

Lee's Summit R7 District
Athletics Facilities

Lee's Summit High School
400 SE Blue Parkway
Lee's Summit, MO 64063

owner:
Lee's Summit R7 School District
301 NE Tudor Road
Lee's Summit, MO 64086

architect:
Gould Evans
4200 Pennsylvania Avenue
Kansas City, MO 64111
816.931.6655 voice
www.goulddevans.com

structural engineer:
Bob D. Campbell & Company, Inc.
4338 Bellevue Avenue
Kansas City, MO 64111
816.331.4144

civil engineer:
Kaw Valley Engineering
14700 West 134th Terrace
Lenexa, KS 66215
913.485.0318

mechanical/electrical engineer:
Henderson Engineers
8345 Lenexa Drive | Suite 300
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202003134
MO. CORPORATE NO. E-5560
EXPIRES 12/31/2021

REVISIONS

NUMBER	DESCRIPTION	DATE
5	PH 13	02.29.2021
1	Addendum 3	10.23.2020

PROJECT NO: 0119-0101
DATE: September 28, 2020

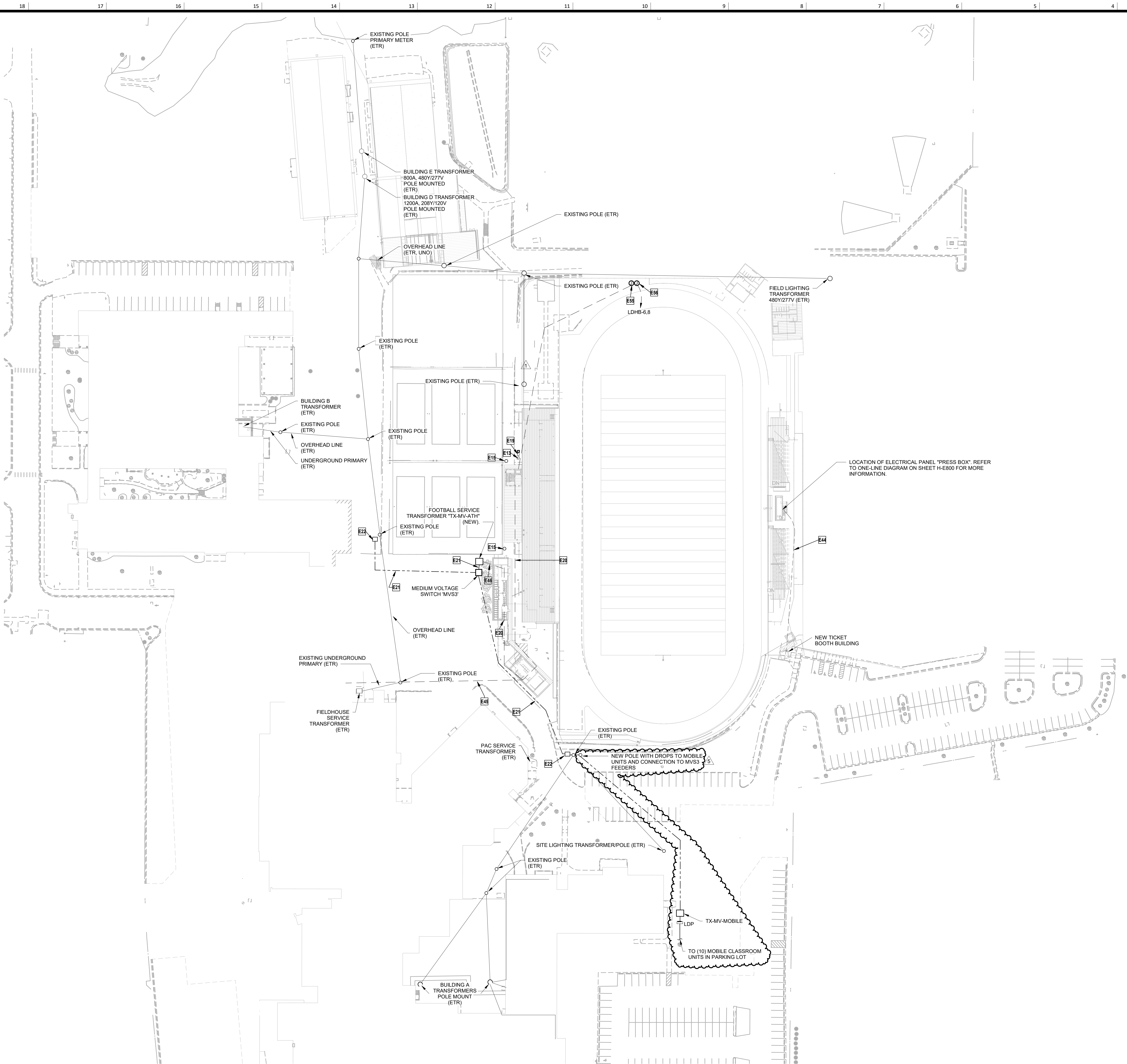
ELECTRICAL SITE PLAN
- NEW

H-E002

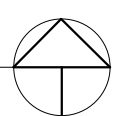
BID SET

ELECTRICAL PLAN NOTES:

- E13 APPROXIMATE LOCATION OF EXISTING TENNIS COURT LIGHTING CABINET.
- E15 NEW LOCATION OF EXISTING TENNIS COURT LIGHT POLES. PROVIDE NEW FEEDER FROM POLE LOCATION TO TENNIS COURT LIGHTING CABINET. NEW FEEDER SHALL MATCH EXISTING SIZE. RE-AIM FIXTURES TO MAINTAIN UNIFORM ILLUMINATION ACROSS THE TENNIS COURTS.
- E19 NEW LOCATION OF EXISTING TENNIS COURT LIGHTING CONTROLLER. PROVIDE NEW FEEDER FROM CONTROLLER TO CABINET. NEW FEEDER SHALL MATCH EXISTING.
- E20 PROVIDE THE FOLLOWING: 2" CONDUIT FOR TELECOM. CONDUIT FOR ELECTRICAL FEEDER, AND (1) 1" SPARE CONDUIT BETWEEN BUILDINGS AS SHOWN. REFER TO ELECTRICAL ONE-LINE DIAGRAM ON SHEET H-E800 FOR ELECTRICAL FEEDER CONDUIT SIZING. COORDINATE ROUTING WITH CIVIL ENGINEER.
- E21 NEW UNDERGROUND PRIMARY ROUTING SHOWN FOR DIAGRAMMATIC PURPOSES. COORDINATE ROUTING AND DEPTH OF MEDIUM VOLTAGE CONDUITS WITH CIVIL DRAWINGS. REFER TO ONE-LINE DIAGRAM FOR CONDUIT AND WIRE SIZES.
- E22 HAND HOLE FOR CONNECTION TO EXISTING POLE MOUNTED MEDIUM VOLTAGE INFRASTRUCTURE.
- E44 PROVIDE THE FOLLOWING: 2" CONDUIT FOR TELECOM. CONDUIT FOR ELECTRICAL FEEDER, AND (1) 1" SPARE CONDUIT BETWEEN BUILDINGS AS SHOWN. REFER TO ELECTRICAL ONE-LINE DIAGRAM ON SHEET H-E801 FOR ELECTRICAL FEEDER CONDUIT SIZING. COORDINATE ROUTING WITH CIVIL ENGINEER.
- E45 PROVIDE (2) 2" CONDUITS FOR TELECOM. ROUTE FROM IDF ROOM AT SCHOOL BUILDING TO CONCESSION BUILDING. COORDINATE ROUTING WITH CIVIL ENGINEER AND OWNER.
- E46 REFER TO ELECTRICAL ONE-LINE ON SHEET H-E800 FOR CONDUIT SIZING FROM TX-MV-ATH TO MDP.
- E55 PROVIDE EMPTY 1-1/4" CONDUIT FROM COMMAND CENTER H1-204 IN PRESS BOX TO EXISTING SCOREBOARD. TERMINATE CONDUIT IN HAND HOLE NEAR SCOREBOARD FOR FUTURE CONNECTION OF LOW VOLTAGE WIRING.
- E56 PROVIDE NEW POWER CONNECTION TO EXISTING SCOREBOARD AS SHOWN. NEW CONDUIT SHALL BE ROUTED PARALLEL TO THE EMPTY LOW VOLTAGE CONDUIT. PULL (4)#10, #10G FOR THIS CIRCUIT. CURRENT SCOREBOARD IS SINGLE PHASE BUT PROPOSED NEW EQUIPMENT WILL BE 3-PHASE.



1 ELECTRICAL SITE PLAN
1" = 50'-0"



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NUMBER DESCRIPTION DATE
5 PW 13 02.19.2021

PROJECT NO: 0119-0101
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ELECTRICAL
SCHEDULES

H-E601

BID SET

PANELBOARD: HDT (NEW)														EQUIPMENT GROUND BUS									
BUS AMPS: 125A MAIN SIZE/TYPE: 125A M.C.B. VOLTS/PHASE: 480Y/277 V 3P/4W SUPPLIED BY: MDP														FAULT CURRENT: REFER TO ONE-LINE DIAGRAM AIC RATED: FULLY RATED AIC RATING: FCA +10% MINIMUM SERVES: TENNIS MOUNTING: SURFACE LOCATION: MEP/Custodian 2-102									
														LINE-SIDE LUGS: MECHANICAL									
CKT NO.	DESCRIPTION	LOAD TYPE	NOTES	WIRE SIZE	BKR AMP	P	PHASE A	PHASE B	PHASE C	P	BKR AMP	WIRE SIZE	NOTES	LOAD TYPE	DESCRIPTION	CKT NO.							
1	PWR - UH TENNIS STORAGE 2-101	R Z M		12	20	1	3000	564		1	20	12		L	LTS - RESTROOM BUILDING	2							
3									2728	478		1	20	12		L Z	LTS - EXTERIOR LIGHTING	4					
5	TX-LDT			OL	70	3			2232	3000	2682	3000	1	20	12	U	PWR - UH-1	6					
7		U						2500	1667		1	20	12	U	PWR - UH-2	8							
9	PWR - UH-3			12	20	3			2500	1667	3	20	12	U	PWR - UH-5	10							
11									2500	1667								12					
13		U		12	20	3		1667	5000		3	25	10	U	WH1	14							
15	PWR - UH-4								1667	5000	1667	5000	3	25	10	U	WH1	16					
17									1667	5000								18					
19		U		12	20	3		2500	0		1	20			SPARE	20							
21	PWR - UH-6								2500	0	2500	0	1	20		SPARE	22						
23									2500	0			1	20		SPARE	24						
25	SPARE			20	1			0	0		1	20			SPARE	26							
27	SPARE			20	1			0	0		1	20			SPARE	28							
29	SPARE			20	1	0	0				1	20			SPARE	30							
31	SPARE			20	1			0	0		1	20			SPARE	32							
33	SPARE			20	1			0	0		1	20			SPARE	34							
35	SPARE			20	1				0	0	1	20			SPARE	36							
37	SPARE			20	1	0	0				1	20			SPARE	38							
39	SPARE			20	1			0	0		1	20			SPARE	40							
41	SPARE			20	1				0	0	1	20			SPARE	42							
TOTAL LOAD (VA):							22129 VA	16539 VA	19015 VA														
TOTAL AMPS:							81 A	60 A	70 A														
LOAD TYPE		CONNECTED LOAD	DEMAND FACTOR	NEC DEMAND	PANELBOARD NOTES					PANELBOARD TOTALS													
EXISTING LOAD (E)		0 VA	100%	0 VA						TOTAL CONNECTED LOAD 57684 VA													
COOLING (C)		0 VA	0%	0 VA						TOTAL NEC LOAD 58117 VA													
HEATING (H)		0 VA	100%	0 VA																			
LIGHTING (L)		1037 VA	125%	1286 VA						TOTAL CONNECTED CURRENT 69 A													
RECEPTACLES (R)		1620 VA	100%	1620 VA						TOTAL NEC DEMAND CURRENT 70 A													
MOTORS (M)		4776 VA	100%	4776 VA																			
SUPPLEMENTAL HEAT (U)		49000 VA	100%	49000 VA																			
MISC EQUIP (Z)		565 VA	100%	565 VA																			
REFRIGERATION (F)		0 VA	100%	0 VA																			
SIGN/DISPLAY (D)		0 VA	125%	0 VA																			
KITCHEN (K)		0 VA	100%	0 VA																			
LARGEST MOTOR		696 VA	125%	870 VA																			
SHOW WINDOW (W)		0 VA	125%	0 VA																			
TRACK LIGHTING		0 VA	100%	0 VA																			

PANELBOARD: LDT (NEW)										EQUIPMENT GROUND BUS										
BUS AMPS: 225A MAIN SIZE/TYPE: 150A M.C.B. VOLTS/PHASE: 208Y/120 V 3P/4W SUPPLIED BY: HDT VIA TX-LDT										FAULT CURRENT: REFER TO ONE-LINE DIAGRAM AIC RATED: FULLY RATED AIC RATING: FCA +10% MINIMUM SERVES: TENNIS MOUNTING: SURFACE LOCATION: MEP/Custodian 2-102										
										LINE-SIDE LUGS: MECHANICAL										
CKT NO.	DESCRIPTION	LOAD TYPE	NOTES	WIRE SIZE	BKR AMP	P	PHASE A	PHASE B	PHASE C	P	BKR AMP	WIRE SIZE	NOTES	LOAD TYPE	DESCRIPTION	CKT NO.				
1	PWR - EF WOMENS RR 2-104	M		12	20	1	696	0			1	20			SPARE	2				
3	PWR - EF MENS RR 2-103	M		12	20	1		696	0		1	20			SPARE	4				
5	PWR - TF WOMENS RR	M		12	20	1			696	0	1	20			SPARE	6				
7	RCPT - 2-104 GENERAL	R		12	20	1	540	0			1	20			SPARE	8				
9	RCPT - 2-103 GENERAL	R		12	20	1		540	0		1	20			SPARE	10				
11	RCPT - 2-101/102 GENERAL	R		12	20	1			360	0	1	20			SPARE	12				
13	PWR - EF-1	M		12	15	1	696	0			1	20			SPARE	14				
15	PWR - EF-2	M		12	15	1		696	0		1	20			SPARE	16				
17	PWR - TF-1	M		12	15	1			696	0	1	20			SPARE	18				
19	PWR - TF-2	M		12	15	1	696	0			1	20			SPARE	20				
21	PWR - RECIRC PUMP	M		12	15	1		500	0		1	20			SPARE	22				
23	RCPT - 2-101 EXTERIOR	R		12	20	1			180	0	1	20			SPARE	24				
25	PWR - RR MOTORIZED DAMPERS	M		12	20	1	100	0			1	20			SPARE	26				
27	PWR - 2-102 DDC CONTROLS	Z		12	20	1		250	0		1	20			SPARE	28				
29	PWR - RR AUTO FAUCETS	Z		12	20	1			300	0	1	20			SPARE	30				
31	SPARE			20	1		0	0			1	20			SPARE	32				
33	SPARE			20	1			0	0		1	20			SPARE	34				
35	SPARE			20	1				0	0	1	20			SPARE	36				
37	SPARE			20	1		0	0			1	20			SPARE	38				
39	SPARE			20	1			0	0		1	20			SPARE	40				
41	SPARE			20	1				0	0	1	20			SPARE	42				
TOTAL LOAD (VA):							2728 VA	2682 VA	2232 VA											
TOTAL AMPS:							23 A	23 A	19 A											
LOAD TYPE										PANELBOARD TOTALS										
EXISTING LOAD (E)										TOTAL CONNECTED LOAD										7642 VA
COOLING (C)										TOTAL NEC LOAD										7816 VA
HEATING (H)										TOTAL CONNECTED CURRENT										21 A
LIGHTING (L)										TOTAL NEC DEMAND CURRENT										22 A
RECEPTACLES (R)																				
MOTORS (M)																				
SUPPLEMENTAL HEAT (U)																				
MISC EQUIP (Z)																				
REFRIGERATION (F)																				
SIGN/DISPLAY (D)																				
KITCHEN (K)																				
LARGEST MOTOR																				
SHOW WINDOW (W)																				
TRACK LIGHTING																				

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MO. EXPIRES 12/31/2021

REVISIONS

NUMBER DESCRIPTION DATE
5 15 02.19.2021

PROJECT NO: 0119-0101
DATE: September 28, 2020

ELECTRICAL ONE-LINE DIAGRAM

H-E800

BID SET

ELECTRICAL PLAN NOTES:

E50 PROVIDE GROUNDING AT EQUIPMENT PER DETAIL 1 ON SHEET H-E801.

FEEDER SCHEDULE:

SIZES ARE BASED ON COPPER (CU) THHN/THWN-2 INSULATION. UNO. NUMBER DESIGNATIONS PRECEDED BY "A" INDICATE THAT THE SIZE IS BASED ON ALUMINUM (AL) WIRE. AL CONDUCTOR SIZES ARE BASED ON XHHW-2 INSULATION. UNO. ALL CONDUCTOR SIZES ARE BASED ON 75 DEG C RATED TERMINATIONS. UNO. CONDUIT SIZES SHOWN ARE APPROPRIATE FOR SCHEDULE 40 PVC. EMT, GRS, IMC AND RMC; ADJUST SIZE AS NEEDED FOR OTHER RACEWAY TYPES. FOR ANY OTHER CONDITIONS MODIFY SIZES PER CODE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

FEEDER TAG	FEEDER DESCRIPTION
33	(3)#10, (1)#10 G, 1/2" C
53	(3)#8, (1)#10 G, 3/4" C
72	(2)#4, (1)#8 G, 3/4" C
73	(3)#4, (1)#8 G, 1" C
124	(4)#1, (1)#6 G, 1-1/2" C
153	(3)#1/0, (1)#6 G, 1-1/2" C
204	(4)#3/0, (1)#6 G, 2" C
AS1204	(4) 3" C, EACH W/ (4)-500 kcmil
AT104	(4)#1, (1)#6 SSBJ, 1-1/2" C
ETR	ETR
G2	#2 COPPER GROUND, 3/4" C
G4	#4 COPPER GROUND, 3/4" C
G6	#6 COPPER GROUND, 3/4" C
G8	#8 COPPER GROUND, 3/4" C
G20	#20 COPPER GROUND, 3/4" C
MV20	(3)#20 (15KV), (1)#4 (800V), 6" C
MV500	(3)-500kcmil (15KV), (1)#20 (800V), 6" C
S404	(2) 2" C, EACH W/ (4)#30
T104	(4)#3, (1)#8 SSBJ, 1-1/4" C
T123	(3)#1, (1)#6 SSBJ, 1-1/4" C
T154	(4)#1/0, (1)#6 SSBJ, 1-1/2" C

ELECTRICAL UTILITY CONTACT NOTE:

UTILITY COMPANY: EVERGY
UTILITY CONTACT: RON DEJARNETTE
EMAIL: ron.dejarnette@evergy.com

FAULT CURRENT GENERAL NOTE (ESTIMATED VALUE):

THE MAXIMUM AVAILABLE 3-PHASE SYMMETRICAL FAULT CURRENT VALUE AT THE UTILITY TRANSFORMER SECONDARY/POINT OF SERVICE COULD NOT BE DETERMINED AT THE TIME OF THIS SUBMITTAL. THE ESTIMATED WORST CASE VALUE OF 18,402 A IS BASED ON AN INFINITE BUS CALCULATION AT THE UTILITY TRANSFORMER. CONTRACTOR SHALL VERIFY ACTUAL AVAILABLE FAULT CURRENT VALUE WITH UTILITY. NOTIFY ENGINEER IF ACTUAL VALUE EXCEEDS ESTIMATED CALCULATED VALUE. ESTIMATED DESIGN VALUE IS BASED ON THE FOLLOWING:

TX-MV-ATH:
MEDIUM VOLTAGE TRANSFORMER PRIMARY VOLTAGE: 12,470V
MEDIUM VOLTAGE TRANSFORMER SECONDARY VOLTAGE:
480Y/277V, 3Ø, 4W
MEDIUM VOLTAGE TRANSFORMER SIZE: 300KVA, Z=2.0%

BUILDING LOAD SUMMARY (MDP)

BUILDING OCCUPANCY TYPE: OFFICE BUILDING	SERVICE DESCRIPTION:		
BUILDING SQUARE FOOTAGE: 10000	480Y/277 V		
LOAD TYPE	CONNECTED LOAD	DEMAND FACTOR	NEC DEMAND
EXISTING LOAD (E)	0 VA	100%	0 VA
COOLING (C)	2288 VA	0%	0 VA
HEATING (H)	4000 VA	100%	4000 VA
LIGHTING (L) (PER NEC-220)	35000 VA	125%	43750 VA
RECEPTACLES (R)	12700 VA	89%	11350 VA
MOTORS (M)	11314 VA	100%	11314 VA
SUPPLEMENTAL HEAT (U)	105770 VA	100%	105770 VA
MISC EQUIP (Z)	24015 VA	100%	24015 VA
REFRIGERATION (F)	0 VA	100%	0 VA
SIGNS/DISPLAY (D)	1200 VA	125%	1500 VA
KITCHEN (K)	8000 VA	65%	5200 VA
LARGEST MOTOR	9977 VA	125%	12471 VA
SHOW WINDOW (W)	0 VA	125%	0 VA
TRACK LIGHTING	0 VA	100%	0 VA
TOTAL LOAD	214264 VA		219370 VA
TOTAL AMPACITY	258	AMPS	264
SERVICE AMPACITY		AMPS	400
SPARE CAPACITY		AMPS	136

ONE-LINE DIAGRAM GENERAL NOTES:

- THE INFORMATION SHOWN IN THE SHORT-CIRCUIT AND VOLTAGE DROP CALCULATIONS SCHEDULE IS SHOWN FOR CALCULATION PURPOSES ONLY. CONTRACTOR SHALL NOT USE THE CONDUIT TYPES, CONDUCTOR TYPES, SIZES, QUANTITIES OR LENGTHS FOR TAKEOFFS OR BIDDING PURPOSES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN THIS SCHEDULE AND OTHER PORTIONS OF THE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL NOTIFY ENGINEER OF AS-BUILT CONDITIONS THAT CONSTITUTE A CHANGE FROM WHAT IS SHOWN BELOW; THIS INCLUDES CONDUCTOR LENGTHS DIFFERING BY MORE THAN 10%.
- REFER TO THE SHORT-CIRCUIT AND VOLTAGE DROP CALCULATIONS TABLE ON THIS SHEET. AVAILABLE FAULT CURRENT INFORMATION IS LISTED UNDER THE FAULT CURRENT COLUMN. VOLTAGE DROP VALUES ARE LISTED UNDER THE "CUMULATIVE VOLTAGE DROP" COLUMN. THE AIC/SCCR RATING OF THE EQUIPMENT SHALL NOT BE LESS THAN THE AVAILABLE 3-PHASE SYMMETRICAL FAULT CURRENT. ALL SERIES RATED EQUIPMENT SHALL BE PROPERLY LISTED AND LABELED PER CODE.
- FEEDER NUMBER DESIGNATIONS PRECEDED BY "V" INDICATE THAT THE CONDUCTORS ARE UP-SIZED DUE TO VOLT-DROP CONSIDERATIONS. PROVIDE LUG ADAPTERS AS NEEDED IN ORDER TO PROPERLY LAND CONDUCTORS AT TERMINATIONS.
- FEEDER SIZES ARE BASED ON COPPER (CU) THHN/THWN-2 INSULATION, UNLESS NOTED OTHERWISE. CONDUIT SIZES SHOWN ARE APPROPRIATE FOR SCHEDULE 40 PVC. EMT, GRS, IMC AND RMC; ADJUST SIZE AS NEEDED FOR OTHER RACEWAY TYPES. NUMBER DESIGNATIONS PRECEDED BY "A" INDICATE THAT THE SIZE IS BASED ON ALUMINUM (AL) WIRE. AL CONDUCTOR SIZES ARE BASED ON XHHW-2 INSULATION, UNLESS NOTED OTHERWISE. AL WIRE MAY BE SUBSTITUTED FOR CU FEEDERS AS ALLOWED BY CODE. SPECIFICATIONS AND OWNER, UNLESS NOTED OTHERWISE, AT CONTRACTOR'S OPTION. CU WIRE MAY BE SUBSTITUTED FOR AL, UNLESS NOTED OTHERWISE. ALL CONDUCTOR SIZES ARE BASED ON 75 DEG C RATED TERMINATIONS. UNLESS NOTED OTHERWISE, FOR ANY OTHER CONDITIONS MODIFY SIZES PER CODE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- BRANCH CIRCUIT SIZES ARE BASED ON COPPER (CU) THHN/THWN-2 INSULATION, UNLESS NOTED OTHERWISE. CONDUIT SIZES SHOWN ARE APPROPRIATE FOR SCHEDULE 40 PVC. EMT, GRS, IMC AND RMC; ADJUST SIZE AS NEEDED FOR OTHER RACEWAY TYPES. ALL CONDUCTOR SIZES ARE BASED ON 60 DEG C RATED TERMINATIONS, UNLESS NOTED OTHERWISE, FOR ANY OTHER CONDITIONS MODIFY SIZES PER CODE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- INSTALL FEEDERS OVERHEAD AS HIGH AS PRACTICABLE AND ORTHOGONALLY ALONG BUILDING STRUCTURE, UNLESS NOTED OTHERWISE. COORDINATE FINAL ROUTING WITH OTHER TRADES.
- CIRCUIT BREAKERS RATED 1200A OR HIGHER SHALL HAVE APPROPRIATE DOCUMENTATION AND METHOD TO REDUCE CLEARING TIME IN ORDER TO REDUCE ARC FLASH ENERGY PER CODE. PROVIDE ELECTRONIC TRIP UNIT WITH INSTANTANEOUS TRIP AND ENERGY-REDUCING MAINTENANCE SWITCH WITH LOCAL STATUS INDICATOR FOR COMPLIANCE. PROVIDE PROVISIONS TO INTERFACE WITH OWNER ALARM/MONITORING SYSTEM TO INDICATE MAINTENANCE SWITCH STATUS.
- PROVIDE A PERMANENT LABEL ON FRONT OF EQUIPMENT ENCLOSURE. REFER TO SPECIFICATIONS FOR LABEL REQUIREMENTS. LABEL SHALL READ AS FOLLOWS (INCLUDE RESPECTIVE NAMES IN BLANKS):

SERVICE EQUIPMENT LABEL:

EXAMPLE:
208Y/120V, 60HZ
800A
SCCR = 65,000A
MAX AVAILABLE FAULT CURRENT = 58,815A
CALCULATED: 01/01/2018

PANELBOARD/SWITCHBOARD LABEL:
LINE 1: PANELBOARD " " SUPPLIED BY UPSTREAM
LINE 2: PANELBOARD/SWITCHBOARD " "
LINE 3: LOCATED IN " "
LINE 4: PANELBOARD " " SUPPLIES DOWNSTREAM
LINE 5: PANELBOARD(S) " "

TRANSFORMERS LABEL:
LINE 1: TRANSFORMER " " SUPPLIED BY UPSTREAM
LINE 2: PANELBOARD/SWITCHBOARD " "
LINE 3: LOCATED IN " "
LINE 4: TRANSFORMER " " SUPPLIES DOWNSTREAM
LINE 5: PANELBOARD(S) " "

ONE-LINE DIAGRAM GENERAL NOTES:

- COORDINATE WORK WITH ARCHITECTURAL PHASING DRAWINGS TO PROPERLY STAGE TRANSITION TO PROVIDE POWER TO EXISTING, NEW AND TEMPORARY LOADS. MONITOR LOADS ON DISTRIBUTION SYSTEM TO MAKE SURE SHIFTING OF LOADS DOES NOT OVERLOAD ELECTRICAL EQUIPMENT.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXISTING AIC/SCCR RATING OF EACH PANELBOARD/SWITCHBOARD. ALL NEW AND EXISTING OVER-CURRENT PROTECTION DEVICES (CIRCUIT BREAKERS AND FUSES) MUST HAVE AN AIC/SCCR RATING EXCEEDING THE AVAILABLE FAULT CURRENT AT THAT POINT IN THE SYSTEM. NOTIFY THE OWNER AND THE ENGINEER IF THE EXISTING EQUIPMENT DOES NOT COMPLY WITH THIS REQUIREMENT.
- VERIFY THE INTEGRITY OF THE EXISTING GROUNDING ELECTRODE SYSTEM AND THAT THE NEUTRAL AND GROUND ARE PROPERLY BONDED TOGETHER AT THE POINT OF SERVICE ENTRANCE. NOTIFY THE OWNER AND THE ENGINEER OF ANY EXISTING DEFICIENCIES.
- AS APPLICABLE, OBTAIN THE FOLLOWING INFORMATION IN REGARD TO THE EXISTING ELECTRICAL SERVICE AND DISTRIBUTION SYSTEM AND REPORT FINDINGS TO THE ENGINEER FOR ANALYSIS PRIOR TO BEGINNING CONSTRUCTION:

A. AVAILABLE FAULT CURRENT DELIVERED BY THE UTILITY COMPANY AT THE POINT OF SERVICE. INCLUDE THE AVAILABLE FAULT CURRENT DELIVERED TO THE TENANT SPACE BY THE OWNERS DISTRIBUTION SYSTEM.

B. PROVIDE A PLAN SKETCH OF THE OWNERS DISTRIBUTION EQUIPMENT LOCATION RELATIVE TO THE ENTIRE BUILDING. INCLUDE THE LOCATION OF TENANT SPACE UTILITY METER AND SERVICE DISCONNECT, RELEVANT FEEDER ROUTING AND LENGTHS.

C. PROVIDE A SKETCH OF THE ONE-LINE SHOWING THE PATH FROM THE UTILITY TRANSFORMER TO THE OWNER EQUIPMENT TO THE TENANT SPACE. INCLUDE FEEDER CONDUCTOR MATERIAL, (AL OR CU), NUMBER AND SIZE OF CONDUCTORS, GROUND LENGTH, CONDUIT SIZE AND CONDUIT TYPE.

D. TYPE OF SERVICE DISCONNECT OVER-CURRENT PROTECTION DEVICE (FUSE OR CIRCUIT BREAKER), AMPERE RATING OF THE DEVICE AND AIC/SCCR RATING OF THE DEVICE.

E. AIC/SCCR RATING AT EACH EXISTING SWITCHBOARD/PANELBOARD.

ONE-LINE DIAGRAM SUPPLEMENTAL SPECIFICATIONS:

- GROUNDING ELECTRODE SYSTEM SHALL BE PER LOCAL REQUIREMENT AND SHALL NOT BE LESS STRINGENT THAN THAT SPECIFIED IN THE CONSTRUCTION DOCUMENTS.
- PROVIDE PROPERLY SIZED LUGS FOR ALL EQUIPMENT, CIRCUIT BREAKERS, AND OTHER ELECTRICAL DEVICES TO ACCOMMODATE INSTALLED CONDUCTORS. A LARGER FRAME, OVERSIZED LUGS OR NON-STANDARD PRODUCT MAY BE REQUIRED IN SOME INSTANCES. UTILIZE PIN ADAPTERS ONLY IF NECESSARY AND ONLY AS ALLOWED BY MANUFACTURER AND AHJ.
- PROVIDE ANY AVAILABLE SPACE IN SWITCHBOARDS/PANELBOARDS WITH BUSSING.
- PROVIDE (4) EMPTY 1" CONDUITS WITH PULL STRINGS FROM EACH RECESSED PANELBOARD UP TO ACCESSIBLE CEILING SPACE. CAP AND LABEL CONDUITS FOR FUTURE USE.
- PROVIDE TYPED FINAL CIRCUIT DIRECTORY FOR ALL PANELBOARDS TO REFLECT ACTUAL AS-BUILT CONDITIONS. COORDINATE FINAL ROOM NAMES, NUMBERS AND DESCRIPTIONS WITH OWNER PRIOR TO COMPLETION. CIRCUIT DESCRIPTIONS SHALL BE PER CODE AND SHALL BE DISTINGUISHABLE FROM ALL OTHERS.

