### **ELECTRICAL SPECIFICATIONS**

## **EXECUTION SPECIFICATION**

THE CONTRACT INCLUDES THE FURNISHING OF LABOUR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND OPERATING TO THE COMPLETE SATISFACTION OF THE ENGINEER.

NEW C.S.A. APPROVED EQUIPMENT OF UNIFORM MANUFACTURE THROUGHOUT.

COORDINATE ALL WORK WITH OTHER TRADES.

OBTAIN NECESSARY PERMITS AND PAY PERMIT FEES.

EXECUTE WORK IN A FIRST-CLASS AND WORKMANLIKE MANNER.

LEAVE PREMISES IN A CLEAN AND SATISFACTORY CONDITION ON COMPLETION OF ELECTRICAL WORK.

DRAWING IS DIAGRAMMATIC ONLY, AND DOES NOT SHOW ALL DETAILS. INFORMATION INVOLVING ACCURATE MEASUREMENTS OF THE BUILDING, STRUCTURAL STEEL, EXISTING WALLS, ETC. ARE TO BE TAKEN IN THE FIELD. THE CONTRACTOR SHALL MAKE, WITHOUT ADDITIONAL EXPENSE TO OWNER NECESSARY CHANGES OR ADDITIONS TO RUNS TO ACCOMMODATE STRUCTURAL CONDITIONS.

LOCATION OF DEVICES MAY BE ALTERED WITHOUT CHARGE TO OWNER, PROVIDED THE CHANGE IS MADE BEFORE FINAL INSTALLATION, IT DOES NOT NECESSITATE ADDITIONAL MATERIALS, AND ALL SUCH CHANGES ARE RATIFIED BY THE CONTRACT ADMINISTRATOR. RECORD CHANGES ON RECORD SET OF DRAWINGS.

DRAWING SHOWS GENERAL LOCATION FOR EQUIPMENT AND CIRCUITS; INSTALL THEM IN SUCH A WAY AS TO CONSERVE HEADROOM AND INTERFERE AS LITTLE AS POSSIBLE WITH THE FREE USE OF SPACE THROUGH WHICH THEY PASS.

EXAMINE THE SITE, BUILDING AND LOCAL CONDITIONS AFFECTING WORK OF THIS CONTRACT. EXAMINE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL CONDITIONS TO ENSURE WORK CAN BE PERFORMED WITHOUT CHANGES, AS SHOWN ON CONTRACT DRAWINGS. NO ALLOWANCE WILL BE MADE LATER FOR NECESSARY CHANGES, UNLESS IT HAS BEEN BROUGHT TO CONTRACT ADMINISTRATOR'S ATTENTION IN WRITING, PRIOR TO CLOSING OF TENDERS.

KEEP AN ONGOING SET OF 'RECORD' DRAWINGS ON SITE FOR REVIEW BY CONTRACT ADMINISTRATOR AT ANY TIME. DRAWINGS TO BE TURNED OVER UPON COMPLETION OF PROJECT.

CONDUITS SHALL NOT HAVE MORE THAN ONE VOLTAGE LEVEL OF WIRING RUNNING WITHIN THEM.

- ALL PENETRATIONS THROUGH FIRE SEPARATIONS SHALL BE RATED TO MATCH FIRE RATING.
- ALL PAINTING AND PATCHING SHALL BE DONE BY QUALIFIED LABOURERS.

CLEARLY LABEL CIRCUIT AND PANEL VIA LAMACOID ON ALL RECEPTACLES.

ANY PENETRATIONS ON FINISHED SURFACES SHALL BE FINISHED WITH TRIM. TRIM FINISHES SHALL BE BRUSHED STAINLESS STEEL AND SHALL INCLUDE TRIM RINGS, ETC. WHERE PENETRATIONS ARE MADE IN FIRE WALLS.

INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS, THE CANADIAN ELECTRICAL CODE AND ALL OTHER AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO ENSURE PROPER INSTALLATION.

1M SHALL BE KEPT CLEAR IN FRONT OF ALL PANELBOARDS AS PER CEC.

# **SUBMITTALS**

SUBMIT PRODUCT DATA FOR ALL EQUIPMENT. ACCEPTABLE MATERIALS SHALL BE AS SPECIFIED, CODE APPROVED OR OWNER APPROVED. ALL MATERIAL SHALL BE NEW, UNLESS SPECIFIED OTHERWISE. LIGHTING FIXTURES LISTED ARE PREFERRED. CONTRACTOR MAY, HOWEVER, SUBMIT ALTERNATES ONE WEEK PRIOR TO CLOSING OF TENDER TO CONTRACT ADMINISTRATOR FOR APPROVAL AS EQUIVALENT. SUBMIT SHOP DRAWINGS ON ALL CONTRACTOR PROVIDED EQUIPMENT. PROVIDE THREE (3) COPIES OF OPERATING AND MAINTENANCE MANUALS.

## **COORDINATION**

THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE SCOPE OF THE WORK REQUIRED FOR EACH TRADE. WORK SHALL BE DONE BY THE APPROPRIATE SKILLED TRADE. ALL TRADES MUST COORDINATE WORK TO ENSURE THAT THE ENTIRE SCOPE OF THE PROJECT IS COVERED. THERE SHALL BE NO ALLOWANCES GIVEN FOR ITEMS WHICH RESULT AS A FAILURE OF COORDINATION. THE CONTRACTOR WILL REVIEW THE DRAWINGS WITH ALL TRADES PRIOR TO TENDER SUBMISSION TO RESOLVE ALL COORDINATION ISSUES.

RESPONSIBILITY TO DETERMINE WHICH DIVISION OR SECTION PROVIDES VARIOUS PRODUCTS AND WORK, RESTS WITH THE CONTRACTOR. ADDITIONAL COMPENSATION WILL NOT BE CONSIDERED BECAUSE OF DIFFERENCES IN INTERPRETATION OF TECHNICAL PROVISIONS.

RECEPTACLES SHOWN NEAR OR AROUND MILLWORK SHALL BE COORDINATED WITH THE CONTRACT ADMINISTRATOR.

## PRODUCT SPECIFICATIONS:

RECEPTACLES
SINGLE RECEPTACLES, DUPLEX RECEPTACLES, CSA TYPE 5-15 R, 125 V, 15 A, U GROUND

- SUITABLE FOR NO. 10 AWG FOR BACK AND SIDE WIRING. - BREAK-OFF LINKS FOR USE AS SPLIT RECEPTACLES.
- EIGHT BACK WIRED ENTRANCES, FOUR SIDE WIRING SCREWS.
- TRIPLE WIPE CONTACTS AND RIVETED GROUNDING CONTACTS. - HUBBELL 5252 OR EQUIVALENT - WHITE

### WIRING METHODS

ALL REGULAR WIRING MAY BE AC90 WHERE HIDDEN. WHERE EXPOSED, WIRING SHALL BE RW90 IN WIREMOLD.

ALL OTHER WIRING SHALL BE MINIMUM #12AWG. WHERE A CIRCUIT IS 20A MINIMUM WIRING SIZE SHALL BE #10AWG.

### DATA WIRING

ALL DATA DROPS SHOWN SHALL BE CATEGORY 6 DROPS. ALL DATA CABLING SHALL HAVE FT-6 JACKETING. DATA CABLING SHALL BE INSTALLED BY AND AMP OR BELDEN CERTIFIED DATA INSTALLER. INSTALLATION SHALL BE COMPLETELY TESTED AND TEST REPORTS SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR. PROVIDE A COMPLETE MANUFACTURERS WARRANTY FOR THE CABLING.

LIGHTING SHALL BE AS INDICATED ON THE DRAWING NOTES.

### WIRING/ CIRCUITING NOTES

THE POWER CIRCUITING FOR THE SPACE SHALL BE RE-USED UNLESS INDICATED OTHERWISE. NEW BREAKERS SHALL BE COMPATIBLE WITH EXISTING BREAKER.

LUMINAIRE SCHEDULE				
TYPE	DESCRIPTION	VOLTAGE	LAMPS	APPROVED MANUFACTURERS
В	6" HIGH OUTPUT LED 2000 LUMEN 2700°K POTLIGHT C/W LUTRON HILUME BALLAST	120V	2000 LUMEN LED 2700°K	PORTFOLIO: L D6 20 DLUT ERW6 827H20 6LW1 H WF HB26
С	2'x4' ARCHITECTURAL SEMI-INDIRECT FIXTURE C/W LUTRON HILUME BALLAST	120V	2-28W T5 (46") 4100°K	LITHONIA: AVANTE 2AV G2 28T5 MDR — HILUME

GROUP CONSULTING ENGINEERS CHECKED DRAWN APPROVED GCN/TJC HOR. SCALE: AS SHOWN RELEASED FOR 12/05/10 CONSTRUCTION:

Winnipeg

THE CITY OF WINNIPEG PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT

PROJECT TITLE KITCHEN UPGRADES AND RENOVATIONS FOR FORT ROUGE LEISURE CENTRE - 625 OSBORNE STREET BID OPPORTUNITY NO.: 300-2012 ELECTRICAL SPECIFICATIONS AND SCHEDULE

001 COMPUTER FILE NAME 12-2326-001\_E02 CITY DRAWING NUMBER

**APEGN** Certificate of Authorization KGS Group

ELEV.

NO. REVISIONS

RE-ISSUED FOR TENDER 0 ISSUED FOR TENDER

12/04/23 AP DATE BY DATE

12/04/23 DATE

CONSULTANT DRAWING NO. E02

No. 245

REALONDE Member 32345

MAY 10,2012