

# RE-BID: USCA ETHERREDGE STAGE RIGGING REPLACEMENT

PROJECT NUMBER: H29-I356/50003363-2



PROJECT LOCATION 

RIGGING SYSTEM DRAWINGS IN THIS SET ARE SCHEMATIC IN NATURE. EXCEPT AS NOTED IN STRUCTURAL AND ELECTRICAL DOCUMENTS, WORK ASSOCIATED WITH THIS BID PACKAGE IS CONSIDERED DELEGATED DESIGN. SYSTEM AND COMPONENTS TO BE DESIGNED AND ENGINEERED BY CONTRACTOR'S NC LICENSED DESIGN PROFESSIONAL PRIOR TO INSTALLATION AND ACCEPTANCE.

**DRAWING INDEX:**

T-000	COVER SHEET
QTR-101	PERFORMANCE RIGGING PLAN
QTR-102	PERFORMANCE RIGGING LONGITUDINAL SECTION
QTR-103	PERFORMANCE RIGGING TRANSVERSE SECTION
EYM-101	PERFORMANCE MACHINERY ELECTRICAL REQUIREMENTS
E-1	ELECTRICAL DEMO PLAN
E-2	ELECTRICAL POWER PLAN
E-3	ELECTRICAL NOTES & RISER DIAGRAM

Re-Bid: USCA ETHERREDGE  
STAGE RIGGING  
REPLACEMENT

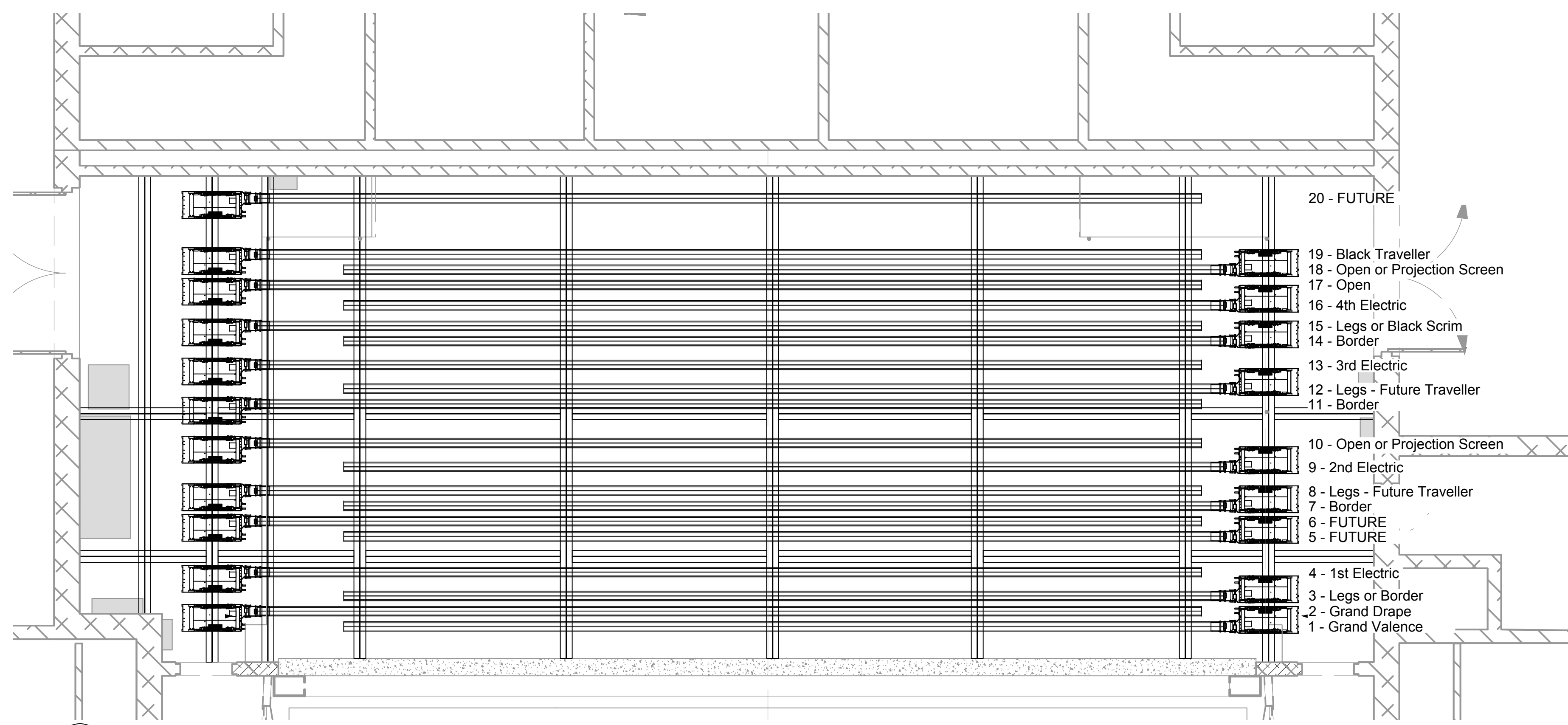
USC - AIKEN

471 UNIVERSITY PARKWAY  
AIKEN, SC 29801

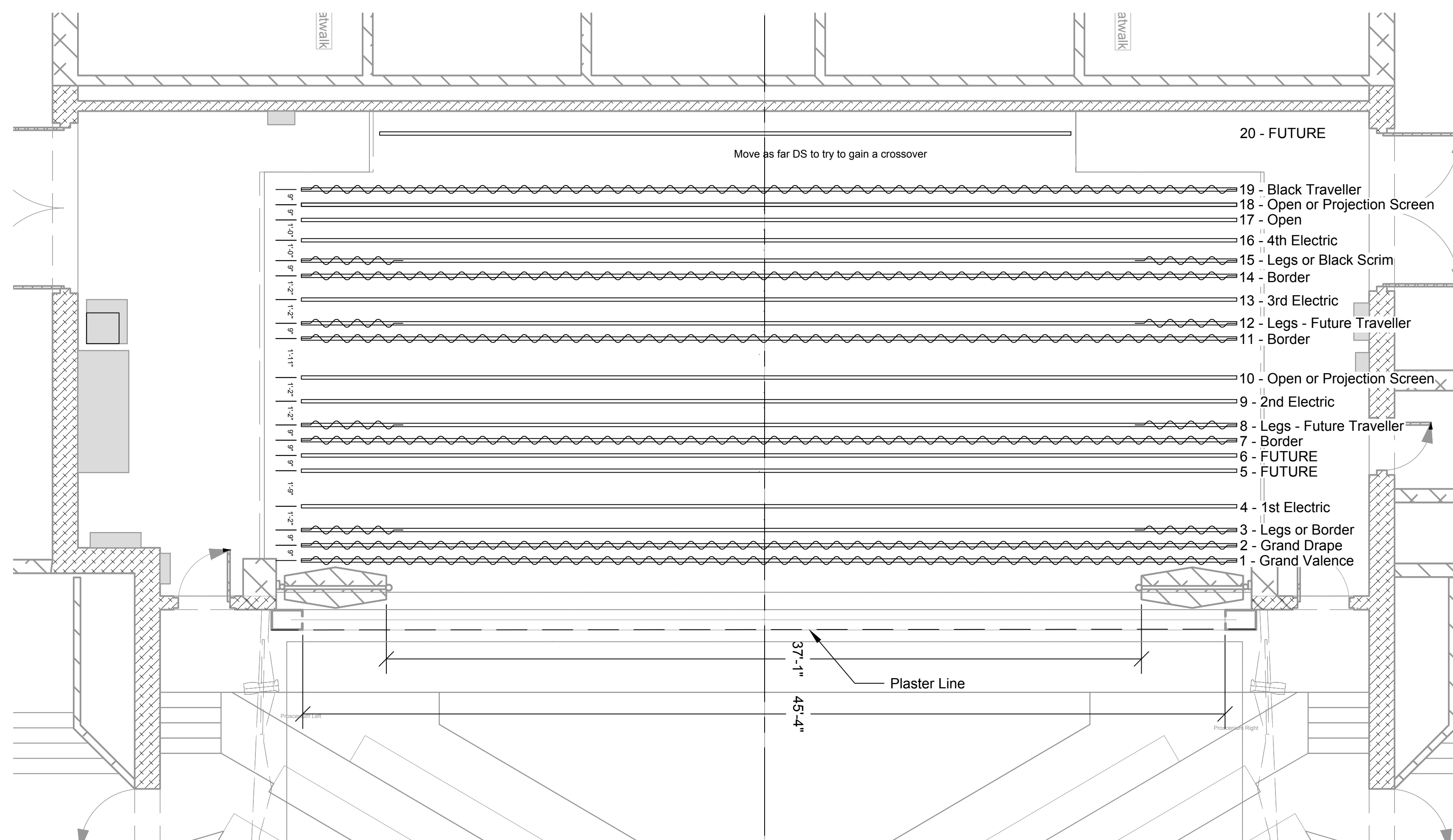
DATE: 08/27/19 REQUEST FOR PROPOSAL  
PROJECT NUMBER: H29-I356/50003363-2  
SCALE: XXXXXX

TITLE PAGE

**T-000**



**2 STAGE RIGGING CEILING LEVEL PLAN**  
SCALE: 1/4" = 1'-0"



**1 STAGE RIGGING STAGE LEVEL PLAN**  
SCALE: 1/4" = 1'-0"

SET	DATUM PLASTER LINE	DESCRIPTION	OPERATION	BATTEN LENGTH	BATTEN TYPE	NO. LINES	LIVE CAPACITY	COMMENTS
FC	6"	Fire Curtain		A/R	Single Pipe	A/R	A/R	
1	3'-5"	Grand Valance	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
2	4'-2"	Grand Drape	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
3	4'-11"	Legs or Border	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
4	6'-1"	1st Electric	Fixed Speed Hoist	46'-0"	Single Pipe	5	2000#	
5	7'-10"	FUTURE	Variable Speed Hoist					
6	8'-7"	FUTURE	Variable Speed Hoist					
7	9'-4"	Border	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
8	10'-1"	Legs - Future Traveller	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
9	11'-3"	2nd Electric	Fixed Speed Hoist	46'-0"	Single Pipe	5	2000#	
10	12'-5"	Open or Projection Screen	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
11	14'-4"	Border	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
12	15'-1"	Legs - Future Traveller	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
13	16'-3"	3rd Electric	Fixed Speed Hoist	46'-0"	Single Pipe	5	2000#	
14	17'-5"	Border	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
15	18'-2"	Legs or Black Scrim	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
16	19'-2"	4th Electric	Fixed Speed Hoist	46'-0"	Single Pipe	5	2000#	
17	20'-2"	Open	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
18	20'-11"	Open or Projection Screen	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
19	21'-8"	Black Traveller	Variable Speed Hoist	46'-0"	Single Pipe	5	1200#	
20	24'-5"	FUTURE	Variable Speed Hoist					

**3 LINESET SCHEDULE**

**Re-BID: USCA ETHEREDGE  
STAGE RIGGING  
REPLACEMENT**

USC - AIKEN

471 UNIVERSITY PARKWAY  
AIKEN, SC 29801

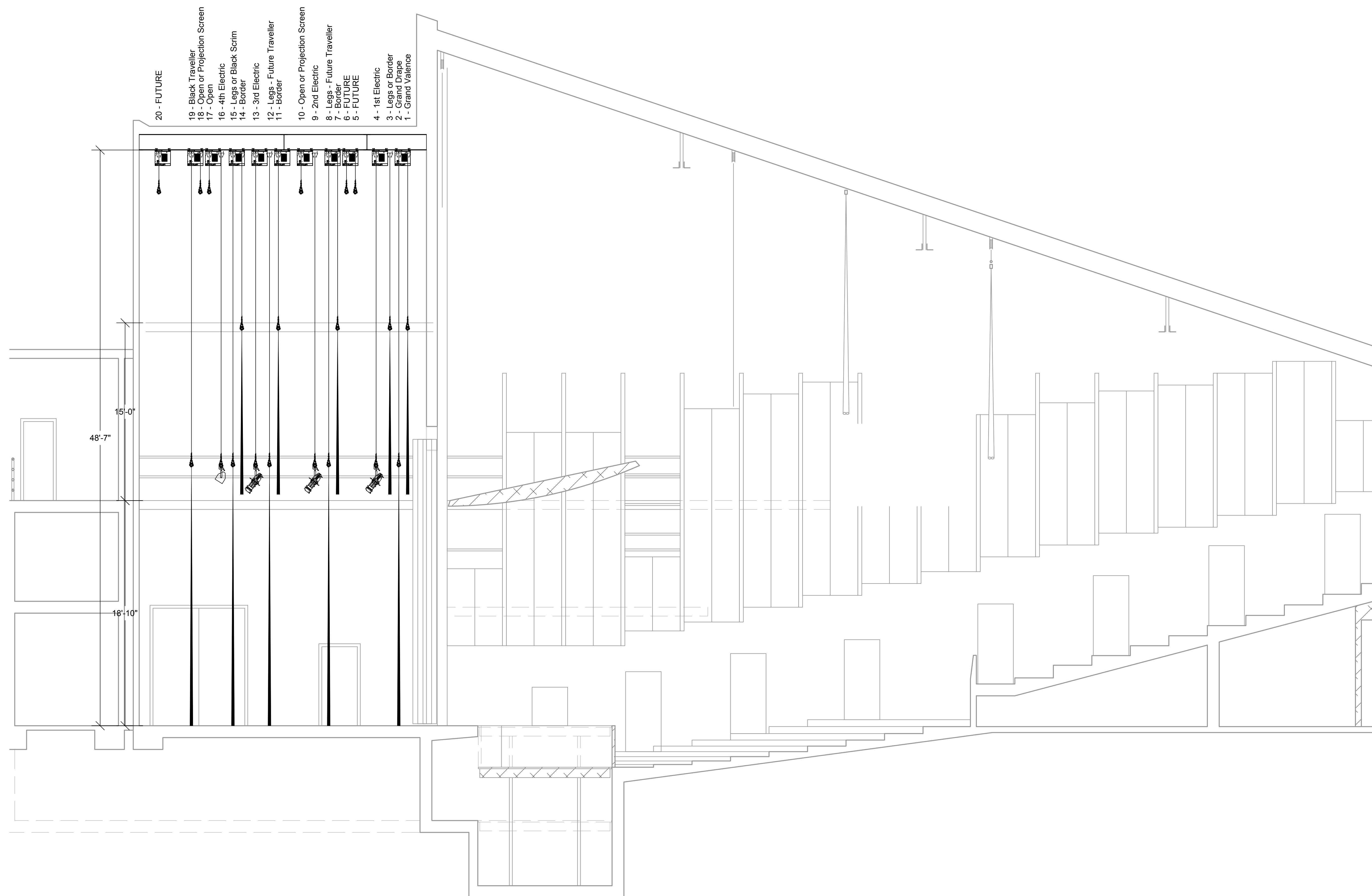
DATE: 08/27/19 REQUEST FOR PROPOSAL

PROJECT NUMBER: H29-1356/50003363-2

SCALE:

**PERFORMANCE RIGGING  
PLAN**

**QTR-101**



**Re-BID: USCA ETHEREDGE  
STAGE RIGGING  
REPLACEMENT**

**USC - AIKEN**

471 UNIVERSITY PARKWAY  
AIKEN, SC 29801

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

DATE: 08/27/19 REQUEST FOR PROPOSAL

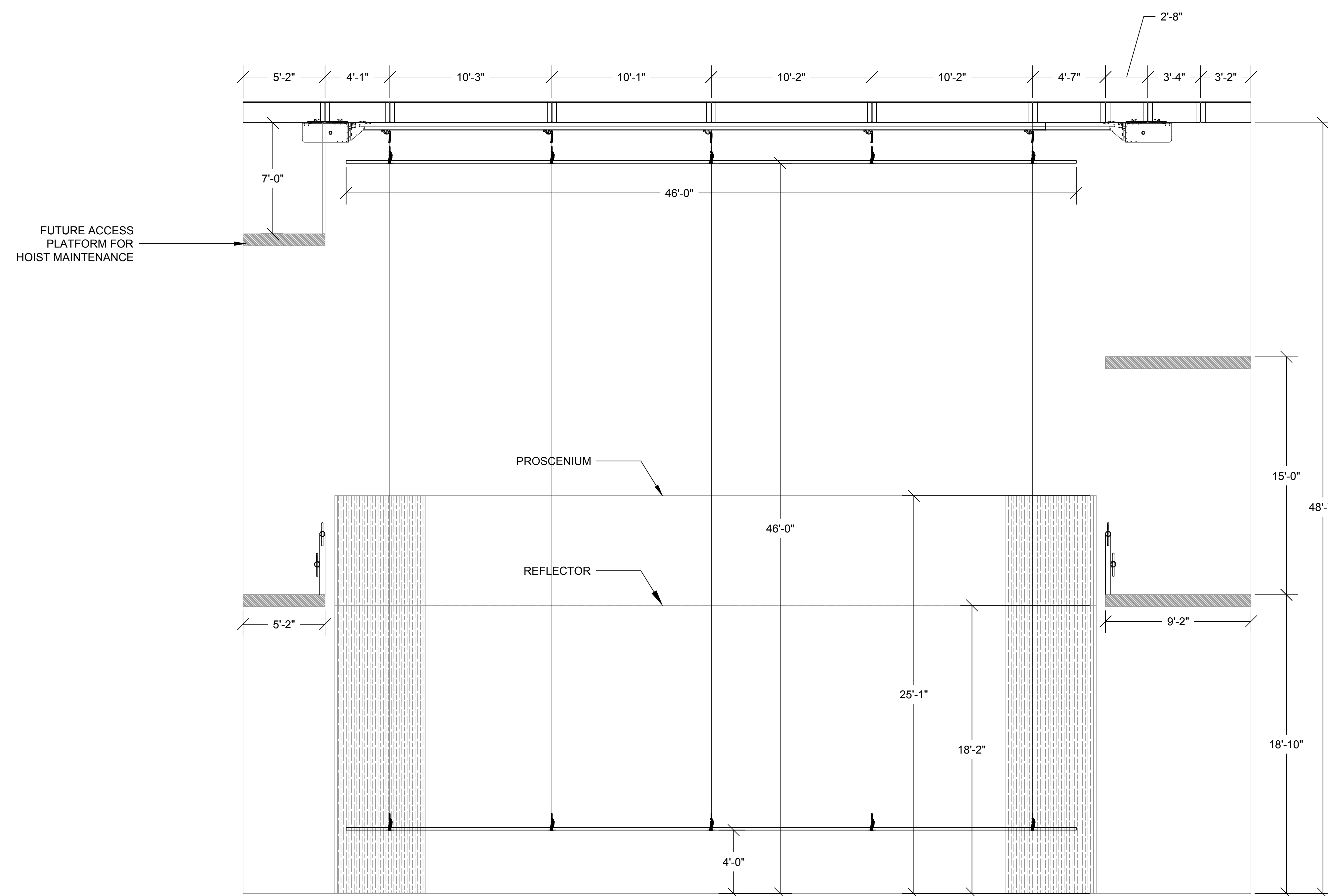
PROJECT NUMBER: H29-1356/50003363-2

SCALE:

**PERFORMANCE RIGGING  
LONGITUDINAL SECTION**

**QTR-102**

① STAGE RIGGING SECTION  
SCALE: 1/4" = 1'-0"



① STAGE RIGGING TRANSVERSE SECTION  
SCALE: 1/4" = 1'-0"

**Re-BID: USCA ETHEREDGE  
STAGE RIGGING  
REPLACEMENT**

**USC - AIKEN**

471 UNIVERSITY PARKWAY  
AIKEN, SC 29801

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

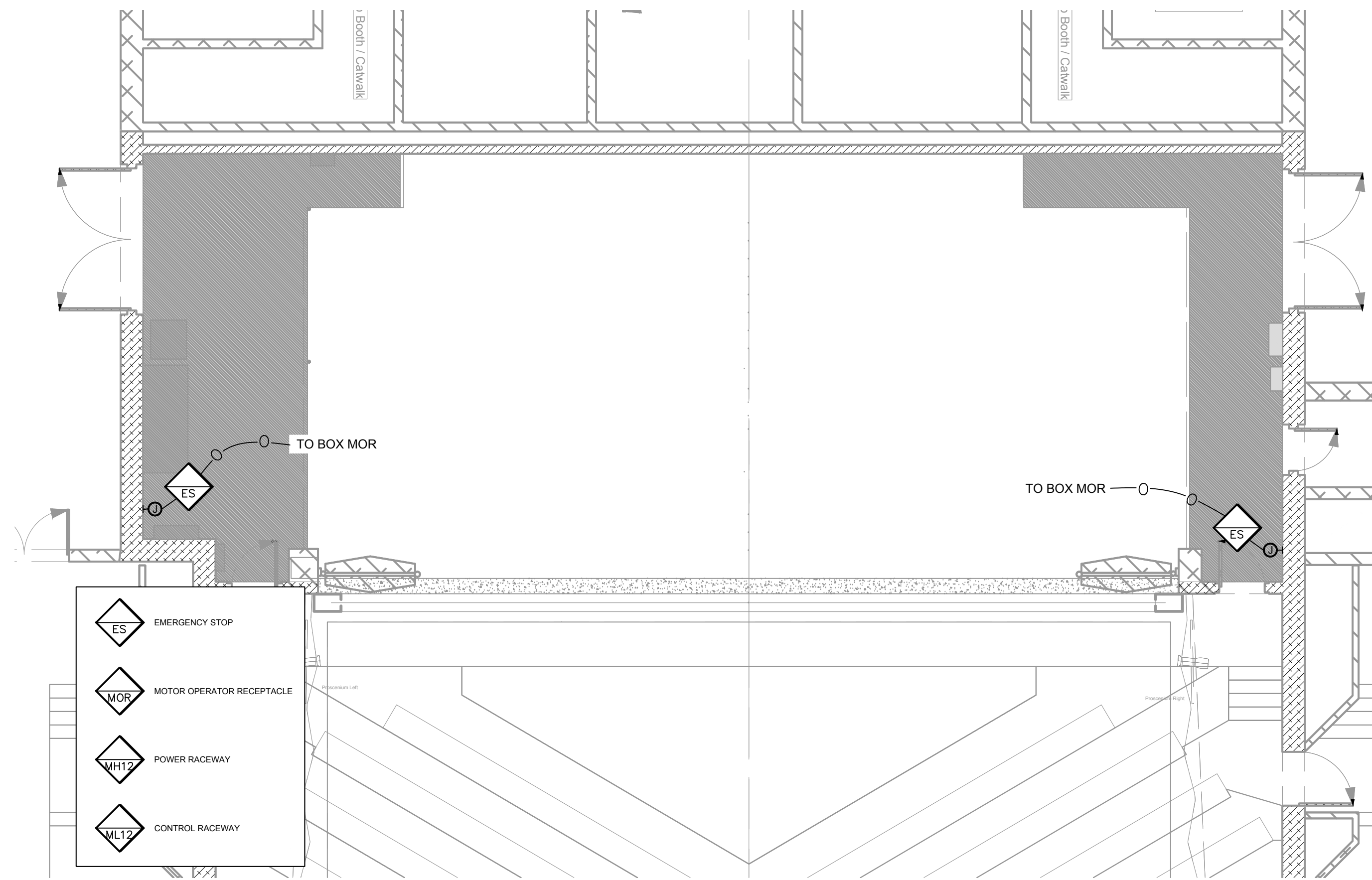
DATE: 08/27/19 REQUEST FOR PROPOSAL

PROJECT NUMBER: H29-1356/50003363-2

SCALE:

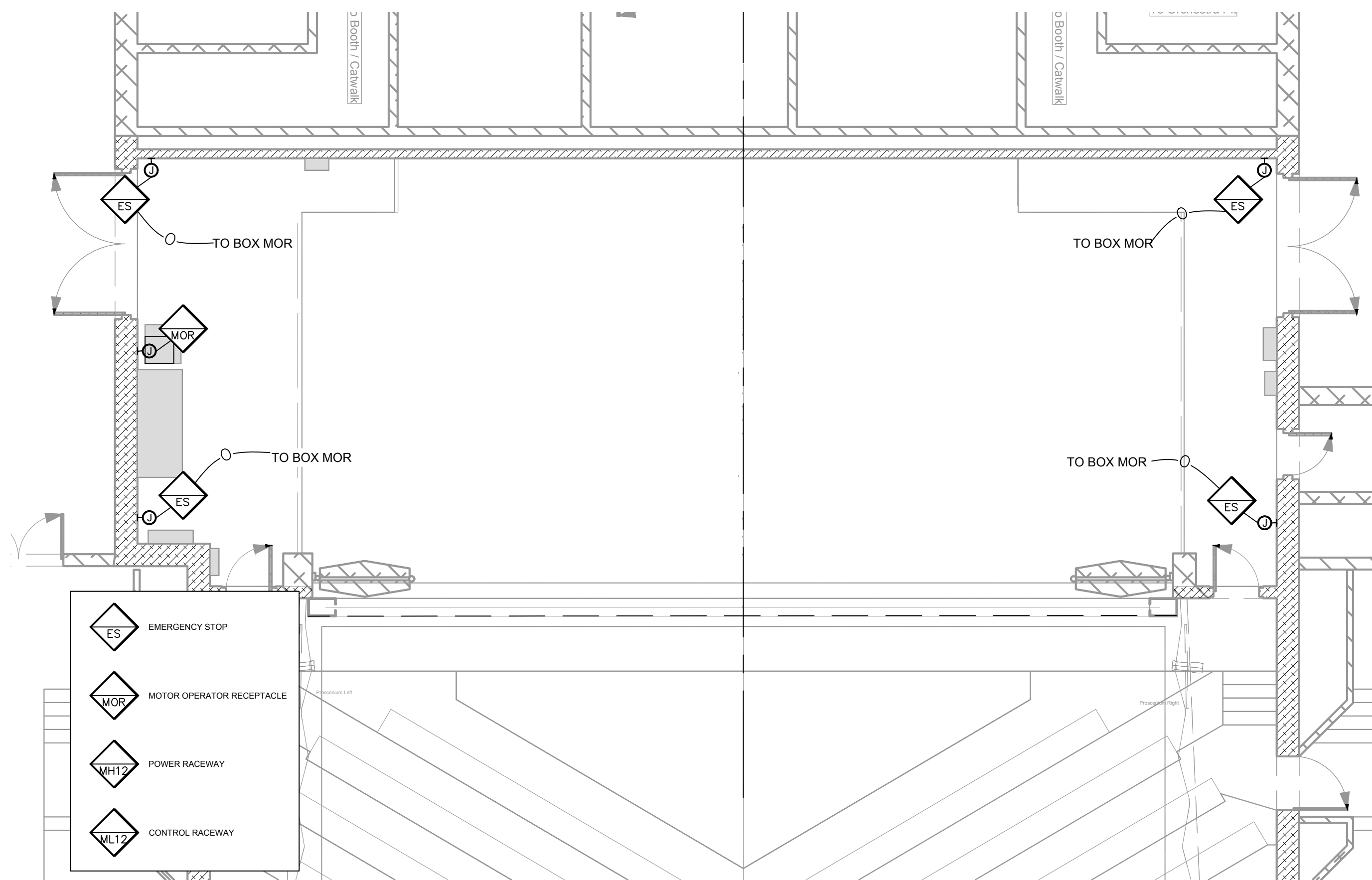
**PERFORMANCE RIGGING  
TRANSVERSE SECTION**

**QTR-103**

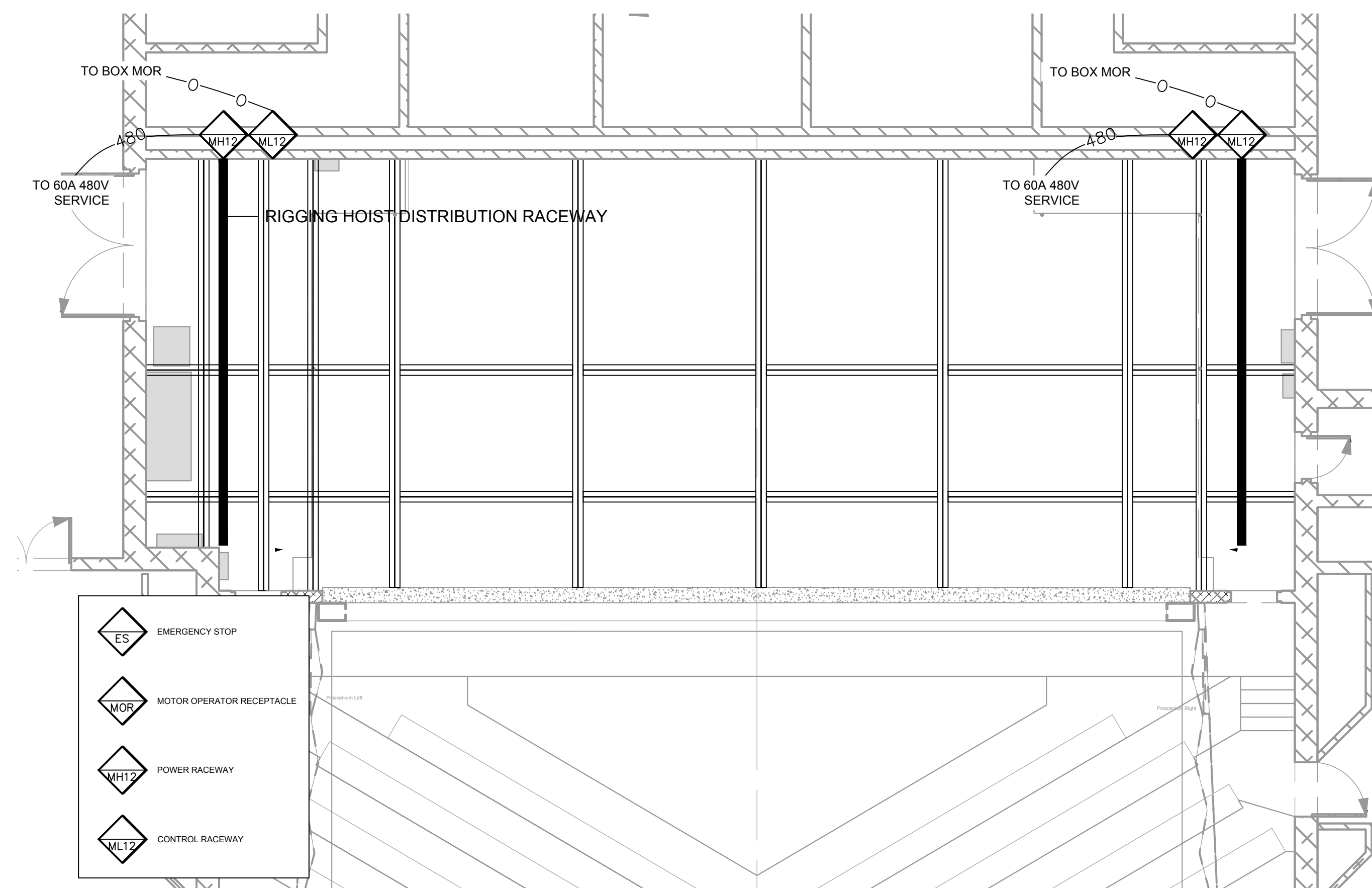


**2 MID GALLERY LEVEL PLAN**  
 SCALE: 3/16" = 1'-0"

REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL REQUIREMENTS



**1 STAGE LEVEL PLAN**  
 SCALE: 3/16" = 1'-0"



**3 GRID LEVEL PLAN**  
 SCALE: 3/16" = 1'-0"

**Re-BID: USCA ETHEREDGE STAGE RIGGING REPLACEMENT**

**USC - AIKEN**

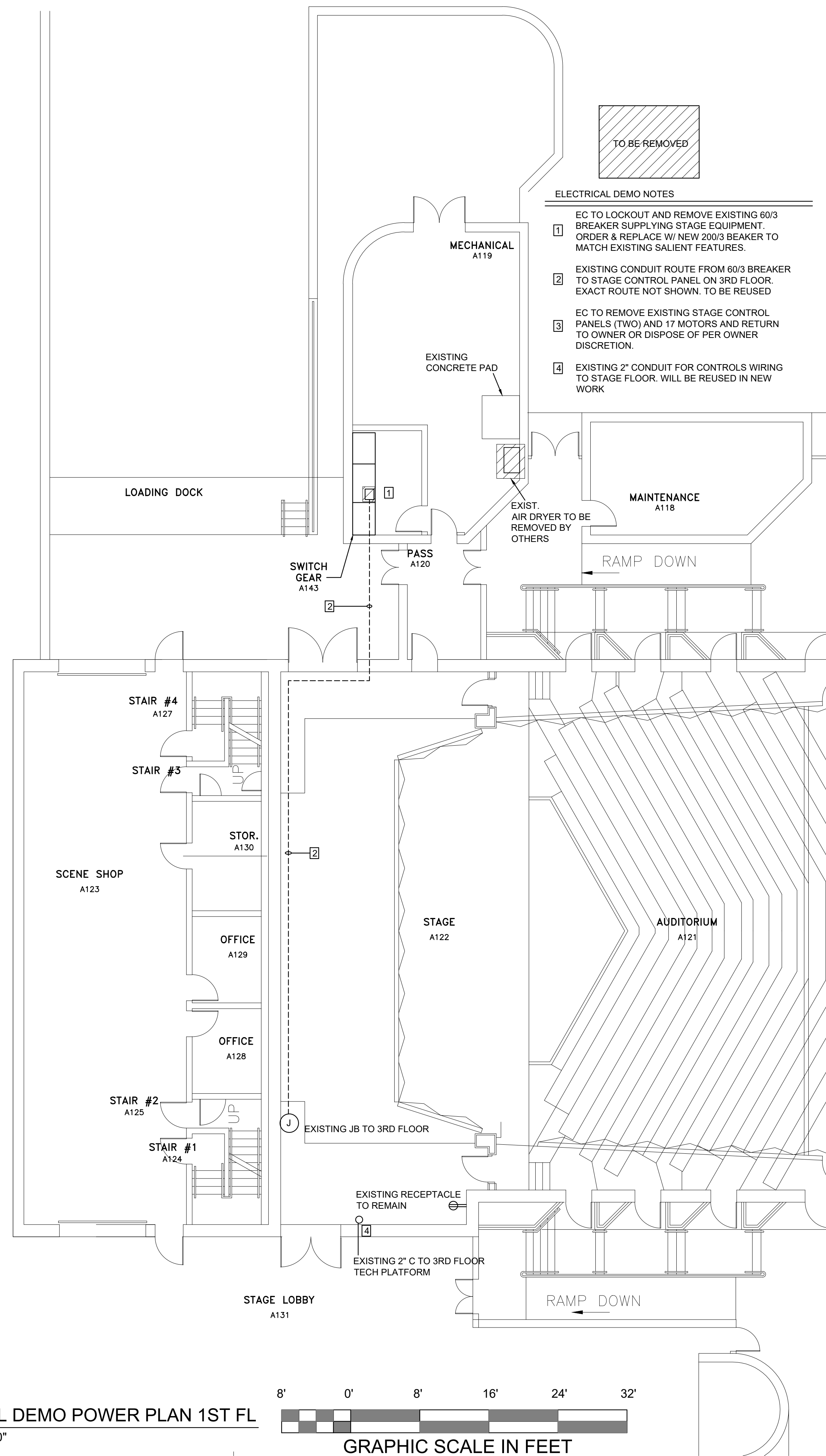
471 UNIVERSITY PARKWAY  
 AIKEN, SC 29801

DATE: 08/27/19 REQUEST FOR PROPOSAL

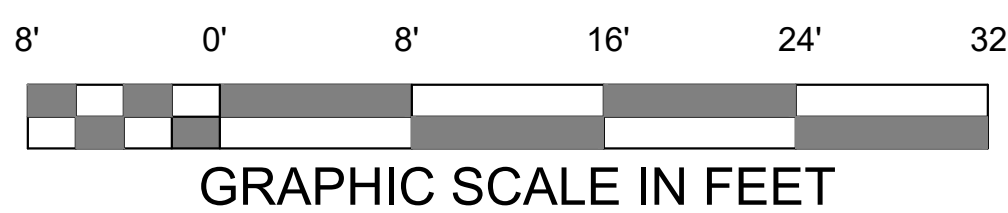
PROJECT NUMBER: H29-1356/50003363-2  
 SCALE:

**PERFORMANCE MACHINERY ELECTRICAL REQUIREMENTS**

**EYM-101**



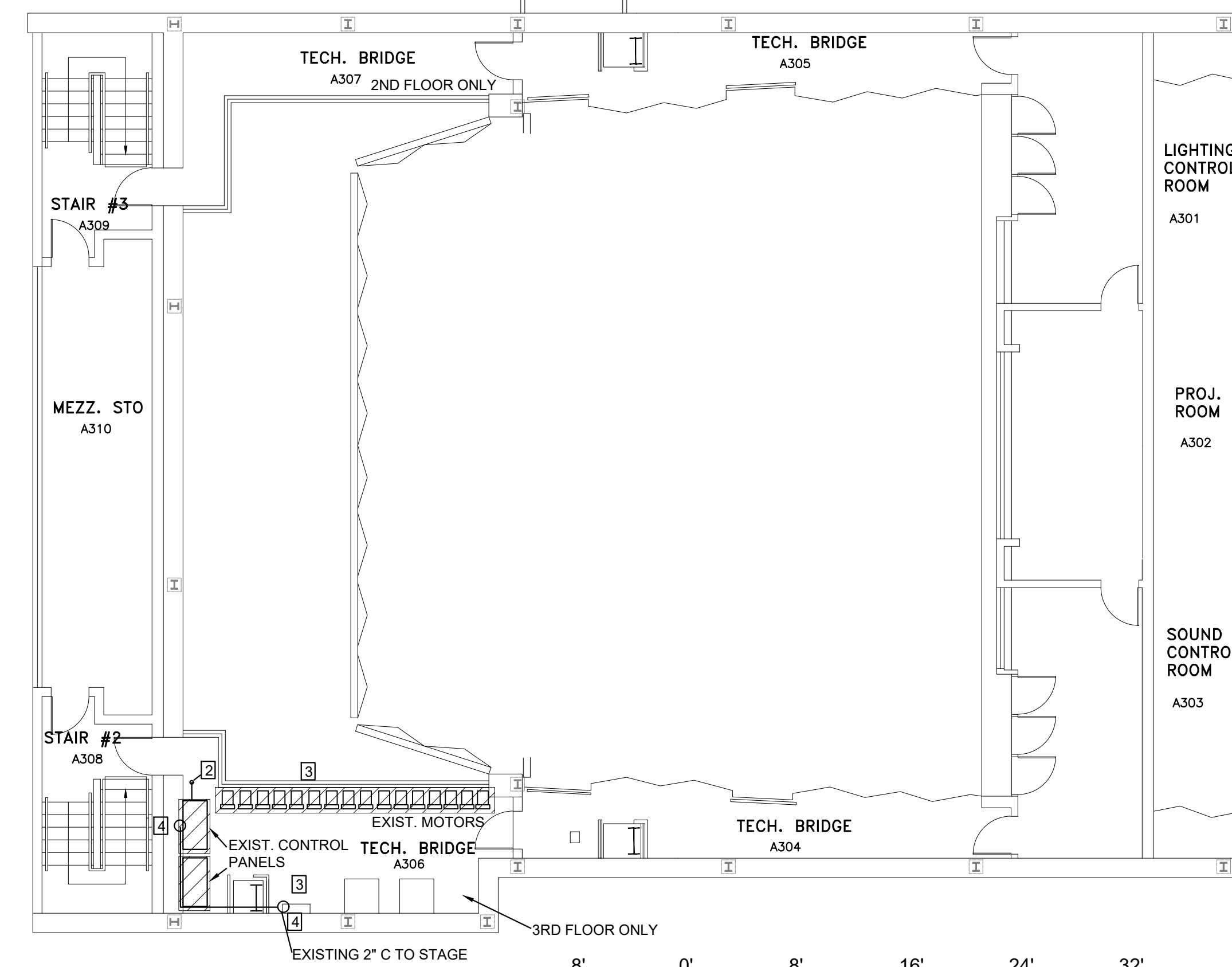
1 ELECTRICAL DEMO POWER PLAN 1ST FL  
E-1 SCALE: 1/8" = 1' - 0"



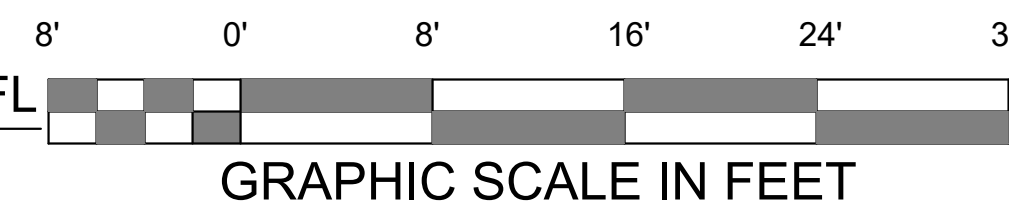
ELECTRICAL DEMO NOTES

- 1 EC TO LOCKOUT AND REMOVE EXISTING 60/3 BREAKER SUPPLYING STAGE EQUIPMENT. ORDER & REPLACE W/ NEW 200/3 BEAKER TO MATCH EXISTING SALIENT FEATURES.
- 2 EXISTING CONDUIT ROUTE FROM 60/3 BREAKER TO STAGE CONTROL PANEL ON 3RD FLOOR. EXACT ROUTE NOT SHOWN. TO BE REUSED
- 3 EC TO REMOVE EXISTING STAGE CONTROL PANELS (TWO) AND 17 MOTORS AND RETURN TO OWNER OR DISPOSE OF PER OWNER DISCRETION.
- 4 EXISTING 2" CONDUIT FOR CONTROLS WIRING TO STAGE FLOOR. WILL BE REUSED IN NEW WORK

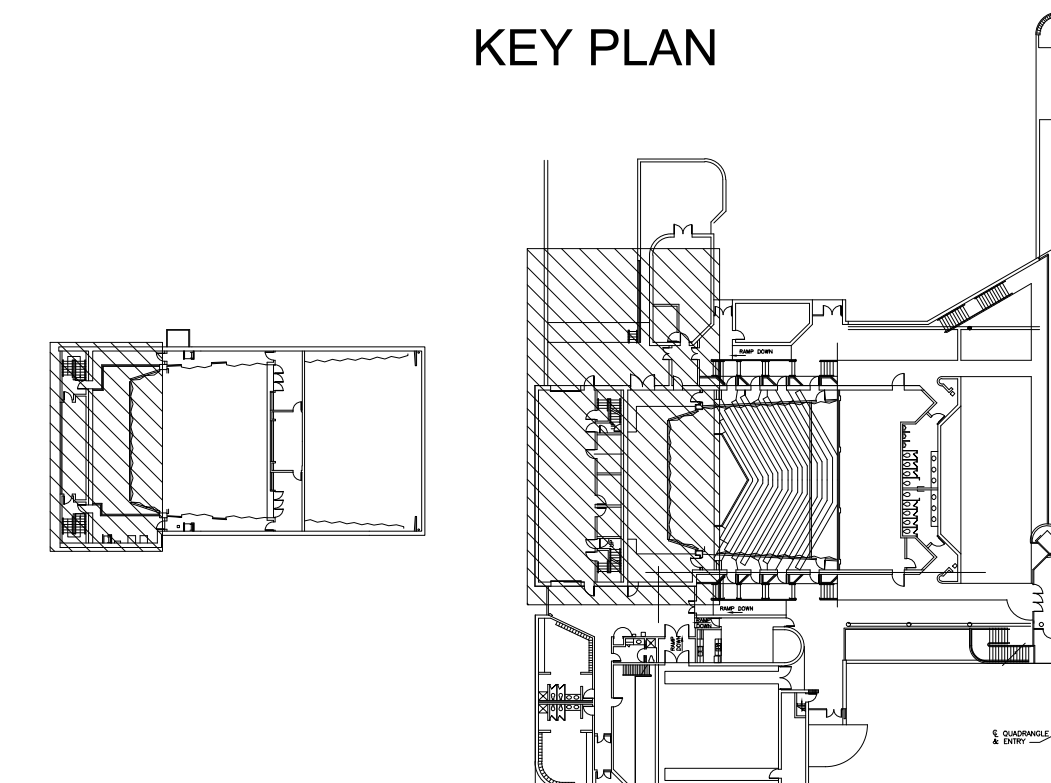
EXISTING SWITCH GEAR			1000DE 30 MLO 2000A				MINIMUM AC EACH BREAKER 10,000				EXISTING OR AVAILINE SWITCHBOARD		
LOAD A	LOAD B	LOAD C	LOAD SERVED	WIRE CONDUIT SIZE	WIRE SIZE	WIRE TYPE	WIRE SIZE	WIRE TYPE	LOAD SERVED	LOAD A	LOAD B	LOAD C	
			ELEVATOR	60/3	1	2	4	4	WELDER				
			WELDER	60/3	7	8	8	8	STAGE MACHINERY "EVERYTHING ELSE"				
			STAGE MACHINERY "WINGHES"	60/3	11	12	12	12	PUMP 1				
			PUMP 2	40/3	13	14	14	14	PUMP 3				
			PUMP 4	40/3	15	16	16	16	AHU 2				
			SPARE	100/3	17	18	18	18	PANEL X				
			SPARE	100/3	19	20	20	20	FAN				
			AHU 1	100/3	21	22	22	22	OPEN				
			DUCT HEATER	200/3	23	24	24	24	DUCT HEATER				
			DUCT HEATER	200/3	25	26	26	26	***NO LABEL***				
			OPEN	100/3	27	28	28	28	DIMMER 2				
			OPEN	200/3	29	30	30	30	PANEL A				
TOTAL	TOTAL	TOTAL	TOTAL PANEL VA XXXX	LOAD CURRENT XXX					TOTAL	TOTAL	TOTAL	TOTAL	
VA 10150	VA 8800	VA 7900							VA 10150	VA 8800	VA 7900		



2 ELECTRICAL DEMO POWER PLAN 3RD FL  
E-1 SCALE: 1/8" = 1' - 0"



KEY PLAN

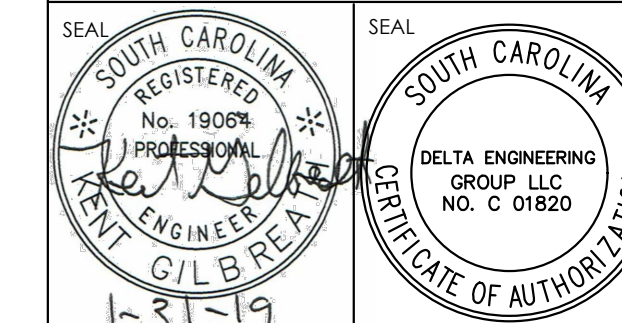


DELTA ENGINEERING GROUP, LLC  
204 PITCARIN WAY, SUITE A  
AUGUSTA, GEORGIA 30909  
706-364-1770 www.deltaeng.net



MECHANICAL PLUMBING ELECTRICAL

RE-BID: USCA  
STAGE RIGGING SYSTEM  
471 UNIVERSITY PARKWAY, AIKEN, SC 29801



COPYRIGHT © 2018 DELTA ENGINEERING GROUP LLC. ALL RIGHTS RESERVED. THIS DOCUMENT IS THE PROPERTY OF DELTA ENGINEERING GROUP LLC. THE UNAUTHORIZED REPRODUCTION, COPYING OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED. ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION. THIS DOCUMENT IS TO BE RETURNED UPON REQUEST. ANY AUTHORIZED USE MUST BE RECEIVED IN WRITING.

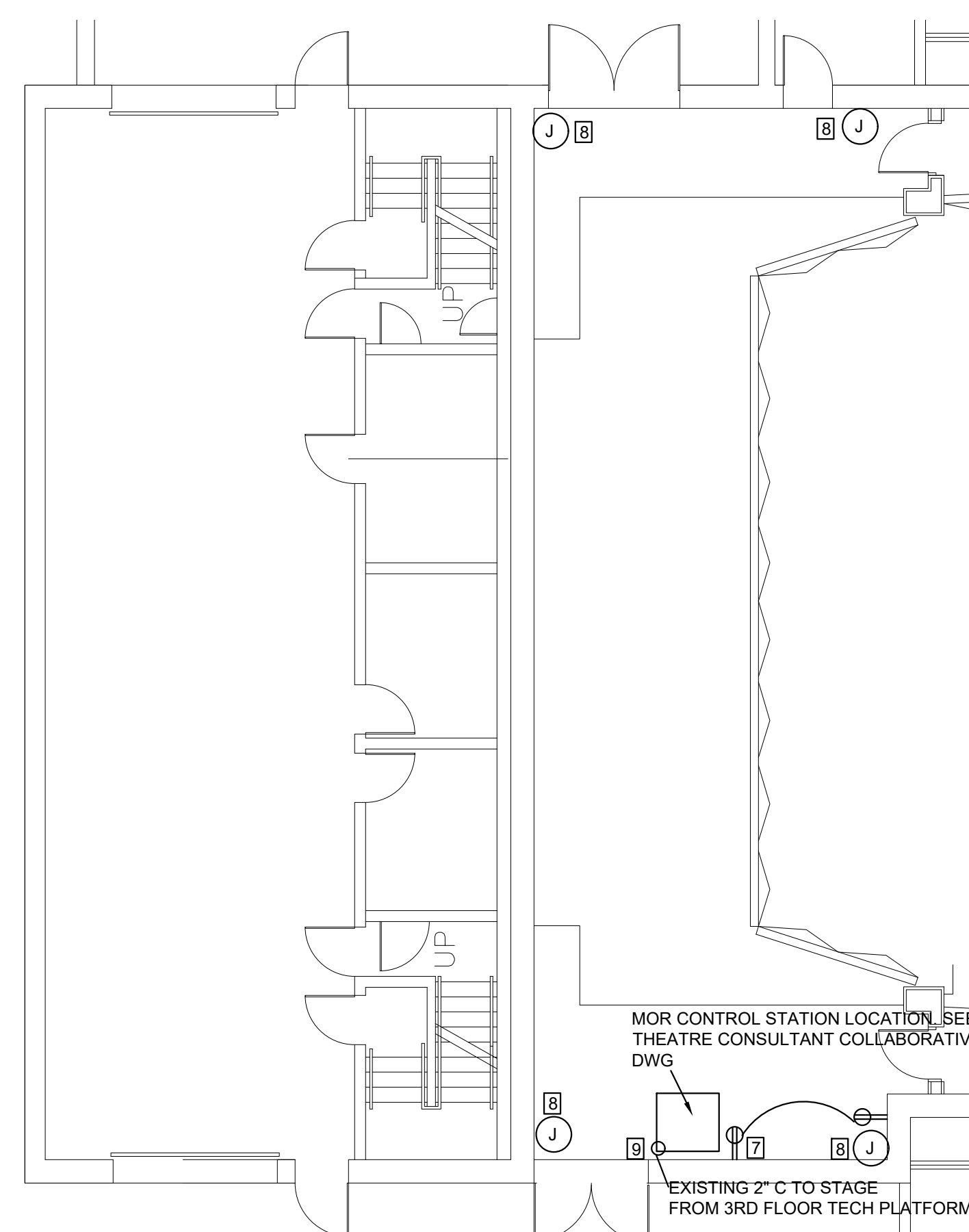
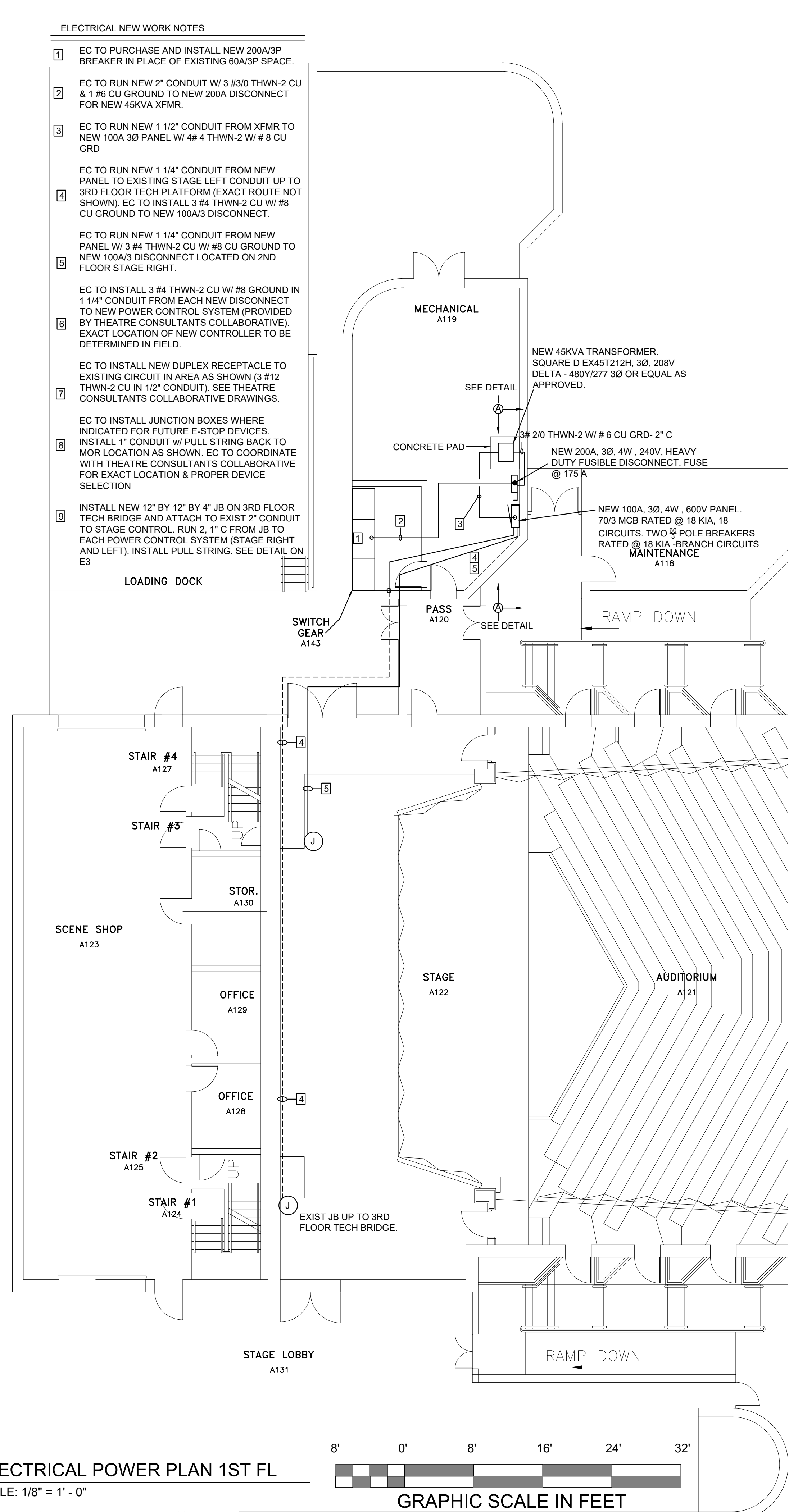
REVISION #	DATE	DESCRIPTION	BY

DRAWN BY: SCH  
CHECKED BY: KDG  
APPROVED BY: KDG  
PROJECT NO.: H29-1356/50003363-2  
DRAWING TITLE: ELECTRICAL DEMO PLAN

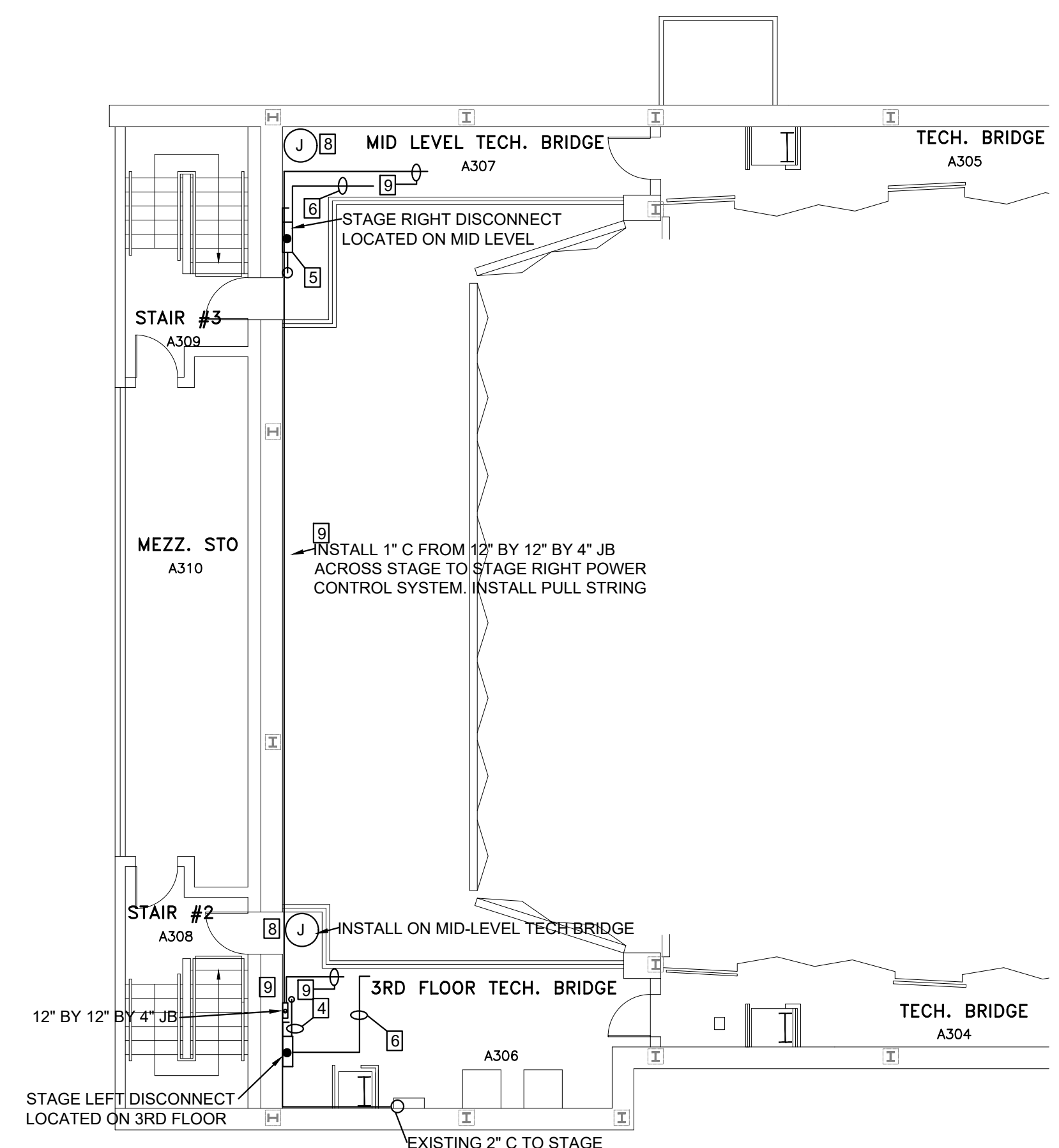
DRAWING NO.: E-1

**ELECTRICAL NEW WORK NOTES**

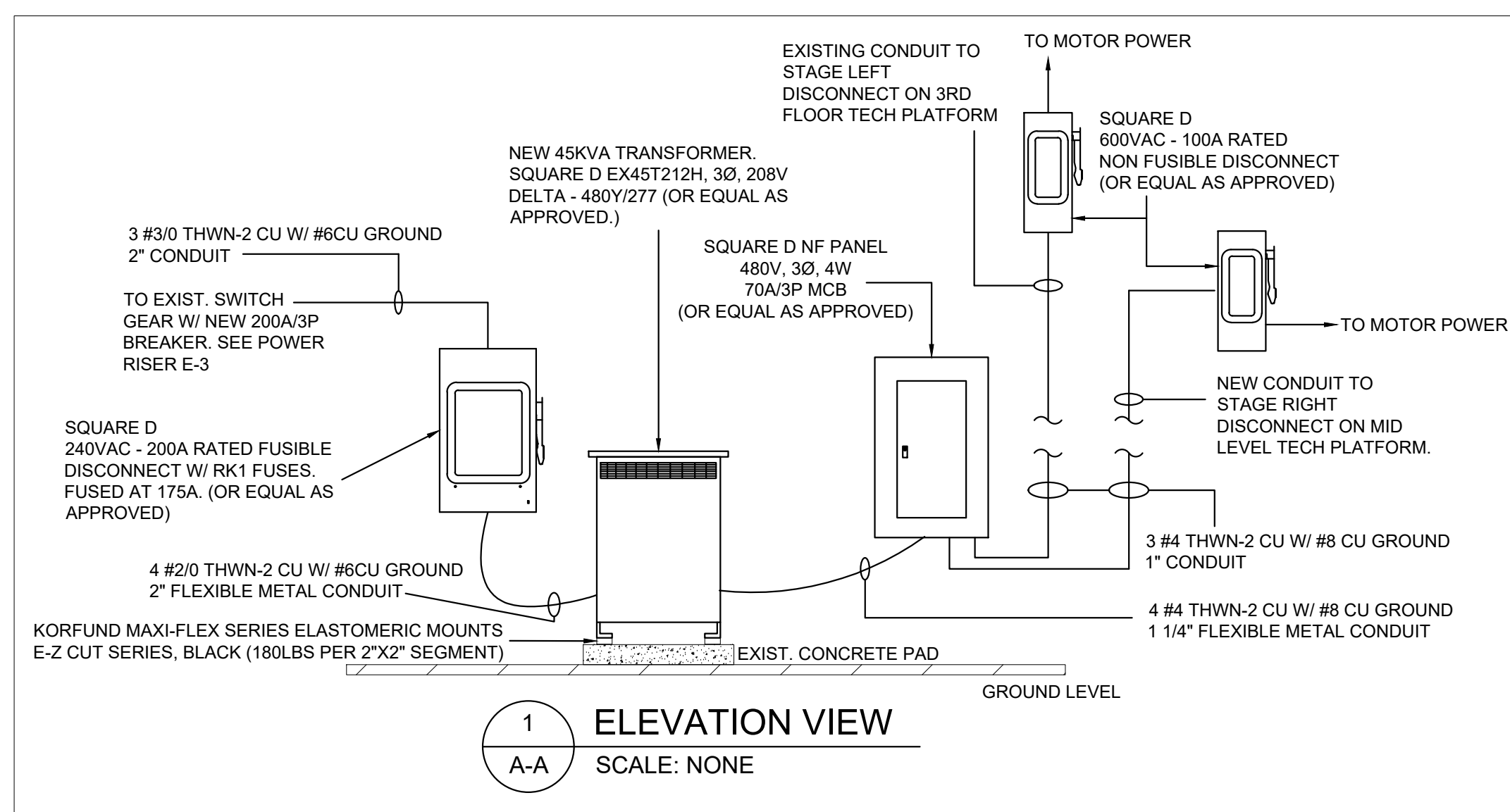
- 1 EC TO PURCHASE AND INSTALL NEW 200A/3P BREAKER IN PLACE OF EXISTING 60A/3P SPACE.
- 2 EC TO RUN NEW 2" CONDUIT W/ 3 #3/0 THWN-2 CU & 1 #6 CU GROUND TO NEW 200A DISCONNECT FOR NEW 45KVA XFMR.
- 3 EC TO RUN NEW 1 1/2" CONDUIT FROM XFMR TO NEW 100A 3Ø PANEL W/ #4 THWN-2 W/ #8 CU GRD
- 4 EC TO RUN NEW 1 1/4" CONDUIT FROM NEW PANEL TO EXISTING STAGE LEFT CONDUIT UP TO 3RD FLOOR TECH PLATFORM (EXACT ROUTE NOT SHOWN). EC TO INSTALL 3 #4 THWN-2 CU W/ #8 CU GROUND TO NEW 100A/3 DISCONNECT.
- 5 EC TO RUN NEW 1 1/4" CONDUIT FROM NEW PANEL W/ 3 #4 THWN-2 CU W/ #8 CU GROUND TO NEW 100A/3 DISCONNECT LOCATED ON 2ND FLOOR STAGE RIGHT.
- 6 EC TO INSTALL 3 #4 THWN-2 CU W/ #8 GROUND IN 1 1/4" CONDUIT FROM EACH NEW DISCONNECT TO NEW POWER CONTROL SYSTEM (PROVIDED BY THEATRE CONSULTANTS COLLABORATIVE). EXACT LOCATION OF NEW CONTROLLER TO BE DETERMINED IN FIELD.
- 7 EC TO INSTALL NEW DUPLEX RECEPTACLE TO EXISTING CIRCUIT IN AREA AS SHOWN (3 #12 THWN-2 CU IN 1/2" CONDUIT). SEE THEATRE CONSULTANTS COLLABORATIVE DRAWINGS.
- 8 EC TO INSTALL JUNCTION BOXES WHERE INDICATED FOR FUTURE E-STOP DEVICES. INSTALL 1" CONDUIT W/ PULL STRING BACK TO MOR LOCATION AS SHOWN. EC TO COORDINATE WITH THEATRE CONSULTANTS COLLABORATIVE FOR EXACT LOCATION & PROPER DEVICE SELECTION
- 9 INSTALL NEW 12" BY 12" BY 4" JB ON 3RD FLOOR TECH BRIDGE AND ATTACH TO EXIST 2" CONDUIT TO STAGE CONTROL. RUN 2. 1" C FROM JB TO EACH POWER CONTROL SYSTEM (STAGE RIGHT AND LEFT). INSTALL PULL STRING. SEE DETAIL ON E3



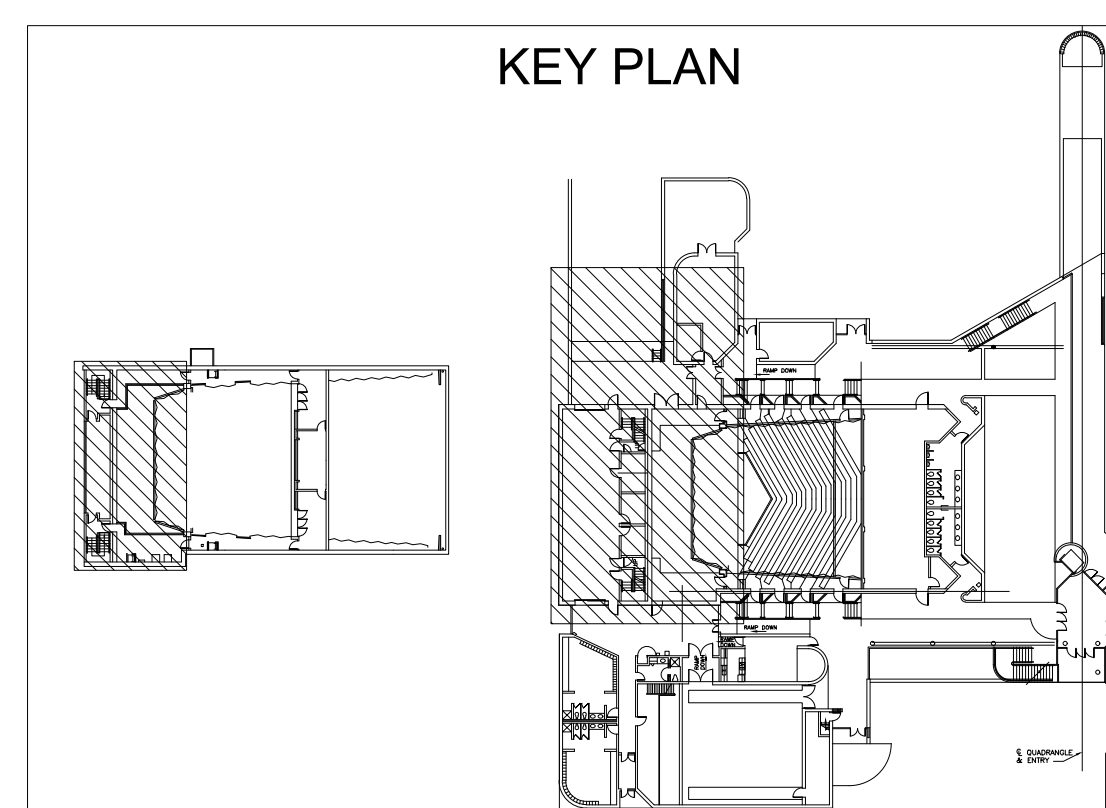
**2 ELECTRICAL POWER PLAN - 1ST FL**  
 E-2 SCALE: 1/8" = 1' - 0"  
 8' 0' 8' 16' 24' 32'  
**GRAPHIC SCALE IN FEET**



**2 ELECTRICAL POWER PLAN 2ND & 3RD FL**  
 E-2 SCALE: 1/8" = 1' - 0"  
 8' 0' 8' 16' 24' 32'  
**GRAPHIC SCALE IN FEET**



**1 ELEVATION VIEW**  
 A-A SCALE: NONE



DELTA ENGINEERING GROUP, LLC  
 204 PITCARIN WAY, SUITE A  
 AUGUSTA, GEORGIA 30909  
 706-364-1770 www.deltaeng.net

**Certified**  
**WBEN**  
 Women's Business Enterprise

MECHANICAL PLUMBING ELECTRICAL

**Re-BID: USCA**  
**STAGE RIGGING**  
**SYSTEM**  
 471 UNIVERSITY PARKWAY, AIKEN, SC 29801

SEAL SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 19006 KENT GILBERT 1-31-19

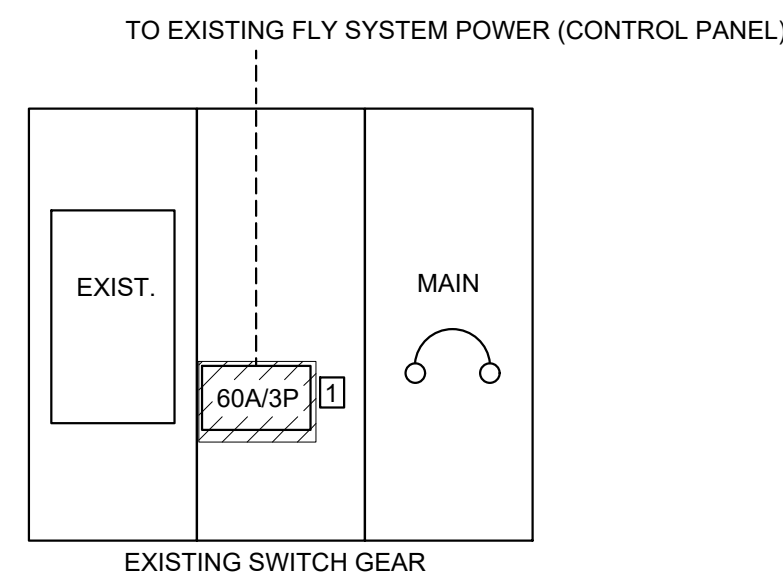
SEAL SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. C 01820 DELTA ENGINEERING GROUP, LLC 1-31-19

COPYRIGHT © 2018 DELTA ENGINEERING GROUP, LLC. ALL RIGHTS RESERVED. THIS DOCUMENT IS THE PROPERTY OF DELTA ENGINEERING GROUP, LLC. THE UNAUTHORIZED REPRODUCTION, COPYING OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED. ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION. THIS DOCUMENT IS TO BE RETURNED UPON REQUEST. ANY AUTHORIZED USE MUST BE RECEIVED IN WRITING.

REVISION #	DATE	DESCRIPTION	BY

DRAWN BY	SCH	CAD FILE NAME	
CHECKED BY	KDG	SCALE	AS NOTED
APPROVED BY	KDG	DATE	01/31/19

PROJECT NO. H29-1356/50003363-2  
 DRAWING TITLE  
**ELECTRICAL POWER PLAN**  
 DRAWING NO. **E-2**



2 EXISTING RISER DIAGRAM - ELEC. ROOM (A143)  
E-3 SCALE: NONE

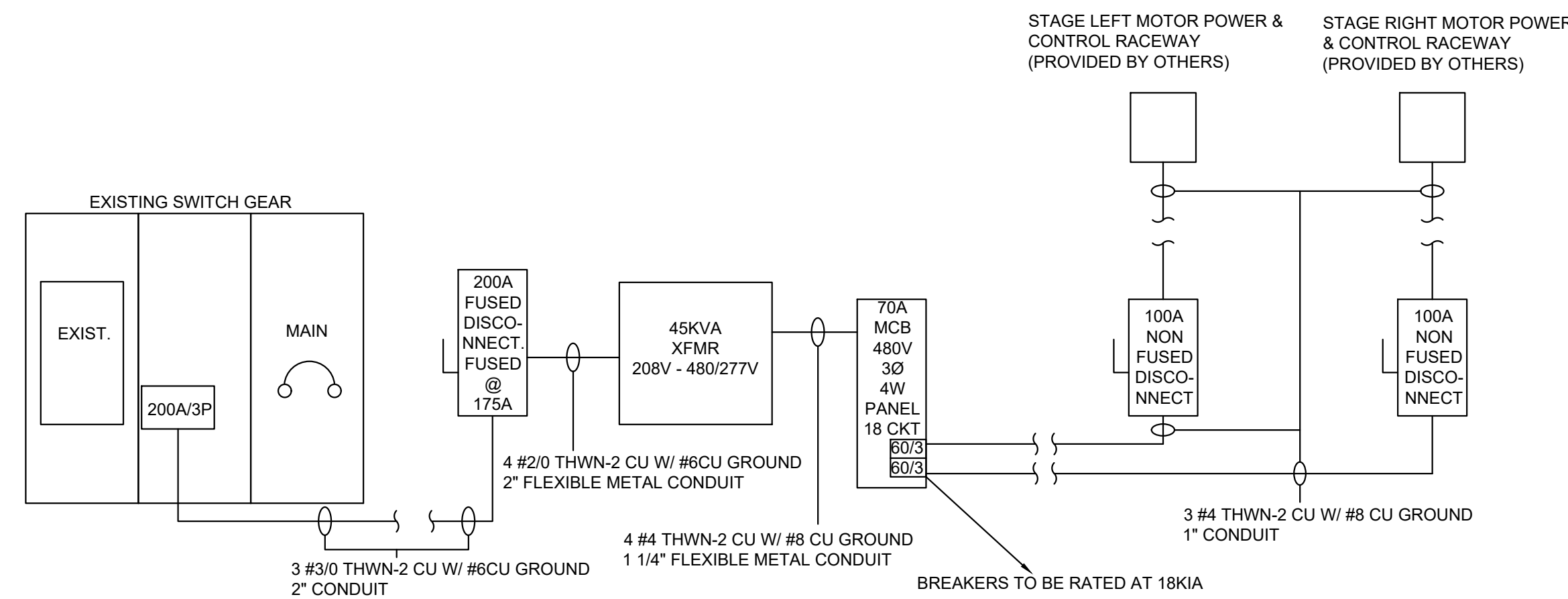
ELECTRICAL SYMBOLS	
SYMBOL	DESCRIPTION
	BRANCH CIRCUIT OR FEEDER CONDUIT CONCEALED IN WALLS OR ABOVE CEILING WITH GROUND. ARROW DENOTES HOME RUN TO PANEL. CROSS HATCHES DENOTE NUMBER OF CONDUCTORS IF OTHER THAN TWO, BUT DO NOT INCLUDE SWITCH LEGS OR THE EQUIPMENT GROUND WIRE. NUMBER 12 MINIMUM SIZE. SEE PANEL SCHEDULE FOR WIRE SIZE.
	ENCLOSED DISCONNECT SWITCH, NEMA-3R FOR OUTDOOR, NEMA 1 R FOR INDOOR, MOUNTED 30" AFF TO BUILDING, EXCEPT AS NOTED ON PRINTS. SIZE DISCONNECT AND FUSE TO MEET HVAC MFRS SPECIFICATIONS.
	WALL OR CEILING MOUNTED JUNCTION BOX, OR EQUIPMENT JUNCTION BOX WHEN FURNISHED WITH COVER. MINIMUM SIZE 4" x 4" x 1-1/2". SIZE PER NEC.
	20A, 120VOLT DUPLEX CONVENIENCE OUTLET, CENTERED VERTICALLY 18" AFF UNLESS OTHERWISE NOTED.
	ELECTRICAL PANELBOARD (RECESSED OR FLUSH MOUNTED). SEE RISER AND PANEL SCHEDULE FOR RATINGS
	EXISTING CONDUIT.

**GENERAL NOTES:**

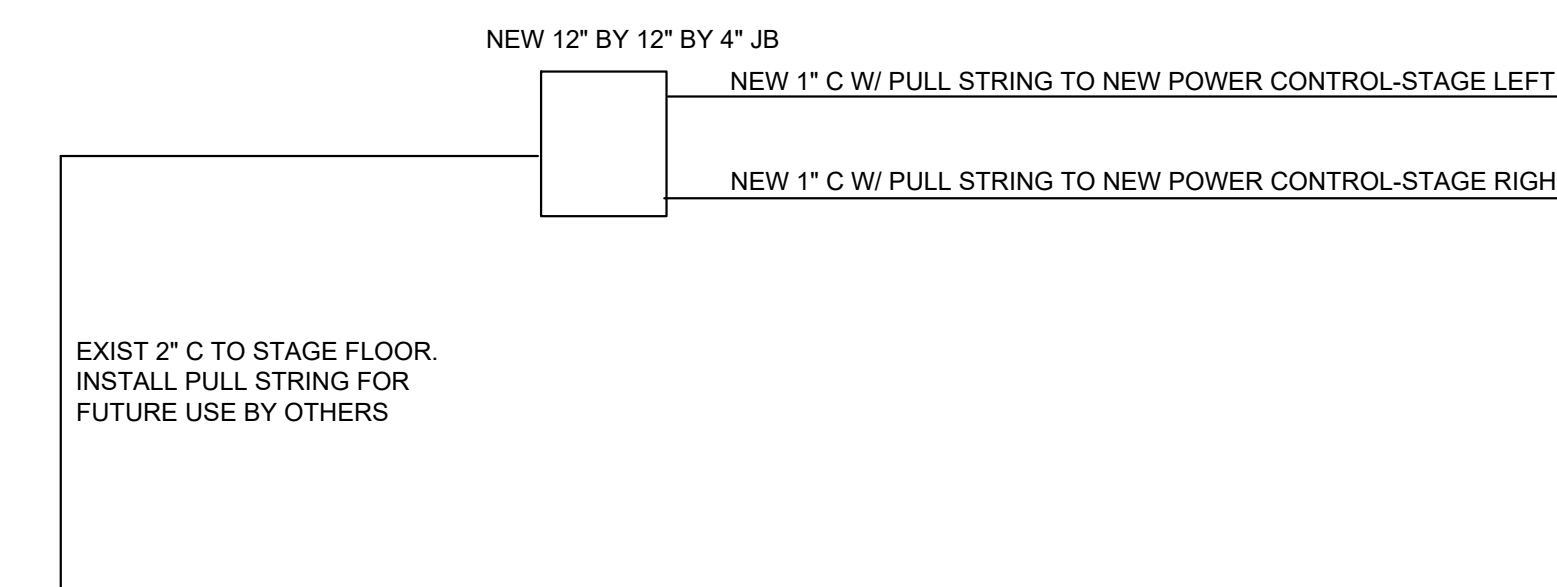
- OUTLET BOXES ON OPPOSITE SIDES OF FIRE RESISTANT WALL OR SHAFT ENCLOSURE SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24" MINIMUM.
- ALL CONVENIENCE OUTLETS INSTALLED TO SERVE A KITCHEN COUNT TOP SHALL BE GFI PROTECTED PER NEC.
- MAINTAIN CONTINUOUS GROUNDS ON ALL RECEPTACLES.
- USE FIRE RATED MATERIALS IN RATED WALLS. FOR STOP PER NFPA.
- CEILING PENETRATIONS SHALL MEET THE REQUIREMENT OF NEC AND IBC.
- GROUND ELECTRICAL SERVICE PER NEC250-66 AND AS APPROVED BY LOCAL AHJ.
- MAINTAIN 3 FT. MINIMUM CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT PER NEC 110.26 (A)
- HOME RUNS FOR ALL 20 AMP BRANCH CIRCUITS LONGER THAN 75 FEET SHALL BE AT LEAST 10 AWG.

**ELECTRICAL MATERIALS**

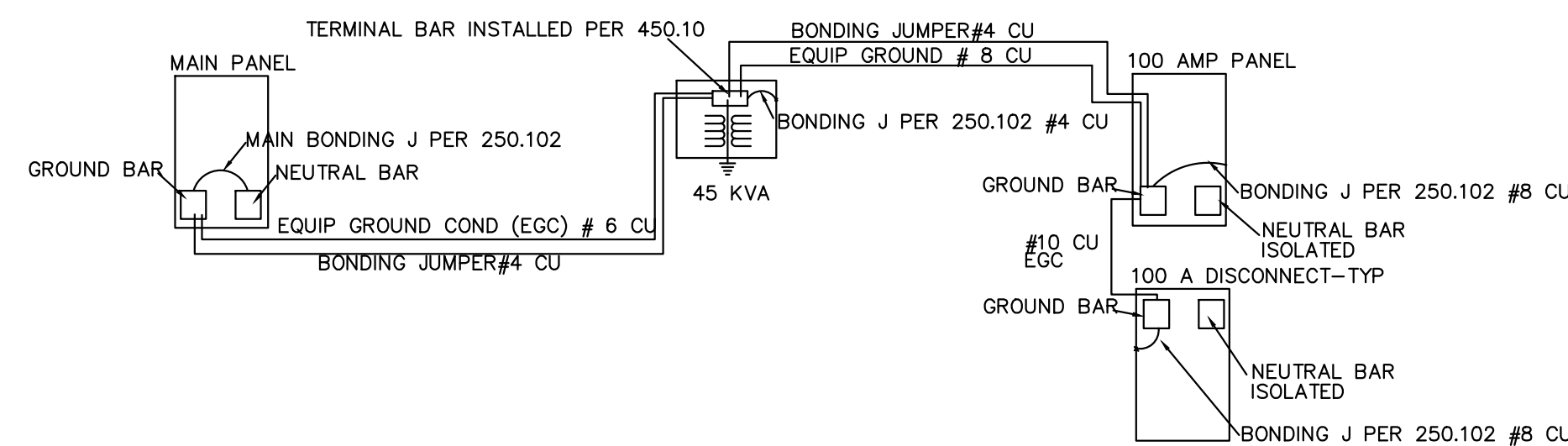
- FURNISH ALL NECESSARY MATERIALS, TOOLS AND LABOR, AND INSTALL A COMPLETE AND FULLY OPERABLE SYSTEM AS SHOWN OR REASONABLY IMPLIED. ALL OUTLETS SHALL BE LEFT READY FOR USE. ALL MATERIALS SHALL BE NEW FREE OF DEFECTS AND BE UL LISTED.
- ALL WORK SHALL BE IN ACCORDANCE WITH NEC, LATEST EDITION, LOCAL CODES AND ORDINANCES AND THE REQUIREMENTS OF THE UTILITY COMPANY. LOCAL CODES SHALL GOVERN IN THE EVENT OF A CONFLICT.
- APPLY AND PAY FOR ALL REQUIRED PERMITS, INSPECTIONS, ETC.
- UNLESS OTHERWISE NOTED, ALL WIRING SHALL BE RUN CONCEALED AND OUTLETS SHALL BE FLUSH MOUNTED IN WALLS, CEILING OR FLOORS.
- OUTLET BOXES SHALL BE SIZED AND INSTALLED PER NEC AND MEET ALL LOCAL CODES.
- PANELS SHALL HAVE INSULATED NEUTRAL BUSES AND SEPARATE EQUIPMENT GROUNDING BUSES. PROVIDE CIRCUIT INDEX CARDS.
- ALL POWER WIRING AND CONNECTIONS TO MECHANICAL EQUIPMENT SHALL BE PROVIDED BY THIS CONTRACTOR.
- SEAL ALL PENETRATIONS IN FIRE RATED ASSEMBLIES WITH 3-M, OR EQUAL FIRE STOP MATERIAL. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- AT THE COMPLETION OF THIS WORK, THIS CONTRACTOR SHALL REMOVE ALL RUBBISH CAUSED BY HIS WORK AND SHALL THOROUGHLY CLEAN ALL ELECTRICAL EQUIPMENT.
- GROUND SYSTEMS PER NEC ARTICLE 250 AND LOCAL CODES.
- THE ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT AND LABOR FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OR FIRE BENEFICIAL USE BY THE OWNER, WHICHEVER COMES FIRST. THE ENTIRE SYSTEM SHALL BE FREE OF SHORTS AND GROUNDS. CORRECTIONS TO THE WIRING SYSTEM, DUE TO DEFECTIVE MATERIALS AND WORKMANSHIP, WITHIN THE GUARANTEE PERIOD, SHALL BE MADE BY THE CONTRACTOR AT NO COST TO THE OWNER.
- CONDUCTORS SHALL BE THHN/ THWN-2 COPPER, 10WG & SMALLER SHALL BE SOLID, 8 AWG AND LARGER SHALL BE STRANDED. COLOR CODE SHALL BE AS FOLLOWS: 120/208 3Ø 4W: ØA - BLACK, ØB - RED, ØC - BLUE, NEUTRAL - WHITE, EQUIPMENT GROUND - GREEN, 277/480 3Ø 4W: ØA - BROWN, ØB - ORANGE, ØC - YELLOW, NEUTRAL - GRAY, EQUIPMENT GROUND - GREEN. USE OF #14 AWG IS ALLOWED WHERE PERMITTED BY NEC AND AUTHORITY HAVING JURISDICTION (AHJ)
- USE OF NM, NMC AND NMS CABLE IN LIEU OF CONDUIT AND STRANDED THHN, THWN WIRE FOR BRANCH CIRCUITS PER CURRENT NEC IS ALLOWED PROVIDED LOCAL AHJ APPROVES OF ITS USE. RESIDENTIAL CLASSIFICATIONS ONLY.
- CONDUITS CONCEALED IN WALLS AND ABOVE CEILING SHALL BE EMT, UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40, EXPOSED CONDUITS SHALL BE RIGID STEEL. CONDUITS SHALL BE RUN AT RIGHT ANGLES TO BUILDING WALLS.
- DEVICES AND DEVICE BOXES SHALL BE INSTALLED LEVEL AND PLUMB. DUPLEX RECEPTACLES SHALL BE INSTALLED SO THAT GROUNDS ARE AT BOTTOM. SINGLE POLE TOGGLE SWITCHES SHALL BE INSTALLED SO THAT OFF POSITION IS DOWN.
- DEVICE AND DEVICE PLATE MATERIALS AND COLORS SHALL BE AS SPECIFIED BY OWNER / ARCHITECT.
- ALL FUSES SHALL BE CLASS RK1 OR RK5 FUSES OR EQUAL WITH CURRENT LIMITING CHARACTERISTICS.
- LABEL ALL PANELS AND DISCONNECTS PER NEC ARC FLASH PROTECTION REQUIREMENTS.
- AFFIX MAXIMUM FAULT CURRENT TO MAIN CIRCUIT PANEL OR DISCONNECT AT FACILITY PER NEC 110.16 AND 24.



3 NEW RISER DIAGRAM  
E-3 SCALE: NONE



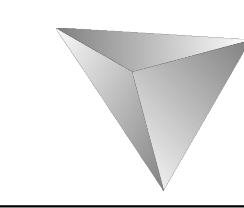
5 MOTOR COMMUNICATION CONDUIT DIAGRAM- 3RD FLOOR  
E-3 SCALE: NONE



4 GROUNDING DETAIL DIAGRAM  
E-3 SCALE: NONE

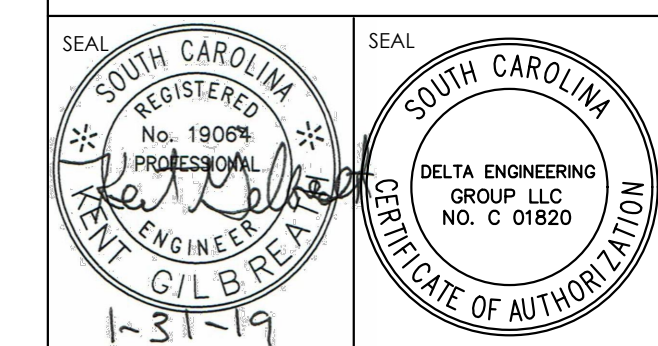
1 NOTES & RISER DIAGRAM  
E-3 SCALE: NONE

DELTA ENGINEERING GROUP, LLC  
204 PITCARIN WAY, SUITE A  
AUGUSTA, GEORGIA 30909  
706-364-1770 www.deltaeng.net



MECHANICAL PLUMBING ELECTRICAL

Re-BID: USCA  
STAGE RIGGING SYSTEM  
471 UNIVERSITY PARKWAY, AIKEN, SC 29801



COPYRIGHT © 2018 DELTA ENGINEERING GROUP, LLC. ALL RIGHTS RESERVED. THIS DOCUMENT IS THE PROPERTY OF DELTA ENGINEERING GROUP, LLC. THE UNAUTHORIZED REPRODUCTION, COPYING OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED. ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION. THIS DOCUMENT IS TO BE RETURNED UPON REQUEST. ANY AUTHORIZED USE MUST BE RECEIVED IN WRITING.

REVISION #	DATE	DESCRIPTION	BY

DRAWN BY <b>SCH</b>	CAD FILE NAME
CHECKED BY <b>KDG</b>	SCALE <b>AS NOTED</b>
APPROVED BY <b>KDG</b>	DATE <b>01/31/19</b>
PROJECT NO. <b>H29-1356/50003363-2</b>	

DRAWING TITLE  
**ELECTRICAL NOTES & RISER DIAGRAM**  
DRAWING NO.  
**E-3**