

## PROJECT DEFINITION

**PROJECT NAME:** WEST VIRGINIA STATE MUSEUM  
**PROJECT DESCRIPTION:** ENHANCEMENTS FOR 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305  
**LOCATION:** CHARLESTON, WV 25305  
**USE CLASS:** A-3 ASSEMBLY / B - BUSINESS / S-1 STORAGE  
**CONSTRUCTION TYPE:** RB FOR BUILDING, HOWEVER A-3 MUSEUM LEVEL IS FIRE RESISTANT Poured concrete columns and wafile slab above. Surrounded by museum space is separated from the remainder by an 8" concrete block walls  
**NUMBER OF STORIES:** 5 STORIES (EXISTING)  
**BUILDING HEIGHT:** 55 FEET (EXISTING)  
**BUILDING AREA:** 90,000 GROSS SF (MUSEUM LEVEL)  
**NUMBER OF OCCUPANTS:** 1,280 MAX. OCCUPANTS - THIS WILL BE POSTED OCCUPANT LOAD AT MUSEUM ENTRANCE (EXISTING - NO CHANGE)  
**SPRINKLERED:** MUSEUM LEVEL OF THE BUILDING IS FULLY SPRINKLERED  
**BUILDING CODE:** IBC 2003 / NFPA 101 2003

## DRAWING INDEX

### ARCHITECTURAL

ISSUE DATE	SHEET NUMBER	DESCRIPTION
06/09/11	A-1.1	PARTIAL LOWER LEVEL FLOOR PLAN
06/09/11	A-1.2	DOOR SCHEDULE, PARTITION TYPES, ENLARGED PLANS

### MECHANICAL

ISSUE DATE	SHEET NUMBER	DESCRIPTION
06/09/11	HV-1.01	MECHANICAL PLAN

### ELECTRICAL

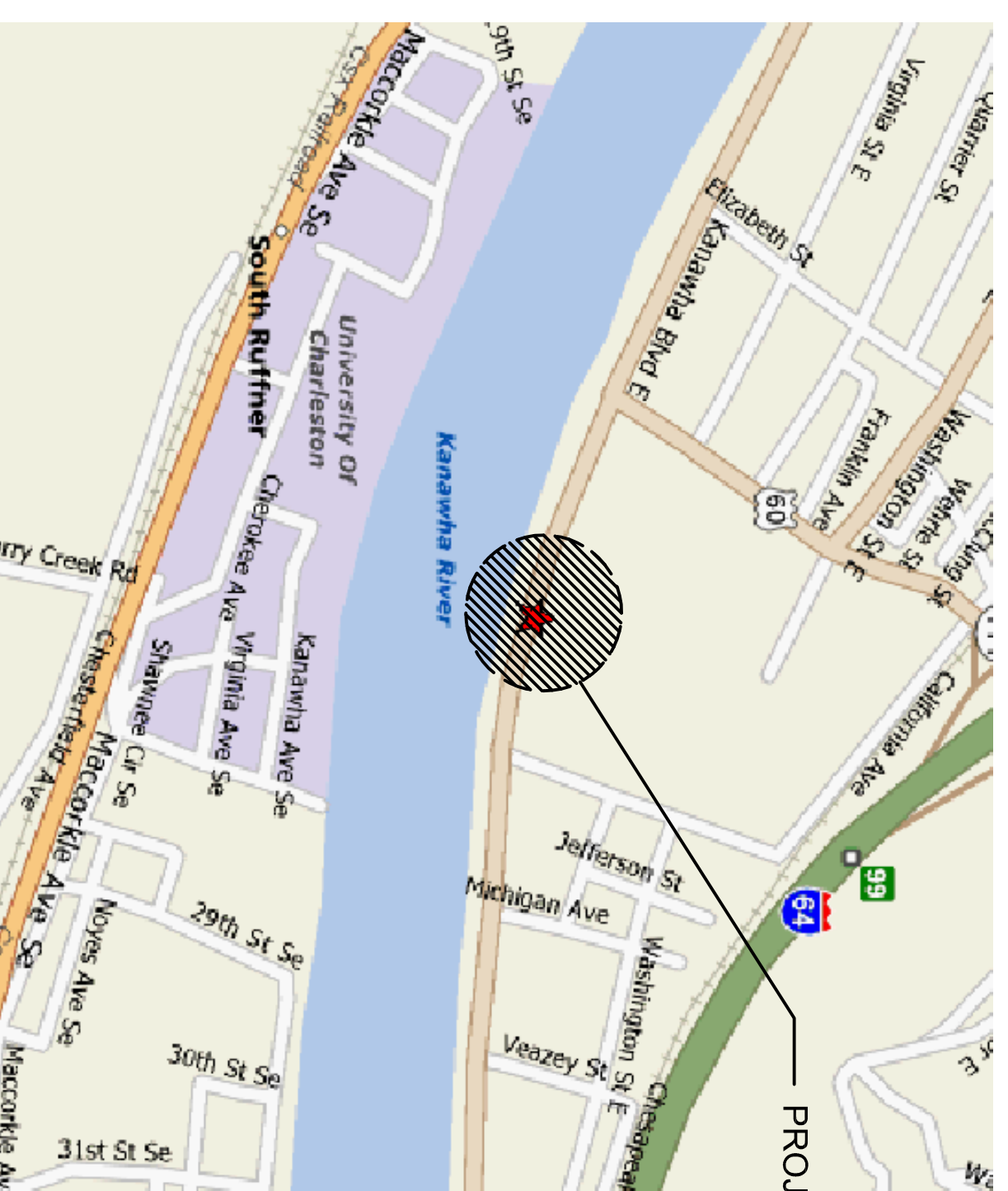
ISSUE DATE	SHEET NUMBER	DESCRIPTION
06/09/11	ED-1.01	ELECTRICAL DEMOLITION PLAN
06/09/11	EL-1.00	OVERALL FLOOR PLAN
06/09/11	EL-1.01	ELECTRICAL LIGHTING PLAN
06/09/11	EL-1.02	ELECTRICAL LIGHTING PLAN
06/09/11	EL-1.03	ELECTRICAL LIGHTING PLAN
06/09/11	EP-1.00	LOW VOLTAGE CABLING PLAN
06/09/11	EP-1.01	ELECTRICAL POWER PLAN
06/09/11	EP-1.02	ELECTRICAL POWER PLAN
06/09/11	EP-1.03	ELECTRICAL POWER PLAN
06/09/11	EP-2.01	ELECTRICAL DETAILS
06/09/11	EP-2.02	ELECTRICAL DETAILS
06/09/11	EP-3.01	ELECTRICAL SINGLE-LINE DIAGRAM

### PLUMBING

ISSUE DATE	SHEET NUMBER	DESCRIPTION
06/09/11	PL-1.00	PLUMBING AND FIRE PROTECTION PLAN

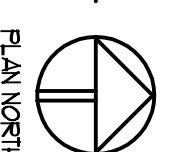
## ISSUE DATES

06.09.11 ISSUED FOR BIDDING



## VICINITY PLAN

SCALE: 1" = 40'



PLAN NORTH

# Enhancements for the: WEST VIRGINIA STATE MUSEUM CULTURAL CENTER - LOWER LEVEL 1900 Kanawha Blvd., East Charleston, WV 25305

ARCHITECT:

**R S L** COMMERCIAL  
ARCHITECTURE

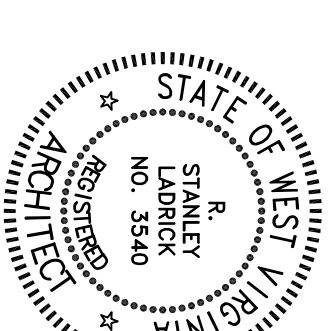
8927 Rossash Road  
Cincinnati, OH 45236  
513-891-9950 PHONE  
513-891-9951 FAX  
www.rsarch.com

MECH / ELEC / PLUMBING ENGINEER:

**KLH ENGINEERS**  
1538 ALEXANDRIA PIKE, SUITE 11  
FT. THOMAS, KY 41075  
(859) 442-8050

AV - TECHNOLOGY DIRECTOR:

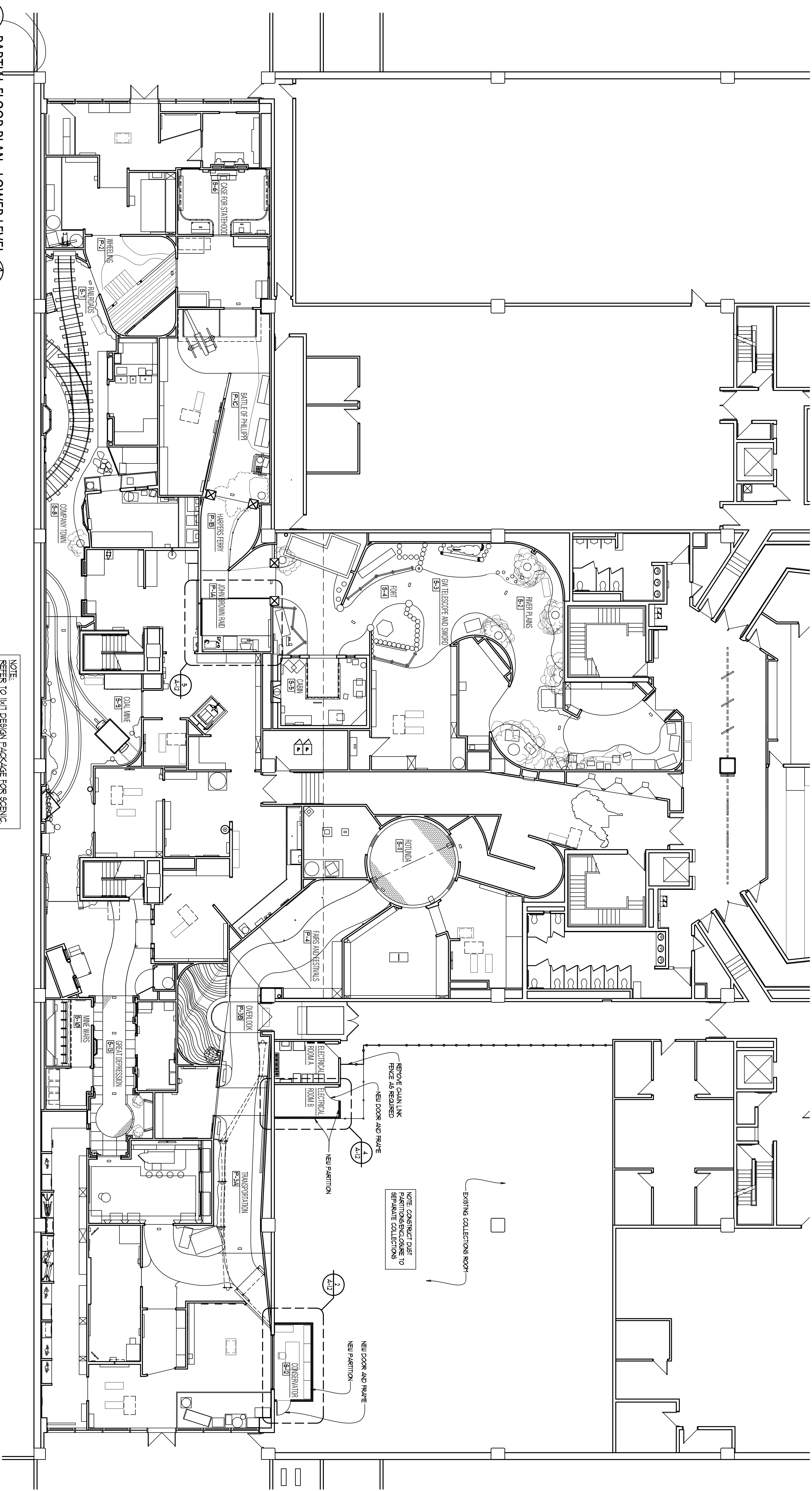
**MR. RICH WAGNER**  
**RAW MEDIA TECHNOLOGIES, LLC**  
770 WEST BAY STREET  
WINTER GARDEN, FL 34787  
(407) 650-8815



# A-0.0

FLOOR PLAN LEGEND

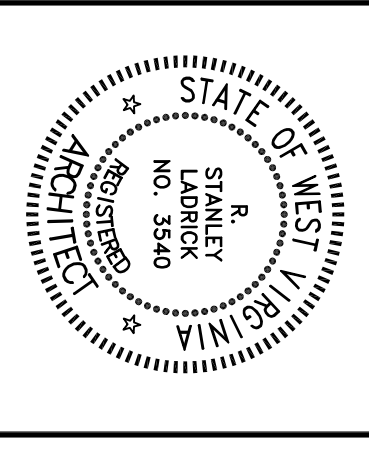
- EXISTING PARTITION
- EXISTING DOOR AND FRAME TO REMAIN
- NEW PARTITION
- NEW OR RELOCATED DOOR AND FRAME - REFER TO DOOR SCHEDULE
- DOOR NUMBER
- PARTITION TYPE
- INDICATES A REDUXER STRIP



1 PARTIAL FLOOR PLAN - LOWER LEVEL  
SCALE: 3/32" = 1'-0"

NOTE:  
REFER TO I/MIT DESIGN PACKAGE FOR SCENIC,  
AV, SCENT AND OTHER INFORMATION

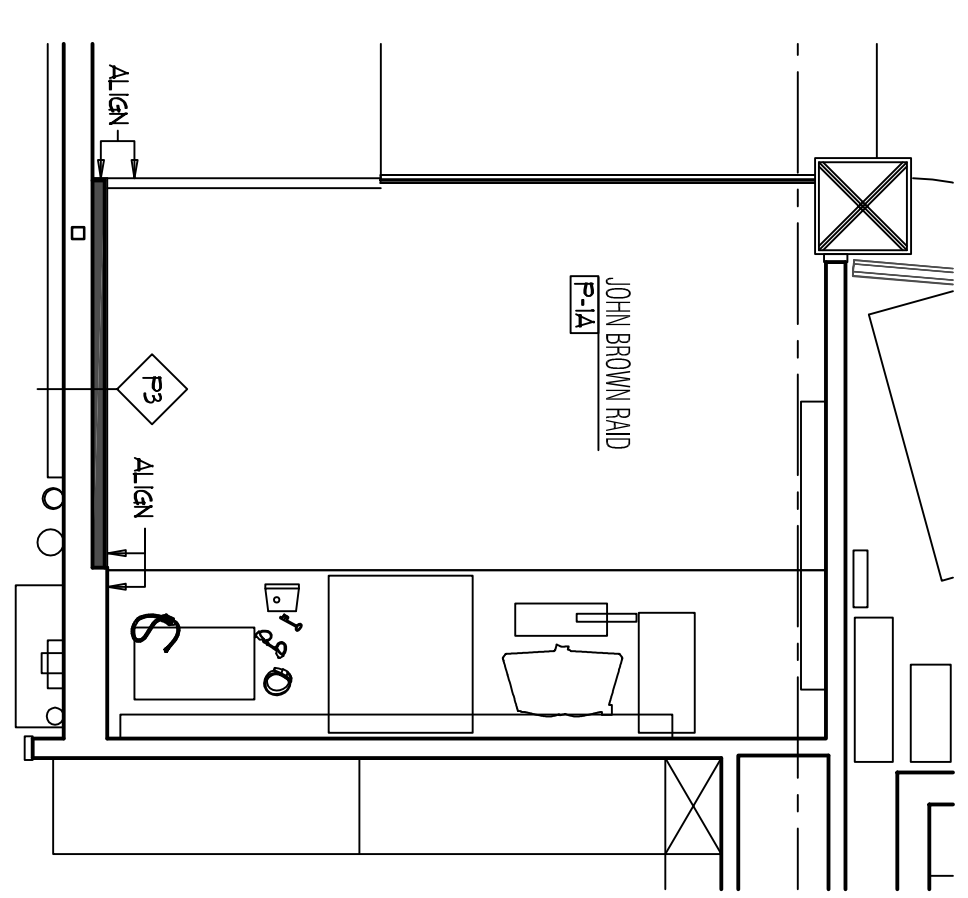
Project: 2011023 WEST VIRGINIA STATE MUSEUM CULTURAL CENTER - LOWER LEVEL  
Date: 6-13-2011 @ 4:48pm  
Author: MPT



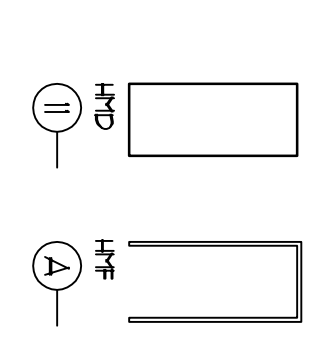
DOOR SCHEDULE						
NO.	DOOR SIZE	MATL	TYPE	FINISH	HARDWARE	MARKS
1	3'-0" x 7'-0" x 134"	HFD	II	A	B, SL, CL, F9	
2	3'-0" x 7'-0" x 134"	HFD	II	A	B, SL, CL, F9	

**DOOR SCHEDULE LEGEND**

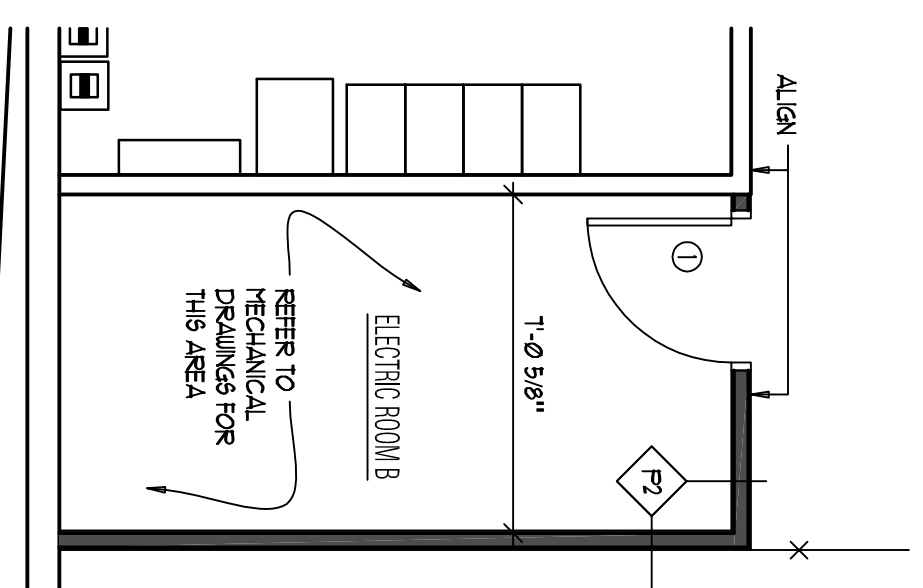
- B - BUTTS
  - CL - CLOSER HANDICAPPED ACCESSIBLE TYPE, LOU, 4841 SERIES WITH REDUCED OPENING FORCE MOUNT ON INTERIOR SIDE OF DOOR. PROVIDE CLOSER AT EACH LEAF OF PAIRED DOORS.
  - F9 - FLOOR STOP, HALF DOOR TYPE, 1/8" X 3/4" OR EQUAL.
  - HFD - HOLLOW METAL DOOR.
  - HFE - HOLLOW METAL DOOR FRAME.
  - SL - STORAGE LOCKSET, Cylindrical, TYPE WITH HANDICAPPED ACCESSIBLE LEVER HANDLE. MATCH EXISTING BUILDING STANDARD MANUFACTURER AND FINISH SYSTEM.
- NOTES:  
 1. ALL HARDWARE SHALL MATCH EXISTING BUILDING STANDARD UNLESS NOTED OTHERWISE.  
 2. PAINT DOOR AND FRAME TO MATCH EXISTING HOLLOW METAL DOORS AND FRAMES IN THIS AREA.



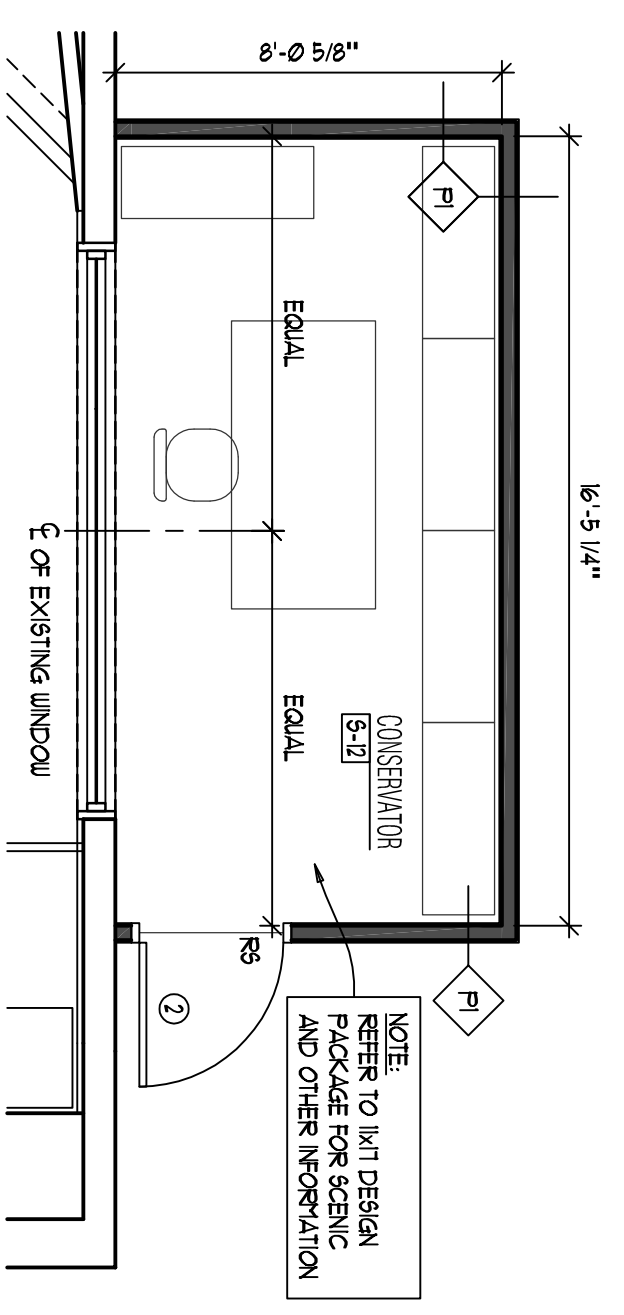
**5 ENLARGED PLAN at JOHN BROWN RAID**  
SCALE: 1/4" = 1'-0"



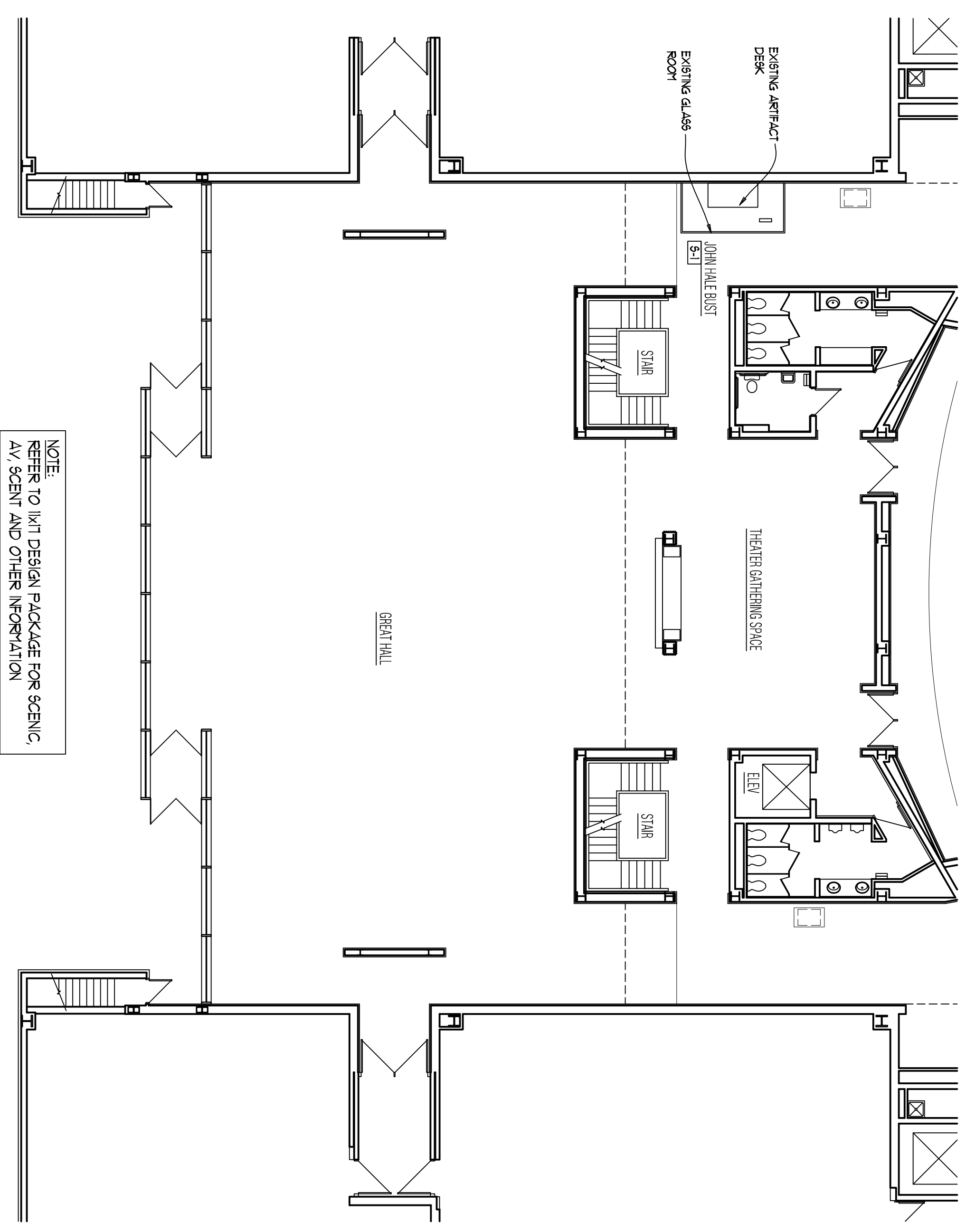
**1 DOOR AND FRAME TYPES**  
SCALE: 1/8" = 1'-0"



**4 ENLARGED PLAN at ELEC. ROOM B**  
SCALE: 1/4" = 1'-0"

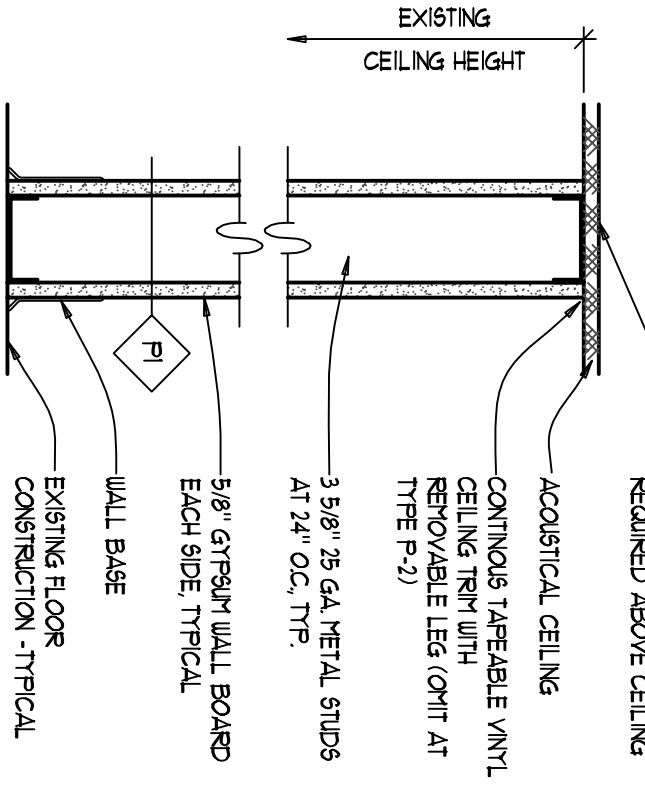


**2 ENLARGED PLAN at CONSERVATOR**  
SCALE: 1/4" = 1'-0"

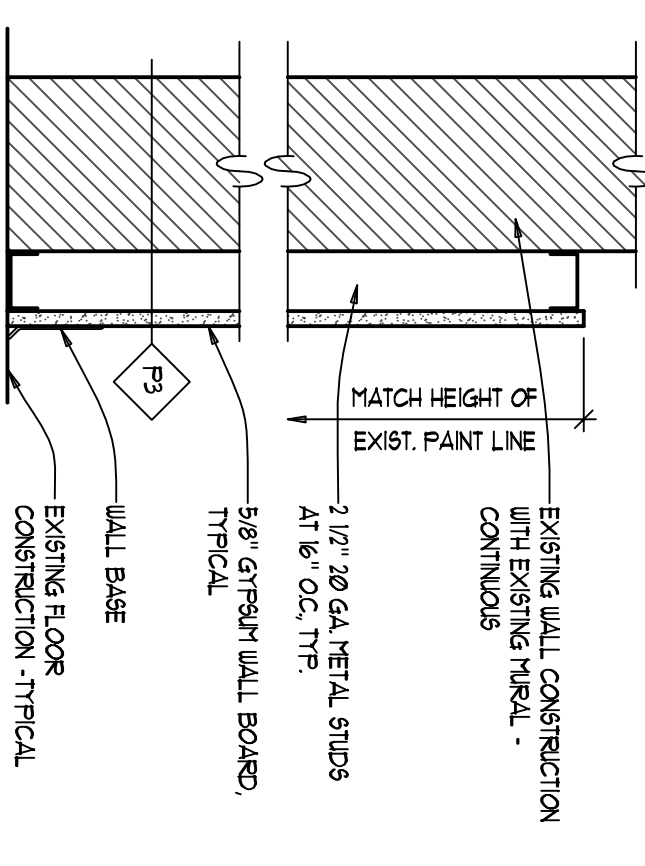
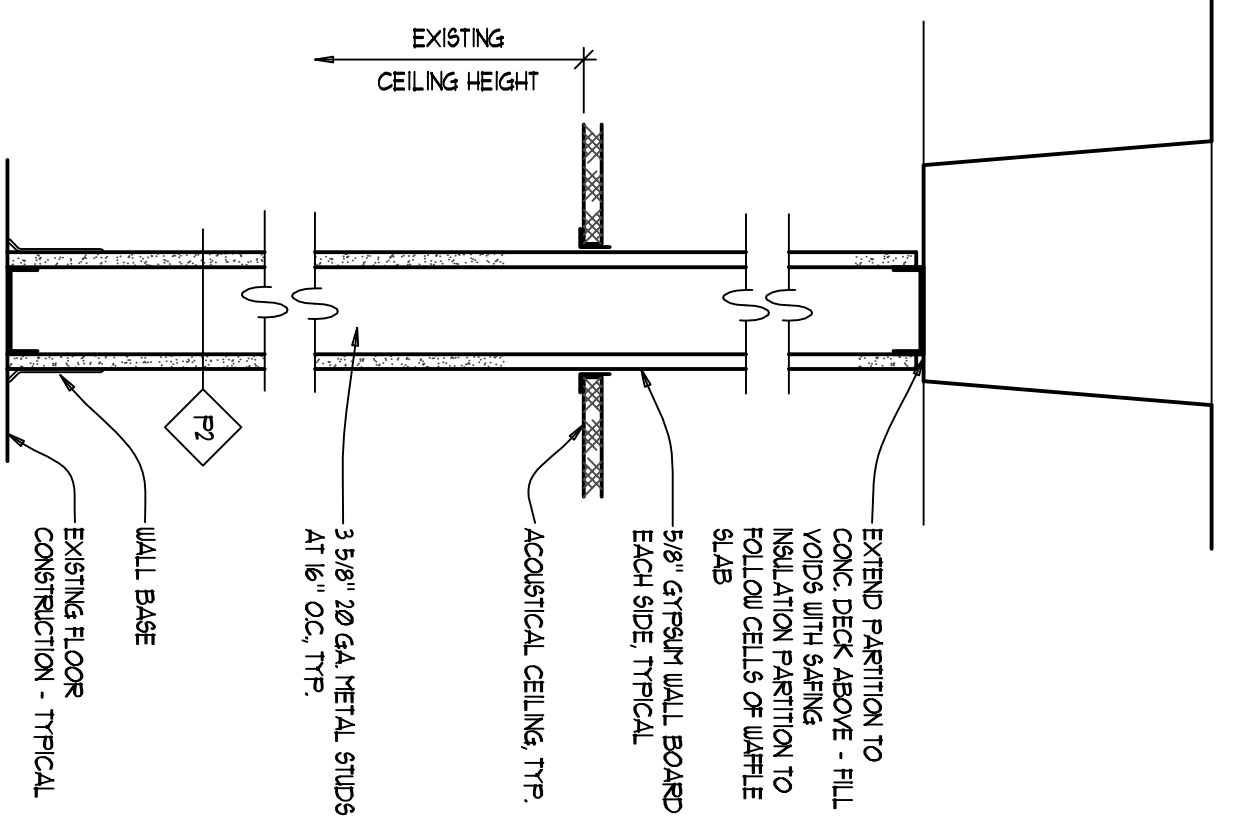


NOTE:  
REFER TO I/MT DESIGN PACKAGE FOR SCENIC, AV, SCENT AND OTHER INFORMATION

**6 PARTIAL FLOOR PLAN - PLAZA**  
SCALE: 3/32" = 1'-0"



**3 PARTITION TYPES**  
SCALE: 1 1/2" = 1'-0"



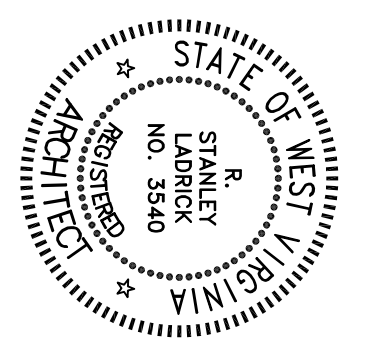
Enhancements for the:  
**West Virginia State Museum**  
 Cultural Center - Lower level

1900 Kanawha Boulevard East  
 Charleston, West Virginia 25305

8927 Rossash Road  
 Cincinnati, OH 45236

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DRAWN BY: MPT  
 ISSUE DATE: 06-09-2011  
 REVISIONS:

DOOR SCHEDULE  
 PARTITION TYPES  
 ENLARGED PLANS

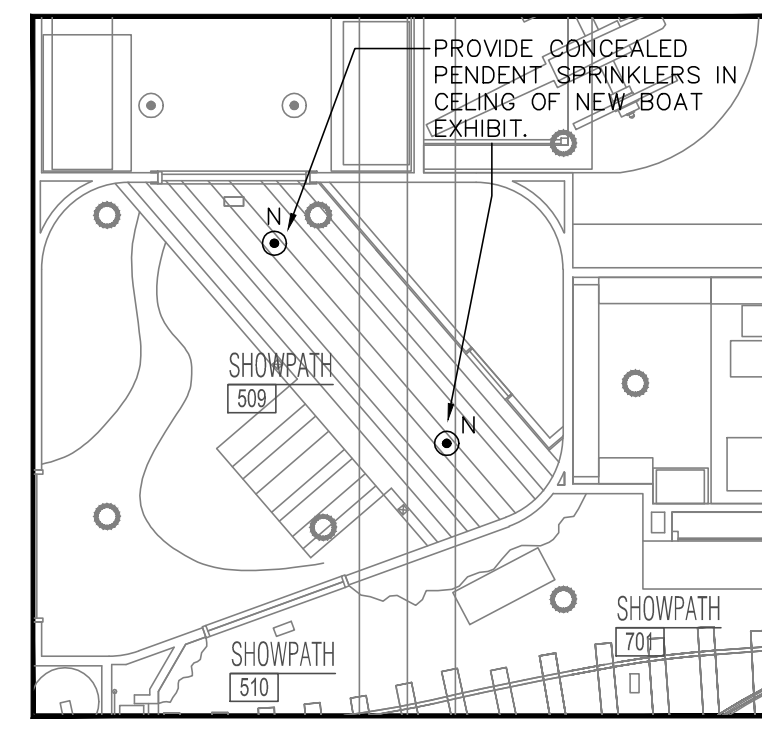
**A-1.2**

PROJECT #: 211035

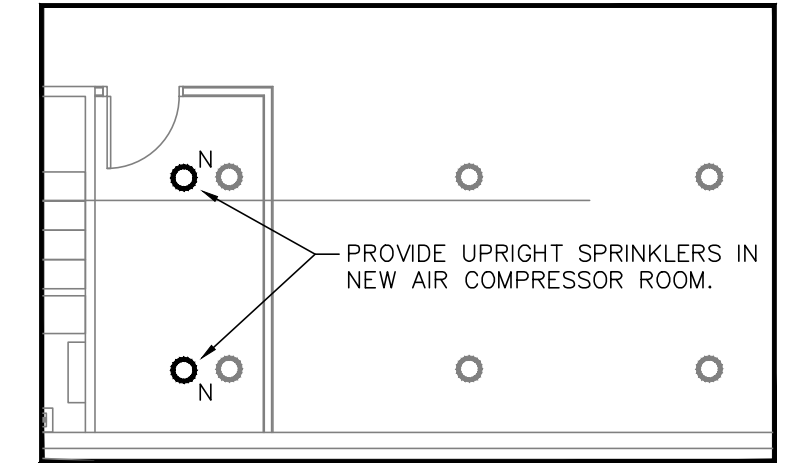


PLUMBING LEGEND	
SYMBOL	DESCRIPTION
—AC—	COMPRESSED AIR PIPING
—COND—	CONDENSATE PIPING
⊘	BALL VALVE

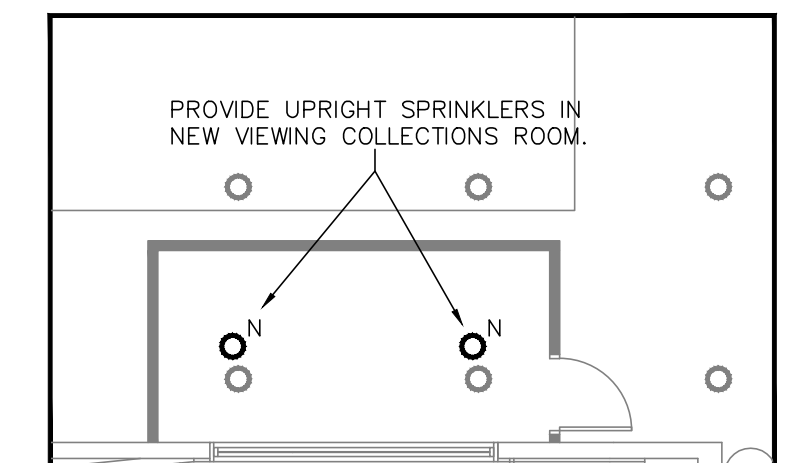
- KEYED NOTES**
- CONNECT 1/2" COMPRESSED AIR TO ANIMATRONICS.
  - 1/2" COMPRESSED AIR UP. CONNECT TO ANIMATRONICS.
  - AC1-AIR COMPRESSOR.
  - AIR DRYER.
  - FILTERS AND OIL/WATER SEPARATOR.
  - CONDENSATE PUMP EQUAL TO LITTLE GIANT VCL-24ULS.
  - DISCHARGE 1/2" CONDENSATE PIPING TO MOP SINK.



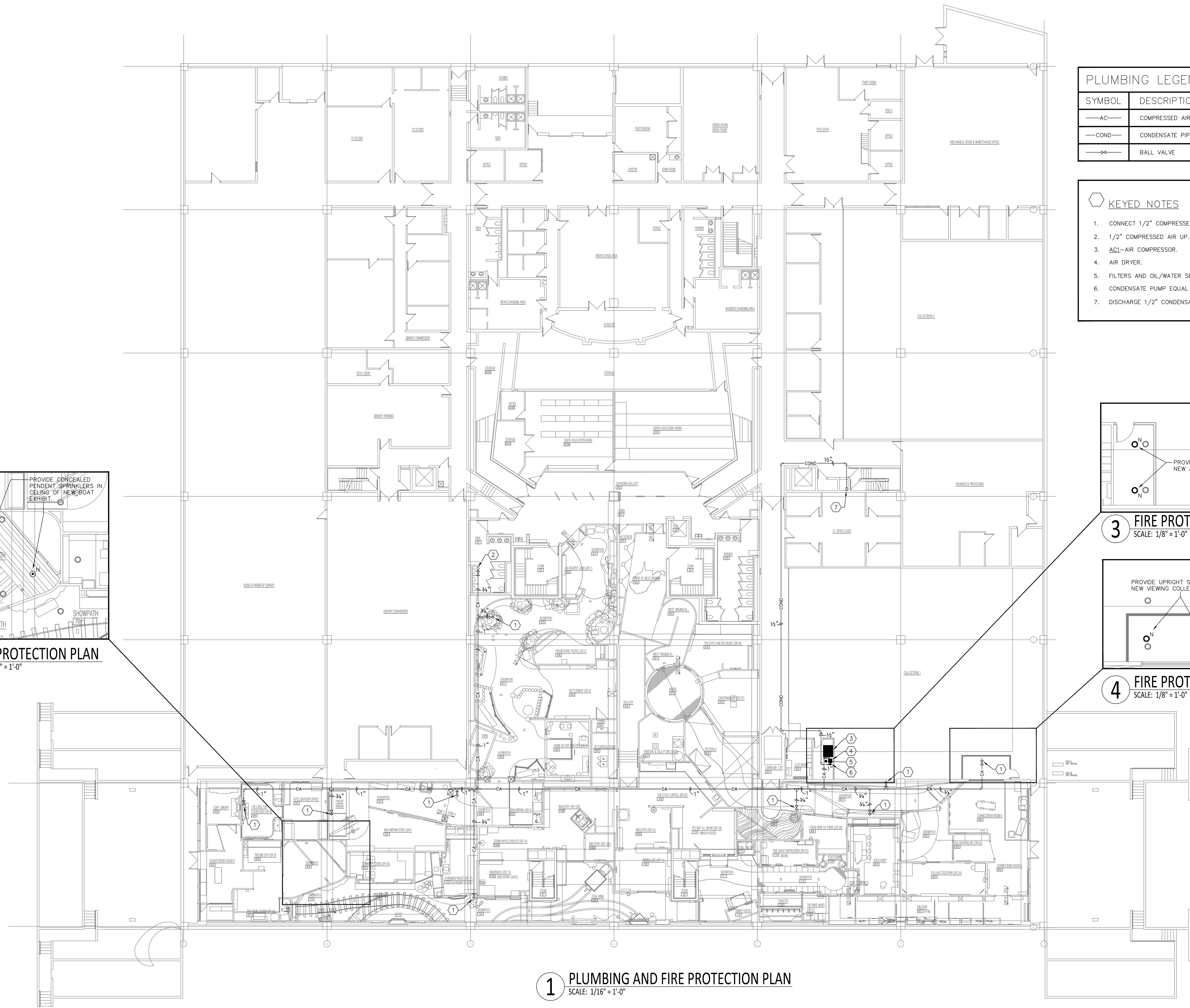
**2 FIRE PROTECTION PLAN**  
SCALE: 1/8" = 1'-0"



**3 FIRE PROTECTION PLAN**  
SCALE: 1/8" = 1'-0"

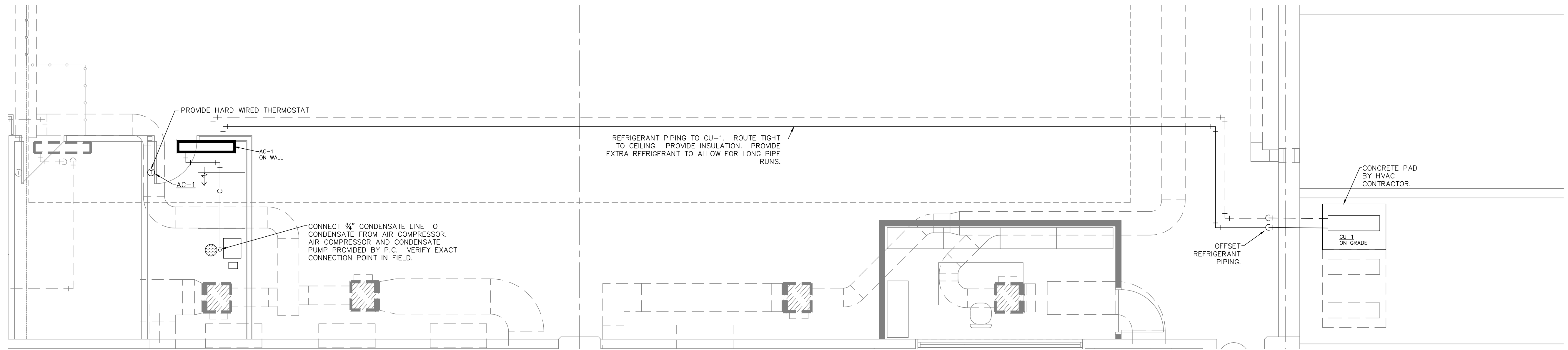


**4 FIRE PROTECTION PLAN**  
SCALE: 1/8" = 1'-0"



**1 PLUMBING AND FIRE PROTECTION PLAN**  
SCALE: 1/16" = 1'-0"





**HVAC ACCESSORIES**

- ACCESSORIES:
- |                   |                        |                      |                        |                  |                            |
|-------------------|------------------------|----------------------|------------------------|------------------|----------------------------|
| 1. MOTOR DAMPER   | 5. INTAKE HOOD         | 9. ACCESS DOOR       | 13. FACE/BYPASS DAMPER | 17. DUCT FLANGES | 21. ECON POWERED EXHAUST   |
| 2. ECONOMIZER     | 6. VIBRATION ISOLATION | 10. FLEX CONNECTIONS | 14. CONDENSATE PUMP    | 18. BASE RAIL    | 22. ECON BAROMETRIC RELIEF |
| 3. ROOF CURB      | 7. FLAT FILTER         | 11. MOUNTING COLLAR  | 15. MOTOR GUARD        | 19. HUMIDIFIER   | 23. HEAT RECLAIM COIL      |
| 4. SMOKE DETECTOR | 8. FILTER/MIXING BOX   | 12. HOT GAS BYPASS   | 16. GREASE TRAP        | 20. CO2 SENSORS  | 24. LOW AMBIENT KIT        |

**HVAC CONDENSING UNIT SCHEDULE**

MARK	CU-1
DESCRIPTION	CONDENSING UNIT
AREA SERVED	ELECTRIC ROOM
MFG	DAIKIN, OR EQUAL BY LG OR SANYO
MODEL	PY-AT8NHA
VOLTS	208
PHASE	1
WEIGHT	
EMERG	
CLG MBH	18
CLG SENS	18
ACCESS	24
FLA	
MCA	13
OCP	20

**HVAC SYSTEM EQUIPMENT SCHEDULE**

MARK	AC-1
DESCRIPTION	AIR COND. UNIT
AREA SERVED	ELECTRIC ROOM
MFG	DAIKIN, OR EQUAL BY LG OR SANYO
MODEL	PKA-AT8HA
VOLTS	LOW VOLTAGE*
PHASE	1
WEIGHT	
EMERG	
CFM	500
ESP (IN)	1
OACFM	0
BHP	
HP	
RPM	
CLG MBH	18
CLG SENS	18
CLG GPM	0
CW EWT	
CW LWT	
HTG MBH	
HTG GPM	0
HW EWT	
HW LWT	
GAS HTG IN	
GAS HTG OUT	
HTG KW	
ACCESS	
FLA	
MCA	1
OCP	

\*LOW VOLTAGE POWERED FROM OUTDOOR UNIT. COORDINATE CONDUIT FOR LOW VOLTAGE WIRING WITH E.C.

**HVAC DUCTWORK LEGEND**

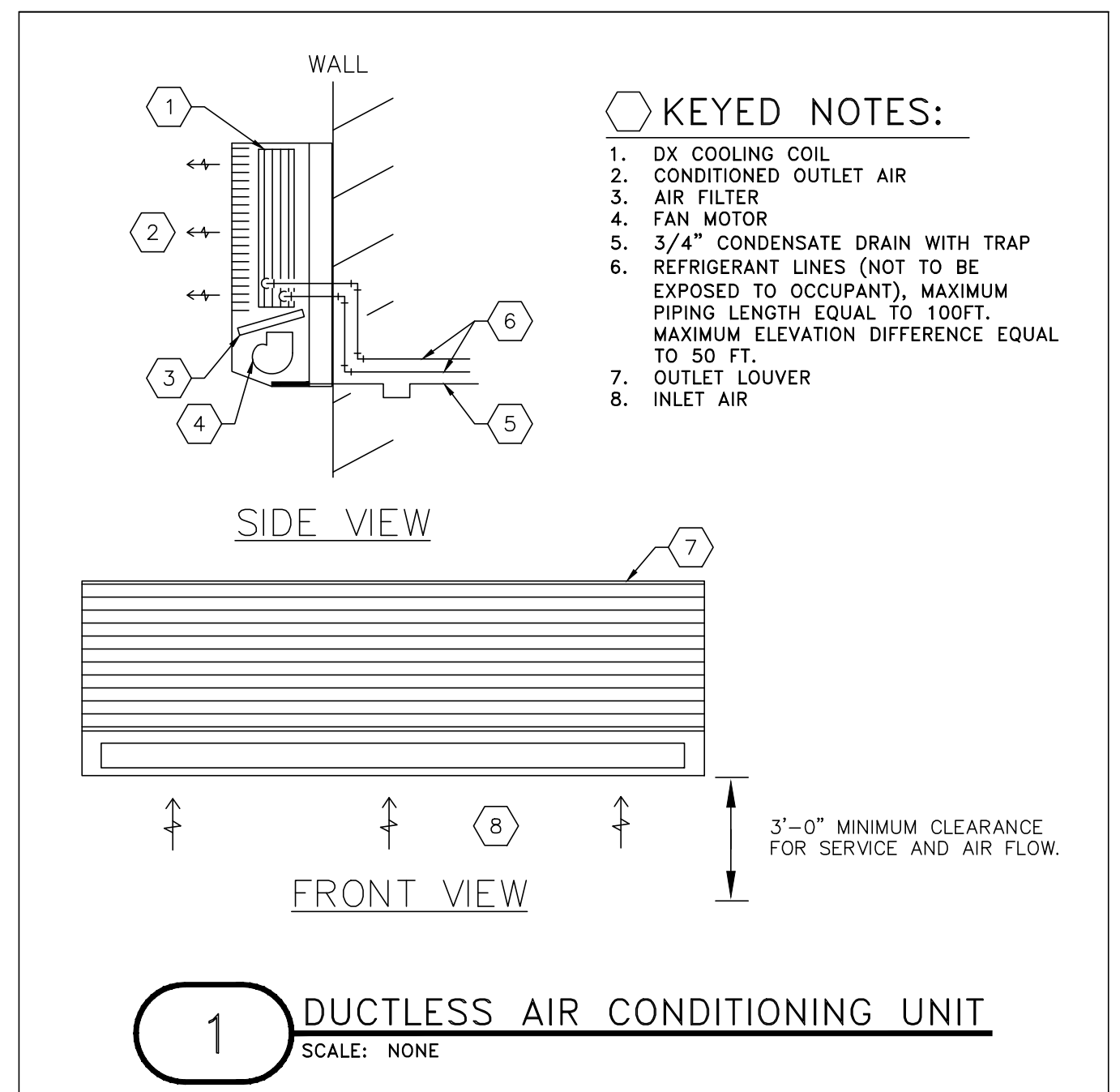
SYMBOL	DESCRIPTION
Ⓣ	LOW VOLTAGE THERMOSTAT
-C-	AIR CONDITIONING CONDENSATE PIPING

**HVAC PIPING LEGEND**

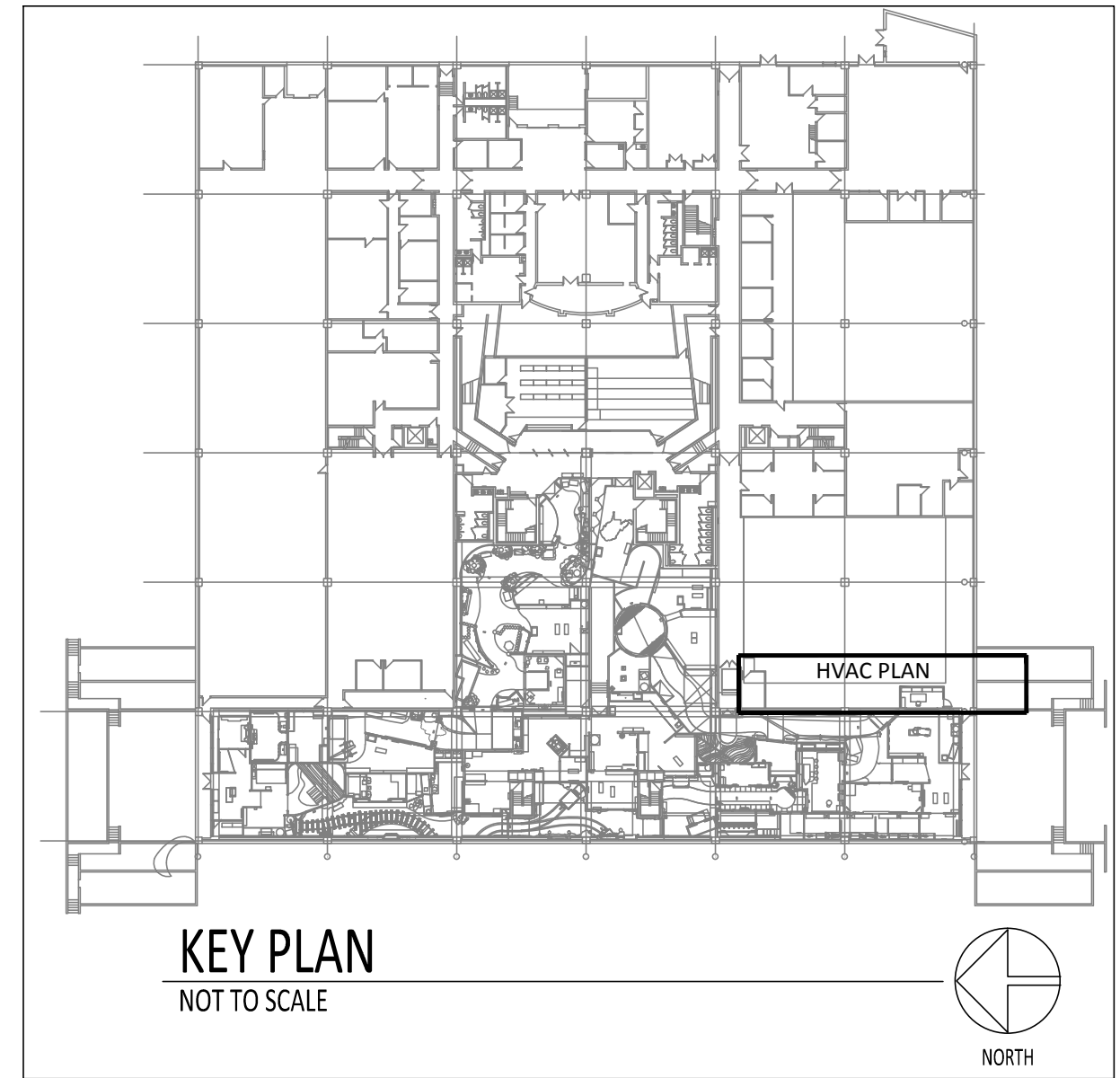
SYMBOL	DESCRIPTION
→	PIPE ELBOW TURNED DOWN
○	PIPE ELBOW TURNED UP
⊥	PIPE TEE WITH BRANCH OPENING TURNED DOWN
⊥	PIPE TEE WITH BRANCH OPENING TURNED UP

**HVAC LEGEND**

SYMBOL	DESCRIPTION
Ⓣ	EXISTING THERMOSTAT TO REMAIN
Ⓣ	NEW THERMOSTAT
- - -	EXISTING WORK TO REMAIN
---	EXISTING WORK TO BE REMOVED
---	NEW WORK

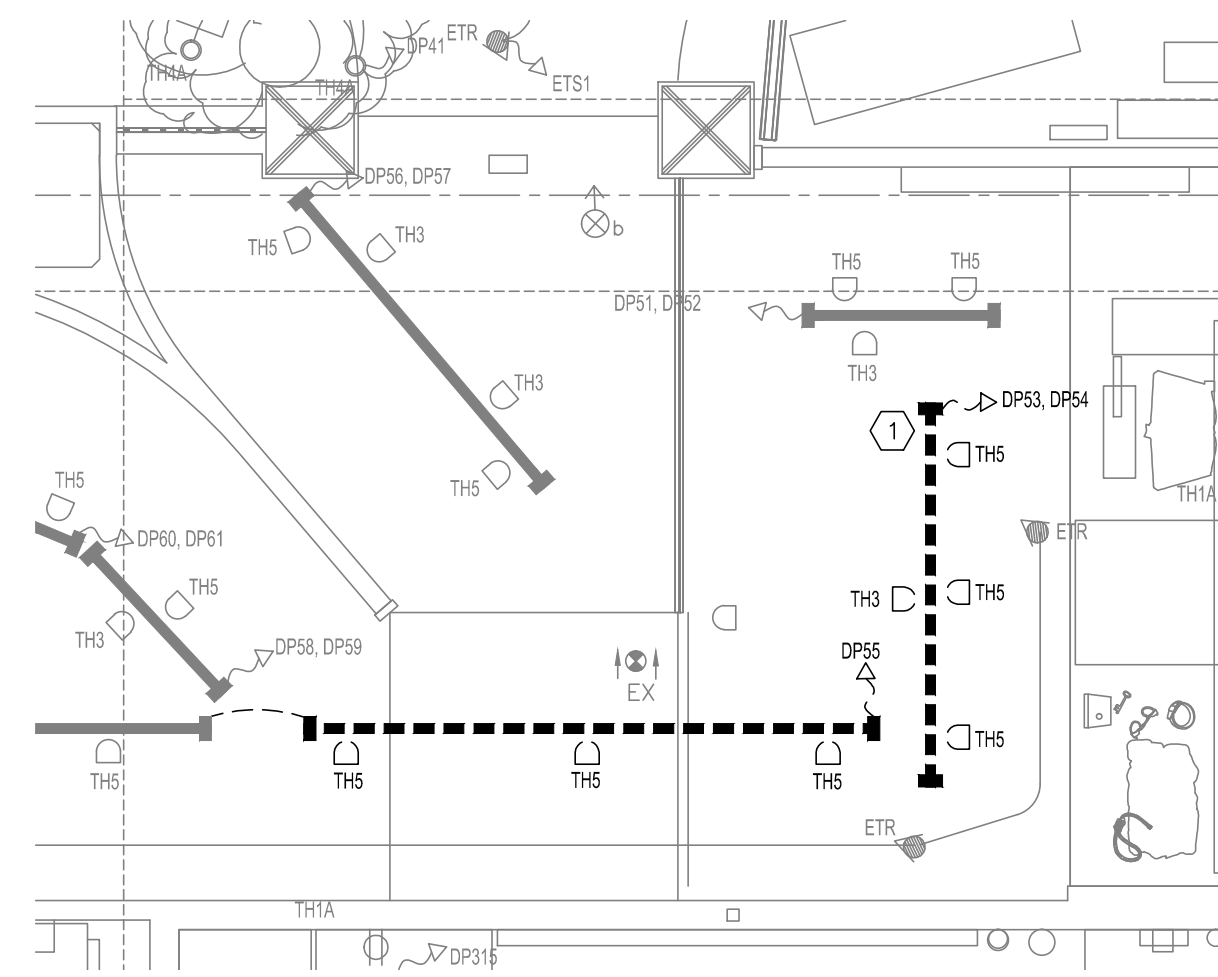


**1 DUCTLESS AIR CONDITIONING UNIT**  
SCALE: NONE

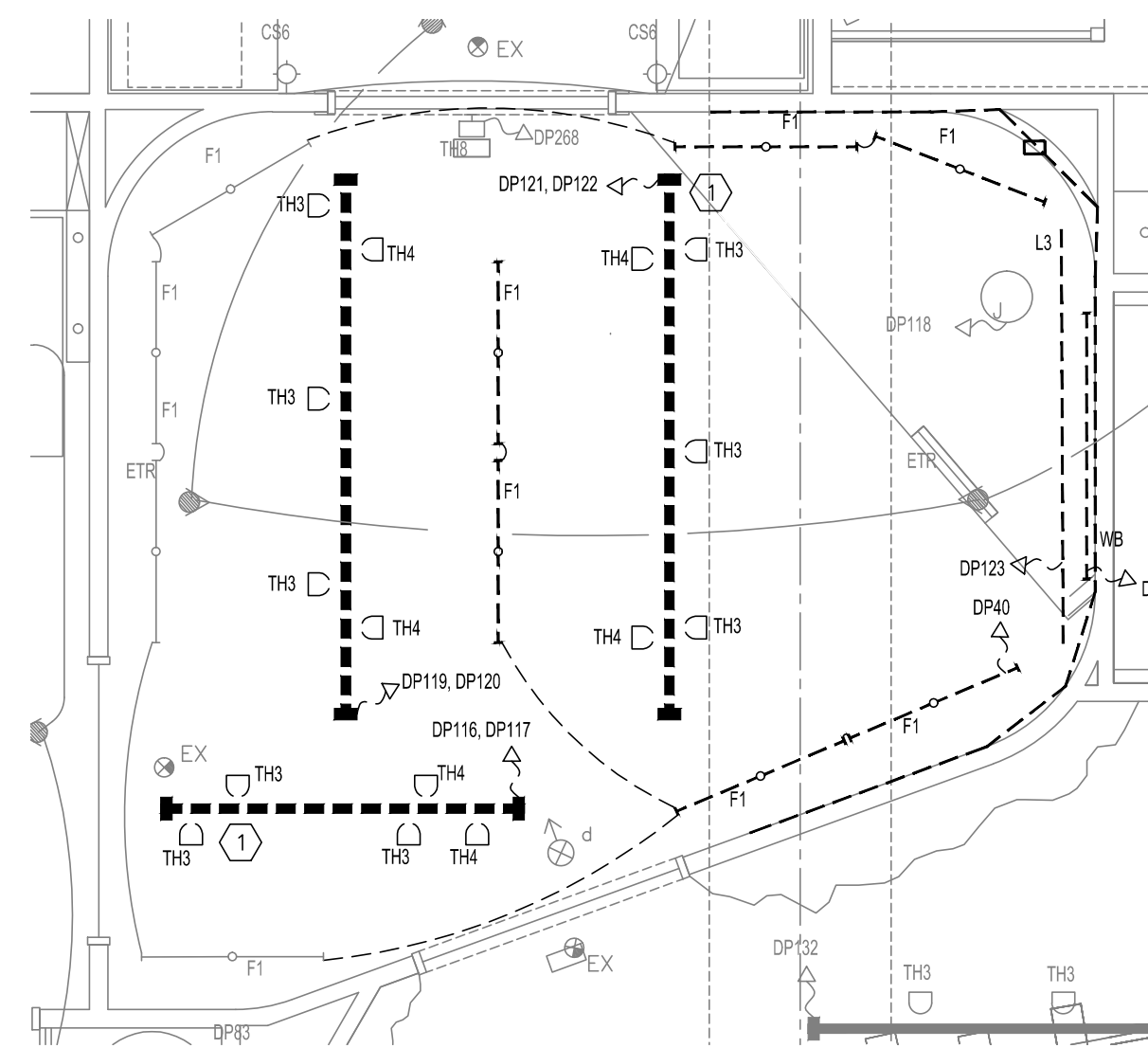


**KEY PLAN**  
NOT TO SCALE

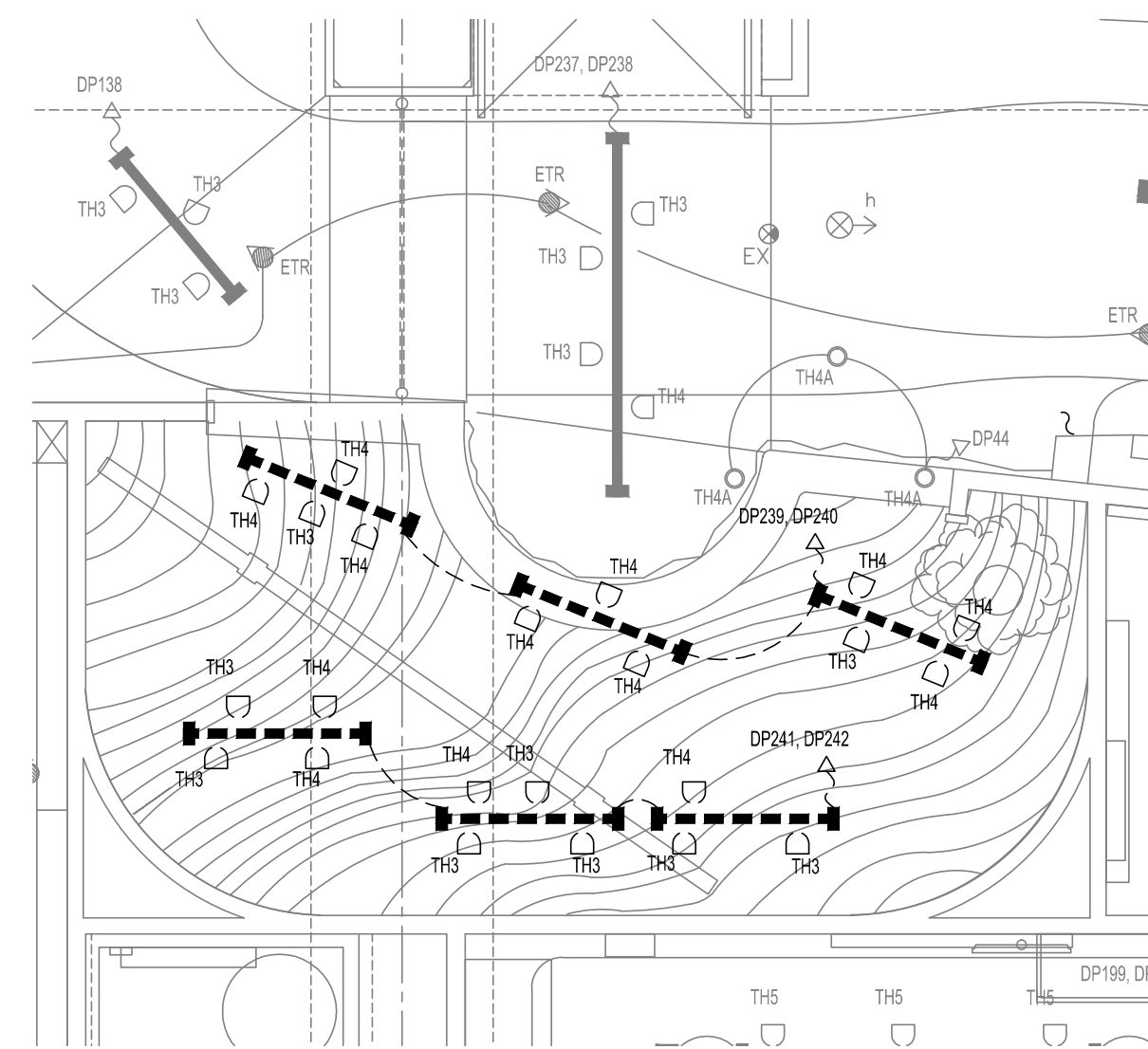
**1 MECHANICAL PLAN**  
SCALE: 1/4" = 1'-0"

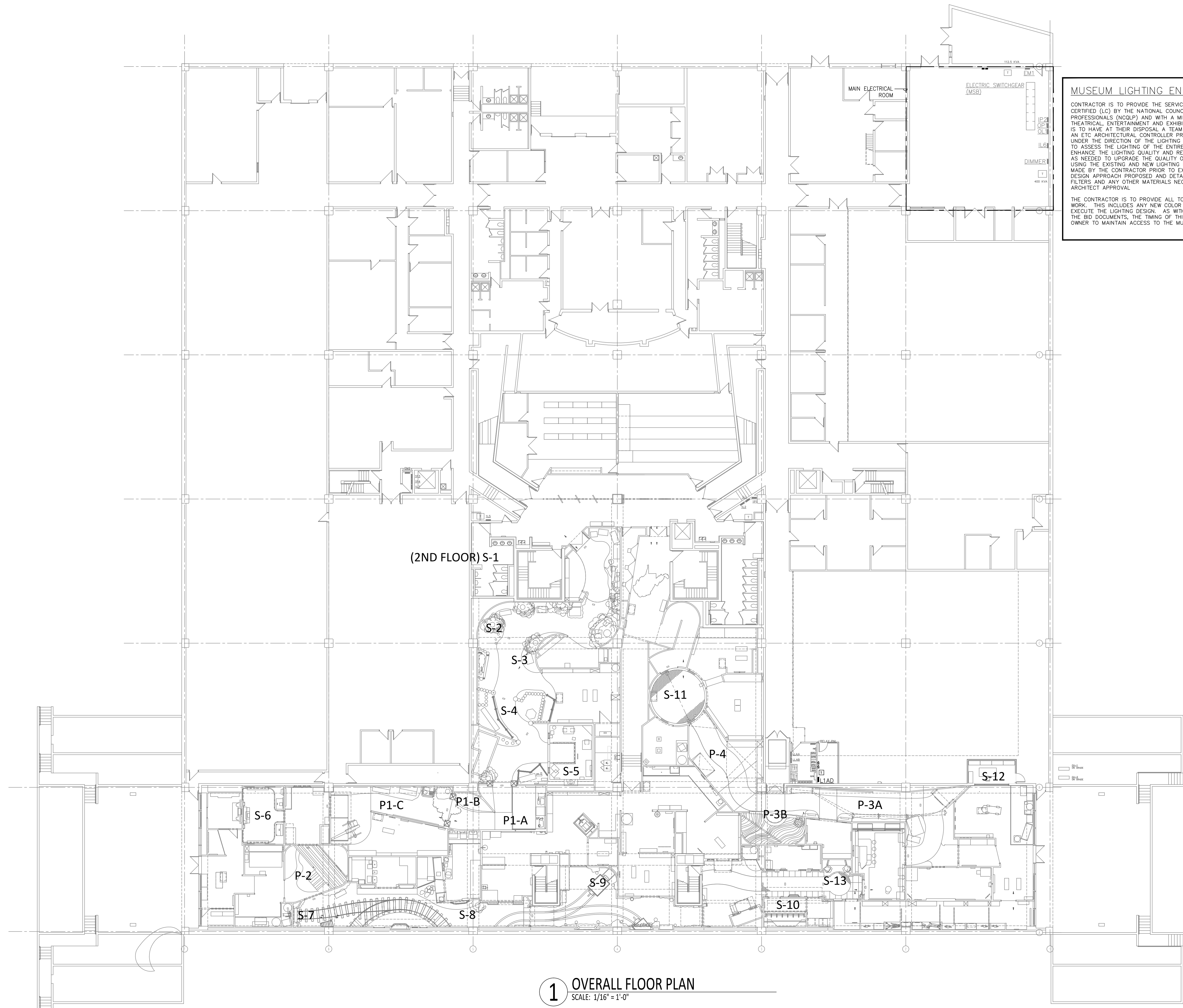


**1 P-1A - JOHN BROWN'S RAID**  
SCALE: 1/4" = 1'-0"



**4 P-2 - WHEELING**  
SCALE: 1/4" = 1'-0"





**MUSEUM LIGHTING ENHANCEMENT**

CONTRACTOR IS TO PROVIDE THE SERVICES OF A LIGHTING DESIGNER, LIGHTING CERTIFIED (LC) BY THE NATIONAL COUNCIL FOR THE QUALIFICATION OF LIGHTING PROFESSIONALS (NQCPL) AND WITH A MINIMUM OF FIVE YEARS EXPERIENCE IN THEATRICAL, ENTERTAINMENT AND EXHIBIT LIGHTING DESIGN. THE LIGHTING DESIGNER IS TO HAVE AT THEIR DISPOSAL, A TEAM OF FOUR LIGHTING FOCUS TECHNICIANS AND AN ETC ARCHITECTURAL CONTROLLER PROGRAMMER, WHO IS UNISON CERTIFIED UNDER THE DIRECTION OF THE LIGHTING DESIGNER. THIS TEAM OF PROFESSIONALS IS TO ASSESS THE LIGHTING OF THE ENTIRE EXISTING MUSEUM, DEVELOP A PLAN TO ENHANCE THE LIGHTING QUALITY AND REFOCUS, DIM AND AIM ALL LIGHTING DEVICES AS NEEDED TO UPGRADE THE QUALITY OF THE LIGHTING AND EXHIBIT PRESENTATION USING THE EXISTING AND NEW LIGHTING INSTRUMENTS. A SUBMISSION IS TO BE MADE BY THE CONTRACTOR PRIOR TO EXECUTION OF THE WORK DESCRIBING THE DESIGN APPROACH PROPOSED AND DETAILING THE QUANTITY AND TYPES OF COLOR FILTERS AND ANY OTHER MATERIALS NECESSARY FOR THE WORK FOR OWNER AND ARCHITECT APPROVAL.

THE CONTRACTOR IS TO PROVIDE ALL TOOLS AND MATERIALS NECESSARY FOR THIS WORK. THIS INCLUDES ANY NEW COLOR GELS OR FILTER LENSES NECESSARY TO EXECUTE THE LIGHTING DESIGN. AS WITH THE ENTIRE SCOPE OF WORK INDICATED IN THE BID DOCUMENTS, THE TIMING OF THIS WORK IS TO BE COORDINATED WITH THE OWNER TO MAINTAIN ACCESS TO THE MUSEUM DURING OPERATING HOURS.

**1 OVERALL FLOOR PLAN**  
SCALE: 1/16" = 1'-0"

**KORNE LOWMEYER INC.**  
ENGINEERS, P.C.  
MECHANICAL/ELECTRICAL ENGINEERS  
WWW.KLEIENERS.COM  
7700 ALUMINUM DRIVE #100  
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614-442-8801 FAX  
124 BROWN STREET  
CANTON, OHIO 44703  
330-225-8700 FAX  
TWO WILSONIA PLACE, SUITE 200  
COLUMBUS, OH 43215

**R S L ARCHITECTURE**  
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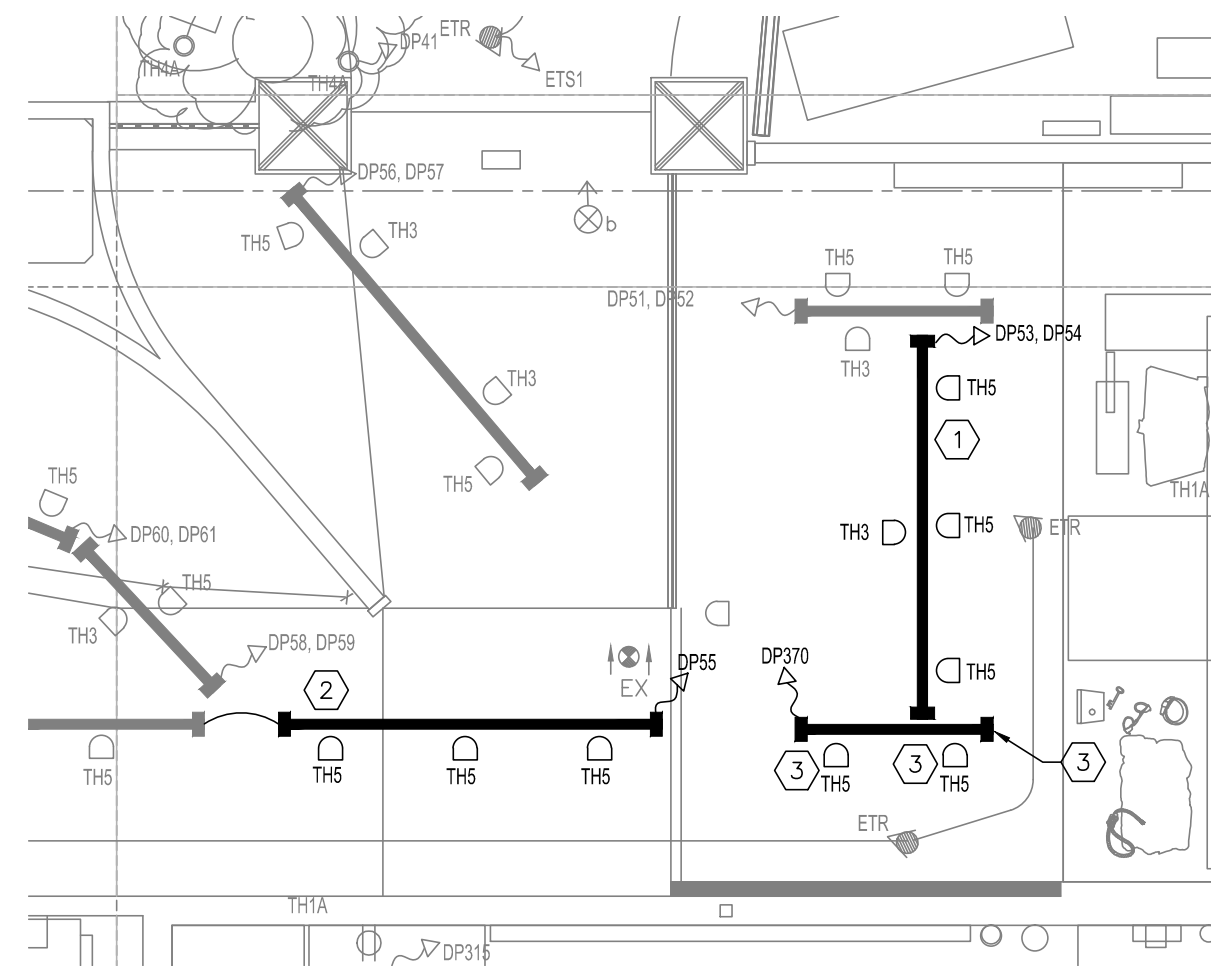
DRAWN BY: SCR  
ISSUE DATE: 06-09-2011  
REVISIONS:

OVERALL FLOOR PLAN

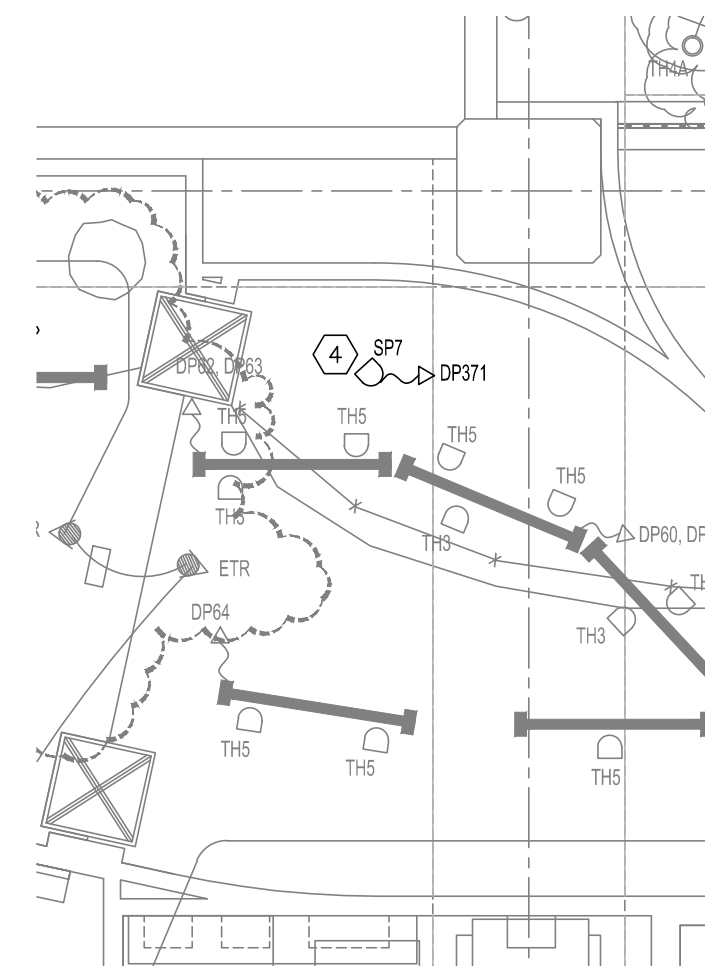
**EL1.00**

PROJECT #10843.00

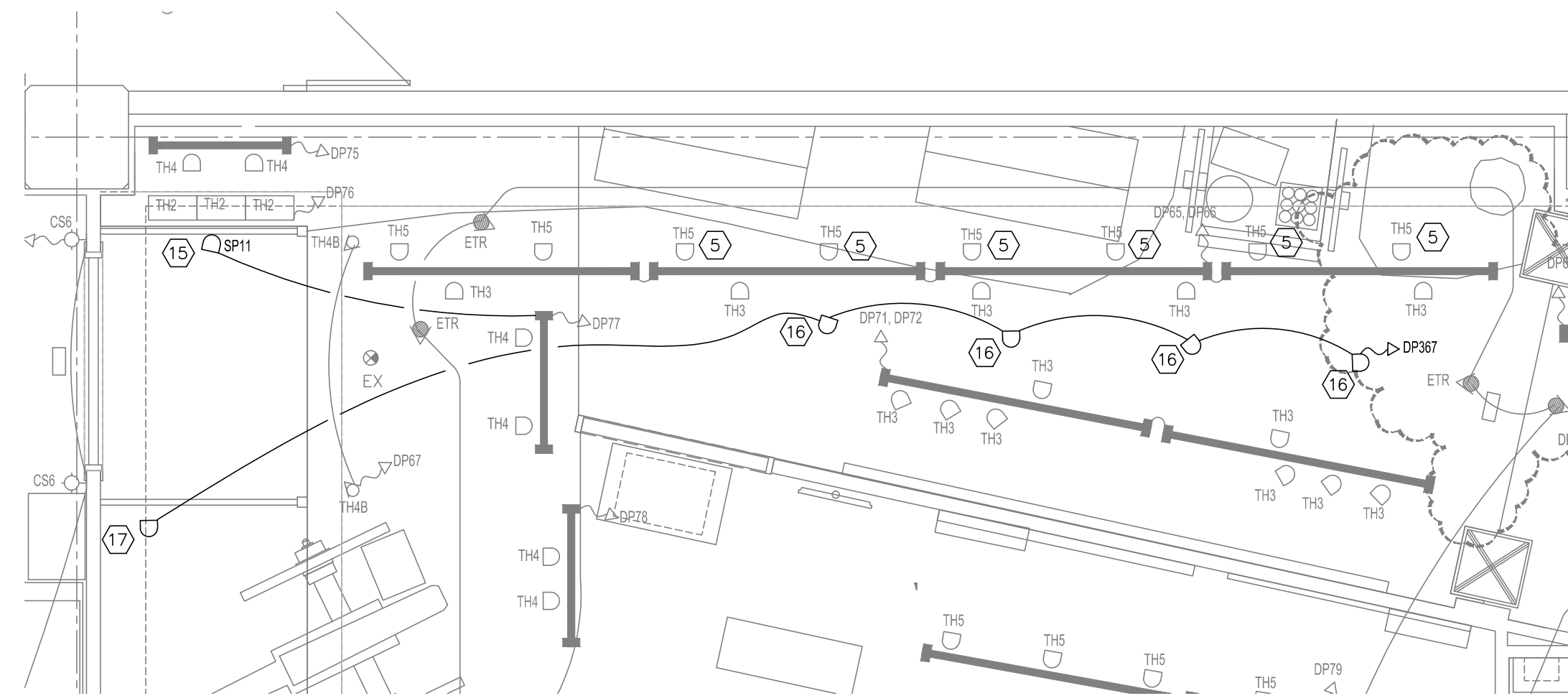




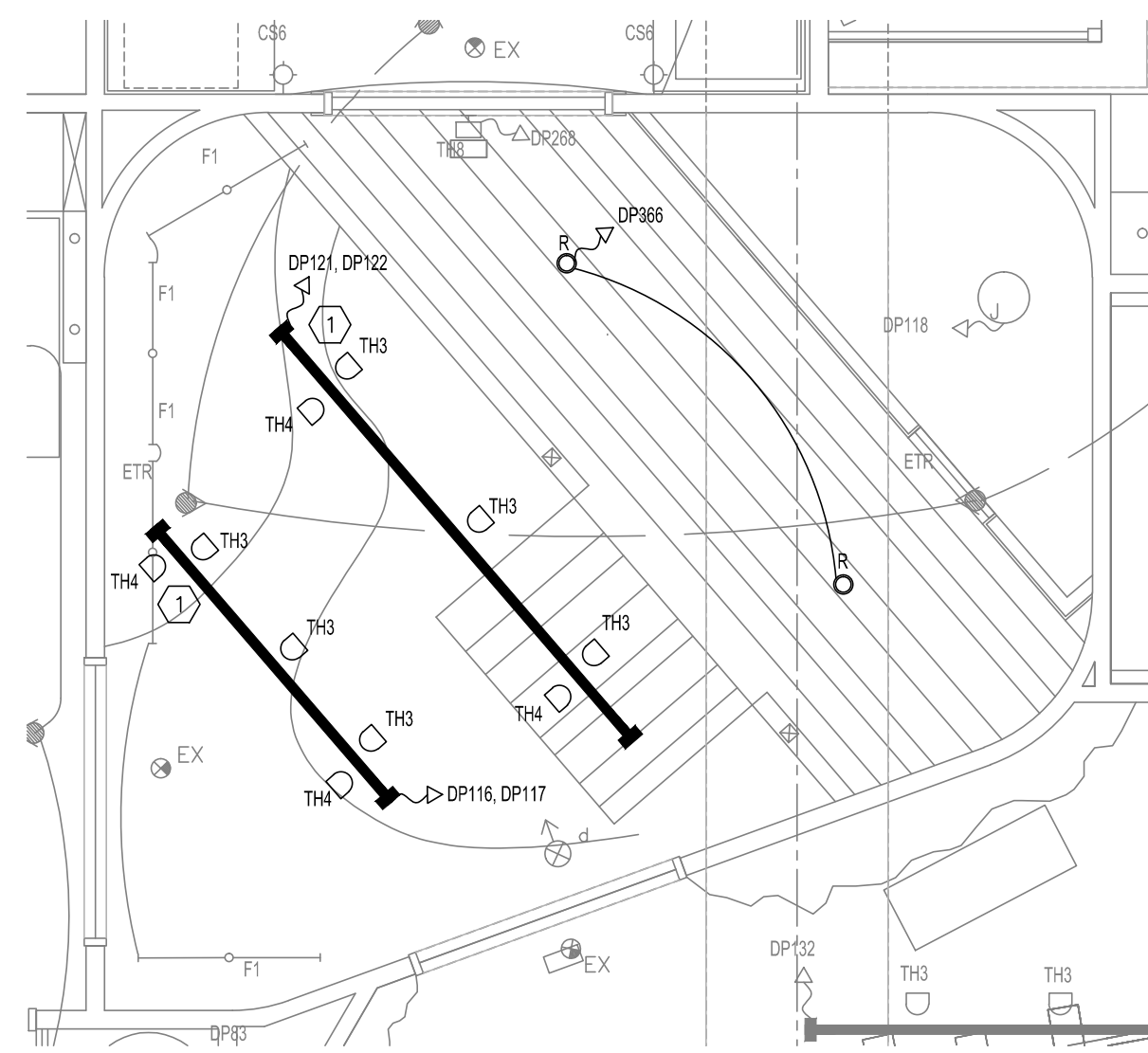
**1 P-1A - JOHN BROWN'S RAID**  
SCALE: 1/4" = 1'-0"



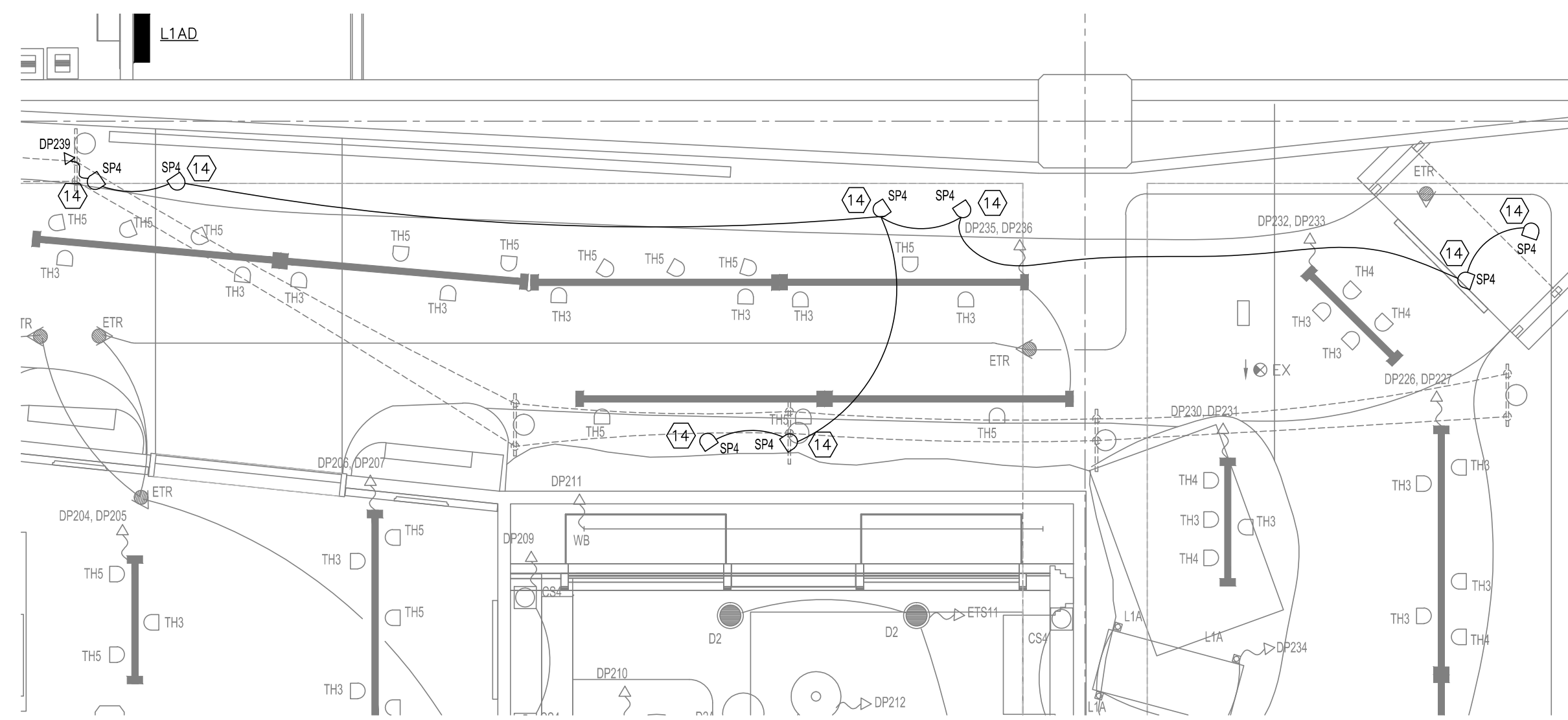
**2 P-1B - HARPERS FERRY**  
SCALE: 1/4" = 1'-0"



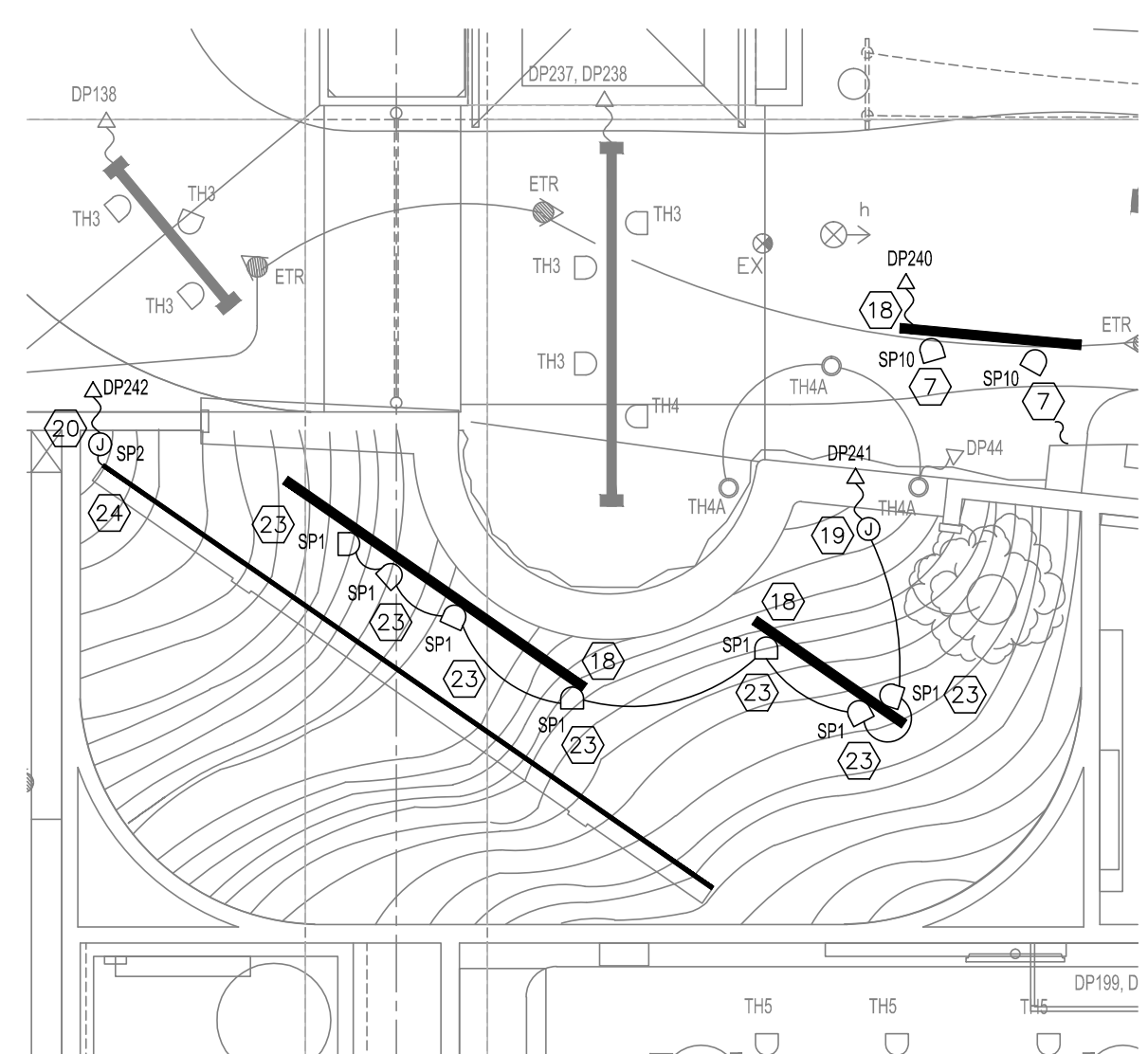
**3 P-1C - BATTLE OF PHILIPPI**  
SCALE: 1/4" = 1'-0"



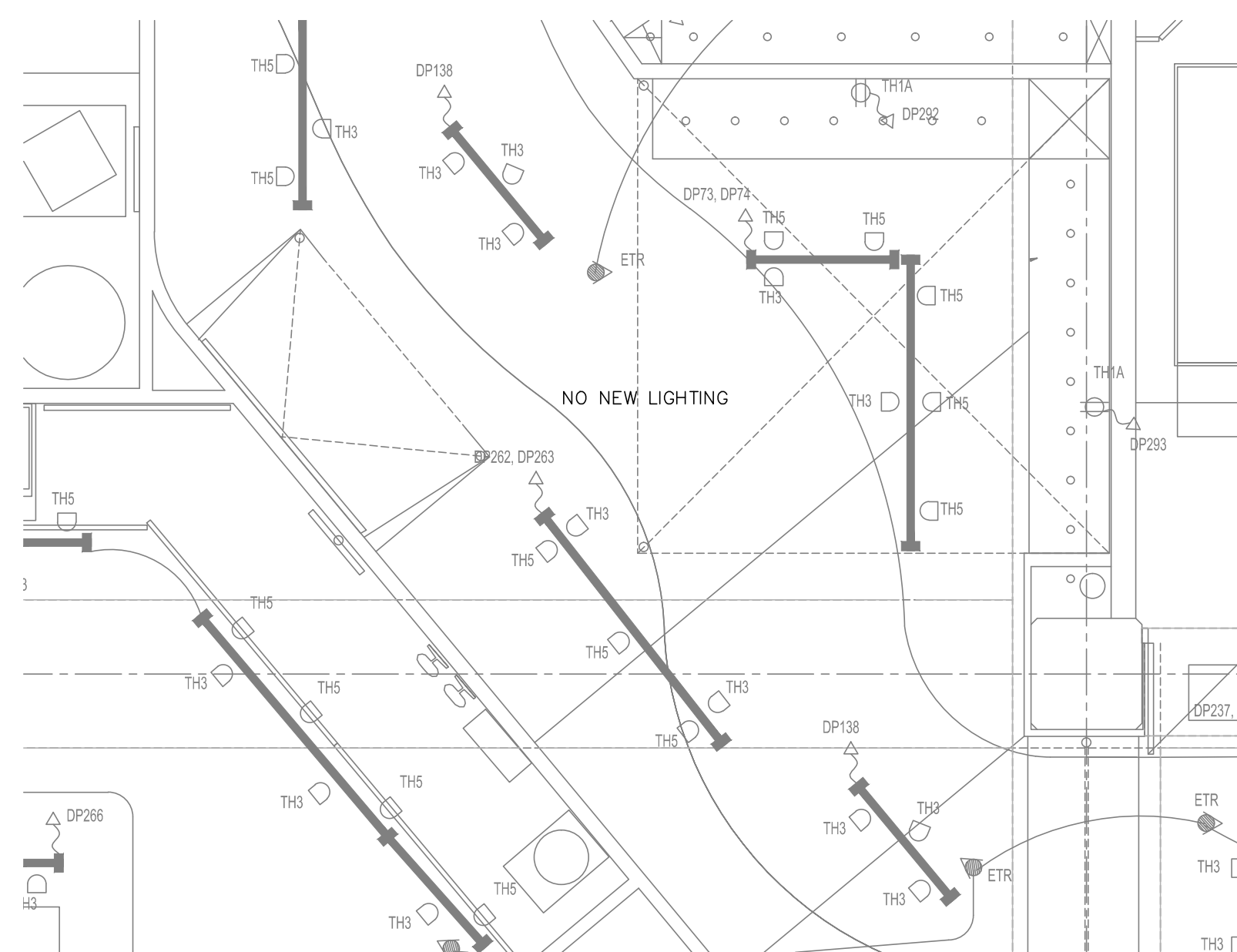
**4 P-2 - WHEELING**  
SCALE: 1/4" = 1'-0"



**5 P-3A - TRANSPORTATION**  
SCALE: 1/4" = 1'-0"



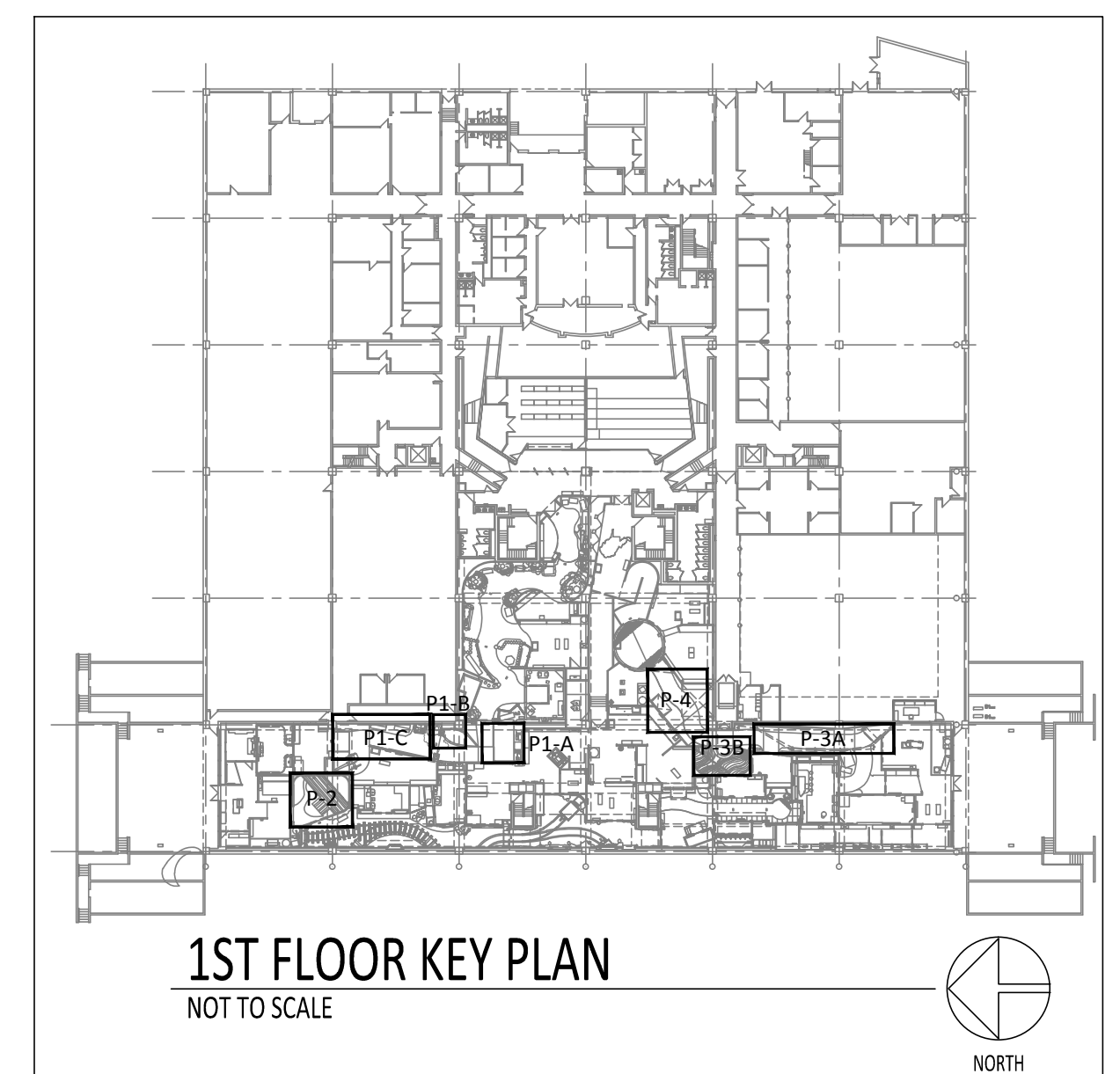
**6 P-3B - OVERLOOK**  
SCALE: 1/4" = 1'-0"



**7 P-4 - FAIRS AND FESTIVALS**  
SCALE: 1/4" = 1'-0"

**KEYED NOTES**

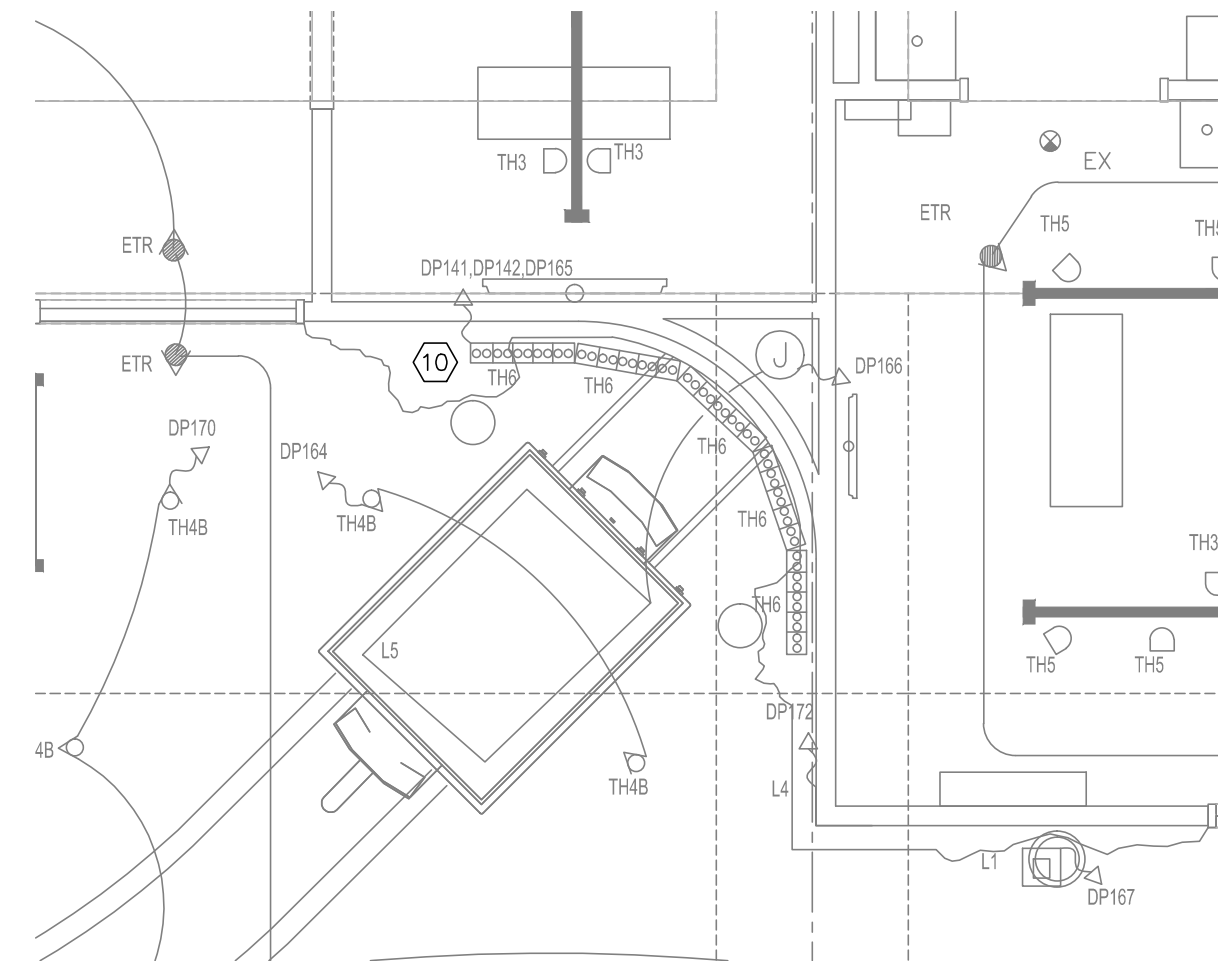
- RELOCATE TRACK AND/OR TRACK FIXTURES TO LOCATION SHOWN AND RE-CONNECT TO EXISTING DIMMING CIRCUIT.
  - P1-A: PROVIDE NEW 8'-0" TRACK EQUAL TO TRACK SCHEDULED FOR DEMOLITION (LSI #32220). RE-USE EXISTING TRACK FIXTURES AND QUANTITY SHOWN ON PLANS. RE-CONNECT TO EXISTING DIMMING CIRCUIT.
  - P1-A: PROVIDE NEW 4'-0" TRACK EQUAL TO TRACK SCHEDULED FOR DEMOLITION (LSI #32210). RE-USE EXISTING TRACK FIXTURES "TH5" FROM AREA S-3 THAT ARE SCHEDULED FOR RELOCATION. CONNECT TO NEW DIMMING CIRCUIT SHOWN.
  - P1-B: PROVIDE NEW SINGLE SPOT FIXTURE WITH UV FILTER TO SHINE ON MURAL. FIXTURE SHALL BE ACTIVATED WITH THE SHOW CONTROL. LIGHT SHALL FADE OUT WHEN SHOW IS COMPLETE.
  - P1-C: PROVIDE COLOR FILTER GEL FROM SPECIAL FX LIGHTING AND UV FILTER ON EXISTING FIXTURE TO CREATE A WARM SUNRISE GLOW ON WALL MURAL AND NEW TENTS. FILTER COLOR TO BE DETERMINED IN THE FIELD.
  - S-1/S-6: PROVIDE NEW SINGLE SPOT FIXTURE WITH UV FILTER TO SHINE ON BUST. FIXTURE SHALL BE ACTIVATED WITH THE SHOW CONTROL. LIGHT SHALL FADE OUT WHEN SHOW IS COMPLETE.
  - S-2/S-8: PROVIDE NEW DIMMABLE SHOW LIGHTING FOCUSED ON CARDINAL ANIMATRONIC. LIGHTING SHALL BE TIED INTO THE SHOW CONTROL.
  - S-3: PROVIDE (2) NEW SPOT LIGHT FIXTURES WITH COLOR FILTER MOUNTED ON NEW TRACK. COLOR FILTER TO BE DETERMINED. LIGHT FIXTURES SHALL ACTIVATE VIA THE SHOW CONTROL FROM PROMPT IN SCENE S-2.
  - S-3: PROVIDE NEW DIMMABLE LED FIXTURE SURROUNDING THE EXISTING CASE. FIXTURE SHALL REMAIN ILLUMINATED AT ALL TIMES.
  - S-9: REPLACE GREEN COLOR FILTER ON EXISTING TH6 LIGHT FIXTURES ALONG THE CURVED BACK WALL WITH NEW BLUE COLOR FILTER. COLOR FILTER SHALL BE FROM SPECIAL FX LIGHTING. THE BLUE COLOR FILTER SHALL MATCH THE SHADE OF THE EXISTING BLUE COLOR FILTER UNDERNEATH THE MULE CART. EXACT COLOR SHALL BE DETERMINED IN THE FIELD.
  - S-11: PROVIDE NEW BLUE FILTER FROM SPECIAL FX LIGHTING IN EXISTING LIGHT FIXTURE TO MATCH EXISTING FILTER IN ROTUNDA. EXACT COLOR FILTER TO BE DETERMINED IN THE FIELD.
  - S-12: PROVIDE NEW SPOT LIGHT FIXTURE MOUNTED TO THE CEILING TO HIGHLIGHT FEMALE ANIMATRONIC/ARTIFACT. LIGHT FIXTURE SHALL BE CONTROLLED BY THE SHOW CONTROL. COORDINATE THE EXACT LOCATION IN THE FIELD.
  - S-13: PROVIDE NEW TRACK MOUNTED LIGHT FIXTURES WITH UV FILTER TO SHINE ON MURAL. LIGHTS SHALL BE INSTALLED AND FOCUSED TO ELIMINATE THE SHADOWING FROM THE FRAME.
  - P-3A: PROVIDE NEW SPOT FIXTURES TO HIGHLIGHT NEW ANIMATRONICS. COORDINATE EXACT LOCATION OF SPOT AND AIMING IN FIELD.
  - P1-C: PROVIDE NEW SPOT FIXTURE WITH COLOR FILTER GEL FROM SPECIAL FX LIGHTING AND UV FILTER ON EXISTING FIXTURE TO PROJECT A SOFT SUNRISE EFFECT TO LIGHT INTERIOR BRIDGE AND RACCOON. FILTER COLOR TO BE DETERMINED IN THE FIELD.
  - P1-C: PROVIDE NEW GOBO PROJECTOR EQUAL TO STARLIGHT MODEL #L060100 WITH "LEAFY SHADOW EFFECT" GOBO FIXTURE TO PROJECT ONTO THE FLOOR AND MURAL. COORDINATE EXACT LOCATION, LEAF PATTERN, AND AIMING IN WITH THE OWNER, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
  - P1-C: PROVIDE NEW GOBO PROJECTOR EQUAL TO STARLIGHT MODEL #L060100 WITH "WATER REFLECTION EFFECT" GOBO FIXTURE TO PROJECT ONTO THE FLOOR AND MURAL. COORDINATE EXACT LOCATION, WATER PATTERN, AND AIMING IN WITH THE OWNER, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
  - PROVIDE 1" BLACK PIPE BAR THAT SHALL BE USED TO MOUNT LUMINAIRES. LUMINAIRES SHALL ATTACH TO THE PIPE BAR USING C-CLAMPS. SUSPEND PIPE BAR SO THAT THE BOTTOM OF THE LUMINAIRES ALIGN WITH THE BLACKOUT LINE.
  - P-3B: PROVIDE CONTROLLER FOR SP1 LED LUMINAIRES LOCATED AT CEILING OF OVERLOOK AREA. CONTROLLER SHALL RECEIVE ON/OFF INPUT FROM DIMMING RACK. CONTROL SCHEME SHALL HAVE A 10 MINUTE DURATION TO FADE FROM SUNRISE, SUNSET, NIGHTTIME. ALL PROGRAMMATIC FUNCTION SHALL BE INTEGRAL TO LOCAL CONTROLLER FOR CONTROL SCHEME.
  - P-3B: PROVIDE CONTROLLER FOR SP2 LED LUMINAIRES LOCATED AT CEILING OF OVERLOOK AREA. CONTROLLER SHALL RECEIVE ON/OFF INPUT FROM DIMMING RACK. CONTROL SCHEME SHALL HAVE THE SP2 LUMINAIRE "CHASE" TO CREATE A MOVING TRAFFIC EFFECT ON THE BRIDGE. ALL PROGRAMMATIC FUNCTION SHALL BE INTEGRAL TO LOCAL CONTROLLER FOR CONTROL SCHEME.
  - S-12: PROVIDE DIMMABLE DOWNLIGHTS CONTROLLED THROUGH THE DIMMER RACK.
  - S-10: PROVIDE NEW TRACK MOUNTED LIGHT FIXTURE WITH UV FILTER. LIGHTS SHALL BE INSTALLED AND FOCUSED TO HIGHLIGHT ARCHITECTURAL ELEMENTS. SUSPEND TRACK SO THAT THE BOTTOM OF THE LIGHT FIXTURE ALIGNS WITH THE BLACKOUT LINE.
  - P-3B: PROVIDE NEW COLOR CHANGING LED FIXTURE MOUNTED TO NEW PIPE BAR; PROGRAM LED LIGHT TO CREATE A SUNRISE TO SUNSET EFFECT. LIGHTING SHALL BE TIED INTO THE SHOW CONTROL.
  - P-3B: PROVIDE NEW LED LIGHTING TAPE AFFIXED TO BRIDGE STRUCTURE TO SIMULATE AUTOMOBILES. LIGHTING SHALL BE TIED INTO THE SHOW CONTROL.
- GENERAL NOTES**
- E.C. IS RESPONSIBLE FOR RACEWAYS AND CABLING ONLY. SHOW CONTROL CONTRACTOR WILL PROVIDE TERMINAL DEVICES AND TERMINATIONS IN AV ROOM.
  - ALL CONDUIT SHALL BE GROUPED AND MOUNTED ABOVE OR TO THE SIDE OF ALL HVAC DUCTWORK AND SPRINKLER LINES.
  - MOUNTING FOR TRACK SHALL BE AT 10'-0" AFF UNLESS OTHERWISE NOTED.
  - PROVIDE IVORY SWITCHES AND COVERPLATES.
  - SCENE CONTROL OF LIGHTING IS BY OTHERS. ANY DESCRIPTION OF SCENE CONTROL IN KEYED NOTES IS FOR REFERENCE ONLY.
  - COORDINATE EXACT LOCATION, MOUNTING HEIGHTS, AND AIMING OF ALL NEW AND RELOCATED LIGHT FIXTURES WITH OWNER, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
  - ALL CONDUIT SHALL BE PAINTED BLACK TO MATCH ALL EXISTING CONDUIT, EQUIPMENT, ETC. ABOVE THE BLACKOUT LINE.



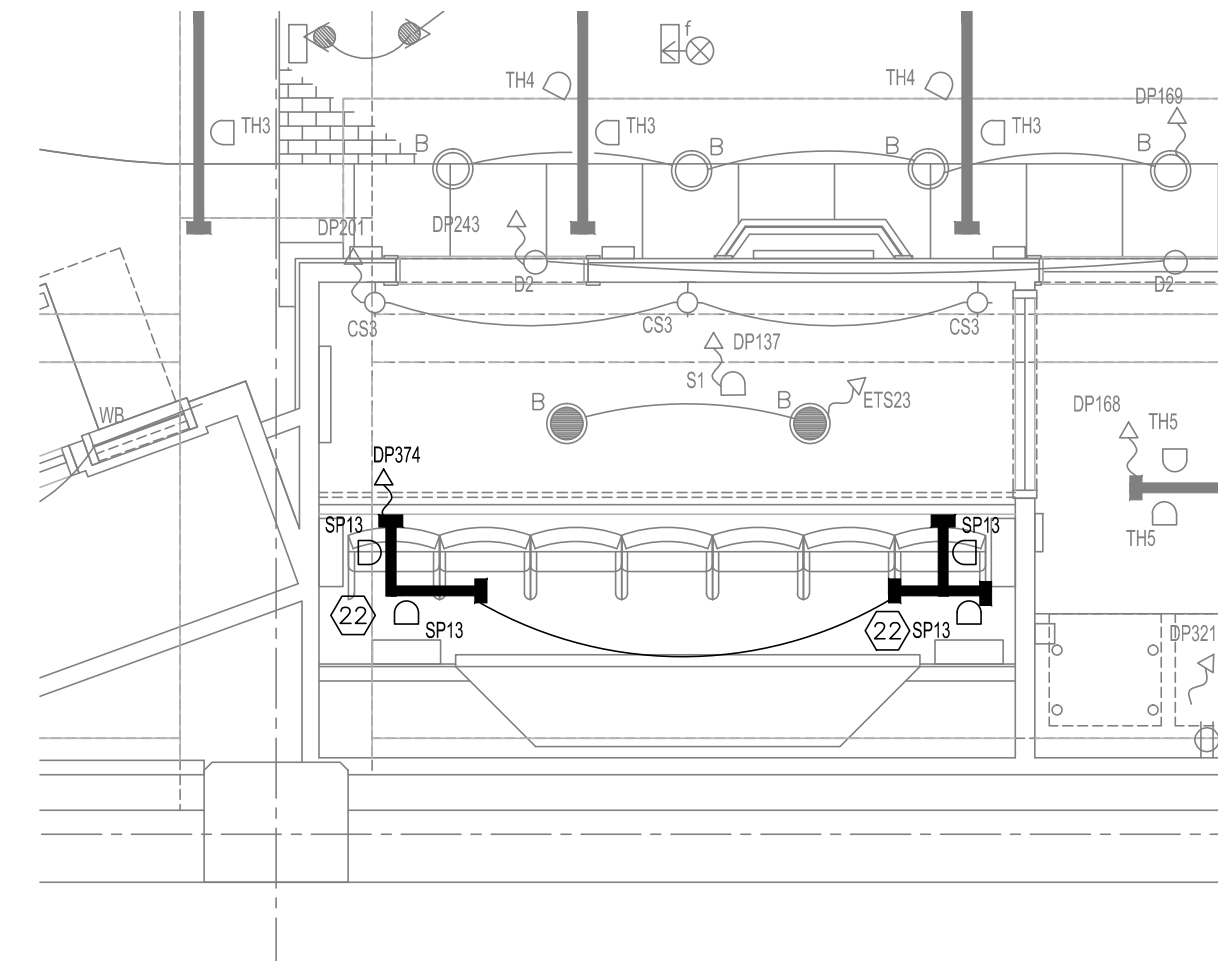
**1ST FLOOR KEY PLAN**  
NOT TO SCALE



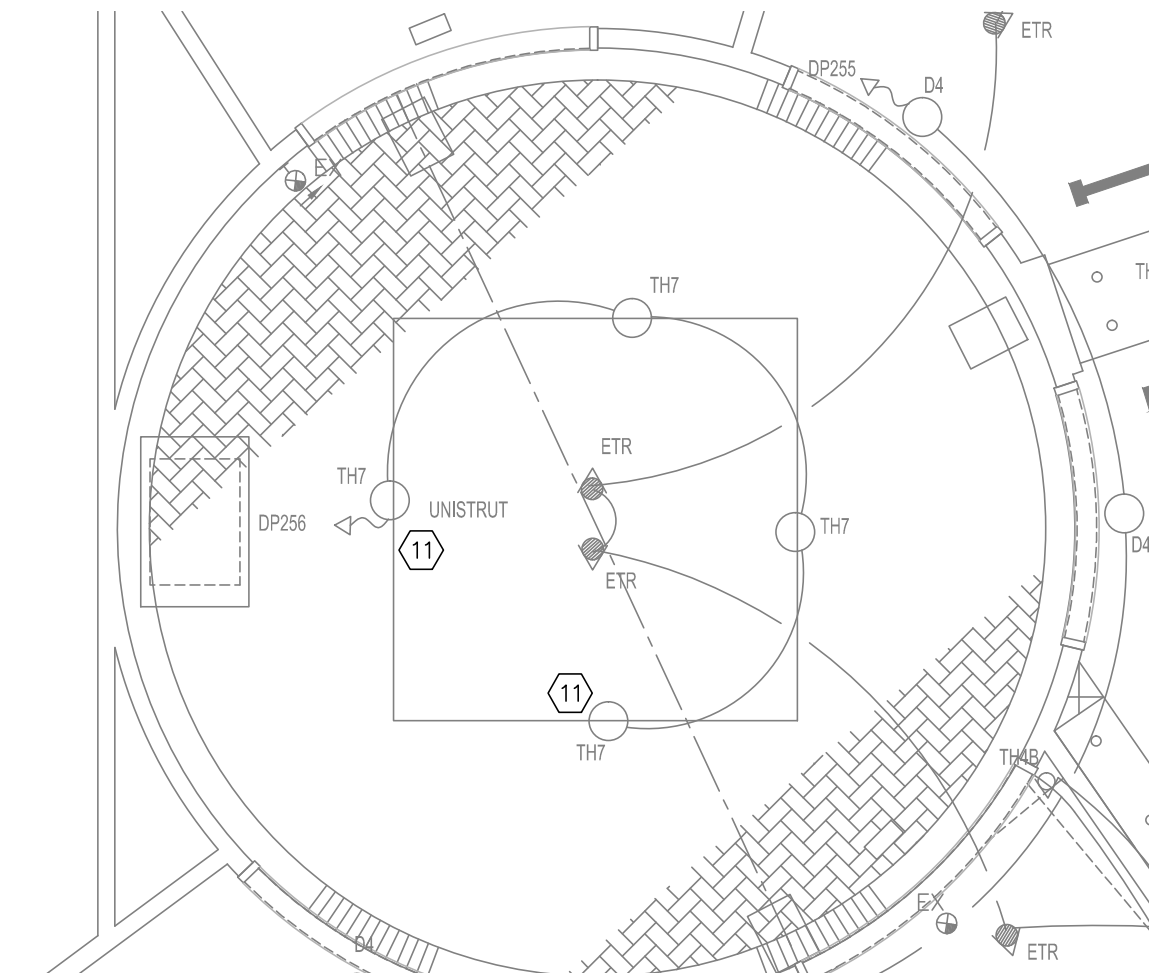




**1 S-9 - COAL MINE**  
SCALE: 1/4" = 1'-0"



**2 S-10 - MINE WARS**  
SCALE: 1/4" = 1'-0"





- KEYED NOTES**
- E-1A-C-01**, ITEM P-1A SENSOR TRIGGER  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT SCENE HAS BEEN TRIGGERED AND IS RUNNING, 1 POWER PAIR FOR SENSOR, 1 SPARE PAIR.

**E-1A-V-01**, **02**, **03** & **04**, ITEM P-1A VIDEO  
 PROVIDE (4) CAT6 CABLES, VIDEO MEDIA TWIST TYPE, BELDEN 1872A OR EQUAL, RUN BACK TO MAIN AV CONTROL SYSTEM RACK, 1 PER MONITOR.

**E-1A-SP-01**, **02**, **03** & **04**, ITEM P-1A SPEAKERS  
 PROVIDE (4) PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM EACH SPEAKER TO MAIN AV CONTROL ROOM RACKS, 1 PER SPEAKER.
  - E-1B-C-01**, ITEM P-1B ANIMATION & AUDIO PLAYER  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO ENABLE IN SHOW RUN MODE, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT ANIMATION HAS BEEN TRIGGERED AND IS RUNNING, 1 SPARE PAIR.

**E-1B-SP-01**, ITEM P-1B SPEAKER  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM SPEAKER TO P-1B-C-01.
  - E-1C-SP-01**, **02**, **03** & **04**, ITEM P-1C SPEAKERS  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM EACH SPEAKER TO MAIN AV CONTROL ROOM FOR 01, 02 & 03. SPEAKER 04 WILL HAVE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL, RUN TO P-1C-C-03 CONTROLLER.

**E-1C-C-01** & **02**, ITEM P-1C VIDEO PROJECTOR CONTROL & SENSOR  
 PROVIDE 1 CAT5E ETHERNET CABLE PER PROJECTOR RUN TO MAIN AV CONTROL RACK AND INTO CONTROL ETHERNET SWITCH.

PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO ENABLE IN SHOW RUN MODE, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT ANIMATION HAS BEEN TRIGGERED AND IS RUNNING, 1 SPARE PAIR.

**E-1C-V-01** & **02**, ITEM P-1C VIDEO PROJECTOR CABLES  
 PROVIDE 1 CAT6 CABLE, VIDEO MEDIA TWIST TYPE, BELDEN 1872A OR EQUAL, RUN BACK TO MAIN AV CONTROL SYSTEM RACK.

**E-1C-C-03**, ITEM P-1C ANIMATION & AUDIO PLAYER FOR RACCOON  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO ENABLE IN SHOW RUN MODE, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT ANIMATION HAS BEEN TRIGGERED AND IS RUNNING, 1 SPARE PAIR.
  - E-2-SP-01A**, **02**, **03** & **04**, ITEM P-2 SPEAKERS  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM EACH SPEAKER TO MAIN AV RACKS.

**E-2-SP-03** & **04**, ITEMS P-2 SPEAKERS  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM EACH SPEAKER TO MAIN AV RACKS.

**P-2-C-01**, **02** & **03**, ITEMS P-2 VIDEO PROJECTORS CONTROL  
 PROVIDE 1 CAT5E ETHERNET CABLE PER PROJECTOR RUN TO MAIN AV CONTROL RACK AND INTO CONTROL ETHERNET SWITCH.

**P-2-V-01**, ITEM P-2 VIDEO SILHOUETTE PROJECTOR  
 PROVIDE 1 CAT6 CABLE, VIDEO MEDIA TWIST TYPE, BELDEN 1872A OR EQUAL, RUN BACK TO MAIN AV CONTROL SYSTEM RACK.
  - E-3A-C-01** & **02**, ITEMS P-3A ANIMATION CONTROLLERS & MULTICHANNEL AUDIO PLAYBACK  
 SYSTEMS MUST BE TRIGGER-ABLE VIA CONTACT CLOSURE FROM MAIN AV CONTROL SYSTEM.  
 LOCATION OF CONTROLLERS MUST BE DISCREET, CEILING MOUNTED OR HIDDEN BEHIND SCENIC ELEMENTS.

**P-3A-SP-01** & **02**, ITEM P-3A SPEAKERS  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM EACH SPEAKER TO P-3A-C-01 OR 02 CONTROLLERS & AUDIO PLAYBACK.
  - E-3B-C-01**, ITEM P-3B ANIMATION & AUDIO PLAYER  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO ENABLE IN SHOW RUN MODE, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT ANIMATION HAS BEEN TRIGGERED AND IS RUNNING, 1 SPARE PAIR.

**E-3B-C-02**, **03** & **04**, ITEM P-4 VIDEO PROJECTORS CONTROL  
 PROVIDE 1 CAT5E ETHERNET CABLE PER PROJECTOR RUN TO MAIN AV CONTROL RACK AND INTO CONTROL ETHERNET SWITCH.

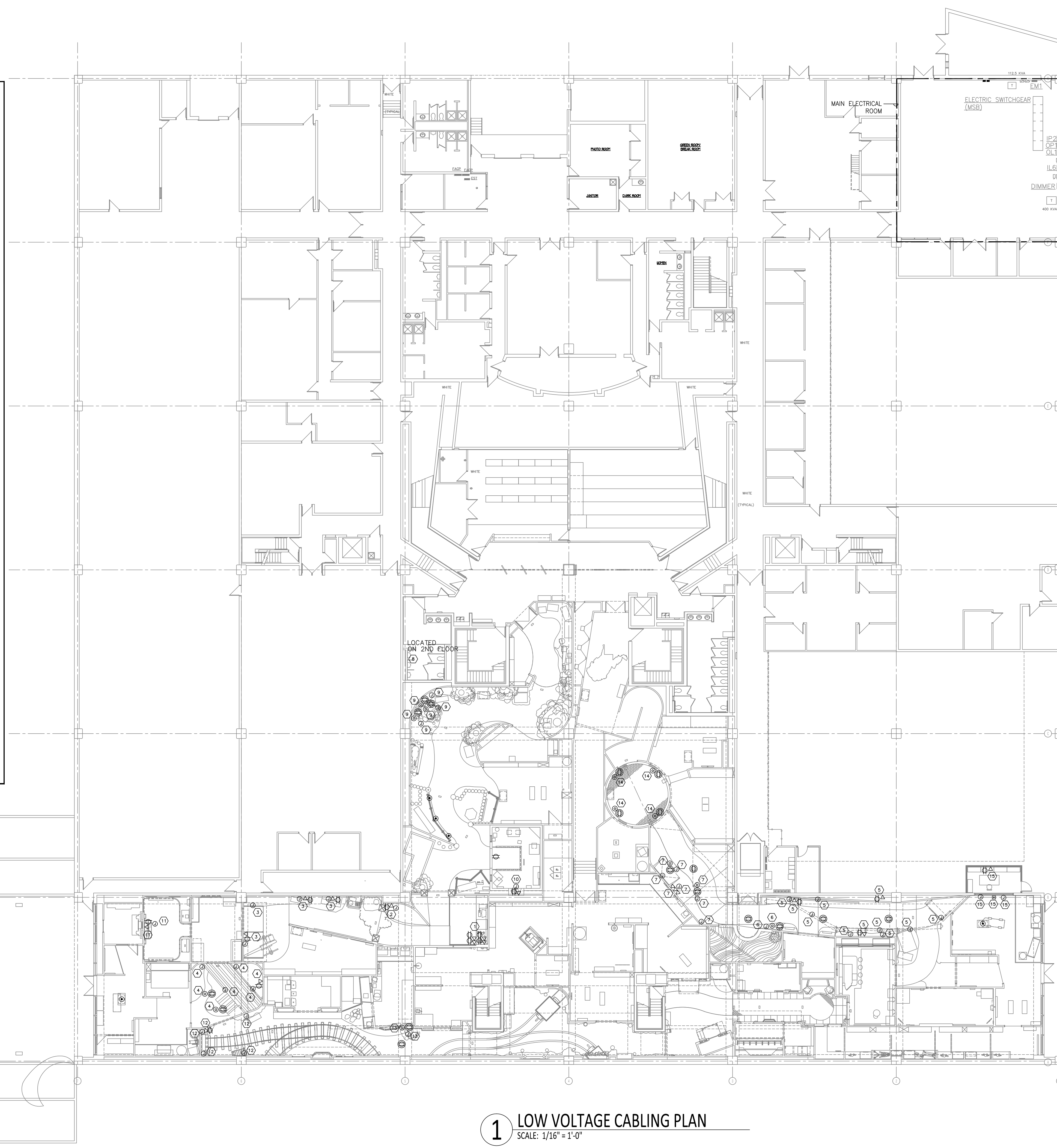
**E-3B-C-04** & **05**, ITEM P-4 CAMERA TRACKING TECHNOLOGY  
 CABLES FOR INTERACTIVE DETECTION CAMERAS TO GAMING SYSTEMS COMPUTER. CABLE TYPE & DESTINATION TO BE DETERMINED BY GAMING SYSTEM VENDOR.

**E-4-SP-01** & **02**, ITEM P-4 SPEAKERS  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM EACH SPEAKER TO MAIN AV RACKS.

**E-4-C**, ITEM P-4 COMPUTERS  
 PROVIDE CAT5E ETHERNET CABLE FROM PROJECTOR TO DATA OUTLET.
  - S-1-C-01**, ITEM S-1 ANIMATION & AUDIO PLAYER  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO ENABLE IN SHOW RUN MODE, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT ANIMATION HAS BEEN TRIGGERED AND IS RUNNING, 1 SPARE PAIR.

**S-1-SP-01**, ITEM S-1 SPEAKER  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM SPEAKER TO S-1-C-01.
  - S-2-C-01**, ITEM S-2 ANIMATION & AUDIO PLAYER  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO ENABLE IN SHOW RUN MODE, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT ANIMATION HAS BEEN TRIGGERED AND IS RUNNING, 1 SPARE PAIR.

**S-2-SP-01**, ITEM S-2 SPEAKER  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM EACH SPEAKER TO S-2-C-01.



- KEYED NOTES (CONT.)**
- S-3-SP-01**, ITEM S-3 SPEAKER  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM SPEAKER TO MAIN AV CONTROL ROOM.

**S-6-C-01**, ITEM S-6 ANIMATION & AUDIO PLAYER  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO ENABLE IN SHOW RUN MODE, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT ANIMATION HAS BEEN TRIGGERED AND IS RUNNING, 1 SPARE PAIR.

**S-6-SP-01**, ITEM S-6 SPEAKER  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM SPEAKER TO S-6-C-01.
  - S-7-C-01**, **02** & **03**, ITEM S-7 PLUNGER AUDIO TRIGGERS  
 PROVIDE ONE SINGLE-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM.

**S-7-C-04**, ITEM S-7 EXPLOSION STROBE LIGHT EFFECT  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 2 SPARE Pairs.

**S-7-SP-01**, **02**, **03** & **04**, ITEM S-7 SPEAKERS  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM EACH SPEAKER TO MAIN AV CONTROL ROOM.
  - S-8-C-01**, ITEM S-8 ANIMATION & AUDIO PLAYER  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO ENABLE IN SHOW RUN MODE, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT ANIMATION HAS BEEN TRIGGERED AND IS RUNNING, 1 SPARE PAIR.

**S-8-SP-01**, ITEM S-8 SPEAKER  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM SPEAKER TO S-8-C-01.
  - S-11-C-01**, **02**, **03** & **04**, ITEMS S-11 VIDEO PROJECTORS CONTROL  
 PROVIDE 1 CAT5E ETHERNET CABLE PER PROJECTOR RUN TO MAIN AV CONTROL RACK AND INTO CONTROL ETHERNET SWITCH.

**S-11-V-01**, **02**, **03** & **04**, ITEMS S-11 VIDEO PROJECTORS  
 PROVIDE 1 CAT6 CABLE, VIDEO MEDIA TWIST TYPE, BELDEN 1872A OR EQUAL, RUN BACK TO MAIN AV CONTROL SYSTEM RACK.
  - S-12-C-01**, ITEM S-12 ANIMATION & AUDIO PLAYER  
 PROVIDE ONE 3-PAIR, 20AWG CABLE, BELDEN 9750 OR EQUAL, RUN TO MAIN AV CONTROL SYSTEM, 1 PAIR TO ENABLE IN SHOW RUN MODE, 1 PAIR TO SIGNAL MAIN AV CONTROL SYSTEM THAT ANIMATION HAS BEEN TRIGGERED AND IS RUNNING, 1 SPARE PAIR.

**S-12-C-02**, ITEM S-12 PUSH BUTTON TRIGGER  
 PROVIDE A RED SINGLE CONTACT CLOSURE BUTTON ON A PEDESTAL TO START THE ANIMATION SEQUENCE OF ITEM S-12.

PROVIDE ONE SINGLE PAIR, 20AWG CABLE, BELDEN 8205 OR EQUAL, RUN TO ANIMATION CONTROLLER S-12-C-01.

**S-12-SP-01**, ITEM S-12 SPEAKERS  
 PROVIDE 1 PAIR, 18AWG CABLE, BELDEN 5300UE OR EQUAL FROM EACH SPEAKER TO S-12-C-01.
- GENERAL NOTES**
- REFER TO THE AUDIO VISUAL DRAWINGS AND COORDINATE ALL WORK WITH THE AUDIO VISUAL CONTRACTOR PRIOR TO PERFORMING ANY WORK.
  - COORDINATE EXACT ROUTING OF CONDUITS/CABLES IN THE FIELD.
  - ALL CONDUIT SHALL BE PAINTED BLACK TO MATCH ALL EXISTING CONDUIT, EQUIPMENT, ETC. ABOVE THE BLACKTOP LINE.
  - REFER TO DRAWINGS EP1.01, EP1.02, AND EP1.03 FOR MORE INFORMATION.
  - CAT6 CABLE QUANTITIES SHALL NOT EXCEED (3) IN 1/2" CONDUIT, (5) IN 3/4" CONDUIT, (9) IN 1" CONDUIT, OR (22) IN 1-1/2" CONDUIT. LEAVE 10FT OF SLACK AT BOTH ENDS. COORDINATE WITH AV PLANS.
  - BELDEN 8205 CABLE QUANTITIES SHALL NOT EXCEED (3) IN 1/2" CONDUIT, (4) IN 3/4" CONDUIT, (7) IN 1" CONDUIT, OR (18) IN 1-1/2" CONDUIT. LEAVE 10FT OF SLACK AT BOTH ENDS. COORDINATE WITH AV PLANS.
  - BELDEN 1872A/9750 CABLE QUANTITIES SHALL NOT EXCEED (3) IN 3/4" CONDUIT, (5) IN 1" CONDUIT, (10) IN 1-1/4" CONDUIT, OR (15) IN 1-1/2" CONDUIT. LEAVE 10FT OF SLACK AT BOTH ENDS. COORDINATE WITH AV PLANS.
  - BELDEN 5300UE SPEAKER CABLE QUANTITIES SHALL NOT EXCEED (1) IN 1/2" CONDUIT, (4) IN 3/4" CONDUIT, (7) IN 1" CONDUIT, OR (18) IN 1-1/2" CONDUIT. LEAVE 10FT OF SLACK AT BOTH ENDS. COORDINATE WITH AV PLANS FOR EXACT SPEAKER LOCATION AND QUANTITIES.
  - CAT6 CABLE QUANTITIES SHALL NOT EXCEED (3) IN 3/4" CONDUIT, (5) IN 1" CONDUIT, (9) IN 1-1/4" CONDUIT, OR (14) IN 1-1/2" CONDUIT. LEAVE 10FT OF SLACK AT BOTH ENDS. COORDINATE WITH AV PLANS.
  - E.C. IS RESPONSIBLE FOR RACEWAYS AND CABLING ONLY. SHOW CONTROL CONTRACTOR WILL PROVIDE TERMINAL DEVICES AND TERMINATIONS IN AV ROOM.

**1 LOW VOLTAGE CABLING PLAN**  
 SCALE: 1/16" = 1'-0"

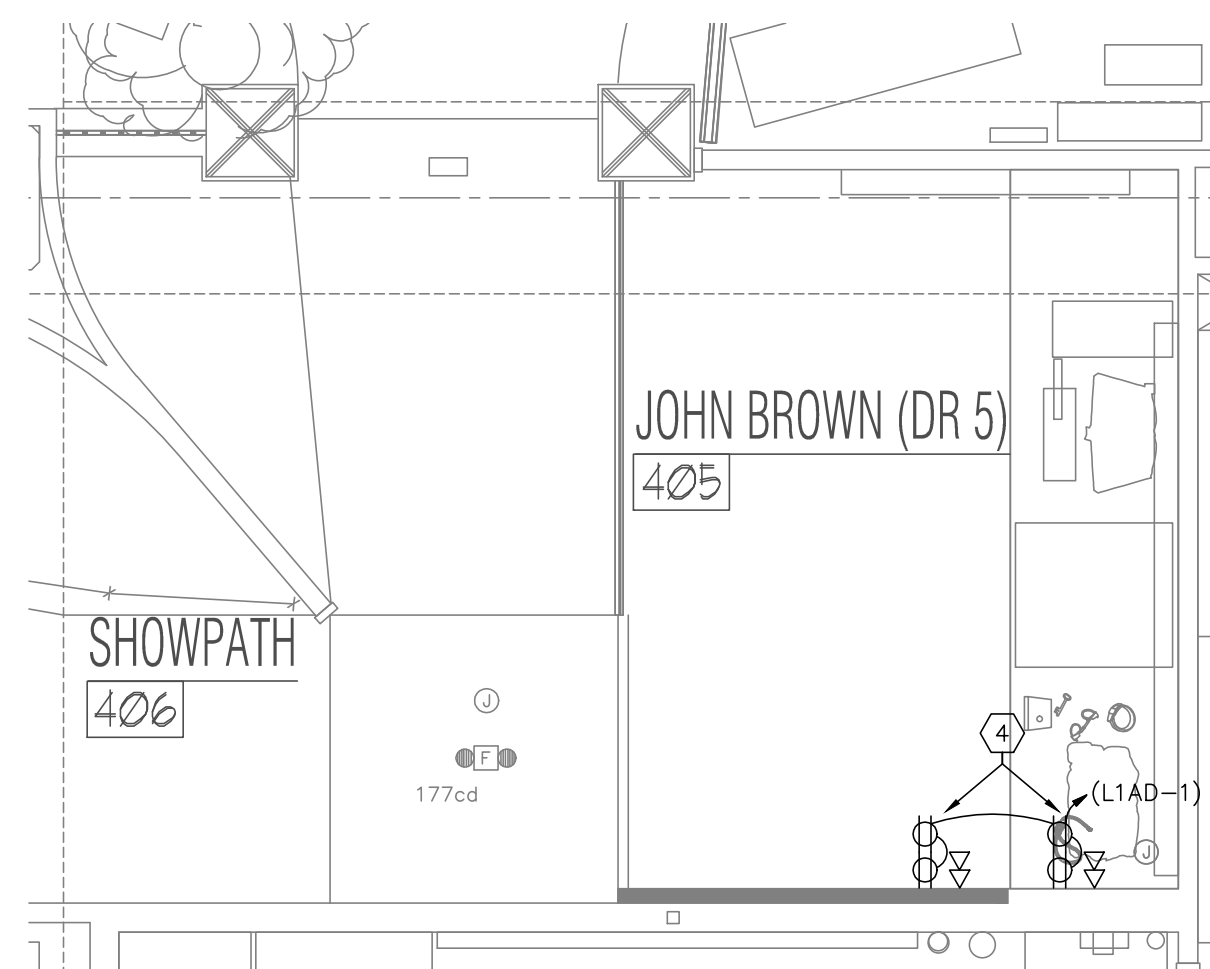
**RSL ARCHITECTURE**  
 8927 Roush Road  
 Cincinnati, OH 45236  
 513-891-9950 PHONE  
 513-891-9951 FAX  
 www.rslarch.com

**Enhancements for the:**  
**West Virginia State Museum**  
 Cultural Center - Lower level  
 1900 Kanawha Boulevard East  
 Charleston, West Virginia 25305

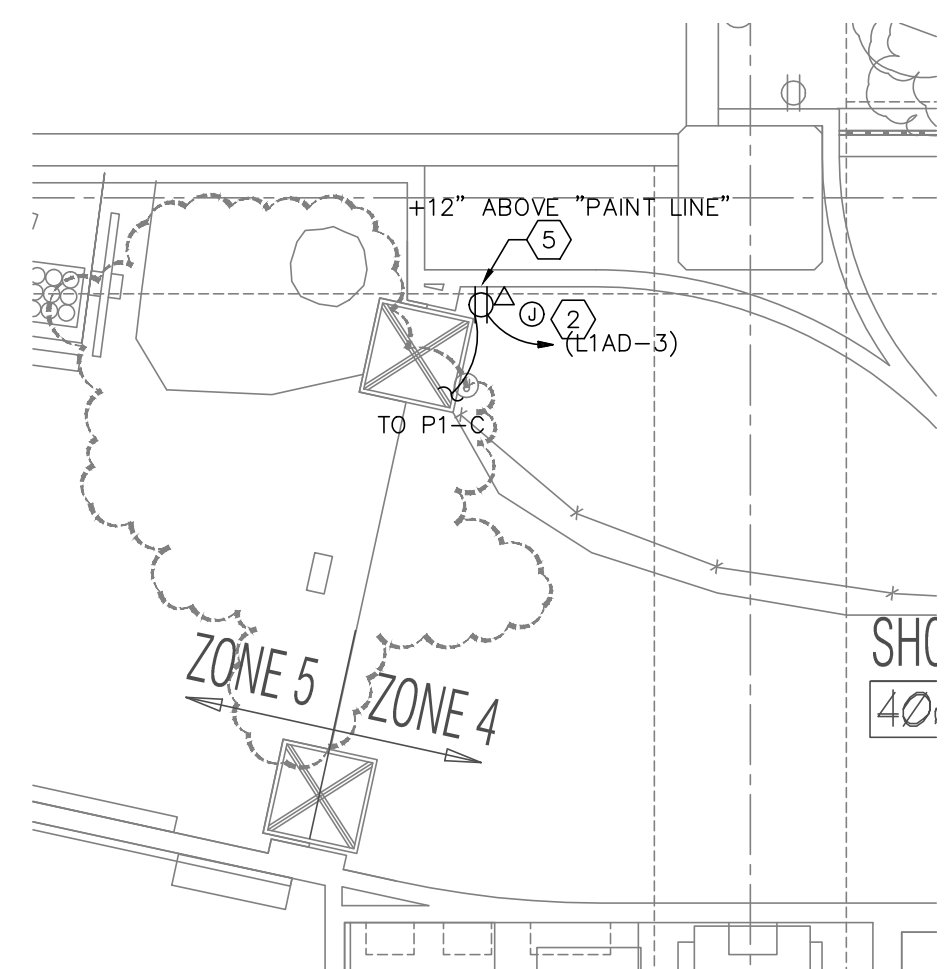
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 ISSUE DATE: 06-09-2011  
 REVISIONS:

LOW VOLTAGE  
 CABLING PLAN

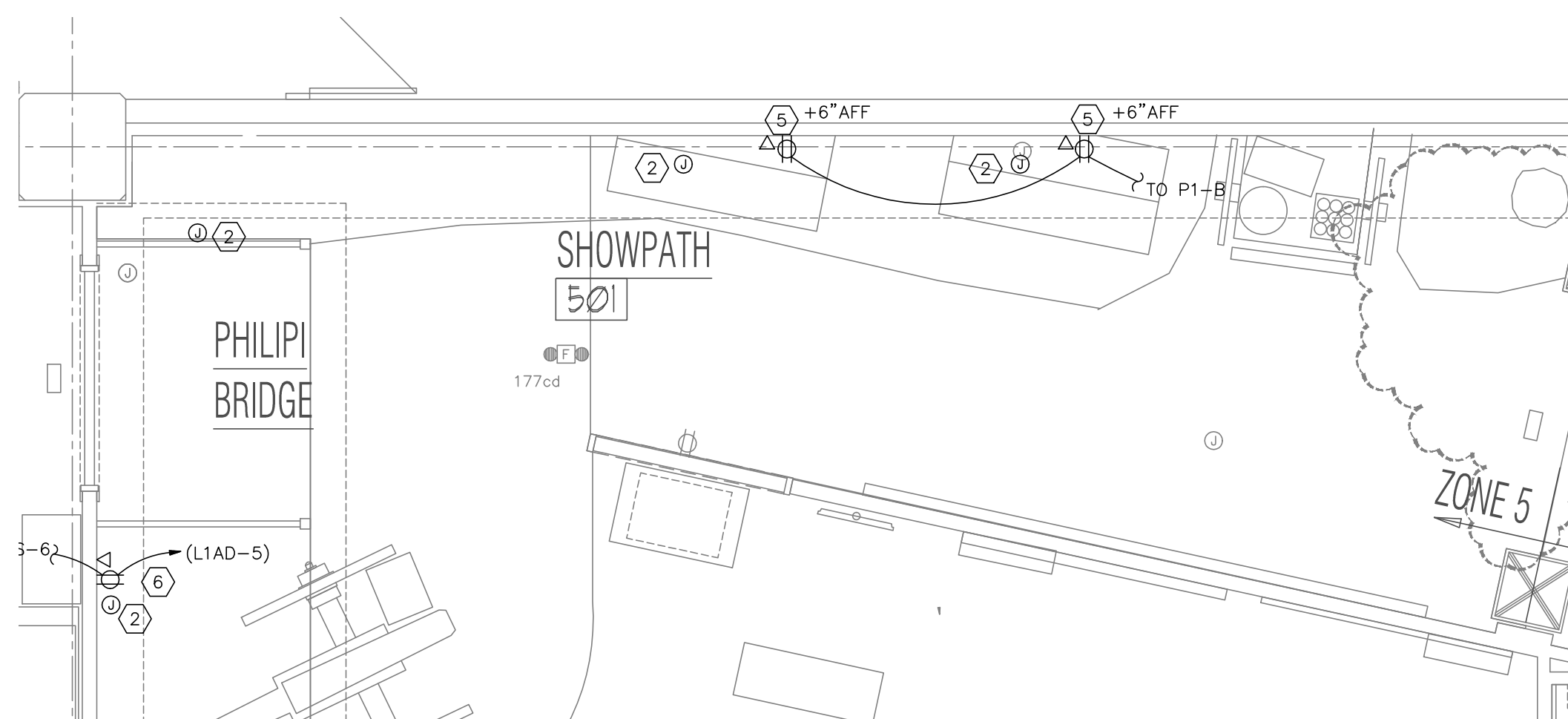
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 PROJECT #10843.00



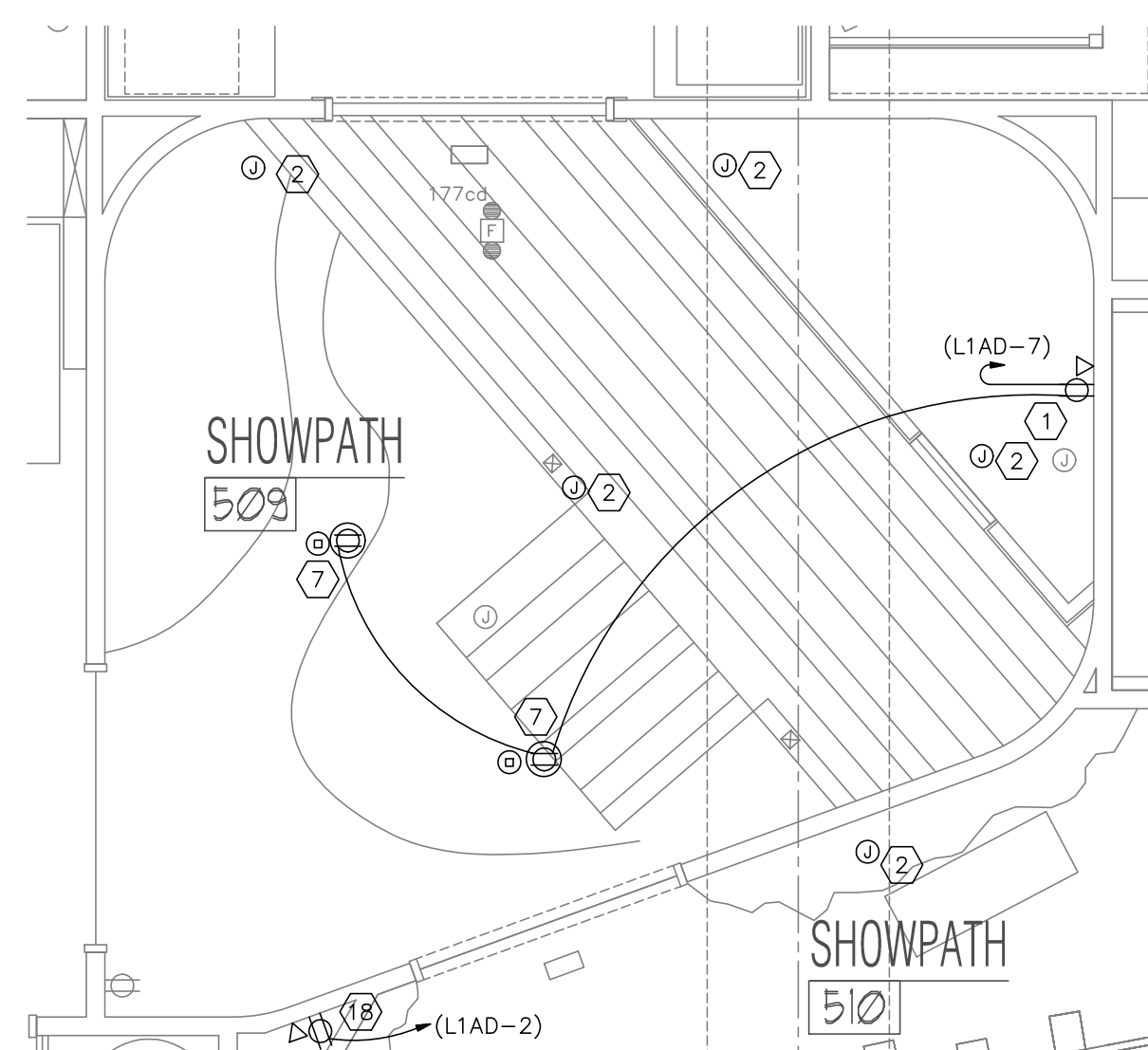
**1 P-1A - JOHN BROWN'S RAID**  
SCALE: 1/4" = 1'-0"



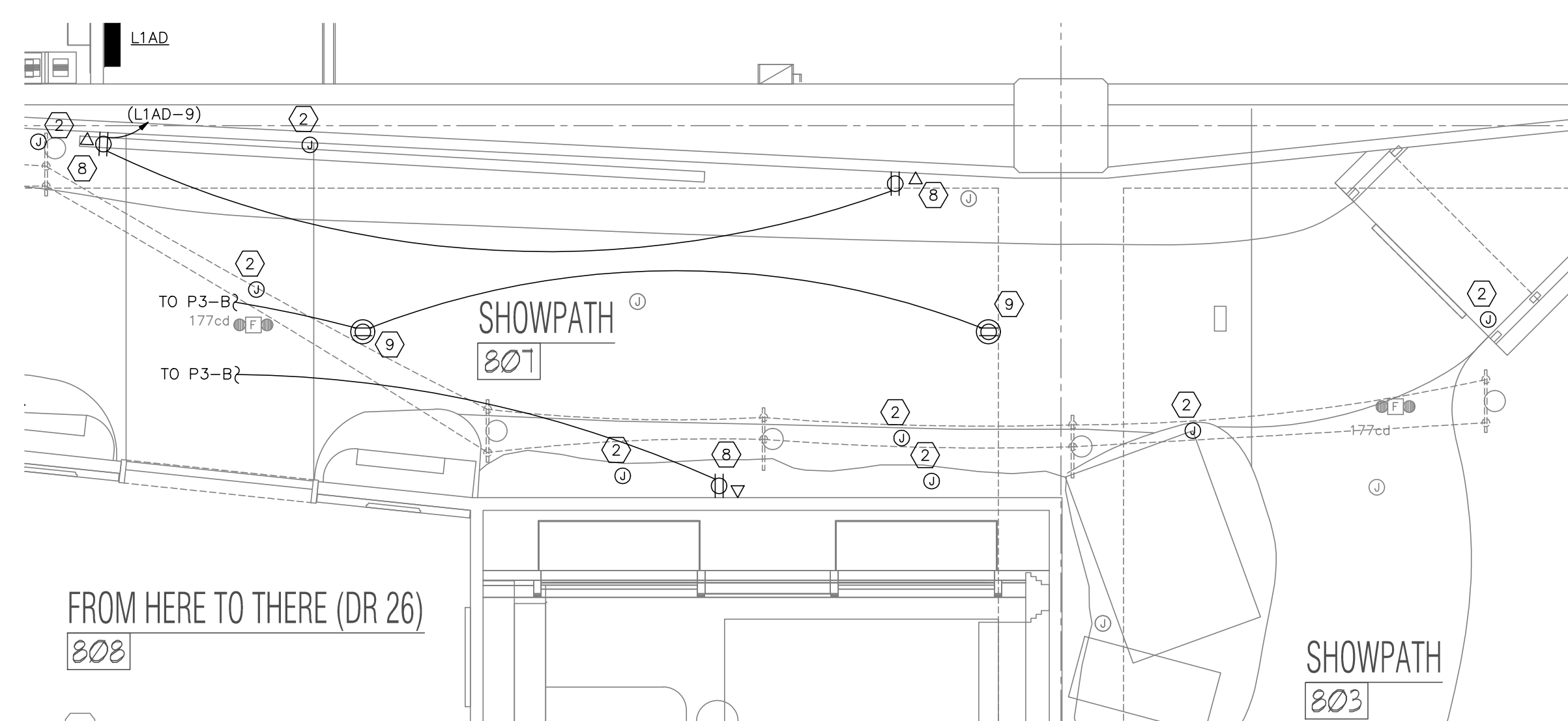
**2 P-1B - HARPERS FERRY**  
SCALE: 1/4" = 1'-0"



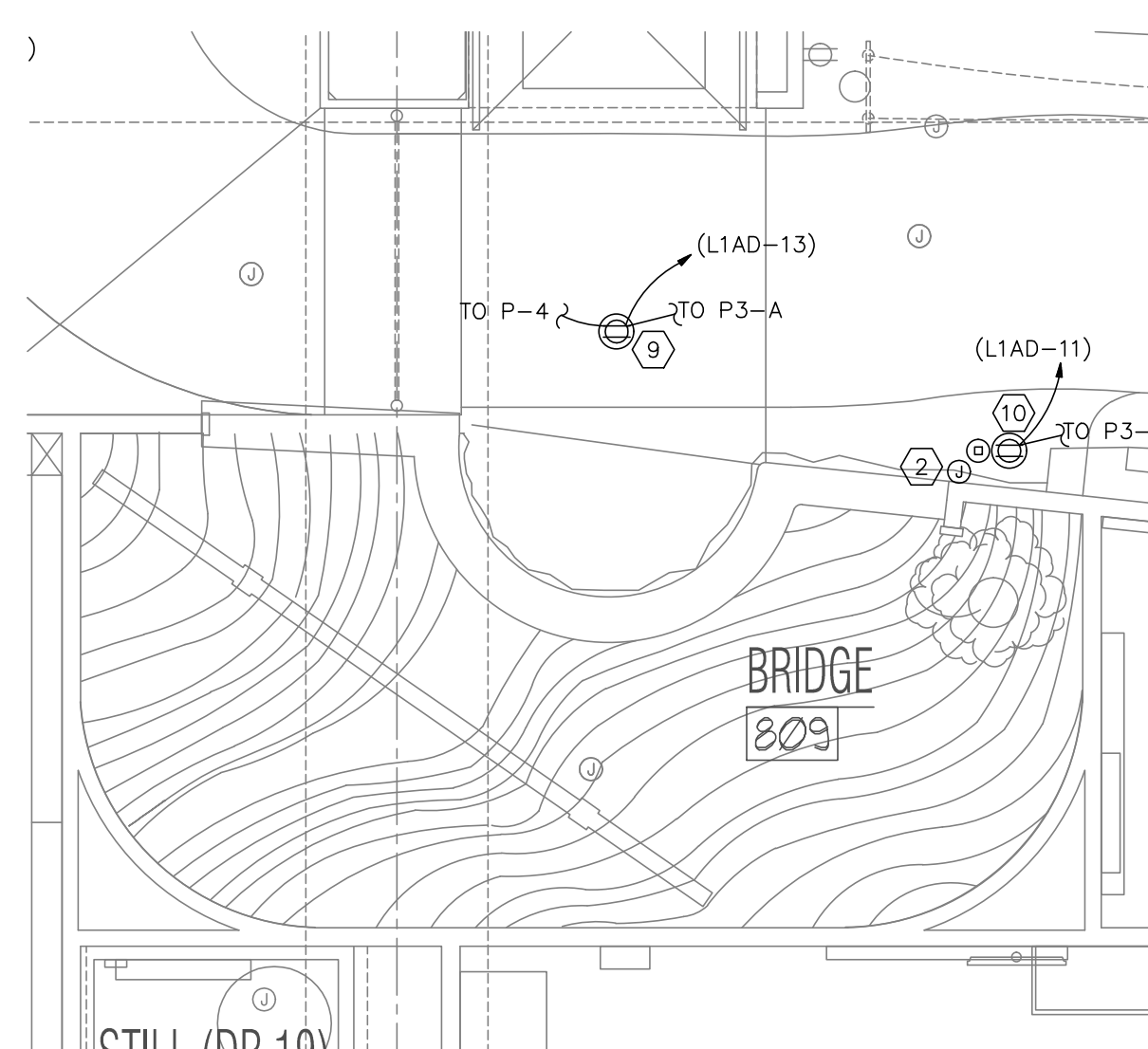
**3 P-1C - BATTLE OF PHILIPPI**  
SCALE: 1/4" = 1'-0"



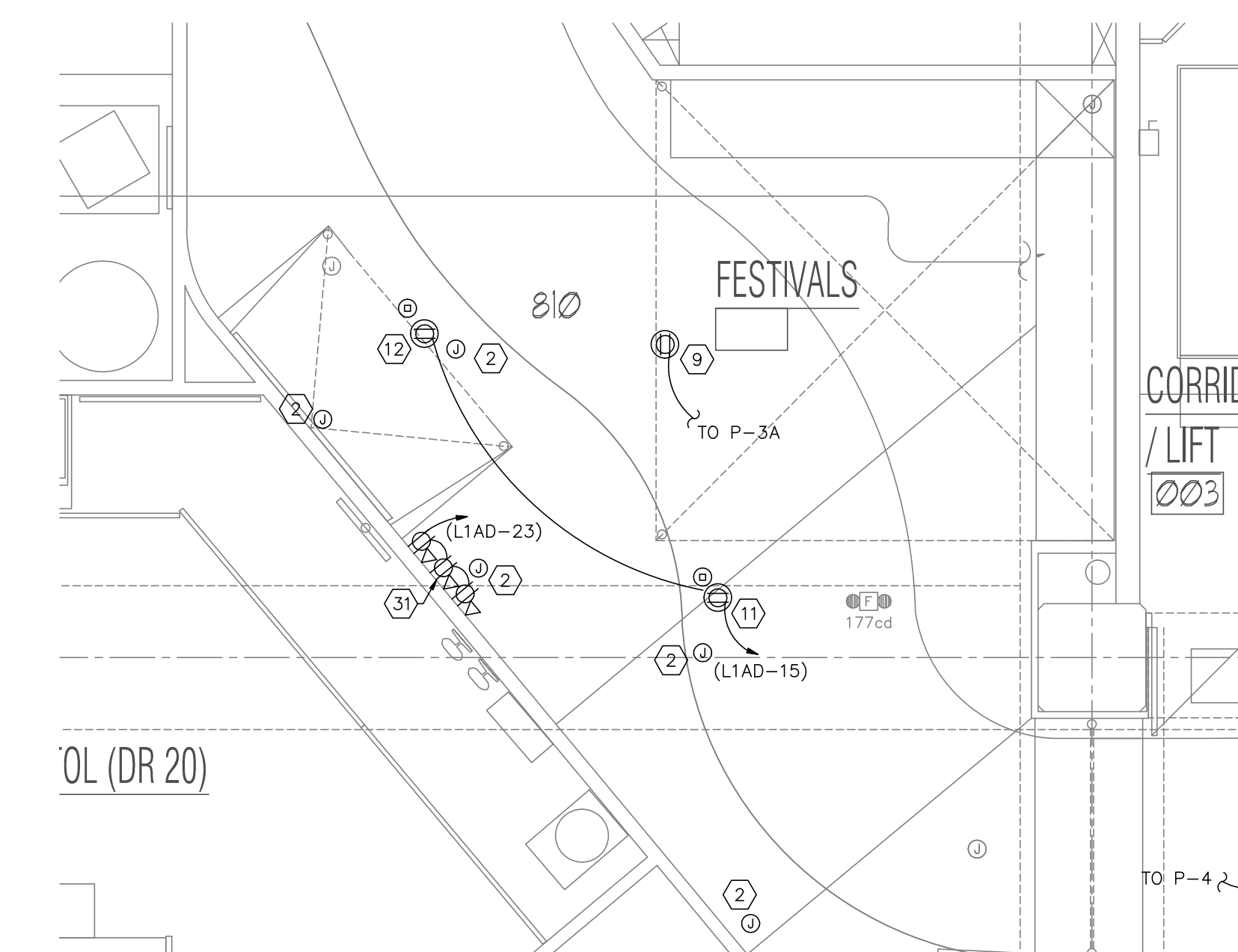
**4 P-2 - WHEELING**  
SCALE: 1/4" = 1'-0"



**5 P-3A - TRANSPORTATION**  
SCALE: 1/4" = 1'-0"

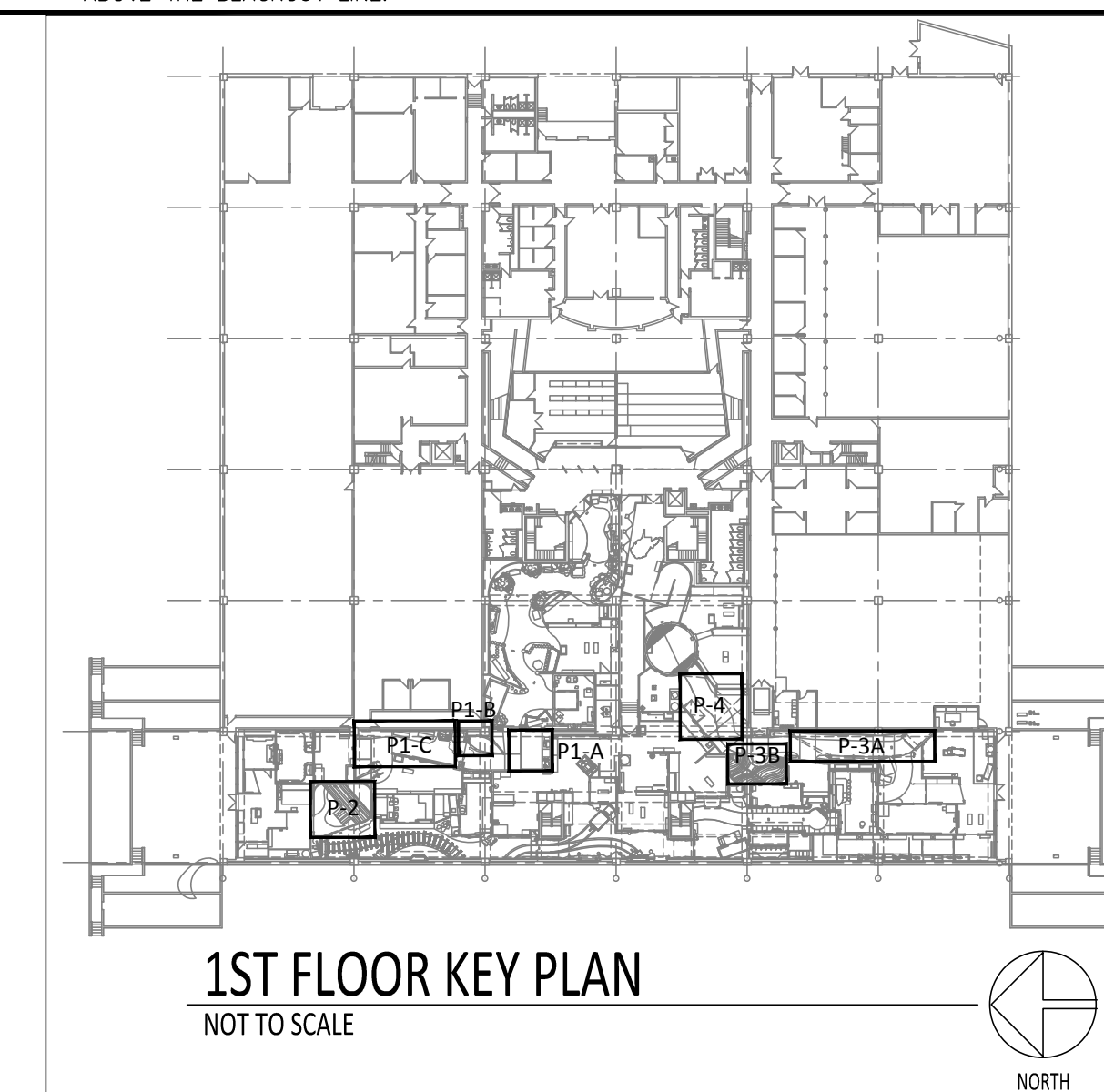


**6 P-3B - OVERLOOK**  
SCALE: 1/4" = 1'-0"



**7 P-4 - FAIRS AND FESTIVALS**  
SCALE: 1/4" = 1'-0"

- KEYED NOTES**
- P-2: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL ON WALL FOR THE WHEELING BOAT SILHOUETTES. COORDINATE HEIGHT WITH A/V CONSULTANT PRIOR TO INSTALLATION.
  - SPEAKER LOCATION. REFER TO LOW VOLTAGE CABLING PLANE EP1.00 FOR SPEAKER CABLING REQUIREMENTS.
  - TRENCH FLOOR AND PROVIDE (2) 1" CONDUITS, (1) FOR POWER AND (1) FOR DATA. TURN UP CONDUIT IN WALL AND ROUTE OVERHEAD TO ELECTRICAL AND DATA ROOM RESPECTIVELY.
  - P1-A: PROVIDE (4) DUPLEX RECEPTABLES AND SCENE CONTROL DATA OUTLETS. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS.
  - P1-B/P1-C: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET HIDDEN FROM VIEW FOR MARINE ANIMATRONIC/TENT SILHOUETTE.
  - P1-C: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET IN RAFTERS FOR RACECOON ANIMATRONIC.
  - P-2: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR GESTURE PROJECTION SYSTEM.
  - P-3A: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET ON THE WALL NEAR CEILING, ABOVE THE BLACK OUT LINE, FOR ANIMATRONICS CONTROLLER.
  - P-3A/P-3B/P-4: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE FOR SCENTWAVE FAN TO BLOW A GRASS SCENT ALONG PATHWAY. ORIENT FANS SUCH THAT THE INTEGRAL MOTION SENSOR DETECTS MOTION ALONG "SHOWPATH 807" AND FESTIVALS "810". FIRST SCENTWAVE FAN SHALL BE PLACED A MAXIMUM OF 25'-0" FROM THE ENTRANCES TO THE TRANSPORTATION AREA.
  - P3-B/P3-C/P3-D: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR CARDINAL ANIMATRONIC.
  - P-4: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR GESTURE TYPE GAMES PROJECTOR.
  - P-4: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR AUGMENTED REALITY PROJECTOR.
  - S-1/S-6: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR TALKING BUST AT 18" AFF.
  - S-2: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND DATA OUTLET FOR SCENE CONTROL OF NEW FANS FOR TREE CANOPY FOR WIND EFFECT.
  - S-4: PROVIDE FLOOR MOUNTED OUTLET WITH (1) DUPLEX RECEPTACLE AND CAPABILITY FOR DATA CONNECTIVITY FOR NEW INTERACTIVE POST-MOUNTED MONITORS. RECEPTACLE SHALL BE INSTALLED IN SCENIC DIRT. SPEAKERS SHALL BE INTEGRAL TO THE MONITOR.
  - S-5: SPEAKER SHALL BE INSTALLED IN THE CHIMNEY.
  - S-5: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET IN THE CHIMNEY FOR POWER TO THE ASH EFFECTS AT 6" AFF.
  - S-7: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR STROBE CONTROLLER/PLUNGERS INSIDE REVEAL.
  - S-12: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET IN COLLECTIONS ROOM FOR HUMAN ANIMATRONIC. COORDINATE HEIGHT WITH A/V CONSULTANT PRIOR TO INSTALLATION.
  - S-8: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE FOR A SCENTWAVE FAN TO BLOW A BAKED APPLE PIE SCENT ALONG PATHWAY. ORIENT FANS SUCH THAT THE INTEGRAL MOTION SENSOR DETECTS MOTION ALONG "SHOWPATH 701".
  - PROVIDE WALL MOUNTED DUPLEX RECEPTACLE IN THE SODA SHOP FOR A SCENTWAVE FAN TO BLOW WAFFLE CONE SCENT. INSTALL RECEPTACLE ABOVE THE "LOCAL AND LONG DISTANCE TELEPHONE" ON THE WOOD MOLDING.
  - S-5: PROVIDE WALL MOUNTED DUPLEX RECEPTACLE IN THE CABIN FOR A SCENTWAVE FAN TO BLOW A BAKING CORNBREAD SCENT. INSTALL THE RECEPTACLE ABOVE THE CEILING IN THE CABIN. COORDINATE THE EXACT LOCATION IN THE FIELD.
  - S-11: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR PROJECTOR IN ROTUNDA.
  - S-1: CONNECT NEW BRANCH CIRCUIT FOR BUST TO AVAILABLE POLE SPACE IN PANEL 2L1.
  - PROVIDE 60A/3P/NF NEMA 1 HEAVY DUTY DISCONNECT FOR AIR COMPRESSOR.
  - PROVIDE JUNCTION BOX FOR CONNECTION TO REFRIGERATED AIR DRYER. COORDINATE EXACT CONNECTION LOCATION WITH PLUMBING CONTRACTOR.
  - PROVIDE FLOOR MOUNTED OUTLET WITH (1) DUPLEX RECEPTACLE AND CAPABILITY FOR DATA CONNECTIVITY FOR NEW INTERACTIVE MONITOR. E.C. SHALL BE RESPONSIBLE FOR REMOVING CARPET TILE CUTTING, PATCHING, AND RE-INSTALLING.
  - PROVIDE OUTLET AND DATA CONNECTIVITY FOR CONNECTION TO NEW INTERACTIVE MONITOR. CONNECT TO AVAILABLE POLE SPACE IN PANEL 2L1.
  - CONDENSING UNIT CU-1 POWERS INDOOR UNIT AC-1. PROVIDE LOW VOLTAGE WIRING FROM CU-1 TO AC-1.
  - COORDINATE FINAL LOCATIONS OF POWER/DATA FOR THREE COMPUTERS IN THE FIELD. PROVIDE
- GENERAL NOTES**
- ALL THE CODED NOTES MAY NOT BE SHOWN ON THIS DRAWING.
  - E.C. IS RESPONSIBLE FOR RACEWAYS AND CABLING ONLY. SHOW CONTROL CONTRACTOR WILL PROVIDE TERMINAL DEVICES AND TERMINATIONS IN AV ROOM.
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  - ALL CONDUIT SHALL BE PAINTED BLACK TO MATCH ALL EXISTING CONDUIT, EQUIPMENT, ETC. ABOVE THE BLACKOUT LINE.



**R S L ARCHITECTURE**  
COMMERCIAL ARCHITECTURE

8927 Rossash Road  
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513.891.9951 FAX  
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Enhancements for the:  
**West Virginia State Museum**  
Cultural Center - Lower level  
1900 Kanawha Boulevard East  
Charleston, West Virginia 25305

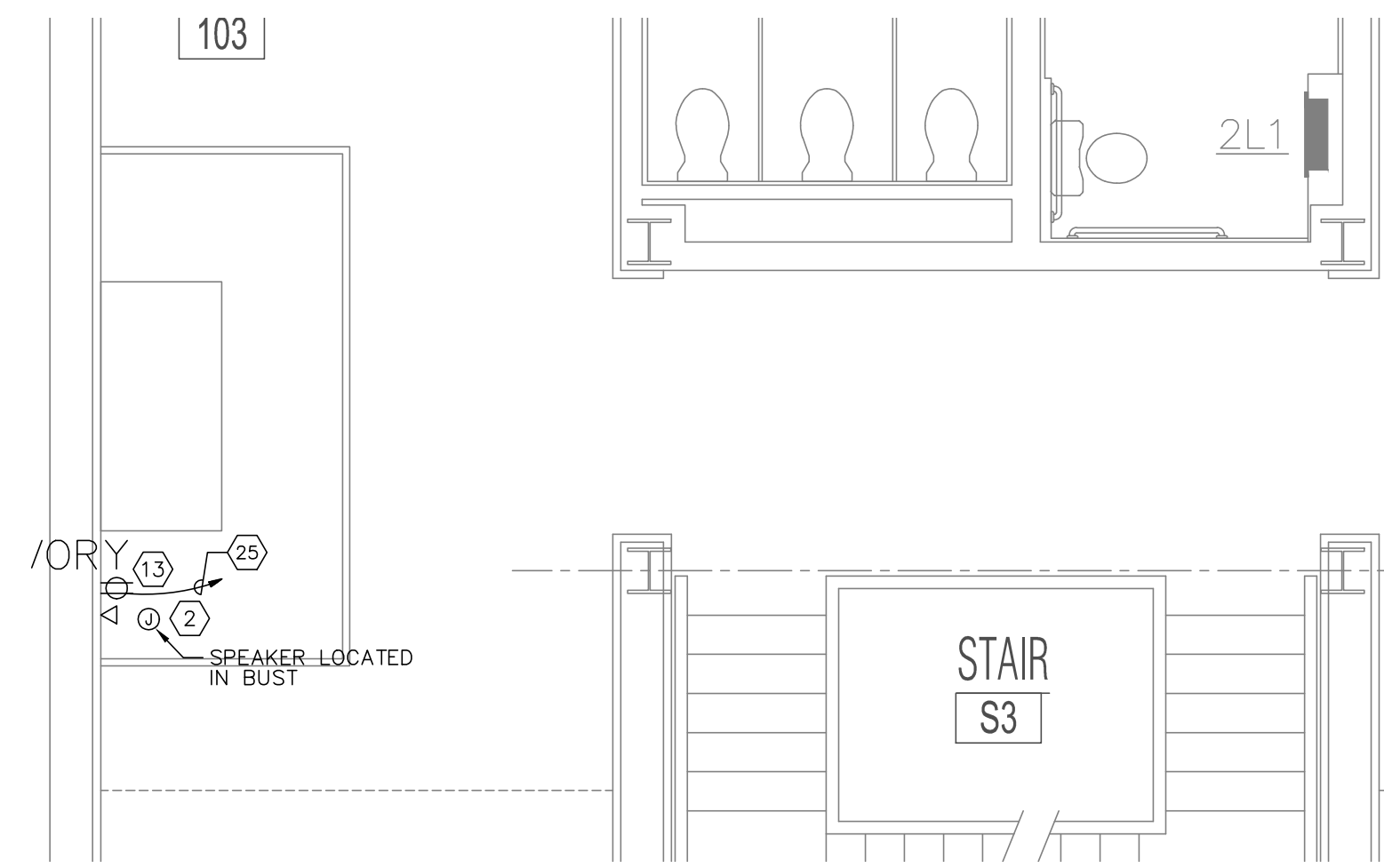
DRAWN BY: SCR  
ISSUE DATE: 06-09-2011  
REVISIONS:

ELECTRICAL POWER PLAN

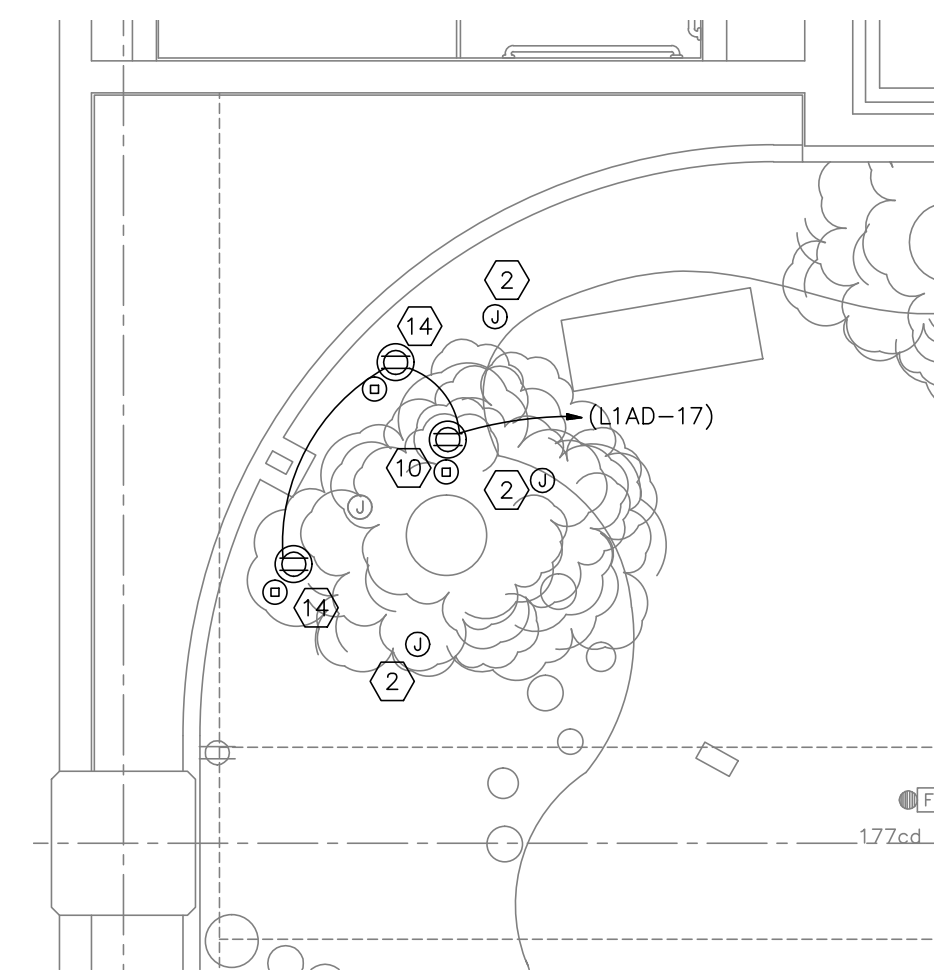
**EP1.01**

PROJECT #10843.00

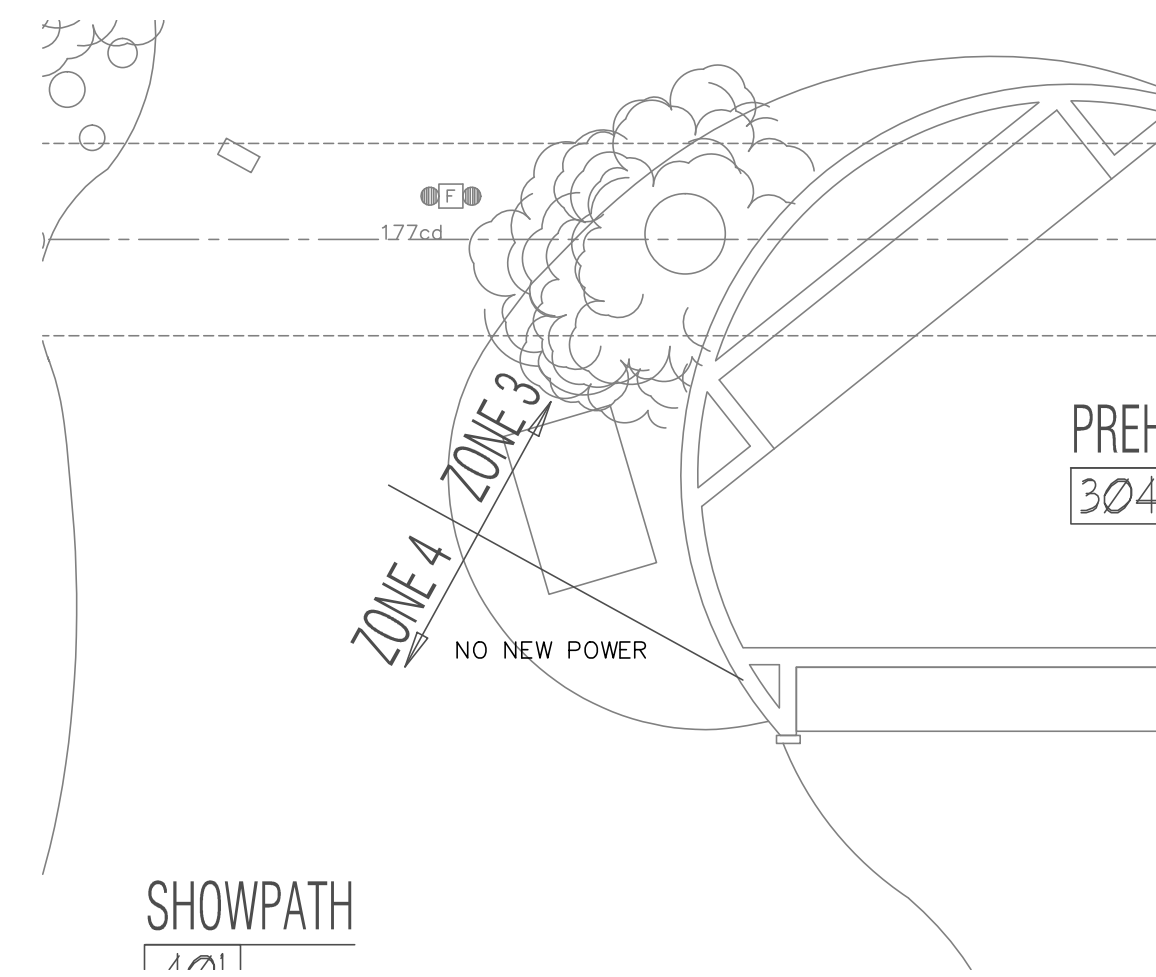




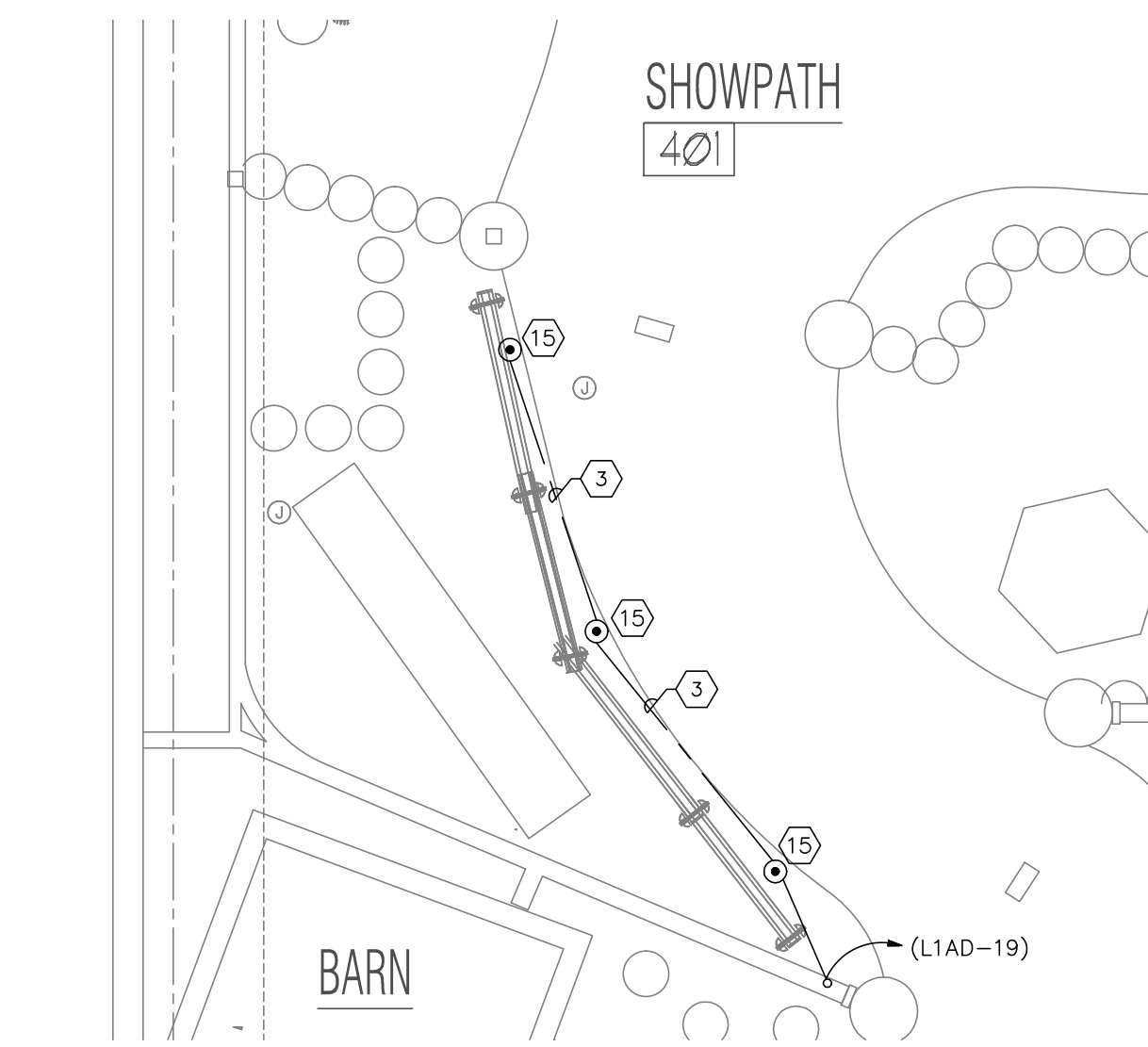
**1 S-1 - JOHN HALE BUST**  
SCALE: 1/4" = 1'-0"



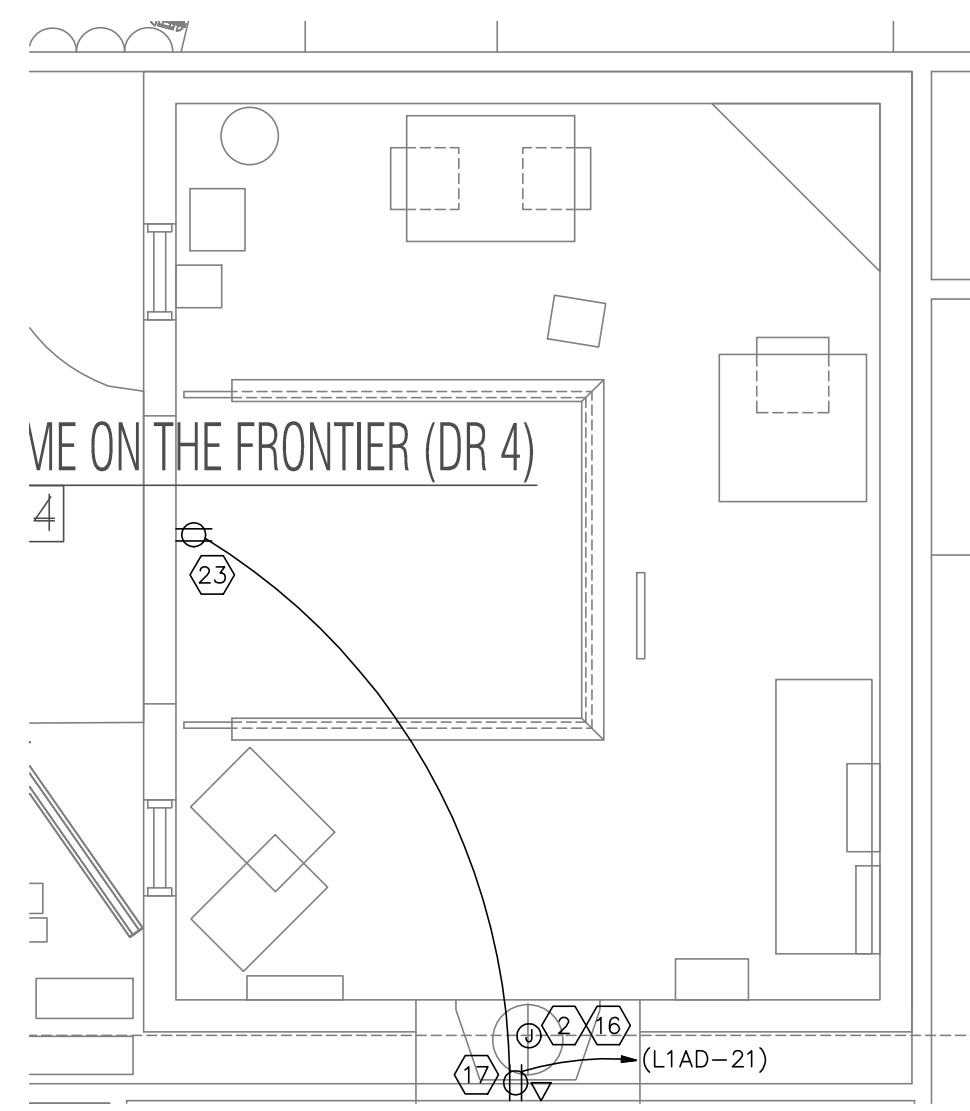
**2 S-2 - RIVER PLAINS**  
SCALE: 1/4" = 1'-0"



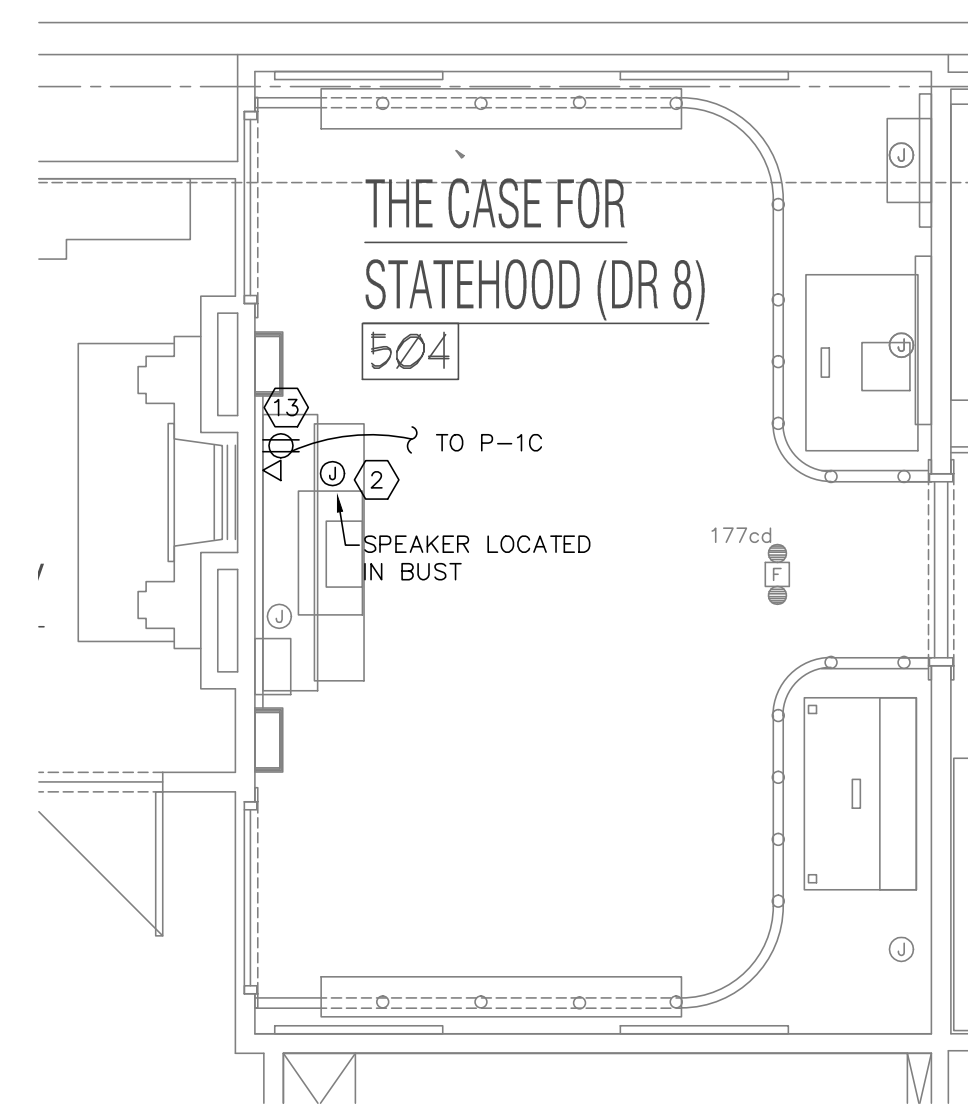
**3 S-3 - TELESCOPE CASE**  
SCALE: 1/4" = 1'-0"



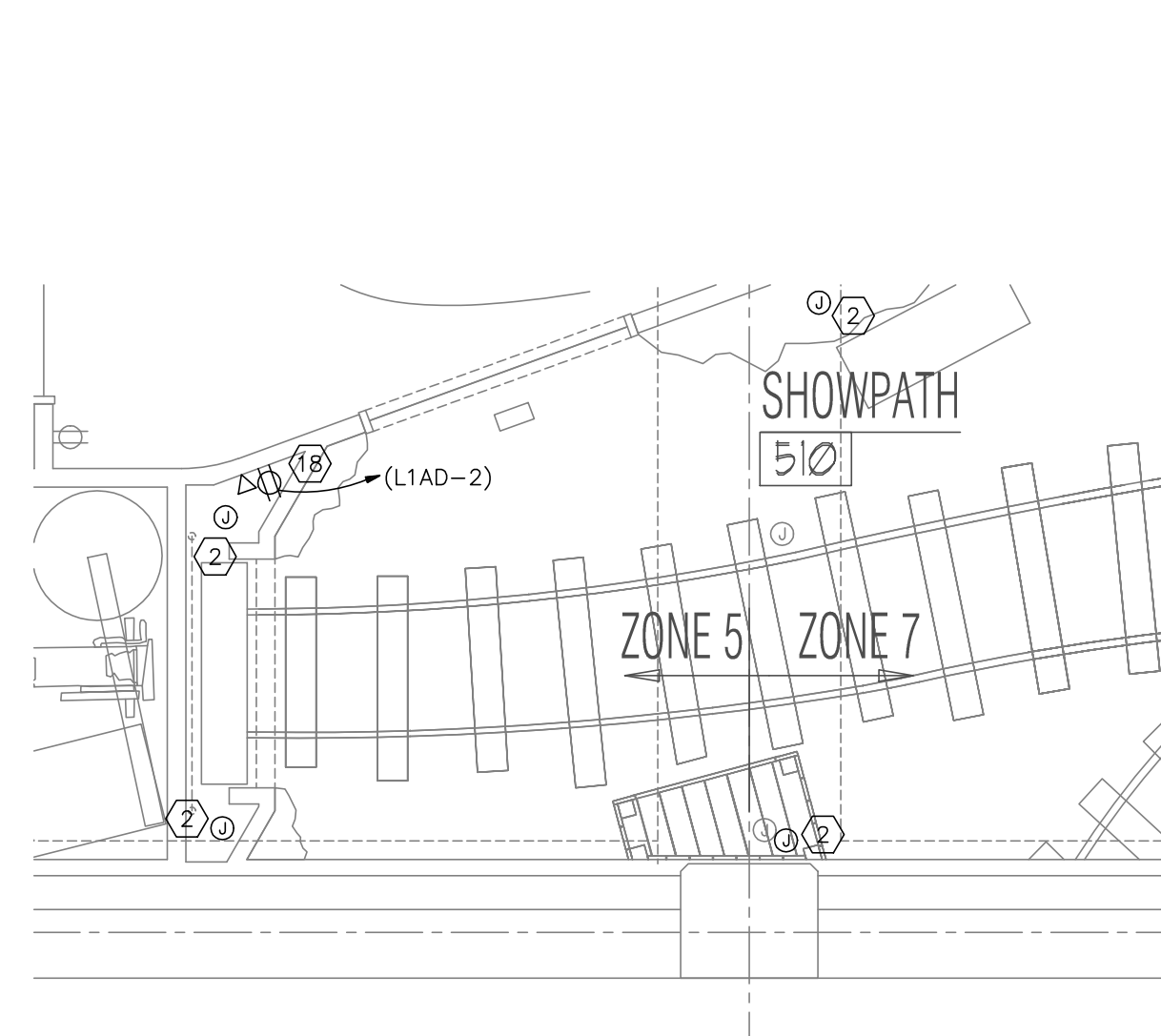
**4 S-4 - FORT**  
SCALE: 1/4" = 1'-0"



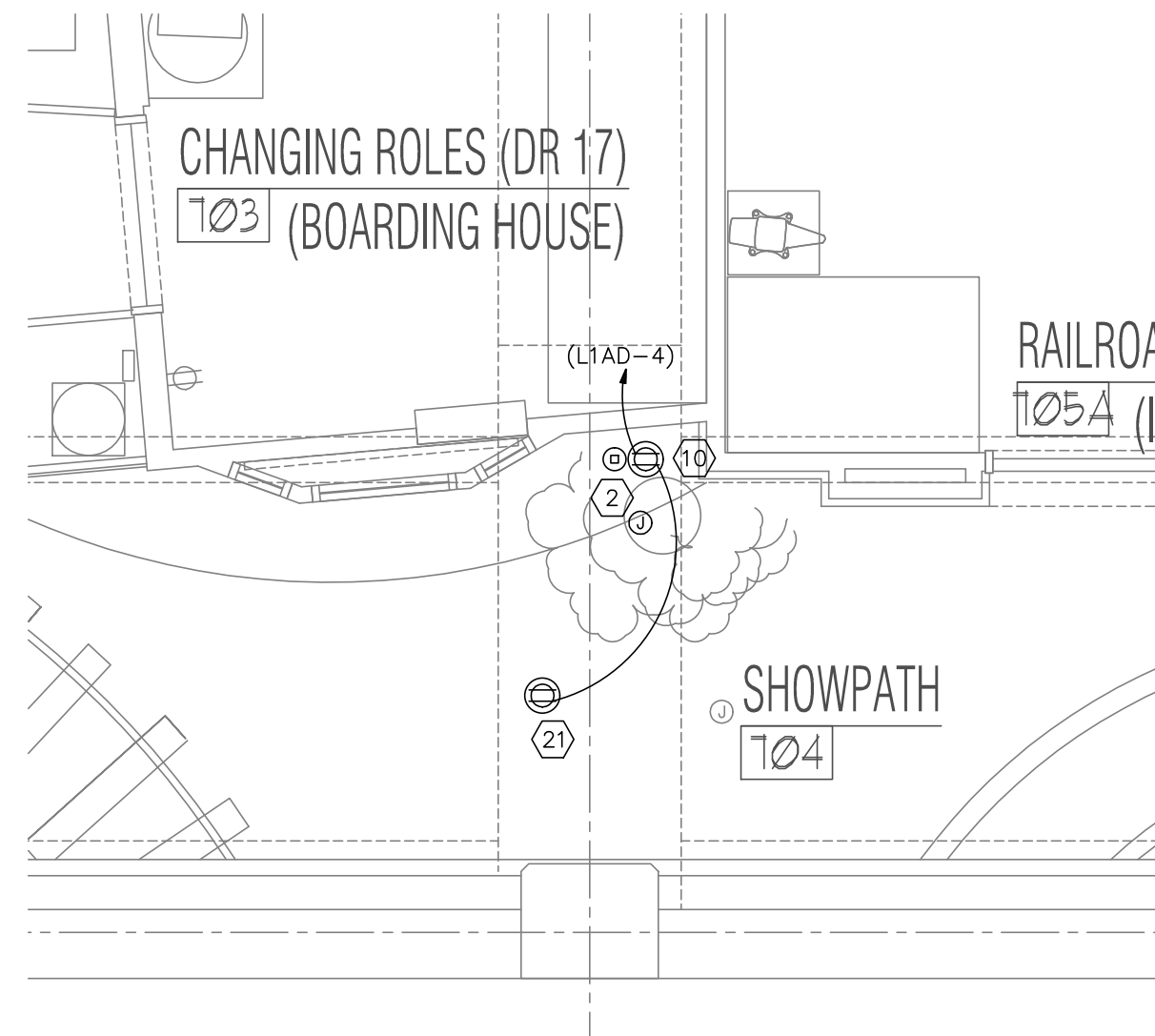
**5 S-5 - CABIN**  
SCALE: 1/4" = 1'-0"



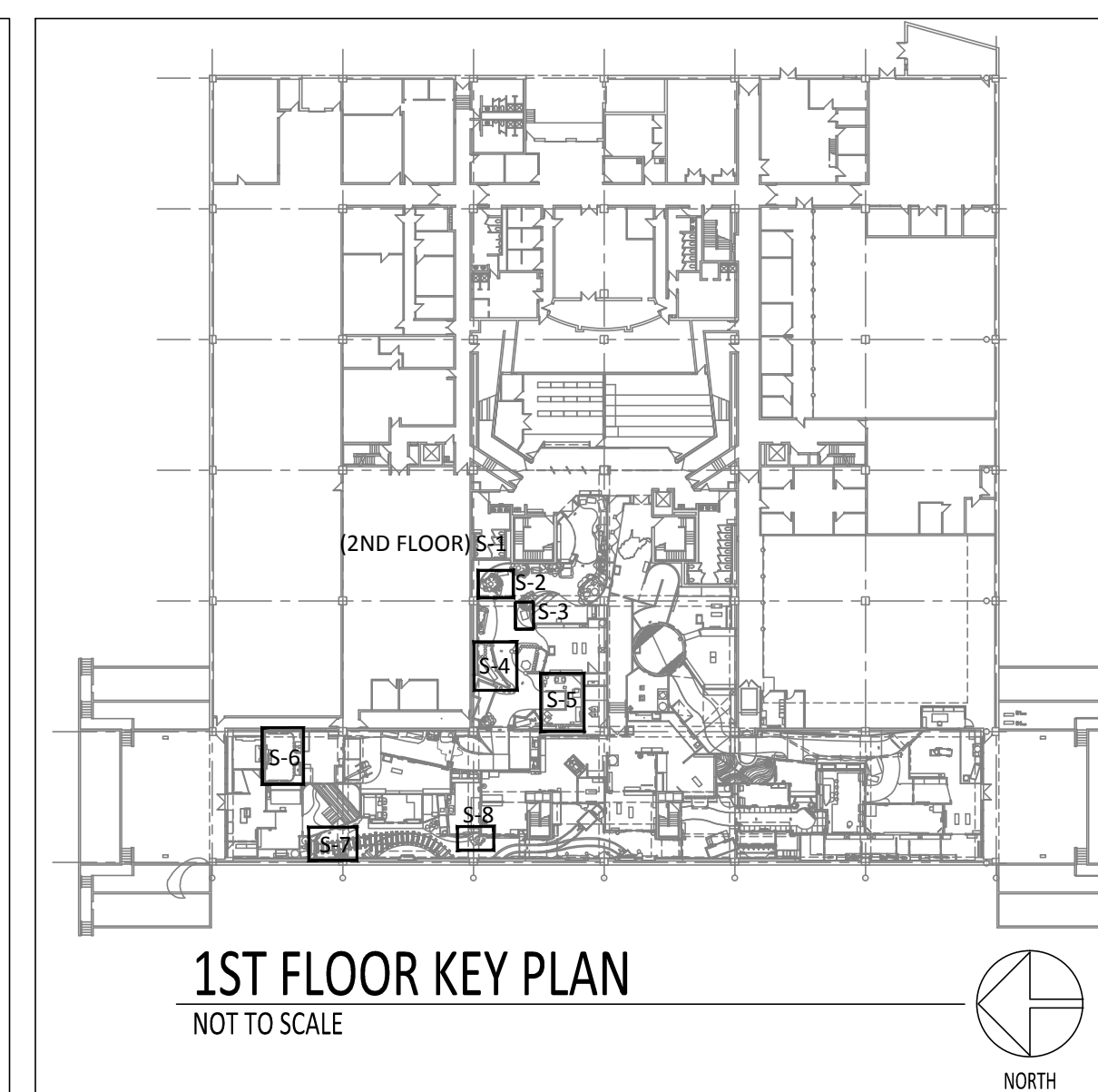
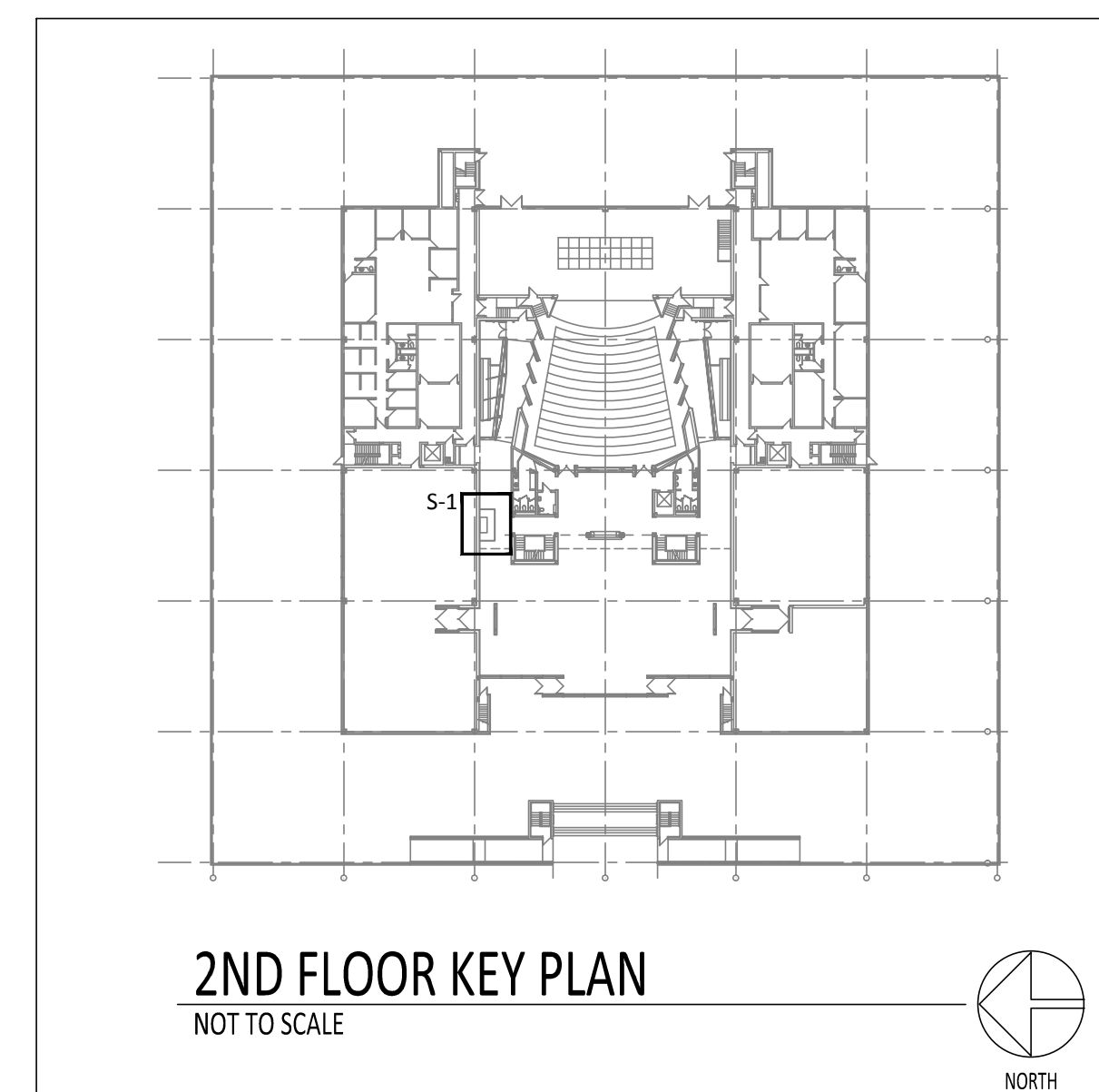
**6 S-6 - CASE FOR STATEHOOD**  
SCALE: 1/4" = 1'-0"



**7 S-7 - RAILROAD**  
SCALE: 1/4" = 1'-0"



**8 S-8 - COMPANY TOWN**  
SCALE: 1/4" = 1'-0"



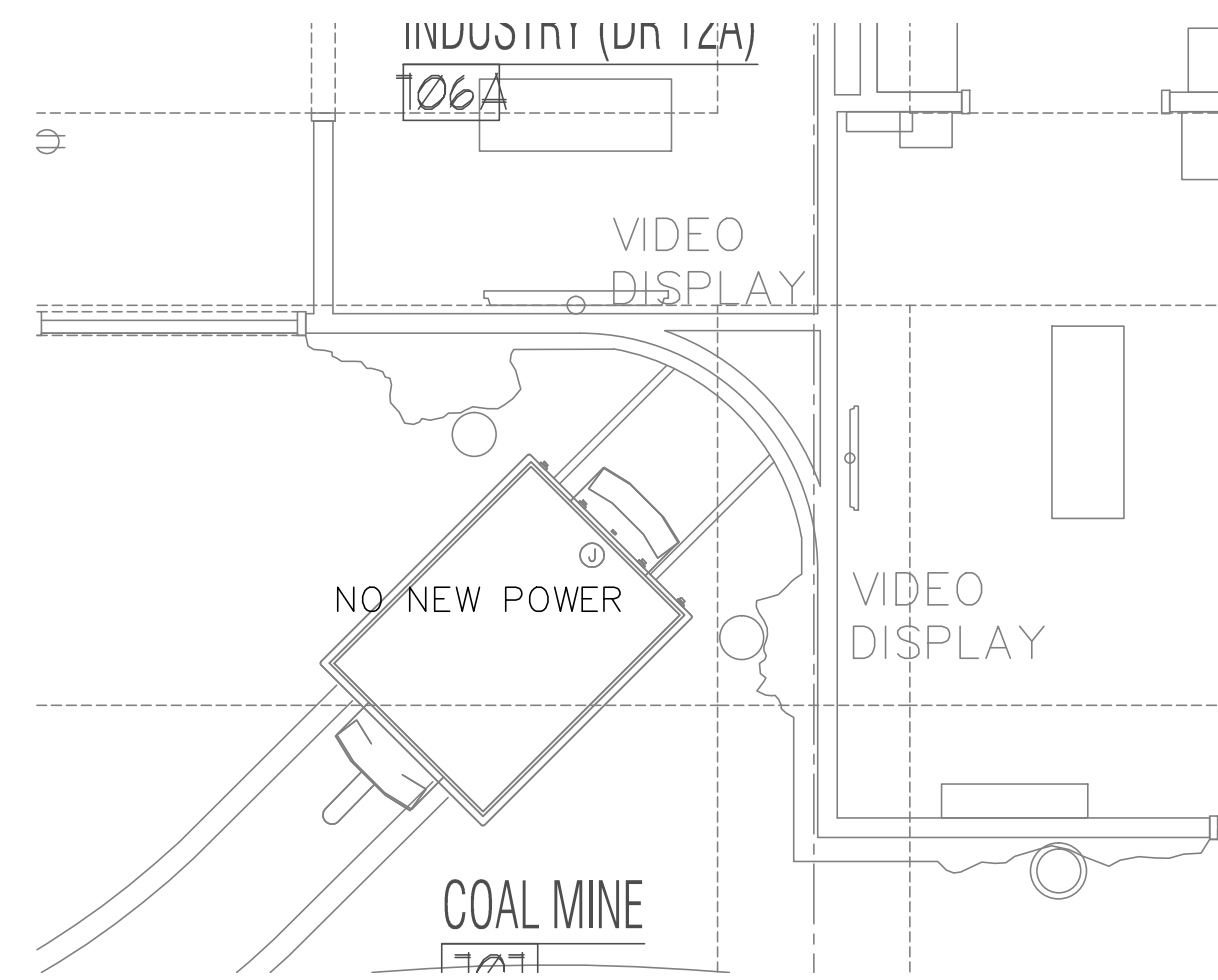
**KEYED NOTES**

- P-2: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL ON WALL FOR THE WHEELING BOAT SILHOUETTES. COORDINATE HEIGHT WITH A/V CONSULTANT PRIOR TO INSTALLATION.
- SPEAKER LOCATION. REFER TO LOW VOLTAGE CABLING PLANE EP1.00 FOR SPEAKER CABLING REQUIREMENTS.
- TRENCH FLOOR AND PROVIDE (2) 1" CONDUITS, (1) FOR POWER AND (1) FOR DATA. TURN UP CONDUIT IN WALL AND ROUTE OVERHEAD TO ELECTRICAL AND DATA ROOM RESPECTIVELY.
- P1-A: PROVIDE (4) DUPLEX RECEPTABLES AND SCENE CONTROL DATA OUTLETS. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS.
- P1-B/P1-C: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET HIDDEN FROM VIEW FOR MARINE ANIMATRONIC/TENT SILHOUETTE.
- P1-C: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET IN RAFTERS FOR RACCOON ANIMATRONIC.
- P-2: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR GESTURE PROJECTION SYSTEM.
- P-3A: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET ON THE WALL NEAR CEILING, ABOVE THE BLACK OUT LINE, FOR ANIMATRONICS CONTROLLER.
- P-3A/P-3B/P-4: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE FOR SCENTWAVE FAN TO BLOW A GRASS SCENT ALONG PATHWAY. ORIENT FANS SUCH THAT THE INTEGRAL MOTION SENSOR DETECTS MOTION ALONG "SHOWPATH 807" AND FESTIVALS "810". FIRST SCENTWAVE FAN SHALL BE PLACED A MAXIMUM OF 25'-0" FROM THE ENTRANCES TO THE TRANSPORTATION AREA.
- P3-3B/S-2/S-8: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR CARDINAL ANIMATRONIC.
- P-4: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR GESTURE TYPE GAMES PROJECTOR.
- P-4: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR AUGMENTED REALITY PROJECTOR.
- S-1/S-6: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR TALKING BUST AT 18" AFF.
- S-2: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND DATA OUTLET FOR SCENE CONTROL OF NEW FANS FOR TREE CANOPY FOR WIND EFFECT.
- S-4: PROVIDE FLOOR MOUNTED OUTLET WITH (1) DUPLEX RECEPTACLE AND CAPABILITY FOR DATA CONNECTIVITY FOR NEW INTERACTIVE MONITORS. RECEPTACLE SHALL BE INSTALLED IN SCENIC DIRT. SPEAKERS SHALL BE INTEGRAL TO THE MONITOR.
- S-5: SPEAKER SHALL BE INSTALLED IN THE CHIMNEY.
- S-5: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET IN THE CHIMNEY FOR POWER TO THE ASH EFFECTS AT 6" AFF.
- S-7: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR STROBE CONTROLLER/PLUNGERS INSIDE REVEAL.
- S-12: PROVIDE DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET IN COLLECTIONS ROOM FOR HUMAN ANIMATRONIC. COORDINATE HEIGHT WITH A/V CONSULTANT PRIOR TO INSTALLATION.
- S-12: PROVIDE RED MOMENTARY PUSH BUTTON LOCATED ON A POST IN FRONT OF COLLECTIONS WINDOW TO TRIGGER THE COLLECTIONS SCENE AND DIALOGUE WITH ANIMATRONIC.
- S-8: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE FOR A SCENTWAVE FAN TO BLOW A BAKED APPLE PIE SCENT ALONG PATHWAY. ORIENT FANS SUCH THAT THE INTEGRAL MOTION SENSOR DETECTS MOTION ALONG "SHOWPATH 701".
- PROVIDE WALL MOUNTED DUPLEX RECEPTACLE IN THE SODA SHOP FOR A SCENTWAVE FAN TO BLOW WAFFLE CONE SCENT. INSTALL RECEPTACLE ABOVE THE "LOCAL AND LONG DISTANCE TELEPHONE" ON THE WOOD MOLDING.
- S-5: PROVIDE WALL MOUNTED DUPLEX RECEPTACLE IN THE CABIN FOR A SCENTWAVE FAN TO BLOW A BAKING CORNBREAD SCENT. INSTALL THE RECEPTACLE ABOVE THE ENTRANCE TO THE CABIN.
- S-11: PROVIDE CEILING MOUNTED DUPLEX RECEPTACLE AND SCENE CONTROL DATA OUTLET FOR PROJECTOR IN ROTUNDA.
- S-1: CONNECT NEW BRANCH CIRCUIT FOR BUST TO AVAILABLE POLE SPACE IN PANEL 2L1.
- PROVIDE 60A/3P/NF NEMA 1 HEAVY DUTY DISCONNECT FOR AIR COMPRESSOR.
- PROVIDE JUNCTION BOX FOR CONNECTION TO REFRIGERATED AIR DRYER. COORDINATE EXACT CONNECTION LOCATION WITH PLUMBING CONTRACTOR.
- PROVIDE FLOOR MOUNTED OUTLET WITH (1) DUPLEX RECEPTACLE AND CAPABILITY FOR DATA CONNECTIVITY FOR NEW INTERACTIVE MONITOR. E.C. SHALL BE RESPONSIBLE FOR REMOVING CARPET TILE, CUTTING, PATCHING, AND RE-INSTALLING.
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- CONDENSING UNIT CU-1 POWERS INDOOR UNIT AC-1. PROVIDE LOW VOLTAGE WIRING FROM CU-1 TO AC-1.

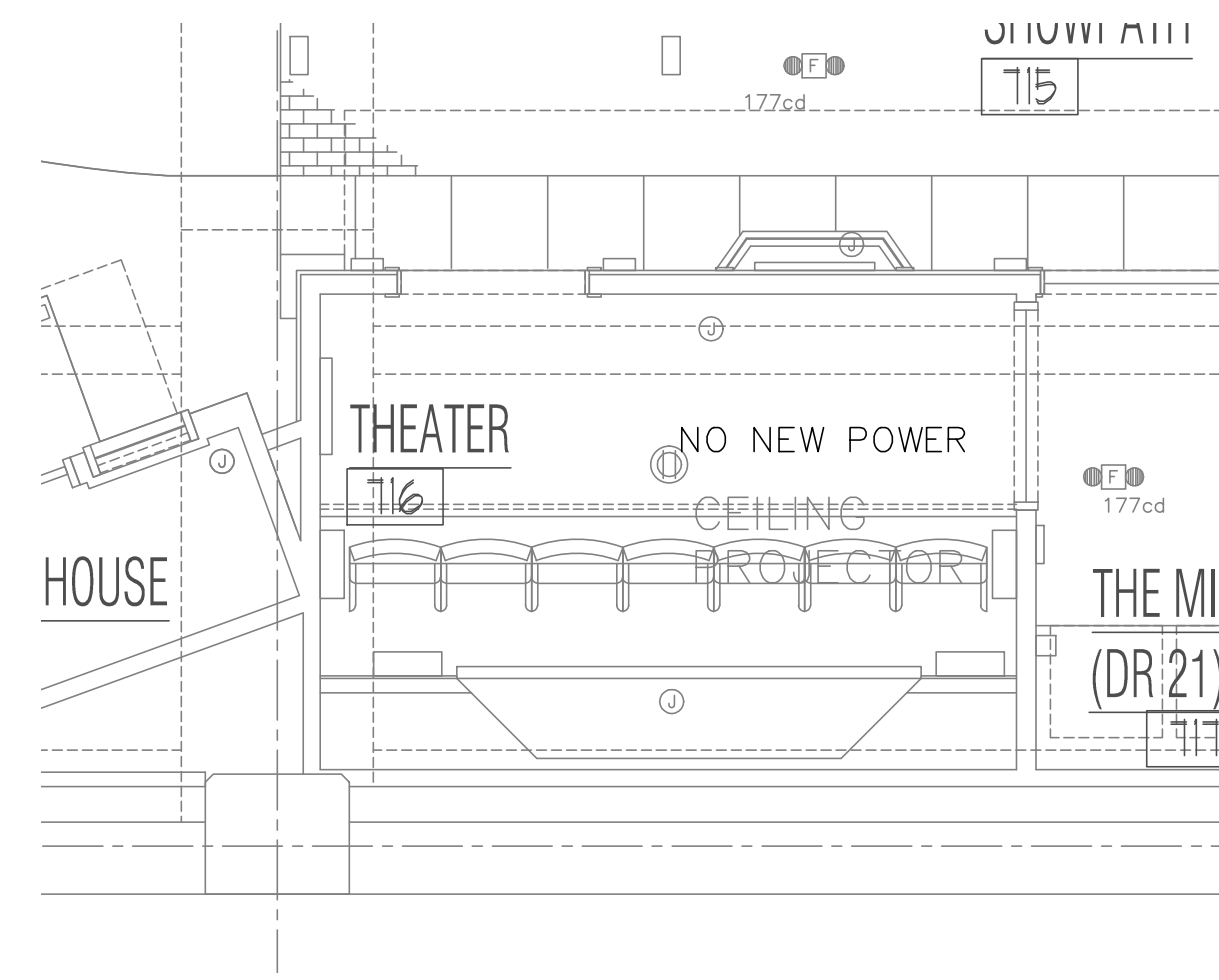
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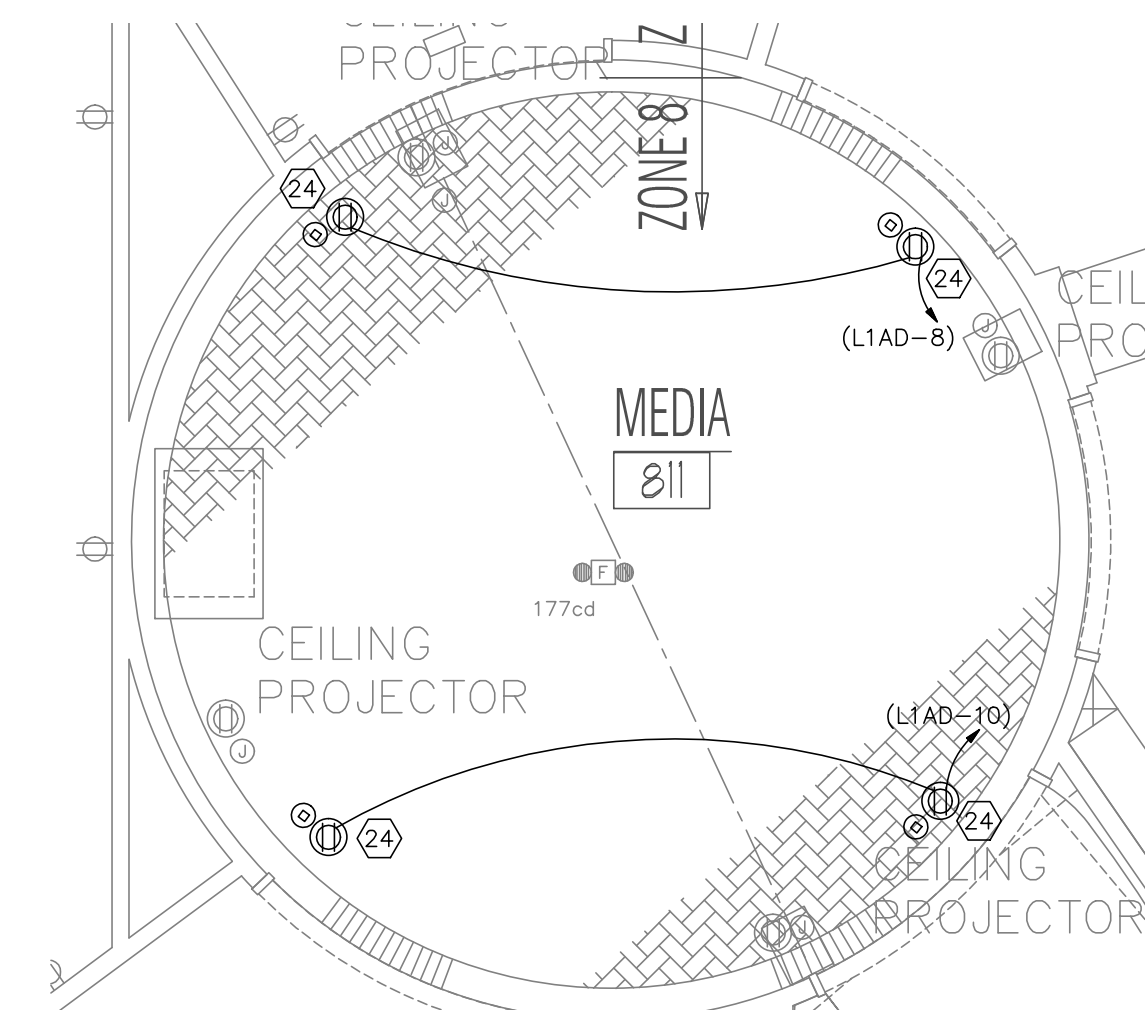




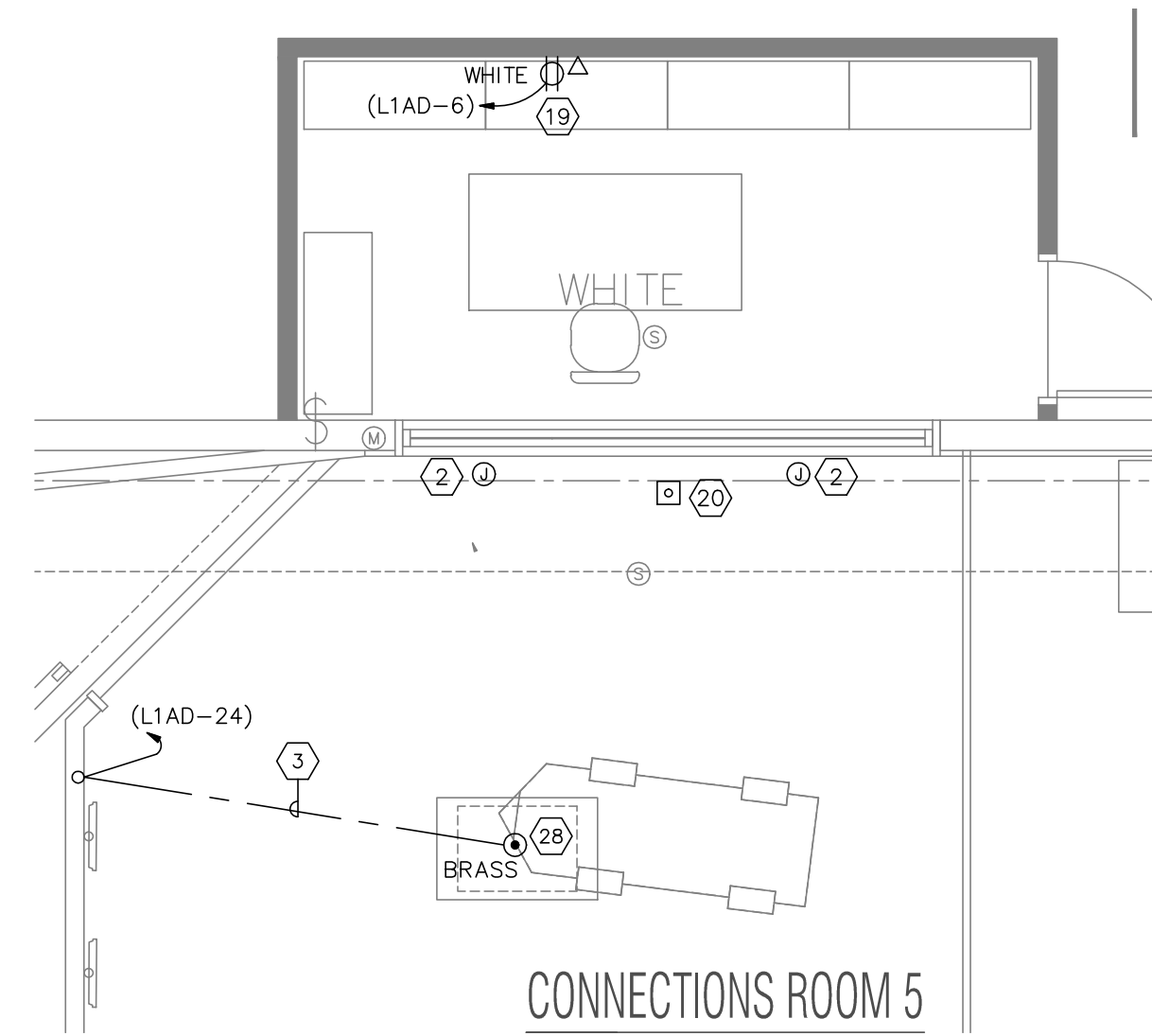
1 S-9 - COAL MINE  
SCALE: 1/4" = 1'-0"



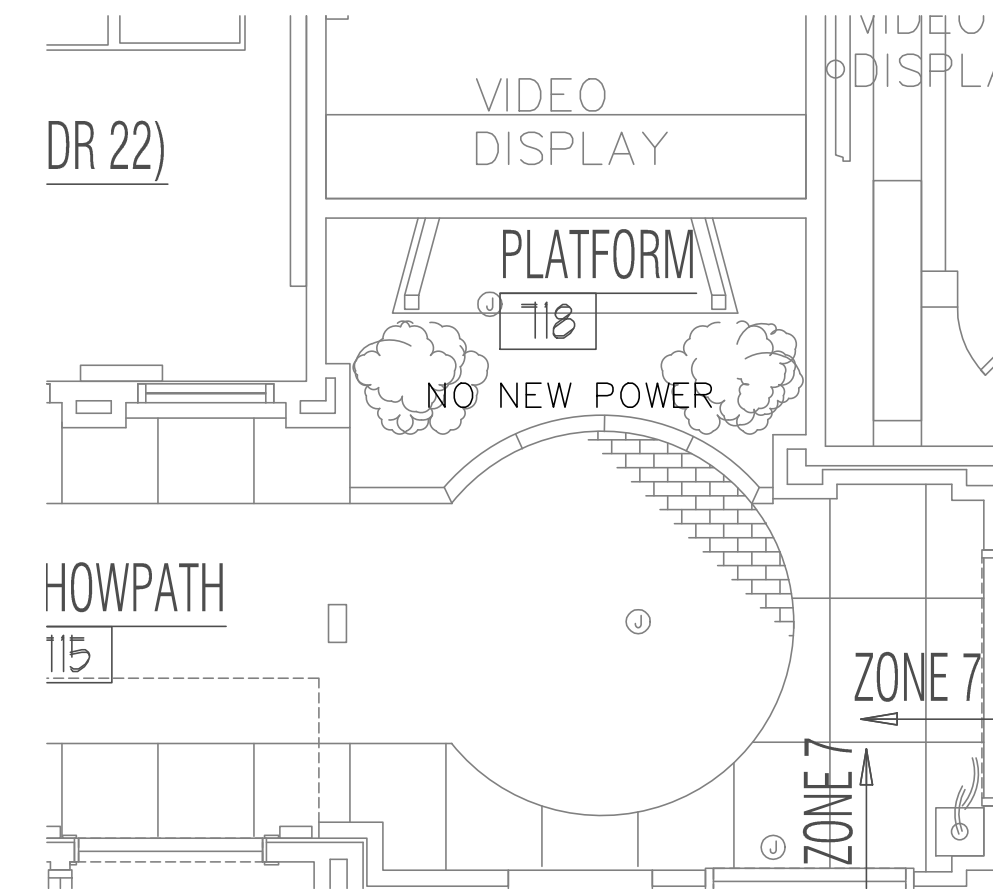
2 S-10 - MINE WARS  
SCALE: 1/4" = 1'-0"



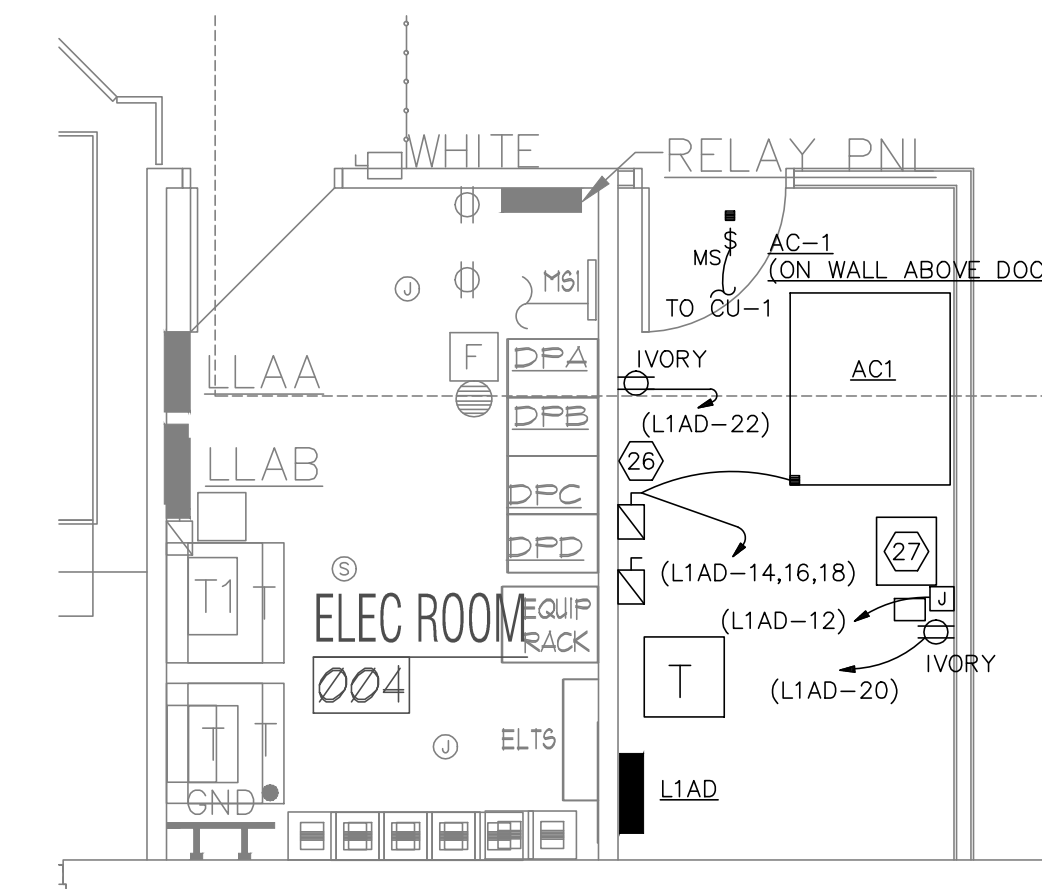
3 S-11 - ROTUNDA  
SCALE: 1/4" = 1'-0"



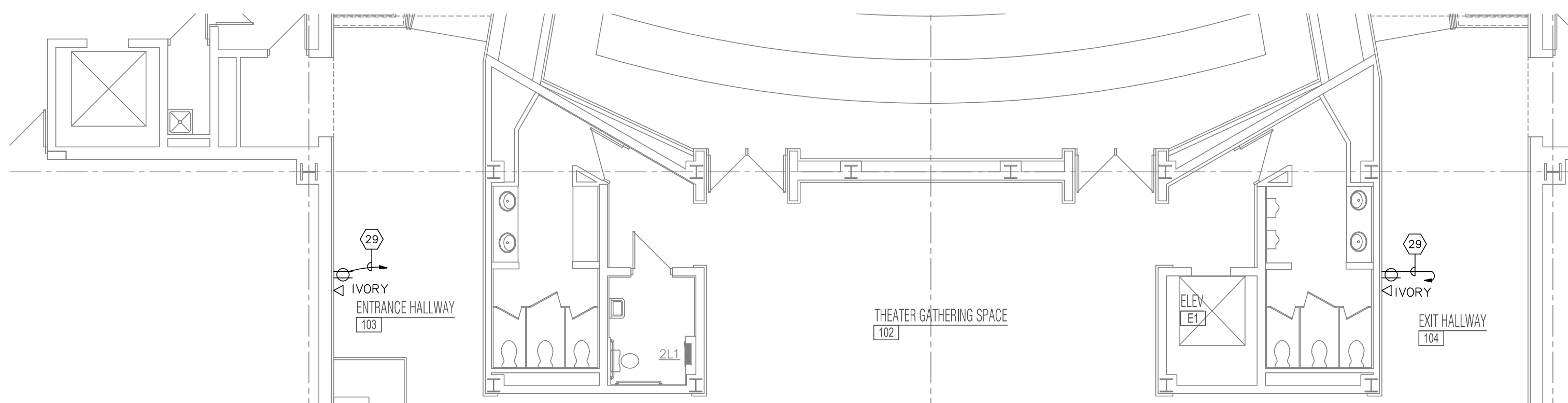
4 S-12 - COLLECTIONS ROOM  
SCALE: 1/4" = 1'-0"



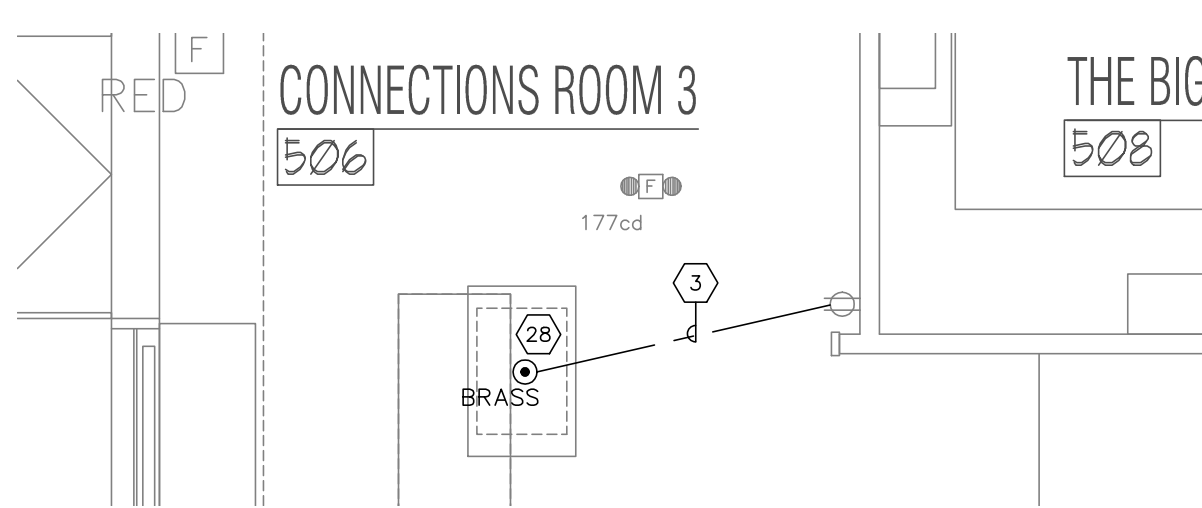
5 S-13 - NEELY  
SCALE: 1/4" = 1'-0"



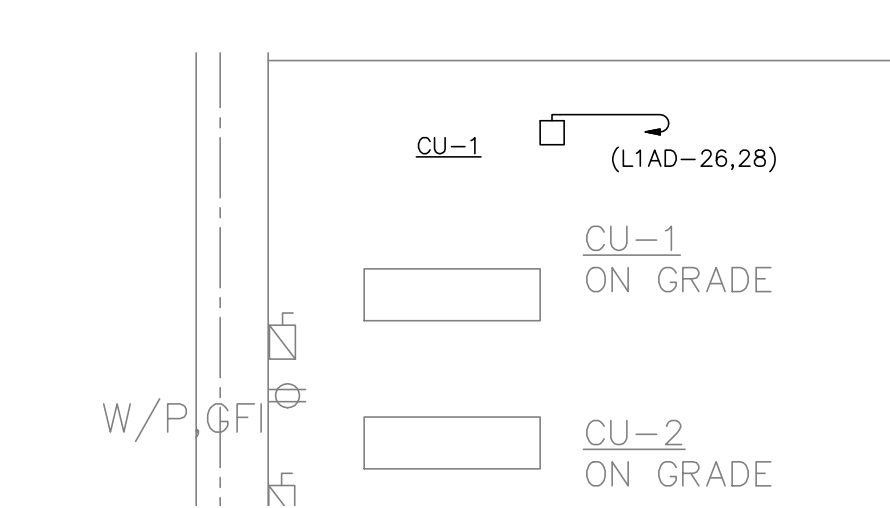
6 NEW MECHANICAL ROOM  
SCALE: 1/4" = 1'-0"



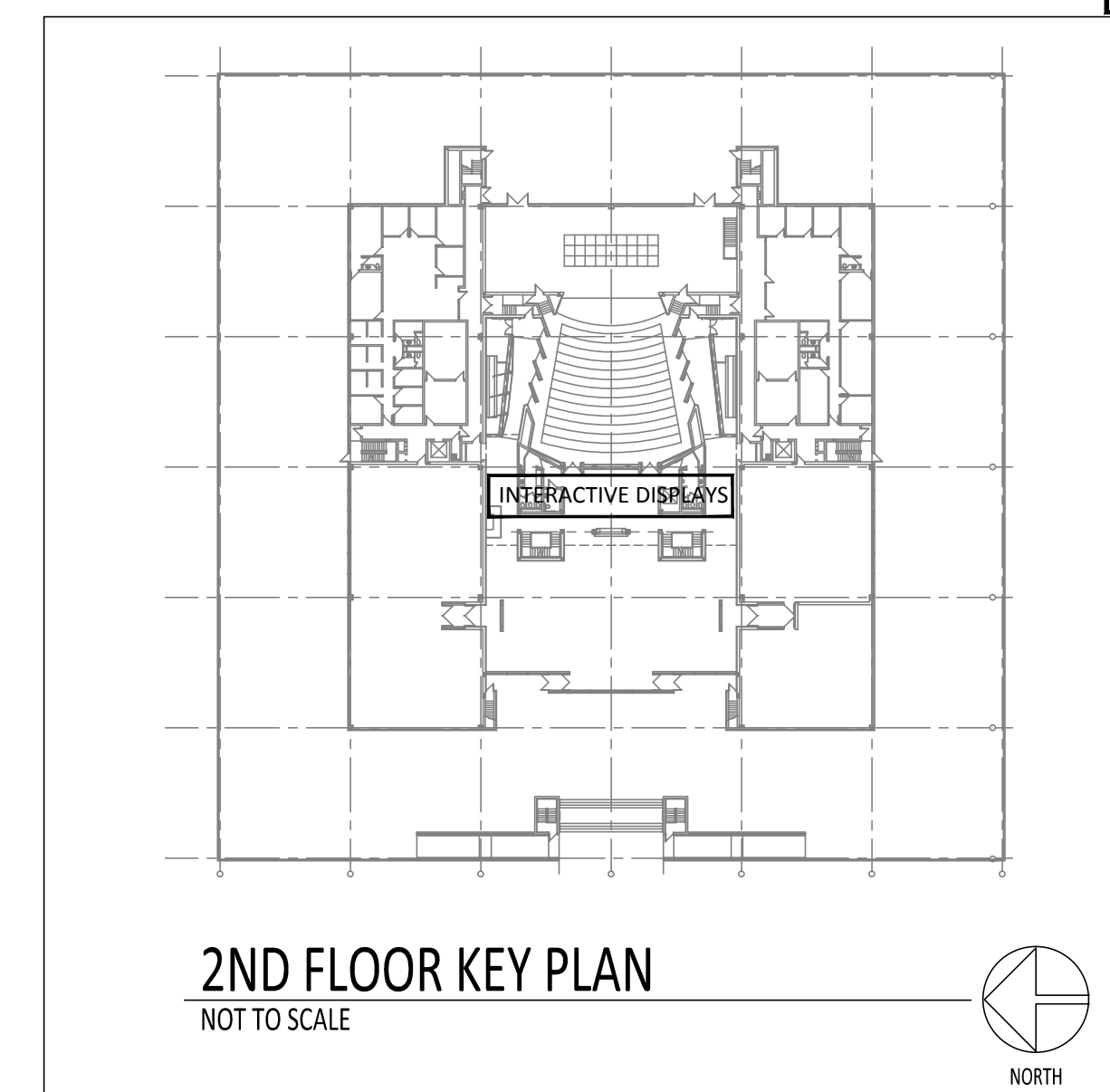
7 GREAT HALL - INTERACTIVE DISPLAYS  
SCALE: 1/8" = 1'-0"



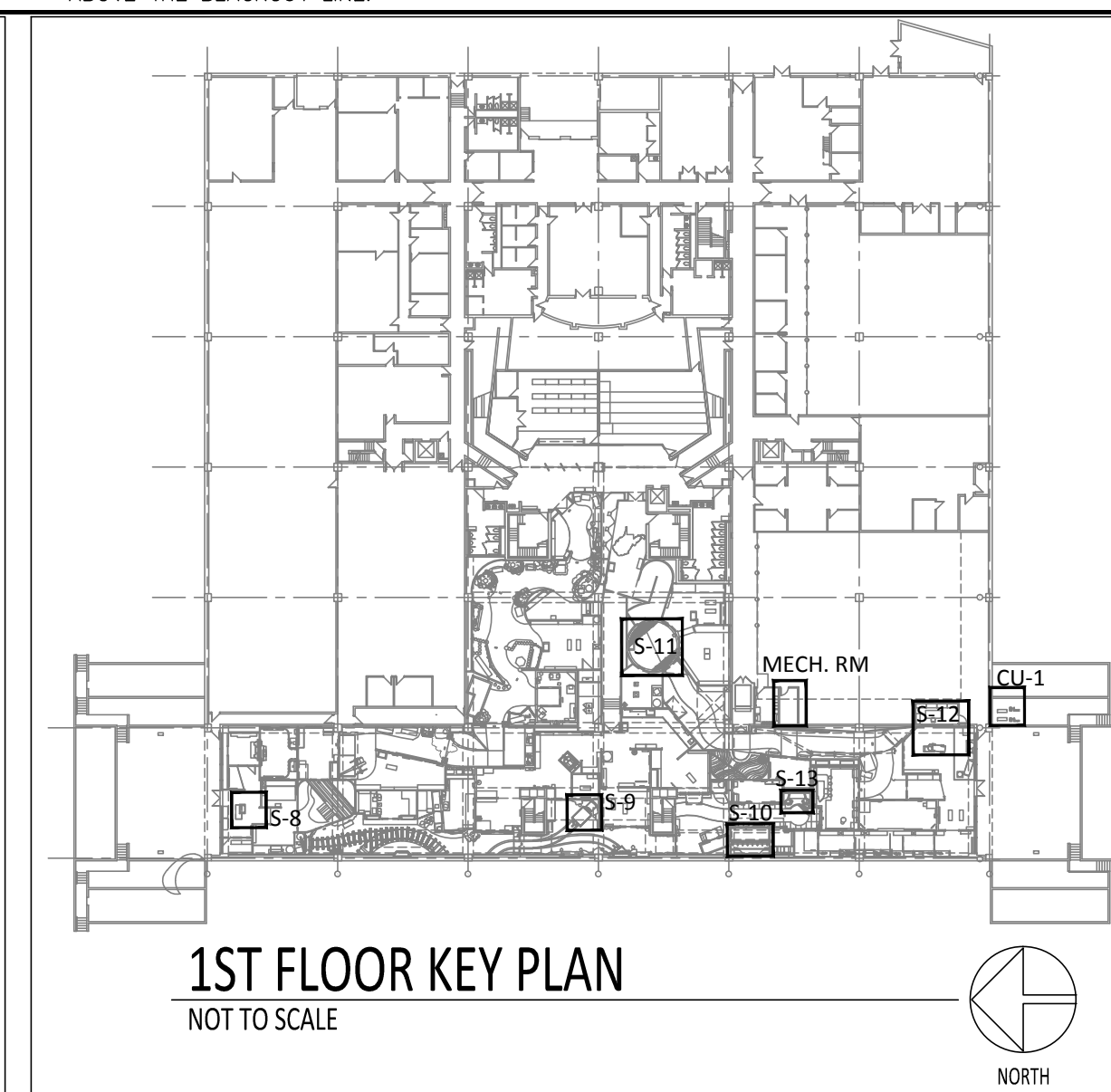
8 NORTH CONNECTIONS - INTERACTIVE DISPLAY  
SCALE: 1/8" = 1'-0"



9 CONDENSING UNIT LOCATION  
SCALE: 1/4" = 1'-0"



2ND FLOOR KEY PLAN  
NOT TO SCALE



1ST FLOOR KEY PLAN  
NOT TO SCALE

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  - CONDENSING UNIT CU-1 POWERS INDOOR UNIT AC-1. PROVIDE LOW VOLTAGE WIRING FROM CU-1 TO AC-1.
  - COORDINATE FINAL LOCATIONS OF POWER/DATA FOR THREE COMPUTERS IN THE FIELD. PROVIDE **GENERAL NOTES**
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**KLING STUBBINS**  
 MECHANICAL/ELECTRICAL ENGINEERS, P.C.  
 150 EAST WASHINGTON STREET  
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 8927 Rossash Road  
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 513-891-9950 PHONE  
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Enhancements for the:  
**West Virginia State Museum**  
 Cultural Center - Lower level  
 1900 Kanawha Boulevard East  
 Charleston, West Virginia 25305

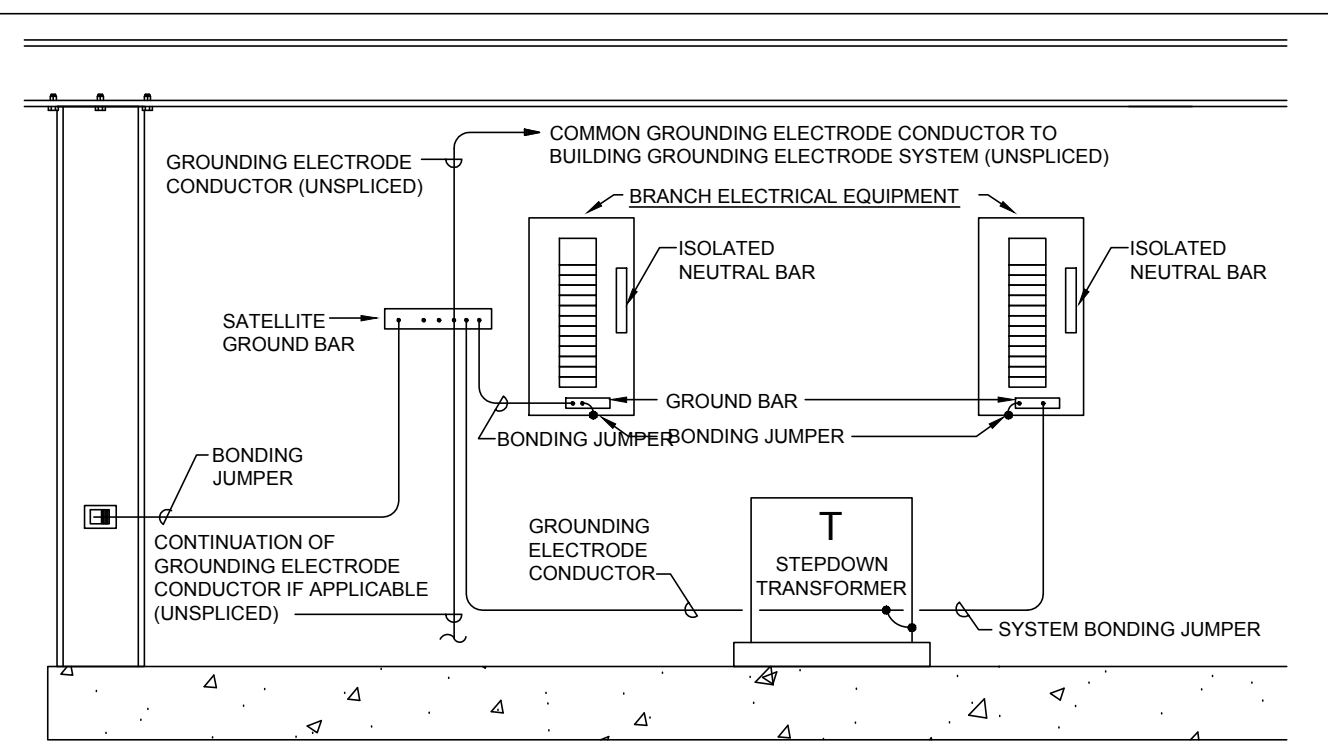
DRAWN BY: SCR  
 ISSUE DATE: 06-09-2011  
 REVISIONS:

ELECTRICAL POWER PLAN

**EP1.03**  
 PROJECT #10843.00



LUMINAIRE SCHEDULE						
<p>LAMPS ARE SPECIFIED BY LAMP ORDERING CODE, NOT ANSI CODE NUMBER. LAMPS LISTED ARE G.E. UNLESS OTHERWISE NOTED. NO EXCEPTIONS ALLOWED WITHOUT PRIOR APPROVAL.</p> <p>SINGLE NUMERICAL PREFIX IN LAMP COLUMN INDICATES NUMBER OF LAMPS IN FIXTURE (e.g., 3-F32R/SF35). NO PREFIX INDICATES SINGLE LAMP.</p> <p>USE THE FOLLOWING MOUNTING ABBREVIATIONS: C=CEILING, R=RECESSED, S=SURFACE, P=PENDANT, W=WALL, IG=IN-GRADE, A=AS INDICATED, CB=CONCRETE BASE</p> <p>MANUFACTURER SERIES AND DESCRIPTION LISTED, AND NOTATED CUT-SHEETS ARE BASIS OF DESIGN. ALTERNATE MANUFACTURERS ARE GIVEN BY NAME ONLY, AND SHALL BE EQUAL IN PERFORMANCE AND QUALITY TO LISTED LUMINAIRE, AS DETERMINED BY CD+M. IF MANUFACTURER IS NOT LISTED, THEY SHALL COMPLY WITH THE SUBSTITUTION SECTION OF THE SPECIFICATIONS.</p> <p>REFER TO ELECTRICAL AND ARCHITECTURAL DOCUMENTS FOR ADDITIONAL LIGHTING INFORMATION.</p> <p>DETAILS GIVEN IN DESCRIPTION SECTION OF LUMINAIRE SCHEDULE SHALL APPLY, IN ADDITION TO CATALOG NUMBERS, WHETHER OR NOT INCLUDED AS PART OF A CATALOG NUMBER.</p> <p>LAMP AND TRANSFORMER INFORMATION IN SPECIFICATION SHALL APPLY IN ADDITION TO INFORMATION IN LUMINAIRE SCHEDULE, WHETHER OR NOT INCLUDED IN LUMINAIRE SCHEDULE.</p> <p>FURNISH STOCK OF UNUSED, UNOPENED REPLACEMENT LAMPS AMOUNTING TO AT LEAST 15 PERCENT, BUT NOT LESS THAN 4 LAMPS IN EACH CASE, OF EACH TYPE AND SIZE LAMP USED IN EACH TYPE LUMINAIRE. DELIVER AND NEATLY STORE THIS REPLACEMENT STOCK AS DIRECTED TO OWNER'S STORAGE SPACE.</p>						
TYPE	MFG / CATALOGUE #	ALTERNATE MFG	VOLTS	LAMP CODE	MTG.	DESCRIPTION / REMARKS
C	LITHONIA C232 120 GEB	METALUX DAYBRITE	120	2-F032/B35	S	2 LAMP STRIP
R	JUNO TC22LED 27K 1 DIMMABLE 27WHZ-AB2	PORTFOLIO	120	1-2700K LED MODULE WITH LUMINAIRE	R	6" DIA. OPEN DOWNLIGHT, WHEAT HAZE REFLECTOR, AGED BRONZE TRIM
SP1	COLOR KINETICS COLORBLAST TR		120		AI	COLOR CHANGING LED FLOOD LIGHT, BLACK FINISH, PROVIDE BARN DOORS AND ALL NECESSARY DRIVERS, CONTROLLERS AND ACCESSORIES FOR A COMPLETE WORKING SYSTEM. PROVIDE CLAMP FOR MOUNTING TO PIPE BAR
SP2	ELEMENTAL LED EL-1MGBRTR12V		120	2700K LED WITH UNIT	AI	LED TAPE PROVIDE NECESSARY DRIVERS, CONTROLLERS, AND ACCESSORIES FOR A COMPLETE WORKING SYSTEM.
SP3	LSI TP38-3GBX	TIMES SQUARE	120	1-50PAR30/H/SP10	AI	MONOPOINT MOUNT HALOGEN FIXTURE WITH BLACK FINISH, PROVIDE MONOPOINT CANOPY, BARN DOORS AND UV FILTER ACCESSORY
SP4	LSI TP38-3GBX	TIMES SQUARE	120	1-75PAR30/H/NFL	AI	MONOPOINT MOUNT HALOGEN FIXTURE WITH BLACK FINISH, PROVIDE MONOPOINT CANOPY, BARN DOORS AND UV FILTER ACCESSORY
SP5	LSI TP38-3GBX	TIMES SQUARE	120	1-75PAR30/H/FL40	AI	TRACK MOUNT HALOGEN FIXTURE WITH BLACK FINISH, PROVIDE BARN DOORS AND UV FILTER ACCESSORY
SP6	LSI TP38-3GBX	TIMES SQUARE	120	1-75PAR30/H/FL40	AI	MONOPOINT MOUNT HALOGEN FIXTURE WITH WHITE FINISH, PROVIDE MONOPOINT CANOPY, BARN DOORS AND UV FILTER ACCESSORY
SP7	LSI TP38-3GBX	TIMES SQUARE	120	1-75PAR30/H/FL40	AI	MONOPOINT MOUNT HALOGEN FIXTURE WITH BLACK FINISH, PROVIDE MONOPOINT CANOPY, BARN DOORS AND UV FILTER ACCESSORY
SP8	LSI TP38-3GBX	TIMES SQUARE	120	1-75PAR30/H/NFL	AI	TRACK MOUNT HALOGEN FIXTURE WITH BLACK FINISH, PROVIDE BARN DOORS AND COLOR AND UV FILTER ACCESSORIES
SP9	GE LIGHTING TETRA CONTOUR		120	2700K LED WITH UNIT	AI	DIMMABLE LED LINEAR ACCENT LIGHT
SP10	LSI TP38-3GBX	TIMES SQUARE	120	1-50PAR30/H/SP10	AI	PIPE BAR MOUNT HALOGEN FIXTURE WITH BLACK FINISH, PROVIDE BARN DOORS, C-CLAMP FOR PIPE BAR MOUNTING AND JBOX CONNECTION, AND UV FILTER ACCESSORY
SP11	LSI BP-75N-00 B	TIMES SQUARE	120	Q71MR16/C/FL40	AI	LOW VOLTAGE MONOPOINT HALOGEN FIXTURE WITH BLACK FINISH, PROVIDE MONOPOINT CANOPY, BARN DOORS AND COLOR AND UV FILTER IN FRAME
SP12	LSI TP38-3GBX	TIMES SQUARE	120	1-50PAR30/H/SP10	AI	MONOPOINT MOUNT HALOGEN FIXTURE WITH WHITE FINISH, PROVIDE MONOPOINT CANOPY, BARN DOORS AND UV FILTER ACCESSORY
SP13	LSI TP38-3GBX	TIMES SQUARE	120	1-75PAR30/H/NFL	AI	TRACK MOUNT HALOGEN FIXTURE WITH BLACK FINISH, PROVIDE BARN DOORS AND UV FILTER ACCESSORY
TRACK	LSI TRACK SERIES	TIMES SQUARE	120	N/A	S	SINGLE OR DUAL CIRCUIT TRACK, BLACK FINISH, PROVIDE END FEED CONNECTION AND CANOPY AS REQUIRED.
TH3	LSI TP38-3GBX (LSI# 07204-02)		120	75PAR30/H/FL35	AI	TRACK MOUNT HALOGEN FIXTURE WITH BLACK FINISH, PROVIDE 2-CKT TRACK ADAPTER AT END OF 6' LONG CORD, COLOR FILTER IN FRAME (PROVIDED FOR REFERENCE ONLY, TRACK FIXTURES ARE EXISTING TO REMAIN OR SCHEDULED FOR RELOCATION).
TH4	LSI BP-75N-00 B		120	Q71MR16/C/FL40	AI	LOW VOLTAGE TRACK MOUNT HALOGEN FIXTURE WITH BLACK FINISH, 2-CKT TRACK ADAPTER AT END OF 6' LONG CORD, PROVIDE NEW COLOR AND UV FILTER IN FRAME WHERE INDICATED (PROVIDED FOR REFERENCE ONLY, TRACK FIXTURES ARE EXISTING TO REMAIN OR SCHEDULED FOR RELOCATION).
TH5	LSI TP38-3GBX (LSI SPECIAL # 07204)		120	75PAR30/H/FL35	AI	SIMILAR TO TYPE TH3, EXCEPT PROVIDE NEW COLOR AND UV FILTER WHERE INDICATED (PROVIDED FOR REFERENCE ONLY, TRACK FIXTURES ARE EXISTING TO REMAIN OR SCHEDULED FOR RELOCATION).



**GENERAL NOTES:**

- THIS DETAIL APPLIES AT EACH SATELLITE ELECTRIC ROOM/CLOSET, OR OTHER GROUPING OF PANELS. REFER TO FLOOR PLANS FOR GROUND BAR LOCATIONS, AND IF NOT SHOWN IN PLAN VIEW INSTALL AS CLOSE AS POSSIBLE TO AFFECTED EQUIPMENT.
- PROVIDE ALL GROUNDING ELECTRODE CONDUCTORS SIZED PER NEC TABLE 250.66 UNLESS NOTED OTHERWISE.
- PROVIDE SATELLITE GROUND BAR EQUAL TO ERICO EQUIPMENT GROUND BAR INSULATORS AND BRACKET (1/4" THICK, 4" WIDE, 18" LONG, HOLE PATTERN TYPE "CC").
- PROVIDE ALL BONDING JUMPERS SIZED PER NEC TABLE 250.122 UNLESS NOTED OTHERWISE.
- COORDINATE WITH ELECTRICAL INSPECTOR. MODIFY SPECIFIC MEANS & METHODS IF SO DIRECTED.

**1 SCHEMATIC SATELLITE ELECTRIC ROOM GROUNDING DETAIL**  
SCALE: NONE

ELECTRIC LEGEND	
SYMBOL	DESCRIPTION
<b>LIGHTING FIXTURES</b>	
	FLUORESCENT 2' x 4' LUMINAIRE
	FLUORESCENT 2' x 2' LUMINAIRE
	FLUORESCENT 1' x 4' LUMINAIRE
	SPOT/FLOOD/TRACK LUMINAIRE
	SHADED LUMINAIRE DENOTE THOSE CONNECTED TO EMERGENCY POWER SOURCE (UNSWITCHED LUMINAIRE SHALL BE UTILIZED AS NIGHT-LIGHTS)
	TRACK LIGHTING IN LENGTH SHOWN & WITH NUMBER OF LUMINAIRE (HEADS) AS INDICATED PROVIDE ALL REQ'D. FACT. ACCESSORIES (T's, L's, X's, ENDS, PWR.FEEDS, FITTINGS, ETC.)
	SINGLE SIDED EXIT SIGN - CONNECT AHEAD OF SWITCHING
	DOUBLE SIDED EXIT SIGN - CONNECT AHEAD OF SWITCHING
A,B,C	LUMINAIRE/LIGHTING FIXTURE TYPES
<b>LIGHTING CONTROL/SWITCHING</b>	
a,b,c	SWITCHING DESIGNATION
\$	SINGLE POLE SWITCH
<b>RECEPTACLES/MISCELLANEOUS OUTLETS</b>	
	DUPLEX RECEPTACLE (18" A.F.F. UNLESS OTHERWISE NOTED)
<b>RECEPTACLES/MISCELLANEOUS OUTLETS</b>	
	FLUSH CEILING DUPLEX RECEPTACLE
	FLOOR OUTLET - TYPE DESIGNATION CALLED OUT IN SPECIFICATIONS.
	HEAVY DUTY DISCONNECT SWITCH (FUSED)
	HEAVY DUTY DISCONNECT SWITCH (UNFUSED)
	DATA OUTLET
	CEILING MOUNTED DATA OUTLET
	PUSH BUTTON
	RECESSED OR SURFACE MOUNTED PANELBOARD AS INDICATED ON PLANS
	TRANSFORMER
<b>SINGLE LINE DIAGRAM</b>	
	ENCLOSED CIRCUIT BREAKER IN NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED (LEFT) CIRCUIT BREAKER (CENTER) - FUSED SWITCH IN SWITCHGEAR OR DISTRIBUTION BOARD (RIGHT)
	SURGE PROTECTIVE DEVICES (SPD)
	INDICATES GROUNDING BY E.C. PER N.E.C. ARTICLE 250 MINIMUM
	ELECTRIC UTILITY COMPANY METER AND ASSOCIATED CURRENT TRANSFORMER(S)
	RECESSED OR SURFACE MOUNTED PANELBOARD AS INDICATED ON PLANS TRIANGLE SYMBOL (RIGHT) INDICATES PANEL TO BE PROVIDED WITH FEED THROUGH LUGS
	SWITCHGEAR / DISTRIBUTION PANEL
	NON FUSED (LEFT) AND FUSED (RIGHT) DISCONNECT
	AUTOMATIC TRANSFER SWITCH
<b>RACEWAY/WIRE/CABLE</b>	
	HOME RUN WITH CIRCUIT NUMBER(S)
	CABLING/RACEWAY - CEILING OR WALL - SEE SPECS. FOR APPL. CONDUIT/RACEWAY REQ'TS. (FULLY CONCEALED IN FINISHED AREAS, CONCEALED TO OVERHEAD STRUCTURE IN UNFIN. AREAS)
	CABLING/RACEWAY - BELOW FLOOR/GRADE - SEE SPECS. FOR APPL. CONDUIT/RACEWAY REQ'TS.
	JUNCTION BOX
	CONDUIT UP OR DOWN
<b>ABBREVIATIONS AND NOTES</b>	
E.C.	ELECTRICAL CONTRACTOR
G.C.	GENERAL CONTRACTOR
VF	VERIFY IN FIELD (PRIOR TO ROUGH-IN WHERE APPLICABLE AND PRIOR TO SUBMITTING A BID WHERE APPLICATION)
AFF	ABOVE FINISHED FLOOR (OR GRADE/PAVEMENT WHERE APPLICABLE) TO CENTER OF OUTLET (UNLESS OTHERWISE NOTED)
C/B	CIRCUIT BREAKER

**COMcheck Software Version 3.8.0**  
**Interior Lighting Compliance Certificate**

**2003 IECC**

**Section 1: Project Information**

Project Type: Addition  
Project Title: \_\_\_\_\_  
Construction Site: \_\_\_\_\_ Owner/Agent: \_\_\_\_\_ Designer/Contractor: \_\_\_\_\_

**Section 2: Interior Lighting and Power Calculation**

Area Category	A Floor Area (sq ft)	B Allowed Watts (ft <sup>2</sup> )	C Allowed Watts (ft <sup>2</sup> )	D Allowed Watts (ft <sup>2</sup> )
Museum	19966	1	19966	
Museum	1364	1	1364	
Mechanical Room (Storage, Industrial and Commercial)	101	0.8	81	
Collectors Room (Museum)	135	1	135	
Total Allowed Watts =				21996

**Section 3: Interior Lighting Fixture Schedule**

Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	A Lamps/Fixture	B # of Fixtures	C Fixture Watt	D Watt (C X D)	E (C X D)
Museum (19966 sq ft)					
TH8: Incandescent 50W	1	12	50	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH9A: Incandescent 50W	1	12	60	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
A1: Incandescent 50W	1	18	50	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
CS4: Incandescent 60W	1	8	60	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
CS2: Incandescent 40W	1	2	40	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
CS1: Incandescent 40W	1	1	40	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
CP2: Incandescent 100W	1	1	100	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
CP1: Incandescent 60W	1	1	60	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH3: Meter Halls 120W / Electronic	1	1	220	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH7: Other	1	4	575	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH6: Incandescent 75W	1	5	710	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH5: Incandescent 75W	1	370	75	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH4C: Incandescent 75W	1	6	71	Exempt	
Exemption Gallery/Museum/Monument Exhibits					

Project Title: \_\_\_\_\_ Report date: \_\_\_\_\_  
Data filename: \_\_\_\_\_ Page 1 of \_\_\_\_\_

TH4B: Incandescent 75W	1	29	71	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH4A: Incandescent 75W	1	38	71	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH4: Incandescent 75W	1	80	71	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH3: Incandescent 75W	1	200	75	15000	
TH2: Other	1	6	150	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH1: Incandescent 75W	1	3	75	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
L2A3: Other	1	13	50	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
L1A: Other	1	4	4	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
L1: Other	1	9	4	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
F1: 48" T8 32W / Electronic	1	10	41	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
D4: Incandescent 75W	1	17	75	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
D2: Incandescent 75W	1	6	75	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
D2A: Incandescent 75W	1	4	71	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
D2B: Incandescent 75W	1	6	50	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
D2: Incandescent 75W	1	20	71	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH3 EXEMPT: Incandescent 75W	1	43	75	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
ETB: Incandescent 70W	1	100	75	Exempt	
Exemption: Emergency Lighting (Automatic Control)					
S1: Incandescent 75W	1	1	575	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH9B: Incandescent 80W	1	15	50	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH9C: Incandescent 60W	1	40	60	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
WB LED WALL ILLUMINATOR: Other	1	10	250	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH1A: Incandescent 100W	1	46	100	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
Halogen 3: SP2-SP2: LED - Theatrical Spot / Other	1	24	26	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
Halogen 4: SP2: LED - Accent / Other	1	1	20	20	
Exemption Gallery/Museum/Monument Exhibits					
Incandescent 37: GOBO FIXTURE / Incandescent 100W	1	5	100	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
Halogen 5: R: LED - Recessed Downlight / Other	1	2	26	52	
Museum (1364 sq ft)					
B: Triple 4-pin 32W / Electronic	1	57	100	5700	
TH9: Incandescent 50W	1	15	50	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
TH9C: Incandescent 60W	1	38	60	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
Mechanical Room (Storage, Industrial and Commercial 101 sq ft.)					
Linear Fluorescent 2: 48" T8 32W / Electronic	2	2	62	124	
Collection Room (Museum 135 sq ft.)					
Halogen 1: SP1: LED - Theatrical Spot / Other	1	7	28	Exempt	
Exemption Gallery/Museum/Monument Exhibits					
Halogen 2: R: LED - Recessed Downlight / Other	1	3	28	78	
Total Proposed Watts =				20974	

**Section 4: Requirements Checklist**

**Lighting Wattage:**

Project Title: \_\_\_\_\_ Report date: \_\_\_\_\_  
Data filename: \_\_\_\_\_ Page 2 of \_\_\_\_\_

1. Total proposed watts must be less than or equal to total allowed watts.

Allowed Watts	Proposed Watts	Complies
21996	20974	YES

2. Exit signs 5 Watts or less per sign.

**Exterior Lighting:**

3. Efficacy greater than 45 lumens/W.

Exceptions:

- Specialized lighting highlighting features of historic buildings; signage; safety or security lighting; low-voltage landscape lighting.

**Controls, Switching, and Wiring:**

4. Independent controls for each space (switch/occupancy sensor).

Exceptions:

- Areas designated as security or emergency areas that must be continuously illuminated.
- Lighting in stairways or corridors that are elements of the means of egress.
- Master switch at entry to hotel/motel guest room.
- Individual dwelling units separately metered.

5. Each space provided with a manual control to provide uniform light reduction by at least 50 percent.

Exceptions:

- Only one luminaire in space.
- An occupant-sensing device controls the area.
- The area is a corridor, storeroom, restroom, public lobby or guest room.
- Areas that use less than 0.6 Watts/sq.ft.

6. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.

Exceptions:

- Areas with only one luminaire, corridors, storerooms, restrooms, or public lobbies.
- Photocell/astrometrical time switch on exterior lights.

Exceptions:

- Lighting intended for 24 hour use.

10. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).

Exceptions:

- Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available ballast.

**Interior Lighting PASSES Design 3% better than code**

**Section 5: Compliance Statement**

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2003 IECC, Chapter 8, requirements in COMcheck Version 3.8.0 and to comply with the mandatory requirements in the Requirements Checklist.

**Robert A. Heil, PE, L.C.**  
Name - Title \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

Project Title: \_\_\_\_\_ Report date: \_\_\_\_\_  
Data filename: \_\_\_\_\_ Page 3 of \_\_\_\_\_

**1 ELECTRICAL DETAILS**  
SCALE: NTS

**RS&L COMMERCIAL ARCHITECTURE**

8927 Rossasah Road  
Cincinnati, OH 45236

513-891-9950 PHONE  
513-891-9951 FAX

www.rsarch.com

Enhancements for the:

**West Virginia State Museum**  
Cultural Center - Lower level

1900 Kanawha Boulevard East  
Charleston, West Virginia 25305

DRAWN BY: SCR

ISSUE DATE: 06-09-2011

REVISIONS:

ELECTRICAL DETAILS

**EP2.01**

PROJECT #: 10843.00



**DIMMER RACK SCHEDULE (A)**

ZONE	DESCRIPTION	CIRCUIT	VOLTAGE	FEED TYPE	NUMBER OF FIXTURES	WIRE SIZE	TOTAL KVA
1	Track 305	1	120	NORMAL	2	#12	0.2
2	Track 305	2	120	NORMAL	2	#12	0.2
3	Track 305	3	120	NORMAL	2	#12	0.2
4	Track 305	4	120	NORMAL	3	#12	0.2
5	Starfield 301	5	120	NORMAL	2	#12	0.3
6	Track 302	6	120	NORMAL	2	#12	0.2
7	Track 302	7	120	NORMAL	3	#12	0.2
8	Track 303	8	120	NORMAL	1	#12	0.1
9	Track 401	9	120	NORMAL	1	#12	0.1
10	Recessed 303	10	120	NORMAL	8	#12	0.3
11	Recessed 303	11	120	NORMAL	18	#12	1.3
12	Track 303	12	120	NORMAL	4	#12	0.3
13	Track 303	13	120	NORMAL	5	#12	0.4
14	Track 303	14	120	NORMAL	2	#12	0.2
15	Track 303	15	120	NORMAL	6	#12	0.5
16	Recessed 303	16	120	NORMAL	3	#12	0.2
17	Telescope Case	17	120	NORMAL	2	#12	0.2
18	Telescope Case	18	120	NORMAL	2	#12	0.1
19	Track 401	19	120	NORMAL	9	#12	0.7
20	Track 401	20	120	NORMAL	10	#12	0.8
21	Track 401	21	120	NORMAL	3	#12	0.2
22	Track 401	22	120	NORMAL	4	#12	0.3
23	Track 304	23	120	NORMAL	5	#12	0.4
24	Track 304	24	120	NORMAL	7	#12	0.5
25	Track 402	25	120	NORMAL	4	#12	0.3
26	Track 402	26	120	NORMAL	3	#12	0.2
27	Track 402	27	120	NORMAL	2	#12	0.2
28	Track 402	28	120	NORMAL	3	#12	0.2
29	Track 402	29	120	NORMAL	2	#12	0.2
30	Track 402	30	120	NORMAL	3	#12	0.2
31	Track 402	31	120	NORMAL	2	#12	0.1
32	Track 401	32	120	NORMAL	2	#12	0.1
33	Track 401	33	120	NORMAL	2	#12	0.2
34	Wallwash 403	34	120	NORMAL	3	#12	0.5
35	Track 506	35	120	NORMAL	1	#12	0.1
36	Track 506	36	120	NORMAL	1	#12	0.1
37	Track 403	37	120	NORMAL	2	#12	0.2
38	Track 403	38	120	NORMAL	2	#12	0.2
39	Track 403	39	120	NORMAL	3	#12	0.2
40	Blacklight 509	40	120	NORMAL	10	#12	0.3
41	Recessed 403	41	120	NORMAL	3	#12	0.2
42	Track 403	42	120	NORMAL	2	#12	0.2
43	Track 403	43	120	NORMAL	2	#12	0.2
44	Monopoint 807	44	120	NORMAL	3	#12	0.2
45	Track 403	45	120	NORMAL	5	#12	0.4
46	Track 403	46	120	NORMAL	6	#12	0.5
47	Track 404	47	120	NORMAL	2	#12	0.2
48	Track 404	48	120	NORMAL	4	#12	0.3
49	Track 404	49	120	NORMAL	2	#12	0.2
50	Track 906	50	120	NORMAL	3	#12	0.2
51	Track 405	51	120	NORMAL	1	#12	0.1
52	Track 405	52	120	NORMAL	2	#12	0.2
53	Track 405	53	120	NORMAL	1	#12	0.1
54	Track 405	54	120	NORMAL	3	#12	0.2
55	Track 405	55	120	NORMAL	3	#12	0.3
56	Track 405	56	120	NORMAL	2	#12	0.2
57	Track 405	57	120	NORMAL	3	#12	0.2
58	Track 406	58	120	NORMAL	1	#12	0.1
59	Track 406	59	120	NORMAL	1	#12	0.1
60	Track 406	60	120	NORMAL	1	#12	0.1
61	Track 406	61	120	NORMAL	2	#12	0.2
62	Track 406	62	120	NORMAL	1	#12	0.1
63	Track 406	63	120	NORMAL	2	#12	0.2
64	Track 406	64	120	NORMAL	2	#12	0.2
65	Track 501	65	120	NORMAL	8	#12	0.6
66	Track 501	66	120	NORMAL	5	#12	0.4
67	Track 501	67	120	NORMAL	2	#12	0.1
68	Monopoint 201/203	68	120	NORMAL	2	#12	0.1
69	Monopoint 204	69	120	NORMAL	3	#12	0.2
70	Monopoint 510	70	120	NORMAL	2	#12	0.1
71	Track 501	71	120	NORMAL	2	#12	0.2
72	Track 501	72	120	NORMAL	6	#12	0.5
73	Track 810	73	120	NORMAL	3	#12	0.2
74	Track 810	74	120	NORMAL	4	#12	0.3
75	Track Philippi Bridge	75	120	NORMAL	2	#12	0.1
76	Wallwash Philippi Bridge	76	120	NORMAL	3	#12	0.5
77	Track 501	77	120	NORMAL	2	#12	0.1
78	Track 502	78	120	NORMAL	2	#12	0.1
79	Track 502	79	120	NORMAL	7	#12	0.5
80	Track 502	80	120	NORMAL	7	#12	0.5
81	Track 504	81	120	NORMAL	2	#12	0.2
82	Track 504	82	120	NORMAL	4	#12	0.3
83	Window 510	83	120	NORMAL	1	#12	0.3
84	Track MOI	84	120	NORMAL	2	#12	0.1
85	Track 806	85	120	NORMAL	4	#12	0.3
86	Track 806	86	120	NORMAL	8	#12	0.6
87	Window 503	87	120	NORMAL	1	#12	0.3
88	Recessed 503	88	120	NORMAL	2	#12	0.1
89	Recessed 503	89	120	NORMAL	6	#12	0.4
90	Wall Sconces 504	90	120	NORMAL	4	#12	0.2
91	Monopoint 504	91	120	NORMAL	1	#12	0.1
92	Monopoint 504	92	120	NORMAL	1	#12	0.1
93	Monopoint 504	93	120	NORMAL	1	#12	0.1
94	Monopoint 504	94	120	NORMAL	1	#12	0.1
95	Monopoint 504	95	120	NORMAL	1	#12	0.1
96	Track 505	96	120	NORMAL	4	#12	0.3

**DIMMER RACK SCHEDULE (B)**

ZONE	DESCRIPTION	CIRCUIT	VOLTAGE	FEED TYPE	NUMBER OF FIXTURES	WIRE SIZE	TOTAL KVA
97	Track 505	97	120	NORMAL	2	#12	0.2
98	Monopoint 506	98	120	NORMAL	2	#12	0.1
99	Monopoint 713	99	120	NORMAL	2	#12	0.1
100	Track 506	100	120	NORMAL	2	#12	0.2
101	Track 506	101	120	NORMAL	1	#12	0.1
102	Downlights 506	102	120	NORMAL	6	#12	0.5
103	Track 506	103	120	NORMAL	3	#12	0.2
104	Track 508	104	120	NORMAL	3	#12	0.2
105	Track 508	105	120	NORMAL	2	#12	0.2
106	Track 508	106	120	NORMAL	2	#12	0.2
107	Track 508	107	120	NORMAL	1	#12	0.1
108	Track 508	108	120	NORMAL	2	#12	0.2
109	Track 508	109	120	NORMAL	1	#12	0.1
110	Track 507	110	120	NORMAL	2	#12	0.2
111	Track 507	111	120	NORMAL	1	#12	0.1
112	Track 507	112	120	NORMAL	2	#12	0.2
113	Track 507	113	120	NORMAL	3	#12	0.2
114	Track 507	114	120	NORMAL	2	#12	0.2
115	Track 507	115	120	NORMAL	2	#12	0.2
116	Track 509	116	120	NORMAL	2	#12	0.1
117	Track 509	117	120	NORMAL	3	#12	0.2
118	Starfield 509	118	120	NORMAL	2	#12	0.2
119	Track 509	119	120	NORMAL	3	#12	0.2
120	Track 509	120	120	NORMAL	2	#12	0.1
121	Track 509	121	120	NORMAL	3	#12	0.2
122	Track 509	122	120	NORMAL	2	#12	0.1
123	LED 509	123	120	NORMAL	9	#12	0.1
124	Specialty 701	124	120	NORMAL	1	#12	0.2
125	Track 702	125	120	NORMAL	2	#12	0.2
126	Track 702	126	120	NORMAL	3	#12	0.2
127	Track 702	127	120	NORMAL	2	#12	0.2
128	Track 702	128	120	NORMAL	3	#12	0.2
129	Track 702	129	120	NORMAL	2	#12	0.2
130	Track 702	130	120	NORMAL	1	#12	0.1
131	Track 702	131	120	NORMAL	3	#12	0.2
132	Track 701	132	120	NORMAL	6	#12	0.5
133	Track 701	133	120	NORMAL	2	#12	0.1
134	Track 701	134	120	NORMAL	1	#12	0.1
135	Track 701	135	120	NORMAL	2	#12	0.2
136	Track 702/703	136	120	NORMAL	1	#12	0.1
137	Strobe Flicker 716	137	120	NORMAL	1	#12	0.6
138	Track 810	138	120	NORMAL	6	#12	0.5
139	Track 703	139	120	NORMAL	3	#12	0.2
140	Track 703	140	120	NORMAL	4	#12	0.3
141	Floor CYC Light 707	141	120	NORMAL	2	#12	1.4
142	Floor CYC Light 707	142	120	NORMAL	2	#12	1.4
143	Incan 701	143	120	NORMAL	2	#12	0.1
144	Track 701/704	144	120	NORMAL	10	#12	0.8
145	Track 701/704	145	120	NORMAL	9	#12	0.7
146	Track 704	146	120	NORMAL	1	#12	0.1
147	Track 705A	147	120	NORMAL	4	#12	0.3
148	Track 705A	148	120	NORMAL	4	#12	0.3
149	Track 705A	149	120	NORMAL	1	#12	0.1
150	Track 705A	150	120	NORMAL	3	#12	0.2
151	Track 705B	151	120	NORMAL	6	#12	0.5
152	Track 705B	152	120	NORMAL	6	#12	0.5
153	Track 706B	153	120	NORMAL	3	#12	0.2
154	Track 706B	154	120	NORMAL	3	#12	0.2
155	Monopoint 706B	155	120	NORMAL	4	#12	0.3
156	Track 706B	156	120	NORMAL	3	#12	0.2
157	Track 706B	157	120	NORMAL	1	#12	0.1
158	Track 706B	158	120	NORMAL	5	#12	0.4
159	Track 706B	159	120	NORMAL	3	#12	0.2
160	Recessed 706A	160	120	NORMAL	4	#12	0.3
161	Track 704/707	161	120	NORMAL	2	#12	0.1
162	Track 707	162	120	NORMAL	2	#12	0.1
163	Track 707	163	120	NORMAL	2	#12	0.1
164	Monopoint 707	164	120	NORMAL	2	#12	0.1
165	Floor CYC Light 707	165	120	NORMAL	1	#12	0.7
166	LED 707	166	120	NORMAL	17	#12	0.1
167	LED 707	167	120	NORMAL	9	#12	0.1
168	Track 717	168	120	NORMAL	4	#12	0.3
169	Recessed 715	169	120	NORMAL	4	#12	0.4
170	Monopoint 707	170	120	NORMAL	6	#12	0.4
171	Track 507	171	120	NORMAL	2	#12	0.2
172	Window 703	172	120	NORMAL	1	#12	0.1
173	LED Strip 'L2'	173	120	NORMAL	6	#12	0.1
174	LED Strip 'L3'	174	120	NORMAL	9	#12	0.1
175	Track 707	175	120	NORMAL	1	#12	0.1
176	Track 707	176	120	NORMAL	2	#12	0.1
177	Track 707	177	120	NORMAL	1	#12	0.1
178	Track 707	178	120	NORMAL	2	#12	0.1
179	Track 707	179	120	NORMAL	1	#12	0.1
180	Track 707	180	120	NORMAL	2	#12	0.4
181	Track 707	181	120	NORMAL	1	#12	0.1
182	Track 707	182	120	NORMAL	2	#12	0.4
183	Track 712	183	120	NORMAL	2	#12	0.2
184	Track 712	184	120	NORMAL	2	#12	0.2
185							



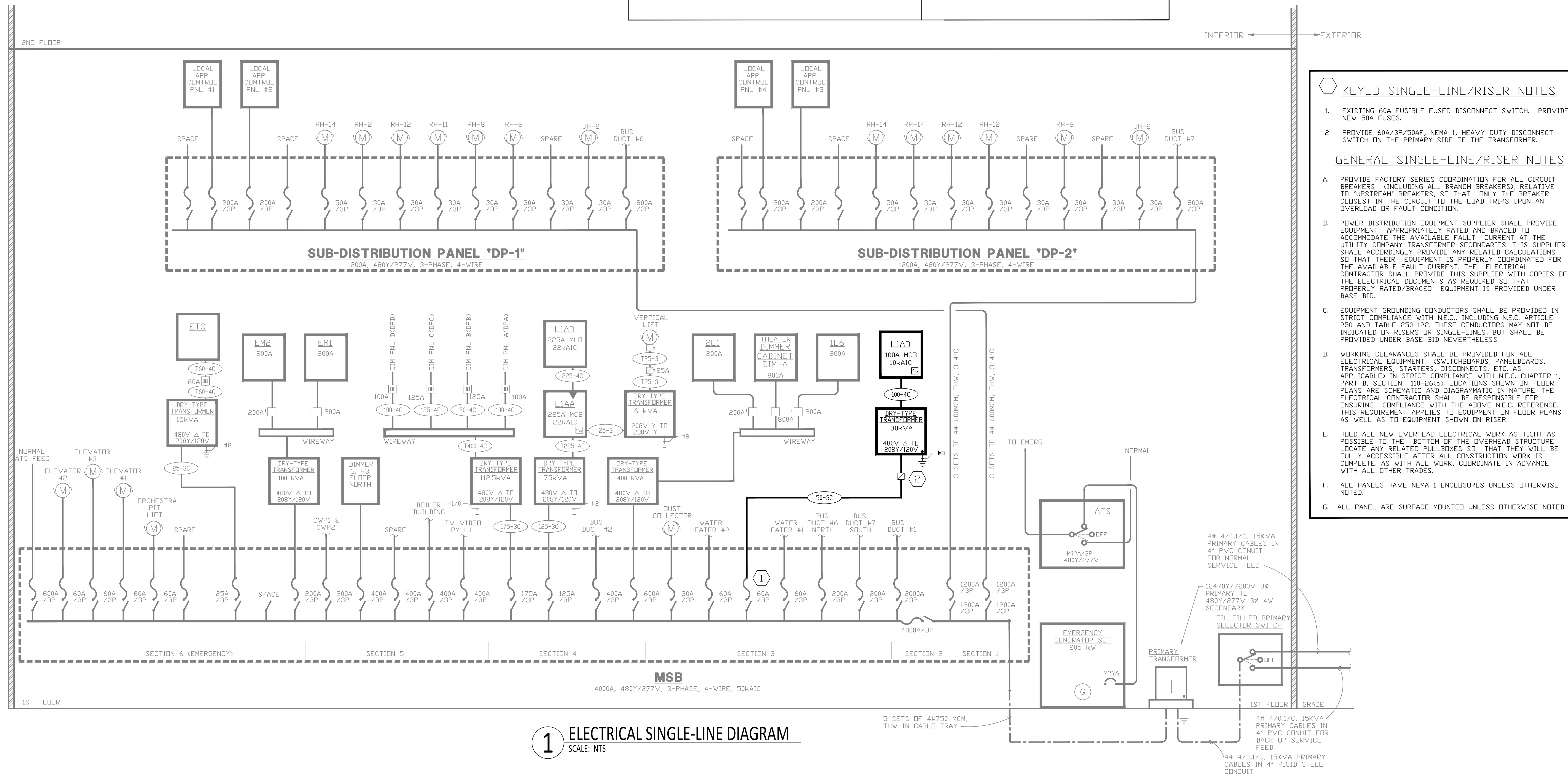
MSB LOAD SUMMARY			
CONNECTED LOAD	CONNECTED KVA (277/480)	DEMAND FACTOR	DEMAND LOAD
DEMO MISC EQPT	0.00	100%	0.00
DEMO LIGHTING	1.05	125%	1.31
DEMO RECEPTACLES	3.24	100% FIRST 10KVA, 50% REMAINING	3.24
DEMO HVAC	0.00	100%	0.00
MISC EQPT	16.01	100%	16.01
LIGHTING	4.87	125%	6.08
RECEPTACLES	6.78	100% FIRST 10KVA, 50% REMAINING	6.78
HVAC	0.00	100%	0.00
PREVIOUS PROJECT'S ADDED LOAD	200.37	100%	200.37
EXISTING LOAD:	707	(1.25) =	883.75
<b>TOTAL ADDED LOAD</b>			<b>24.32 KVA</b>
<b>TOTAL LOAD</b>			<b>912.62 KVA</b>
<b>TOTAL AMPS</b>			<b>1338.72 AMPS</b>

LIAD (NEW)												
PANEL NAME		SOURCE		VOLTAGE		PHASE		WIRE		LOCATION		
MSB VIA T1				208		3		4		ELECTRIC ROOM		
#	L	R	M	H	C	BRK	AMP	POLE	DESCRIPTION	KVA	PHASE	
										A	B	C
1						20	1.2	1	JOHN BROWN'S RAID	1.2		
2						20	0.5	0.5	HARRIS FERRY	0.5		
3						20	0.7	0.5	BRIDGE RACCOON STATEHOOD BUST	0.7		
4						20	1.2	1	WHEELING DOCKS	1.2		
5						20	0.7	0.7	TRANSPORTATION ANIMATRONICS	0.7		
6						20	0.7	0.7	TRANSPORTATION ANIMATRONICS	0.7		
7						20	0.4	0.4	TRANSPORTATION ANIMATRONICS	0.4		
8						20	0.4	0.4	SCENT FANS - TRANSPORTATION	0.4		
9						20	1.0	1.0	PROFECTORS - FAIRS AND FESTIVALS	1.0		
10						20	0.3	0.2	CARDINAL/FANS - RIVER PLAINS	0.3		
11						20	0.5	0.5	FORT - INTERACTIVE KIOSKS	0.5		
12						20	0.4	0.4	CARD - PRESCENT FAN	0.4		
13						20	1.2	1.2	RECEPTS - PCS FAIRS AND FESTIVALS	1.2		
14						20	1.4	1.4	SPARE	1.4		
15						20	1.4	1.4	SPARE	1.4		
16						20	1.4	1.4	SPARE	1.4		
17						20	1.4	1.4	SPARE	1.4		
18						20	1.4	1.4	SPARE	1.4		
19						20	1.4	1.4	SPARE	1.4		
20						20	1.4	1.4	SPARE	1.4		
21						20	1.4	1.4	SPARE	1.4		
22						20	1.4	1.4	SPARE	1.4		
23						20	1.4	1.4	SPARE	1.4		
24						20	1.4	1.4	SPARE	1.4		
25						20	1.4	1.4	SPARE	1.4		
26						20	1.4	1.4	SPARE	1.4		
27						20	1.4	1.4	SPARE	1.4		
28						20	1.4	1.4	SPARE	1.4		
29						20	1.4	1.4	SPARE	1.4		
30						20	1.4	1.4	SPARE	1.4		
31						20	1.4	1.4	SPARE	1.4		
32						20	1.4	1.4	SPARE	1.4		
33						20	1.4	1.4	SPARE	1.4		
34						20	1.4	1.4	SPARE	1.4		
35						20	1.4	1.4	SPARE	1.4		
36						20	1.4	1.4	SPARE	1.4		
37						20	1.4	1.4	SPARE	1.4		
38						20	1.4	1.4	SPARE	1.4		
39						20	1.4	1.4	SPARE	1.4		
40						20	1.4	1.4	SPARE	1.4		
41						20	1.4	1.4	SPARE	1.4		
42						20	1.4	1.4	SPARE	1.4		

SINGLE LINE FEEDER SCHEDULE	
50-3C	600 CU AWG & 600 CU AWG GND IN 3/4" CONDUIT
100-4C	400 CU AWG & 400 CU AWG GND IN 1-1/2" CONDUIT

FEEDER SCHEDULE GENERAL NOTES

- FEEDERS DENOTED BY A "\*" HAVE BEEN OVERSIZED TO COMPENSATE FOR VOLTAGE DROP.
- "CU" = COPPER CONDUCTOR
- "AL" = ALUMINUM CONDUCTOR
- IF ALUMINUM CONDUCTORS ARE SHOWN FOR ANY FEEDER AND LUGS/TRANSFORMER COMPARTMENT DO NOT ALLOW THE INCREASED SIZE, COPPER CONDUCTORS SHALL BE INSTALLED.



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Enhancements for the:  
**West Virginia State Museum**  
Cultural Center - Lower level  
1900 Kanawha Boulevard East  
Charleston, West Virginia 25305

DRAWN BY: SCR  
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**EP3.01**  
PROJECT #: 10843.00