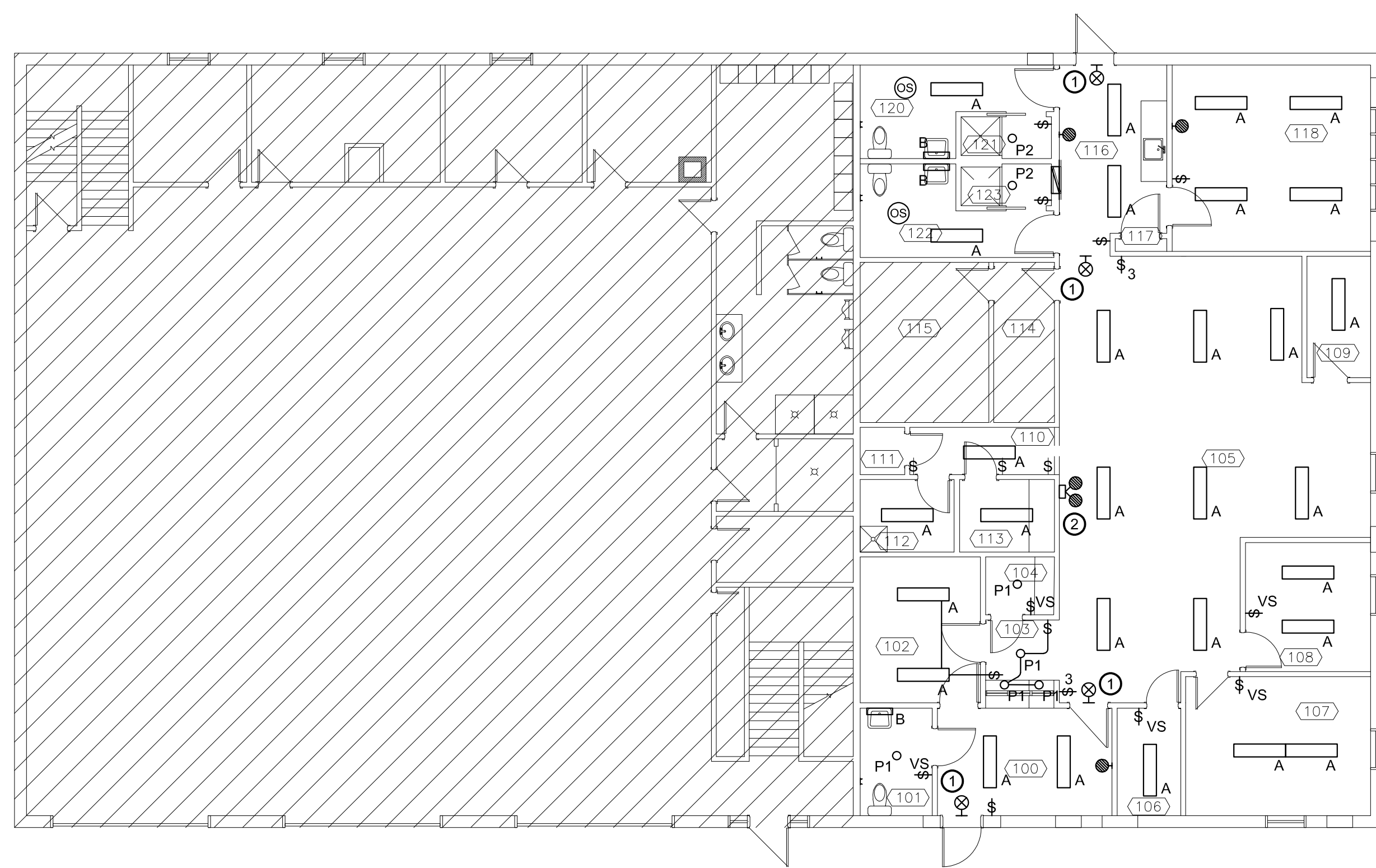


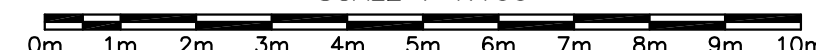


**ELECTRICAL SPECIFICATION**



**LIGHTING PLAN**

SCALE : 1:100



**KEYNOTES**

- ① NEW EXIT LIGHT TO BE WIRED TO EXISTING EXIT LIGHT CIRCUIT.
- ② EMERGENCY LIGHTING BATTERY UNIT TO BE WIRED TO UNSWITCHED SIDE OF EXISTING LIGHTING CIRCUIT. WIRE EACH REMOTE HEAD AND EXIT LIGHT TO THE 12VDC BACK-UP SIDE OF THE UNIT USING 2#12DC WIRING.

**GENERAL NOTES**

- 1. ALL NEW LIGHT FIXTURES TO BE WIRED TO EXISTING 120V LIGHTING CIRCUITS. COORDINATE ON SITE.

**1 GENERAL**  
**1.1 GENERAL REQUIREMENTS**

- 1.1.1 PERFORM THE WORK IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL BUILDING CODE OF CANADA AND THE CANADIAN ELECTRICAL CODE ADOPTED BY LOCAL AUTHORITIES HAVING JURISDICTION AND OTHER CODES OF PROVINCIAL OR LOCAL APPLICATION INCLUDING AMENDMENTS UP TO PROJECT TENDER CLOSING.
- 1.1.2 THE ELECTRICAL CONTRACTOR SHALL MAKE A THOROUGH EXAMINATION OF THE SITE AND REVIEW OTHER TRADE'S DRAWINGS, SPECIFICATIONS, AND ADDENDUMS TO COORDINATE ASSOCIATED ELECTRICAL WORK PRIOR TO SUBMITTING TENDER PRICE. ADDITIONAL COSTS WILL NOT BE CONSIDERED DUE TO A FAILURE TO ADHERE TO THIS REQUIREMENT.
- 1.1.3 DRAWINGS FOR THE ELECTRICAL WORK ARE SHOWN DIAGRAMMATICALLY. THEY ARE INTENDED TO CONVEY THE SCOPE OF WORK AND TO INDICATE THE GENERAL ARRANGEMENT OF EQUIPMENT.
- 1.1.4 SUBMIT TO INSPECTION DEPARTMENTS NECESSARY NUMBER OF DRAWINGS AND SPECIFICATIONS FOR EXAMINATION AND APPROVAL PRIOR TO COMMENCEMENT OF WORK.
- 1.1.5 WORK SHALL BE WARRANTED FOR ONE (1) YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION.
- 1.1.6 COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT FOR THE PROVINCE OF NEW BRUNSWICK, AND THE GENERAL REGULATIONS MADE PURSUANT TO THE ACT.
- 1.1.7 PLAN AND SCHEDULE SHUTDOWNS OF EXISTING SERVICES IN CONSULTATION WITH OWNER, MINIMIZE IMPACT AND DOWNTIME OF FACILITY OPERATIONS. OWNERS DIRECTIVES TO BE STRICTLY FOLLOWED IN THIS REGARD.
- 1.1.8 WHERE NEW WORK CONNECTS WITH EXISTING AND WHERE EXISTING WORK IS ALTERED, CUT, PATCH AND MAKE GOOD TO MATCH EXISTING WORK. THIS INCLUDES SECTIONS OF EXISTING WORK AFFECTED BY THE REMOVAL OF EXISTING SERVICES. FIRE STOP PENETRATIONS AS REQUIRED.
- 1.1.9 WHERE UNKNOWN SERVICES ARE ENCOUNTERED, IMMEDIATELY ADVISE OWNERS REPRESENTATIVE. CONFIRM FINDINGS IN WRITING.
- 1.1.11 EXISTING DAMAGE IS TO BE IDENTIFIED AND REPORTED PRIOR TO COMMENCEMENT OF WORK

**1.2 DESCRIPTION OF WORK**

- 1.2.1 ALTERATION OF ELECTRICAL DEVICES AND FIXTURES TO SUIT NEW FLOOR PLAN.

**1.3 SUBMITTALS**

- 1.3.1 SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE GENERAL REQUIREMENTS OF THE CONTRACT FOR THE FOLLOWING:
  - 1.3.1.1 RECEPTACLES, AND SWITCHES
  - 1.3.1.2 OCCUPANCY SENSORS
  - 1.3.1.3 LIGHT FIXTURES
  - 1.3.1.4 EXIT AND EMERGENCY LIGHTING
- 1.3.2 SUBMIT AS-BUILT DRAWINGS IN ACCORDANCE WITH THE GENERAL REQUIREMENTS OF THE CONTRACT.
- 1.3.3 SUBMIT REVIEWED SHOP DRAWINGS, MAINTENANCE INSTRUCTIONS, PERMITS, AND TEST RESULTS FOR INSERTION INTO O&M MANUAL IN ACCORDANCE WITH THE GENERAL REQUIREMENTS OF THE CONTRACT.

**2 PRODUCTS**

**2.1 WIRE AND CONDUIT:**

- 2.1.1 BUILDING WIRE:
  - 2.1.1.1 STRANDED CONDUCTORS FOR 10 AWG AND LARGER. MINIMUM SIZE 12 AWG.
  - 2.1.1.2 COPPER CONDUCTORS SIZE AS INDICATED, WITH 600 V INSULATION OF CHEMICALLY CROSS LINKED THERMOSETTING POLYETHYLENE MATERIAL RATED RW90, COLOURED GREEN FOR BOND WIRE.

**2.1.2 CONDUIT AND FITTINGS:**

- 2.1.2.1 EMT CONDUIT RUN PARALLEL AND PERPENDICULAR TO BUILDING LINES AND DOWN NEW AND EXISTING WALLS.
- 2.1.2.2 ARMoured CABLE FOR CONNECTIONS TO LIGHT FIXTURES (MAX. 1550mm)

**2.1.4 INSTALLATION:**

- 2.1.4.1 BUILDING WIRE IN CONDUIT FOR ALL WORK.

**2.2 WIRING DEVICES:**

- 2.2.1 RECEPTACLES: WHITE DUPLEX SPECIFICATION GRADE, 15A OR 20A AS INDICATED, CSA 5-15R OR 5-20R CONFIGURATION, GFCI AS INDICATED, DECORA STYLE, WHITE NYLON COVERPLATE.
- 2.2.2 LIGHT SWITCHES: WHITE, DECORA ROCKER SWITCH, COMMERCIAL SPECIFICATION GRADE, 120V, 3-WAY AS INDICATED, WHITE IN COLOUR CW NYLON COVERPLATE.

**2.2.3 ALL WIRING DEVICES TO BE FROM SAME MANUFACTURER.**

**2.2.4 ACCEPTABLE MANUFACTURER OR APPROVED EQUAL:**

- 2.2.4.1 HUBBELL
- 2.2.4.2 LEVITON
- 2.2.4.3 PASS & SEYMOUR
- 2.2.4.4 COOPER

**2.3 OCCUPANCY SENSORS:**

- 2.3.1 DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR, 120V, ADJUSTABLE SENSITIVITY AND TIME DELAY SETTINGS, WHITE IN COLOUR.

- 2.3.2 DUAL TECHNOLOGY CEILING OCCUPANCY SENSOR, LINE VOLTAGE 120V, 360 DEG COVERAGE, ADJUSTABLE SENSITIVITY AND TIME DELAY SETTINGS, WHITE IN COLOUR.

**2.3.3 ACCEPTABLE MANUFACTURER OR APPROVED EQUAL:**

- 2.3.3.1 GREEN-GATE
- 2.3.3.2 WATTSTOPPER
- 2.3.3.3 SENSOR SWITCH

**2.4 LIGHT FIXTURES:**

- 2.4.1 REFER TO LUMINAIRE SCHEDULE FOR FIXTURE INFORMATION.
- 2.4.2 LIGHT FIXTURES TO BE COMPLETE WITH 5-YEAR MANUFACTURER'S WARRANTY ON FIXTURE AND DRIVER.

**2.5 EXIT AND EMERGENCY LIGHTING:**

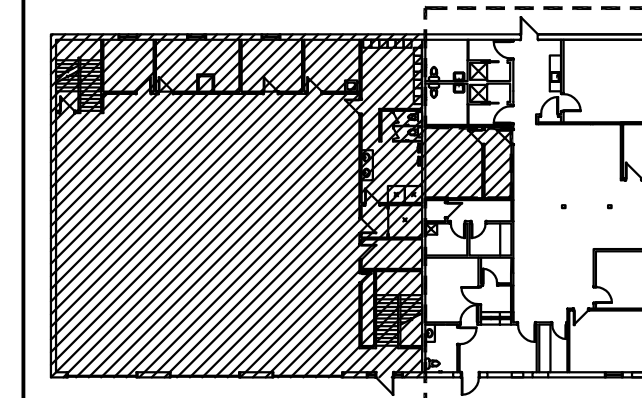
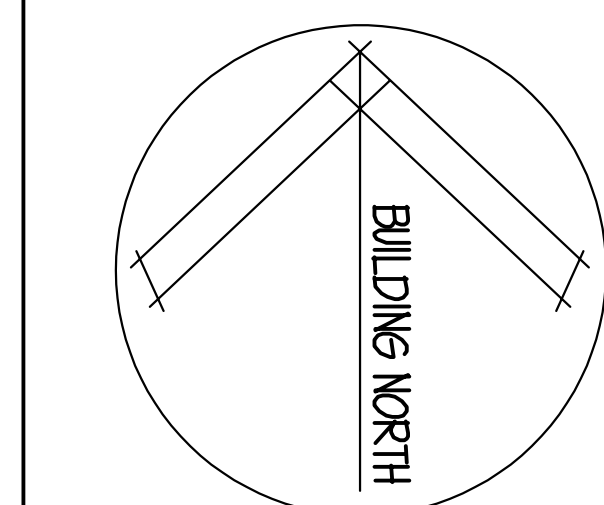
- 2.5.1 EXIT LIGHTS: WHITE EXTRUDED ALUMINUM HOUSING, LED LIGHT SOURCE, UNIVERSAL AC INPUT 120-347V, 12VDC CONNECTION TO NEAREST EMERGENCY BATTERY UNIT, UNIVERSAL MOUNTING ON WALL OR CEILING. MEETS OR EXCEEDS CSA 22.2 No. 141-15. ACCEPTABLE MANUFACTURER OR EQUAL: LUMACELL, AIMLITE, READY-LITE.

- 2.5.2 EMERGENCY BATTERY UNIT, IMPACT RESISTANT WHITE STEEL HOUSING, FROSTED THERMOPLASTIC LIGHT CUBES AT EACH END, WALL OR CEILING MOUNTED, MAINTENANCE-FREE SEALED LEAD-CALCIUM BATTERY, 120/347V INPUT, 12VDC BATTERY OUTPUT, 72W CAPACITY, 5W LED LIGHT HEADS, ACCEPTABLE MANUFACTURER OR EQUAL: LUMACELL, AIMLITE, READY-LITE.

- 2.5.3 EMERGENCY LIGHT REMOTE HEADS: FROSTED THERMOPLASTIC LIGHT CUBES, SINGLE OR DUAL HEAD, 12VDC INPUT, 5W LED LIGHT HEADS, ACCEPTABLE MANUFACTURER OR EQUAL: LUMACELL, AIMLITE, READY-LITE.

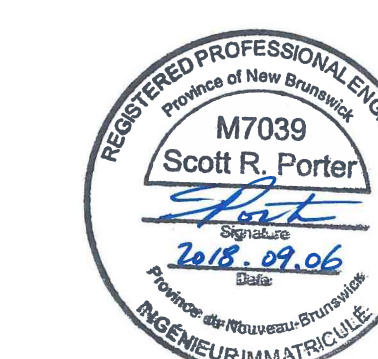
**2.6 FIRE ALARM AND SECURITY:**

- 2.6.1 RELOCATED EXISTING FIRE ALARM AND SECURITY DEVICES AS REQUIRED. PROVIDE ADDITIONAL WIRING AND CONDUIT TO NEW LOCATION.
- 2.6.2 CONTRACTOR TO VERIFY INSTALLATION ONCE COMPLETE AND RE-CERTIFY SYSTEM. SYSTEM CERTIFICATION TO BE BY MANUFACTURER'S SERVICE PROVIDER. COORDINATE WITH OWNER.



**KEY PLAN**

--- LIMITS OF CONTRACT (AREA OF WORK)



|           |                         |             |
|-----------|-------------------------|-------------|
| 0         | ISSUED FOR CONSTRUCTION | 06 SEP 2018 |
| revisions |                         | date        |
| project   |                         | project     |

**G.O.C.B.  
 SUNNY CORNER  
 NEW BRUNSWICK**

drawing no. design

**LIGHTING PLAN,  
 SCHEDULE,  
 AND ELECTRICAL  
 SPECIFICATION**

designed MG conçu

date SEPTEMBER 06, 2018

drawn MG dessiné

date SEPTEMBER 06, 2018

approved SRP approuvé

date

Tender Soumission

PWSC Project Manager Administrateur de projets TPSGC

project number no. du projet

**1005880**

drawing no. no. du dessin

**2600-2**

| LIGHTING SCHEDULE |   |                       |         |   |                             |
|-------------------|---|-----------------------|---------|---|-----------------------------|
| SYMBOL            | DESCRIPTION                               | LAMP                  | VOLTAGE | MOUNTING  | MANUFACTURER                |
| A                 | NEW 1220mm LED SURFACE MOUNTED WRAPAROUND | 5000L LED 3500K 80CRI | 120V    | SURFACE MOUNTED TO CEILING                              | PHILIPS #OWL450L835-UNV     |
| B                 | NEW 610mm LED WALL MOUNTED VANITY LIGHT   | 3000L LED 3500K 80CRI | 120V    | WALL MOUNTED ABOVE VANITY                               | PHILIPS #FSW-2-30L-835-120  |
| C                 | 1220mm LED INDUSTRIAL STRIP LIGHT         | 4000L LED 3500K 80CRI | 120V    | SURFACE MOUNTED IN COVE. REFER TO ARCHITECTURAL DETAILS | PHILIPS #FSI4-40L-835       |
| P1                | 100mm DIA LED RECESSED DOWNLIGHT          | 1500L LED 3500K 80CRI | 120V    | RECESSED IN CEILING                                     | PHILIPS #P4R-D15-835-N-U-CC |
| P2                | 150mm DIA LED RECESSED SHOWER LIGHT       | 1500L LED 3500K 80CRI | 120V    | RECESSED IN CEILING                                     | PHILIPS #P6R-D15-835-N-U-CC |