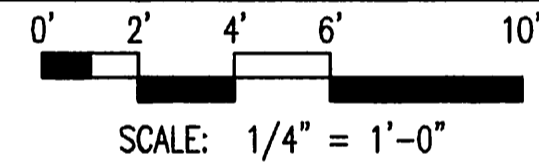


A ELECTRICAL POWER AND SYSTEMS PLAN

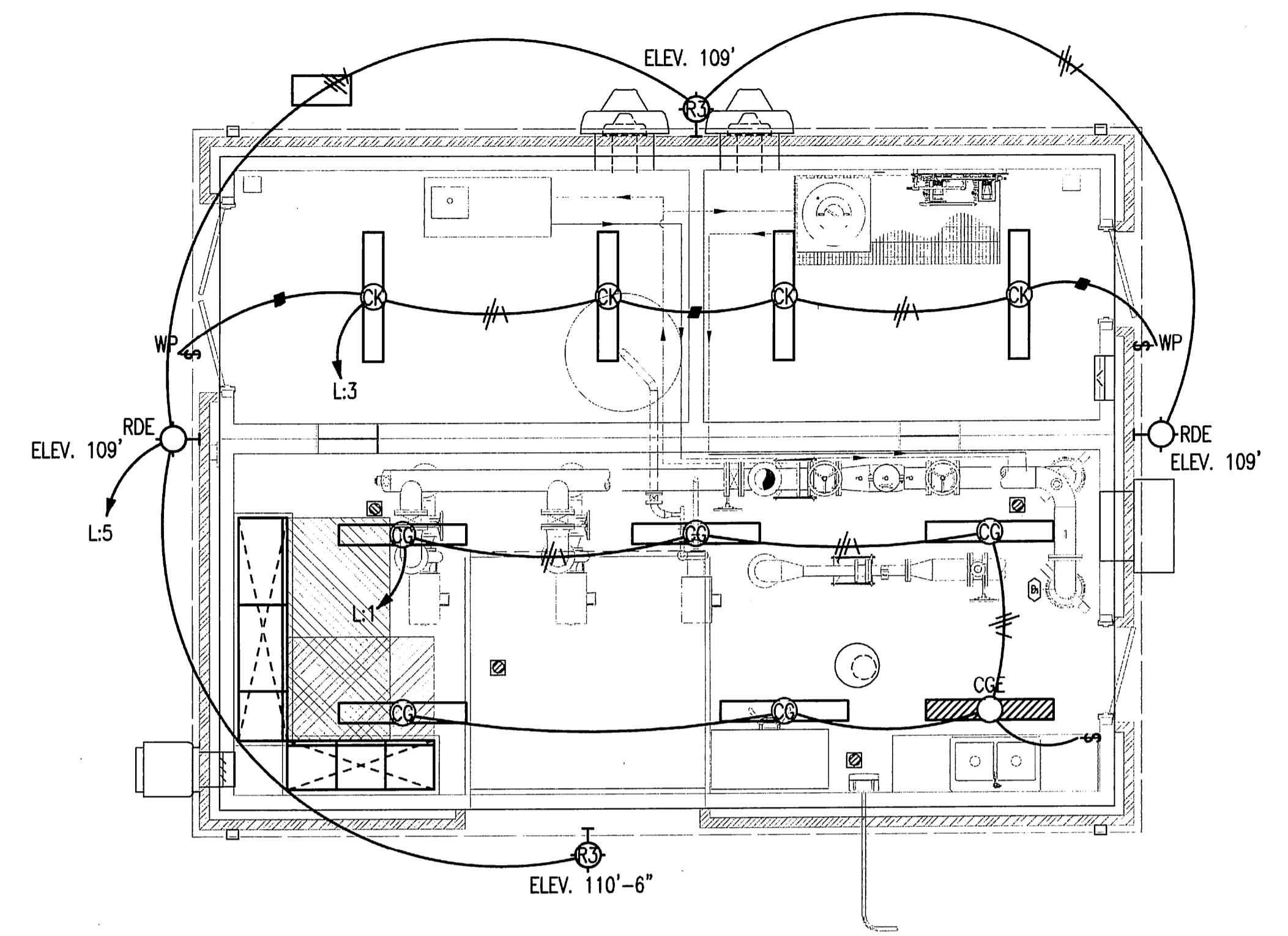


POWER PLAN NOTES:

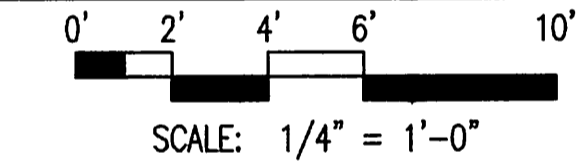
1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION 16120 FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. FOR CONNECTION REQUIREMENTS TO MECHANICAL UNITS, SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
4. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
5. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
6. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
7. FIELD VERIFY THE EXACT LOCATION OF ALL FLOOR BOXES AND POKE-THROUGHS WITH ENGINEER PRIOR TO ROUGH-IN.
8. PROVIDE ALL ISOLATED GROUND CIRCUITS WITH INDIVIDUAL NEUTRAL CONDUCTORS AND EQUIPMENT GROUND CONDUCTORS.

KEYED PLAN NOTES:

- ① THIS AREA IS A CORROSIVE ENVIRONMENT. USE ONLY NON-METALLIC, FULLY ENCLOSED BOXES AND PVC CONDUIT. ALL DEVICES AND ELECTRICAL EQUIPMENT SHALL BE NEMA 4X RATED. PROVIDE CONDUIT SEALS IN ALL CONDUITS THAT LEAVE THIS ROOM.
- ② WEATHERPROOF TOGGLE SWITCH WITH WEATHERPROOF RED PILOT LIGHT MOUNTED UNDER SAME COVERPLATE TO CONTROL CHLORINE ROOM EXHAUST FAN EF-1. PROVIDE LABEL: "WHEN LIGHT IS ON, EXHAUST FAN IS ON". SEE DETAIL 4/E1.1.
- ③ ROUTE TO AND TERMINATE AT TELEPHONE INTERFACE BOX.
- ④ PROVIDE J-BOX FOR LOUVER LL-1. INTERLOCK WITH EF-1. SEE SHEET M2.1 FOR ADDITIONAL INFORMATION.
- ⑤ PROVIDE J-BOX FOR LOUVER LL-2. INTERLOCK WITH EF-5. SEE SHEET M2.1 FOR ADDITIONAL INFORMATION.
- ⑥ PROVIDE J-BOX FOR LOUVER LL-3. INTERLOCK WITH EF-4. SEE SHEET M2.1 FOR ADDITIONAL INFORMATION.
- ⑦ PROVIDE RELAY FOR FOR CHLORINE LEAK DETECTOR. INTERLOCK WITH EF-1. SEE SHEET M2.1 FOR ADDITIONAL INFORMATION.
- ⑧ MOUNT CONTROL PANEL ON WALL ABOVE CHLORINE ANALYZER.
- ⑨ WEATHERPROOF TOGGLE SWITCH WITH WEATHERPROOF RED PILOT LIGHT MOUNTED UNDER SAME COVERPLATE TO CONTROL AMMONIA ROOM EXHAUST FAN EF-5. PROVIDE LABEL: "WHEN LIGHT IS ON, EXHAUST FAN IS ON". SEE DETAIL 4/E1.1.
- ⑩ MOUNT WEATHERPROOF GFCI RECEPTACLE ON VERTICAL FACE OF SUMP PUMP VAULT WALL TO PROVIDE POWER AS NECESSARY FOR SUMP PUMP SP-1. SEE DETAIL 2/E1.2. REFERENCE MECHANICAL DRAWINGS.
- ⑪ FROM P-1 VFD IN MCC1.
- ⑫ FROM P-2 VFD IN MCC1.
- ⑬ P-3 FVNR COMBINATION STARTER/DISCONNECT.
- ⑭ PROVIDE RELAY AHEAD OF RECEPTACLE TO BE CONTROLLED BY CHLORINE SYSTEM. VERIFY ALL REQUIREMENTS.



B ELECTRICAL LIGHTING PLAN



LIGHTING PLAN NOTES:

1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION 16120 FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
4. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.

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 Plot Scale: 1/4" = 1'-0"
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	SEDGWICK COUNTY RURAL WATER DISTRICT #1 WATER DISTRIBUTION SYSTEM IMPROVEMENTS	
	ELECTRICAL FLOOR PLANS	
	GARY JANZEN, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 448-90565	
	PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2691 www.pec1.com	
Designed by RDB Drawn by ADM	Job No. 34-11123 Date JULY 2013	Sht. E.4.1 of 9