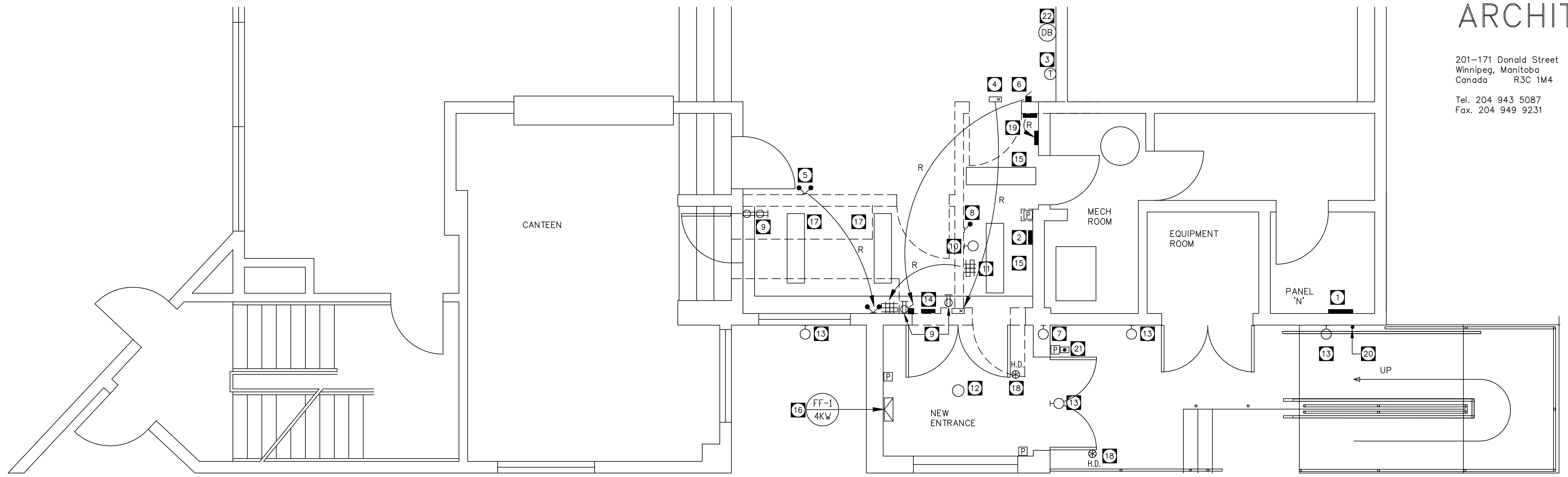


ELECTRICAL SPECIFICATIONS

- 1 - ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CANADIAN ELECTRICAL CODE, CSA 22.1, PROVINCIAL, MUNICIPAL AND OTHER CODES, RULES AND REGULATIONS.
- 2 - THE CONTRACTOR SHALL INCLUDE THE FURNISHING OF LABOUR, NEW MATERIAL, EQUIPMENT AND SERVICES NECESSARY AND REASONABLY IMPLIED AND/OR INCIDENTAL TO THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK SHOWN ON THE PLANS AND SPECIFICATIONS. SUPPLY AND INSTALL ALL DEVICES REQUIRED TO COMPLETE THE WORKS, OPERATING TO THE COMPLETE SATISFACTION OF THE RESPONSIBLE CONTRACT ADMINISTRATOR.
- 3 - PREPARE AND SUBMIT TO THE PROPER AUTHORITIES ALL NECESSARY PERMITS AND PAY ALL FEES.
- 4 - UPON COMPLETION AND BEFORE FINAL PAYMENT IS MADE, PRESENT TO THE CONTRACT ADMINISTRATOR A CERTIFICATE OF APPROVAL FOR ALL ELECTRICAL WORK FROM THE INSPECTION DEPARTMENT HAVING JURISDICTION.
- 5 - ELECTRICAL INSTALLATION INCLUDING ELECTRICAL EQUIPMENT SUPPLIED, INSTALLED, OR CONNECTED SHALL BE TESTED IN THE PRESENCE OF THE CONTRACT ADMINISTRATOR UPON COMPLETION OF WORK.
- 6 - THE CONTRACTOR SHALL VISIT THE SITE AND ASCERTAIN THAT ALL WORK INDICATED CAN BE CARRIED OUT WITHOUT ADDITIONAL COST TO THE CITY.
- 7 - THE CONTRACTOR SHALL GUARANTEE THE SATISFACTORY OPERATION OF ALL WORK AND APPARATUS INCLUDED AND INSTALLED UNDER THIS SECTION OF THE SPECIFICATION FOR A PERIOD OF TWELVE (12) CALENDAR MONTHS AFTER THE FINAL ACCEPTANCE OF THE COMPLETED INSTALLATION.
- 8 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE BUILDING BY IMPROPERLY CARRYING OUT THE WORK.
- 9 - THE CONTRACTOR SHALL CAREFULLY EXAMINE ALL DRAWINGS AND SPECIFICATIONS RELATING TO THE WORK AND TO BE CERTAIN THAT THE WORK UNDER THIS CONTRACT CAN BE SATISFACTORILY CARRIED OUT AND PRIOR TO THE SUBMISSION OF THIS TENDER, REPORT AT ONCE TO THE CONTRACT ADMINISTRATOR ANY DEFECT, DISCREPANCY, OMISSION OR INTERFERENCE AFFECTING THE WORK OF THIS SECTION OR THE GUARANTEE OF SAME.
- 10 - SUBMIT ONE SET OF CORRECTED 'AS-BUILT' SEPIAS OR CORRECTED 'CADD DISKS' TO THE CONTRACT ADMINISTRATOR.
- 11 - GROUNDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF CANADIAN ELECTRICAL CODE.
- 12 - PANELBOARDS, MOTOR STARTERS, DISCONNECT SWITCHES, ETC. SHALL BE PROPERLY IDENTIFIED BY MEANS OF ENGRAVED LAMACOID NAMEPLATES. AFFIX LAMACOID WITH RIVETS.
- 13 - SUPPLY AND INSTALL ALL MOTOR CONTROLS UNLESS NOTED OTHERWISE ON THE DRAWINGS. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF MOTORS AND MECHANICAL EQUIPMENT. UNLESS OTHERWISE SPECIFIED AND/OR SHOWN ON THE DRAWINGS, SUPPLY AND INSTALL THE FOLLOWING MOTOR CONTROL EQUIPMENT.
 - A) - MANUAL MOTOR STARTERS.
 - B) - MOTOR DISCONNECT SWITCHES.
 - C) - STARTER HEATER ELEMENTS AS REQUIRED FOR STARTERS.
 - D) - MAGNETIC MOTOR STARTERS WHICH ARE NOT PART OF THE PACKAGE EQUIPMENT.
 - E) - PUSHBUTTON STATIONS.
 - F) - HAND-OFF-AUTO SELECTOR SWITCHES.

- 14 - CONDUITS SHALL BE ELECTRIC METALLIC TUBING UNLESS OTHERWISE NOTED ON DRAWINGS OR UNLESS PROHIBITED BY REGULATIONS. CONDUITS SHALL BE CONCEALED UNLESS OTHERWISE NOTED ON THE DRAWINGS. CONDUITS SHALL NOT BE EXPOSED IN ANY AREA WHERE CONCEALED WORK IS REQUIRED WITHOUT PRIOR WRITTEN APPROVAL.
 - 15 - OUTLET, JUNCTION AND SWITCH BOXES SHALL BE GALVANIZED PRESSED STEEL OF SIZE AND TYPE TO SUIT THE REQUIREMENTS OF EACH OUTLET. OUTLET BOXES SHALL BE ACCESSIBLE.
 - 16 - ALL WIRING SHALL BE IN CONDUIT, EXCEPT THAT ARMoured CABLE SHALL BE USED FOR CABLE DROPS TO RECESSED LUMINAIRES AND IN STUD PARTITIONS.
 - 17 - WIRE AND CABLE SHALL BE COPPER AWG SIZES WITH 600V (90 DEGREE C) INSULATION. INSULATION SHALL BE X-LINK POLYETHYLENE UNLESS OTHERWISE NOTED ON DRAWINGS OR PROHIBITED BY REGULATIONS. MINIMUM WIRE SIZE SHALL BE #12 AWG.
 - 18 - PANELBOARDS SHALL BE FACTORY ASSEMBLED CUSTOM MADE OF SIZE, TYPE AND ARRANGEMENT AS SHOWN ON DRAWINGS. CIRCUIT BREAKERS SHALL BE BOLT-IN, MOULDED-CASE, THERMAL AND MAGNETIC TRIP. TRIP VALUES AS SHOWN ON DRAWING. TWO OR THREE POLE BREAKERS SHALL HAVE COMMON TRIP UNITS. MOUNT A TYPEWRITTEN DIRECTORY BEHIND A PLASTIC SHIELD ON THE INSIDE OF PANELBOARD DOORS.
 - 19 - SUPPLY AND INSTALL SPRINKLER DRIP SHIELDS ON ALL PANEL BOARDS AND TRANSFORMERS IF BUILDING IS SPRINKLERED.
 - 20 - WALL MOUNTED FLUSH SWITCHES SHALL BE COMMERCIAL GRADE 15A, 125VAC, WHITE HANDLE, SIDE OR BACK WIRING. MOUNT SWITCHES 1370mm OR 54 INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - 21 - DUPLEX RECEPTACLES SHALL BE COMMERCIAL GRADE 15A, 125VAC PARALLEL SLOT, U-GROUND, WHITE, SIDE AND BACK WIRING. MOUNT RECEPTACLES 305mm OR 12 INCHES ABOVE FINISHED FLOOR. MOUNT RECEPTACLES 150mm OR 6 INCHES ABOVE COUNTER TOPS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - 22 - COVER PLATES FOR FLUSH-MOUNTED RECEPTACLES AND SWITCHES ON CONCEALED CONDUIT SYSTEM SHALL BE WHITE.
 - 23 - TELEPHONE AND COMPUTER RACEWAY SYSTEMS SHALL BE IN SEPARATE AND INDEPENDENT CONDUIT SYSTEMS. EMPTY CONDUITS SHALL BE COMPLETE WITH A #12 AWG PULL WIRE. INSTALL AS SHOWN ON DRAWING COMPLETE ENTIRE INSTALLATION TO MTS REQUIREMENTS AND SATISFACTION.
 - 24 - THE CONTRACTOR SHALL RELOCATE OUTLETS AT NO ADDITIONAL CHARGE IF REQUESTED PRIOR TO ROUGHING IN.
 - 25 - SUPPLY AND INSTALL, WIRE AND CONNECT ALL LUMINAIRES (TO BE COMPLETE WITH LAMPS) AS INDICATED.
 - 26 - FINAL CONNECTION TO ALL MECHANICAL EQUIPMENT TO BE FLEXIBLE. OBTAIN AND REFER TO MECHANICAL SHOP DRAWINGS OF MECHANICAL EQUIPMENT FOR CIRCUIT BREAKER AND WIRE SIZE. ADJUST CIRCUIT BREAKER AND WIRE SIZE WITHOUT ADDITIONAL COST TO CONTRACT ADMINISTRATOR.
 - 27 - ALL EXISTING AND NEW EQUIPMENT IS TO BE WIRED AND CONNECTED. REFER TO AND CONFIRM EQUIPMENT NAME PLATE RATINGS FOR ELECTRICAL REQUIREMENTS PRIOR TO ROUGH-IN.
- WORK IN EXISTING BUILDINGS:** (WHERE APPLICABLE)
- 28 - ANY CUTTING AND PATCHING IN EXISTING WALLS OR FLOORS REQUIRED FOR THE ADDITION OR RELOCATION OF ELECTRICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - 29 - THE CONTRACTOR SHALL TAKE INTO ACCOUNT ITEMS WHICH THEY ARE RESPONSIBLE FOR DUE TO THE CHANGES AND ALTERATIONS TO THE EXISTING BUILDING AND ALLOW FOR SUCH ITEMS THAT MAY OCCUR IN THE TENDERED PRICE.
 - 30 - THE CONTRACTOR MAY REUSE EXISTING CONDUITS, WIRE AND OUTLETS WHICH ARE IN GOOD REPAIR AND SIZED TO MEET ALL CODE REQUIREMENTS. ALL EQUIPMENT TO BE REUSED MUST BE APPROVED BY THE LOCAL INSPECTION DEPARTMENT AND THE CONTRACT ADMINISTRATOR.



PARTIAL MAIN FLOOR PLAN

SCALE: 1/4" = 1'-0"

DRAWING NOTES:

- 1 EXISTING 400A/120V/240V/1Ø/3W ELECTRICAL PANEL 'N'
- 2 FIRE ALARM ANNUNCIATOR TO REMAIN.
- 3 THERMOSTAT TO REMAIN.
- 4 RELOCATE EXISTING EXIT SIGN.
- 5 RELOCATE EXISTING EMERGENCY LIGHTING.
- 6 RELOCATE EXISTING FIRE ALARM PULL STATION. PROVIDE V.I.
- 7 REMOVE EXISTING OUTDOOR WALL PACK.
- 8 REMOVE EXISTING EMERGENCY LIGHT.
- 9 REMOVE EXISTING RECEPTACLES.
- 10 REMOVE EXISTING WALL SCONCE.
- 11 RELOCATE EXISTING LIGHT SWITCHES.
- 12 NEW SURFACE MOUNTED LUMINAIRE LITHONIA MODEL # VR4CV 100M 120 C/W 100 MH LAMP. USE LOCAL 15A-120V CIRCUIT. WIRE TO NEW PHOTO-CELL.
- 13 NEW 100W HPS WALL PACK C/W PHOTOCELL & WIRE GUARD. USE LOCAL 15A-120V CIRCUIT. WALL PACK TO HAVE NON-BREAKABLE LENS.
- 14 REMOVE EXISTING 8 CIRCUIT PANEL. EXTEND LIVE REMAINING CIRCUITS TO MAIN DISTRIBUTION PANEL 'N'. REMOVE OR RELOCATE EXISTING JUNCTION BOX ON BEAM @ HIGH LEVEL. PROVIDE ACCESS DOORS IN NEW BULKHEAD IF JUNCTION BOXES CANNOT BE RELOCATED DUE TO SITE CONDITIONS.
- 15 EXISTING SURFACE MOUNTED 1'x4' FLUORESCENT LUMINAIRE TO REMAIN. WIRE TO LOCAL WALL SWITCH.
- 16 NEW 4KW FORCE FLOW HEATER C/W BIT, 240V/1Ø COLOR: WHITE. WIRE TO NEW 3Ø-2P BREAKER IN EXISTING MAIN DISTRIBUTION PANEL 'N' WITH 2#10 R90 IN 3/4"Ø C.
- 17 NEW 1'x4' SURFACE MOUNTED LUMINAIRE TO MATCH EXISTING. WIRE TO LOCAL SWITCH.
- 18 PROVIDE 15A-1P BREAKER FROM PANEL 'N' FOR HANDI-CAPPED DOOR OPERATOR. WIRE & CONNECT PUSH BUTTONS AS REQUIRED.
- 19 RELOCATE EXISTING SECURITY PANEL. RETAIN FORCES OF ALARM COMPANY.
- 20 REPAIR BROKEN 'LB' CONNECTOR @ WALL.
- 21 DOORBELL BUTTON MOUNTED ON WALL ABOVE THE HANDICAP DOOR BUTTON. APPROXIMATELY 5' AFF.
- 22 DOOR BELL CHIME. CONFIRM EXACT LOCATION FOR INSTALLATION ON SITE WITH CLUB MANAGER. PROVIDE PRICE FOR EXTRA CHIMES.

SYMBOL SCHEDULE	
	SURFACE/RECESSED MTD. FLUORESCENT LUMINAIRE
	WALL MTD LUMINAIRE
	SINGLE POLE SWITCH
	MULTI-GANG SWITCH. 'a' DENOTES SWITCHING
	DUPLEX RECEPTACLE
	FIRE ALARM PULL STATION
	REMOTE EMERGENCY LIGHTING HEADS
	LED EXIT LIGHT
	THERMOSTAT BY DIV. 15 WIRED BY DIV. 16
	PANELBOARD OR UNLESS OTHERWISE NOTED
	PUSH BUTTON FOR HANDI-DOOR
	HANDI-DOOR POWER
	DOOR BELL PUSH BUTTON
	DOOR BELL CHIME

HAROLD FUNK ARCHITECT INC.

201-171 Donald Street
Winnipeg, Manitoba
Canada R3C 1M4

Tel. 204 943 5087
Fax. 204 949 9231

NO.	DESCRIPTION	DATE	BY
1	ADDITION OF DOOR BELL	12.20.04	GS
REVISIONS (READ UP)			



ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE ENGINEER.
NO REPRODUCTIONS MAY BE MADE WITHOUT THE CONSENT OF THE ENGINEER AND ALL REPRODUCTIONS MUST BEAR THE NAME OF THE ENGINEER.
THIS DRAWING SHALL NOT BE SCALED.

ENGINEER

**ORIGINALLY SEALED BY
M.J. MARK ON 12/20/04**

PROJECT

**ADDITION TO LUXTON
COMMUNITY CENTRE
210 CROSS ST
WINNIPEG, MANITOBA**

SHEET TITLE		
ELECTRICAL - POWER & SYSTEMS LAYOUT		
DRAWN BY	DATE	SHEET NO.
G.S.	DEC. 2004	E-1
CHECKED BY	DESIGNED BY	
M.J.M.	M.J.M.	