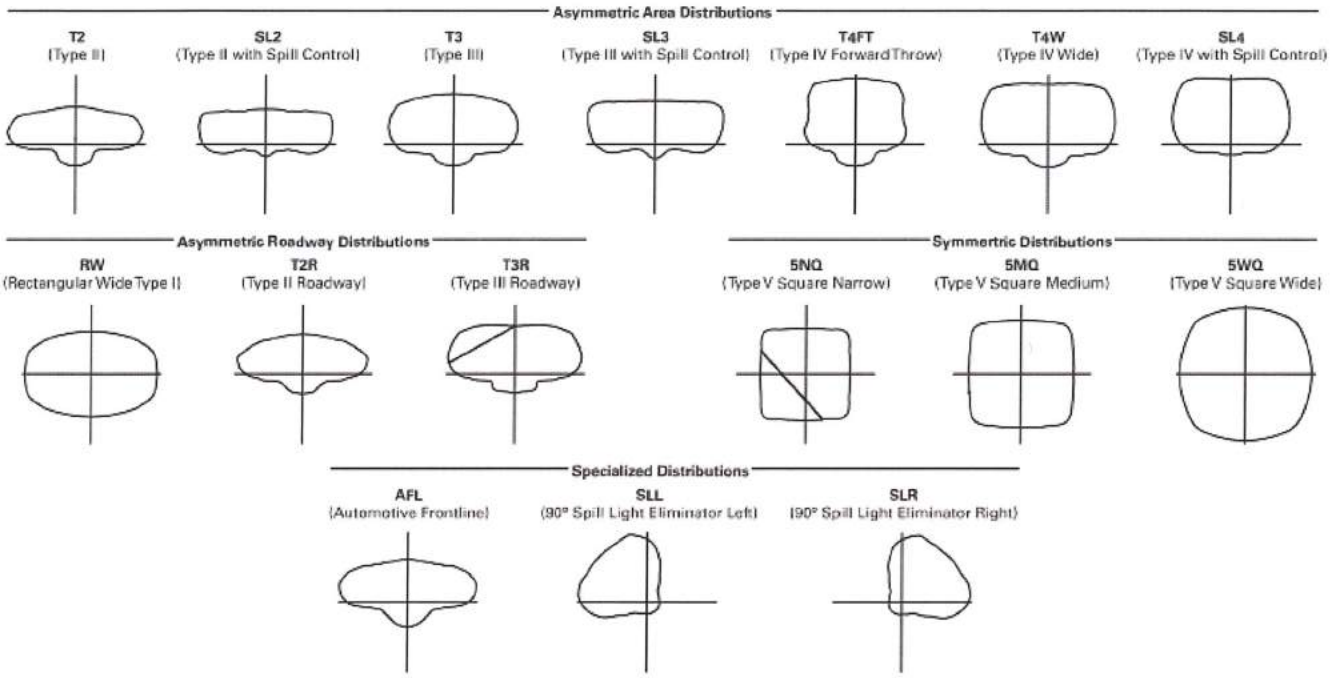
NOTES: 1 QM option available with 1-8 light square configurations. **2** QMEA option available with 1-6 light square configurations. **3** QMEA arm to be used when mounting two fixtures at 90° on a single pole.

OPTIC ORIENTATION



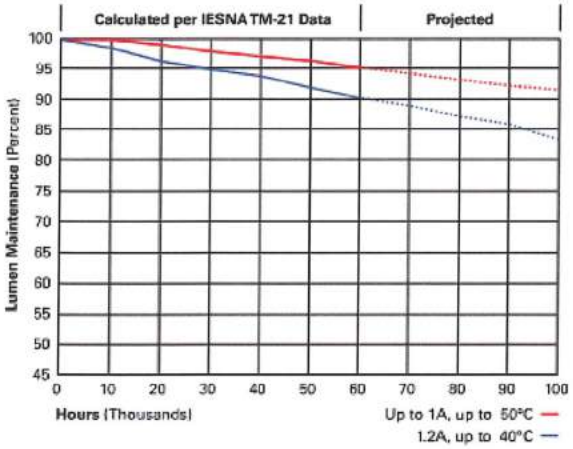
Standard | **Optics Rotated Left @ 90°** (L90) | **Optics Rotated Right @ 90°** (R90)

OPTICAL DISTRIBUTIONS



LUMEN MAINTENANCE

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



LUMEN MULTIPLIER

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

NOMINAL POWER LUMENS (1.2A)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		67	129	191	258	320	382	448	511	575	640
Input Current @ 120V (A)		0.58	1.16	1.78	2.31	2.94	3.56	4.09	4.71	5.34	5.87
Input Current @ 208V (A)		0.33	0.63	0.93	1.27	1.57	1.87	2.22	2.52	2.8	3.14
Input Current @ 240V (A)		0.29	0.55	0.80	1.10	1.35	1.61	1.93	2.18	2.41	2.71
Input Current @ 277V (A)		0.25	0.48	0.70	0.96	1.18	1.39	1.69	1.90	2.09	2.36
Input Current @ 347V (A)		0.20	0.39	0.57	0.78	0.96	1.15	1.36	1.54	1.72	1.92
Input Current @ 480V (A)		0.15	0.30	0.43	0.60	0.73	0.85	1.03	1.16	1.28	1.45
Optics											
T2	4000K/5000K Lumens	6,863	13,412	20,011	26,441	32,761	39,205	46,364	52,534	58,601	64,880
	3000K Lumens	6,489	12,681	18,919	25,000	30,974	37,066	43,836	49,668	55,405	61,341
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	7,285	14,238	21,246	28,072	34,780	41,621	49,221	55,770	62,212	68,878
	3000K Lumens	6,888	13,462	20,087	26,541	32,884	39,351	46,537	52,729	58,819	65,122
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,995	13,670	20,397	26,951	33,391	39,959	47,256	53,544	59,728	66,130
	3000K Lumens	6,613	12,924	19,284	25,480	31,570	37,780	44,679	50,624	56,471	62,524
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	7,150	13,973	20,850	27,549	34,134	40,846	48,307	54,734	61,056	67,598
	3000K Lumens	6,761	13,212	19,713	26,046	32,272	38,619	45,673	51,750	57,726	63,911
	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	B4-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	7,036	13,748	20,515	27,107	33,586	40,191	47,530	53,854	60,074	66,512
	3000K Lumens	6,652	12,999	19,397	25,629	31,754	37,999	44,938	50,917	56,797	62,885
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/5000K Lumens	6,945	13,571	20,249	26,756	33,152	39,671	46,917	53,160	59,298	65,653
	3000K Lumens	6,566	12,831	19,146	25,297	31,344	37,508	44,358	50,260	56,064	62,072
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,851	13,388	19,977	26,396	32,704	39,137	46,283	52,444	58,498	64,768
	3000K Lumens	6,477	12,658	18,888	24,957	30,920	37,003	43,759	49,584	55,308	61,235
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,994	13,668	20,394	26,947	33,388	39,953	47,249	53,537	59,720	66,119
	3000K Lumens	6,612	12,922	19,281	25,477	31,567	37,774	44,673	50,618	56,463	62,514
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	6,645	12,986	19,378	25,603	31,723	37,962	44,893	50,868	56,743	62,824
	3000K Lumens	6,282	12,279	18,321	24,207	29,993	35,892	42,445	48,094	53,648	59,398
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	7,214	14,097	21,036	27,795	34,437	41,210	48,734	55,220	61,597	68,199
	3000K Lumens	6,820	13,329	19,888	26,279	32,558	38,962	46,077	52,208	58,237	64,479
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	7,347	14,356	21,423	28,306	35,071	41,969	49,632	56,237	62,730	69,454
	3000K Lumens	6,947	13,573	20,254	26,762	33,158	39,680	46,925	53,170	59,309	65,667
	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
5WQ	4000K/5000K Lumens	7,366	14,396	21,480	28,381	35,164	42,080	49,765	56,386	62,898	69,639
	3000K Lumens	6,964	13,610	20,308	26,833	33,247	39,786	47,050	53,311	59,468	65,842
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	6,147	12,010	17,921	23,679	29,339	35,109	41,521	47,046	52,478	58,102
	3000K Lumens	5,811	11,355	16,944	22,388	27,739	33,194	39,256	44,479	49,617	54,933
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	7,149	13,970	20,846	27,543	34,126	40,837	48,295	54,722	61,042	67,582
	3000K Lumens	6,760	13,208	19,709	26,041	32,264	38,610	45,661	51,738	57,713	63,897
	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
AFL	4000K/5000K Lumens	7,175	14,021	20,921	27,643	34,249	40,986	48,470	54,920	61,262	67,828
	3000K Lumens	6,784	13,256	19,780	26,136	32,381	38,750	45,827	51,925	57,922	64,129
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (1A)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		59	113	166	225	279	333	391	445	501	558
Input Current @ 120V (A)		0.51	1.02	1.53	2.03	2.55	3.06	3.56	4.08	4.60	5.07
Input Current @ 208V (A)		0.29	0.56	0.82	1.11	1.37	1.64	1.93	2.19	2.46	2.75
Input Current @ 240V (A)		0.26	0.48	0.71	0.96	1.19	0.41	1.67	1.89	2.12	2.39
Input Current @ 277V (A)		0.23	0.42	0.61	0.83	1.03	1.23	1.45	1.65	1.84	2.09
Input Current @ 347V (A)		0.17	0.32	0.50	0.64	0.82	1.00	1.14	1.32	1.50	1.68
Input Current @ 480V (A)		0.14	0.24	0.37	0.48	0.61	0.75	0.91	0.99	1.12	1.28
Optics											
T2	4000K/5000K Lumens	6,256	12,225	18,242	24,104	29,865	35,739	42,265	47,888	53,420	59,144
	3000K Lumens	5,915	11,559	17,248	22,789	28,236	33,790	39,960	45,277	50,506	55,919
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	6,642	12,979	19,366	25,589	31,705	37,941	44,870	50,840	56,711	62,789
	3000K Lumens	6,280	12,271	18,311	24,193	29,976	35,872	42,423	48,068	53,619	59,365
	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
T3	4000K/5000K Lumens	6,377	12,461	18,593	24,568	30,439	36,426	43,077	48,810	54,447	60,282
	3000K Lumens	6,029	11,781	17,580	23,229	28,781	34,441	40,731	46,150	51,480	56,997
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,518	12,739	19,006	25,113	31,116	37,235	44,036	49,895	55,658	61,622
	3000K Lumens	6,029	11,781	17,579	23,229	28,779	34,440	40,729	46,148	51,478	56,995
	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	B4-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	6,414	12,533	18,702	24,710	30,616	36,637	43,328	49,093	54,763	60,631
	3000K Lumens	6,064	11,849	17,681	23,363	28,946	34,638	40,966	46,417	51,776	57,325
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/5000K Lumens	6,331	12,372	18,459	24,391	30,221	36,163	42,769	48,459	54,056	59,849
	3000K Lumens	5,986	11,697	17,452	23,061	28,572	34,192	40,436	45,817	51,108	56,585
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,245	12,205	18,212	24,062	29,813	35,677	42,192	47,807	53,326	59,042
	3000K Lumens	5,904	11,539	17,218	22,750	28,187	33,732	39,891	45,199	50,418	55,822
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,376	12,460	18,591	24,564	30,436	36,421	43,072	48,803	54,439	60,273
	3000K Lumens	6,028	11,780	17,578	23,224	28,776	34,435	40,723	46,141	51,471	56,986
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	6,058	11,838	17,664	23,340	28,918	34,605	40,924	46,370	51,727	57,269
	3000K Lumens	5,727	11,193	16,701	22,067	27,341	32,718	38,692	43,841	48,906	54,146
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	6,577	12,851	19,176	25,336	31,392	37,566	44,426	50,337	56,151	62,170
	3000K Lumens	6,218	12,151	18,131	23,955	29,680	35,517	42,003	47,592	53,089	58,779
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	6,697	13,088	19,528	25,803	31,970	38,258	45,243	51,264	57,185	63,313
	3000K Lumens	6,332	12,374	18,463	24,395	30,227	36,171	42,776	48,468	54,066	59,861
	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
5WQ	4000K/5000K Lumens	6,715	13,122	19,580	25,871	32,055	38,360	45,365	51,401	57,337	63,482
	3000K Lumens	6,348	12,406	18,513	24,461	30,307	36,268	42,891	48,599	54,210	60,021
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	5,604	10,949	16,337	21,586	26,745	32,004	37,850	42,886	47,838	52,965
	3000K Lumens	5,298	10,351	15,446	20,409	25,287	30,258	35,786	40,547	45,229	50,077
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	6,517	12,735	19,002	25,107	31,109	37,227	44,025	49,883	55,644	61,607
	3000K Lumens	6,162	12,040	17,965	23,738	29,413	35,197	41,623	47,163	52,609	58,247
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
AFL	4000K/5000K Lumens	6,541	12,781	19,072	25,199	31,221	37,362	44,185	50,065	55,846	61,831
	3000K Lumens	6,184	12,084	18,032	23,825	29,519	35,325	41,775	47,334	52,801	58,459
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (800MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		44	85	124	171	210	249	295	334	374	419
Input Current @ 120V (A)		0.39	0.77	1.13	1.54	1.90	2.26	2.67	3.03	3.39	3.80
Input Current @ 208V (A)		0.22	0.44	0.62	0.88	1.06	1.24	1.50	1.68	1.87	2.12
Input Current @ 240V (A)		0.19	0.38	0.54	0.76	0.92	1.08	1.30	1.46	1.62	1.84
Input Current @ 277V (A)		0.17	0.36	0.47	0.72	0.83	0.95	1.19	1.31	1.42	1.67
Input Current @ 347V (A)		0.15	0.24	0.38	0.49	0.63	0.77	0.87	1.01	1.15	1.52
Input Current @ 480V (A)		0.11	0.18	0.29	0.37	0.48	0.59	0.66	0.77	0.88	0.96
Optics											
T2	4000K/5000K Lumens	5,054	9,878	14,739	19,475	24,129	28,875	34,148	38,691	43,159	47,785
	3000K Lumens	4,779	9,338	13,935	18,412	22,813	27,301	32,286	36,581	40,805	45,179
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	5,366	10,486	15,647	20,675	25,616	30,654	36,252	41,076	45,819	50,730
	3000K Lumens	5,074	9,914	14,794	19,548	24,218	28,982	34,276	38,835	43,320	47,964
	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-G5
T3	4000K/5000K Lumens	5,153	10,068	15,022	19,849	24,593	29,430	34,805	39,436	43,990	48,705
	3000K Lumens	4,872	9,519	14,203	18,766	23,251	27,825	32,907	37,285	41,591	46,048
	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
T3R	4000K/5000K Lumens	5,265	10,292	15,356	20,290	25,140	30,084	35,578	40,312	44,968	49,786
	3000K Lumens	4,979	9,731	14,518	19,184	23,769	28,443	33,638	38,114	42,516	47,071
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4FT	4000K/5000K Lumens	5,182	10,126	15,109	19,964	24,736	29,600	35,006	39,664	44,245	48,987
	3000K Lumens	4,899	9,574	14,285	18,876	23,387	27,986	33,097	37,501	41,832	46,315
	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
T4W	4000K/5000K Lumens	5,115	9,995	14,914	19,706	24,417	29,218	34,554	39,152	43,674	48,354
	3000K Lumens	4,836	9,450	14,100	18,631	23,085	27,624	32,670	37,017	41,292	45,717
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	5,046	9,860	14,713	19,441	24,087	28,825	34,089	38,625	43,085	47,702
	3000K Lumens	4,771	9,322	13,911	18,381	22,774	27,253	32,229	36,518	40,735	45,101
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	5,152	10,067	15,020	19,846	24,591	29,426	34,800	39,431	43,984	48,698
	3000K Lumens	4,871	9,518	14,200	18,764	23,249	27,822	32,902	37,280	41,585	46,042
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL4	4000K/5000K Lumens	4,894	9,565	14,271	18,857	23,364	27,959	33,065	37,465	41,792	46,270
	3000K Lumens	4,627	9,043	13,492	17,829	22,090	26,434	31,261	35,422	39,513	43,746
	BUG Rating	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	5,313	10,383	15,493	20,470	25,363	30,351	35,893	40,669	45,367	50,229
	3000K Lumens	5,024	9,817	14,647	19,354	23,980	28,696	33,936	38,452	42,893	47,490
	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
5MQ	4000K/5000K Lumens	5,411	10,574	15,778	20,848	25,830	30,911	36,554	41,418	46,202	51,154
	3000K Lumens	5,117	9,997	14,917	19,710	24,421	29,225	34,561	39,160	43,682	48,364
	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
5WQ	4000K/5000K Lumens	5,426	10,603	15,820	20,903	25,899	30,992	36,652	41,529	46,325	51,290
	3000K Lumens	5,130	10,025	14,958	19,763	24,486	29,302	34,654	39,263	43,799	48,493
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	4,528	8,846	13,199	17,440	21,609	25,858	30,580	34,649	38,651	42,792
	3000K Lumens	4,281	8,364	12,480	16,489	20,430	24,448	28,912	32,759	36,543	40,459
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	5,265	10,289	15,353	20,285	25,134	30,077	35,569	40,303	44,958	49,775
	3000K Lumens	4,978	9,727	14,516	19,179	23,763	28,437	33,629	38,105	42,508	47,060
	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-G4
AFL	4000K/5000K Lumens	5,285	10,327	15,409	20,360	25,225	30,186	35,699	40,450	45,120	49,956
	3000K Lumens	4,996	9,763	14,569	19,249	23,849	28,540	33,752	38,244	42,659	47,232
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (600MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		34	66	96	129	162	193	226	257	290	323
Input Current @ 120V (A)		0.30	0.58	0.86	1.16	1.44	1.73	2.03	2.33	2.59	2.89
Input Current @ 208V (A)		0.17	0.34	0.49	0.65	0.84	0.99	1.14	1.30	1.48	1.63
Input Current @ 240V (A)		0.15	0.30	0.43	0.56	0.74	0.87	1.00	1.13	1.30	1.43
Input Current @ 277V (A)		0.14	0.28	0.41	0.52	0.69	0.81	0.93	1.04	1.22	1.33
Input Current @ 347V (A)		0.11	0.19	0.30	0.39	0.49	0.60	0.69	0.77	0.90	0.99
Input Current @ 480V (A)		0.08	0.15	0.24	0.30	0.38	0.48	0.53	0.59	0.71	0.77
Optics											
T2	4000K/5000K Lumens	4,121	8,055	12,019	15,881	19,676	23,547	27,847	31,552	35,196	38,967
	3000K Lumens	3,896	7,615	11,363	15,015	18,604	22,263	26,328	29,831	33,276	36,842
	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	4000K/5000K Lumens	4,376	8,552	12,760	16,860	20,890	24,998	29,563	33,497	37,365	41,369
	3000K Lumens	4,138	8,085	12,064	15,941	19,751	23,635	27,951	31,670	35,328	39,113
	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-G4	B3-U0-G4	B3-U0-G4
T3	4000K/5000K Lumens	4,201	8,210	12,251	16,187	20,055	23,999	28,383	32,159	35,873	39,718
	3000K Lumens	3,973	7,763	11,583	15,304	18,961	22,691	26,835	30,406	33,916	37,552
	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	4000K/5000K Lumens	4,294	8,393	12,523	16,546	20,501	24,532	29,014	32,875	36,671	40,600
	3000K Lumens	4,060	7,936	11,840	15,644	19,383	23,195	27,432	31,082	34,671	38,386
	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	4000K/5000K Lumens	4,226	8,257	12,321	16,280	20,172	24,139	28,547	32,346	36,082	39,948
	3000K Lumens	3,996	7,807	11,649	15,392	19,071	22,822	26,990	30,582	34,114	37,770
	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	4000K/5000K Lumens	4,171	8,151	12,162	16,071	19,912	23,827	28,178	31,928	35,615	39,432
	3000K Lumens	3,943	7,706	11,498	15,194	18,825	22,527	26,642	30,187	33,673	37,281
	BUG Rating	B1-U0-G1	B2-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	4000K/5000K Lumens	4,114	8,041	11,998	15,854	19,643	23,506	27,799	31,498	35,135	38,901
	3000K Lumens	3,890	7,603	11,344	14,989	18,572	22,224	26,282	29,780	33,219	36,779
	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	4000K/5000K Lumens	4,200	8,209	12,249	16,184	20,053	23,996	28,379	32,154	35,869	39,712
	3000K Lumens	3,972	7,762	11,580	15,302	18,960	22,688	26,831	30,400	33,913	37,546
	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	4000K/5000K Lumens	3,992	7,799	11,638	15,378	19,053	22,801	26,964	30,552	34,081	37,733
	3000K Lumens	3,774	7,374	11,003	14,539	18,015	21,557	25,493	28,886	32,222	35,674
	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	4000K/5000K Lumens	4,333	8,467	12,634	16,694	20,683	24,751	29,271	33,166	36,996	40,961
	3000K Lumens	4,097	8,005	11,945	15,784	19,555	23,401	27,674	31,357	34,978	38,727
	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	4000K/5000K Lumens	4,413	8,622	12,867	17,000	21,064	25,207	29,810	33,777	37,677	41,715
	3000K Lumens	4,173	8,152	12,165	16,073	19,915	23,832	28,185	31,934	35,623	39,440
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
5WQ	4000K/5000K Lumens	4,424	8,646	12,900	17,046	21,120	25,274	29,890	33,866	37,778	41,826
	3000K Lumens	4,182	8,175	12,197	16,117	19,968	23,896	28,260	32,018	35,717	39,545
	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	4000K/5000K Lumens	3,692	7,214	10,763	14,222	17,621	21,086	24,937	28,256	31,519	34,897
	3000K Lumens	3,491	6,820	10,176	13,447	16,660	19,937	23,577	26,715	29,800	32,994
	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	4000K/5000K Lumens	4,293	8,390	12,520	16,542	20,496	24,527	29,007	32,865	36,662	40,591
	3000K Lumens	4,059	7,932	11,837	15,640	19,378	23,189	27,425	31,074	34,662	38,377
	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	4000K/5000K Lumens	4,310	8,421	12,566	16,602	20,571	24,616	29,112	32,986	36,795	40,738
	3000K Lumens	4,074	7,962	11,881	15,697	19,448	23,273	27,525	31,187	34,788	38,516
	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 70 CRI.

CONTROL OPTIONS

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

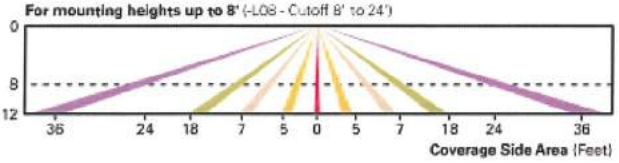
Photocontrol (P, R and PER7)
Optional button-type photocontrol (P) and photocontrol receptacles (R and PER7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

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

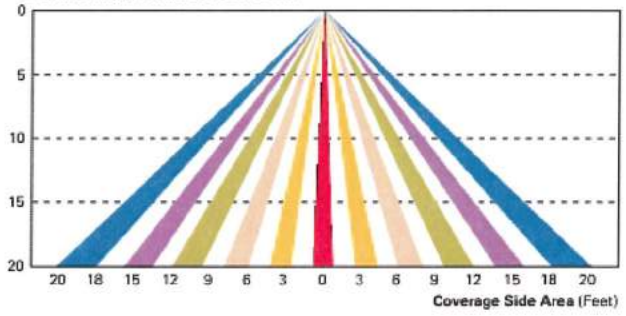
Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity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

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

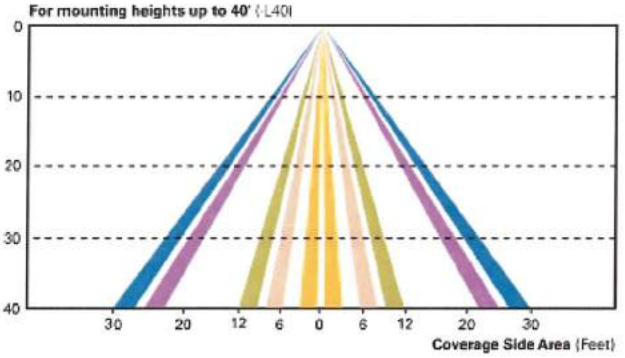
For mounting heights up to 8' (-L08 - Cutoff 8' to 24')



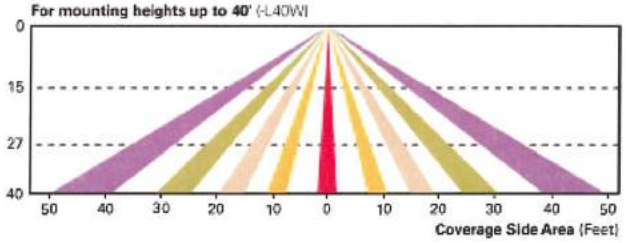
For mounting heights up to 20' (-L20)



For mounting heights up to 40' (-L40)

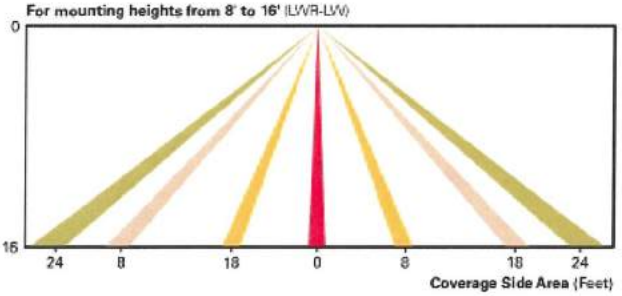


For mounting heights up to 40' (-L40W)

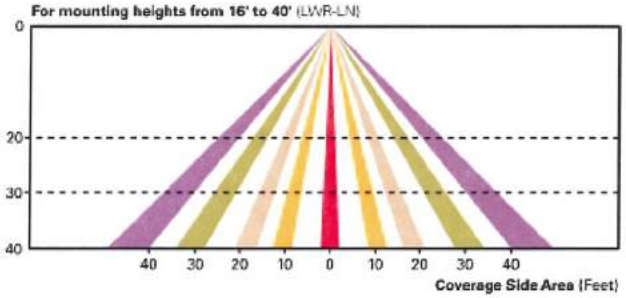


LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting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

For mounting heights from 8' to 16' (LWR-LW)



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



WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)
The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

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

ORDERING INFORMATION

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

Product Family [1,2]	Light Engine	Number of Light Squares [3]	Lamp Type	Voltage	Distribution	Color	Mounting
GLEON=Galleon	**AF**=1A Drive Current	**01**=1 **02**=2 **03**=3 **04**=4 **05**=5 [4] **06**=6 **07**=7 [5] **08**=8 [5] **09**=9 [5] **10**=10 [6]	**LED**=Solid State Light Emitting Diodes	**E1**=120-277V **347**=347V [7] **480**=480V [7,8]	**T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T3R**=Type III Roadway **T4FT**=Type IV ForwardThrow **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 WideType 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 [9] **MA**=Mast Arm Adapter [10] **WM**=Wall Mount **QM**=Quick Mount Arm (Standard Length) [11] **QMEA**=Quick Mount Arm (Extended Length) [12]

Options (Add as Suffix)

7027=70 CRI 2700K [13]
7030=70 CRI 3000K [13]
8030=80 CRI 3000K [13]
7050=70 CRI 5000K [13]
7060=70 CRI 6000K [13]
600=Drive Current Set to Nominal 600mA [14]
800=Drive Current Set to Nominal 800mA [14]
1200=Drive Current Set to Nominal 1200mA [15, 16]
F=Single Fuse (120, 277 or 347V. Specify Voltage)
FF=Double Fuse (208, 240 or 480V. Specify Voltage)
2L=Two Circuits [17,18]
DIM=External 0-10V Dimming Leads [19,20]
AHD145=After Hours Dim, 5 Hours [22]
AHD245=After Hours Dim, 6 Hours [22]
AHD255=After Hours Dim, 7 Hours [22]
AHD355=After Hours Dim, 8 Hours [22]
HA=50°C High Ambient [23]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° Right
MT=Installed Mesh Top
TH=Tool-less Door Hardware
HSS=Installed House Side Shield [26]
CE=CE Marking [29]
LCF=Light Square Trim Painted to Match Housing [27]
P=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) [21]
PER7=NEMA 7-PIN Photocontrol Receptacle [21]
R=NEMA Photocontrol Receptacle [21]
MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height [24]
MS-L40W=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height [24]
MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height [24]
MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height [24]
MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height [24]
MS/X-L08=Bi-Level Motion Sensor, Maximum 8' Mounting Height [24,25]
MS/X-L20=Bi-Level Motion Sensor, 9' - 20' Mounting Height [24,25]
MS/X-L40W=Bi-Level Motion Sensor, 21' - 40' Mounting Height [24,25]
MS-L08=Motion Sensor for ON/OFF Operation, Maximum 8' Mounting Height [24]
LWR-LW=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [26]
LWR-LN=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [26]
ZW=WaveLinx-enabled 4-PIN Twistlock Receptacle [33,34]
ZW-SWPD4WH=Wavelinx Wireless Sensor, 7' – 15' Mounting Height, White [33,34]
ZW-SWPD4BZ=Wavelinx Wireless Sensor, 7' – 15' Mounting Height, Bronze [33,34]
ZW-SWPD5WH=Wavelinx Wireless Sensor, 15' – 40' Mounting Height, White [33,34]
ZW-SWPD5BZ=Wavelinx Wireless Sensor, 15' – 40' Mounting Height, Bronze [33,34]

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 [24]
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
GLEON-QM=Quick Mount Arm Kit [11]
GLEON-QMEA=Quick Mount Extended Arm Kit [12]
LS/HSS=Field Installed House Side Shield [26,28]
WOLC-7P-10A=WaveLinx Outdoor Control Module [18,31]
SWPD4-WH=Wavelinx Wireless Sensor, 7' – 15' Mounting Height, White [18,33,34]
SWPD4-BZ=Wavelinx Wireless Sensor, 7' – 15' Mounting Height, Bronze [18,33,34]
SWPD5-WH=Wavelinx Wireless Sensor, 15' – 40' Mounting Height, White [18,33,34]
SWPD5-BZ=Wavelinx Wireless Sensor, 15' – 40' Mounting Height, Bronze [18,33,34]

NOTES:
1 Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. **2** DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. **3** Standard 4000K CCT and minimum 70 CRI. **4** Not compatible with MS/4-LXX or MS/1-LXX sensors. **5** Not compatible with extended quick mount arm (QMEA). **6** Not compatible with standard quick mount arm (QM) or extended quick mount arm (QMEA). **7** Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A. **8** Only for use with 480Y Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). **9** May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern. Refer to arm mounting requirement table. **10** Factory installed. **11** Maximum 8 light squares. **12** Maximum 6 light squares. **13** Extended lead times apply. Use dedicated IES files for 2700K, 3000K, 5000K and 6000K when performing layouts. **14** Reserved **15** 1 Amp standard. Use dedicated IES files for 600mA, 800mA and 1200mA when performing layouts. **16** Not available with HA option. **17** 2L is not available with MS, MS/X or MS/DIM at 347V or 480V. 2L in AF-02 through AF-04 requires a larger housing, normally used for AF-05 or AF-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. **18** Not available with LumaWatt Pro wireless sensors. **19** Cannot be used with other control options. **20** Low voltage control lead brought out 18" outside fixture. **21** Not available if any "MS" sensor is selected. Motion sensor has an integral photocell. **22** Requires the use of P photocontrol or the PER7 or R photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information. **23** 50°C lumen maintenance data applies to 600mA, 800mA and 1A drive currents. **24** 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. **25** Replace X with number of Light Squares operating in low output mode. **26** LumaWatt Pro wireless sensors are factory installed only requiring network components LWP-EM-1, LWP-GW-1 and LWP-PoE8 in appropriate quantities. See www.eaton.com/lighting for LumaWatt Pro application information. **27** Not available with house side shield (HSS). **28** Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected. **29** CE is not available with the LWR, MS, MS/X, MS/DIM, P, R or PER7 options. Available in 120-277V only. **30** One required for each Light Square. **31** Requires PER7. **32** Reserved. **33** WAC Gateway required to enable field configurability: Order WAC-PoE and WPDE-120 (10V to PoE injector) power supply if needed. **34** Requires ZW. **35** Reserved.

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

Product Family	Camera Type	Data Backhaul	
L=LumenSafe Technology®	**D**=Dome Camera, Standard **H**=Dome Camera, Hi-Res **Z**=Dome Camera, Remote PTZ	**C**=Cellular, Customer Installed SIM Card **A**=Cellular, Factory Installed AT&T SIM Card **V**=Cellular, Factory Installed Verizon SIM Card **S**=Cellular, Factory Installed Sprint SIM Card	**W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking

*Consult LumenSafe system pages for additional details and compatibility.

dial architects

14364 Manchester Road
Manchester Missouri 63011
636 230 0400

January 29, 2020

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 Facility on Adjusted Lot 1.
NEFF Power – 669 Spirit Valley Central Drive

General Requirements for Site Design

This project consists of a single-story office/factory/warehouse building designed for a single tenant. The site is located at an entry of Spirit Valley Business Park on the west side of Spirit Valley Central Drive and south side of Olive Street Road on the far west side of Chesterfield. The owner of this building is moving his hi-tech robotics headquarters from Earth City to Chesterfield Valley.

Site Relationships:

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 and congruous with the other buildings in the development.

The approved concept plan for the entire development shows a 5' wide side walk on the west side of Spirit Valley Central Drive to provide pedestrian circulation. While we cannot control future development of neighboring sites, this specific site design allows cross access with the neighbor to the south.

We are not proposing the use of fencing at this time.

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

General Requirements for Building Design

The intent of the design is to project the high quality, high-tech image of the users robotics products. This design states "the future is built here". The front (north) elevation is articulated with stepping concrete walls with rhythmically pleasing reveal patterns highlighted with glass and aluminum and a striking blue slashing accent. The tilt-up concrete walls cast great shadows, adding depth, complexity and a sense of place for the entry. The reveals and glass extend around each side (west & east) corner to give a sense of pattern and encourage one to explore the building further.

The south building face is articulated with recessed reveals, high windows in a rhythmic pattern and pleasing to the eye. The building will utilize earth tone colors, clear and tinted glass windows and metal canopies. The colors, glass and metal items are juxtaposed on the façades of the building to create an interesting overall building design. This includes a stark blue slash to draw attention to the main entry to the building.

All sides of this building are treated in the same fashion with design reveals, glass and aluminum windows and earth tone paints. The building materials are the same as all of the other buildings in this park, but are being used in more design appropriate ways to deliver an aesthetically pleasing solution. A special coating designed specifically for concrete will protect the concrete panels. The flat roof is covered with a TPO membrane and slopes to scuppers on the west elevation.

The windows for this project, in keeping with its strong design theme, are non-operable and are energy compliant windows. The glass is 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.

Site lighting is planned to be three light standards in the front of the building (north) along Olive Street Road and two light standards at the back of the building (south) along the south property line. A wall-mounted fixture will accent the south side. This lighting will not shine off of the Owners property in an unnecessary fashion.

Please see the site development section plan for drainage information.

The proposed HVAC system is planned to be roof mounted.

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 metal canopies and 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 located near the southwest corner of the building south of the building and will receive vegetation to screen the units. 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 north and a few south of the building and the service/loading area is on the south 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 Sprit 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 Spirit Valley Central Drive. 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 sample
- Color samples of the concrete coatings

End of Architects Statement

dial architects

14364 Manchester Road
Manchester Missouri 63011
636 230 0400

March 10, 2020

Justin Wyse
Annisa Kumerow
City of Chesterfield
Department of Planning
690 Chesterfield Parkway West
Chesterfield, Missouri 63017-0760

Re: Third Submittal – Revised Elevations per ARB comments
Resubmitted per email from Annisa Kumerow dated 03-06-2020
Submittal for Approval of revised elevational design adding a third material.
NEFF Power – 669 Spirit Valley Central Drive

Annisa,

Per your email mentioned above, we are submitting one hard copy of the revisions containing the following items per your email.

- *Statement of Design*
- *SDSP*
- *Lighting Plan and Cutsheets*
- *Landscape Plan*
- *Elevations*

The new design includes revisions based on the response received from the city as follows:

1. *Given that the building is on a major thoroughfare, particular attention should be paid to the materials:*
    a. *A new material of a better quality should be introduced on the primary façade*
    b. *This new material should translate to both sides of the building and,*
    c. *The new material should transition at logical points along the facades*
2. *Additionally, the reduction of glass is not of benefit to the design.*

RESPONSE:

1. We have chosen to add Alucobond, a composite aluminum faced panel system, as the third material on the front elevation which we had re-designed a bit to allow this third material to wrap to the east and west elevations.

   In order to do this, we added the recessed corner window and canopy detail to the northwest corner, which now matches the other corners on the 'front' elevation. Alucobond is a high-quality system that will add another level of high-tech innovation to this building.

2. The reduction in glass mentioned in the city comments refers to the elimination and/or relocation of some of the small 'high' windows on the east, west and south elevations. The numbers changed from 23 small windows on the three elevations to 10 only on the east and south elevations. This change was due partially to some of the windows conflicting with internal elements on the plan and partially due to the owner's desire to de-clutter the elevations. This change was actually made prior to the ARB meeting but after the ARB submittal. When the re-submittal was made, the re-designed elevations with the fewer windows was simply used. We realize that we should have called this change out, and our neglecting to do this was simply an oversight.

   The Owner has stated that we can add some back in if that is the desire of staff. At this point, the windows were not added back in.

Thanks again for taking the time to meet with us to resolve the design of this building. as we discussed, we were certainly not ignoring the ARB comments, we just mis-understood them.

Please let us know if you require anything further.

David W. Dial

President
Dial Architects

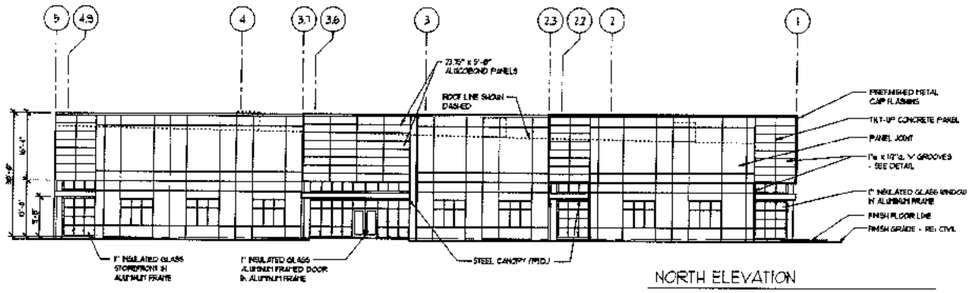
Neff Power Bio

Neff Power is a Robotics and High-Tech Automation distributor that represents innovative, top manufacturers bringing products and solutions to OEM, End User, and Integrator customers in the manufacturing and warehouse distribution markets.

Neff Power has been in business since 1965 and was purchased by Kent and Loretto Wemhoener eight years ago. Since 2012, Neff Power has achieved unprecedented growth and has expanded from the St. Louis market to eight states while opening offices in Kansas City, Phoenix, and Dallas.

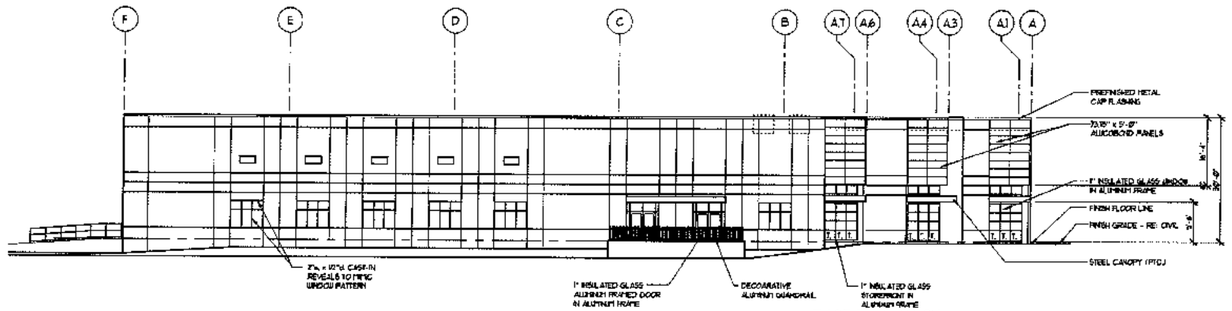
Neff Power is the largest volume US distributor for Yaskawa Robotics, one of the top 3 worldwide robot manufacturers. Neff Power is an ISO 9001:2015 registered company focused on continually improving company processes and offerings to provide the best service to its diversified customers. The management team has increased the technical staff of Application and Design Engineers from two to fourteen to add value to its customers. Neff Power has developed a robust online web store and App downloadable through Apple and Google.

Neff Power chose the Chesterfield location to build its new St. Louis Headquarters because we believe Chesterfield is a great investment for the future and is an innovative community that is attractive to a high-tech business such as ours.



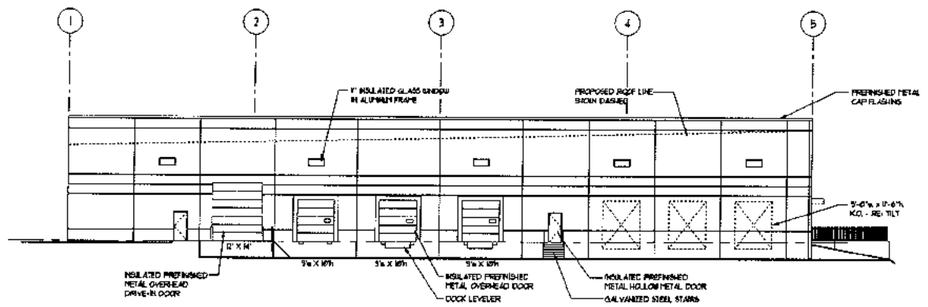
NORTH ELEVATION

1/16" = 1'-0"



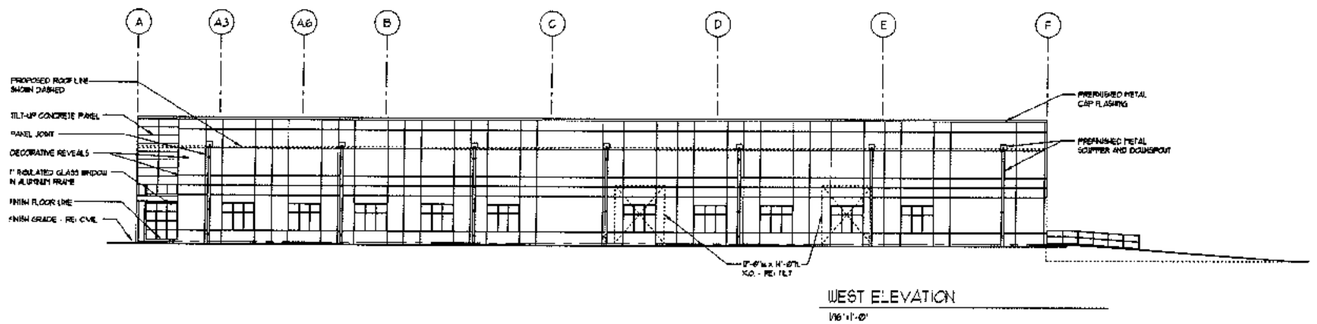
EAST ELEVATION

1/16" = 1'-0"



SOUTH ELEVATION

1/16" = 1'-0"



WEST ELEVATION

1/16" = 1'-0"

SCUPPER AND DOWNSPOUT NOTES:

1. SCUPPER AND DOWNSPOUT FABRICATOR SHALL VERIFY SIZES WITH BUILDING CODE REQUIREMENTS PRIOR TO FABRICATION AND SHALL SUBMIT SHOP DRAWINGS WITH DETAILS FOR EACH CONDITION.
2. DOWNSPOUTS SHALL CONNECT TO STORM SEWER - RE: CIVIL - DO NOT ALLOW PVC DRAIN PIPE TO EXTEND MORE THAN 4" ABOVE GRADE - CAP WITH DOWNSPOUT CONNECTOR CAP OF SAME COLOR PVC.

SCUPPER AND DOWNSPOUT SIZES:

SCUPPER SIZE: SEE DETAILS XG/XXX AND XG/XXX
DOWNSPOUT SIZE: 6" x 6"
USE QUANTITIES AND LOCATIONS SHOWN - FABRICATE PER SPECIFICATION

VISION GLASS = 1" INSUL. CLEAR WITH LOW 'E' COATING

WINDOW FRAMES = CLEAR ANODIZED ALUMINUM

General Contractor:

New facility for:

Spirit Valley Business Park, Lot-1

ISSUE DATES:

CITY ELEVATIONS:	01-03-2020
PROGRESS SET:	02-13-2020
PROGRESS SET:	02-25-2020
PROGRESS SET:	03-03-2020

STATE OF MISSOURI REGISTERED ARCHITECT:
DAVID WILLIAM DIAL - LICENSE NUMBER A-7331
DAVID W. DIAL ARCHITECTS, P.C.
ARCHITECTURAL CORPORATION #2009.49091

THE ARCHITECT'S SEAL AFFIXED TO THIS SHEET INDICATES THAT THE NAMED ARCHITECT HAS PREPARED OR DIRECTED THE PREPARATION OF THE MATERIAL SHOWN ONLY ON THIS SHEET. OTHER DRAWINGS AND DOCUMENTS, NOT EXHIBITING THIS SEAL, SHALL NOT BE CONSIDERED PREPARED BY OR THE RESPONSIBILITY OF THE UNDERSIGNED.

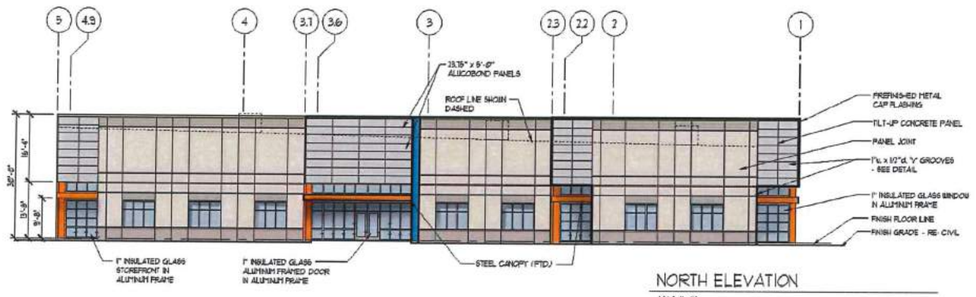
dial architects
14861 Manchester Road • Manchester, Missouri 63011
636.230.0400 www.dialarchitects.com

SHEET NUMBER:

A8 of X

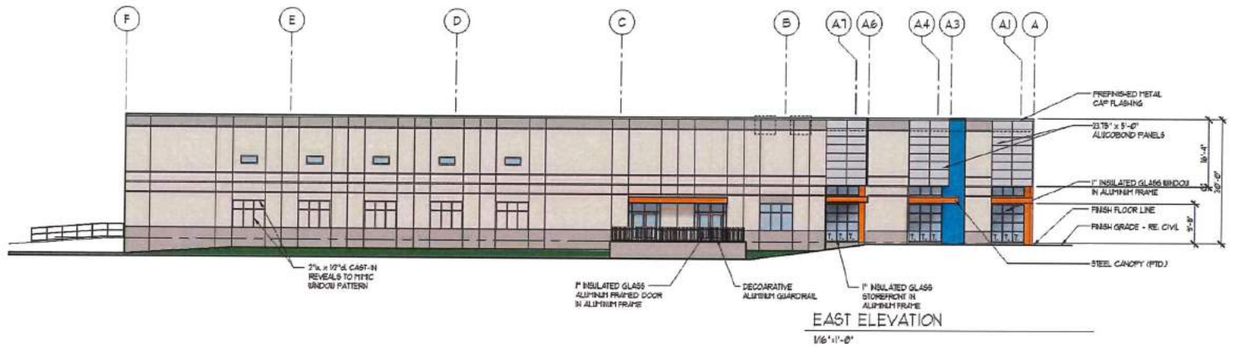
BUILDING ELEVATIONS

PROJECT NUMBER: 19300 DATE: 00-00-00



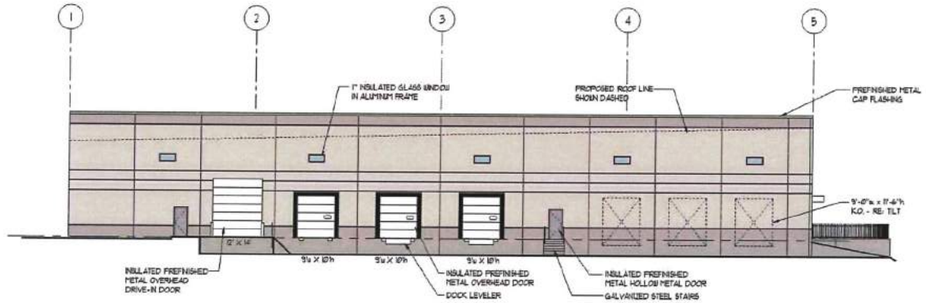
NORTH ELEVATION

1/16"=1'-0"



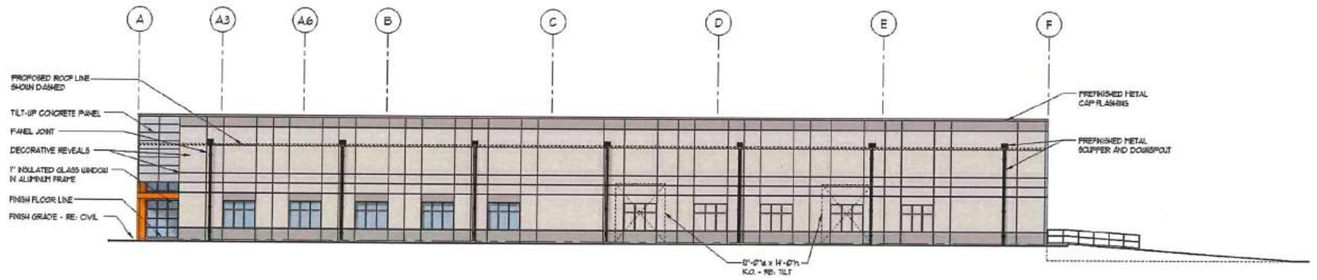
EAST ELEVATION

1/16"=1'-0"



SOUTH ELEVATION

1/16"=1'-0"



WEST ELEVATION

1/16"=1'-0"

SCUPPER AND DOWNSPOUT NOTES:

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SCUPPER AND DOWNSPOUT SIZES:

SCUPPER SIZE: SEE DETAILS XX/A0X AND XX/A0X
DOWNSPOUT SIZE: 6" x 6"
SEE QUANTITIES AND LOCATIONS SHOWN - FABRICATE PER SMACNA

VISION GLASS - 1" INSUL. CLEAR WITH LOW 'E' COATING

WINDOW FRAMES - CLEAR ANODIZED ALUMINUM

General Contractor:

KEYSTONE

QUALITY DESIGN/BUILD CONSTRUCTION

New facility for:

NEXTPOWER

Spirit Valley Business Park, Lot-1

ISSUE DATES:

CITY ELEVATIONS:	01-03-2020
PROGRESS SET:	02-13-2020
PROGRESS SET:	02-25-2020
PROGRESS SET:	03-03-2020

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

THE ARCHITECTS SEAL AFFIXED TO THIS SHEET INDICATES THAT THE NAMED ARCHITECT HAS PREPARED OR DIRECTED THE PREPARATION OF THE MATERIAL SHOWN ONLY ON THIS SHEET. OTHER DRAWINGS AND DOCUMENTS, NOT EXHIBITING THIS SEAL, SHALL NOT BE CONSIDERED PREPARED BY OR THE RESPONSIBILITY OF THE UNDERSIGNED.

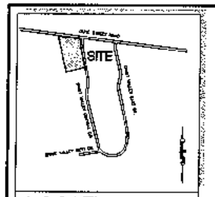
dial architects
14364 Manchester Road • Manchester Missouri 63011
636 230 0400 www.dialarchitects.com

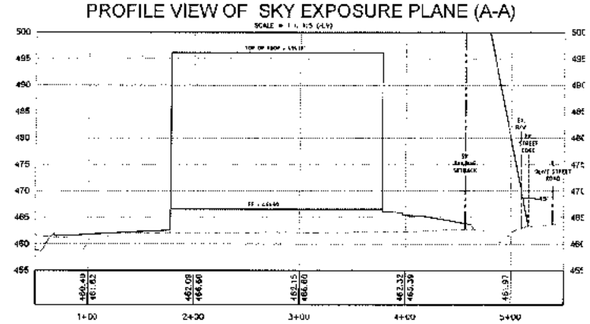
SHEET NUMBER:

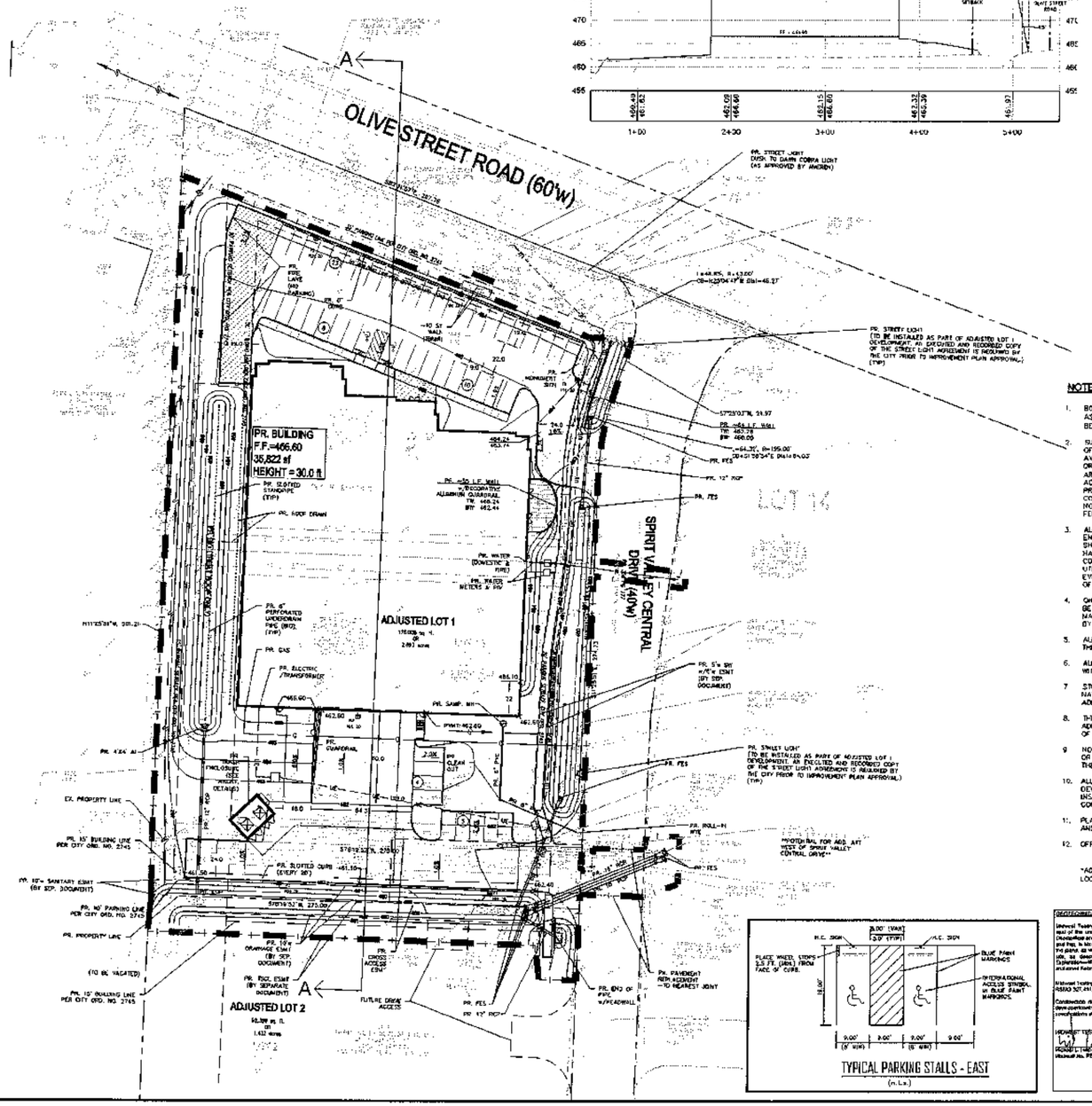
A8 of X

BUILDING ELEVATIONS

PROJECT NUMBER: 19300 DATE: 00-00-00







LOCATION MAP
(NOT TO SCALE)

SHEET INDEX

SDSP-1.0 – SITE DEVELOPMENT SECTION PLAN
SDSP-2.0 – PHOTOMETRIC PLAN

SITE INFORMATION

ADJUSTED LOT 1

OWNER(CURRENT):	SPIRIT VALLEY DEVELOPMENT, LLC
OWNER(UNDER CONTRACT):	K&L TECH PROPERTIES, LLC
ADDRESS:	669 SPIRIT VALLEY CENTRAL DRIVE CHESTERFIELD, MO 63005
LOT AREA:	2.893 Acres ±
LOCATOR NO:	17W420123/17W420112/17W420079
ORDINANCE NO:	#3002
FIRE DISTRICT:	MONARCH FIRE PROTECTION DISTRICT
SCHOOL DISTRICT:	ROCKWOOD
SEWER DISTRICT:	METROPOLITAN ST. LOUIS SEWER DIST.
WATER SHED:	MISSOURI RIVER
FEMA MAP:	29189C0145K
ELECTRIC COMPANY:	AMEREN UE
GAS COMPANY:	SPIRE
PHONE COMPANY:	AT&T
WATER COMPANY:	MISSOURI AMERICAN WATER COMPANY

OPENSPACE CALCULATIONS

TOTAL SITE AREA (ADJUSTED LOT 1):	126,008 sf
PR. BUILDING: (OFFICE = 14,250 s.f. ; WAREHOUSE = 21,572 s.f.)	35,822 sf
VEHICLE PAVEMENT:	33,148 sf

PERCENT OPENSPACE:
((126,008 − (35,822+33,148) / 126,008) × 100% = 45.2%

F.A.R. CALCULATION

F.A.R. = 35,930 / 126,008 = 0.29
MAXIMUM = 0.55

BUILDING SETBACKS

OLIVE:	50' BUILDING SETBACK
FRONT:	20' BUILDING SETBACK
SIDE:	15' BUILDING SETBACK

RECORDED BOUNDARY ADJUSTMENT PLAT INFORMATION:
-FILED XX/XX/20XX
-20XXXXXXXXXXX
-PB. XXX, PG.XXX

PARKING CALCULATIONS

REQUIRED PARKING: (MINIMUM)		
OFFICE	3.3 SPACES PER 1,000 GROSS FLOOR AREA OF OFFICE (3.3 x 14,358 = 46 SPACES)	
WAREHOUSE:	2 SPACES FOR EVERY 3 EMPLOYEES ON THE MAXIMUM SHIFT (3 EMPLOYEES = 2 SPACES)	
TOTAL PERMITTED (MINIMUM):		50 SPACES
TOTAL PERMITTED: (MAXIMUM)		
OFFICE	4.5 SPACES PER 1,000 GROSS FLOOR AREA OF OFFICE (4.5 x 14,358 = 65 SPACES)	
WAREHOUSE:	1.2 SPACES PER EMPLOYEE ON THE MAXIMUM SHIFT (3 EMPLOYEES = 4 SPACES)	
TOTAL PERMITTED (MAXIMUM):		69 SPACES
PROPOSED TOTAL SPACES:		50 SPACES (2 ACCESSIBLE)
REQUIRED LOADING:	10x40 LOADING SPACE (3 SPACES)	
TOTAL LOADING PROVIDED:		3 SPACES

K&L Tech Properties, LLC, the owner under contract of the property shown on this plan for and in consideration of being granted approval of said plan to develop property under the provisions of Section 03. ______ (applicable subsection), "PI" – Planned Industrial (present zoning) of City of Chesterfield Unified Development 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.

K&L Tech Properties
by:______________________

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

On this ______ day of ______________, A.D., 2020, before me personally appeared ______________ (Officer of Corporation), who being by me sworn in, did say that he/she is the ________ (Title) of ______________ (Name of Corporation) a corporation in the State of ______ 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 said ______________ (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 __________ 2020, by the Director, authorizing the recording of this Site Development Section Plan pursuant to Chesterfield Ordinance No. 200, as attested to by the Director of Planning and Development Services.

By: ______________________
Justin Wyse, Director of Planning and Development Services
City of Chesterfield, MO

By: ______________________
Vickie Hass, City Clerk
City of Chesterfield, MO

PROPERTY DESCRIPTION

Lot 1A of Lot Split Plat of Lot 1 of SPIRIT VALLEY BUSINESS PARK, a Subdivision in St. Louis County, Missouri, according to the plat thereof recorded in Plat Book 361 page 230 of the St. Louis County Records.

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. The information shown is a correct representation of all existing and proposed land divisions.

STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC.
L.S. No. 222-D

____
WALTER J PFLEGER, MISSOURI P.L.S. NO. 2008000728

ST. LOUIS COUNTY BENCHMARK

SL-46: BRASS DISC STAMPED "SL-46 1990" ON THE NORTH SIDE OF NORTH OUTER 40 RD, ACROSS FROM THE INTERSECTION OF SPIRIT OF ST. LOUIS BOULEVARD. ELEV.=468.35

PREPARED FOR:

KEYSTONE CONSTRUCTION COMPANY
ATTN: BILL HARDIE
633 SPIRIT VALLEY CENTRAL DRIVE
CHESTERFIELD, MO 63005

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY WITH COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

LOT 1A, 1B & PART OF LOT 2 OF SPIRIT VALLEY BUSINESS PARK - SITE DEVELOPMENT SECTION PLANS

A TRACT OF LAND BEING LOT 1A OF LOT SPLIT OF LOT 1 OF SPIRIT VALLEY BUSINESS PARK AS RECORDED IN PLAT BOOK 361, PAGE 230 TOWNSHIP 45 NORTH, RANGE 3 EAST OF THE 5TH PRINCIPAL MERIDIAN CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

PROFILE VIEW OF SKY EXPOSURE PLANE (A-A)

ABBREVIATIONS

ATG	–	ADJUST TO GRADE
B.C.	–	BACK OF CURB
C.O.	–	CLEANOUT
DB.	–	DEED BOOK
E	–	ELECTRIC
ELEV.	–	ELEVATION
EX.	–	EXISTING
F.C.	–	FACE OF CURB
FL	–	FLOWLINE
FT.	–	FEET
FND.	–	FOUND
G	–	GAS
H.W.	–	HIGH WATER
LFB	–	LOW FLOW BLOCKED
M.H.	–	MANHOLE
N/F	–	NOW OR FORMERLY
PB.	–	PLAT BOOK
PG	–	PAGE
PR.	–	PROPOSED
P.V.C.	–	POLYVINYL CHLORIDE PIPE
R.C.P.	–	REINFORCED CONCRETE PIPE
R/W	–	RIGHT-OF-WAY
SQ.	–	SQUARE
T	–	TELEPHONE CABLE
T.B.A	–	TO BE ABANDONED
T.B.R.	–	TO BE REMOVED
T.B.R.&R.	–	TO BE REMOVED AND REPLACED
TYP.	–	TYPICALLY
U.I.P.	–	USE IN PLACE
U.O.N.	–	UNLESS OTHERWISE NOTED
V.C.P	–	VITRIFIED CLAY PIPE
W	–	WATER
(60'W)	–	RIGHT-OF-WAY WIDTH

LEGEND

EXISTING SANITARY SEWER	
EXISTING STORM SEWER	
EXISTING TREE	
EXISTING BUILDING	
EXISTING CONTOUR	
SPOT ELEVATION	
EXISTING UTILITIES	
FOUND 1/2" IRON PIPE	○
SET IRON PIPE	●
FOUND CROSS	+
FOUND STONE	□
FIRE HYDRANT	
LIGHT STANDARD	
BUSH	
SIGN	
NOTES PARKING SPACES	
GUY WIRE	
POWER POLE	
WATER VALVE	
DENOTES RECORD INFORMATION	( )
HANDICAPPED PARKING	
PROPOSED CONTOUR	442
PROPOSED SPOT	442.25
PROPOSED STORM	
PROPOSED SANITARY	SS

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. THIS AMENDED SITE DEVELOPMENT SECTION PLAN WILL ADHERE TO THE PARKING AND LOADING REGULATIONS OF THE CITY OF CHESTERFIELD CODE.
9. NO PARKING SHALL BE PERMITTED ON ANY ROADWAY IN OR ADJACENT TO THE DEVELOPMENT AS REQUIRED BY THE SITE SPECIFIC ORDINANCE.
10. ALL UTILITIES WILL BE INSTALLED UNDERGROUND. THE DEVELOPMENT OF THIS PARCEL WILL COORDINATE THE INSTALLATION OF ALL UTILITIES IN CONJUNCTION WITH THE CONSTRUCTION OF ANY ROADWAY.
11. PLANS SUBJECT TO CHANGE PENDING AGENCY REVIEWS AND FINAL ENGINEERING.
12. OFF STREET PARKING COUNTS:
    PERMITTED = 50-69 SPACES (2 ACCESSIBLE)
    PROPOSED = 50 SPACES (2 ACCESSIBLE)
    *ADA PARKING DIMENSIONS PER DETAIL (THIS SHEET). LOCATION NEAR MAIN ENTRANCE (REFER TO PLAN).

TYPICAL PARKING STALLS - EAST
(n.t.s.)

GEOTECHNICAL ENGINEER'S STATEMENT

Midwest Testing and the undersigned engineer have not prepared the plan on this sheet. The seal of the undersigned professional engineer has been affixed at the request of the City of Chesterfield and is a professional opinion to indicate that the undersigned has reviewed the [illegible], in his opinion, the grading and improvements relative to slope construction as shown on the plans, as well as the foundations, are compatible with the soil and geologic conditions at the site, as described in the geotechnical report for the development, titled Geotechnical Exploration—MT Job No. 14851—Spirit Valley Business Park – Lot 1A—Chesterfield, Missouri and dated February 5, 2020.

Midwest Testing and the undersigned assume no responsibility for services by others pursuant to RSMO 327.411.

Construction means and methods for implementation of the grading plan shall be left to the [illegible] contractor. Observations of the developer/contractor's compliance with the applicable specifications shall be [illegible] and verified in writing.

MIDWEST TESTING
Ronald L. [illegible], P.E.
Missouri No. PE-[illegible]

PREPARED BY:

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

SITE DEVELOPMENT SECTION PLANS FOR:
NEFF POWER - ADJUSTED LOT 1
SPIRIT VALLEY BUSINESS PARK
669 SPIRIT VALLEY CENTRAL DRIVE
CHESTERFIELD, MISSOURI

DATE:

GEORGE MICHAEL STOCK
NUMBER PE-25116
3/4/2020

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000[illegible]

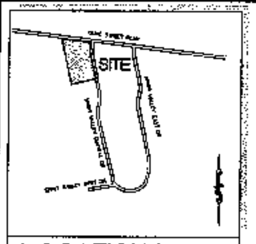
REVISIONS:

1	01-29-20 CITY COMMENTS
2	02-13-20 CITY COMMENTS
3	02-26-20 PC PACKETS
4	03-04-20 CULVERT UPDATE

A.L.W.	G.M.S
01/08/20	219-6666
20MSD-00049	17W1
–	–
NO–	

SHEET TITLE:
SITE DEVELOPMENT SECTION PLAN

SHEET NO.:
SDSP-1.0



POLE FIXTURE MOUNTING HEIGHT INCLUDES 2.5' BASE
LIGHT LEVEL CALCULATED ON THE GROUND

Calculation Summary

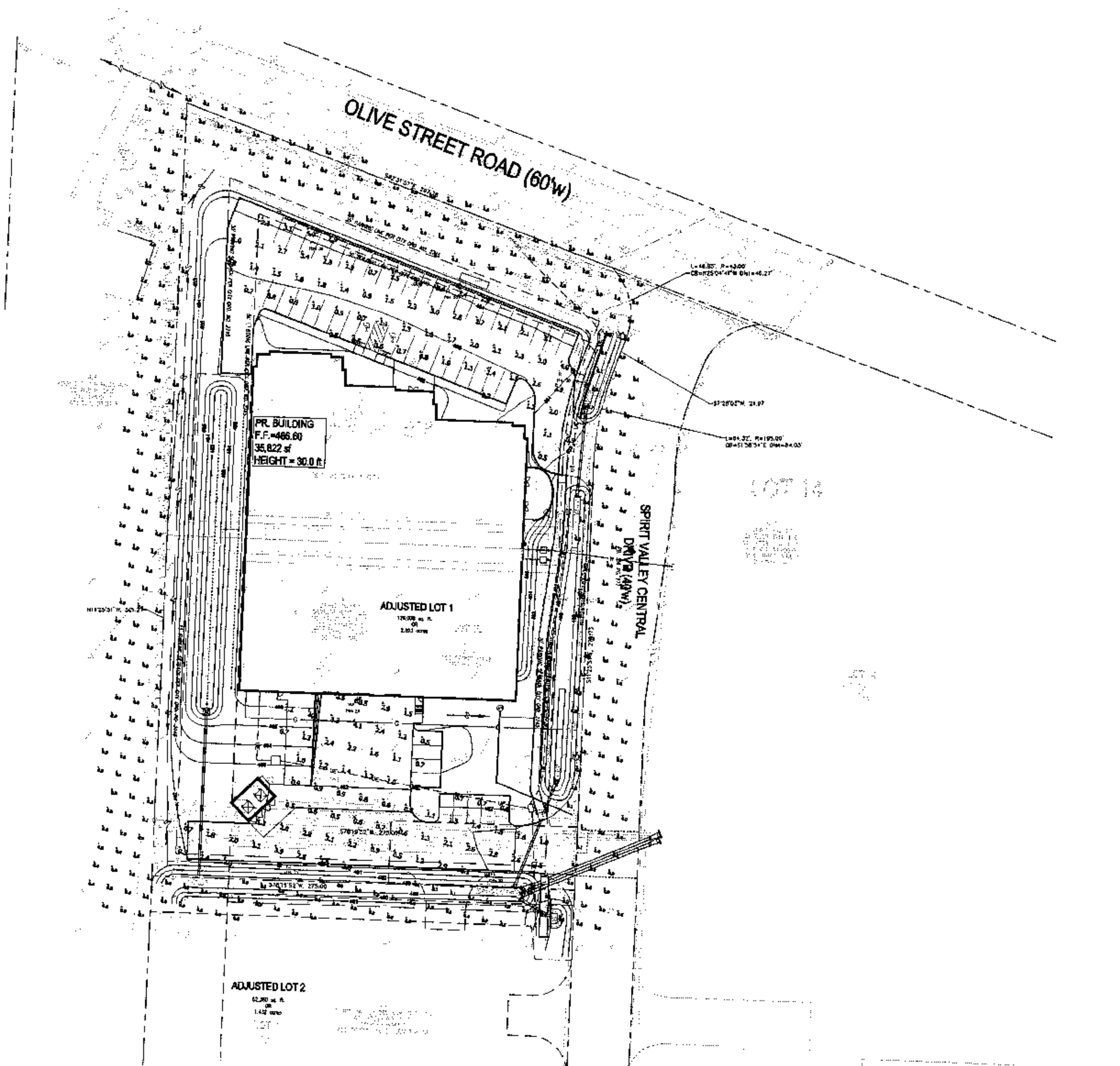
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE	Illuminance	Fc	1.72	4.1	0.5	3.44	8.20
SPILL LIGHT	Illuminance	Fc	0.01	1.7	0.0	N.A.	N.A.

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	Description
	4	F1	SINGLE	113	452	1.000	GLEON-AF-02-LED-E1-SL4-HSS
	1	WP	SINGLE	113	113	1.000	GLEON-AF-02-LED-E1-T4FT - WALL MOUNT
	1	F2	SINGLE	113	113	1.000	GLEON-AF-02-LED-E1-SL2

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.

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.



UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

PREPARED BY:

STOCK & ASSOCIATES
Consulting Engineers, Inc.

SITE DEVELOPMENT SECTION PLANS FOR
NEFF POWER - ADJUSTED LOT 1
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669 SPIRIT VALLEY CENTRAL DRIVE
CHESTERFIELD, MISSOURI

DATE:

GEORGE M. STOCK E-25116
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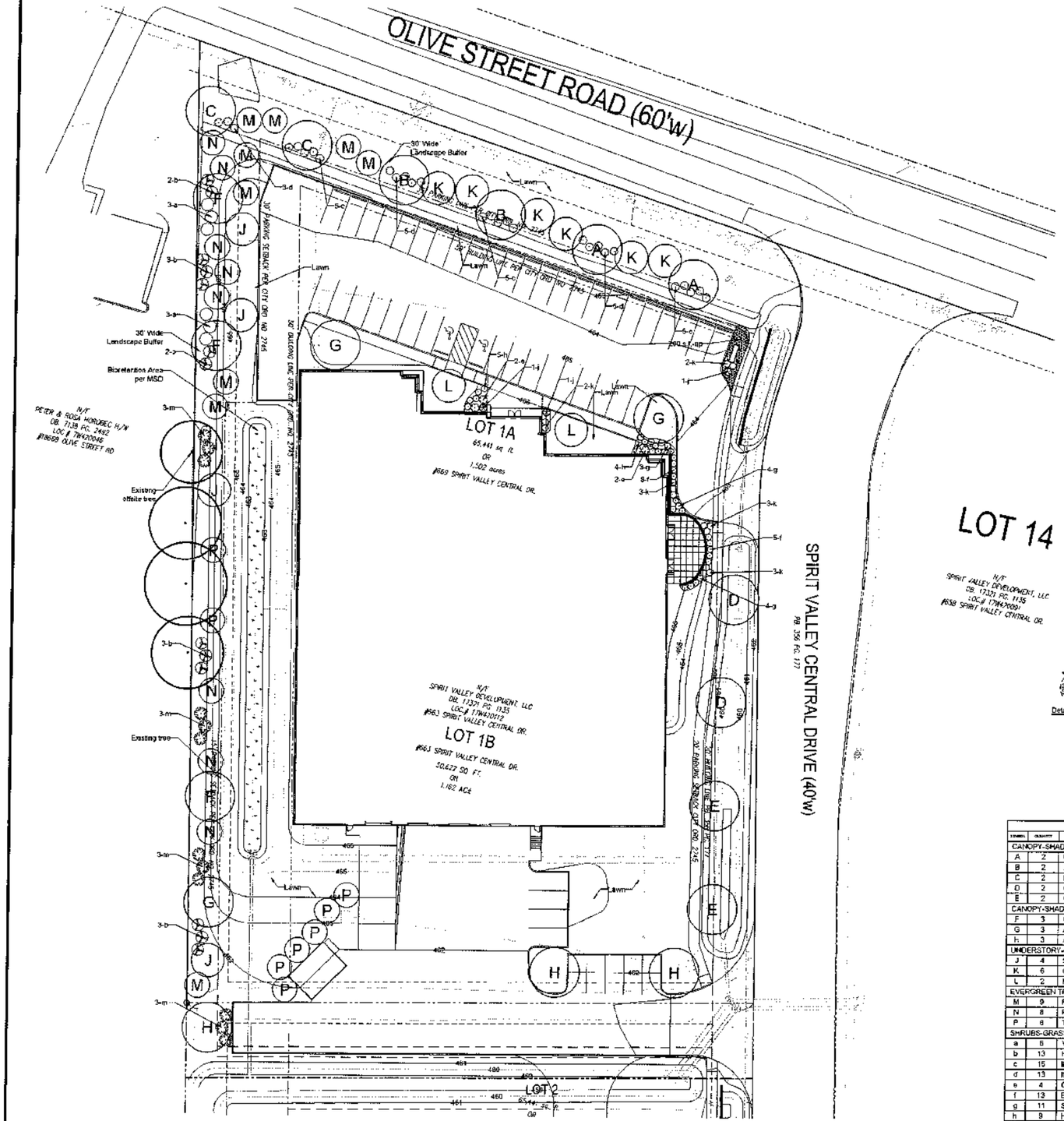
A.L.W. | G.M.S.
01/08/20 | 219-8688
20/SD-00049 | 1780
NO-

SHEET TITLE:
PHOTOMETRIC PLAN

SHEET NO.
SDSP-2.0



Landscape Plan

SCALE 1"=20'

0 20 40 80

Open Space = 47.2 %

Notes: All new landscape shall be irrigated with an automatic underground sprinkler system per the City of Chesterfield Unified Code Section 04-02. Refer to L1.02 for Bioretention Planting Plan.

Typical Perennial Planting

Scarify root ball of all container stock

Typical Shrub Planting

Typical Canopy Tree Planting

Typical Evergreen Planting

PLANTING SCHEDULE

SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS	MATURITY
CANOPY-SHADE STREET TREES						
A	2	Ulmus parvifolia 'Emer II'	Allee Elm	2.5" cal.	B&B	45+
B	2	Zelkova serrata 'Green Vase'	Green Vase Zelkova	2.5" cal.	B&B	45+
C	2	Platanus x acerifolia 'Morton Circle'	Exclamation Planetree	2.5" cal.	B&B	45+
D	2	Quercus bicolor	Swamp White Oak	2.5" cal.	B&B	45+
E	2	Quercus muehlenbergii	Chinkapin Oak	2.5" cal.	B&B	45+
CANOPY-SHADE TREES						
F	3	Gleditsia triacanthos inermis	Honeylocust (thornless)	2.5" cal.	B&B	45+
G	3	Acer rubrum 'Armstrong'	Armstrong Maple	2.5" cal.	B&B	45+
H	3	Acer x freemanii 'Jeffersred'	Freeman Maple	2.5" cal.	B&B	45+
UNDERSTORY-ORNAMENTAL TREES						
J	4	Syringa reticulata	Japanese Lilac Tree	2.5" cal.	B&B	25-30
K	6	Carpinus caroliniana	American Hornbeam	2.5" cal.	B&B	20-35
L	2	Magnolia stellata 'Royal Star'	Star Magnolia	2.5" cal.	B&B	15-25
EVERGREEN TREES						
M	9	Picea glauca	White Spruce	6' h.	B&B	30-40
N	8	Picea pungens	Colorado Blue Spruce	6' h.	B&B	30-40
P	6	Thuja 'Green Giant'	Green Giant Arborvitae	6' h.	B&B	40-60
SHRUBS-GRASSES-PERENNIALS-ANNUALS-GROUNDCOVER						
a	6	Viburnum dentatum 'Chislom'	Blue Muffin Arrowwood Viburnum	18"	Container	
b	13	Hydrangea macrophylla 'Nikko Blue'	Nikko Blue Hydrangea	18"	Container	
c	15	Ilex glabra 'Shamrock'	Shamrock Inkberry	18"	Container	
d	13	Itea virginica	Virginia Sweetspire	18"	Container	
e	4	Chaenomeles speciosa 'Orange Storm'	Double Take Orange Quince	18"	Container	
f	13	Buxus 'Green Mountain'	Green Mountain Boxwood	18"	Container	
g	11	Spiraea betulifolia 'Tor'	Tor Birchleaf Spirea	18"	Container	
h	9	Hypericum calycinum 'NCHC1'	Golden Rule St. John's Wort	18"	Container	
j	3	Pennisetum alopecuroides 'Desert Plains'	Prairie Winds Desert Plains Fountain Grass	1 gal.	Container	
k	13	Panicum virgatum 'Shenandoah'	Shenandoah Switchgrass	1 gal.	Container	
m	12	Viburnum rhytidophyllum	Leatherleaf Viburnum	18"	Container	
ap	200 s.f.	Annuals / Perennials	Annuals / Perennials (to be selected by Owner)	2" c.p.	12" o.c.	

2/26/20
Jerald Saunders - Landscape Architect
MO License # LA-207

Consultants:

Neff Power - Lot 1
Spirit Valley Business Park

669 Spirit Valley Central Drive
Chesterfield, Missouri

Revisions.

Date	Description	No.
1/29/20	City Comments	1
2/12/20	City Comments	2
2/26/20	City Comments	3

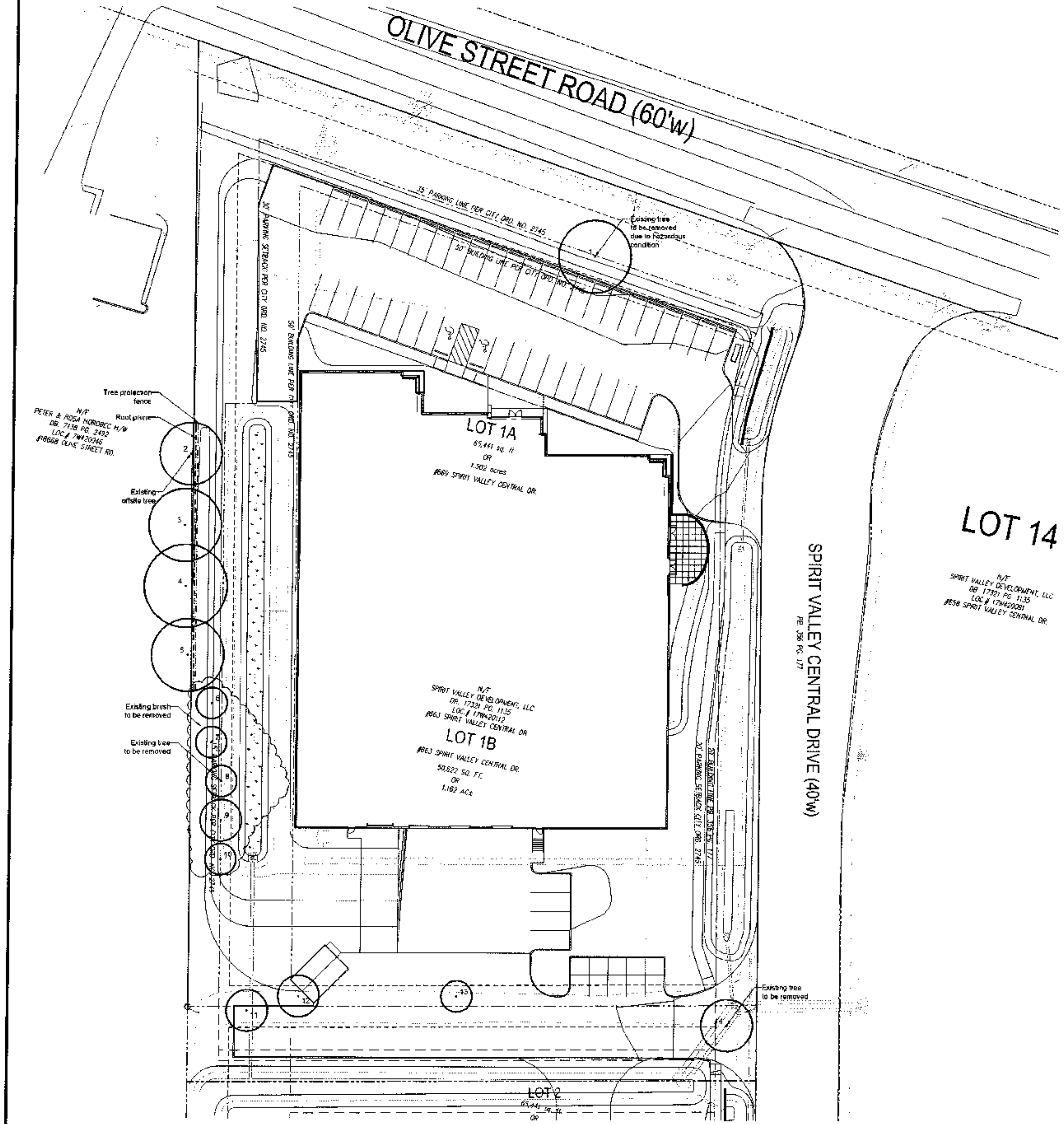
Drawn: XP
Checked: RS

loomisAssociates
landscapeArchitects/planners
Loomis Associates Inc
Missouri State Certificate of Authority #: LAC-2000019

Sheet Title: Landscape Plan

Sheet No: L1.01

Date: 1/8/20
Job #: 687.017



Tree Preservation Plan

SCALE 1"=20'

0 20 40 80

Total Site Area = 128,008 s.f. (2.893 acres)

Note: Existing tree canopy is within existing and proposed easement areas.

Tree Inventory							
ID	Tree Name	DBH	Canopy Diam.	Condition Rating	Comment	Preserved	To Be Removed
1	Hackberry	24	35	1	Twin		X
2	Crabapple	10	30	3	Offsite, triple	X	
3	Pecan	12	36	3	Offsite	X	
4	Pecan	16	40	3	Offsite	X	
5	Pecan	14	35	3	Offsite	X	
6	Maple	10	15	2	Two-stem		X
7	Maple	10	18	2	Two-stem		X
8	Maple	12	15	1	Three-stem		X
9	Maple	12	20	1	Two-stem		X
10	Maple	6	15	1			X
11	Cottonwood	10	20	2	Three-stem		X
12	Cottonwood	12	20	2			X
13	Cottonwood	12	15	2	Three-stem		X
14	Cottonwood	20	25	2	Triple		X

Condition Rating:
0 = Dead
1 = In Decline
2 = Poor Quality
3 = Fair Quality
4 = Good Quality
5 = Excellent Quality

Tree Protection Notes:

1) Pre-construction meeting to be held on-site to include a presentation of tree protection measures to operators, construction supervisors, developer's representative, and city zoning inspector.

2) Clearing limits shall be rough staked or marked by the Applicant's surveyor in order to facilitate location for trenching and fencing installation.

3) No clearing or grading shall begin in areas where tree treatment, preservation, and protection measures have not yet been completed including the installation of tree protection fencing as shown on the plan. Where necessary, Contractor may perform minor tree clearing prior to installing silt fencing and tree protection fencing provided they maintain tree protection area.

4) Tree Protection Fencing shall be 4-foot high temporary plastic construction fence. No equipment traffic/parking, concrete washout, material storage or other such construction activity shall be permitted to penetrate the protection fencing or disrupt the Protected Woodland Area except for the removal of dead or invasive plant material. All ground plane in planting areas shall be mulched with hardwood bark mulch. Tree Protection Signage will be placed along the Protection Fencing as shown as the dashed line on the plan.

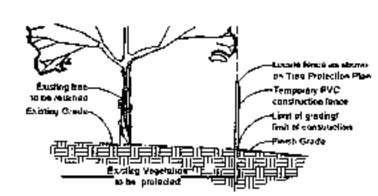
5) Tree protection measures to be maintained throughout construction sequence.

Tree Protection Action Key Sequence:

1) Survey limit of disturbance.
2) Perform root pruning.
3) Install tree protection fencing.
4) Post tree protection signage on fence. (No signs will be posted on trees).
5) Maintain tree protection area as an off-limits zone.

Key

Symbol	Description
(circle)	Existing individual tree
— · — · —	Tree Protection Fence
— — — —	Root pruning



Tree Protection Detail

Tree Preservation Plan
Prepared under direction of:
Brian Bage
Certified Arborist MW- 5033A

Consultants:

Neff Power - Lot 1
Spirit Valley Business Park
669 Spirit Valley Central Drive
Chesterfield, Missouri

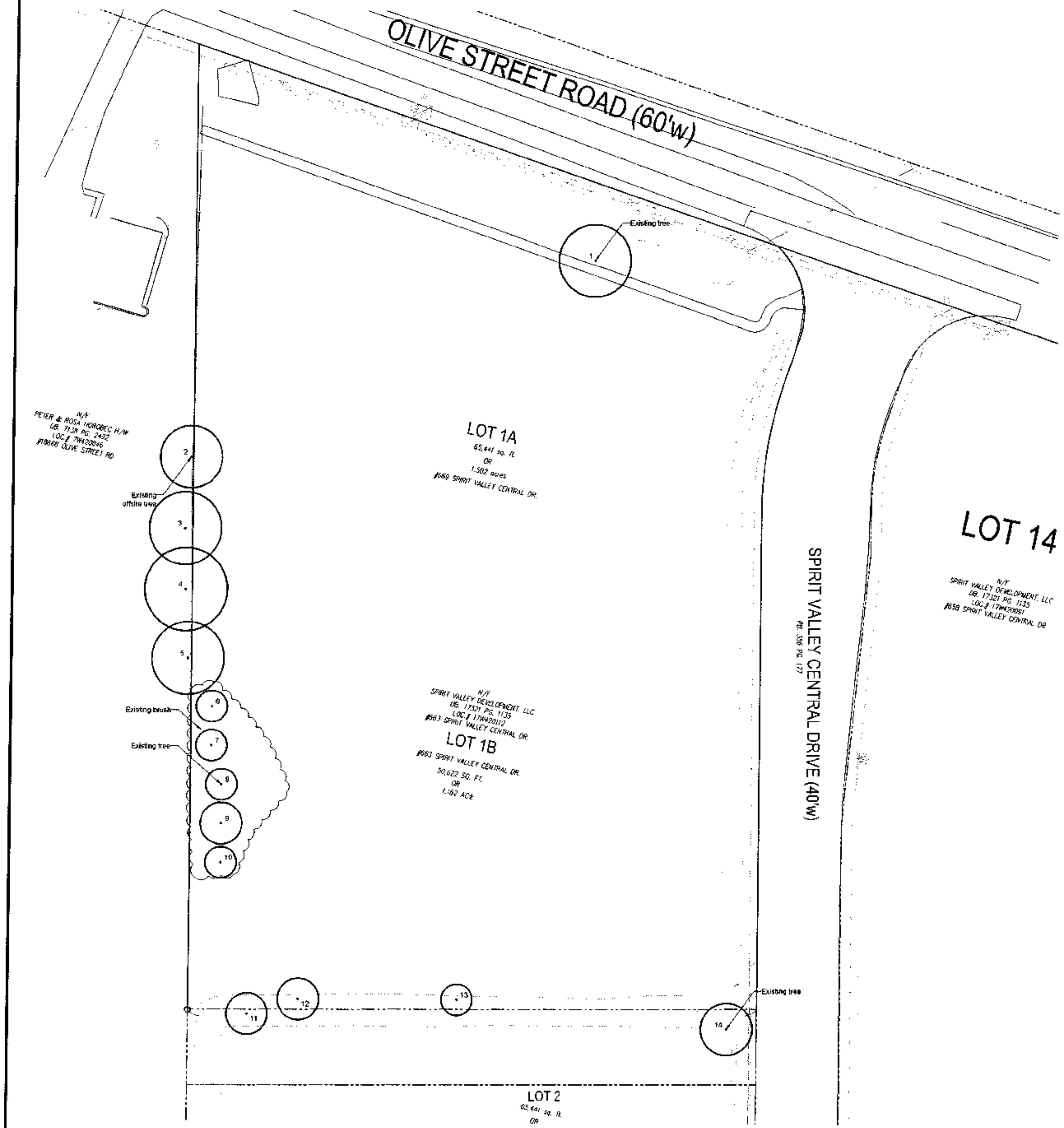
Revisions:

Date	Description	No.
1/29/20	City Comments	1

Drawn: KP
Checked: RS

loomisAssociates
landscapeArchitects/planners
Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Tree Preservation Plan
Sheet No: TPP
Date: 1/8/20
Job #: 687,017



Tree Stand Delineation
SCALE 1"=20'

0 20 40 80

Tree Inventory					
ID	Tree Name	DBH	Canopy Diam.	Condition Rating	Comment
1	Hackberry	24	35	1	Twin
2	Crabapple	10	30	3	Offsite, triple
3	Pecan	12	35	3	Offsite
4	Pecan	16	40	3	Offsite
5	Pecan	14	35	3	Offsite
6	Maple	10	15	2	Two-stem
7	Maple	10	15	2	Two-stem
8	Maple	12	15	1	Three-stem
9	Maple	12	20	1	Two-stem
10	Maple	6	15	1	
11	Cottonwood	10	20	2	Three-stem
12	Cottonwood	12	20	2	
13	Cottonwood	12	15	2	Three-stem
14	Cottonwood	20	25	2	Triple

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Key

Symbol	Description
○	Existing individual tree

Tree Stand Delineation
Prepared under direction of:
Brian Bage
Certified Arborist MW- 5033A

Jerald Saunders - Landscape Architect
MO License # LA-007

Consultants.

Neff Power - Lot 1
Spirit Valley Business Park
669 Spirit Valley Central Drive
Chesterfield, Missouri

Revisions:

Date	Description	No.
1/29/20	City Comments	1

Drawn: KP
Checked RS

loomisAssociates
landscape architects/planners
Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC 000019

Sheet Title: Tree Stand Delineation
Sheet No: TSD
Date 1/8/20
Job #: 687 017