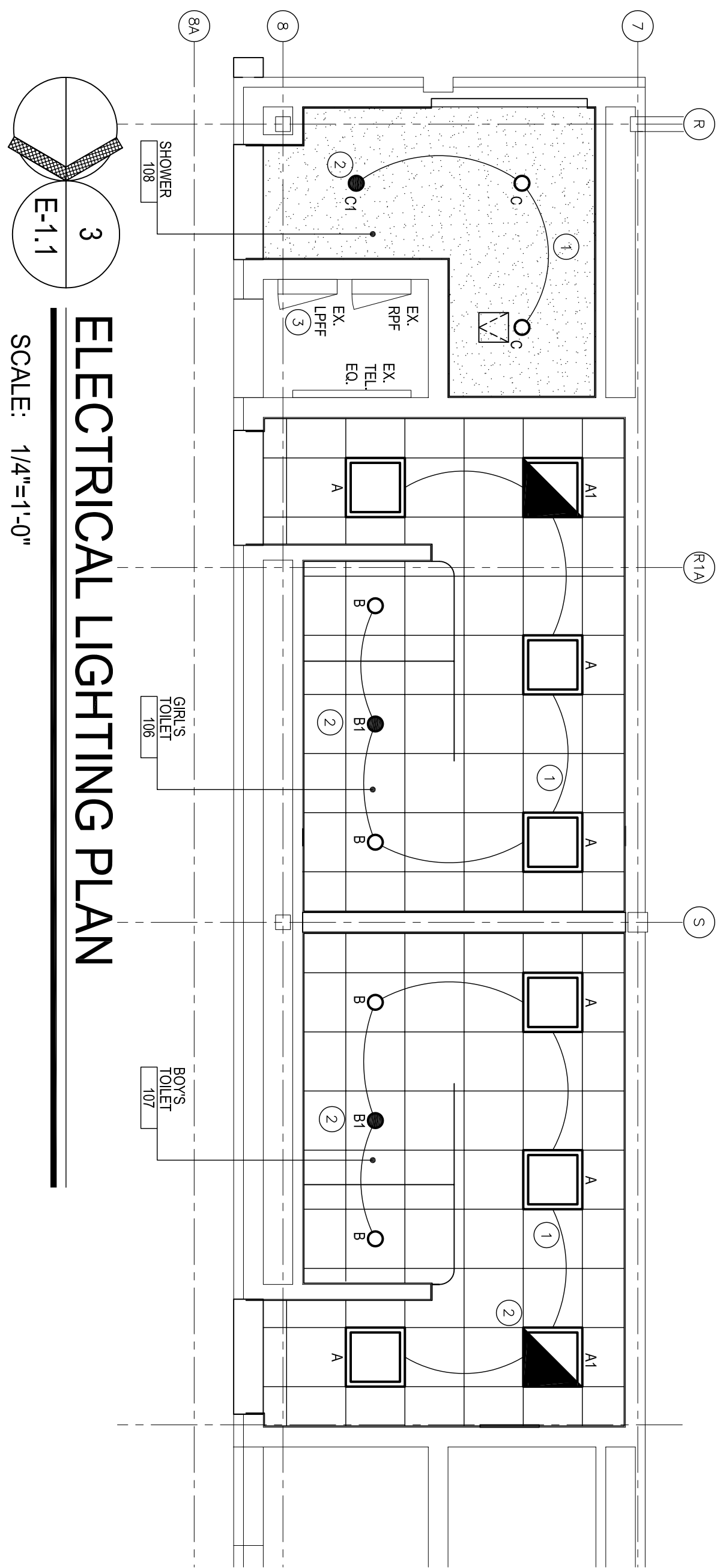
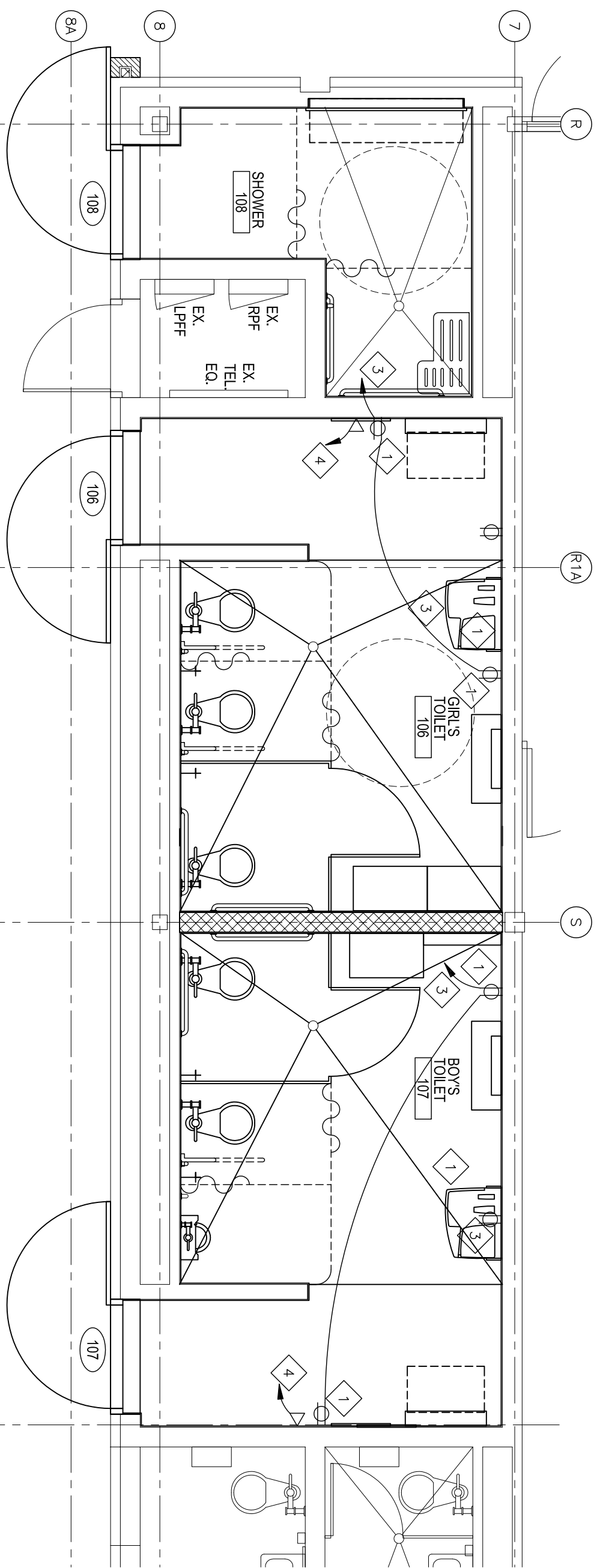


ELECTRICAL SPECIFICATIONS:

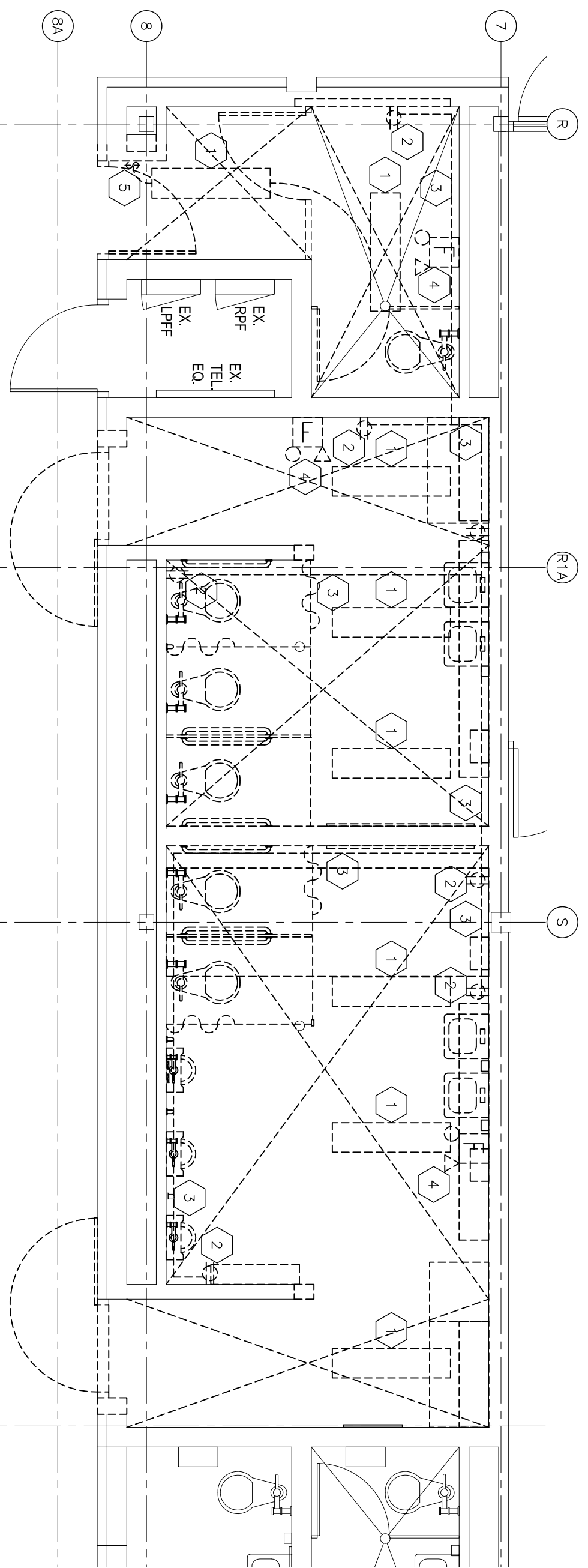
1. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND CERTIFICATES OF INSPECTION FOR WORK HEREIN SPECIFIED. THE PERMITS AND CERTIFICATES SHALL BE INCLUDED IN HIS BID PROPOSAL.
2. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS, ORDINANCES, REGULATIONS, AS WELL AS THE RULES AND STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, THE NATIONAL ELECTRIC CODE, THE N.E.C., A.E.C., OSHA, AND A.O.C.
3. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. SHOULD ANY FIELD CONDITIONS PREVENT PLACING OF CONDUIT, ETC., AS SHOWN ON THE PLANS, THE CONTRACTOR IS REQUIRED TO MAKE ANY MINOR DEVIATIONS THEREFROM AS DETERMINED BY THE ARCHITECT WITHOUT THE ELECTRICAL CONTRACTOR'S PRESENT CONSENT.
4. THE ELECTRICAL CONTRACTOR SHALL COOPERATE AND WORK WITH THAT OF THE GENERAL CONTRACTOR AND WITH OTHER SUB-CONTRACTORS ON THE JOB AND SHALL CHECK WITH ARCHITECT PRIOR TO PLACING OF ANY FLUSH DEVICES OR OTHER EQUIPMENT.
5. THE ELECTRICAL DRAWING SHOWS THE ARRANGEMENTS, GENERAL DESIGN AND INTENT OF THE WIRING SYSTEM ONLY. THE CIRCUIT RUNS GIVING SPECIFIC DATA, PULL BOXES OR JUNCTION BOXES, THOUGH NOT SHOWN ON THE PLANS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. ELECTRICAL WORK INDICATED ON THE PLANS BUT NOT SHOWN ON THE ELECTRICAL DRAWING SHALL BE PROVIDED AND INSTALLED BY THIS CONTRACTOR. THE DRAWINGS ARE NOT INTENDED TO BE USED FOR ROUGH-IN DIMENSIONS.
6. PROVIDE AND INSTALL AND REMOVE/UPON COMPLETION OF PROJECT A COMPLETE TEMPORARY ELECTRIC SERVICE AND DISTRIBUTION SYSTEM FOR CONSTRUCTION IN FULL ACCORDANCE WITH GENERAL REQUIREMENTS AND OSHA.
7. SEE SPECIFICATION SECTION 17100 FOR LOW VOLTAGE CABLE INSTALLATION.
8. DISCONNECT SWITCHES:
 - 8.1. DISCONNECT SWITCHES SHALL BE NEMA HEAVY DUTY AND FLUID OR UNFUSED AS NOTED ON THE DRAWINGS. QUICKMAKE, QUICK-BREAK, VISIBLE BLADE TYPE WITH FULL COVER INTERLOCK RATED. ENCLOSURE SHALL BE NEMA 1 UNLESS OTHERWISE NOTED. MEANS FOR PADLOCKING THE OPERATING HANDLE IN THE SHUT POSITION SHALL BE PROVIDED. SWITCHES SHALL BE PROVIDED AND INSTALLED BY THIS CONTRACTOR. THE DRAWINGS ARE NOT INTENDED TO BE USED FOR ROUGH-IN DIMENSIONS.
9. PROVIDE ALL LIGHTING FIXTURES COMPLETE WITH LAMPS AND ELECTRONIC BALLASTS.
10. DIRECTORIES:
 - 10.1. PROVIDE NEW DIRECTORIES IN EXISTING PANELS DISTURBED DUE TO NEW WORK.
11. WIRE AND CABLE (600 VOLTS):
 - 11.1. ALL WIRE AND CABLE SHALL BE 80% CONDUCTIVE COPPER UNLESS OTHERWISE NOTED.
 - 11.2. NO 10, 10WG AND SMALLER SHALL BE SOLID.
 - 11.3. NO 8 AWG AND LARGER SHALL BE STRANDED.
 - 11.4. NO 8 AWG AND LARGER SHALL BE STRANDED.
 - 11.5. ALL WIRING TO BE INSTALLED IN CONDUITS.
12. CONDUITS 1-1/2" AND SMALLER SHALL BE GALVANIZED THINWALL TYPE UNLESS OTHERWISE INDICATED ON THE PLANS. CONDUITS 2" AND LARGER SHALL BE THINWALL TYPE UNLESS OTHERWISE INDICATED OR SCHEDULED RIGID TYPE. COMMUNICATION CONDUITS BELOW GRADE MAY BE RIGID PLASTIC PVC WITH GROUND WIRE.
13. NAMEPLATES SHALL BE PROVIDED ON ALL NEW MOTOR STARTERS, DISCONNECT SWITCHES, REMOTE SWITCHES, PANELBOARDS AND SIMILAR EQUIPMENT. NAMEPLATES SHALL BE PHENOLIC TYPE WHITE LETTERS ON BLACK BACKGROUND.
14. SPECIAL RECEPTACLES:
 - 14.1. ALL RECEPTACLES TO BE GFCI TYPE, NON-FEED THROUGH TYPE, DUPLEX WITH INDICATOR LIGHT, WHEN TRIPPED. P & S 2094, LEVITON OR HUBBELL.
 - 14.2. RECEPTACLES TO MATCH THOSE PRESENTLY USED IN ADJACENT AREAS.
15. THE CONTRACTOR SHALL PROVIDE, INSTALL AND CONNECT A COMMUNICATIONS SYSTEM FOR THE PROJECT. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION (NFP) STANDARDS. THE CONTRACTOR SHALL GUARANTEE AGAINST MECHANICAL AND ELECTRICAL DEFECTS OF ANY AND ALL EQUIPMENT MATERIALS, AND WORKMANSHIP COVERED BY THESE SPECIFICATIONS. AND SHALL MAKE GOOD ANY DEFECTS OR DAMAGE TO ANY AND ALL EQUIPMENT MATERIALS OR WORK OR PART WHICH MAY SHOW ITSELF WITHIN A PERIOD OF ONE (1) YEAR AFTER FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXISTING CONDITIONS AT THE SITE PRIOR TO SUBMISSION OF HIS BID.
17. NO EXTRA SHALL BE ALLOWED DUE TO IGNORANCE OF EXISTING CONDITIONS.
18. THE ACCOMPANYING DRAWINGS SHOW THE ARRANGEMENT, GENERAL DESIGN AND INTENT OF THE WIRING SYSTEM ONLY. THE CIRCUIT RUNS GIVING SPECIFIC DATA, PULL BOXES OR JUNCTION BOXES, THOUGH NOT SHOWN ON THE PLANS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. ELECTRICAL WORK INDICATED ON THE PLANS BUT NOT SHOWN ON THE ELECTRICAL DRAWING SHALL BE PROVIDED AND INSTALLED BY THIS CONTRACTOR. THE DRAWINGS ARE NOT INTENDED TO BE USED FOR ROUGH-IN DIMENSIONS.



ELECTRICAL LIGHTING PLAN



ELECTRICAL POWER PLAN



ELECTRICAL DEMOLITION PLAN

GENERAL DEMOLITION NOTES:

- A. THESE DEMOLITION NOTES AND PLAN DO NOT FULLY REPRESENT ALL DEMOLITION WORK REQUIRED TO INSTALL NEW WORK IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION (NFP) STANDARDS. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS, ORDINANCES, REGULATIONS, AS WELL AS THE RULES AND STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, THE NATIONAL ELECTRIC CODE, THE N.E.C., A.E.C., OSHA, AND A.O.C.
- B. MAINTAIN SCOUT CONTINUITY TO ALL EXISTING TO REMAIN ITEMS ON THE SAME CIRCUIT OUTSIDE OF DEMOLITION WORK.
- C. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR REVIEW OF THE AMOUNT OF DEMOLITION REQUIRED PRIOR TO BID SUBMITTAL.
- D. REFER TO ARCHITECTURAL DEMOLITION PLANS FOR COMPLETE SCOPE OF DEMOLITION WORK.
- E. ALL CONDUITS AND JUNCTION BOXES SERVING DEVICES IN REMODELED AREAS TO BE ROUTED WITHIN WALLS AND CEILING. EXPOSED RACEWAYS AND SURFACE MOUNTED BOXES ARE NOT PERMITTED.
- F. PROVIDE FIRE STOPPING WHERE REQUIRED.
- G. EXACT LOCATIONS AND REQUIREMENTS FOR ALL EQUIPMENT SHALL BE VERIFIED WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
- H. ALL RECEPTACLES LOCATED WITHIN 6'-0" OF A WATER SOURCE SHALL BE GFCI TYPE. PROVIDE GFCI RECEPTACLES REGARDLESS OF SYMBOL USED ON PLAN FOR THESE LOCATIONS.

LIGHTING PLAN KEY NOTES:

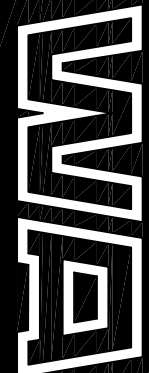
1. CONNECT LIGHTING TO EXISTING 277 VOLT LIGHTING CIRCUIT. PROVIDE NEW DEVICE AT EXISTING SWITCH LOCATION.
2. CONNECT EMERGENCY FIXTURE BATTERY UNIT AHEAD OF SWITCHING.
3. EXISTING 1P 1F - 480/277 VOLT, 3 PHASE, 4 WIRE - USE FOR NEW TOILET AND SHOWER ROOM LIGHTING. VERIFY CIRCUIT IN FIELD. REUSE EXISTING SWITCH LOCATION FOR TOILET ROOMS' LIGHTING WITH NEW DEVICE. CONNECT NEW SHOWER ROOM LIGHTING TO SAME CIRCUIT AND SWITCH.

ELECTRICAL PLAN KEY NOTES:

1. ALL RECEPTACLES TO BE GFCI, 20A, DUPLEX NON-FEED THRU TYPE.
2. CONNECT NEW RECEPTACLES TO EXISTING RPP. PROVIDE NEW 20A CIRCUIT BREAKERS, IF REQUIRED TO ACCOMMODATE NEW CIRCUITING REQUIREMENTS.
3. CONNECT TO SEPARATE CIRCUIT IN EXISTING RPP.
4. PROVIDE 4" SQUARE BOX WITH SINGLE GANG PLASTER RING FOR TELECOMMUNICATIONS WITH (1) CATEGORY 5 CABLE IN 3/4" CONDUIT TO TELECOMMUNICATION TERMINAL CABINET - VERIFY TERMINATION REQUIREMENTS WITH OWNER.

DEMOLITION PLAN KEY NOTES:

1. REMOVE ALL LIGHTING, WIRING, LIGHTING CIRCUITS AND SWITCHING FOR NEW LIGHTING SEE NEW LIGHTING PLAN.
2. REMOVE ALL EXISTING RECEPTACLES AND DEVICES. MAINTAIN CIRCUITS AND REUSE, WHERE POSSIBLE, FOR NEW RECEPTACLES.
3. REMOVE ALL EXISTING SURFACE MOUNTED RACEWAYS, ALL RACEWAYS FOR BRANCH CIRCUITS WITHIN REMODELED AREAS BE ROUTED ABOVE CEILING. FIRE ALARM SYSTEMS, LIGHTING, ETC. AND WITHIN WALL SURFACES.
4. EXISTING FIRE ALARM (FA) AUDIO/VISUAL DEVICE. RELOCATE. SEE NEW POWER PLAN.
5. REMOVE SWITCH. CONNECT NEW LIGHTING AND SWITCH SERVING TOILET ROOM LIGHTING.



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WARREN WOODS PUBLIC SCHOOLS
POHI TOILET ROOM RENOVATIONS
TOWER HIGH SCHOOL

ELECTRICAL POWER PLANS
AND SPECIFICATIONS

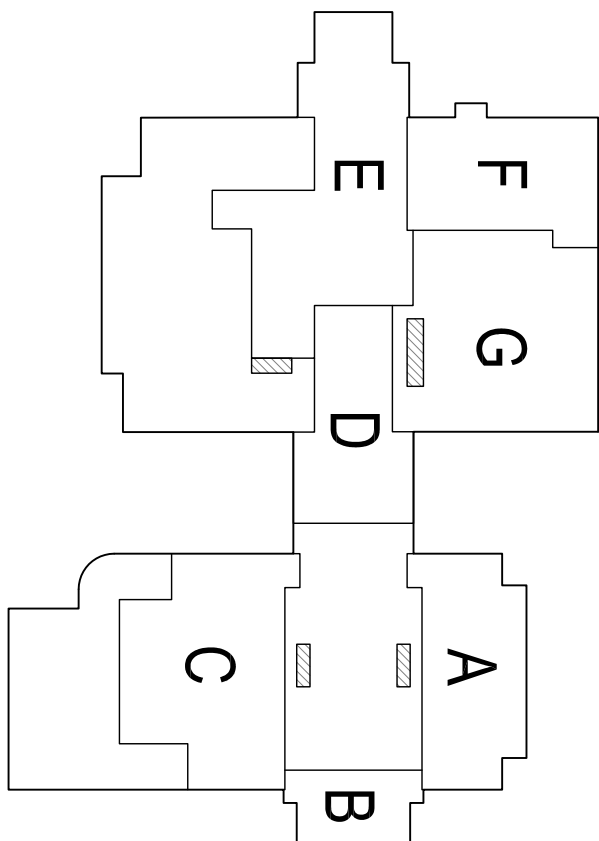
PRELIMINARY	■
DESIGN DEVELOPMENT	■
CONSTRUCTION	■
FINAL RECORD	□
DRAWN BY:	SSM
CHECKED BY:	PKS
REVISIONS:	

DATE: MAY 17, 2013
SHEET NO.:

E-1.1

PROJECT NO.: 131480

1ST FLOOR KEY PLAN



SCALE: N.T.S.