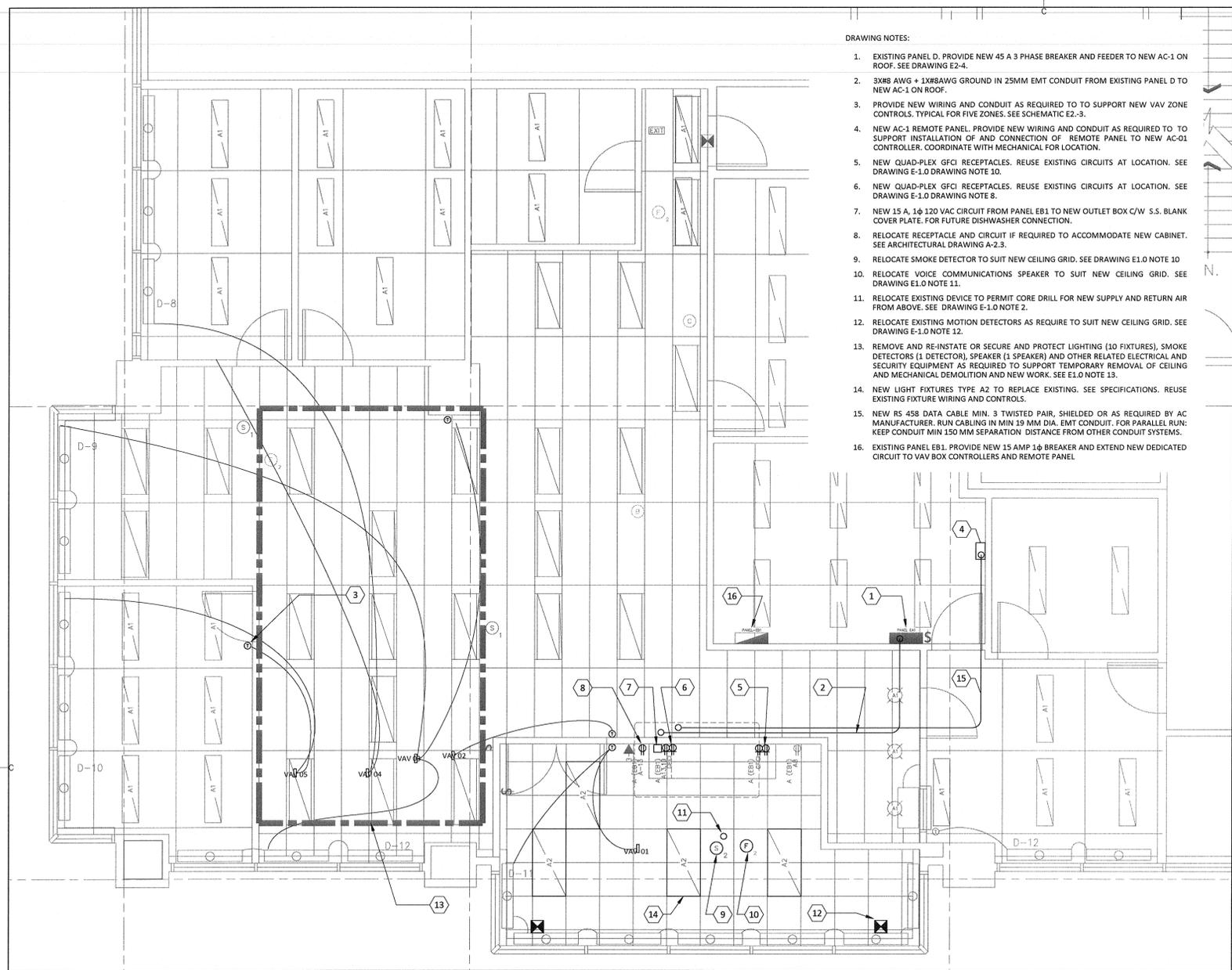
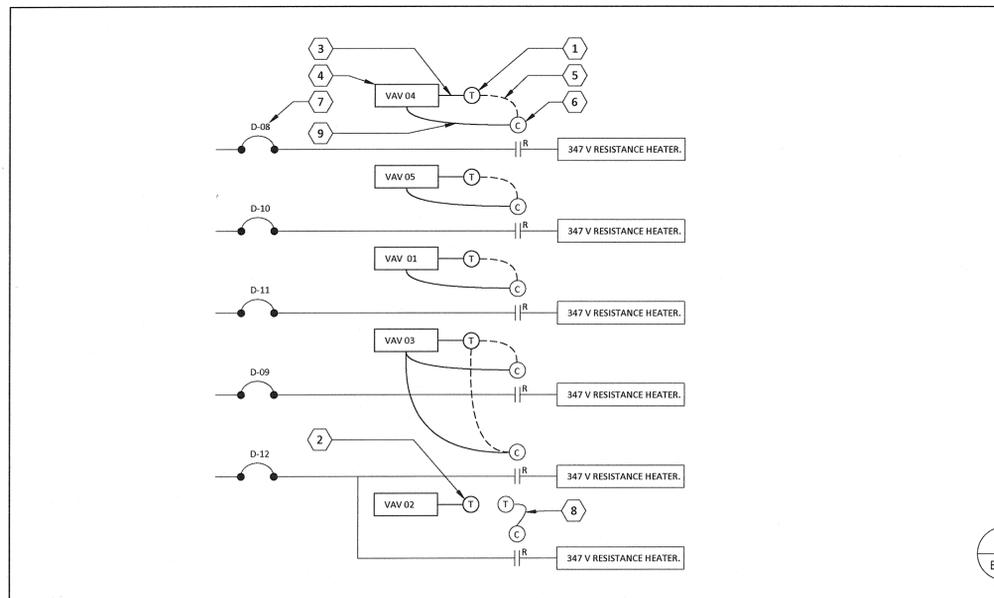


DRAWING NOTES:

- EXISTING PANEL D. PROVIDE NEW 45 A 3 PHASE BREAKER AND FEEDER TO NEW AC-1 ON ROOF. SEE DRAWING E-2.4.
- 3X#8 AWG + 1X#8AWG GROUND IN 25MM EMT CONDUIT FROM EXISTING PANEL D TO NEW AC-1 ON ROOF.
- PROVIDE NEW WIRING AND CONDUIT AS REQUIRED TO SUPPORT NEW VAV ZONE CONTROLS. TYPICAL FOR FIVE ZONES. SEE SCHEMATIC E2-3.
- NEW AC-1 REMOTE PANEL. PROVIDE NEW WIRING AND CONDUIT AS REQUIRED TO SUPPORT INSTALLATION OF AND CONNECTION OF REMOTE PANEL TO NEW AC-01 CONTROLLER. COORDINATE WITH MECHANICAL FOR LOCATION.
- NEW QUAD-PLEX GFCI RECEPTACLES. REUSE EXISTING CIRCUITS AT LOCATION. SEE DRAWING E-1.0 DRAWING NOTE 10.
- NEW QUAD-PLEX GFCI RECEPTACLES. REUSE EXISTING CIRCUITS AT LOCATION. SEE DRAWING E-1.0 DRAWING NOTE 8.
- NEW 15 A 1Ø 120 VAC CIRCUIT FROM PANEL E81 TO NEW OUTLET BOX C/W S.S. BLANK COVER PLATE. FOR FUTURE DISHWASHER CONNECTION.
- RELOCATE RECEPTACLE AND CIRCUIT IF REQUIRED TO ACCOMMODATE NEW CABINET. SEE ARCHITECTURAL DRAWING A-2.3.
- RELOCATE SMOKE DETECTOR TO SUIT NEW CEILING GRID. SEE DRAWING E1.0 NOTE 10
- RELOCATE VOICE COMMUNICATIONS SPEAKER TO SUIT NEW CEILING GRID. SEE DRAWING E1.0 NOTE 11.
- RELOCATE EXISTING DEVICE TO PERMIT CORE DRILL FOR NEW SUPPLY AND RETURN AIR FROM ABOVE. SEE DRAWING E-1.0 NOTE 2.
- RELOCATE EXISTING MOTION DETECTORS AS REQUIRE TO SUIT NEW CEILING GRID. SEE DRAWING E-1.0 NOTE 12.
- REMOVE AND RE-INSTATE OR SECURE AND PROTECT LIGHTING (10 FIXTURES), SMOKE DETECTORS (1 DETECTOR), SPEAKER (1 SPEAKER) AND OTHER RELATED ELECTRICAL AND SECURITY EQUIPMENT AS REQUIRED TO SUPPORT TEMPORARY REMOVAL OF CEILING AND MECHANICAL DEMOLITION AND NEW WORK. SEE E1.0 NOTE 13.
- NEW LIGHT FIXTURES TYPE A2 TO REPLACE EXISTING. SEE SPECIFICATIONS. REUSE EXISTING FIXTURE WIRING AND CONTROLS.
- NEW RS 458 DATA CABLE MIN. 3 TWISTED PAIR, SHIELDED OR AS REQUIRED BY AC MANUFACTURER. RUN CABLING IN MIN 19 MM DIA. EMT CONDUIT. FOR PARALLEL RUN; KEEP CONDUIT MIN 150 MM SEPARATION DISTANCE FROM OTHER CONDUIT SYSTEMS.
- EXISTING PANEL E81. PROVIDE NEW 15 AMP 1Ø BREAKER AND EXTEND NEW DEDICATED CIRCUIT TO VAV BOX CONTROLLERS AND REMOTE PANEL



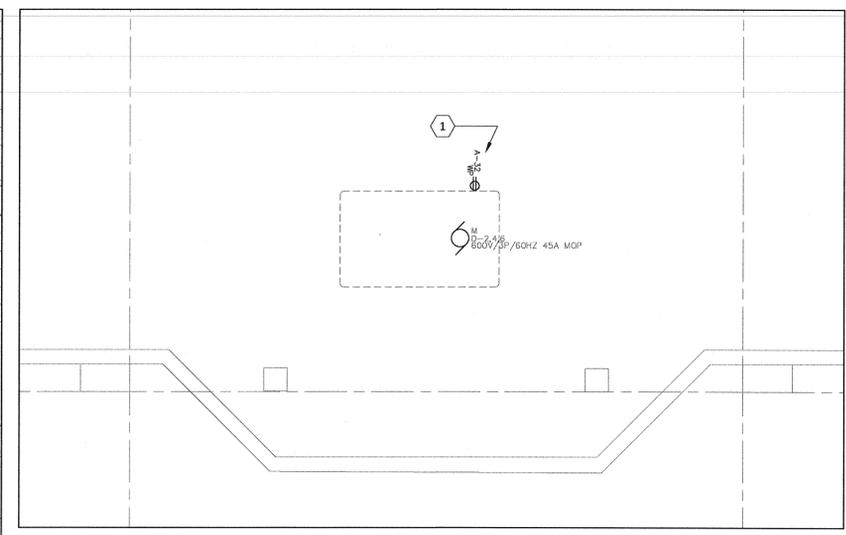
1 FLOOR PLAN - ELECTRICAL
E-2.0 1:30



DRAWING NOTES:

- REMOVE EXISTING ZONE CONTROL HEATING THERMOSTAT AND REPLACE WITH NEW HEAT/COOL THERMOSTAT SUPPLIED BY MECHANICAL. TYPICAL FOR FOUR ZONES.
- INSTALL NEW COOLING ONLY THERMOSTAT SUPPLIED BY MECHANICAL. TYPICAL FOR ONE ZONE.
- PROVIDE AND INSTALL NEW CAT-5 CABLE OR OTHER CABLE AS REQUIRED IN CONDUIT FROM NEW THERMOSTAT TO NEW VAV BOX CONTROLLER TYPICAL OF FIVE.
- NEW VAV BOX CONTROLLER BY MECHANICAL. TYPICAL OF FIVE. EXTEND NEW 120VAC DEDICATED CIRCUIT FROM PANEL E81 AND DIRECT CONNECT TO CONTROLLERS.
- EXISTING CONTROL WIRING TO BE REMOVED.
- REPLACE EXISTING CONTROL RELAY WITH NEW: 24VDC 40 MA RELAY TO CONTROL 347 VAC 18 AMP RESISTIVE LOAD. CONTRACTOR MAY RETAIN EXISTING RELAY WHERE RATING IS COMPATIBLE WITH NEW CONTROLS.
- EXISTING BREAKER IN PANEL 'D' FEEDING EXISTING LOAD TO REMAIN. CONTRACTOR TO VERIFY AND UPDATE RECORD DRAWINGS TO SHOW AS-BUILT CONDITION. SEE DRAWING E1-4 NOTE 1.
- RETAIN EXISTING PERIMETER HEATING CONTROL THERMOSTAT. TYPICAL FOR ONE ZONE ONLY.
- NEW 18AWG WIRING IN CONDUIT FROM VAV BOX CONTROLLER TO PERIMETER HEATING CONTROL RELAY. TYPICAL FOR ALL NEW PERIMETER HEATING ZONE CONTROLS

3 LOW VOLTAGE ZONE CLIMATE CONTROL SCHEMATIC
E-2.0 NS



2 ROOF PLAN - ELECTRICAL
E-2.0 1:30

DRAWING NOTES:

- NEW: 600V 3Ø 60 HZ 50 A SERVICE TO NEW AHU-01 ON ROOF; NEW 120VAC WEATHERPROOF RECEPTACLE.

| DESIGNATION | WATTS | | | AWG | BKR | CIR NO. | MOUNTING SURFACE | | | CIR NO. | BKR | AWG | DESIGNATION | | | |
|-------------------|-------|---|---|-----|-----|---------|------------------|---|---|---------|-----|-----|-------------|------|------|------------|
| | A | B | C | | | | A | B | C | | | | A | B | C | |
| 45KVA TRANSFORMER | 15000 | | | 6 | 60 | 2 | | | | 1 | 45 | 8 | 9890 | 9890 | 9890 | AC-1 (NEW) |
| SPARE | | | | | | 4 | | | | 2 | | | | | | |
| HEATING | | | | 12 | 20 | 7 | | | | 3 | 20 | 12 | | | | HEATING |
| HEATING | | | | 12 | 15 | 11 | | | | 4 | 15 | 12 | | | | HEATING |
| SPARE | | | | | | 9 | | | | 5 | 20 | 12 | | | | HEATING |
| LIGHTING | | | | 12 | 20 | 13 | | | | 6 | 15 | 12 | | | | HEATING |
| SPARE | | | | | | 15 | | | | 7 | 15 | 12 | | | | SPARE |
| EXIT LIGHTS | | | | 12 | 15 | 17 | | | | 8 | 15 | 12 | | | | SPARE |
| HALLWAY LIGHTS | | | | | | 19 | | | | 9 | 15 | 12 | | | | |
| SPARE | | | | | | 21 | | | | 10 | 12 | 12 | | | | |
| SPARE | | | | | | 23 | | | | 11 | 12 | 12 | | | | |

4 PANEL 'D'
E-2.0 NS

DRAWING NOTES:

- VERIFY AND UPDATE CIRCUITS SUPPLYING PERIMETER HEATING LOADS. TYPICAL OF FIVE CIRCUITS. SEE DRAWING E1-3 NOTE 6.
- REMOVE EXISTING 15 A 3PHASE BREAKER AND REPLACE WITH NEW 45 AMP BREAKER.

| LEGEND | |
|--------|---|
| --- | EXISTING CONSTRUCTION TO BE REMOVED |
| --- | NEW CONSTRUCTION |
| --- | EXISTING CONSTRUCTION TO REMAIN |
| ⊕ | 120V 15A 3 WIRE DUPLEX RECEPTACLE |
| ⊕ | 120V 15A DOUBLE DUPLEX COMMON COVER |
| ⊕ | 120V 15A 3 WIRE SINGLE RECEPTACLE |
| ⊕ | 120V 15A 3 WIRE DUPLEX SPLIT RECEPTACLE |
| ⊕ | 120V 15A 4 WIRE 4-PLEX RECEPTACLE |
| ⊕ | 120V 15A/20A 4 WIRE SINGLE RECEPTACLE |
| ⊕ | 120V 15A/20A 4 WIRE DUPLEX RECEPTACLE |
| ⊕ | 120V 15A/ 20A 4 WIRE 4-PLEX RECEPTACLE |
| ⊕ | 120V 20A 4 WIRE SINGLE RECEPTACLE |
| ⊕ | 120V 20A 4 WIRE DUPLEX RECEPTACLE |
| ⊕ | 208V 15A 3 PHASE SINGLE RECEPTACLE |
| ⊕ | 208V 20A 3 PHASE SINGLE RECEPTACLE |
| ⊕ | 208V 30A 3 PHASE SINGLE RECEPTACLE |
| ⊕ | 208V 50A 3 PHASE SINGLE RECEPTACLE |
| ⊕ | 208V 60A 3 PHASE SINGLE RECEPTACLE |
| ⊕ | 208V 20A 3 PHASE DUPLEX RECEPTACLE |
| ⊕ | 120V 208 V 3 PHASE 4 WIRE PANEL |
| ⊕ | 347V/600 V 3 PHASE 4 WIRE PANEL |
| ⊕ | 347V BASEBOARD ELECTRIC RADIANT HEAT |
| ⊕ | BASEBOARD ELECTRIC RADIANT HEAT CONTROL |
| ⊕ | THERMOSTAT |
| ⊕ | TELEPHONE OUTLET |
| ⊕ | SECURITY DEVICE |
| ⊕ | SMOKE DETECTOR |
| ⊕ | VOICE COMMUNICATIONS SYSTEM SPEAKER |
| ⊕ | MOTOR |



REF. NORTH



MECHANICAL & ELECTRICAL



STAMP: REGISTERED PROFESSIONAL ENGINEER J. C. JARRETT 2017-08-14 PROVINCE OF ONTARIO

PROVINCE OF NEWFOUNDLAND AND LABRADOR ENGINEERING PERMIT N0946

Antares Engineering Group Inc. Signature or Member Number (Member-in-Responsible Charge)

GENERAL NOTES:

SEE DRAWING M3.0 FOR LEGEND.

THE WORDS "NEW" AND "PROVIDE" AS USED HEREIN SHALL MEAN TO "SUPPLY AND INSTALL".

LOCATION OF EQUIPMENT INDICATED OR SPECIFIED IS TO BE CONSIDERED AS APPROXIMATE. DO NOT SCALE DRAWINGS TO ORDER MATERIAL. CONTRACTOR TO TAKE FIELD MEASUREMENTS AND MAKE MATERIAL CONFORM TO SITE CONDITIONS.

REMOVE AND REINSTALL, CUT AND PATCH AND MAKE GOOD ANY EQUIPMENT, SERVICE OR SYSTEM DEEMED NECESSARY TO PERFORM WORK AS SPECIFIED HEREIN.

| revisions | title | date |
|-----------|-----------------------|----------|
| C | Issued for Tender | 21.07.17 |
| B | Issued for Tender | 07.07.17 |
| A | Issued for 90% Review | 15.06.17 |

DISTRICT OFFICE INFRASTRUCTURE JOHN CABOT BUILDING ST. JOHN'S, NL BUILDING I.D. GOC00047

ELECTRICAL PARTIAL FLOORPLAN NEW WORK SCHEDULES & DETAILS

designed J.C.J. conquis
date JUNE 2017
drawn J.C.J. dessiné
date JUNE 2017
approved I.C.S. approuvé
date JUNE 2017
Tender: 2017/07/31 Submission
Project Manager: Administration des projets TPSGC

project number R.090120.001 no. du projet
drawing no. E-2.0 no. du dessin