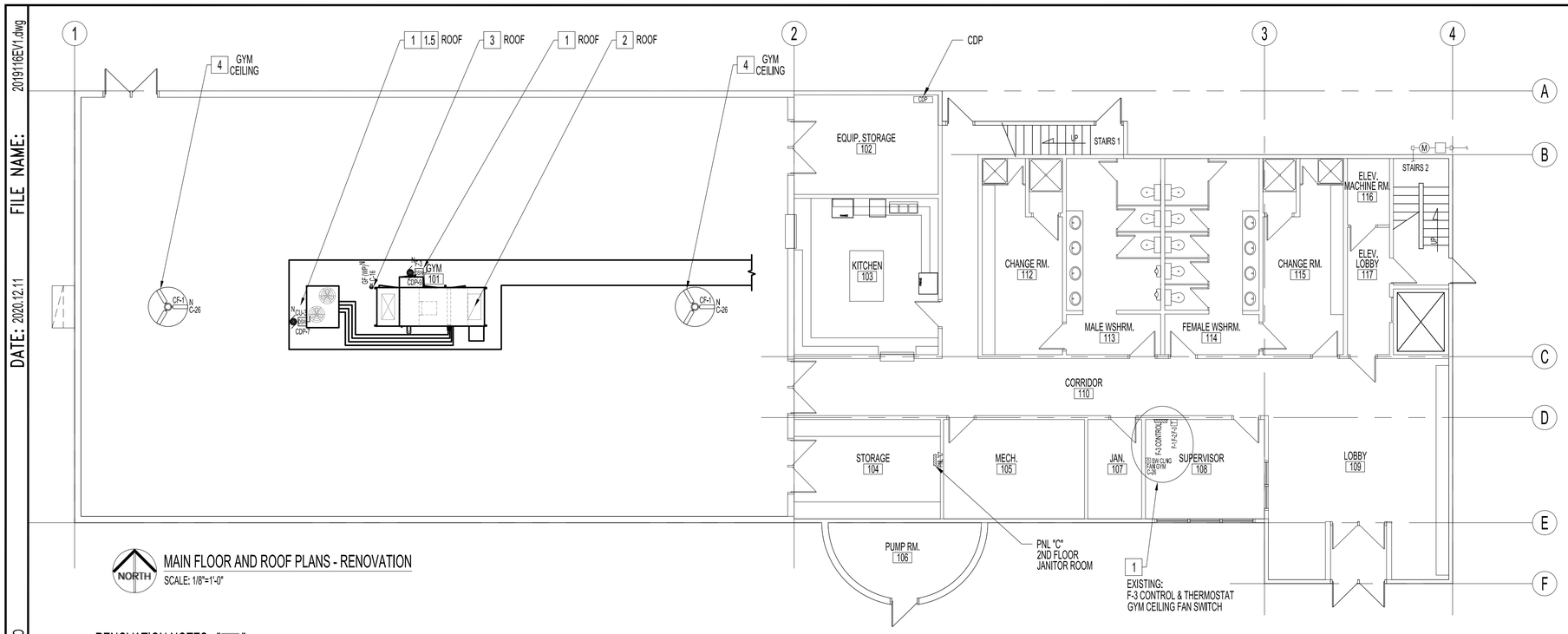

NORTH

MAIN FLOOR AND ROOF PLANS - RENOVATION

SCALE: 1/8"=1'-0"

RENOVATION NOTES: "X"

1. SUPPLY ALL NECESSARY COMPONENTS TO INSTALL (F-3), 208V/3PH/60HZ., MINIMUM CIRCUIT AMPACITY: 31.5 ELECTRICAL CONTRACTOR TO WIRE & COORDINATE WITH MECHANICAL ON SITE.
   - 1.1. DISCONNECT OLD (F-3) ELECTRICAL CONNECTION (C-16, C-17, C-18) INCLUDING ALL CONDUIT/SUPPORTS BACK TO PANEL "C" & REMOVE 30A-3P BREAKER. PROVIDE BLANK COVERS FOR C-17 & C-18 & RETYPE PANEL LIST AS PER ELECTRICAL SPECIFICATIONS INCLUDING INDICATING C-17 & C-18 ARE SPACES.
   - 1.2. WIRE (F-3) WITH MOTOR STARTER & MOTOR OVERLOADS TO CIRCUIT SHOWN WITH NEW 50A-3P CIRCUIT BREAKER & 3 / #6 AWG RW90 IN 1-1/4" EMT.
   - 1.3. INSTALLATION SHALL BE CONTROLLED BY DIVISION 16 . PROVIDE WEATHERPROOF TECK CONDUIT/CONNECTION THROUGH A WEATHER TIGHT ROOF PITCH BOX TO DISCONNECT SWITCH ON (F-3).
   - 1.4. PROVIDE ALL LINE VOLTAGE WIRING & CONTROL WIRING AS REQUIRED. REFER TO MECHANICAL DRAWING FOR LOCATION OF NEW (F-3) CONTROL CENTRE & THERMOSTAT..
   - 1.5. REUSE EXISTING (CU-3) 60A ELECTRICAL CIRCUIT IF EXISTING CONDUCTORS ARE #4 AWG MINIMUM & MEETS CEC REQUIREMENTS. PROVIDE NEW MOTOR STARTER & MOTOR OVERLOADS. INSTALL SIMILAR TO 1.3. ABOVE.
   - 1.6. PROVIDE RELAY TO INTERLOCK WITH FIRE ALARM SYSTEM TO SHUTDOWN (F-3), (CU-3) & BOTH (CF-1).
   - 1.7. PRIOR TO (F-3), (CU-3) & (CF-1) STARTUP.
     - 1.7.1. PERFORM MANUFACTURER'S START-UP CHECK LIST.
     - 1.7.2. TEST SUPPLY VOLTAGE. VOLTAGE MUST BE WITHIN 10% OF RATING PLATE, CORRECT VOLTAGE CONDITION, IF REQUIRED.
     - 1.7.3. CHECK ROTATION OF ALL 3 PHASE MOTORS.

2. PROVIDE IN-DUCT SMOKE DETECTOR (SYSTEM SENSOR MODEL: DNRA WITH DST SAMPLING TUBE) & ALL NECESSARY COMPONENTS MOUNTED TO (F-3) RETURN AIR DUCT AS PER MANUFACTURER'S INSTRUCTIONS. WIRE WITH RELAY & ALL NECESSARY COMPONENTS TO INTERLOCK WITH FIRE ALARM SYSTEM TO SHUTDOWN (F-3), (CU-3) & BOTH (CF-1) . TEST FIRE ALARM SYSTEM & SUBMIT REPORT.

3. PROVIDE MAINTENANCE EQUIPMENT 120V, 20A BRANCH CIRCUIT WITH 20A BREAKER TO CIRCUIT SHOWN, 5-20R GFCI RECEPTACLE WITH WEATHERPROOF COVER AS REQUIRED BY CEC. INSTALL ON EQUIPMENT RAILING AT 36" MINIMUM ABOVE EQUIPMENT RAILING DECK.

4. REPLACE (CF-1) WITH NEW (CF-1), REFER TO MECHANICAL. REUSE EXISTING CIRCUIT. INTERLOCK WITH FIRE ALARM SYSTEM AS NOTED ABOVE. PROVIDE (CF-1) DISCONNECTS AS PER CEC.

1.1 ELECTRICAL SPECIFICATIONS

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE, SUBMIT AND FACILITATE ALL ITEMS RELATED TO MANITOBA HYDRO POWER SMART PROGRAM INCENTIVES.

2. REFER TO MECHANICAL SPECIFICATIONS AND OTHER GENERAL CONDITIONS.

3. PROVIDE A COMPLETE AND WORKING INSTALLATION AS HEREIN SPECIFIED AND AS SHOWN ON THE DRAWINGS.

4. THE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE, PROVINCIAL AND MUNICIPAL CODES AND REGULATIONS.

5. OBTAIN ALL PERMITS, APPROVALS AND PAY ALL RELATED FEES REQUIRED FOR THIS INSTALLATION.

6. ALL EQUIPMENT SUPPLIED UNDER THIS CONTRACT SHALL BE NEW AND BE C.S.A. APPROVED.

7. COORDINATE ALL CONDUIT RUNS AS SPECIFIED OR AS PER CONTRACT ADMINISTRATOR BEFORE INSTALLATION BEGINS.

8. ARRANGE FOR COORDINATE, ROUGH-IN AND FINAL INSPECTIONS WITH INSPECTION AUTHORITIES, CONTRACT ADMINISTRATOR.

9. VISIT EXISTING SITE WHERE SUCH EQUIPMENT IS PRESENTLY INSTALLED, AND/OR OBTAIN OUTLETS, WIRING AND RECEPTACLE CONFIGURATIONS FROM EQUIPMENT MANUFACTURERS. EXACT CONFIGURATIONS MAY DIFFER FROM THOSE SHOWN ON THE DRAWINGS. INCLUDE ALL COSTS TO PROVIDE NECESSARY OUTLETS WIRING AND RECEPTACLES.

1.2 EXAMINATION

.1 EXAMINE OTHER DOCUMENTS TO ENSURE THE WORK UNDER THIS CONTRACT CAN BE SATISFACTORILY CARRIED OUT. REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR.

.2 THE CONTRACTOR SHALL EXAMINE THE SITE, LOCAL CONDITIONS AND CONSIDER HOW THEY MAY AFFECT THE PROJECT.

1.3 SUPERVISION

.1 SUPERVISE THE WORK AT ALL TIMES THROUGH A RESPONSIBLE AND COMPETENT JOURNEYMEN ELECTRICIAN / SUPERVISOR.

.2 FULL COOPERATION SHALL BE SHOWN WITH OTHER TRADES TO FACILITATE INSTALLATIONS AND TO AVOID DELAYS IN CARRYING OUT THE WORK.

1.4 ACCURACY OF DATA

.1 DRAWINGS ARE SCHEMATIC; EXACT LOCATIONS, DISTANCES, LEVELS AND OTHER DIMENSIONS SHALL BE GOVERNED BY THE BUILDING AS CONSTRUCTED.

.2 OUTLETS OR EQUIPMENT SHALL BE MOVED TO ANY POINT WITHIN A 10' RADIUS WHEN RELOCATION IS REQUESTED BY THE CONTRACT ADMINISTRATOR BEFORE THE WORK HAS BEEN SUBSTANTIALLY COMPLETED, WITHOUT ADDITIONAL COST.

.3 BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITH CIRCUITS ARRANGED EXACTLY AS SHOWN ON THE DRAWINGS. CONDUIT AND CABLE RUNS MAY BE MODIFIED TO SUIT THE INSTALLATION.

1.5 APPROVAL OF MATERIAL

.1 REQUEST FOR APPROVAL OF MATERIAL AS EQUALS OR ALTERNATES TO THAT SPECIFIED SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR IN ACCORDANCE WITH B7.

1.6 SHOP DRAWINGS

.1 PROVIDE SHOP DRAWINGS FOR REVIEW BY THE CONTRACT ADMINISTRATOR. THE SHOP DRAWINGS MUST BE ASSEMBLED INTO COMPLETE BROCHURES.

.2 THE REVIEW OF THE SHOP DRAWINGS IS FOR THE SOLE PURPOSE OF ASCERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. THE REVIEW SHALL NOT MEAN APPROVAL OF THE DETAILED DESIGN INHERENT IN THE EQUIPMENT. THE RESPONSIBILITY FOR WHICH SHALL REMAIN WITH THE CONTRACTOR. THE REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL REMAIN RESPONSIBLE FOR CONFIRMING AND CORRELATING THE DIMENSIONS ON THE JOBSITE, AND FOR INFORMATION THAT PERTAINS TO THE FABRICATION PROCESS, CONSTRUCTION TECHNIQUES, AND INSTALLATION DETAILS, AND FOR COORDINATING ALL WORK OF THE RELATED SUB-TRADES.

.3 FABRICATION OF EQUIPMENT SHALL NOT COMMENCE UNTIL SHOP DRAWINGS OF SUCH EQUIPMENT HAVE BEEN REVIEWED AND APPROVED BY THE CONTRACT ADMINISTRATOR. TWO SETS SHALL BE SUBMITTED WITH LOCAL INSPECTION DEPARTMENT FOR APPROVAL WHERE REQUIRED.

.4 THE ELECTRICAL SUB-CONTRACTOR SHALL REVIEW ALL OTHER DOCUMENTS REQUIRING ELECTRICAL CONNECTION - AND COORDINATE VOLTAGE AND SIZES WITH DIVISION 15 AND GENERAL CONTRACTOR.

1.7 AS-BUILT DRAWINGS

.1 KEEP A RECORD SET OF DRAWINGS ON-SITE AT ALL TIMES RECORDING ANY CHANGES THAT MAY OCCUR. SUBMIT THESE DRAWINGS TO THE CONTRACT ADMINISTRATOR UPON COMPLETION OF THE WORK. AS-BUILTS SHALL INCLUDE TAGGING EXISTING AND NEW CIRCUITS AND EQUIPMENT.

.2 SUBMIT A CERTIFICATE OF INSPECTION FROM THE LOCAL INSPECTION AUTHORITY UPON COMPLETION OF WORK.

.3 THE CONTRACT ADMINISTRATOR RESERVES THE RIGHT TO RECOMMEND A PORTION OF THE CONTRACT FUNDS BE WITHHELD PENDING SUBMISSION OF ACCEPTABLE ON-SITE REDLINE DRAWINGS.

1.8 TESTING

.1 THE ELECTRICAL INSTALLATION SHALL BE COMPLETELY TESTED DEMONSTRATING THE EQUIPMENT AND SYSTEMS INSTALLED PERFORM IN THE MANNER INTENDED.

1.9 GUARANTEE

.1 THE SATISFACTORY OPERATION OF ALL WORK SHALL BE GUARANTEED FOR A PERIOD OF 12 CALENDAR MONTHS AFTER FINAL ACCEPTANCE OF THE BUILDING.

1.10 REQUEST FOR CHANGE

.1 ALL QUOTATIONS IN RESPONSE TO REQUEST FOR CHANGE SHALL BE SUBMITTED COMPLETE WITH AN ITEMIZED COST BREAKDOWN OF ALL MATERIALS AND LABOUR REQUIRED IN THE CHANGE.

1.11 GROUNDING

.1 THE ENTIRE INSTALLATION SHALL BE GROUNDED IN ACCORDANCE WITH THE LATEST EDITION OF CANADIAN ELECTRICAL CODE AND AS SHOWN ON DRAWINGS.

1.12 WORKMANSHIP

.1 INSTALL EQUIPMENT, CONDUIT AND CABLES IN A WORKMANLIKE MANNER TO PRESENT A NEAT APPEARANCE TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR. INSTALL CONDUITS AND CABLE RUNS PARALLEL AND/OR PERPENDICULAR TO SITE AND BUILDING GRID LINES & COLUMNS IN CEILING SPACES, CHASES & BEHIND FURRING. IN AREAS WHERE SYSTEMS ARE TO BE EXPOSED, INSTALL NEATLY AND GROUP TO PRESENT A TIDY APPEARANCE.

.2 INSTALL EQUIPMENT AND APPARATUS REQUIRING MAINTENANCE, ADJUSTMENT OR EVENTUAL REPLACEMENT WITH ADEQUATE CLEARANCES AND ACCESSIBILITY FOR SAME.

.3 INCLUDE, IN THE WORK, ALL REQUIREMENTS SHOWN ON THE SHOP DRAWINGS OR MANUFACTURERS' INSTALLATION INSTRUCTIONS.

.4 REPLACE WORK UNSATISFACTORY TO THE CONTRACT ADMINISTRATOR WITHOUT EXTRA COST.

.5 USE OF CLIPS FOR SECURING AC90 TO CEILING SYSTEM IS PROHIBITED.

.6 ALL CONDUITS MUST BE CLIPPED TO STRUCTURAL CONCRETE BY MEANS OF SUITABLE ANCHORS OR SUPPORTED BY UNISTRUT HANGERS AS CLOSE TO UNDERSIDE AS POSSIBLE. TYE WRAPS FOR WIRE HANGING AND FASTENING IS NOT ACCEPTABLE. PERFORATED STRAPPING IS ALSO UNACCEPTABLE. ALL ELECTRICAL COMPONENTS MUST BE SUPPORTED INDEPENDENTLY.

.7 ALL ELECTRICAL SUPPORTS AND HANGER SHALL CONFORM TO LATEST EDITION OF CANADIAN ELECTRICAL CODE AND/OR MANUFACTURER'S INSTALLATION INSTRUCTIONS .

2.0 MATERIALS AND INSTALLATION

2.1 OUTLET BOXES

.1 OUTLET, JUNCTION AND SWITCH BOXES SHALL BE GALVANIZED PRESSED STEEL OF SIZE AND TYPE TO SUIT EACH INDIVIDUAL APPLICATION.

.2 OUTDOOR DUPLEX RECEPTACLE BOXES SHALL BE ONE-PIECE ZINC DIE-CAST WITH WEATHERPROOF (WP) DEVICE BOX COVERS.

.3 COMMERCIAL DUTY DUPLEX RECEPTACLES SHALL BE WHITE & CSA APPROVED.

.4 OUTLETS SHALL NOT BE LOCATED ANYWHERE ON THE EXTERIOR CURTAIN WALL. OUTLETS SHOWN SHALL BE MOUNTED ON THE NEAREST DIVIDING WALL 2' FROM OUTSIDE WALL, OR NEAREST FURRED OUT COLUMN.

.5 PROVIDE ALL REQUIRED ACCESS PANELS WITH SUITABLE FIRE RATINGS FOR THE WALL OR CEILING THEY ARE BEING INSTALLED IN.

2.2 WIRING METHODS

.1 EXISTING WIRING INCLUDING INSULATION THAT IS FRAYED, CRACKED OR DEEM NOT TO CODE SHALL BE REPLACED TO MEET CODE.

.2 UNLESS OTHERWISE SHOWN ON THE DRAWINGS, ALL WIRE SHALL BE COPPER, MINIMUM #12 AWG WITH 90 DEGREES CELSIUS X-LINK INSULATION. WIRING TO BE INSTALLED IN CONDUIT OR OTHERWISE NOTED.

.3 ALL TECK CABLES TO BE 1000V RATED.

.4 WIRING IN CONCRETE OR MASONRY CONSTRUCTION SHALL BE INSTALLED IN STEEL ELECTRICAL METALLIC TUBING (EMT). PROVIDE A SEPARATE GROUNDING CONDUCTOR IN EMT CONDUIT RUNS EMBEDDED IN CONCRETE SLABS. CONDUITS INSTALLED IN AREAS EXPOSED TO MOISTURE SHALL HAVE WATERTIGHT FITTINGS.

.5 ALL WIRING IN FINISHED AREAS SHALL BE CONCEALED. ALL CONDUCTORS AND CONDUITS SHALL BE RUN PERPENDICULAR OR PARALLEL TO THE BUILDING CORE WALLS.

.6 CONDUIT AND WIRING SHALL BE GROUPED WHERE POSSIBLE AND CLIPPED IN A NEAT AND WORKMANLIKE MANNER.

.7 CONDUIT RUNS SHALL BE INSTALLED AND INSPECTED BEFORE AC-90 RUNS ARE INSTALLED TO ENSURE CONFORMANCE WITH ITEM .5 HEREIN.

.8 THREE WIRE AC-90 SHALL NOT BE USED FOR ISOLATED GROUND WIRING, UNLESS IT INCLUDES A GREEN INSULATED CONDUCTOR FOR THIS PURPOSE.

.9 ALL AC-90 USED FOR DROPS SHALL BE RUN TIGHT TO DECK AND FOLLOW LINES OF BEAMS AND BUILDING.

.10 ALL WIRING IN SERVICE AREAS TO BE IN SURFACE MOUNTED EMT. DO NOT RUN CONDUIT HORIZONTALLY ON WALLS, VERTICAL DROPS ONLY.

2.3 IDENTIFICATION OF EQUIPMENT

.1 ALL EQUIPMENT SHALL BE IDENTIFIED WITH 3/8" X 1-1/2" (3/16" LETTERS) ENGRAVED LAMACOID NAMEPLATES INDICATING PANEL AND CIRCUIT NUMBER (A-1) AND FED FROM. LAMACOIDS SHALL BE EITHER SCREWED OR RIVETED IN PLACE. WITH EXCEPTION TO RECEPTACLES AND LIGHTING SWITCHES, SELF ADHESIVE TYPE IS ACCEPTABLE.

.2 LAMACOIDS SHALL BE WHITE LETTERING ON RED FACE FOR EMERGENCY POWER AND FIRE ALARM DEVICES.

.3 BLACK LETTERING ON WHITE FACE FOR NORMAL POWER DEVICES AND COMMUNICATION PANELS.

.4 PROVIDE 1" X 3" LAMACOIDS FOR EACH NEW CDP BREAKER, INDICATING PANEL OR FEED BEING FED.

.5 PANEL SCHEDULE SHALL BE RETYPED TO REFLECT AS-BUILT CONDITIONS & INSERTED TO INSIDE OF ASSOCIATED PANEL DOOR SLEEVE PROTECTOR.

2.4 CUTTING AND PATCHING

.1 ARRANGE AND PAY FOR ALL CUTTING AND PATCHING AS REQUIRED FOR THE ELECTRICAL INSTALLATION.

.2 PROVIDE & INSTALL APPROPRIATE FIRE STOP AT ALL FIRE WALL &/OR FLOOR PENETRATIONS. ACCEPTABLE MANUFACTURERS: HILTI, DOW CORNING, FIRE-STOP SYSTEMS (ELASTA-SEAL) OR G.E. SILICONE.

.3 REFER TO MANUFACTURERS' SPECIFICATIONS FOR PRODUCT AND INSTALLATION DETAILS.

ABBREVIATIONS

	DESCRIPTION
A	AMPERE, AMPACITY
CB	CIRCUIT BREAKER
CCT	CIRCUIT, CCT: C=PANEL "B"; CT= CIRCUIT "1" (B1)
CEC	CANADIAN ELECTRICAL CODE, LATEST EDITION
C/W	COMES WITH
CLNG	CEILING
D	DEMOLITION , REMOVE BACK TO SOURCE
DED	DEDICATED CIRCUIT
DSW	DISCONNECT SWITCH
DWG	DRAWING
E	EXISTING OR "NO DESIGNATION"
GF	GROUND FAULT CIRCUIT INTERRUPTER
JB	JUNCTION BOX
N	NEW
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
O/C	ON CENTER
PNL	PANEL
R	RELOCATE
TBD	TO BE DETERMINED
TYP.	TYPICAL
WP	WEATHERPROOF

ELECTRICAL LEGEND

TYPE	DESCRIPTION
PNL "X"	ELECTRICAL PANEL
GF (WP)	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE/WEATHERPROOF
	DUPLEX RECEPTACLE
DISC	MOTOR STARTER/DISCONNECT SWITCH
J	JUNCTION BOX

NOTES:

THIS DRAWING SHALL NOT BE SCALED. CONSULT WITH CLIENT AND DESIGNER ON ANY CONCERNS.

ALSO REFER TO MECHANICAL & ELECTRICAL DRAWINGS & SPECIFICATIONS.

SUBMISSION OF SITE MARK-UPS, AS-BUILTS, OPERATING & MAINTENANCE MANUALS AND OTHER SUPPORTING DOCUMENTS TO CLIENT ARE MANDATORY AT THE COMPLETION OF THIS PROJECT.

THE CONTRACTOR SHALL VISIT THE SITE AND ENSURE ALL DIMENSIONS, DATUM, AND DETAILED INFORMATION SHOWN ARE CORRECT.

THE CONTRACTOR IS TO REVIEW AND COORDINATE ALL ARCHITECTURAL, MECHANICAL AND ELECTRICAL COMPONENTS FOR ADDITIONAL OPENINGS THROUGH FLOORS, WALLS, AND CEILINGS FOR DUCTS, PIPES & ELECTRICAL RISERS AND ALL OPENINGS NOT SHOWN ON DRAWINGS.

ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS, APPLICABLE CODES AND AUTHORITY HAVING JURISDICTION.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING PART OF THE RENOVATION WORK.

RECONNECT & TEST ALL FIRE PREVENTION EQUIPMENT.

WARNING:
ASBESTOS MAYBE PRESENT BEHIND WALLS, CEILING SPACE & FLOORS. IF ASBESTOS & ANY HAZARDOUS MATERIAL IS FOUND, STOP WORK IMMEDIATELY & CONTACT CITY OF WINNIPEG, CENTRAL CONTROLS, PH: 204-986-2351.

No.	REVISION/DESCRIPTION	BY	DATE
1	RE-ISSUED FOR CONSTRUCTION (NO CHANGE)	DTA	DEC 11 2020
0	ISSUED FOR CONSTRUCTION	DTA	NOV 12 2020

SEAL

PROVINCE OF MANITOBA
2020-12-11
X. WU
Member
13048
REGISTERED PROFESSIONAL ENGINEER

DRAWN	CHECKED	DESIGNED	APPROVED
DTA		DTA	
DATE 2020.12.11	USER APPROVAL		

Winnipeg

THE CITY OF WINNIPEG
PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT
MUNICIPAL ACCOMMODATIONS DIVISION
3–65 GARRY STREET, R3C 4K4

PROJECT

MAGNUS ELIASON RECREATION CENTRE
ROOFTOP UNIT REPLACEMENT

430 LANGSIDE STREET

SHEET TITLE

MAIN FLOOR AND ROOF PLANS
ELECTRICAL RENOVATION

SCALE	PROJECT No:	SHEET No:
AS SHOWN	2019-116	E1-R1

DRAWING SHEET SIZE: A1 (841mm x 594mm) PLOT 1:1