

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	15A-125V 2P-3W GROUNDED DUPLEX RECEPTACLE, WALL MOUNTED
	15A-120V 1P 3W GROUNDED DUPLEX RECEPTACLE, CEILING MTD.
	15A-125V 2P-3W GROUNDED DUPLEX RECEPTACLE, WALL MOUNTED 150mm ABOVE COUNTER TOP
	20A-250V 2P-3W GROUNDED SINGLE RECEPTACLE
	30A-250V 2P-3W GROUNDED SINGLE RECEPTACLE, TWIST-LOCK
	120V CONNECTION TO EQUIPMENT
	208V, 1PH CONNECTION TO EQUIPMENT
	208V, 3PH CONNECTION TO EQUIPMENT
	MANUAL MOTOR STARTER
	DISCONNECT SWITCH
	COMBINATION MAGNETIC MOTOR STARTER
	DATA OUTLET - WALL MOUNTED c/w 1" [25mm] C AND CAT. 6A CABLE BACK TO NEAREST COMMUNICATION ROOM/CLOSET OR LOCAL CABLE TRAY
	POWER PANEL
	FIRE ALARM SPEAKER CEILING MOUNTED
	DENOTES DOOR OPERATOR
	DENOTES PUSH BUTTON
	DENOTES KEYPAD
	INCANDESCENT/FLUORESCENT POT LIHGT - CEILING MOUNTED
	FLUORESCENT/LED LUMINAIRE, SURFACE OR RECESSED MOUNTED
	DENOTES LUMINAIRE ON EMERGENCY POWER
	INCANDESCENT/FLUORESCENT LUMINAIRE - WALL MOUNTED
	SINGLE POLE, SINGLE THROW TOGGLE SWITCH ('3' DENOTES 3-WAY, P-DENOTES PILOT LIGHT)

DRAWING LIST

DWG. NO.	DRAWING NAME
E-000	COVER PAGE
E-001	ELECTRICAL LEGEND, DRAWING LIST AND GENERAL NOTES
E-002	ELECTRICAL SPECIFICATION
E-003	ELECTRICAL SPECIFICATION
E-004	ELECTRICAL SPECIFICATION
E-005	ELECTRICAL SPECIFICATION
E-101	LEVEL 0 - DEMOLITION ELECTRICAL LAYOUT
E-102	LEVEL 0 - NEW ELECTRICAL LAYOUT
E-201	LEVEL 4 - DEMOLITION ELECTRICAL LAYOUT
E-202	LEVEL 4 - NEW ELECTRICAL LAYOUT
R	DENOTES EXISTING ITEM TO BE REMOVED
ER	DENOTES EXISTING ITEM TO BE RELOCATED
RE	DENOTES EXISTING ITEM IN RELOCATED POSITION
CH	DENOTES DEVICE MOUNTED 150mm ABOVE COUNTER TOP
WP	DENOTES WEATHERPROOF
WT	DENOTES WATERTIGHT
GFI	DENOTES GROUNDED FAULT INTERRUPTER

GENERAL NOTES

- ALL ITEMS SHOWN DASHED (-----) ARE EXISTING OR RELOCATED
- ALL ITEMS SHOWN SOLID (————) ARE NEW
- CURRENT CIRCUIT NUMBERS ARE DIAGRAMMATIC ONLY. REUSE SPARE BRANCHES AND PROVIDE NEW BREAKERS/BRANCHES IN EXISTING PANELS.
- ELECTRICAL DRAWINGS SHALL BE READ INCONJUNCTION WITH ARCHITECTURAL, STRUCTURE AND MECHANICAL DOCUMENTS AT ALL TIMES.
- IF A POWER SHUT DOWN IS REQUIRED TO FACILITATE ANY INSTALLATION RELATED TO THIS PROJECT AT ANY TIME, THE CONTRACTOR SHALL SUBMIT IN WRITING TO OWNER'S REPRESENTATIVE AND THE CONSTRUCTION MANAGER OR GENERAL CONTRACTOR AT LEAST TWO WEEKS IN ADVANCE FOR PERMISSION. WITHOUT PERMISSION, NO SUCH WORK SHALL BE STARTED. THE CONTRACTOR SHALL ENSURE THE REQUEST IS INDICATED IN SITE MEETING MINUTES.
- BEFORE SUBMITTING ANY PRICE, THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE THE FOLLOWING:
 - CHECK THE EXISTING CONDITIONS OF ANY LIMITATIONS.
 - CHECK THE EXISTING ELECTRICAL COMPONENTS THAT ARE TO BE REUSED (IF APPLICABLE).
 - EXAMINE THE PROPOSED WORK AGAINST THE EXISTING CONDITIONS. AFTER EXAMINING ALL THE ABOVE AGAINST THE PLANS, SPECIFICATIONS AND TERMS OF CONTRACT, THE CONTRACTOR MUST SATISFY HIMSELF THAT THE PROPOSED WORK CAN BE CARRIED OUT, OR SHALL BE MODIFIED AT NO EXTRA COST TO THE OWNER, IN ORDER TO ACHIEVE THE INTENT OF THE SCOPE OF WORK IDENTIFIED IN THESE DOCUMENTS.
- DETAILS ARE INTENDED TO BE FOR GENERAL ARRANGEMENT ONLY. THEY DO NOT SHOW ALL NECESSARY COMPONENTS, BUT ARE MERELY A GUIDE AS TO THE ORIENTATION OF EQUIPMENT WHICH IS REQUIRED.
- THE FOLLOWING SHALL BE USED AS A GUIDE WITH RESPECT TO BRANCH CIRCUIT WIRE SIZING FOR VOLTAGE DROP:
 - #12 AWG TO BE USED FROM 0 TO 80FT MAXIMUM FOR PANEL BRANCH CIRCUIT RUNS.
 - #10 AWG TO BE USED FROM 80 TO 180FT MAXIMUM FOR PANEL BRANCH CIRCUIT RUNS.
 - #8 AWG TO BE USED FROM 180 TO 280FT MAXIMUM FOR PANEL BRANCH CIRCUIT RUNS.

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SEVEN OAKS
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

**ELECTRICAL LEGEND,
DRAWING LIST,
GENERAL NOTES**

scale: N.T.S.
drawn by: LN
reviewed by: DS/LN
job number: CEL:23509.01
MSA:21509.F03
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ELECTRICAL SPECIFICATION

ELECTRICAL DEMOLITION

- .1 CO-ORDINATE ALL WORK WITH THE CURRENT USE OF THE BUILDING.
- .2 MAINTAIN ALL ELECTRICAL SERVICES TO ALL PARTS OF THE BUILDING WHICH ARE IN USE. ELECTRICAL CONTRACTOR SHALL SCHEDULE ALL WORK AND INFORM THE OWNER IN WRITING AT LEAST ONE WEEK IN ADVANCE FOR PERMISSION IF POWER SHUTDOWN IS NECESSARY AND STATE TIME(S) AND DURATION(S) OF INTERRUPTIONS. CONTRACTOR TO CONSULT WITH THE OWNER AND DETERMINE THE EQUIPMENT REQUIRED TO BE ONLINE 24 HOURS PER DAY AND PROVIDE TEMPORARY SERVICES AND WIRING AS NECESSARY. RESCHEDULE WORK ACCORDINGLY WHEN REQUESTED BY THE CONSULTANT.
- .3 INCLUDE COST OF PREMIUM TIME IN TENDER PRICE FOR WORK DURING NIGHTS, WEEKENDS OR OTHER TIME OUTSIDE NORMAL WORKING HOURS NECESSARY TO PERFORM WORK DURING SHUTDOWNS AND MAINTAIN ALL ELECTRICAL SERVICES IN OPERATION.
- .4 CHECK AND CO-ORDINATE ALL SYSTEMS IN THE RENOVATED AREA AND IN THE NEW BUILDING ADDITION, WHICH ARE TO BE EXTENDED FROM EXISTING SYSTEMS TO ENSURE THEIR PROPER OPERATION.
- .5 PROVIDE INTERFACING COMPONENTS BETWEEN NEW AND EXISTING SYSTEMS AS NECESSARY FOR PROPER PERFORMANCE AND OPERATION.
- .6 REMOVE AND RELOCATE EXISTING SERVICES TO ALLOW FOR NEW CONSTRUCTION AS SHOWN ON THE DRAWINGS.
- .7 WORK SHALL INCLUDE FOR REMOVAL AND REINSTALLATION OF ELECTRICAL DEVICES AND EQUIPMENT IN THE NOTED AREAS AS NOTED ON THE DEMOLITION DRAWINGS. THIS SHALL INCLUDE, BUT NOT TO BE LIMITED TO:
 - .1 DISCONNECTING, REMOVAL AND REINSTALLATION OF ALL ELECTRICAL DEVICES, CONDUIT AND WIRING TO ACCOMMODATE NEW WORK.
 - .2 REWORK OF CONDUITS, WIRING AND CABLES IN SPACE ASSOCIATED WITH THE AREAS OF WORK. PULL BACK ALL WIRING AND CABLES TO AN APPROPRIATE POINT FOR RECONNECTION (POWER, VOICE, COMMUNICATION, ETC.).
 - .3 REMOVAL OF EXISTING WIRE AND CABLE IN EXISTING CONDUITS BEING REMOVED BACK TO THE SOURCE, REGARDLESS OF WHETHER THE SOURCE IS LOCATED IN THE DEMOLITION AREA.
 - .4 REMOVAL AND REINSTALLATION OF ALL LIGHT FIXTURES INTERFERING WITH THE WORK.
 - .5 REMOVAL OF ALL UNUSED WALL MOUNTED DEVICES AND BOXES. PATCHING OF OPENINGS SHALL BE BY ELECTRICAL CONTRACTOR.
 - .6 IDENTIFICATION AND PROTECTION OF ALL SERVICES PASSING THROUGH THE AREA OF WORK, BUT SERVICING OTHER AREAS OF THE BUILDING, UNLESS OTHERWISE NOTED.
 - .7 PROVISION OF NEW SUPPORTS FOR EXISTING CONDUITS AND DEVICES WHERE SUPPORTED FROM EXISTING STRUCTURE, WALLS OR CEILINGS BEING REMOVED.
- .8 ALL SERVICE CONDUITS NOT DIRECTLY ASSOCIATED WITH AREA LIGHTING, POWER, LOCAL SYSTEMS, ETC. SHALL BE TRACED AND IDENTIFIED FOR REVIEW BY THE CONSULTANT IN ORDER TO DETERMINE IF SERVICES ARE TO REMAIN OR TO BE REMOVED. ONCE IDENTIFIED, THE CONTRACTOR SHALL REMOVE THOSE DIRECTED BY THE CONSULTANT.
- .9 REMOVE ALL CONDUIT WORK WHICH IS ABANDONED EXCEPT CUT FLUSH WHERE EMBEDDED IN STRUCTURE.
- .10 HAND OVER REMOVED ITEMS TO OWNER AS REQUIRED. DISPOSE OF THE EQUIPMENT THAT THE OWNER DOES NOT WISH TO RETAIN.

ELECTRICAL SPECIFICATION

- .11 REPAIR ALL DAMAGES IN THE SURROUNDING AREA AND RENOVATED AREAS CAUSED BY THE DEMOLITION WORK, WITHOUT EXTRA COST TO THE OWNER.
 - .12 FOLLOW NECESSARY PROCEDURES WHEN DISPOSING OF PRODUCTS CONTAINING HAZARDOUS MATERIALS SUCH AS MERCURY IN LAMPS, PCB BALLASTS, ETC.
 - .13 ALL WORK AND MATERIAL DISPOSAL SHALL BE DONE IN ACCORDANCE WITH THE ESTABLISHED SCHEDULE AND GENERAL CONDITIONS.
 - .14 ALL SERVICES AND EQUIPMENT NOT SHOWN ON DRAWINGS SHALL BE MAINTAINED IN OPERATION DURING THE CONSTRUCTION PHASE. THIS CONTRACTOR SHALL BE REQUIRED TO PROVIDE NEW CONDUIT AND WIRING FOR ALL EXISTING SYSTEMS TO REMAIN SO THAT THE EXISTING CONDUIT AND DEVICES DO NOT INTERFERE WITH NEW WORK. CONTRACTOR TO REMOVE EXISTING DEVICES AND RECONNECT TO NEW SERVICES ACCORDINGLY.
 - .15 WHERE EXISTING DEVICES ARE TO BE REMOVED, MAKE SAFE ALL WIRING AND MAKE SURE THAT ALL OTHER DEVICES ON THE SAME CIRCUIT ARE OPERATIONAL.
 - .16 CLEAN AND TEST EXISTING EQUIPMENT WHICH IS TO REMAIN AND EQUIPMENT BEING REINSTALLED IN AREAS BEING RENOVATED FOR PROPER OPERATION AND REPAIR AS NECESSARY BEFORE BEING PUT BACK INTO SERVICE.
 - .17 CONTRACTOR TO VERIFY OPERATION OF ALL EXISTING DEVICES AND REPORT ANY DISCREPANCIES TO THE CONSULTANT PRIOR TO PROCEEDING WITH THE WORK.
 - .18 WHERE ELECTRICAL ITEMS ARE TO BE SALVAGED AND REUSED, REMOVE ITEMS FROM EXISTING LOCATIONS CAREFULLY TO AVOID DAMAGE.
 - .19 REPAIR OR REPLACE WITHOUT ADJUSTMENT TO THE CONTRACT PRICE ALL EXISTING EQUIPMENT WHICH IS DAMAGED IN PROCESS OF REMOVAL AND REINSTALLATION.
 - .20 UNLESS NOTED OTHERWISE PROVIDE ADDITIONAL EQUIPMENT OF THE SAME TYPE AND MANUFACTURE WHERE REQUIRED TO SUPPLEMENT EXISTING EQUIPMENT.
- ### ELECTRICAL GENERAL REQUIREMENTS
- .1 DIVISION 1 GENERAL INSTRUCTIONS SHALL BE READ IN CONJUNCTION WITH AND FORM PART OF THIS SPECIFICATION.
 - .2 SUPPLY AND INSTALL ALL ITEMS, ARTICLES, MATERIAL, OPERATIONS AND INCLUDE ALL LABOUR, EQUIPMENT AND TOOLS NECESSARY TO COMPLETE ALL INSTALLATIONS SHOWN ON THE DRAWINGS. RENDER A COMPLETE AND OPERATIONAL INSTALLATION. TEST AND VERIFY ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT AND INSTRUCT OWNER'S REPRESENTATIVE IN THE OPERATION OF THE EQUIPMENT.
 - .3 WORKMANSHIP AND METHODS OF INSTALLATION SHALL BE OF BEST STANDARDS AND PRACTICE. WORK SHALL BE PERFORMED BY LICENSED TRADESMAN SKILLED IN THE TYPE OF WORK TO BE PERFORMED.
 - .4 PROVIDE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE GOVERNMENT CODES, LOCAL BY-LAWS, UNDERWRITER'S REGULATIONS BASE BUILDING STANDARDS, CONTRACT DOCUMENTS AND ALL AUTHORITIES HAVING JURISDICTION. ALL MATERIALS & METHOD OF INSTALLATION TO CONFORM TO THE LATEST EDITION OF THE ELECTRICAL SAFETY CODE AND BULLETINS. APPLY FOR, OBTAIN AND PAY FOR ALL PERMITS, FEES, CONNECTIONS, INSPECTIONS, LICENSES CERTIFICATES FOR CHARGES NECESSARY INCLUDING ALL PROVINCIAL TAX AND HST BEFORE PROCEEDING WITH ANY WORK.

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KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

ELECTRICAL SPECIFICATION

scale: N.T.S.

drawn by: LN

reviewed by: DS/LN

job number: CEL:23509.01

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ELECTRICAL SPECIFICATION

ELECTRICAL GENERAL REQUIREMENTS CONTD.

- .5 PRIOR TO TENDER SUBMISSION VISIT AND EXAMINE THE SITE, LOCAL CONDITIONS AND THE CONTRACT DOCUMENTS. MAKE ALLOWANCE FOR ANY RE-ROUTING OF EXISTING AND/OR NEW SERVICES AND EQUIPMENT IN THE TENDER PRICE. AFTER EXAMINING ALL THE ABOVE AGAINST THE PLANS, SPECIFICATIONS AND TERMS OF THE CONTRACT, THE CONTRACTOR MUST SATISFY HIMSELF THAT THE PROPOSED INSTALLATION CAN BE CARRIED OUT AS INTENDED. FAILURE TO OBSERVE THE ABOVE WILL NOT RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITY.
- .6 THE DRAWINGS SHOW THE GENERAL INTENT OF THE WORK ONLY AND DO NOT SHOW ALL DETAILS OF THE INSTALLATION. DO NOT SCALE DRAWINGS. OBTAIN ALL DIMENSIONS OF THE DEVICES, FIXTURES EQUIPMENT, ETC., FROM FIELD MEASUREMENTS AND ARCHITECTURAL DRAWINGS.
- .7 REPORT TO THE CONSULTANT ALL AMBIGUITIES, DISCREPANCIES, OMISSIONS, ERRORS AND DEPARTURES FROM BUILDING CODE, ELECTRICAL CODE, BY-LAWS AND/OR FROM GOOD PRACTICE PRIOR TO TENDER CLOSING. THE TENDER DOCUMENTS SHALL BE READ IN CONJUNCTION WITH THE DOCUMENTS OF ALL TRADES TO PROVIDE A COMPLETE OVERVIEW OF THE ENTIRE SCOPE. WHERE DIFFERENCES OCCUR BETWEEN PLANS AND RISER DIAGRAMS OR SCHEMATICS, THE MAXIMUM CONDITIONS SHALL GOVERN.
- .8 COORDINATE THE ROUTING AND INSTALLATION OF ALL ELECTRICAL SERVICES WITH THE WORK AND COOPERATION OF ALL OTHER TRADES, STRUCTURAL INTERFERENCES AND EXISTING CONDITIONS PRIOR TO ROUGHING-IN DEVICES, CONDUIT, ETC., TO AVOID CONFLICT. IF THERE IS INTERFERENCE, RELOCATE DEVICES TO SUIT WITHOUT ADDITIONAL COST TO THE CONTRACT.
- .9 SUBMIT ELECTRONIC COPIES OF SHOP DRAWINGS FOR ALL SPECIFIED PRODUCTS TO THE CONSULTANTS FOR REVIEW AND OBTAIN CONSULTANT'S REVIEW PRIOR TO ORDERING EQUIPMENT.
- .10 OBTAIN AND PAY FOR ONE (1) SET OF WHITE PRINTS. MARK PRINTS TO ACCURATELY INDICATE INSTALLED WORK. UPON COMPLETION OF THE WORK, SUBMIT THE COMPLETED RECORD DRAWINGS AND ONE SET OF DISKS WITH UPDATED CAD FILES IN AUTOCAD FORMAT TO THE CONSULTANT AND OWNER.
- .11 AT THE COMPLETION OF THE WORK, SUBMIT (3) COPIES OF ELECTRICAL MAINTENANCE MANUALS IN 3 RING HARD COVER BINDERS. ELECTRICAL MANUALS TO INCLUDE THE FOLLOWING; COPIES OF ALL REVIEWED SHOP DRAWINGS, WARRANTY CERTIFICATE, LIST OF SUPPLIERS AND CONTACT INFORMATION, FINAL ESA CERTIFICATE, FIRE ALARM VERIFICATION REPORT, AND ALL OTHER RELEVANT TEST REPORTS.
- .12 TENDER SHALL BE PREPARED ONLY ON THE BASIS OF SPECIFIED MATERIAL AND EQUIPMENT. ANY ALTERNATIVES SUGGESTED SHALL BE SUBMITTED PRIOR TO CONSTRUCTION AND SHALL BE ACCOMPANIED BY ALL DATA REQUIRED TO EVALUATE THE ALTERNATIVE. DURING CONSTRUCTION, ALTERNATIVES WILL ONLY BE CONSIDERED IF TENDERED PRODUCTS ARE UNOBTAINABLE AND WRITTEN PROOF IS SUBMITTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE AND EXTRA COST OR LIABILITY OF ALL SUBSTITUTIONS AND ALTERNATIVES.
- .13 ANY PRODUCT NOT SPECIFICALLY SPECIFIED SHALL BE A QUALITY CONSISTENT WITH BASE BUILDING PRODUCTS AND THE CONTRACT DOCUMENTS.

ELECTRICAL SPECIFICATION

- .14 PROVIDE A WRITTEN WARRANTY FOR ALL LABOUR, MATERIALS AND EQUIPMENT IN THIS CONTRACT, FOR A PERIOD OF TWO (2) YEAR COMMENCING AT COMPLETION OF CONTRACT. PROVIDE LABOUR AND MATERIALS TO REPAIR OR REPLACE ANY DEFECTS AT NO EXTRA COST TO THE OWNER.
- .15 ANY COSTS FOR PREMIUM TIME OUTSIDE THE NORMAL WORKING HOURS TO COMPLETE THE WORK ON SCHEDULE AND TO MAINTAIN ALL EXISTING ELECTRICAL SYSTEMS IN OPERATION SHALL BE INCLUDED IN THE TENDER PRICE.
- .16 PROVIDE A COMPLETE BREAKDOWN OF MATERIALS, EQUIPMENT AND LABOUR COSTS WITH EACH SUBMISSION FOR EXTRA OR DELETED WORK. EACH COMPONENT OF THE EXTRA OR CREDITED WORK SHALL BE SHOWN WITH INDIVIDUAL MATERIAL AND LABOUR COSTS AND SUBMITTED WITH THE BREAKDOWN.
- .17 ALL SHUTDOWNS OF EXISTING BASE BUILDING SYSTEMS SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE. INCLUDE COST OF PREMIUM TIME IN TENDER PRICE FOR WORK DURING NIGHTS, WEEKENDS OR OTHER TIME OUTSIDE NORMAL WORKING HOURS NECESSARY TO PERFORM WORK DURING SHUTDOWNS AND PAY FOR ANY COSTS INCURRED. ALLOW 10 WORKING DAYS NOTICE FOR ALL ELECTRICAL SHUTDOWNS. RESCHEDULE SHUTDOWNS WHERE NECESSARY TO COORDINATE WITH OWNER'S REQUIREMENTS.
- .18 VERIFY ON SITE, EXISTING CIRCUITS USED, SPARE CIRCUITS AND SPACES AVAILABLE. PROVIDE ADDITIONAL BREAKERS AND CIRCUITS NECESSARY WHERE EXISTING PANELS ARE TO BE REUSED.
- .19 PROVIDE ALL CLEAN-UP, LIFTING, STORAGE, CUTTING, CORING, PATCHING AND FLASHING AS REQUIRED. OBTAIN PERMISSION AND COORDINATE ANY PENETRATIONS THROUGH FLOOR SLAB OR STRUCTURE. PROVIDE X-RAY OF SLAB PRIOR TO SAWCUTTING OR CORE-DRILLING. ALL X-RAYING SHALL BE DONE AFTER HOURS AND ONLY BY PERSONNEL QUALIFIED IN THE USE OF THE TYPE OF EQUIPMENT. NO ALLOWANCE WILL BE MADE LATER FOR EXPENSES INCURRED THROUGH THE FAILURE OF PERFORMING THESE X-RAYS. ALL FLOOR SAWCUTTING AND DRILLING REQUIRED FOR ELECTRICAL SERVICES ARE TO BE PERFORMED WITHIN HOURS APPROVED BY THE OWNER. PRIOR WRITTEN NOTICE OF 48-HOURS MUST BE GIVEN TO THE OWNER. CONFIRM LOCATION WITH ARCHITECTURAL AND STRUCTURAL PRIOR TO ANY X-RAYING OR CUTTING. PATCH AND SEAL ALL OPENINGS IN FLOOR, WALLS AND PARTITIONS. IF FLOORS, WALL OR PARTITIONS ARE FIRE RATED, PATCH AND SEAL PENETRATIONS WITH FIRE RESISTANT INSULATION AND APPROVED FIRE STOP SYSTEM.
- .20 BE RESPONSIBLE FOR CARE OF THE BUILDING. CONTRACTOR SHALL SEAL OFF EACH AREA AS WORK IS BEING PERFORMED, SO AS NOT TO DISTURB DAY TO DAY OPERATION. ACCESS TO WASHROOMS, ELEVATORS, STAIRS, ETC. MUST REMAIN OPEN. CLEAN UP ALL DEBRIS DAILY AND REMOVE FROM THE SITE ON OR BEFORE COMPLETION OF CONTRACT.
- .21 ALL MATERIALS ARE TO BE NEW SPECIFICATION GRADE AND TO BEAR CSA APPROVAL LABELS.
- .22 ELECTRICAL EQUIPMENT SHALL BE PROVIDED WITH SUITABLE ENCLOSURES FOR SPRINKLERED AREAS.
- .23 CONTRACTOR TO MAKE GOOD ANY SURFACES OR FINISHES DAMAGED AS A RESULT OF ELECTRICAL ALTERATIONS. REPLACE CEILING TILES DAMAGED BY CONSTRUCTION WITH NEW TO MATCH EXISTING.
- .24 PROVIDE A COMPLETE TYPED-OUT DIRECTORY OF CONNECTED LOADS TO ALL NEW AND EXISTING PANELS BEING USED.
- .25 CIRCUIT NUMBERS SHOWN ON DRAWINGS ARE FOR GROUPING PURPOSES ONLY. BALANCE LOADS ON PANELS TO WITHIN 10 % ACROSS PHASES.



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ELECTRICAL SPECIFICATION

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ELECTRICAL SPECIFICATION

ELECTRICAL GENERAL REQUIREMENTS CONTD.

- .26 PROVIDE LAMACOID NAMEPLATES WITH BLACK LETTERS ON WHITE BACKGROUND FOR ALL EQUIPMENT.
- .27 PROVIDE LAMACOID NAMEPLATES INDICATING PANEL NAME AND CIRCUIT NUMBER ON ALL RECEPTACLES.
- .28 ALL ELECTRICAL OUTLET BOXES, JUNCTION BOXES, ETC. SHALL BE LOCATED IN ACCESSIBLE CEILING. WHERE EXISTING DEVICES AND/OR OUTLET BOXES ARE TO REMAIN ABOVE DRYWALL CEILING, RELOCATE DEVICES OR PROVIDE ACCESS HATCH(ES) (WHICHEVER METHOD IS ACCEPTABLE TO ARCHITECT). PROVIDE ACCESS HATCH(ES) WHERE REQUIRED FOR NEW EQUIPMENT BEING PROVIDED.
- .29 PROVIDE FLUSH MOUNTED ACCESS PANELS FOR ALL CONCEALED ELECTRICAL EQUIPMENT REQUIRING ACCESS. FINISH OF ACCESS PANELS SHALL BE SUITABLE FOR WALL OR CEILING FINISHES WHERE ACCESS PANELS ARE TO BE INSTALLED. REVIEW LOCATIONS OF ALL ACCESS PANELS WITH CONSULTANT PRIOR TO INSTALLATION.
- .30 ALL ELECTRICAL CONSTRUCTION WORK MUST BE PERFORMED BY MEMBERS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, LOCAL 353.

GUARANTEE

- .1 PROVIDE A ONE (1) YEAR UNCONDITIONAL GUARANTEE ON ALL LABOUR AND MATERIAL FROM THE DATE OF ACCEPTANCE OF THE PROJECT UNDER THIS CONTRACT, EXCEPT WHERE WARRANTIES ON CERTAIN ITEMS EXTEND BEYOND ONE (1) YEAR. IN THIS CASE, THE EXTENDED WARRANTY SHALL BE HONOURED.

MECHANICAL EQUIPMENT WIRING

- .1 ALL ELECTRICAL DISCONNECT SWITCHES AND ALL MANUAL OR AUTOMATIC STARTERS FOR MECHANICAL EQUIPMENT SHALL BE PROVIDED BY DIVISION 16. CO-ORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION OF ALL DEVICES TO AVOID ANY CONFLICT. IF THERE IS CONFLICT, RELOCATE DEVICES WITHOUT EXTRA COST TO THE OWNER.
- .2 ALL LINE AND LOAD SIDE POWER WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR. PROVIDE LOCAL DISCONNECT SWITCHES FOR ALL MECHANICAL EQUIPMENT AND MOTORS. ALL CONTROL WIRING SHALL BE BY DIV. 15.

FIRE SEAL

- .1 MAINTAIN THE INTEGRITY OF ALL FIRE SEPARATIONS. PROVIDE ALL NECESSARY CSA AND ULC LISTED PRODUCTS WHICH ARE REQUIRED TO GO IN AND AROUND CONDUITS OR CABLES THROUGH FIRE RATED ASSEMBLIES, TO RETAIN THE FIRE RATING OF THESE ASSEMBLIES.
- .2 WHERE CONDUITS OR SLEEVES PENETRATE FIRE RATED ASSEMBLIES SUCH AS BETWEEN THE CORRIDOR AND ANY ROOM PROVIDE FIRE STOPPING SEALS.
- .3 PACK THE SLEEVES, CONDUITS AND AROUND THE CONDUITS FOR A COMPLETE SEAL.
- .4 ACCEPTED FIRE SEAL LIQUID OR PUTTY TYPE SHALL ONLY BE PROVIDED BY DOW CORNING, 3M OR TREMCO. MINERAL WOOL FIBRE SHALL NOT BE USED.

ELECTRICAL SPECIFICATION

MATERIALS

- .1 MOLDED CASE CIRCUIT BREAKERS AND GROUND-FAULT CIRCUIT INTERRUPTERS: REFER TO C22.2 NO. 5.
- .2 BOLT-ON MOULDED CASE CIRCUIT BREAKERS: QUICK-MAKE, QUICK-BREAK TYPE, FOR MANUAL AND AUTOMATIC OPERATION WITH TEMPERATURE COMPENSATION FOR 40 DEGREES C AMBIENT.
- .3 FUSED AND NON-FUSED DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE WITH QUICK-MAKE, QUICK-BREAK SWITCHING ACTION. SWITCHES SHALL BE PROVIDED WITH CSA ENCLOSURES TO SUIT THE ENVIRONMENT WHERE THE SWITCH IS LOCATED WITH VOIDABLE INTERLOCK TO PREVENT THE DOOR OPENING WHEN THE SWITCH IS IN THE ON POSITION. SWITCHES SHALL BE HAVE PROVISION FOR PADLOCKING IN THE ON OR OFF POSITION. REFER TO CSA STANDARD C22.2 No. 4 - ENCLOSED SWITCHES AND CSA STANDARD C22.2 No. 39 - FUSEHOLDER ASSEMBLIES;

CONDUIT AND WIRING

- .1 PROVIDE CONCEALED CONDUIT FOR ALL WIRING UNLESS OTHERWISE NOTED. SECURE CONDUIT TO UNDERSIDE OF FLOOR SLAB, STRUCTURE OR OTHER MEANS OF INDEPENDENT SUPPORT, DO NOT USE CEILING SYSTEM TO SUPPORT CONDUITS.
- .2 AC90 (BX) CABLE CAN BE USED IN DRYWALL PARTITIONS, AND FOR FINAL CONNECTION TO LIGHTING FIXTURES IN CEILING SPACE. MAXIMUM LENGTH OF DROP CABLE TO LIGHTING FIXTURE SHALL NOT EXCEED 1500mm.
- .3 ALL WIRING SHALL BE COPPER RATED 90C, RW90 TYPE AND MINIMUM WIRE SIZE FOR BRANCH WIRING SHALL BE #12 AWG COPPER, #10 AWG TO BE USED IF DISTANCE BETWEEN PANEL AND FIRST OUTLET EXCEEDS 25M. MAXIMUM VOLTAGE DROP TO BE NO MORE THAN 3%.
- .4 PROVIDE A SEPARATE GROUND WIRE FOR EACH CONDUIT.
- .5 PROVIDE A SEPARATE NEUTRAL WIRE FOR EACH CIRCUIT INDICATED.
- .6 ALL ADDITIONAL CONDUITS AND WIRING REQUIRED FOR THIS MODIFICATION SHALL BE NEW. DO NOT REUSE REMOVED CONDUITS AND WIRING UNLESS APPROVED BY CONSULTANT AND OWNERS REPRESENTATIVE.
- .7 CONDUIT SHALL BE TYPE EMT C/W STEEL SETSCREW CONNECTORS. MINIMUM SIZE OF CONDUIT IS 21mm IN DIAMETER UNLESS OTHERWISE NOTED.
- .8 PROVIDE LIQUID TIGHT FLEXIBLE METALLIC CONDUIT AND FITTINGS FOR FINAL CONNECTIONS TO ALL MOTORS.

WIRING DEVICES

- .1 COORDINATE ALL RECEPTACLES SUCH THAT THEY ARE INSTALLED TO MATCH THE REQUIRED EQUIPMENT PLUG CONFIGURATIONS. MAKE CHANGES TO SUIT AT NO EXTRA COST.
- .2 PROVIDE WIRING DEVICES AS INDICATED ON DRAWINGS. ALL WIRING DEVICES SHALL BE MANUFACTURED BY HUBBELL, LEVITON, PASS & SEYMOUR OR BRYANT.
- .3 CONVENIENCE DUPLEX RECEPTACLES SHALL BE FINISHED IN WHITE HUBBELL CAT. 5262 SERIES.
- .5 120V LIGHT SWITCHES SHALL BE RATED 20A.
- .6 ALL COVER RATES SHALL BE FINISHED IN VERTICALLY BRUSHED STAINLESS STEEL.

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**ELECTRICAL
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ELECTRICAL SPECIFICATION

LIGHTING

- .1 LIGHTING LUMINAIRES AND ACCESSORIES SHALL NOT BE SECURED TO OR SUSPENDED IN ANY WAY FROM MECHANICAL PIPES, DUCTS OR OTHER COMPONENTS. IF NECESSARY, ADDITIONAL SUPPORTS SHALL BE INSTALLED TO BRIDGE THE EQUIPMENT.
- .2 ALL LIGHTING LUMINAIRES (RELOCATED AND NEW) WHICH ARE LOCATED IN SUSPENDED CEILING SHALL BE SUPPORTED BY APPROVED WIRES OR CHAINS WHICH WILL ALLOW LUMINAIRES TO BE SUPPORTED PROPERLY AND INDEPENDENT OF THE CEILING SYSTEM. ALL SUPPORTS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.

TESTING

- .1 AT COMPLETION OF INSTALLATION, CONDUCT GROUNDING RESISTANCE TEST, VOLTAGE TEST, ETC. AND MAKE ALL CORRECTION WHERE NECESSARY AND AS DIRECTED.
- .2 VOLTAGE PROVIDED TO EQUIPMENT IN INSTALLATION SHALL NOT EXCEED MINIMUM AND MAXIMUM PERMISSIBLE LIMITS REQUIRED BY ELECTRICAL SAFETY CODE.
- .3 TEST PERFORMANCE OF ALL EQUIPMENT, DEVICES AND OUTLETS IN RENOVATED AND AFFECTED AREAS. MAKE ADJUSTMENTS AND RECTIFICATIONS NECESSARY.
- .4 FURNISH LABOUR, MATERIALS, INSTRUMENTS, AND BEAR ALL COSTS IN CONNECTION WITH ALL TESTS, OBTAIN REQUIRED CERTIFICATES OF APPROVAL, ACCEPTANCE, AND COMPLIANCE WITH REGULATIONS OF AGENCIES HAVING JURISDICTION AND AS SPECIFIED.
- .5 WORK SHALL NOT BE DEEMED COMPLETE AND FINAL CERTIFICATE OF ACCEPTANCE WILL NOT BE ISSUED, UNTIL SUCH CERTIFICATES HAVE BEEN DELIVERED TO CONSULTANT.

FIRE ALARM AND EMERGENCY VOICE COMMUNICATION

- .1 MODIFY EXISTING FIRE ALARM SYSTEM, WIRING, ANNUNCIATORS AND EQUIPMENT AND PROGRAMMING AS NECESSARY TO RELOCATE EXISTING DEVICES AND CONNECT NEW DEVICES AS SHOWN AND AS SPECIFIED.
- .2 INSTALLATION OF FIRE ALARM SYSTEM SHALL CONFORM TO CSA/ULC S524 AND THE ONTARIO BUILDING CODE.
- .3 FIRE ALARM DEVICES SHALL MATCH EXISTING AND BE COMPATIBLE WITH THE EXISTING FIRE ALARM SYSTEM AND BE ULC AND CSA APPROVED.
- .4 ALL WIRING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND INSTALLED IN METALLIC CONDUIT. FINAL CONNECTIONS TO DEVICES SHALL BE MADE WITH FLEXIBLE METALLIC CONDUIT. SIGNAL CIRCUIT WIRING SHALL BE INSTALLED IN SEPARATE CONDUITS FROM INITIATING CIRCUIT WIRING OR COMMUNICATIONS WIRING. AUDIBLE SIGNAL APPLIANCES SHALL BE ALTERNATELY CONNECTED TO EACH OF THE SIGNAL CIRCUITS ON THE FLOOR. CONSECUTIVE OR NEIGHBORING SIGNAL DEVICES SHALL NOT BE CONNECTED TO THE SAME SIGNAL CIRCUIT.
- .5 ADDRESSABLE LOOP WIRING SHALL BE PROVIDED IN A DCLC STYLE AS DEFINED BY ULC S524. PRIMARY AND ALTERNATE WIRING CIRCUITS SHALL BE INSTALLED IN SEPARATE RACEWAYS WITH SPACING AS REQUIRED BY ULC S524.

ELECTRICAL SPECIFICATION

- .6 THE MANUFACTURER OF THE FIRE ALARM SYSTEM SHALL PERFORM A COMPLETE INSPECTION OF ALL NEW AND RELOCATED COMPONENTS INSTALLED FOR THE SYSTEM IN ACCORDANCE WITH CSA/ULC S537. INCLUDE PROVISION OF ADEQUATE QUALIFIED STAFF TO CARRY OUT INSPECTION WORK. PROVIDE ALL NECESSARY EQUIPMENT AND TEST APPARATUS AS REQUIRED. ADJUST SYSTEM AND COMPONENTS AS REQUIRED TO ENSURE COMPLETE SYSTEM OPERATION AND INCLUDE ASSOCIATED COSTS IN TENDER PRICE.
- .7 WHERE NEW DEVICES ARE BEING ADDED TO EXISTING FIRE ALARM ZONES OR ADDRESSABLE LOOPS, ALL DEVICES ON THE EXISTING ZONE/LOOP SHALL BE RE-VERIFIED IN ACCORDANCE WITH ULC-S537. WHERE NEW FIRE ALARM ZONES OR ADDRESSABLE LOOPS ARE BEING ADDED TO EXISTING FIRE ALARM CONTROL PANELS, OR THE EXISTING PROGRAMMING IS MODIFIED IN ANY WAY, THE NEW ZONE/LOOPS SHALL BE VERIFIED IN ACCORDANCE WITH ULC-S537. IN ADDITION TO THE ABOVE, ONE DEVICE IN EACH EXISTING ZONE/LOOP SHALL BE TESTED IN ACCORDANCE WITH ULC-S536.
- .8 INCLUDE ALL COSTS ASSOCIATED WITH REPROGRAMMING SYSTEM AS SHOWN AND AS SPECIFIED. MANUFACTURER SHALL UPDATE EXISTING MANUALS AND SYSTEM DRAWINGS TO INCLUDE CHANGES PERFORMED AS PART OF THIS CONTRACT.
- .9 THE CONTRACTOR SHALL SUBMIT A LETTER AT THE COMPLETION OF THE PROJECT CONFIRMING THE FIRE ALARM SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF CSA/ULC S524 AND ONTARIO ELECTRICAL SAFETY CODE SECTION 32.
- .10 MAINTAIN EXISTING FIRE ALARM IN BUILDING THROUGHOUT CONSTRUCTION. DEACTIVATE/ACTIVATE ZONES IN CONSTRUCTION AREA ON A DAILY BASIS THROUGHOUT CONSTRUCTION. TEMPORARILY COVER DETECTORS ON A DAILY BASIS TO PROTECT DEVICES DURING CONSTRUCTION. REMOVE COVERS AT THE END OF EACH WORK DAY IN ORDER TO MAINTAIN FIRE ALARM COVERAGE OF AREA. THE FIRE ALARM SYSTEM SHALL NOT BE TURNED OFF UNLESS APPROPRIATE FIRE WATCH IS PROVIDED AND ARRANGEMENT HAS BEEN COORDINATED WITH AND APPROVED BY THE OWNER.
- .11 PROGRAM AS REQUIRED THROUGHOUT PROJECT TO MAINTAIN NO TROUBLE SIGNAL, PROVIDE TEMPORARY FIRE SAFETY DEVICE AS REQUIRED.

TELECOMMUNICATION CABLING SYSTEM

- 0.1 THE CABLING SYSTEM SHALL CONFORM TO ALL CURRENT STANDARDS, AND ESTABLISH NETWORK POINT OF PRESENCE (POP'S) WITHIN THE PREMISES TO ALLOW ANY POINT TO BE SERVED WITHOUT EXCEEDING THE STANDARD 90M HORIZONTAL CABLE DISTANCE LIMITATION.
- 0.2 THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING, INSTALLING, TESTING, AND CERTIFYING A CABLING SYSTEM FOR THE AREAS INCLUDED IN THE SCOPE OF THIS PROJECT.
- 0.3 CODES AND STANDARDS
 - .1 THE PRODUCTS, WORKMANSHIP AND INSTALLATION SHALL CONFORM TO CURRENT GUIDELINES CONTAINED IN THE FOLLOWING DOCUMENTS. THE CONSULTANT SHALL PROVIDE AN INTERPRETATION AND RULING TO THE CONTRACTOR IN THE EVENT THAT ANY OF THESE DOCUMENTS APPEAR TO BE IN CONFLICT:
 - .1 ANSI/TIA/EIA-568-D SERIES AND ISO/IEC 11801, COMMERCIAL BUILDING TELE-COMMUNICATIONS WIRING STANDARDS AND ALL THE COMMUNICATIONS BULLETIN BOARDS AND ADDENDA ISSUED BY THE ABOVE STANDARD BODY AT THE TIME OF TENDER.
 - .2 CAN/CSA C22.1 CANADIAN ELECTRICAL CODE, PART 1 AND ALL THE LOCAL AMENDMENTS.
 - .3 ONTARIO ELECTRICAL SAFETY CODE 2015 OR LATEST EDITION
 - .4 CAN/CSA C22.2 CANADIAN ELECTRICAL CODE, PART 2.

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SEVEN OAKS
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

ELECTRICAL SPECIFICATION

scale: N.T.S.

drawn by: LN

reviewed by: DS/LN

job number: CEL:23509.01

MSA:21509.F03

plot date:

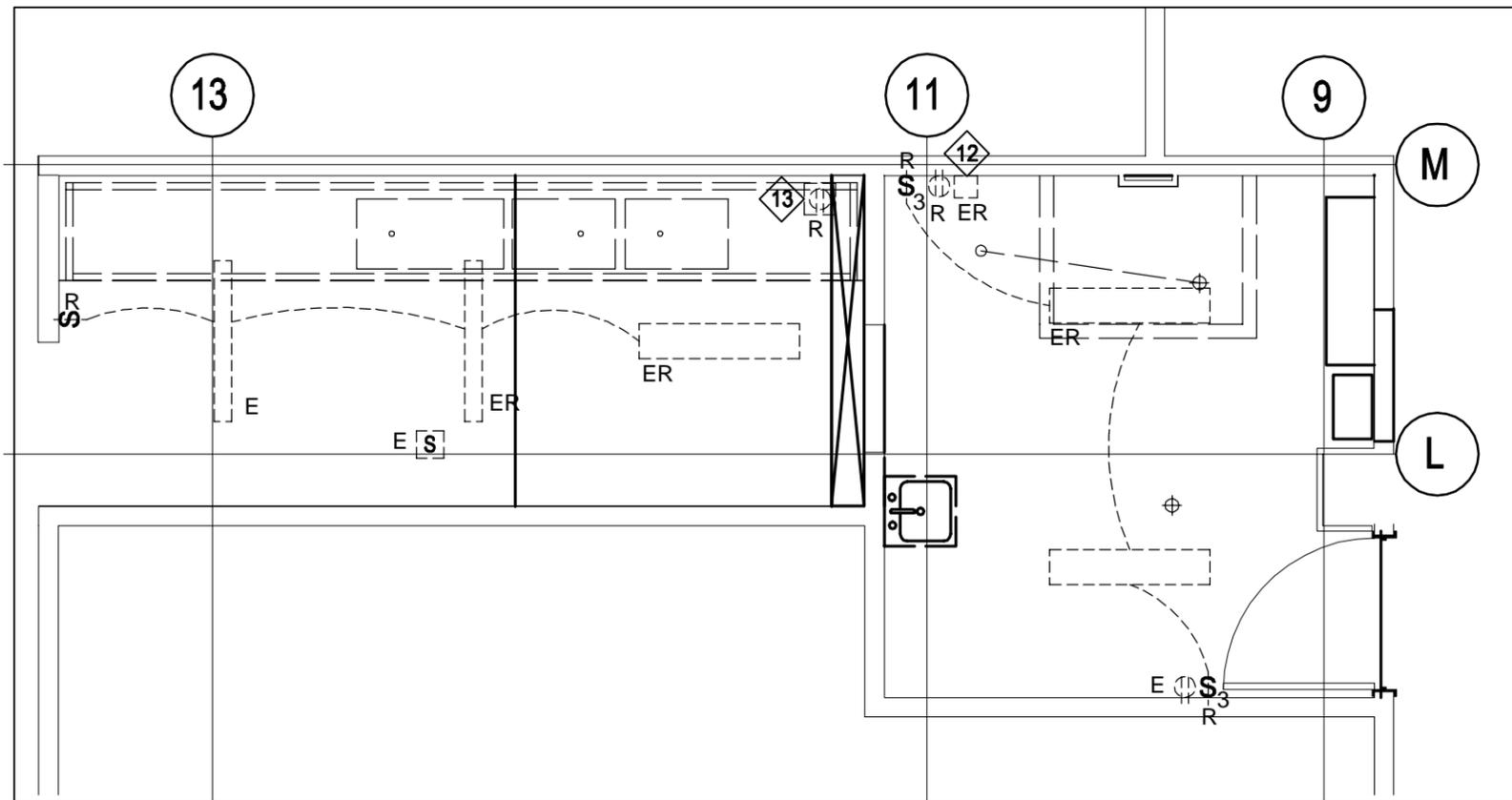
drawing number:

E005



NOTES:

1. THE EXISTING LAYOUTS ARE BASED ON AS BUILT AND SITE REVIEW AND MAY NOT REFLECT CURRENT CONDITION. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS FOR QUANTITY OF DEVICES, THEIR LOCATIONS AND CIRCUIT NUMBERS PRIOR TO BID CLOSING.
2. ALL EXISTING DEVICES MAY NOT SHOWN ON DRAWING. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEVICES IN THE SCOPE OF WORK AREA.
3. ALL EXISTING LUMINAIRES OUTSIDE THE DEMOLITION AREA SHALL REMAIN OPERATIONAL. MAKE THE NECESSARY ADJUSTMENTS AS REQUIRED TO MAINTAIN CIRCUIT AND CONTROL CONTINUITY.
4. DEMOLISH ALL EXISTING DEVICES TO FACILITATE ROOM REVISION AS INDICATED ON ARCHITECTURAL DRAWINGS. EXAM THE CONDITION OF THE EXISTING CONDUITS, JUNCTION BOXES AND SUPPORT. IF IT'S REQUIRED, REPLACE DAMAGED CONDUITS, JUNCTION BOXES, HANGERS, PROVIDE ADDITIONAL HANGERS AND PULL NEW WIRING. DEMOLISH, DISCONNECT AND MAKE SAFE BACK TO SOURCE ALL ELECTRICAL DEVICES AFFECTED BY DEMOLITION. UPDATE PANEL SCHEDULES AND MARK BREAKERS AS SPARES.
5. STORE IN THE SAFE PLACE THE EQUIPMENT TO BE RE-INSTALLED AFTER THE DEMOLITION WORK IS COMPLETE.
6. PROVIDE PROVISIONS SUCH THAT BASE BUILDING POWER SERVICES ARE NOT AFFECTED BY ANY SCOPE OF WORK.
7. FOR MECHANICAL EQUIPMENT TO BE REMOVED REFER TO MECHANICAL DEMOLITION DRAWINGS. DELETE ALL ASSOCIATED ELECTRICAL SERVICES AND DEVICES TO FACILITATE THE REMOVAL OF MECHANICAL EQUIPMENT.
8. WHEN RELOCATING EXISTING DEVICES, EXTEND ASSOCIATED WIRING TO SUIT NEW LOCATIONS.
9. REMOVE ALL WIRING IN CEILING THAT IS NOT IN CONDUIT (IE: FREE AIR, ARMOUR CLAD, ETC.) BACK TO NEAREST JUNCTION BOX, LABEL CIRCUITS ON JUNCTION BOX COVERS. UPDATE AS-BUILT DRAWINGS WITH JUNCTION BOX LOCATIONS AND LABEL CIRCUITS AT PANEL AS SPARE.
10. EXISTING BASE BUILDING LIFE SAFETY SYSTEM TO REMAIN OPERATIONAL DURING THE WORK. COORDINATE ALL SHUTDOWNS AS REQUIRED WITH OWNER.
11. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING DEMOLITION SCOPE OF WORK. THIS WORK IS TO BE INCLUDED AS PART OF SCOPE WHERE DEMOLITION IS REQUIRED FOR LIGHTING, POWER AND SYSTEMS.
12. MECHANICAL GREASE DROP DEVICE TO BE RELOCATED IN SUCH A WAY THAT TO BE PLUGGED TO CEILING RECEPTACLE WITH NOTE TAG #13. COORDINATE NEW LOCATION OF DEVICE WITH MECHANICAL CONTRACTOR AS IT SHALL BE CLOSE TO THE CEILING RECEPTACLE.
13. REMOVE EXISTING RECEPTACLE AND PROVIDE NEW GFI TYPE. PROVIDE/EXTEND CONDUIT AND WIRING AS REQUIRED TO NEW LOCATION TO FACILITATE CEILING REPAIR AND TO SUIT GFI TYPE.



1 BASEMENT POT WASH ROOM - ELECTRICAL DEMOLITION LAYOUT
E-101 1:50



2	2023-11-13	ISSUED FOR PERMIT/TENDER
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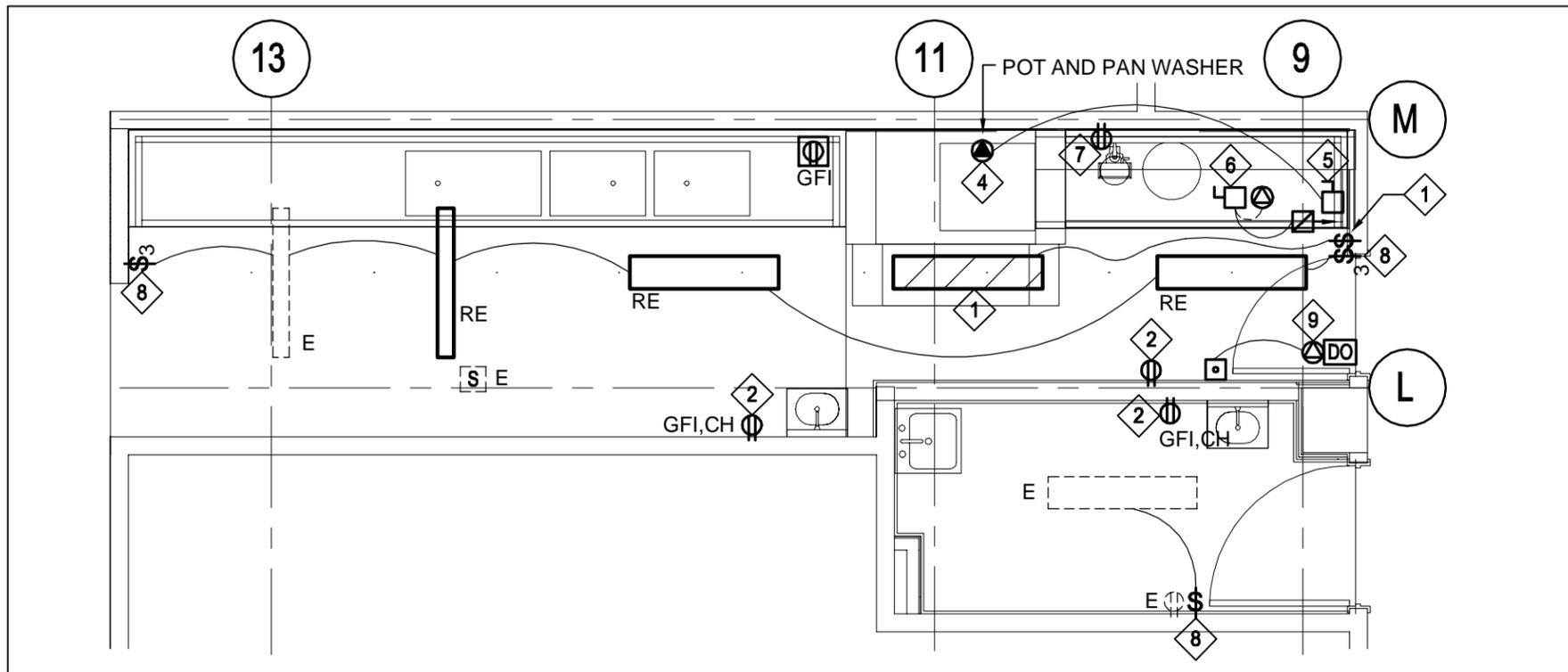
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SEVEN OAKS
KITCHEN RENOVATION

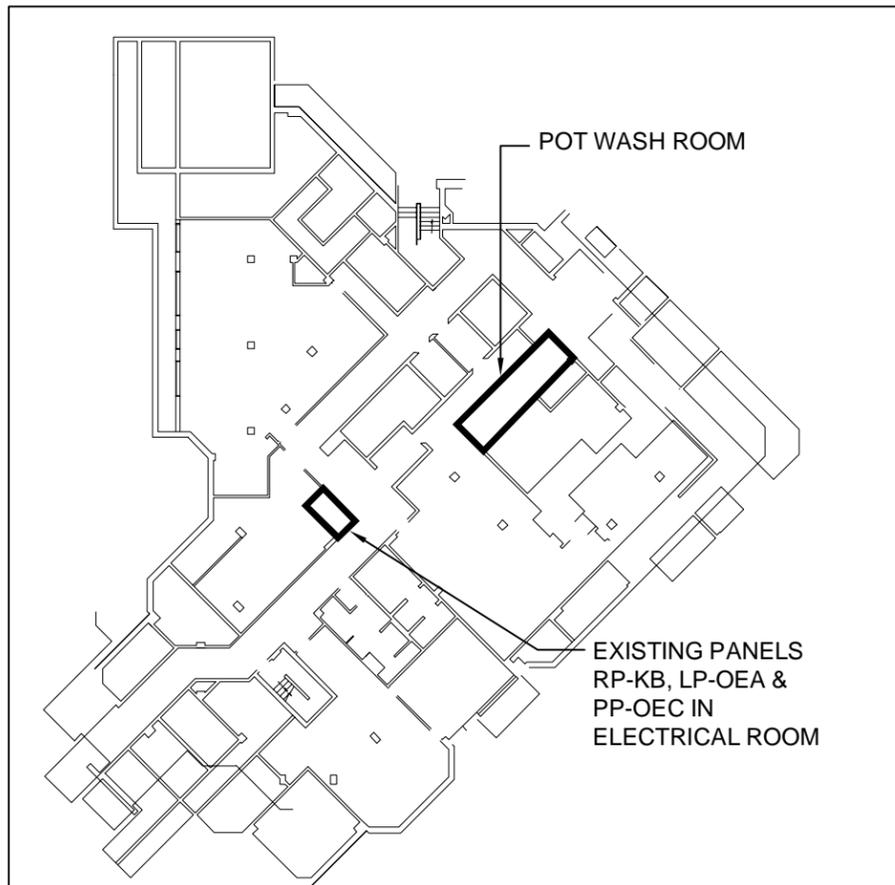
9 NEILSON ROAD, SCARBOROUGH

BASEMENT LEVEL
DEMOLITION
ELECTRICAL LAYOUT

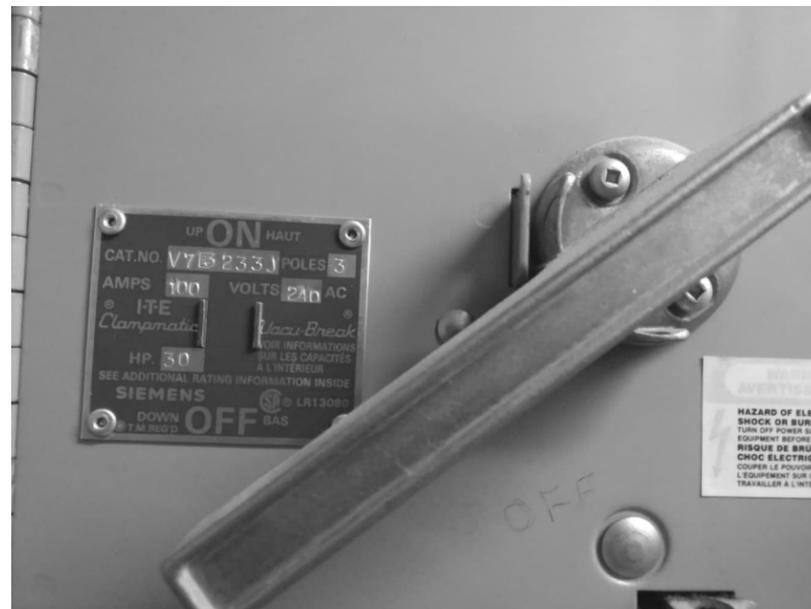
scale: AS SHOWN
drawn by: LN
reviewed by: DS/LN
job number: CEL:23509.01
MSA:21509.F03
plot date:
drawing number:



1 BASEMENT POT WASH ROOM - ELECTRICAL NEW LAYOUT
E-102 1:50



2 BASEMENT KEYPLAN
E-102 N.T.S.



PICTURE #1

NOTES:

1. PROVIDE NEW LUMINAIRE TO MATCH EXISTING. CONNECT TO ADJACENT EMERGENCY LIGHTING CIRCUIT AND REWIRE LIGHTING CONTROL AS INDICATED. PROVIDE UL RELAY MOUNTED CLOSE TO THE SWITCH. WHEN NORMAL POWER FAILS, RELAY CONTACT SHALL BE CLOSED TO ALLOW EMERGENCY POWER BYPASS THE SWITCH AND TURNS THE LIGHT ON.
2. NEW TYPE TO MATCH EXISTING. CONNECT TO ADJACENT EXISTING CIRCUIT AS INDICATED BY 2#12+GND IN 3/4"C.
3. REPLACE BURNED OUT LAMPS IN EXISTING LIGHT FIXTURES, TO MATCH EXISTING TYPE. SHALL BE 2 LAMPS PER FIXTURE.
4. PROVIDE NEW 100A-3P FUSED DISCONNECT SWITCH WITH 90A-3P FUSE IN EXISTING 208V 3PH DISTRIBUTION PANEL DP-BKK LOCATED IN BASEMENT ELECTRICAL ROOM B.05, REFER TO KEYPLAN 2/E-102, AND CONNECT TO NEW POT AND PAN WASHER WITH 3#3+GND IN 1-1/4"C. IF 100A-3P SPARE DISCONNECT IS AVAILABLE, PROVIDE NEW 90A-3P FUSE ONLY. REFER TO PICTURE #1 FOR THE TYPE OF EXISTING DISCONNECT SWITCH IN DP-BKK.
5. PROVIDE NEW 100A-3P DISCONNECT SWITCH IN THE POT WASH ROOM. COORDINATE LOCATION OF THE DISCONNECT SWITCH ON SITE. PROVIDE WATER PROOF TYPE SWITCH IF EXPOSED TO WATER.
6. EXHAUST FAN. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. PROVIDE 15A-1P BREAKER IN PANEL RP-KB IN BASEMENT ELECTRICAL ROOM B.05 AND CONNECT WITH 2#12+GND IN 3/4C.
7. FOR SOFTNER. PROVIDE NEW RECEPTACLE AND CONNECT TO EXISTING CIRCUIT FROM REMOVED RECEPTACLE. EXTEND EXISTING CONDUIT AND WIRING FROM REMOVED RECEPTACLE TO NEW RECEPTACLE. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
8. REWIRE LIGHTING CONTROL AS INDICATED.
9. PROVIDE 120V, 15A-1P CIRCUIT BREAKER FROM AN EXISTING ADJACENT PANEL. UPDATE PANEL DIRECTORY AS NEEDED.



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SEVEN OAKS
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

BASEMENT LEVEL
NEW
ELECTRICAL LAYOUT

scale: AS SHOWN

drawn by: LN

reviewed by: DS/LN

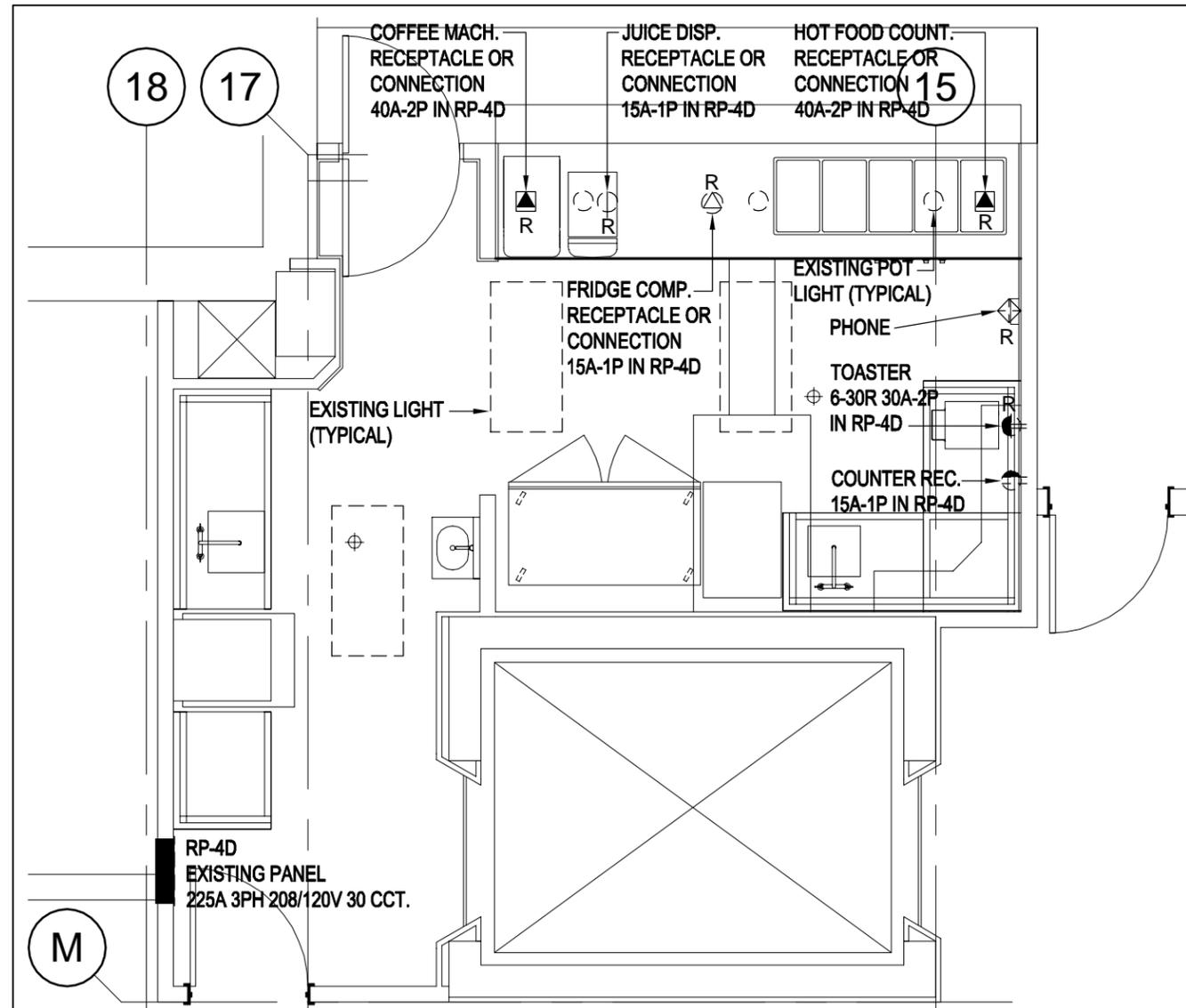
job number: CEL:23509.01
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plot date:

drawing number:

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4. STORE IN THE SAFE PLACE THE EQUIPMENT TO BE RE-INSTALLED AFTER THE DEMOLITION WORK IS COMPLETE.
5. PROVIDE PROVISIONS SUCH THAT BASE BUILDING POWER SERVICES ARE NOT AFFECTED BY ANY SCOPE OF WORK.
6. FOR KITCHEN EQUIPMENT TO BE REMOVED OR RELOCATED REFER TO FOOD SERVICE CONSULTANT DRAWINGS. DELETE ALL ASSOCIATED ELECTRICAL SERVICES AND DEVICES TO FACILITATE THE DEMOLITION OR RELOCATION OF KITCHEN EQUIPMENT.
7. WHEN RELOCATING EXISTING DEVICES, EXTEND ASSOCIATED WIRING TO SUIT NEW LOCATIONS.
8. REMOVE ALL WIRING IN CEILING THAT IS NOT IN CONDUIT (IE: FREE AIR, ARMOUR CLAD, ETC.) BACK TO NEAREST JUNCTION BOX, LABEL CIRCUITS ON JUNCTION BOX COVERS. UPDATE AS-BUILT DRAWINGS WITH JUNCTION BOX LOCATIONS AND LABEL CIRCUITS AT PANEL AS SPARE.
9. EXISTING BASE BUILDING LIFE SAFETY SYSTEM TO REMAIN OPERATIONAL DURING THE WORK. COORDINATE ALL SHUTDOWNS AS REQUIRED WITH OWNER.
10. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BID CLOSING. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING DEMOLITION SCOPE OF WORK. THIS WORK IS TO BE INCLUDED AS PART OF SCOPE WHERE DEMOLITION IS REQUIRED FOR LIGHTING, POWER AND SYSTEMS.



1 LEVEL 4th SERVERY ROOM - PARTIAL EXISTING ELECTRICAL LAYOUT
 E-201 1:50



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**SEVEN OAKS
 KITCHEN RENOVATION**

9 NELSON ROAD, SCARBOROUGH

**LEVEL 4
 DEMOLITION
 ELECTRICAL LAYOUT**

scale: AS SHOWN
 drawn by: LN
 reviewed by: DS/LN
 job number: CEL:23509.01
 MSA:21509.F03
 plot date:

drawing number:



2 2023-11-13 ISSUED FOR PERMIT/TENDER
1 2023-06-26 ISSUED FOR DESIGN SIGN-OFF
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SEVEN OAKS
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

**LEVEL 4
NEW
ELECTRICAL LAYOUT**

scale: AS SHOWN

drawn by: LN

reviewed by: DS/LN

job number: CEL:23509.01

plot date: MSA:21509.F03

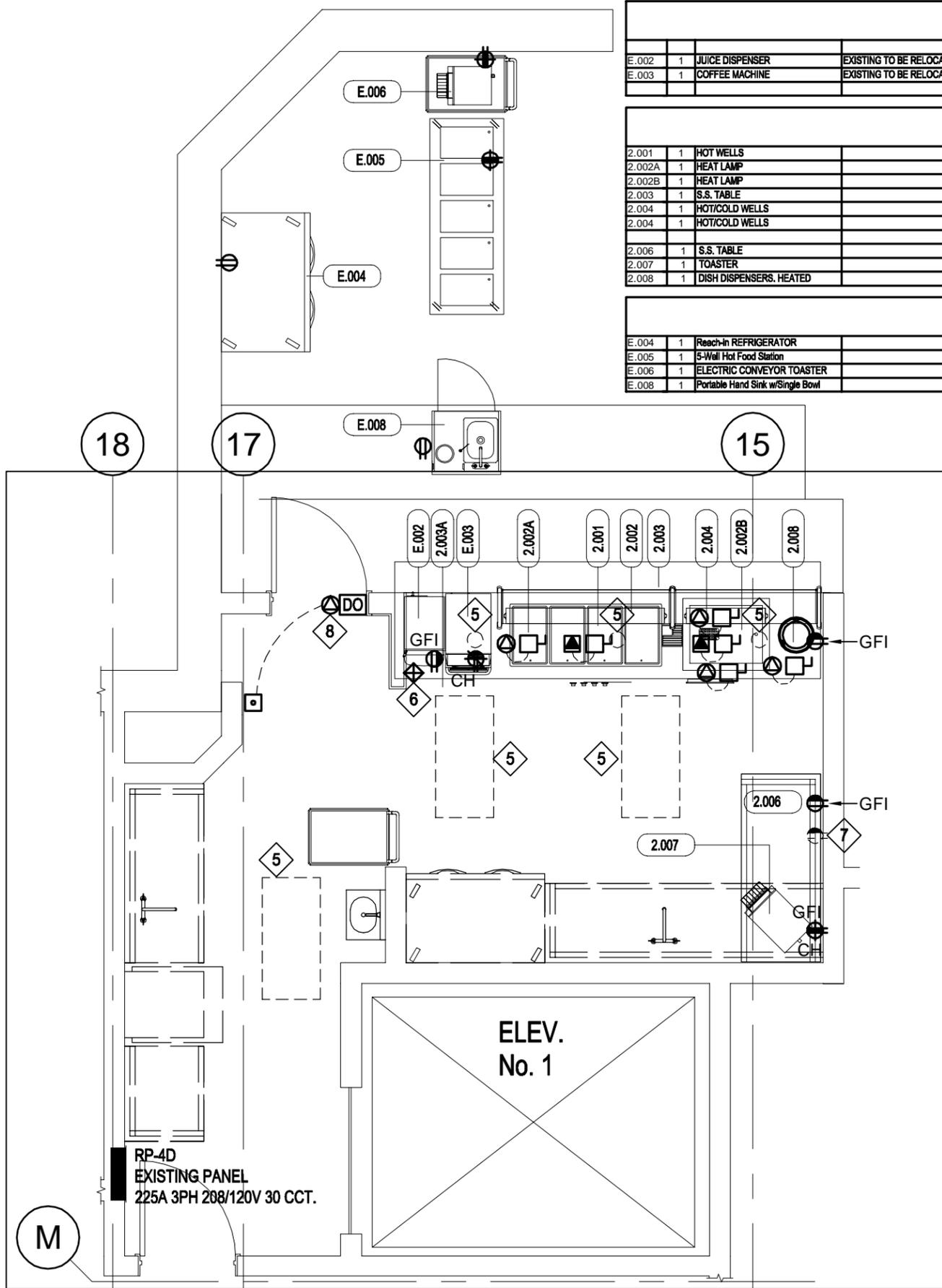
drawing number:

E-202

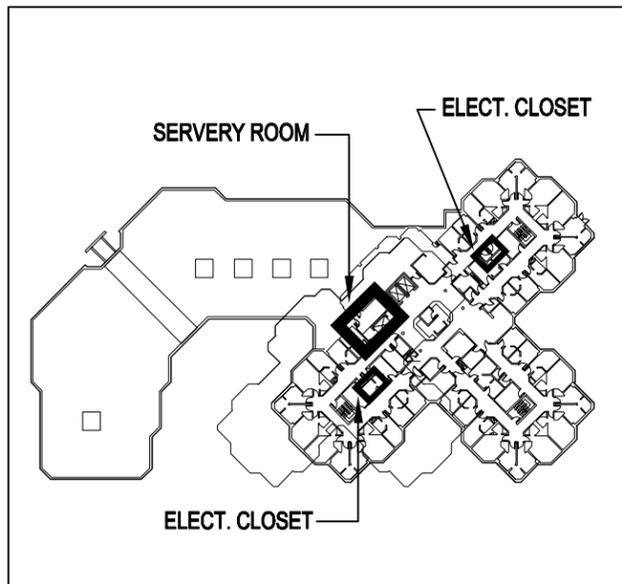
LEVEL 4 SERVERY ROOM EXISTING KITCHEN EQUIPMENT SCHEDULE													
E.002	1	JUICE DISPENSER	EXISTING TO BE RELOCATED	6 A	120	1	60	plug	ALL EXISTING SERVICES T.B.C.	15A-1P	2#12+GND IN 3/4"C	RP-4D	RECEPTACLE TYPE/BREAKER MAY VARY ON OTHER FLOORS, INVESTIGATE. SEPARATE CIRCUIT.
E.003	1	COFFEE MACHINE	EXISTING TO BE RELOCATED	20 A	208	1	60	6-30R	ALL EXISTING SERVICES T.B.C.	30A-2P	2#10+GND IN 3/4"C	RP-4D	RECEPTACLE TYPE/BREAKER MAY VARY ON OTHER FLOORS, INVESTIGATE. SEPARATE CIRCUIT.

LEVEL 4 SERVERY ROOM NEW KITCHEN EQUIPMENT SCHEDULE													
2.001	1	HOT WELLS		15.8A	208	3	60	direct		20A-3P	3#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT
2.002A	1	HEAT LAMP		9 A	120	1	60	direct		15A-1P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT
2.002B	1	HEAT LAMP		5 A	120	1	60	direct		15A-1P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT
2.003	1	S.S. TABLE		12 A	120	1	60	plug	GENERAL PURPOSE RCPT	15A-1P	2#12+GND IN 3/4"C	RP-4D	2.003 AND 2.006 SHARE ONE CIRCUIT
2.004	1	HOT/COLD WELLS		14.5 A	208	1	60	direct		20A-2P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT
2.004	1	HOT/COLD WELLS							ADDL 120V/60 4.9A	15A-1P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT
2.006	1	S.S. TABLE		12 A	120	1	60	plug	GENERAL PURPOSE RCPT	15A-1P	2#12+GND IN 3/4"C	RP-4D	2.003 AND 2.006 SHARE ONE CIRCUIT
2.007	1	TOASTER		16 A	208	1	60	6-20R	ALL EXISTING SERVICES T.B.C.	20A-2P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT
2.008	1	DISH DISPENSERS, HEATED		4 A	120	1	60	direct	ALL EXISTING SERVICES T.B.C.	15A-1P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT

LEVEL 4 SERVERY ROOM TEMPORARY EQUIPMENT CONNECTION SCHEDULE													
E.004	1	Reach-in REFRIGERATOR		15A	120	1	60	plug	ALL EXISTING SERVICES T.B.C.	15A-1P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT
E.005	1	5-Well Hot Food Station		13 A	208	1	60	6-20R	ALL EXISTING SERVICES T.B.C.	20A-2P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT
E.006	1	ELECTRIC CONVEYOR TOASTER		15 A	208	1	60	6-20R	ALL EXISTING SERVICES T.B.C.	20A-2P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT
E.008	1	Portable Hand Sink w/Single Bowl		12 A	120	1	60	plug		15A-1P	2#12+GND IN 3/4"C	RP-4D	SEPARATE CIRCUIT



- CONTRACTOR SHALL VERIFY EXISTING EQUIPMENT REQUIREMENTS PRIOR TO BID CLOSING.
- COORDINATE POWER CONNECTION WITH FOOD SERVICE CONTRACTOR PRIOR TO INSTALLATION.
- ALL KITCHEN EQUIPMENT CONNECTIONS SHALL BE VERIFIED AND COORDINATED WITH KITCHEN EQUIPMENT SHOP DRAWINGS PRIOR TO ROUGH-IN.
- PROVIDE NEW CIRCUIT BREAKERS FOR NEW AND RELOCATED KITCHEN EQUIPMENT. PROVIDE A TYPED AND UPDATED PANEL SCHEDULES.
- REPLACE LAMPS IN EXISTING CEILING POT LIGHTS AND 2x4 FLUORESCENT LIGHT FIXTURES WITH LED LAMPS. PROVIDE LED 100WATT EQUIVALENT FOR POT LIGHTS AND PROVIDE LED T8 32WATT EQUIVALENT TUBE LIGHT BULB FOR 2x4 FIXTURES. IF POT LIGHT AND FLUORESCENT LIGHT CANNOT ACCEPT LED, PROVIDE SIMILAR TYPE OF LAMPS WITH HIGH LUMENS.
- NEW DATA OUTLET FOR RELOCATED PHONE. OUTLET TYPE AND MOUNTED HEIGHT TO MATCH EXISTING.
- PROVIDE GFI RECEPTACLE, IF EXISTING IS NOT.
- PROVIDE 120V, 15A-1P CIRCUIT BREAKER FROM AN AVAILABLE EXISTING ADJACENT ELECTRICAL PANEL.



1 LEVEL 4th SERVERY ROOM - PARTIAL NEW ELECTRICAL LAYOUT
E-202 1:50

2 LEVEL 4th KEYPLAN
E-202 N.T.S.