

EQUIPMENT SCHEDULE						
PLAN MARK	MANUFACTURER	MODEL	AIRFLOW	HEATING	COOLING	REMARKS
RTU #1	RHEEM	C090CL15E	3,800	60,750/121,500	92,000	(1, 2, 3) ⚠
FURN #1	RHEEM	R92PA040	1,025	39,060 ⚠		1
CU #1	RHEEM	RA1624AJ1 ⚠			(17,500) ⚠	1
REMARKS: 1. EQUIPMENT MAY BE SUBSTITUTED AS DIRECTED BY THE OWNER OR WITH OWNERS APPROVAL 2. SMOKE DETECTORS SHALL BE INSTALLED IN THE RETURN AIR SYSTEM PER IMC 606.2.1 3. THE DUCT DETECTION SYSTEM SHALL HAVE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL AT A CONSTANTLY ATTENDED LOCATION PER IMC 606.4.1 4. 5.						

EXHAUST FAN SCHEDULE									
PLAN MARK	MANUFACTURER	MODEL	AIRFLOW (in cfm)	ELECTRICAL				LOCATION	REMARKS
				watt	volt	ph	amps		
EF-1	NUTONE	QTXEN10S	110	7.6	120	1	0.1	RESTROOM	1
REMARKS: 1. EXHAUST FANS DUCTS SHALL BE 4" Ø AND SHALL BE TERMINATED TO THE EXTERIOR THRU THE NORTH WALL.									

AIR BALANCE SCHEDULE			
UNIT	OA (CFM)	EXHAUST (CFM)	MAKE-UP AIR (CFM)
RTU-1	255	---	---
FURN-1	180	---	---
EF-1	---	50	---
TOTAL	435	50	---
BUILDING TOTAL			405

MECHANICAL LEGEND	
	HEAT / COOL UNIT
	GAS FURNACE
	CONDENSING UNIT
	EXHAUST FAN EF-1
	THERMOSTAT

MECHANICAL:

GENERAL

- INSTALLATION OF APPLIANCES SHALL BE PER IMC SEC 304.
- APPLIANCES SHALL BE LOCATED PER IMC SEC 303.
- CLEARANCE TO APPLIANCES SHALL BE PER PROVIDED PER IMC SEC 304.9.
- APPLIANCES SHALL BE VENTED TO THE OUTSIDE PER IMC SEC 804.3.5.
- APPLIANCE VENT TERMINATION SHALL BE PER IMC SEC 804.
- APPLIANCE VENTING SHALL BE SIZED PER IMC 801.6.
- VENT CONNECTORS SHALL BE PER IMC SEC 803.
- AUXILIARY DRAIN PAN SHALL BE PROVIDED PER IPC SEC 314.2.3.

EXHAUST SYSTEMS

- MECHANICAL VENTILATION SHALL BE PROVIDED PER IMC SEC 403.
- RESTROOMS SHALL BE VENTILATED PER IMC TABLE 403.3.

DUCT SYSTEMS

- DUCT SYSTEMS SERVING HEATING, COOLING AND VENTILATION EQUIPMENT SHALL BE PER IMC SEC 603.
- SUPPLY AIR DUCTING:
 - 26 GA. SPIRAL DUCT
- GALVANIZED METAL DUCT SHALL BE SUPPORTED PER IMC SEC 603.10.
- GALVANIZED METAL DUCT SHALL BE INSULATED PER IMC SEC 604 (R-5).
- RETURN AIR DUCTING SHALL BE PER PER IMC SEC 603.10.

COMBUSTION AIR

- COMBUSTION AIR SHALL BE PROVIDED PER IMC SEC 701.
- COMBUSTION AIR OPENINGS SHALL BE TERMINATED IN THE ATTIC SPACE PER IFGC 304.
- COMBUSTION AIR SHALL COMPLY WITH IFGC 304.

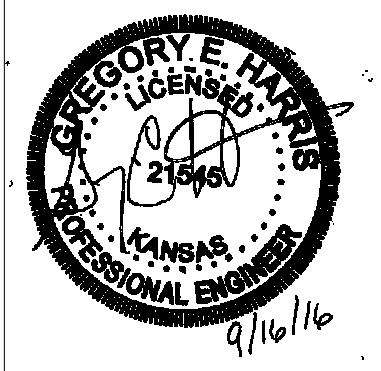
FUEL GAS

- APPLIANCES SHALL BE CONNECTED TO THE FUEL GAS PIPING PER IFGC

CONSTRUCTION NOTES:

- INSTALL PIPING AND DUCT WORK TO BEST SUIT THE FIELD CONDITIONS AND COORDINATE WITH THE INSTALLATION WORK OF OTHER TRADES. THESE DRAWINGS INDICATE APPROXIMATE LOCATIONS. DO NOT SCALE TO DETERMINE LOCATION OF PIPING. ALL DUCT WORK SHALL BE 26 GAUGE OR THICKER AND SHALL BE INSTALLED PER SMACNA STANDARDS.
- PROVIDE CONDUIT AND WIRING PER THE 2014 NEC AND MANUFACTURER'S RECOMMENDATIONS.
- EXHAUST DUCT TERMINATION SHALL MAINTAIN A MINIMUM OF 10' CLEARANCE HORIZONTALLY OR NOT LESS THAN 3' VERTICALLY FROM AIR INTAKE OPENINGS.
- ALL WORK SHALL BE NEATLY EXECUTED, WORKMANLIKE IN APPEARANCE, SYMMETRICAL, PLUMB, UNIFORM, PROPERLY ALIGNED AND SECURED IN PLACE.

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 7272 E. 37th ST N #1205
 WICHITA, KS 67226



OWNER
 6th STREET AUTO
 1716 WEST SIXTH STREET
 LAWRENCE, KANSAS 66044

MARK	DATE	DESCRIPTION
1	12/07/16	ADDED NOTES TO EQUIPMENT SCHEDULE FOR SMOKE DETECTORS AND ACTIVATION SIGNAL
1	12/07/16	ADDED AIR BALANCE SCHEDULE

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 DRAWN BY: K.H. GIRARDIN
 CHK'D BY: G. HARRIS
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MECHANICAL NOTES

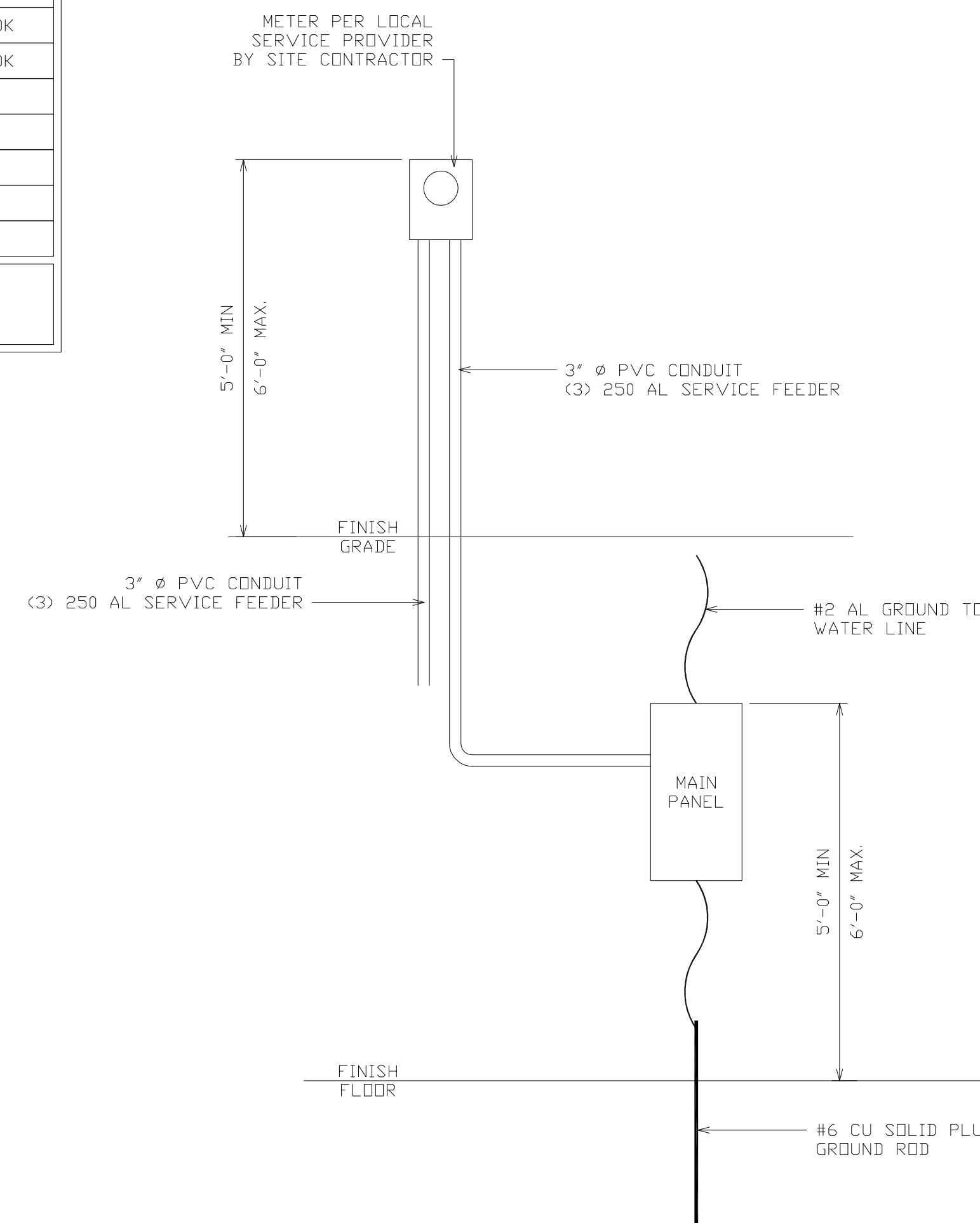
PANEL SCHEDULE											
PANEL: P1 (NEW)			VOLTS: 120 / 240 V			PHASE: 1					
AMPERE: 200		WIRE: 3		AIC RATING: 10,000		ENCLOSURE TYPE: NEMA 1					
LOCATION: <input checked="" type="checkbox"/> INDOOR <input type="checkbox"/> OUTDOOR <input checked="" type="checkbox"/> DRY <input type="checkbox"/> WET		MAINS: <input type="checkbox"/> BREAKER LUGS ONLY <input checked="" type="checkbox"/>		MOUNTING: <input type="checkbox"/> SURFACE FLUSH <input type="checkbox"/>							
<input checked="" type="checkbox"/> NEUTRAL BUS		<input checked="" type="checkbox"/> GROUND BUS		<input type="checkbox"/> INSOLATED GROUND BUS		NEUTRAL BUS GROUND BONDING <input checked="" type="checkbox"/>					
BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	POLE BKR	CKT NO.	ΦA		ΦB		CKT NO.	POLE BKR	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION
SALES LIGHTS	12	1/20A	1	0.80	0.80			2	1/20A	12	SALES RECEPTS
WAITING LIGHTS	12	1/20A	3			0.80	0.80	4	1/20A	12	WAITING RECEPTS
OFFICE LIGHTS	12	1/20A	5	0.80	0.80			6	1/20A	12	OFFICE RECEPTS
BASEMENT LIGHTS	12	1/20A	7			0.80	0.80	8	1/20A	12	BASEMENT RECEPTS
BASEMENT LIGHTS	12	1/20A	9	0.80	0.80			10	1/30A	12	POWER WASHER
EXTERIOR LIGHTS	12	1/20A	11			0.80	0.80	12	1/20A	10	FURNACE
LOT LIGHTING	12	1/20A	13					14	1/20A	12	REFRIG
RTU- #1	6	2/50A	15	4300	4300	4300	4300	16	2/50A	6	A/C COND. UNIT
			17					18			
EJECTOR PUMP	12	1/20A	19			0.80	0.80	20	1/20A	12	INT. / EXT. SIGNAGE
SPARE			21			0.80		22	1/20A	12	LOT SIGN
SPARE			23					24			SPARE
TOTAL KVA / φ:				9400		9400					
CONNECTED KVA:											
DEMAND FACTOR:				0.80							
DEMAND LOAD:				15040				I=63.0A			

⚠ AIC - 240#120V 1PH 200A SERVICE AIC 7250A MAX. SERVICE EQUIPMENT SHALL BE FIELD MARLED IN ACCORDANCE WITH 2014 NEC 110.24

LIGHT FIXTURE SCHEDULE					
FIXTURE	MOUNTING		DESCRIPTION	MANUFACTURER	CATALOG NUMBER
	WALL	CEILING			
A		●	LED LOW-BAY 6K LUMES 2700-3200 KELVIN	ACCULITE	SH1-A06-4K-E12-5L
B		●	8-FT LED STRIP, ELECTRONIC BALLAST	HOLLOPHANE	HZLIN L96 6000LM FST 120 30K
C		●	4-FT LED STRIP, ELECTRONIC BALLAST	HOLLOPHANE	HZLIN L48 5000LM FST 120 30K
D	●		150W WALL PAK W/CUTOFF	HOLLOPHANE	W4 15DMH 12 S
E		●	8" LED DOWNLIGHTING	EATON	LD8A301 27K
F	●		EMERGENCY LIGHT W/ OUTDOOR REMOTE	DUAL LITE	LM16D
G	●		EXIT LIGHT	DUAL LITE	LN4XRWE
G					

REMARKS:
1. ITEMS MAYBE SUBSTITUTED AS DIRECTED BY THE OWNER OR WITH OWNERS APPROVAL

LEGEND	
SYMBOL	DESCRIPTION
	EXIT / LIGHT W/ BATTERY
	EMERGENCY LIGHT W/ BATTERY
	DUPLEX GROUNDED RECEPTACLE
	DUPLEX GROUNDED FLOOR RECEPTACLE
	240v RECEPTACLE
	OHD OPERATOR W/ DUPLEX GROUNDED RECEPTACLE
	LIGHT SWITCH, TOGGLE TYPE, SINGLE POLE, 20 AMP, 120v
	DATA OUTLET
	FLORESCENT LIGHT FIXTURE/CEILING MOUNT
	LED LOW-BAY 7K-10K LUMES 2700-3200 KELVIN
	EXHAUST FAN 80 CFM
	EXTERIOR LIGHT FIXTURE/CEILING MOUNT
	EXTERIOR LIGHT FIXTURE/WALL MOUNT
	175 W WALL PAK W/ CUT-OFF
	CONDUIT RUN 2#12 & 1#12 GRD.- 1/2" C.
	JUNCTION BOX
	ELECTRICAL PANEL BOARD
	ELECTRICAL METER
	DISCONNECT
	THERMOSTAT
	WATER HEATER
	WEATHER PROOF
	WEATHER PROOF ENCLOSURE
	GROUND FAULT CURRENT INTERRUPTER
	HOMERUN / CIRCUIT #
	OCCUPANCY SENSOR
	OCCUPANCY SENSOR W/ SWITCH



1 RISER DIAGRAHM
Scale: N.T.S.

GENERAL NOTES AND SPECIFICATIONS

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2014 NATIONAL ELECTRICAL CODE (NEC), LATEST EDITION, RULES AND REGULATIONS OF THE CITY OF LAWRENCE.
- ALL EQUIPMENT AND MATERIALS SHALL BE UL LISTED WHERE LISTING IS AVAILABLE FOR THAT TYPE OF EQUIPMENT OR CONFORM TO ANSI OR NEMA STANDARDS.
- WORKMANSHIP SHALL CONFORM TO CONSTRUCTION PRACTICES RECOMMENDED BY THE AMERICANS HANDBOOK BY CROFT (LATEST EDITION) AND SHALL BE SUBJECT TO THE APPROVAL OF THE AGENCY WHO HAS JURISDICTION.
- ANY DEVICE MAY BE RELOCATED FROM THE LOCATION SHOWN ON THE DRAWINGS PRIOR TO INSTALLATION AT THE DIRECTION OF THE OWNER AND AT NO ADDITIONAL COST TO THE OWNER.
- METALLIC ENCLOSURES, RACEWAYS, AND ELECTRICAL EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH REQUIREMENTS OF NEC. PROVIDE GROUND WIRE IN EVERY RACEWAY. SIZE IN ACCORDANCE WITH NEC.
- CONDUIT SHALL BE PVC (ENCASED IN CONCRETE AND BELOW GRADE), ALUMINUM (EXPOSED INSTALLATION), EMT (DRY LOCATIONS) CONCEALED ABOVE GRADE, 3/4" DIAMETER UNLESS OTHERWISE NOTED.
- WIRING SHALL BE TYPE THWN OR XHHW, 600V. CONDUCTORS SHALL BE COPPER.
- TESTING SHALL BE PER 2014 NEC.
 - MEASUREMENT OF VOLTAGES AT SERVICE EQUIPMENT.
 - OPERATION TEST
 - INSULATION RESISTANCE
 - GROUNDING TEST
- PANEL BOARD SHALL BE COMPLETE WITH BUS, ENCLOSURE AND TRIM, COMPLEMENT OF MOLDED PLASTIC CASE CIRCUIT BREAKERS WITH RATINGS AS INDICATED, AND COMPLETED TYPE WRITTEN CIRCUIT DIRECTORY.
- SUBSTITUTE MATERIALS TO BE EQUAL QUALITY TO SPECIFIED ITEM.
- GUARANTEE - THE ENTIRE INSTALLATION SHALL BE GUARANTEED FOR ONE YEAR AFTER ACCEPTANCE BY THE OWNER AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP. WHEN NOTIFIED BY THE OWNER OF FAILURE OF ANY PART OF THE INSTALLATION DURING THE GUARANTEE PERIOD, CONTRACTOR SHALL REPAIR OR REPLACE THE DEFECTIVE PART AT HIS OWN EXPENSES TO THE SATISFACTION OF THE OWNER.
 - INSTALLATION AND WORKMANSHIP.
 - ALL WORK SHALL BE NEATLY EXECUTED, WORKMANLIKE IN APPEARANCE SYMMETRICAL, PLUMB, UNIFORM, PROPERLY ALIGNED AND SECURED IN PLACE.
 - WIRING METHODS.
 - USE SEALTITE FLEX FOR CONNECTION TO EQUIPMENT.
 - ATTACH TO CONCRETE AND MASONRY WITH EXPANSION ANCHORS AND TO WOOD WITH WOOD SCREWS.
 - SUPPORT RACEWAYS PER NEC.
 - DO NOT SUPPORT RACEWAYS AND BOXES FROM AND ON MECHANICAL SYSTEMS.
 - CABLES WILL NOT BE PERMITTED.
 - CONDUCTORS.
 - MAKE SPLICES IN ACCESSIBLE LOCATIONS, MAKE SPLICES IN CONDUCTORS No. 10 AWG AND SMALLER DIAMETER WITH INSULATED, PRESSURE-TYPE CONNECTOR MAKE SPLICES IN CONDUCTORS No. 8 AWG AND LARGER DIAMETER WITH SOLDERLESS CONNECTOR, AND COVER WITH INSULATION MATERIAL EQUIVALENT TO CONDUCTOR INSTALLATION.
 - CUT, DRILL AND PATCH AS REQUIRED. REPAIR ANY SURFACES DAMAGED OR MARRED, CUTTING, REPAIRS AND REFINISHING SHALL BE SUBJECT TO THE APPROVAL OF OWNER.
 - CLEAN ALL SURFACES TO RECEIVE PAINT. PAINT ANY SURFACE DAMAGED DURING INSTALLATION.
 - REPAIR ALL SURFACES DAMAGED DURING THE INSTALLATION OF THE WORK SUBJECT TO THE APPROVAL OF THE OWNER.
 - ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOOR / CEILING ASSEMBLIES SHALL BE SEALED WITH APPROVED FIRESTOPPING MATERIAL.
 - PROVIDE EXPANSION/DEFLECTION FITTING FOR CONDUITS THROUGH SEISMIC JOINTS.
 - PROVIDE CONDUIT SEAL FOR CONDUITS PASSING THROUGH AIR CONDITIONED AND NON-AIR CONDITIONED AREAS.
 - WIRING DEVICES.
 - SWITCHES, 20A-POLES AS INDICATED 120 / 240 V, COLOR TO MATCH DEVICE PLATE.
 - RECEPTACLES, 20A, 120V. COLOR TO MATCH DEVICE PLATE.
 - FIXTURES - INSTALL FIXTURES INDICATED IN LUMINAIRE SCHEDULE COMPLETE WITH LAMPS, HANGERS, SUPPORTS, BALLAST AND ACCESSORIES. ALL FLUORESCENT BALLAST SHALL BE ELECTRONIC TYPE.
 - DEVICE PLATES - PLASTIC - COLOR TO MATCH DEVICE.
 - OUTLETS - PROVIDE OUTLET BOXES TO SUIT CONDITIONS ENCOUNTERED. BOXES SIZED TO ACCOMMODATE CONDUCTORS PER NEC. MINIMUM SIZE OF BOX FOR USE WITH RACEWAY SYSTEMS TO BE 4" SQUARE BY 1 1/2" DEEP.
 - CIRCUIT BREAKERS AND SAFETY SWITCHES - GENERAL ELECTRIC, SQUARE D, ITE, WESTINGHOUSE OR CUTLER HAMMER CHALLENGER SAFETY SWITCH - HEAVY DUTY TYPE.

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INDEPENDENCE, MO. 64053



OWNER

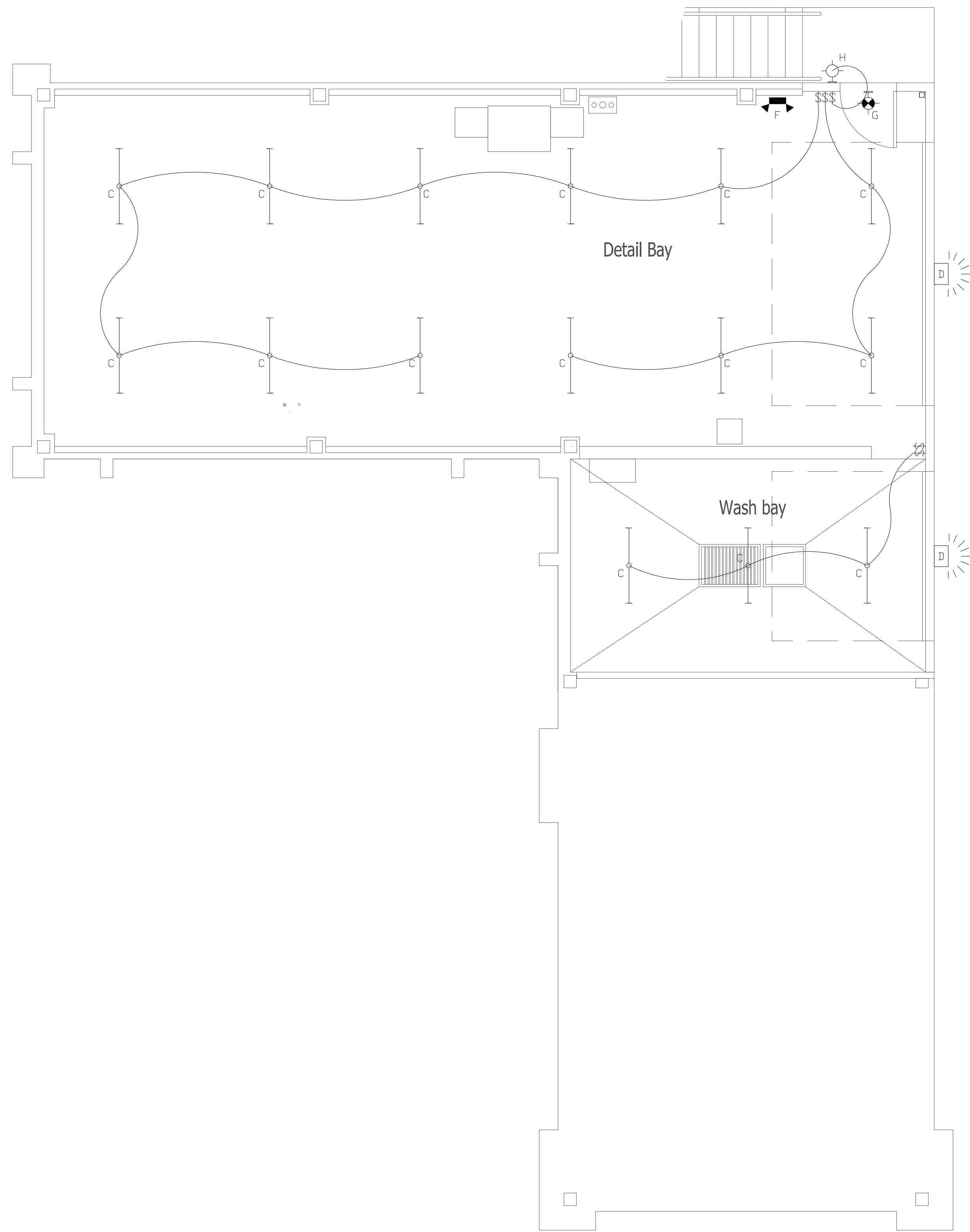
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1716 WEST SIXTH STREET
LAWRENCE, KANSAS 66044

MARK	DATE	DESCRIPTION
1	12/06/16	ADDED NOTATION INDICATING THE CALCULATED FAULT CURRENT.

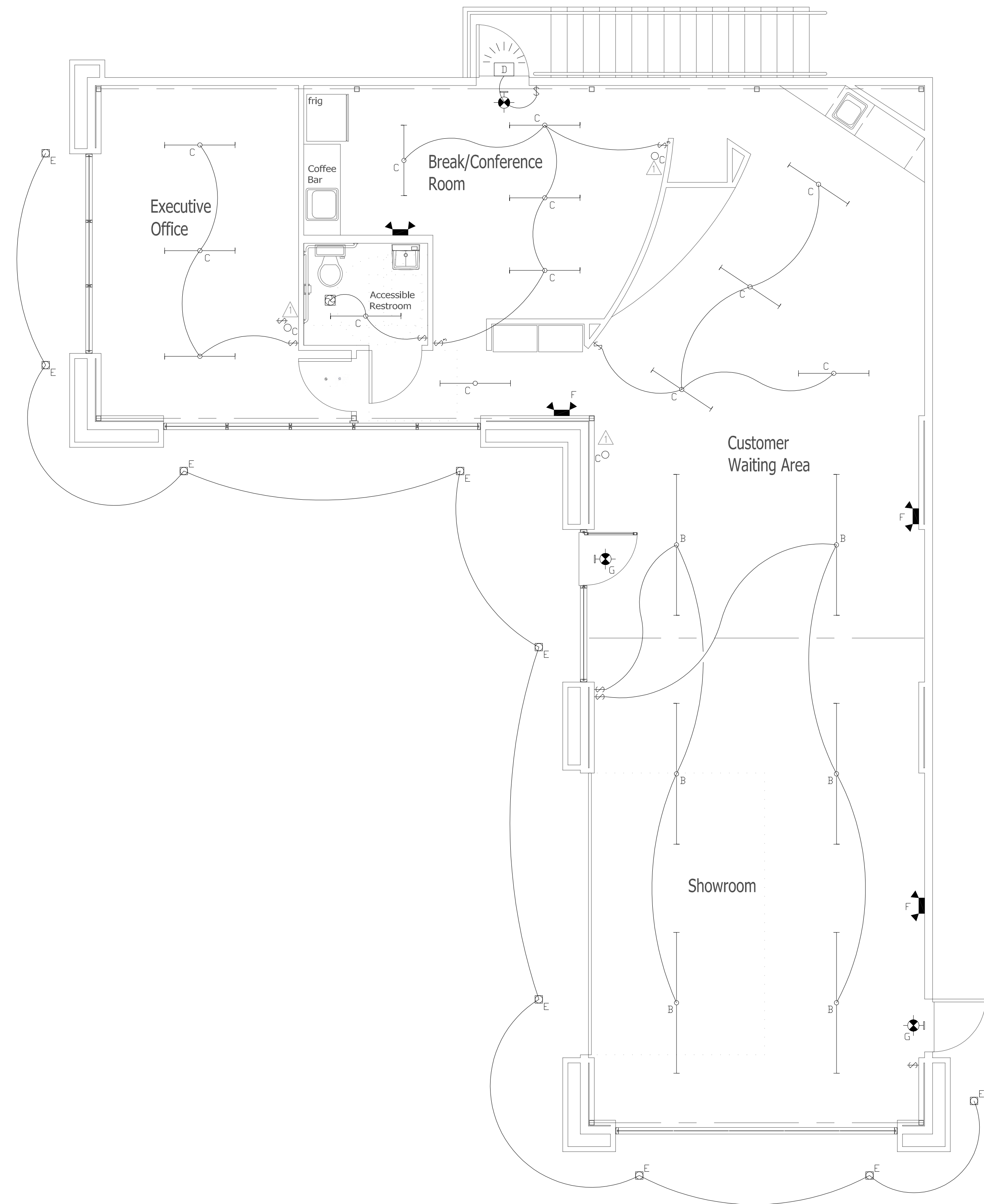
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ELECTRICAL
NOTES

E100
SHEET 1 OF 4



1 BASEMENT PLAN
Scale: 1/4" = 1'-0"



2 GROUND LEVEL PLAN
Scale: 1/4" = 1'-0"

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6th STREET AUTO
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LAWRENCE, KANSAS 66044

MARK	DATE	DESCRIPTION
1	12/06/16	ADDED OCCUPANCY SENSORS, EXECUTIVE OFFICE, BREAK/CONFERENCE ROOM, CUSTOMER WAITING AREA.

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LIGHTING PLAN

E-103