

**STAFF REPORT**  
**Planning Commission Meeting January 22, 2018**

**AGENDA ITEM NO.:** 3  
**PROJECT NUMBER / TITLE:** Application # 17-13

**REQUEST:** Special Use Permit (SUP) for satellite/off-site parking lot

**LOCATION:** Address To Be Assigned  
Immediately north of the Broadmoor Park entrance on Broadmoor Street- Parcel KF251208-1033

**APPLICANT:** Mike Osbourn  
Kaw Valley Engineering, Inc  
14700 W 114th Ter  
Lenexa, KS 66215

**PROPERTY OWNER:** CAPROCQ KC Mission LLC  
1 Allied Dr, Ste 1500  
Little Rock, AR, 72202

**STAFF CONTACT:** Danielle Sitzman  
**ADVERTISEMENT:** 1/2/2018 - The Legal Record Newspaper  
**PUBLIC HEARING:** 1/22/18 - Planning Commission



**Property Information:**

The subject property is located in the West Gateway District and is adjacent to several office buildings. The property is currently developed as a surface parking lot with approximately 117 stalls. It has been a paved parking lot for many years, showing on Johnson County Land Records since the early 1990's. Neither it nor the surrounding properties have ever been platted. Prior to its development it was located in an area of undeveloped farm/ranch lands adjacent to the Missouri and Kansas Interurban Railway otherwise known as the Strang Line. The Strange Line was an interurban trolley line running from Kansas City, Missouri through Downtown Overland Park, to Olathe, Kansas.



The Comprehensive Plan indicates this area is appropriate for medium density residential and parks or trails. The West Gateway Form Based Code also designates this area as an extension of Broadmoor Park to serve as a greenway for future residents and visitors.

**Surrounding properties are zoned and developed as follows:**

- North: "C-0" Office Building District, 1-story office building
- East: "R-1" Single-family Residential District, detached single-family homes
- West: "MP" Industrial Park District, unoccupied former warehouse/office building
- South: "CP-0" Planned Office, a public park

**Background:**

The subject property was purchased in November of 2015 by CAPROCQ KC Mission LLC at the same time that they purchased the Mission Towers building at 5700 Broadmoor Street. Mission Towers is a 10-story, 245,000 square foot office building with multiple tenants. It was built in 1971. The current zoning standard requires approximately 695 parking stalls for this use. A review of aerial imagery for the site indicates approximately 595 parking stalls are currently provided on site in both a 2-level parking structure and a surface parking lot. It is not known what the parking standard was at the time of the development of the property. Over the last five years, occupancy of the building has increased with new tenants on multiple floors.

Purchase of the off-site parking lot came to staff's attention in the fall of 2016 when the property manager for the new property owner made inquiries about making improvements to the site lighting. Staff determined that a Special Use Permit would first need to be approved before a building permit could be issued. Off-site parking is not an allowable use in the zoning district where this property is located and is specifically called out in Section 445.180 of the Municipal Code as a designated use for a Special Use Permit. At this time, the property owner wishes to obtain a Special Use Permit to continue to use the parking lot for employee parking and to make improvements to the

site for its safe operation. A site plan showing these improvement has been submitted. As stated, this would qualify as off-site or satellite parking, and a Special Use Permit is required.

The submitted site plan shows restriping of the parking lot to accommodate 86 parking stalls. Other improvements include installation of a sidewalk and crosswalk to accommodate pedestrians accessing the satellite lot from the Mission Towers building, street trees, landscaping and screening, and bollard-style lights. The property owner is proposing only to use 42" tall bollards for lighting. The basketball hoop would be removed. There is an existing City maintained wood privacy fence installed along the east side of the parking field. The fence would remain.

Staff has reviewed the proposed site plan for compliance with current zoning standards and future Form Based code compliant public improvements. The design of the parking lot and stormwater controls have also been reviewed by the City's on-call engineers at Olsson Associates. The exact location of the crosswalk is yet to be determined. The applicant has complied with all staff comments on the safety and design of the proposed use.

**Code review:**

Under Municipal Code Section 445.180.C The Planning Commission and City Council may designate such other uses as appropriate for a special use permit upon a finding that the use is appropriate in a certain location but is not listed as allowed in any district or is only allowed in a district which contains other uses inappropriate in this subject location.

According to Section 445.190 special uses may be approved by action of the City Council after recommendation from the Planning Commission. Special uses may be approved with conditions including, but not limited to, the following:

1. Requirements for special yards, open spaces, density, buffers, fences, walls and screening.
2. The installation of landscaping and maintenance.
3. Provisions for erosion control.
4. Limitations on ingress and egress movements into and out of the site and traffic circulation.
5. Limitation on signage.
6. Limitation on hours of operation and other characteristics of operation.
7. Conditions specifically listed under the individual special use.
8. Other conditions deemed necessary to ensure compatibility with surrounding land uses.

In addition, Section 445.220 of the Municipal Code states that special use permits generally run with the use of the property. Conditions placed must be clearly spelled out in the motion for approval. Section 445.230 of the City Code allows for the termination of a SUP at any time for several reasons. This includes non-compliance with any special conditions placed or if conditions in the neighborhood have changed to

the extent that approval of the permit would be clearly unwarranted if being applied for at the time of revocation.

**Special Use Permit:**

Section 440.140.E, Criteria for Considering (SUP) applications, lists the criteria to be used by the Planning Commission and City Council in the consideration of this application. An evaluation of these criteria is as follows:

1. The character of the neighborhood.

The subject property is located in the West Gateway District on Broadmoor Street directly north of Broadmoor Park. It is adjacent to several high-rise offices with large surface parking lots, small offices, a vacant industrial building, and a single-family residential neighborhood. There is no direct connection to the existing residential neighborhood and an existing privacy fence runs the length of the boundary between these uses. The property is located in Block E of the Form Based Code and intended to support the surrounding uses either as a greenway or medium density residential. The Form Based Code intends for adjacent properties to front onto Broadmoor Street and for future commercial and residential development. The property has been used as a small surface parking lot for many years.

*The proposed use is an existing use and would not be out of character with the existing neighborhood. Future redevelopment would discourage new surface parking lots in favor of structured parking.*

2. The zoning and uses of nearby properties, and the extent to which the proposed use would be in harmony with such zoning and uses.

Nearby properties are zoned for office or industrial use similarly to the subject property. The residential uses are separated by a fence. The proposed use would be an extension of an existing use and only involves minor improvements to the site. It does not preempt a future compliant use.

*The proposed use is an extension of an existing use to a different owner. It would not generate substantial additional activity in the area.*

3. The suitability of the property for the uses to which it has been restricted under the applicable zoning district regulations.

*The property is suitable for the uses to which it has been restricted under the applicable zoning district regulations and changes to its zoning regulations are not appropriate at this time.*

4. The extent to which approval of the application would detrimentally affect nearby properties.

An established pattern of traffic and foot traffic already exists in the neighborhood. Allowing the use would help ensure adequate parking for office tenants does not otherwise impact the surrounding neighborhood in the short term. The proposed

use would add 86 parking stalls to the approximate 595 parking stalls on site at Mission Towers.

*Approval of the application is not expected to detrimentally affect nearby properties.*

5. The length of time the property has remained vacant as zoned.  
*The property is not vacant and future redevelopment is still possible.*
6. The relative benefit to the public health, safety and welfare by retaining applicable restrictions on the property as compared to the destruction of the value of the property or hardship to the owner association with denying its request.  
Retaining the existing restrictions on the property would limit its use to a parking lot for office tenants at the office to the north or force development of the parcel. Continued use of the property as parking does not undermine the Form Based Code until such time as other parcels in the vicinity are available to assemble for redevelopment. Furthermore, the proposed improvements to the property are not so substantial that they could not be removed for future redevelopment. Also, stipulations proposed by staff include the dedication of right-of-way to ensure future plans for public improvements can proceed.

*There is less relative benefit to the public in retaining the applicable restrictions on the property than allowing for the granting of the Special Use Permit.*

7. The master plan or comprehensive plan.  
*The proposed use does not conform with the long term vision of the Future Land Use section of the Comprehensive Plan or the Sector Plan of the Form Based Code. However, the use requires only minor improvements to be made which in the long-term does not compromise the ability of the property to become compliant in the future.*
8. The extent to which the proposed use would adversely affect the capacity or safety of that portion of the road network influenced by the use, or present parking problems in the vicinity of the property.  
*The proposed use will not generate substantially more traffic than the existing use already does as the number of parking stalls will be reduced from 117 to 86 and will serve the same or similar tenants.*
9. The recommendation of the professional staff.  
The site plan has been reviewed by staff and the City's on-call engineer for compliance with zoning, design, and engineering standards.

*Staff recommends approval of the requested use with the stipulations listed below.*

10. The extent to which utilities and services, including but not limited to, sewers, water service, police and fire protection, and parks and recreation facilities, are available and adequate to serve the proposed use.

*All utilities and services are in place and are adequate to serve the proposed use. Public improvements to sidewalks, crosswalks and street trees will be made by the applicant as a condition of approval.*

11. The extent to which the proposed use would create excessive stormwater runoff, air pollution, water pollution, noise pollution or other environmental harm.  
Improvements will reduce the amount of impervious surface.

*The proposed use will not result in any additional or excessive stormwater runoff or any form of pollution as the site is already developed.*

12. The extent to which there is a need for the use in the community.  
Over the past five years, occupancy rates in the surrounding office buildings have generally increased. In addition, illegal off-site parking on vacant properties has been enforced as those properties prepare for redevelopment. The applicant is not interested in making significant improvements to their existing on-site parking to accommodate additional vehicles.

*The property owner has indicated that their tenants need additional employee parking.*

13. The economic impact of the proposed use on the community.  
*There proposed use will make the leasing of tenant spaces in the adjacent Mission Towers building more desirable to tenants with employees who require parking thus potentially improving rents and property values. No city incentives are being requested by the applicant.*

14. The ability of the applicant to satisfy any requirements applicable to the specific use imposed pursuant to the zoning district regulations.  
*Staff expects the applicant will be able to satisfy any applicable requirements.*

### **Staff Recommendation**

Staff recommends the Planning Commission recommend approval of Case #17-13 to the City Council for a Special Use Permit for the use of the subject property as an off-site parking lot for tenants of 5700 Broadmoor Street. The permission would run with the use of the property with the following conditions:

1. Limit the use of the subject property to the parking of vehicles to support the daily employee parking needs of 5700 Broadmoor Street.
2. Require that the on-site and off-site improvements as detailed in the submitted site plans to be substantially completed no later than November 1, 2018.
3. Require the platting the property for the dedication of right-of-way be completed prior to the issuance of any permits for improvements.

# Memo

**To:** City of Mission  
**From:** Olsson Associates  
**cc:** CAPROCQ KS Mission, LLC  
**Date:** January 10, 2018  
**Re:** Review for CAPROCQ KC Mission Parking Lot at 5700 Broadmoor Street

---

Olsson Associates comments and recommendations are listed below for the revised planning documents dated January 4, 2018 for the CAPROCQ KS Mission, LLC parking lot renovation project at 5700 Broadmoor Street in Mission. We have reviewed the submittal documents for Stormwater and Traffic concerns.

## Sheet C100

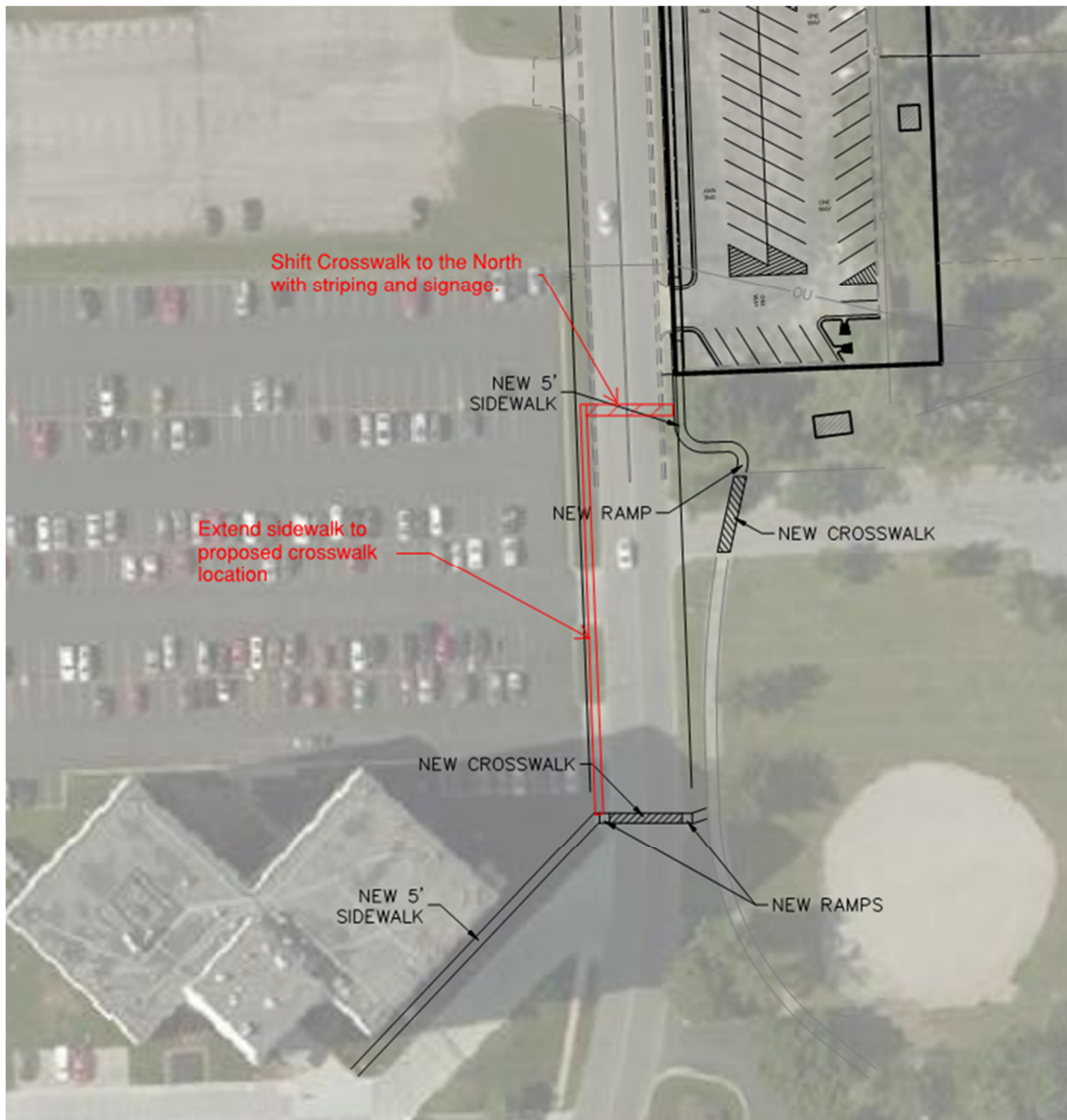
- The current crosswalk location (crossing Broadmoor St) is close to multiple drives which may conflict with crossing pedestrians.
  - Applicant should consider shifting north to be further from these driveways and be closer to the new parking lot and park entrance. (see attachment for possible schematic)
- Crosswalk location shall have Pedestrian Crossing Warning Signs with flashing beacons installed for both directions of travel. Signs shall have pushbuttons to activate beacons. Advanced warning signage in both directions further upstream may also be required depending on final crosswalk location.
- Crosswalk striping shall be installed per APWA standards.

## Sheet SL200 - SL400

- Lamp output correlated color temperature (CCT) is specified as 4200K. Recommend 3200K or lower CCT adjacent to residences to minimize perceived glare associated with lamps that contain more blue light.



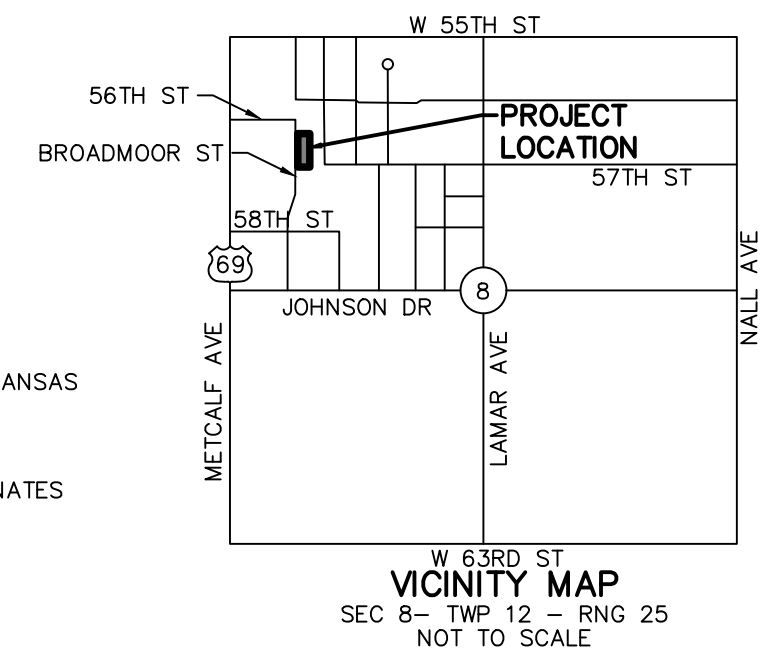
- Site Lighting – The existing parking lot is currently not lighted. Per discussions with the project engineer, the proposed parking lot lighting design is aimed at providing a level of security for the users at night that the ownership is acceptable with while maintaining sensitivity to the residential use to the east. The proposed lighting design does not fully meet industry standards for parking lots in regards to light levels. The owner and project engineer acknowledge this. Should safety or functionality of the parking lot become an issue or concern this can be addressed with the renewal of the Special Use permit.





# BOUNDARY/TOPOGRAPHIC SURVEY

SECTION 8, TOWNSHIP 12, RANGE 25 EAST  
MISSION, JOHNSON COUNTY, KANSAS



**PROPERTY OWNER/ADDRESS**  
CAPROCC KC MISSION, LLC  
5700 BROADMOOR STREET  
MISSION, KANSAS 66202

- REFERENCE DEEDS:**
- SPECIAL WARRANTY DEED, BOOK 201511, PAGE 4756.
  - KANSAS WARRANTY DEED, BOOK 200601, PAGE 1284.
  - SHERIFF'S DEED, BOOK 4780, PAGE 458.

- REFERENCE MAPS:**
- WATERONE MAP #057-067

- REFERENCE PLATS:**
- ALTA VISTA HEIGHTS, BOOK 15, PAGE 41.

- NOTES:**
- NO TITLE WORK WAS PROVIDED BY THE CLIENT AT THE TIME OF THIS SURVEY AND NO EASEMENT INVESTIGATION WAS PERFORMED.
  - CONTAINS 46,509 SQUARE FEET/1.068 ACRES MORE OR LESS.

**DESCRIPTION** (BOOK 201511, PAGE 4756)  
ALL THAT PART OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 12, RANGE 25, NOW IN THE CITY OF MISSION, JOHNSON COUNTY, KANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
BEGINNING AT A POINT ON THE SOUTH RIGHT OF WAY LINE OF 57TH STREET, AS NOW ESTABLISHED, SAID POINT BEING ON THE SOUTHERLY EXTENSION OF THE WEST LINE OF ALTA VISTA HEIGHTS NO. 3, A SUBDIVISION OF LAND NOW IN THE CITY OF MISSION, JOHNSON COUNTY, KANSAS, AND 50 FEET SOUTH OF THE SOUTH LINE OF LOT 14; THENCE NORTHERLY ALONG THE WEST LINE AND ITS EXTENSION OF LOTS 14 THRU 11 INCLUSIVE OF SAID ALTA VISTA HEIGHTS NO. 3, A DISTANCE OF 355 FEET; THENCE WESTERLY, ALONG A LINE 335 FEET NORTH OF AND PARALLEL TO THE WESTERLY EXTENSION OF THE SOUTH RIGHT OF WAY LINE OF SAID 57TH STREET, A DISTANCE OF 131 FEET, TO A POINT ON THE EASTERLY RIGHT OF WAY LINE OF BROADMOOR STREET, AS NOW ESTABLISHED; THENCE SOUTHERLY, ALONG THE EASTERLY RIGHT OF WAY LINE OF SAID BROADMOOR, A DISTANCE OF 355 FEET, TO ITS INTERSECTION WITH THE WESTERLY EXTENSION OF THE SOUTH RIGHT OF WAY LINE OF SAID 57TH STREET; THENCE EASTERLY, ALONG THE WESTERLY EXTENSION OF THE SOUTH RIGHT OF WAY LINE OF SAID 57TH STREET, A DISTANCE OF 131 FEET, TO THE POINT OF BEGINNING, ALL SUBJECT TO THE PART THEREOF DEDICATED FOR STREET PURPOSES.

**FLOOD STATEMENT:**  
SUBJECT PROPERTY IS SHOWN TO BE LOCATED IN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) AND SUBJECT PROPERTY IS SHOWN TO BE LOCATED IN ZONE "X" OTHER FLOOD AREAS (AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD) AS DEPICTED ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 20091C00236, MAP REVISED AUGUST 3, 2009, CITY OF OVERLAND PARK, JOHNSON COUNTY, KANSAS.  
LOCATION DETERMINED BY A SCALED GRAPHICAL PLOT OF THE FLOOD INSURANCE RATE MAP.

**UTILITY STATEMENT:**  
THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY. KANSAS ONE CALL TICKET #17360255 & #17360260 WATERONE TICKET #13183999

**HORIZONTAL AND VERTICAL DATUM:**  
THE COORDINATES SHOWN HEREON ARE GRID COORDINATES BASED ON THE KANSAS STATE PLANE NORTH ZONE (NAD 83-HARN) (NAVD 88)  
CAF: 0.999922619  
1 METER = 3.28083333 U.S. SURVEY FEET  
GROUND COORDINATES X COMBINED ADJUSTMENT FACTOR (CAF) = GRID COORDINATES SCALED AROUND 0.0

**SHAWNEE 2/BM #1**  
NORTHING: 263968.29 (GRID)  
EASTING: 2251815.46 (GRID)  
ELEV = 1006.06

**DATUM BENCH MARK:**  
SHAWNEE 2  
NCS MONUMENT SET IN CONCRETE  
N: 263968.29  
E: 2251815.46  
ELEV = 1006.06

**NCS WY50**  
N: 276062.45  
E: 2253225.89  
ALUMINUM CAP IN MONUMENT BOX IN CENTER OF INTERSECTION.  
ELEV = 969.09

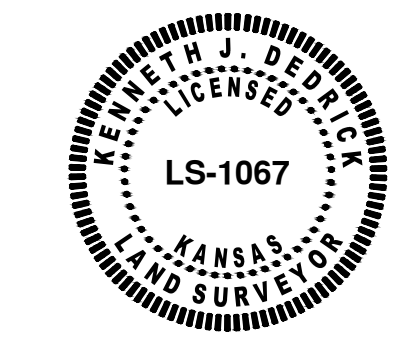
**PROJECT BENCH MARK:**  
BM-1  
CHISELED SQUARE CUT ON TOP OF CONCRETE CURB & GUTTER, WEST SIDE OF BROADMOOR, APPROXIMATE 42' WEST OF NORTHWEST CORNER OF PROPERTY.  
ELEV = 1049.25

BM-2  
CHISELED SQUARE CUT ON TOP OF CONCRETE CURB & GUTTER, WEST SIDE OF BROADMOOR, APPROXIMATE 42' WEST OF SOUTHWEST CORNER OF PROPERTY.  
ELEV = 1046.55

**PROJECT CONTROL:** (GROUND)

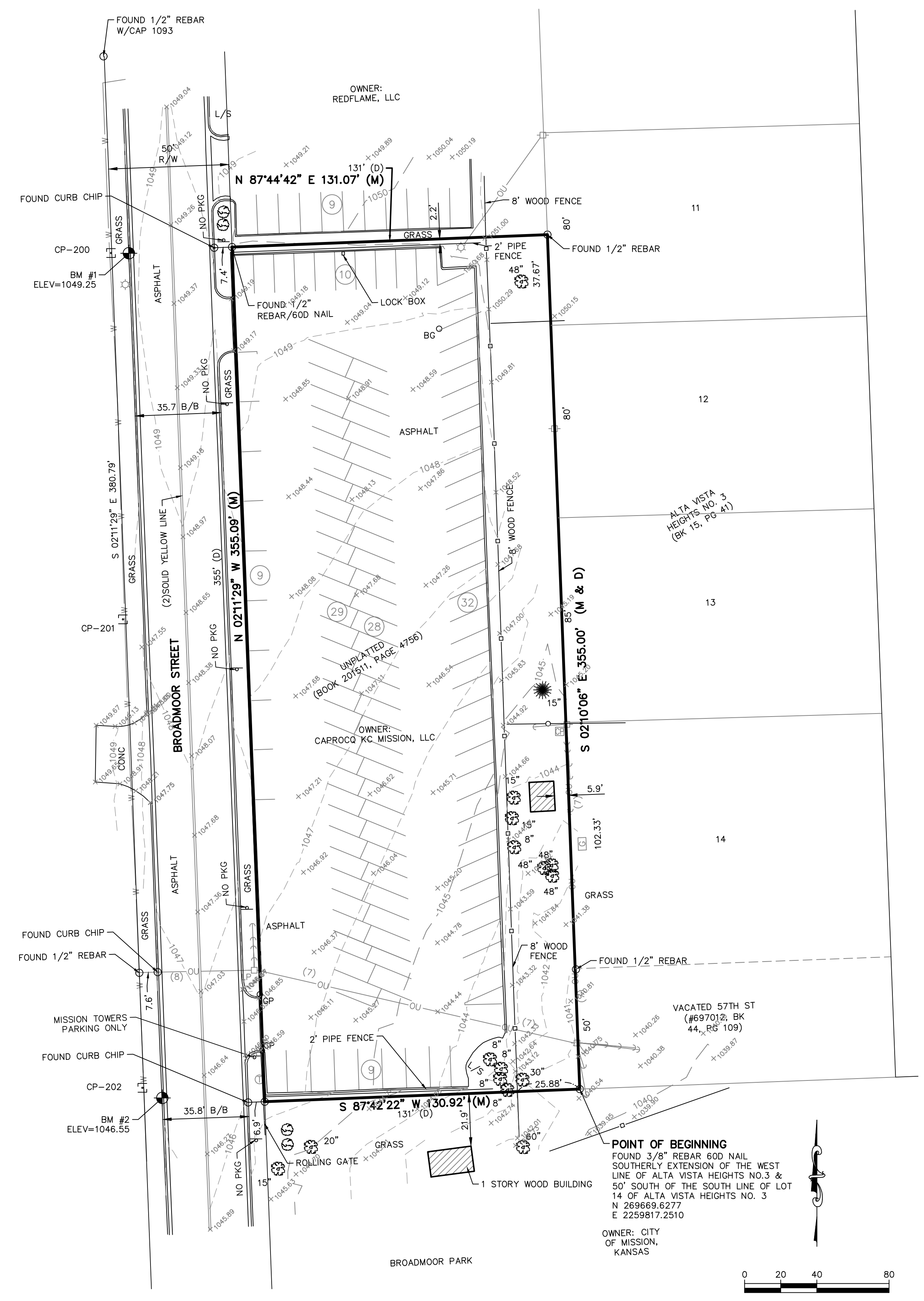
CP #200 1/2"x24" REBAR W/ CONTROL CAP NORTHING: 270016.743 EASTING: 2259622.577 ELEV = 1049.30	CP #201 1/2"x24" REBAR W/ CONTROL CAP SET NORTHING: 269864.853 EASTING: 2259627.536 ELEV = 1048.85	CP #202 1/2"x24" REBAR W/ CONTROL CAP SET NORTHING: 269870.144 EASTING: 2259635.618 ELEV = 1047.69
--	--	--

**SURVEYOR'S CERTIFICATION:**  
I, KENNETH J. DEDRICK, BEING A DULY REGISTERED AND LICENSED LAND SURVEYOR IN THE STATE OF KANSAS, HEREBY CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT WAS BASED WAS MADE BY ME OR UNDER MY DIRECT SUPERVISION, AND MEETS OR EXCEEDS THE CURRENT KANSAS MINIMUM STANDARDS FOR BOUNDARY SURVEYS. THAT THE LINES OF POSSESSION ARE DEPICTED HEREON, THE COURSES AND DISTANCES SHOWN HEREON ARE THOSE MEASURED ON THE DATE OF THE SURVEY AND THE TOPOGRAPHIC SURVEY WAS PERFORMED TO MEET OR EXCEED THE STANDARDS OF PRACTICE ADOPTED BY THE NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS FOR TOPOGRAPHIC SURVEYS AND THAT THE SURVEY WAS COMPLETED IN THE FIELD AND ON THE GROUND AND MAY BE RELIED UPON BY THE PARTIES CERTIFIED AS TO BEING CORRECT TO THE BEST OF MY BELIEF AND KNOWLEDGE.  
THE FIELD WORK WAS COMPLETED ON AUGUST 16, 2017.  
DATE OF PLAT OR MAP: SEPTEMBER 1, 2017



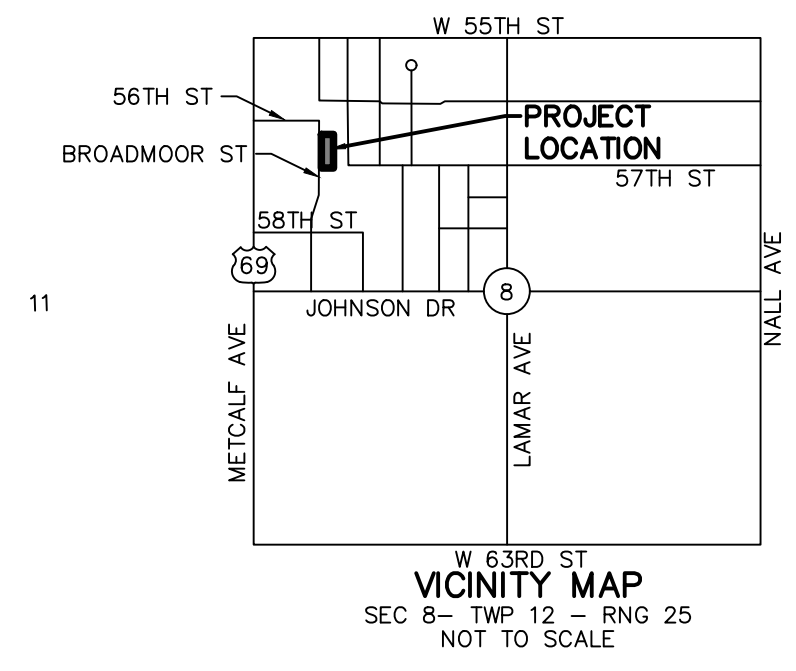
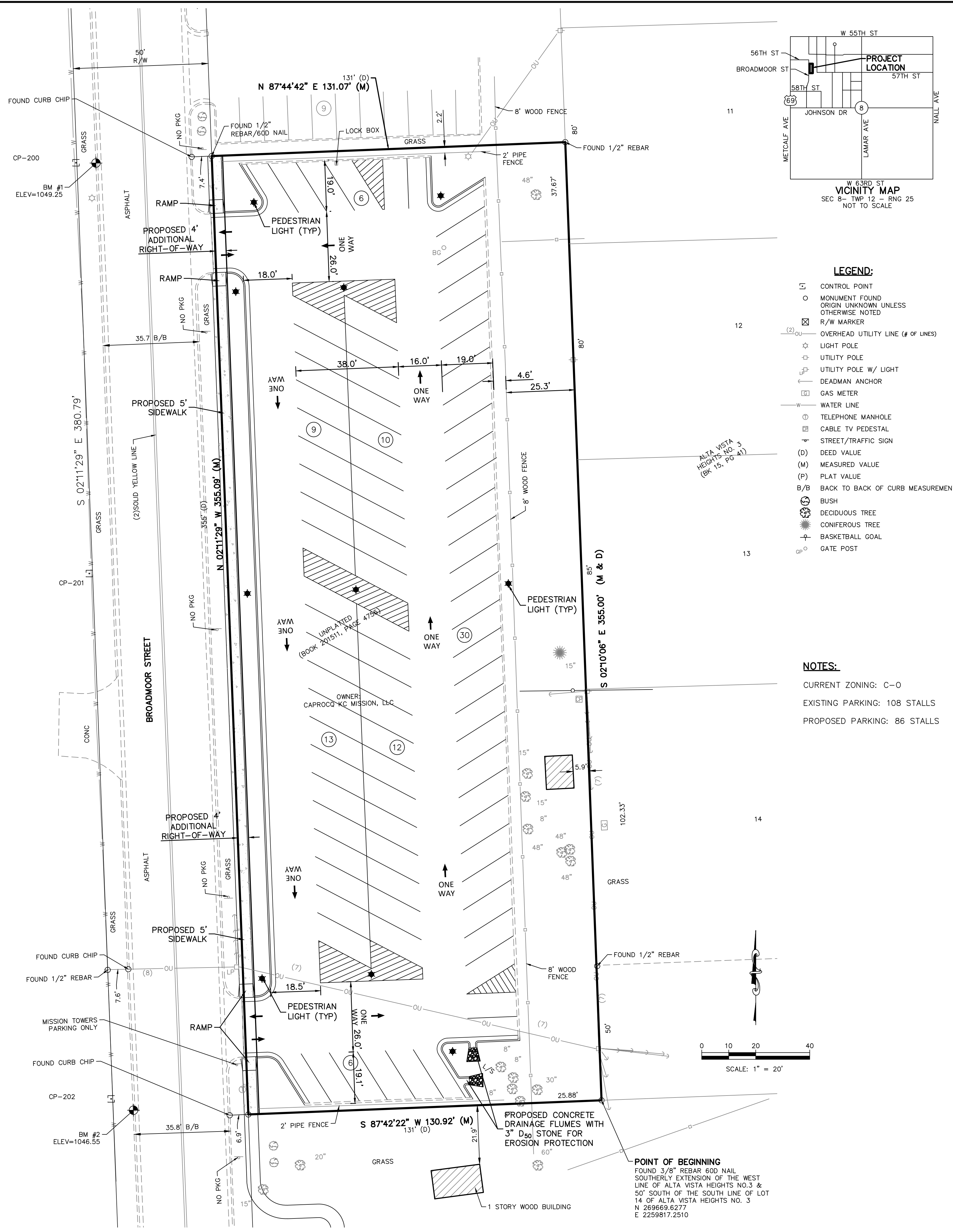
KENNETH J. DEDRICK  
KANSAS PS NO. 1067  
dedrick@kveng.com

<p><b>KAW VALLEY ENGINEERING</b></p>	14700 WEST 114TH TERRACE LENEXA, KANSAS 66215 PH. (913) 894-5150   FAX (913) 894-5977 lx@kveng.com   www.kveng.com	PROJECT NO. <b>C17_9526</b> DRAWN BY <b>EDV</b> CHECKED BY <b>KJD</b> CFN <b>9526TOPO</b> SHEET <b>1 OF 1</b>
	PREPARED FOR: <b>COLLIERS INTERNATIONAL</b> 1 ALLIED DRIVE, SUITE #1500 LITTLE ROCK, ARKANSAS 72202	
KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER SURVEYING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION NO. LS-20. EXPIRES 12/31/18		



THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.





PROJ. NO.	C17_9526
DESIGNER	MRO
DRAWN BY	NJN
CFN	
SHEET	9526SP
C100	1

1	1/4/18	PER CITY COMMENT	MRO	MRO	CHK
0	9/7/17	INITIAL ISSUE	NJN	NJN	DWN
		DESCRIPTION	DSN		

**CAPROCQ KC MISSION, LLC**  
 5700 BROADMOOR STREET  
 MISSION, KANSAS 66202

**KAW VALLEY ENGINEERING**  
 14700 WEST 114TH TERRACE  
 LENEXA, KANSAS 66215  
 PH. (913) 894-9150 | FAX (913) 894-5977  
 kawvalley.com | www.kawvalley.com

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/18

**SITE PLAN**

THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.







**GENERAL NOTES:**

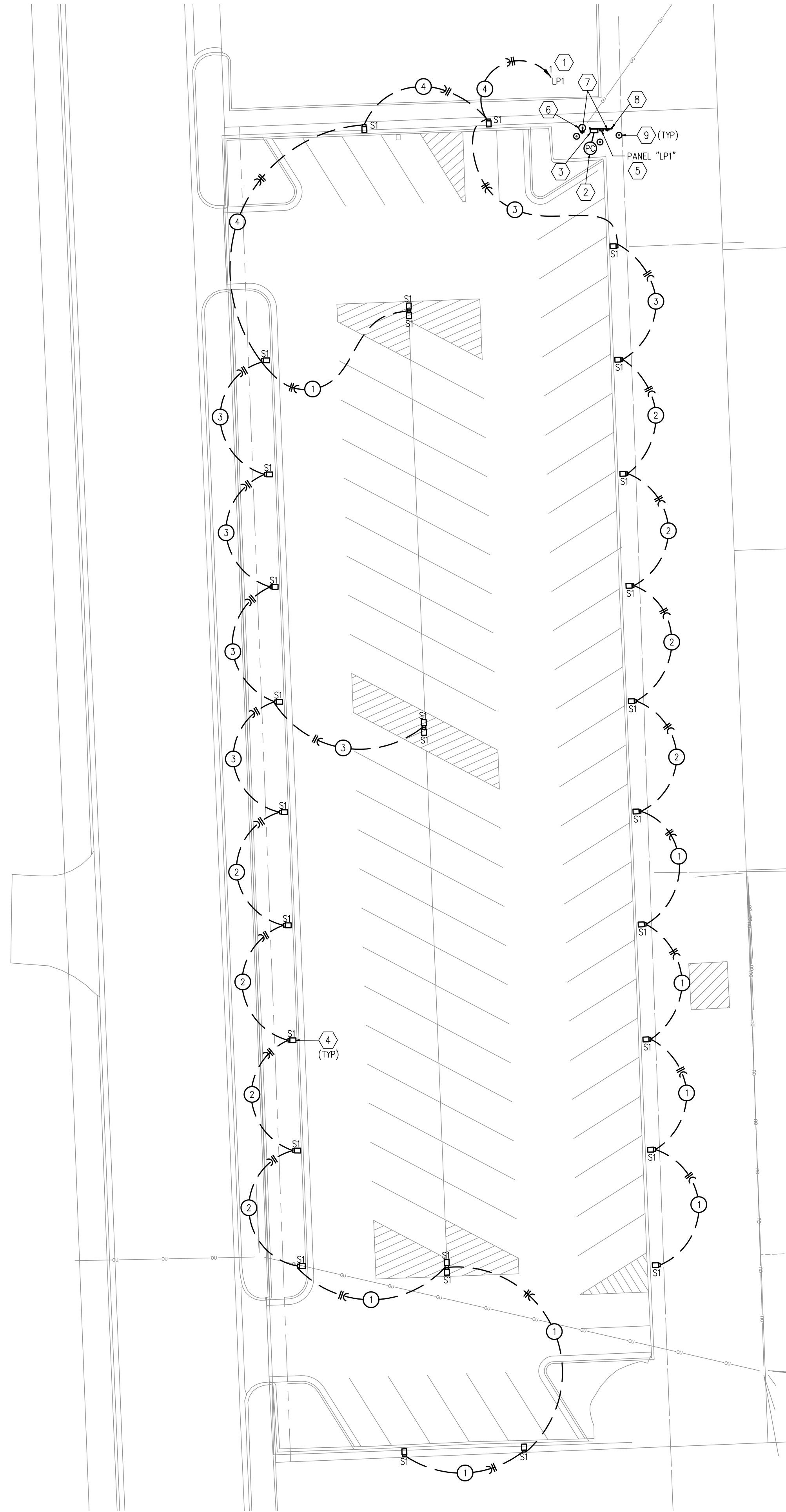
- 1) REFER TO CIVIL DRAWINGS FOR ADDITIONAL SITE INSTALLATIONS.
- 2) REFER TO SHEET SL400 FOR GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
- 3) REFER TO SHEET SL300 FOR ELECTRICAL DETAILS.

**PLAN NOTES:**

- ① ROUTE LUMINAIRE HOMERUN CIRCUIT THROUGH THE LIGHTING CONTACTOR PANEL "LCP" AND THEN TO PANEL "LP1".
- ② PROVIDE PHOTOCELL "PC" MOUNTED ON THE NEW EQUIPMENT UNISTRUT RACK. MOUNT AT A MINIMUM OF 8'-0" ABOVE GRADE AND AIMED IN A NORTHERN DIRECTION. REFER TO SHEET SL300 FOR ADDITIONAL INFORMATION AND CONNECTIONS.
- ③ PROVIDE LIGHTING CONTROL PANEL "LCP" ON THE NEW EQUIPMENT UNISTRUT RACK. CONTRACTOR SHALL PROVIDE ALL NECESSARY DEVICES, CONDUIT, WIRING, ETC. AS REQUIRED FOR THE WIRING DETAIL SHOWN ON SHEET SL300. LIGHTING CONTROLS SHALL BE MOUNTED IN A HINGED, LOCKABLE, STEEL NEMA 3R ENCLOSURE.
- ④ NEW PEDESTRIAN TYPE LUMINAIRE TO BE INSTALLED IN APPROXIMATE LOCATIONS SHOWN. REFER TO THE LUMINAIRE BASE DETAIL ON SHEET SL300. LUMINAIRE SHALL BE ORIENTED IN A DIRECTION PARALLEL OR PERPENDICULAR TO THE PARKING LOT CURBS. LUMINAIRE PROTECTION SHALL BE PROVIDED TO HELP PREVENT DAMAGE FROM VEHICLES.
- ⑤ PROVIDE 30AMP, 240V, 1 PHASE, 8 CIRCUIT PANELBOARD MOUNTED ON THE ELECTRICAL EQUIPMENT UNISTRUT RACK. REFER TO THE PANELBOARD SCHEDULE SHOWN ON SL400 FOR PANELBOARD INFORMATION.
- ⑥ DISCONNECT AND REMOVE THE EXISTING LUMINAIRE, POLE AND THE EXISTING POLE BASE. MAINTAIN THE EXISTING UTILITY METER AND CONDUIT AND WIRING SERVING THE METER.
- ⑦ RELOCATE THE EXISTING METER AND FEEDER FROM THE EXISTING POLE TO THE NEW UNISTRUT RACK. EXTEND ALL CONDUITS AND WIRING AS REQUIRED. COORDINATE NEW LOCATION WITH THE UTILITY COMPANY.
- ⑧ PROVIDE NEW GALVANIZED UNISTRUT SUPPORT TO MOUNT NEW ELECTRICAL EQUIPMENT. REFER TO ELECTRICAL EQUIPMENT UNISTRUT RACK DETAIL ON SHEET SL300 FOR ADDITIONAL INFORMATION.
- ⑨ GROUND ROD. REFER TO SHEET SL300 FOR ADDITIONAL REQUIREMENTS AND SIZES OF THE GROUND RODS.

**FEEDER SCHEDULE:**

- ① (2) #12 AWG, (1) #12 AWG GROUND IN 3/4" CONDUIT.
- ② (2) #10 AWG, (1) #10 AWG GROUND IN 3/4" CONDUIT.
- ③ (2) #8 AWG, (1) #8 AWG GROUND IN 1" CONDUIT.
- ④ (2) #6 AWG, (1) #6 AWG GROUND IN 1" CONDUIT.



**1 ELECTRICAL SITE PLAN**  
1" = 20'-0"



MEP ENGINEER

**InSite Group**  
DEDICATION. DESIRE. INTEGRITY.  
2000 W. COMB DRIVE, SUITE 100 | PH: (913) 281-2121  
8000 SHAWNEE RD. #200 | PH: (800) 228-6200

**CAPROCQ KC MISSION, LLC**  
5700 BROADMOOR STREET  
MISSION, KANSAS 66202

**KAW VALLEY ENGINEERING**  
14700 WEST 114TH TERRACE  
LENEXA, KANSAS 66215  
PH: (913) 894-5150 | FAX (913) 894-5877  
info@kveeng.com | www.kveeng.com

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/18

PROJ. NO.	C17_9526
DESIGNER	JGR
DRAWN BY	JGR
CFN	5381 - SL100
SHEET	SL100
REV	0

REV	DATE	DESCRIPTION
0	11/15/2017	PLANNING SUBMITTAL

(PLANNING SUBMITTAL ONLY)  
**NOT FOR CONSTRUCTION**

DSN	JGR	JGR	AWN
DSN	JGR	JGR	AWN



## GENERAL NOTES:


- REFER TO CIVIL DRAWINGS FOR ADDITIONAL SITE INSTALLATIONS.
- REFER TO SHEET SL400 FOR GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
- REFER TO SHEET SL300 FOR ELECTRICAL DETAILS.

## CALCULATION SUMMARY

DESCRIPTION	SYMBOL	AVG	MAX	MIN	MAX/MIN	AVG/MIN
PARKING LOT	+	1.4 F.C.	43.7 F.C.	0.0 F.C.	N/A	N/A
20'-0" FROM BACK OF PARKING LOT CURB	*	0.0 F.C.	0.0 F.C.	0.0 F.C.	N/A	N/A



### NOTES:

- THE INFORMATION IN THIS CHART IS BASED ON THE LUMINAIRE MOUNTING HEIGHTS AND LOCATIONS SHOWN. CHANGES IN HEIGHTS OR LOCATIONS WILL MODIFY THESE RESULTS.
- THE SYMBOLS IN THIS CHART ARE REPRESENTED ON THE SITE PLAN, AND INDICATE THE LIGHTING LEVELS FOR THAT AREA.
- THE VALUES OBTAINED ARE BASED ON USING A PEDESTRIAN STYLE LUMINAIRE. REFER TO THE LUMINAIRE SCHEDULE ON SHEET SL400 AND THE CUT SHEET SHOWN BELOW FOR LUMINAIRE TYPE AND STYLE USED. PEDESTRIAN STYLE FIXTURES WERE USED PER CITY'S REQUEST, AND TO ENSURE THAT THE TOTAL LUMINAIRE HEIGHT IS LESS THAN THE EXISTING 8'-0" PRIVACY FENCES TO THE EAST. THE INTENT IS TO MINIMIZE LIGHT TRESPASS ON THE ADJACENT RESIDENTIAL PROPERTIES.



**TYPE SL1**

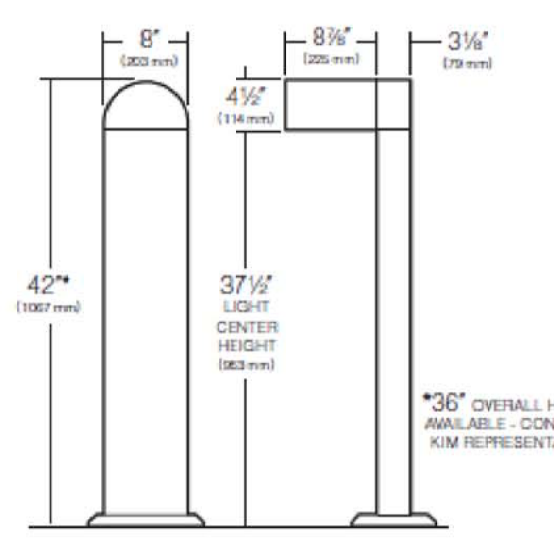
**SL1 LED**  
Site Lightforms  
revision 7/16/14 • k\_l\_sl1led\_spec.pdf

Approvals:  

Date: \_\_\_\_\_  
Page: 1 of 4

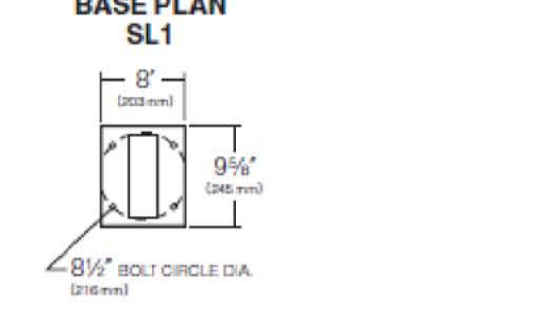
**Specifications**

**SL1 LED**  
Maximum weight: 37 lb



42" (1067 mm)  
37 1/2" (953 mm)  
4 1/2" (114 mm)  
8" (203 mm)  
8 1/2" (216 mm)  
3 1/4" (86 mm)

\*36" OVERALL HEIGHT AVAILABLE - CONTACT KIM REPRESENTATIVE



8" (203 mm)  
9 1/2" (241 mm)  
8 1/2" BOLT CIRCLE DIA. (216 mm)

**BASE PLAN SL1**

**HUBBELL Lighting**

© 2014 KIM LIGHTING • 16555 EAST GALE AVENUE, CITY OF INDUSTRY, CA 91745-1780 • TEL: 626/969-5696 • FAX: 626/969-5716

**Head:** One-piece cast, low-copper (<0.6% Cu) aluminum, 3/4" wall thickness with external reveal unifying head and shaft. Attachment to shaft is by four bolts: concealed within the head.

**Shaft:** One-piece extruded aluminum with internal tracks for attaching head and base.

**Base:** One-piece cast, low-copper (<0.6% Cu) aluminum secured to shaft by four concealed stainless steel bolts.

**Lens:** Clear flat 1/4" thick tempered glass retained by two stainless steel brackets, and four stainless steel, hex socket cap screws, fully gasketed.

**LED Optical System:** A total of 27 mid power LED emitters configured in a rectangular array comprised together as a module. Two (2) modules for 18 version and four (4) modules for 36 version. Available in 580nm Amber, 3000K, 4200K and 5100K color temperatures.

**LED Driver:** Universal voltage from 120 to 277V with a ±10% tolerance, -40°F starting temperature. All drivers are Underwriters Laboratories recognized.

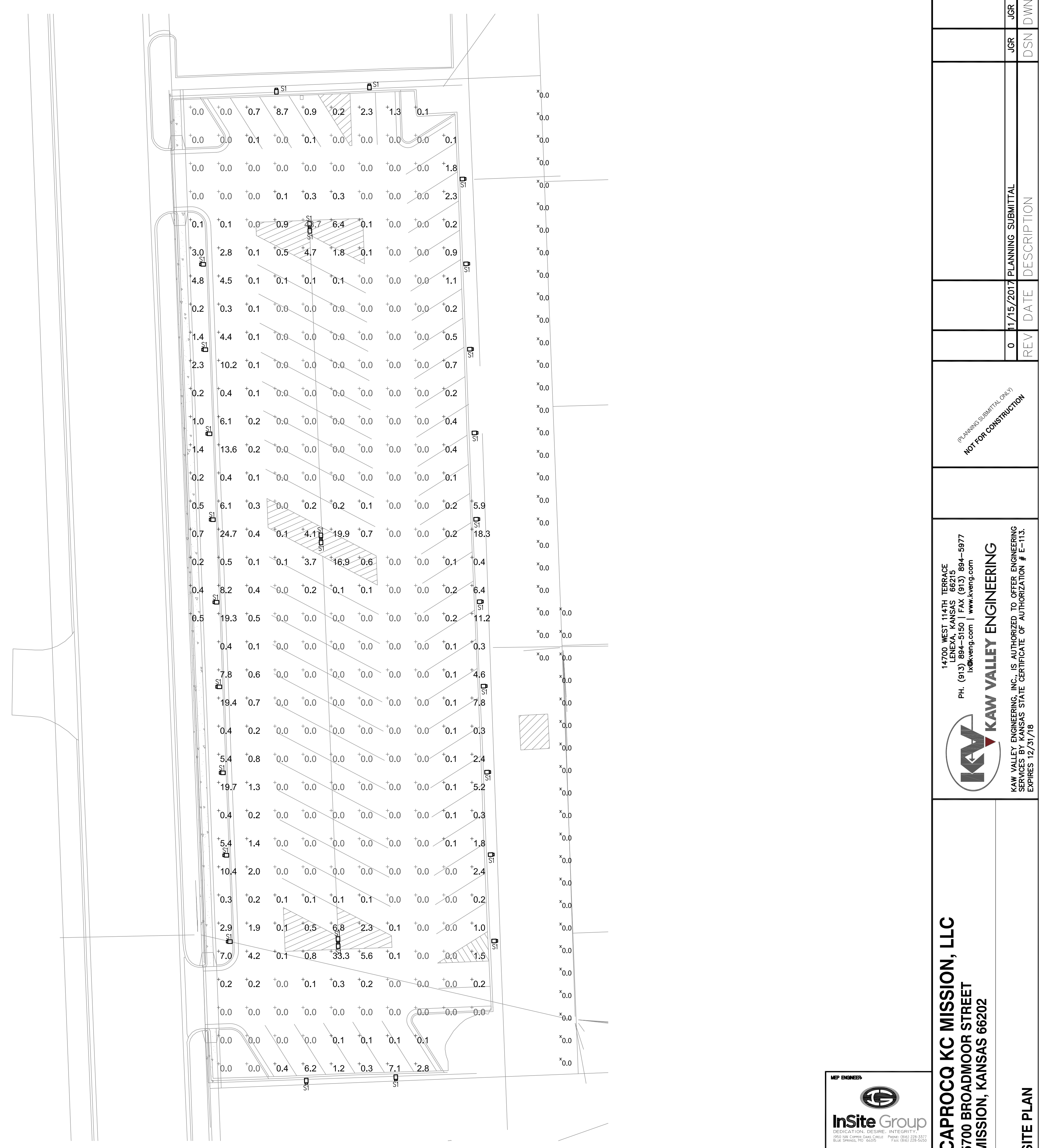
**Anchor Bolts:** Four 3/4" x 10" + 2" zinc plated L-hooks complete with leveling nut, washers, couplings, rigid pressed board template and black stainless steel bolts.

**Finish:** Fade and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) polyester powdercoat. Standard colors are Black, Dark Bronze, Light Gray, Titanium, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

**Listed by:** UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CSA C22.2#250.0 Luminaires. RoHS compliant. Meets Buy American provisions within ARRA.

**Warranty:** For full warranty see <http://www.hubbellighting.com/resources/warranty>.


**CAUTION:** Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.



**1 PHOTOMETRIC PLAN**  
1" = 20'-0"



**MP ENGINEER**

  
**InSite Group**  
DEDICATION. DESIRE. INTEGRITY.  
200 W. COMB DRIVE, SUITE 100 | P.O. BOX 113 | ST. LOUIS, MO 63103  
TEL: (314) 241-8200 | FAX: (314) 241-8200

THIS DRAWING IS PROVIDED AS AN INSTRUMENT OF SERVICE BY THE ENGINEER AND IS INTENDED FOR USE ONLY BY THE PROJECT CLIENT. THE DRAWING REMAINS THE PROPERTY OF THE ENGINEER AND SHALL BE RETURNED UPON COMPLETION OF THE CONSTRUCTION WORK. ALL DRAWING SPECIFICATIONS, NOTES, CONDITIONS, AND AGREEMENTS APPLICABLE HEREIN CONTROL THE ORIGINAL AND UNREVISED WORK OF THE ENGINEER. ANY REVISIONS, USE OF THE DRAWING OR THE INFORMATION CONTAINED HEREIN WITHOUT THE WRITTEN CONSENT OF THE ENGINEER IS STRICTLY PROHIBITED. © Copyright 2017 InSite Group, Inc.

**CAPROC KC MISSION, LLC**  
5700 BROADMOOR STREET  
MISSION, KANSAS 66202

**SITE PLAN**

PROJ. NO. C17\_9526  
DESIGNER JGR DRAWN BY JGR  
CFN 5381 - SL200  
SHEET SL200 REV 0

ISO PROJECT NUMBER 16-5381-0

REV	DATE	DESCRIPTION
0	11/15/2017	PLANNING SUBMITTAL
		NOT FOR CONSTRUCTION

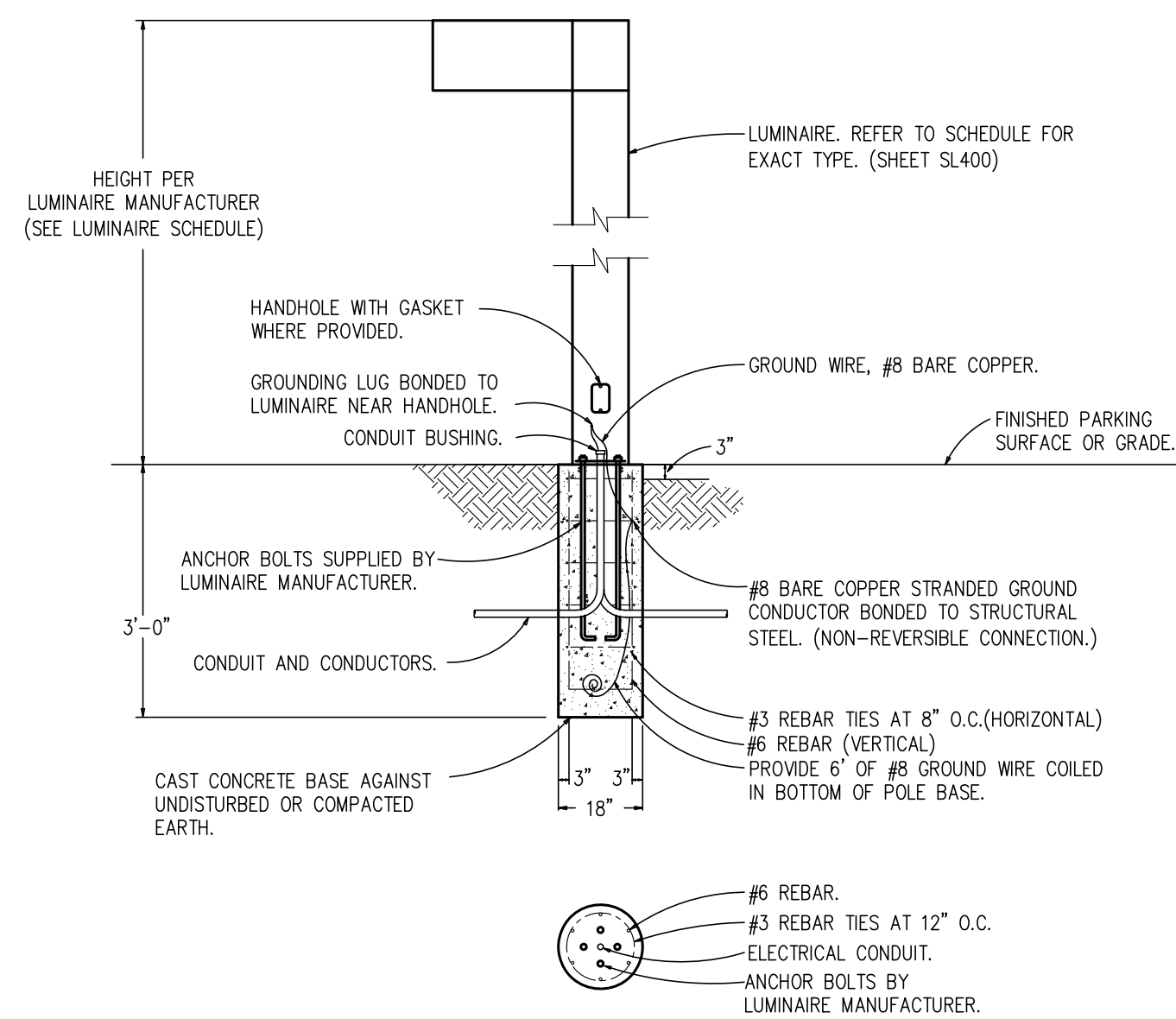
14700 WEST 114TH TERRACE  
LENEXA, KANSAS 66215  
PH. (913) 894-5150 | FAX (913) 894-5977  
info@kvweng.com | www.kvweng.com

**KAW VALLEY ENGINEERING**

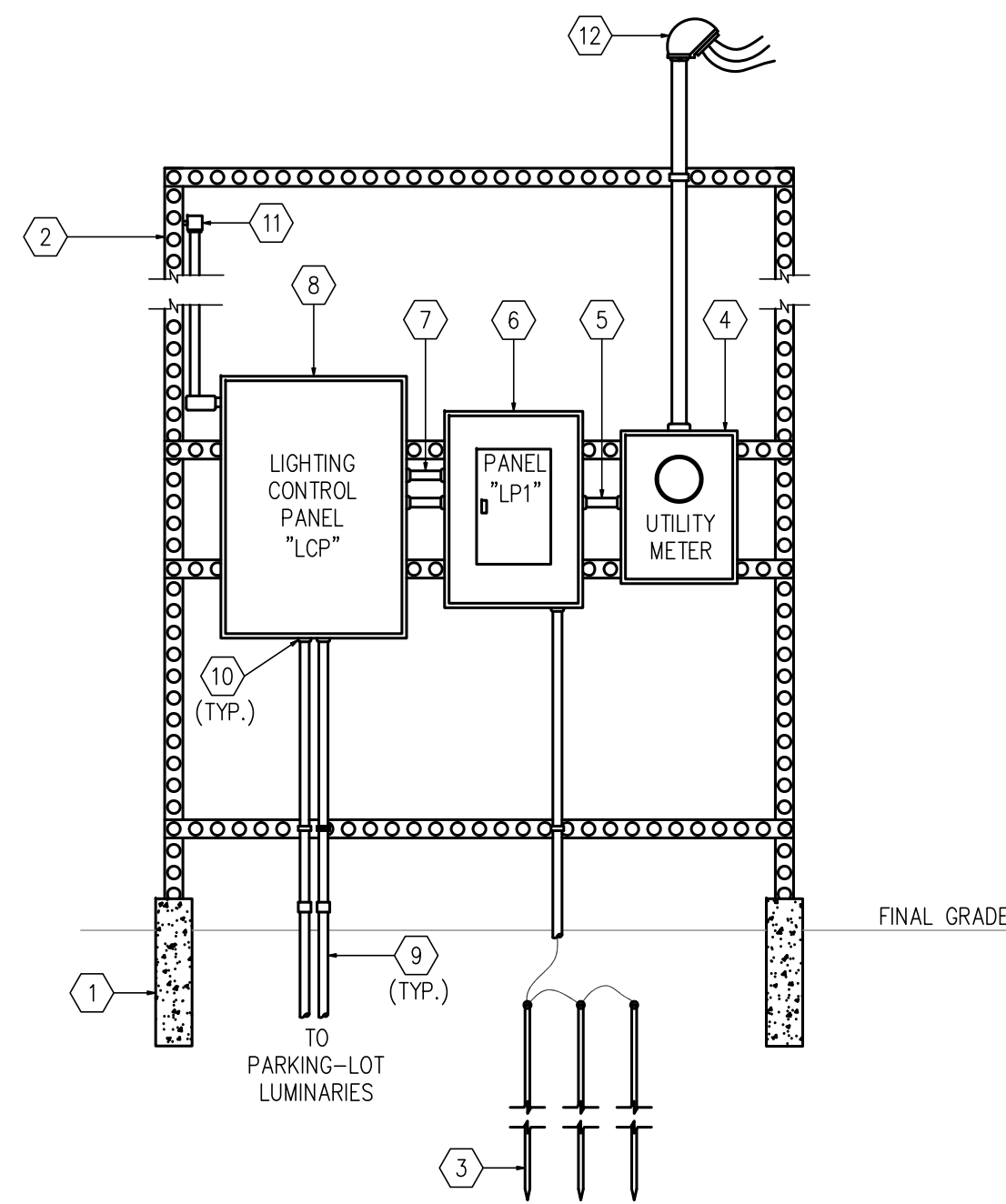
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/18

AWN	CHK
JGR	DSN
JGR	DWN





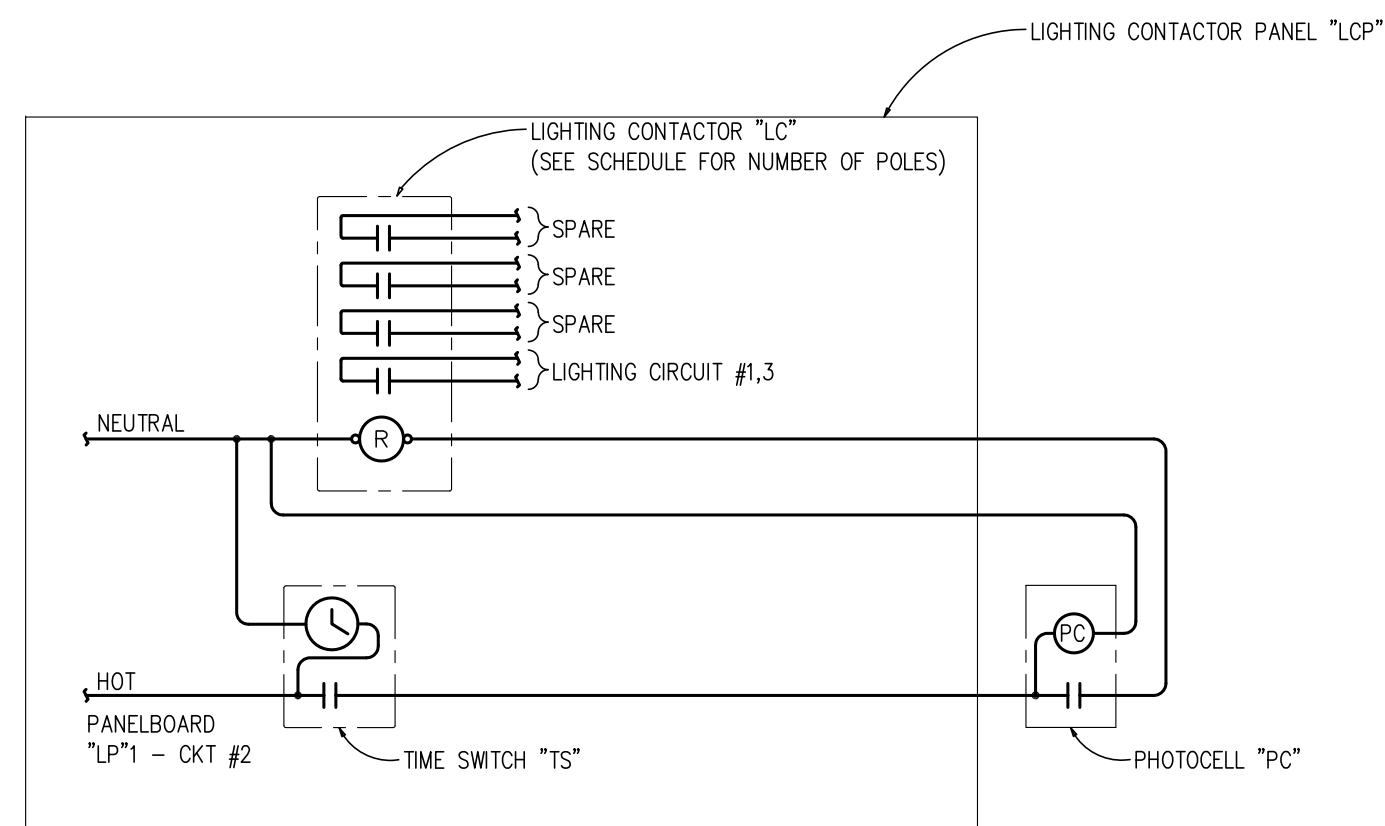
**1 LUMINAIRE BASE DETAIL**  
NO SCALE



**3 ELECTRICAL EQUIP. UNISTRUT RACK DETAIL**  
NO SCALE

**ELECTRICAL EQUIP. UNISTRUT RACK NOTES:**

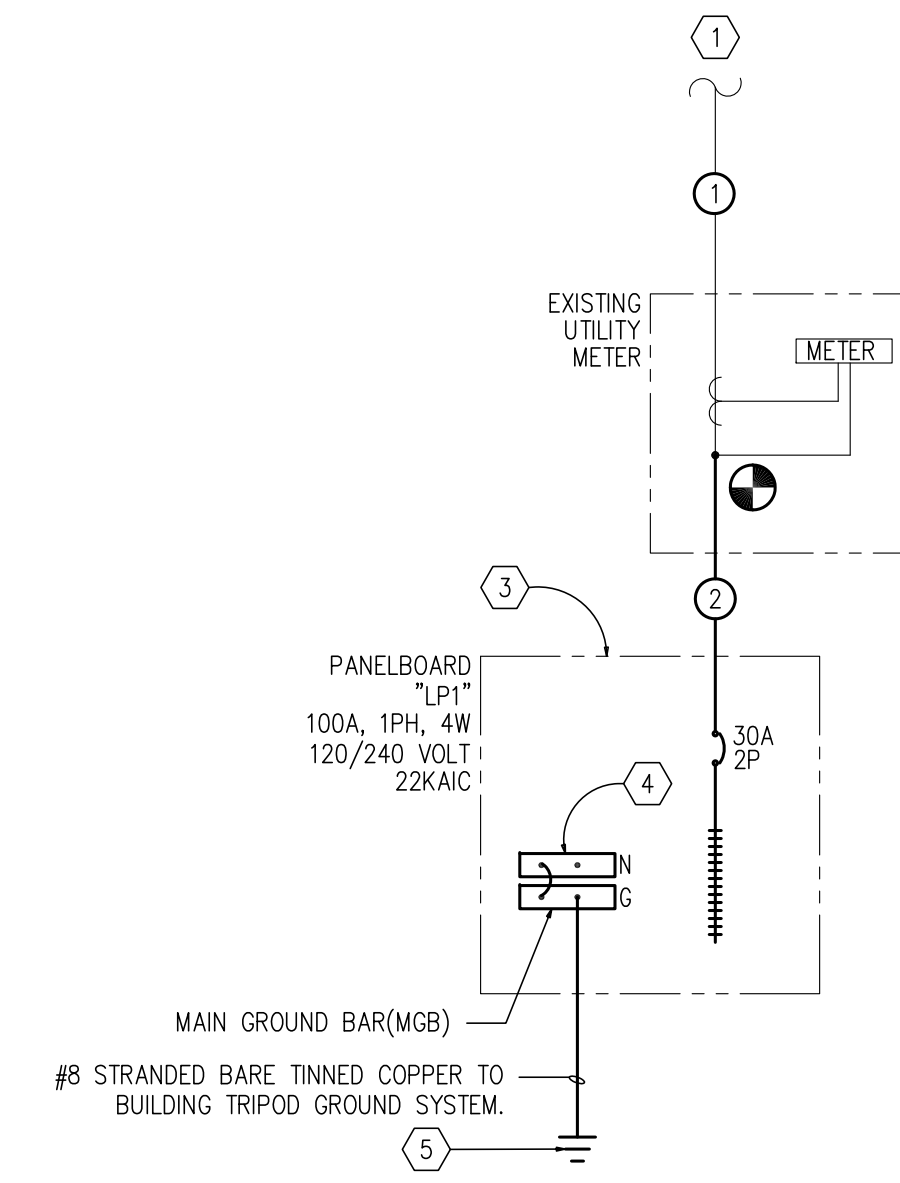
- 1 CONCRETE PIER BELOW UNISTRUT RACK. PROVIDE 8" DIAMETER PIER, 48" DEEP WITH #4 EPOXY COATED REINFORCING STEEL AT 4" ON CENTER VERTICALLY AND HORIZONTALLY. CONCRETE SHALL BE MINIMUM 4000 PSI. REFER TO CIVIL PLANS AND SPECIFICATIONS FOR ADDITIONAL CONCRETE REQUIREMENTS.
- 2 GALVANIZED UNISTRUT RACK. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO MOUNT ALL EQUIPMENT SHOWN. PROVIDE CONCRETE FOOTINGS AT RACK LEGS TO ADEQUATELY SUPPORT THE RACK SYSTEM SHOWN. ALL HARDWARE AND CONNECTIONS SHALL BE GALVANIZED. PROVIDE INTERMEDIATE SUPPORTS AND LATERAL BRACING AS REQUIRED.
- 3 PROVIDE THREE(3) 3/4" X 10' LONG COPPER CLAD GROUND RODS. DRIVE THE THREE GROUND RODS INTO THE GROUND, MINIMUM 6' APART FROM EACH OTHER. CONNECT THE THREE RODS TOGETHER USING #3/0 BARE COPPER WIRE. ALL CONNECTIONS SHALL BE NON-REVERSIBLE TYPE CONNECTIONS.
- 4 RELOCATED UTILITY METER MOUNTED ON UNISTRUT. ALL MOUNTING HARDWARE SHALL BE GALVANIZED. LOCATION AND ELEVATION APPROVED BY UTILITY COMPANY. METER SHALL BE INSTALLED SO THAT IT IS ACCESSIBLE TO THE UTILITY COMPANY. EXTEND EXISTING FEEDERS TO THE RELOCATED METER.
- 5 CONDUIT FROM UTILITY METER TO LIGHTING PANEL "LCP".
- 6 PANELBOARD "LP1". REFER TO ONE-LINE DIAGRAM (THIS SHEET) AND PANELBOARD SCHEDULE (SHEET SL400) FOR ADDITIONAL REQUIREMENTS.
- 7 CONDUITS FROM PANELBOARD "LP1" TO LIGHTING CONTACTOR PANEL "LCP". REFER TO SITE PLAN (SHEET SL100) AND PANELBOARD SCHEDULE FOR EXACT CONDUIT AND WIRING REQUIREMENTS.
- 8 LIGHTING CONTACTOR PANEL "LCP". REFER TO "LUMINAIRE CONTROL SCHEMATIC DIAGRAM" DETAIL (THIS SHEET) FOR CONTENTS WITHIN THE LIGHTING CONTACTOR PANEL ENCLOSURE SHALL BE NEMA 3R RATED WITH HINGED AND PAD-LOCKABLE FRONT DOOR.
- 9 CONDUITS BELOW GRADE SHOULD BE SCHEDULE 40 PVC. CONDUITS ABOVE GRADE SHALL BE RIGID GALVANIZED STEEL CONDUIT. PROVIDE CONNECTION BETWEEN PVC CONDUIT AND RIGID GALVANIZED STEEL CONDUIT. ALL 90 DEGREE "TURN UPS" SHALL BE RIGID GALVANIZED STEEL CONDUIT.
- 10 PROVIDE WEATHER-PROOF HUBS WHERE CONDUITS ENTER EQUIPMENT.
- 11 PHOTOCELL MOUNTED A MINIMUM OF 8'-0" ABOVE GRADE.
- 12 PROVIDE OVERHEAD ELECTRICAL SERVICE TO THE RELOCATED UTILITY METER. PROVIDE RIGID GALVANIZED CONDUIT AND WEATHER-HEAD. COORDINATE FINAL HEIGHT OF THE WEATHER-HEAD, AND FINAL CONNECTIONS OF THE FEEDERS WITH THE UTILITY COMPANY. PROVIDE ALL ADDITIONAL CONDUIT, WIRING, HARDWARE AND OTHER EQUIPMENT AS NEEDED FOR RECONNECTION OF THE EXISTING METER TO THE EXISTING SECONDARY UTILITY FEEDERS.



**2 LUMINAIRE CONTROL SCHEMATIC DIAGRAM**  
NO SCALE

**LUMINAIRE CONTROL NOTES:**

- 1) REFER TO SCHEDULES ON SHEET SL400 FOR EQUIPMENT SHOWN IN THIS DIAGRAM.



**4 ELECTRICAL ONE-LINE DIAGRAM**  
NO SCALE

**ONE-LINE DIAGRAM GENERAL NOTES:**

- 1) CONTRACTOR SHALL INSTALL ALL EQUIPMENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES.
- 2) 20% SPARE BREAKER SPACE SHALL BE PROVIDED IN ALL PANELBOARDS.
- 3) ALL EXTERIOR CONDUIT CONNECTIONS SHALL BE WEATHER-PROOF TYPE UNLESS NOTED OTHERWISE.
- 4) ALL PANELS SHALL HAVE THEIR DESIGNATION AND VOLTAGE IDENTIFIED ON THE FRONT COVER. PROVIDE PLASTIC LAMINATE LABELS ON ALL EQUIPMENT.
- 5) EQUIPMENT SHOWN SHALL BE EATON/CUTLER HAMMER, SQUARE D/SCHNIEDER ELECTRIC, OR GE BRAND. ALL OTHER MANUFACTURER'S SHALL OBTAIN PRIOR APPROVAL IN ORDER TO BID THE PROJECT.

**ONE-LINE DIAGRAM NOTES:**

- 1) EXISTING UTILITY FEEDER FROM UTILITY COMPANY TO EXISTING METER.
- 2) EXISTING METER, EXISTING METER TO BE RELOCATED FROM THE EXISTING LIGHT POLE TO THE NEW ELECTRICAL EQUIPMENT RACK.
- 3) 100 AMP RATED, 120/240 VOLT, 1 PHASE, 3 WIRE, 8 POLE PANELBOARD. PROVIDE WITH 30 AMP MAIN BREAKER. PANEL SHALL BE RATED FOR 22KAIC, NEMA 3R ENCLOSURE WITH HINGED AND LOCKABLE FRONT DOOR. PANELBOARD SHALL HAVE FULL BUSSING.
- 4) MAIN GROUNDING BUS BAR MOUNTED WITHIN NEW PANELBOARD "LP1". ALL CONDUCTORS THAT ARE CONNECTED TO THE BUS BARS SHALL BE TWO HOLE TYPE CONNECTORS AND SHALL BE PROPERLY LABELED. CONNECT THE GROUND AND NEUTRAL BUS BARS AT THIS LOCATION.
- 5) COPPER CLAD GROUND RODS.

**ONE-LINE DIAGRAM WIRING LEGEND**

- 1) EXISTING FEEDER TO UTILITY COMPANY.
- 2) (4) #10 AWG, AND (1) #10 AWG GROUND IN 1" CONDUIT.

AWN	CHK
JGR	DWN
JGR	DSN
JGR	PLANNING
JGR	SUBMITTAL
0	11/15/2017
REV	DATE
	DESCRIPTION

(PLANNING SUBMITTAL ONLY)  
**NOT FOR CONSTRUCTION**

14700 WEST 114TH TERRACE  
LENEKA, KANSAS 66215  
PH. (913) 894-5150 | FAX (913) 894-5977  
info@kvw.com | www.kvw.com

**KAW VALLEY ENGINEERING**

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/18

**CAPROCQ KC MISSION, LLC**  
5700 BROADMOOR STREET  
MISSION, KANSAS 66202

**SITE PLAN**

MEP ENGINEER

**InSite Group**  
DEDICATION. DESIRE. INTEGRITY.  
2000 W. COMB DRIVE, SUITE 1000 | MISSION, KS 66202  
PH: (913) 894-5150 | FAX: (913) 894-5977

THIS DRAWING IS PROVIDED AS AN INSTRUMENT OF SERVICE BY THE ENGINEER AND IS INTENDED FOR USE ON THE PROJECT ONLY. THE DRAWING REMAINS THE PROPERTY OF THE ENGINEER AND SHALL BE RETURNED UPON COMPLETION OF THE CONSTRUCTION WORK. ALL DRAWING SPECIFICATIONS, INCLUDING CHANGES AND AMENDMENTS, INCLUDING BIDDING CONTRACTS, THE ORIGINAL AND UNQUALIFIED MARK OF THE ENGINEER. REPRODUCTION, USE, OR DISSEMINATION OF THIS INFORMATION WITHOUT THE WRITTEN CONSENT OF THE ENGINEER IS STRICTLY PROHIBITED. © Copyright 2017 InSite Group, Inc.

PROJ. NO.	C17_9526
DESIGNER	JGR
DRAWN BY	JGR
CFN	5381 - SL300
SHEET	REV
SL300	0
ISG PROJECT NUMBER	16-5381-0



# LUMINAIRE SCHEDULE

DESIGNATION	MANUFACTURER	FIXTURE DESCRIPTION	MODEL NUMBER	MOUNTING	COLOR (AVG)	LAMP		DRIVE CURRENT (QUANTITY/TYPE)	VOLTS	WATTS	NOTES
						QTY	CODE				
S1	KIM OR APPROVED EQUAL	42" TALL, ONE-PIECE CAST ALUMINUM, 36 LED PEDESTRIAN BOLLARD.	SL1-36L-4K-UV-LG	BASE	4200K	36 PER POLE	LED	(1) 450mA	240	57	1.2

NOTES:  
 1) CONTRACTOR SHALL COORDINATE LUMINAIRE COLOR WITH OWNER.  
 2) LUMINAIRE SHALL BE RATED FOR WET LOCATIONS.

# LIGHTING CONTACTOR SCHEDULE

CONTACTOR DESIGNATION	LOAD			SWITCH					INTERLOCK	
	EQUIPMENT SERVED	MAX WATTS	VOLTS	TYPE	AMP	POLE	ENCLOSURE	ACCESSORIES	CONTROLLED BY	CONTROLS
"LC"	SITE LIGHTING	-	240	NORMALLY OPEN-ELECTRICAL HELD	30	4	NEMA 3R	-	TS-1 & PC-1	-

NOTES:  
 1. ACCEPTABLE MANUFACTURERS ABB, SCHNEIDER ELECTRIC, EATON, AND GE. ALL OTHERS REQUIRE PRE-APPROVAL.

# TIME SWITCH SCHEDULE

SWITCH DESIGNATION	LOAD			SWITCH						
	EQUIPMENT SERVED	WATTS	VOLTS	MANUFACTURER	MODEL #	TYPE	AMP	POLE	ENCLOSURE	ACCESSORIES
"TS"	SITE LIGHTING	1800	120	INTERMATIC	ET1105C	SINGLE POLE SINGLE THROW	30	1	NEMA 3R	-

NOTES:  
 1. PROVIDE WITH STEEL NEMA 3R ENCLOSURE.  
 2. 24 HOUR, 7 DAY AND 7-DAY SUNRISE TO SUNSET VERSION.  
 3. BATTERY BACK-UP.  
 4. AUTO ADJUST FOR DAYLIGHT SAVING TIME.

# PHOTOCELL SCHEDULE

PHOTOCELL DESIGNATION	LOAD			DEVICE	
	EQUIPMENT SERVED	WATTS	VOLTS	MANUFACTURER	MODEL #
"PC"	SITE LIGHTING	MIN. 1800	120	INTERMATIC	K4236CM

NOTES:  
 1. DELAYED ACTION TO PREVENT SWITCHING FROM LIGHTNING OR HEADLAMPS.  
 2. PROVIDE WITH HEAVY DUTY DIE-CAST HOUSING.

# EXTERIOR LIGHTING POWER ALLOWANCE

EXTERIOR AREA/SURFACE (EXTERIOR LIGHTING ZONE 3)	SQUARE FEET	LINEAL FEET	ALLOWED W/LF OR W/SF	ALLOWED WATTAGE
BASE SITE ALLOWANCE	-	-	-	750
PARKING AREA	30,852	-	0.10	3,085.2
TOTAL	-	-	-	3,835.2
EXTERIOR FIXTURE	FIXTURE VOLTAGE	NUMBER OF FIXTURES	FIXTURE WATTAGE	TOTAL WATTAGE
"S1"	240V - 1PH	29	57	1653
TOTALS	-	29	-	1653

CALCULATIONS:  
 1653 < 3835.2 = [OK]  
 \*PER 2012 IECC SECTION 405.6.2

## ELECTRICAL SYMBOLS

- CONDUIT AND CIRCUITRY TO BE REMOVED.
- BRANCH CIRCUIT WIRING RUN IN CONCEALED CONDUIT WHERE POSSIBLE.
- BRANCH CIRCUIT CONDUCTORS: GROUND, NEUTRAL, HOT (OR SWITCHED HOT).
- BRANCH CIRCUIT HOME RUN WITH PANELBOARD DESIGNATION AND CIRCUIT BREAKER No.
- BRANCH CIRCUIT UNDERFLOOR/BELOW GRADE CONDUIT.
- SITE LUMINAIRE.
- GROUND ROD.
- PHOTOCELL.
- TERMINAL BLOCK (BY OTHERS).
- RELAY COIL.
- KIRK KEY INTERLOCK.
- NORMALLY OPEN CONTACTS.
- NORMALLY CLOSED CONTACTS.
- SWITCH.
- FUSE.
- EARTH GROUND.
- TRANSFORMER.
- PANELBOARD.
- CONTROL PANEL.
- NON-FUSED DISCONNECT SWITCH.
- FUSED DISCONNECT SWITCH.
- COMBINATION MOTOR STARTER/DISCONNECT SWITCH.
- JUNCTION BOX.
- WALL MOUNTED BLANK OUTLET BOX.
- PLAN NOTE DESIGNATION.
- CONNECT TO EXISTING.
- EQUIPMENT DESIGNATION.
- SECTION/ELEVATION REFERENCE NUMBER. SECTION/ELEVATION SHEET NUMBER.

## ELECTRICAL NOTATIONS

- ARF ABOVE RAISED FLOOR.
- AFF ABOVE FINISHED FLOOR.
- UNO UNLESS NOTED OTHERWISE.
- IDC INDEPENDENT CONTROLS CONTRACTOR.
- I/C INDICATES SINGLE CONDUCTOR CABLE.
- "A" THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES DEVICE BOTTOM TO BE MOUNTED 4" ABOVE COUNTERTOP BACKSPLASH.
- "GF" THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES GROUND FAULT INTERRUPTER.
- "AG" THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES GROUND FAULT INTERRUPTER AND DEVICE TO BE MOUNTED 4" ABOVE COUNTERTOP BACKSPLASH.
- "IG" THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES ISOLATED GROUND DEVICE.
- "IL" THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES LOCKING OR TWIST-LOCK TYPE DEVICE.
- "WP" THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES WEATHER-PROOF ENCLOSURE.
- "WG" THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES GROUND FAULT INTERRUPTER AND WEATHERPROOF ENCLOSURE.
- "YP" THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES EXPLOSION-PROOF ENCLOSURE.
- 60" DIMENSIONS ADJACENT TO ANY SYMBOL INDICATES MOUNTING HEIGHT TO CENTERLINE OF DEVICE.
- RE:1E2 REFERENCE DESIGNATION. SHEET NUMBER. DETAIL/PLAN NUMBER.

## GENERAL NOTES:

- INSTALL ALL EQUIPMENT WHILE MAINTAINING ALL CLEARANCES PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND PER LOCAL CODES.
- PROVIDE OFFSETS AND TRANSITIONS AS NECESSARY TO AVOID OBSTRUCTIONS.
- THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM HIS/HER WORK.
- DRAWINGS ARE DESIGNED FOR THE MANUFACTURER'S MATERIALS, EQUIPMENT OR SERVICES NAMED ON PLANS AND ANY CHANGES AND THEIR ASSOCIATED COSTS, REQUIRED TO ACCOMMODATE OTHER APPROVED EQUIPMENT MATERIAL OR EQUIPMENT AS WELL AS SPACE REQUIREMENTS FOR THE OTHER APPROVED EQUIPMENT MATERIAL OR EQUIPMENT, MUST BE ASSUMED BY THE CONTRACTOR IN HIS/HER BID.
- THESE PLANS ARE SCHEMATIC IN NATURE AND ARE INTENDED TO DEPICT GENERAL SCOPE OF PROJECT. ALL WORK SHALL BE PERFORMED PER ALL LOCAL AND STATE CODES AND REGULATIONS.
- THE SYMBOLS SHOWN ON THIS SHEET ARE A COMPLETE LIST OF SYMBOLS USED BY InSite Group, Inc. AND NOT ALL SYMBOLS OR ABBREVIATIONS MAY BE USED ON THIS PROJECT.
- THE DRAWINGS, SPECIFICATIONS, REFERENCED STANDARDS, ETC. ARE COMPLEMENTARY OF ONE ANOTHER. IN THE EVENT OF CONFLICT BETWEEN ANY PORTION OF THESE DOCUMENTS, THE ARCHITECT/ENGINEER SHALL BE CONTACTED FOR FORMAL INTERPRETATION OF THE REQUIREMENTS. THE CONTRACTOR SHALL BE DEEMED TO HAVE PROVIDED THE MOST DETAILED AND EXPENSIVE INTERPRETATION OF THE REQUIREMENT IN BID. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECT/ENGINEER INTERPRETATION SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE AND AT NO EXPENSE TO THE OWNER.
- ALL EXTERIOR PENETRATIONS SHALL BE SEALED WEATHER/WATER TIGHT.
- ALL WORK SHALL BE PERFORMED PER OSHA SAFETY STANDARDS.
- COORDINATE WORK WITH ALL OTHER TRADES.
- CONTRACTOR SHALL PAY ALL PERMITTING COSTS ASSOCIATED WITH THE WORK SHOWN.
- CONTRACTOR SHALL PROVIDE (7) HARD COPIES OR (1) ELECTRONIC COPY OF SUBMITTALS FOR ALL EQUIPMENT TO THE ENGINEER CLEARLY DEPICTING EQUIPMENT SELECTIONS AND DEVICE SELECTIONS. PROVIDE FINAL RED LINE AS-BUILT DRAWINGS TO ENGINEER.
- VERIFY ALL DIMENSIONS & CONDITIONS IN THE FIELD. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS, ELBOWS, ETC. WHICH MAY BE REQUIRED FOR PROPER INSTALLATION OF WORK. PROVIDE ADDITIONAL BENDS AND/OFFSETS AS REQUIRED TO COMPLETE WORK AT NO ADDITIONAL COST.
- PROVIDE O&M MANUAL AND OWNER TRAINING FOR ALL NEW EQUIPMENT AND DEVICES.
- CONTRACTOR SHALL CONTACT THE LOCAL ELECTRICAL UTILITY COMPANY AND ARRANGE FOR ELECTRIC SERVICE AS INDICATED ON DRAWINGS. INCLUDE ALL COSTS, CHARGES, FEES, ETC. INCURRED BY LOCAL AUTHORITIES INTO BID. PROVIDE ALL MATERIALS AS REQUIRED BY LOCAL AUTHORITIES FOR ELECTRIC SERVICE INSTALLATION. ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF LOCAL AUTHORITIES.
- PERFORM ALL EXCAVATING AND BACK FILLING AS NECESSARY IN COMPLIANCE WITH OSHA SAFETY STANDARDS. ALL EXCAVATIONS SHALL BE PROTECTED BY NECESSARY SHEATHING, SHORING, CRIBBING, TARPULINS, ETC. AS REQUIRED AND REMOVED AT COMPLETION OF WORK.
- REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS ASSOCIATED WITH THE PROJECT.
- ALL DISTURBED SOIL, SURFACES, AND STRUCTURES DISTURBED AS A RESULT OF ELECTRICAL SERVICES IN THE PROJECT BOUNDARY SHALL BE PUT BACK IN ORIGINAL CONDITION, OR IN THE CONDITION DEFINED ON THE CIVIL AND/OR LANDSCAPING DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE SOIL EROSION CONTROL AS DEFINED BY THE CIVIL ENGINEER'S SPECIFICATION AND/OR DRAWINGS. WHERE NONE ARE INDICATED, CONTRACTOR SHALL CONSULT WITH CIVIL ENGINEER AND PROVIDE COST IN HIS/HER BID TO COVER EROSION CONTROL AS INSTRUCTED.
- ALL EFFORTS SHALL BE MADE BY THE CONTRACTOR TO PROTECT TREE AND OTHER VEGETATION ROOTS WHERE TRENCHING OCCURS, AND WHERE THE TREES/VEGETATION IS TO REMAIN. OFFSET ROUTING AS REQUIRED.

## ELECTRICAL GENERAL NOTES:

- PROVIDE CONDUCTORS FOR LISTED APPLICATIONS AS FOLLOWS:  
 EXTERIOR LIGHTING AND RECEPTACLE CIRCUITS: COPPER, TYPE THWN, 600 VOLT, 90 DEGREES C (194 DEGREES F) THERMOPLASTIC INSULATED BUILDING CONDUCTOR.  
 POWER CIRCUITS AND FEEDERS UNDER 100 AMPS: COPPER, TYPE THWN, 600 VOLT, 90 DEGREES C (194 DEGREES F) THERMOPLASTIC INSULATED BUILDING CONDUCTOR.  
 LOW VOLTAGE AND LINE VOLTAGE CONDUCTORS SIZES NO. 16 AND 18 AWG: COPPER TYPE TFFN, 600 VOLT, 90 DEGREES C (194 DEGREES F) THERMOPLASTIC INSULATED BUILDING CONDUCTOR.  
 POWER CIRCUITS AND FEEDERS OVER 100 AMPS: COPPER, TYPE THWN, 600 VOLT, 75 DEGREE C (167 DEGREES F) THERMOPLASTIC INSULATED BUILDING CONDUCTORS.  
 \* MINIMUM BRANCH CIRCUIT WIRE SIZE IS #12AWG UNLESS NOTED OTHERWISE.
- ALL EXTERIOR WIRING SHALL BE IN RIGID GALVANIZED CONDUIT.
- PANELBOARD REGISTRIES SHALL BE TYPE WRITTEN AND PLACED IN THE PLASTIC COVER ON THE INTERIOR DOOR OF EACH PANELBOARD.
- FURNISH, INSTALL, AND CONNECT ALL WIRE, WIREWAY, CONDUIT, CONNECTORS, OUTLETS, ETC. NECESSARY TO ACHIEVE A COMPLETE ELECTRICAL INSTALLATION. ALTHOUGH SUCH WORK IS NOT SPECIFICALLY SHOWN OR SPECIFIED EQUIPMENT SHALL BE INSTALLED PER CODE REQUIREMENTS PROVIDING A SOUND, SECURE AND COMPLETE INSTALLATION.
- COORDINATE AIC RATINGS OF ALL ELECTRICAL EQUIPMENT WITH ELECTRIC UTILITY. PROVIDE PANELBOARDS, BREAKERS, DISCONNECT SWITCHES, ETC. AS REQUIRED PER UTILITY COMPANY.
- COORDINATE POWER REQUIREMENTS AND FINAL LOCATIONS OF ALL EQUIPMENT, DEVICES, ETC. WITH FINAL EQUIPMENT SELECTIONS AND INSTALL ALL NECESSARY DEVICES ALLOWING FOR END TERMINATION/CONNECTIONS.
- PROVIDE PERMANENTLY AFFIXED BLACK PLACARD WITH WHITE LETTERING INDICATING EQUIPMENT NAME AND PANELBOARD AND CIRCUIT BREAKER SERVICING IT, ON ALL NEW:  
 -ELECTRICAL EQUIPMENT.  
 -PANELBOARDS.  
 -DISCONNECT SWITCHES, ENCLOSED CIRCUIT BREAKERS.
- LABELS SHALL BE ATTACHED USING A MECHANICAL FASTENER. ADHESIVE IS NOT ACCEPTABLE.
- ALL EXTERIOR CONDUIT SUPPORTS SHALL BE GALVANIZED, ALUMINUM, OR STAINLESS STEEL.
- CONTRACTOR SHALL VERIFY ALL FINAL FEEDER LENGTHS AND INCREASE WIRE SIZES AS REQUIRED TO MEET NEC MAXIMUM VOLTAGE DROP REQUIREMENTS.  
 3 PHASE VOLTAGE DROP FORMULA:  
 $VD = (1.73R \cdot L \cdot I) / CM$   
 VD = VOLTAGE DROP (VOLTS)  
 R = RESISTANCE OF CONDUCTOR (OHMS)  
 L = LENGTH OF CONDUCTOR (FEET)  
 I = CURRENT (AMPS)  
 CM = CROSS SECTION AREA OF CONDUCTOR  
 1 PHASE VOLTAGE DROP FORMULA:  
 $VD = (2R \cdot L \cdot I) / CM$   
 VD = VOLTAGE DROP (VOLTS)  
 R = RESISTANCE OF CONDUCTOR (OHMS)  
 L = LENGTH OF CONDUCTOR (FEET)  
 I = CURRENT (AMPS)

## PANELBOARD SCHEDULE: "LP1"

VOLTAGE		PHASE		MAIN BREAKER		FEEDER ENTRANCE:		PANEL LOCATION:	
120/240	1	1	30	X	TOP				
100 AMP MAIN BUS	3	3	MAIN LUGS		BOTTOM				
3R NEMA ENCLOSURE	200% NEUT.		FEED THRU LUGS		MOUNT:				
22K RMS AMPS @	240 VOLTS		SUB-FEED BREAKER		X SURFACE				
11/15/17 DATE	X CU BUSS		SOLID NEUTRAL		FLUSH				

POLE #	SERVICE	VA LOAD	LOAD	WIRE	C.B.	C.B.	WIRE	LOAD	VA LOAD	POLE #			
L1	L2	L1	L2	TRIP	POLE	TRIP	POLE	L1	L2				
1	SITE LIGHTING	826.5	L	NOTE	20	2	20	1	12	M	600	LTG CNTRL PNL "LC"	2
3												SPARE	4
5	SPARE											SPACE	6
7												SPACE	8

CONNECTED VA/PH (LESS FEED THRU & SUB FEED)	L1 - 827	L2 - 1427
CONNECTED VA/PH FROM FEED THRU AND SUB FEED	L1 -	L2 -
TOTAL CONNECTED VA/PH	L1 - 827	L2 - 1427

LOAD TYPE	CODE DEMAND REQUIREMENTS	CONNECTED VA	DEMAND VA	MIN. CODE VA (1.25 x CONT)
		THIS PANEL	SUB PANELS	TOTAL
LIGHTING (NEC 220-11)	100%	1653	1653	2066
RECEPTACLES (NEC 220-13)	1st 10,000VA + 1/2 x REMAINING	0	0	0
LARGEST MOTOR (NEC 430-24)	1.25 x LARGEST FLA	0	0	0
REMAINING MOTORS (NEC 430-24)	100% REMAINING MOTORS	600	600	600
HEATING (NEC 220-15)	100%	0	0	0
KITCHEN EQUIPMENT (NEC 220-20)	VARIABLES (SEE CODE SECTION)	0	0	0
WATER HEATER	100%	0	0	0
MISC.	100%	0	0	0
SPARE	0 x CODE MN VA			0
TOTAL LOADS	SIZING LOAD	2253	2253	2666
			11 AMPS	

NOTES:  
 1. PROVIDE PANELBOARD WITH HINGED INNER AND OUTER DOOR. OUTER DOOR SHALL BE LOCKABLE.  
 2. VERIFY WIRE SIZES SHOWN ON PLAN WITH BREAKERS SHOWN. PROVIDE LARGER LUGS AS REQUIRED.  
 3. REFER TO PLANS FOR WIRE SIZES.

## WIRING SCHEDULE - VOLTAGE DROP

DISTANCE	CONDUCTOR SIZE
120V-20A BRANCH CIRCUITS	
UP TO 100'	#12
100' - 150'	#10
150' - 200'	#8
250' - 300'	#6
277V-20A BRANCH CIRCUITS	
UP TO 200'	#12
200' - 375'	#10
375' - 500'	#8

- NOTES:  
 1. CIRCUITS LENGTHS LONGER THOSE NOTED ABOVE SHOULD BE COORDINATED WITH THE ENGINEER. PROVIDE FEEDER LENGTHS AND PROPOSED CONDUIT AND WIRING SIZE FOR APPROVAL.  
 2. CONTRACTOR SHALL COORDINATE CONDUCTORS AND CIRCUIT BREAKER LUG REQUIREMENTS WITH MANUFACTURER AND PROVIDE PROPER LUGS TO CONNECT CONDUCTORS TO CIRCUIT BREAKERS.  
 3. ALL OTHER FEEDER AND BRANCH CIRCUITS NOT NOTED ABOVE SHALL BE COORDINATED WITH THE ENGINEER. PROVIDE FEEDER LENGTHS AND PROPOSED CONDUIT AND WIRING SIZE TO ENGINEER FOR APPROVAL.  
 4. FEEDER VOLTAGE DROP NOT TO EXCEED 5% AND BRANCH CIRCUITS VOLTAGE DROP NOT TO EXCEED 3% PER NEC.

MEP ENGINEER

InSite Group  
 2000 W. Center Road, Suite 1000 | Mission, KS 66202  
 Phone: (913) 684-5150 | Fax: (913) 684-5877  
 www.insitegroup.com

THIS DRAWING IS PROVIDED AS AN INSTRUMENT OF SERVICE BY THE ENGINEER AND IS INTENDED FOR USE ON THE PROJECT ONLY. THE DRAWING REMAINS THE PROPERTY OF THE ENGINEER AND SHALL BE RETURNED TO HIM UPON COMPLETION OF THE CONSTRUCTION WORK. ALL DRAWING REVISIONS, INCLUDING CORRECTIONS, AND ANY CHANGES TO THE ORIGINAL DRAWING SHALL BE THE PROPERTY OF THE ENGINEER. THE ENGINEER'S LIABILITY IS LIMITED TO THE DESIGN OF THE PROJECT AND DOES NOT INCLUDE THE DESIGN OF THE PROJECT OR THE CONSTRUCTION OF THE PROJECT. THE ENGINEER'S LIABILITY IS LIMITED TO THE DESIGN OF THE PROJECT AND DOES NOT INCLUDE THE CONSTRUCTION OF THE PROJECT. THE ENGINEER'S LIABILITY IS LIMITED TO THE DESIGN OF THE PROJECT AND DOES NOT INCLUDE THE CONSTRUCTION OF THE PROJECT.

CAPROCQ KC MISSION, LLC  
 5700 BROADMOOR STREET  
 MISSION, KANSAS 66202

PROJ. NO.	C17_9526
DESIGNER	JGR
DRAWN BY	JGR
CFN	5381 - SL400
SHEET	REV
ISG PROJECT NUMBER	16-5381-0

SITE PLAN

REV	DATE	DESCRIPTION
0	11/15/2017	PLANNING SUBMITTAL
		AWN
		JGR
		DSN
		DWN
		CHK

(PLANNING SUBMITTAL ONLY)  
 NOT FOR CONSTRUCTION

14700 WEST 114TH TERRACE  
 66215  
 LENEXA, KANSAS (913) 894-5877  
 PH. (913) 894-5150 | FAX (913) 894-5877  
 info@kvw.com | www.kvw.com

KAW VALLEY ENGINEERING  
 KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY THE KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/18