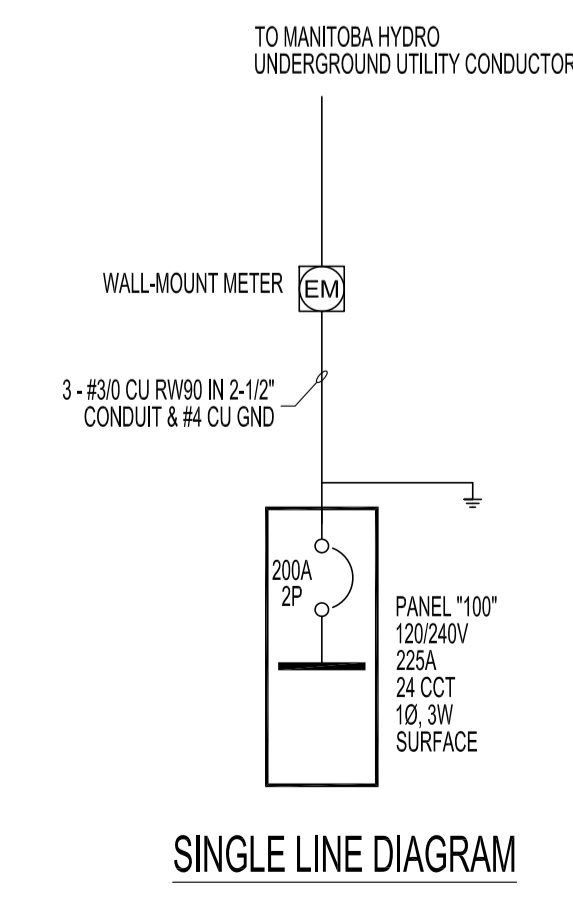


MAIN FLOOR PLAN SCALE: 1/4"=1'-0"

NOTES:	DESCRIPTION	VA	BKR	A	B	VOLTAGE MAIN BUS	REMARKS	DESCRIPTION	NOTES:
	LIGHTING, EXTERIOR	108	15	1	2	120/240V-1PH-3W		RECEPTACLE, EXTERIOR	
	LIGHTING, INTERIOR	60	15	3	4	225A		RECEPTACLE, EXTERIOR	
	EXHAUST FAN (EF-1), DAMPERS (MD)	876	15	5	6			RECEPTACLE, INTERIOR	
	GAS SENSOR (CO/NO2)	240	15	7	8			RECEPTACLE, INTERIOR	
	RECEPTACLES, INTERIOR (ELEC. PNL)	1200	15	9	10			RECEPTACLE, INTERIOR	
	RECEPTACLE, GARAGE DOOR OPENER	746	15	11	12			SPACE	
	RECEPTACLE, HEATER	9600	50	13	14			SPACE	
	SPACE			15	16			SPACE	
	SPACE			17	18			SPACE	
	SPACE			19	20			SPACE	
	SPACE			21	22	9600		RECEPTACLE, HEATER	
	SPACE			23	24				
		12830				19600			

LOAD SUMMARY			
PANEL/LOAD	CONNECTED LOAD (KW)	DEMAND FACTOR (%)	DEMAND LOAD (KW)
LIGHTING	0.2	100	0.2
RECEPTACLES	7.2	100	7.2
MECHANICAL	1.9	100	1.9
HEATER	9.6	100	9.6
AIR COMPRESSOR	9.6	100	9.6
TOTALS	28.5		28.5
AMPERAGE	119		119
AMPERAGE + 25%	148		148



SINGLE LINE DIAGRAM

- ### 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. ALSO REFER TO ARCHITECTURAL AND MECHANICAL SPECIFICATIONS AND OTHER GENERAL CONDITIONS.
 3. PROVIDE FOR 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, AND COORDINATE, ROUGH-IN AND FINAL INSPECTIONS WITH INSPECTION AUTHORITIES, CONTRACT ADMINISTRATOR.

- ### 1.2 EXAMINATION
1. EXAMINE ARCHITECTURAL AND MECHANICAL DRAWINGS TO ENSURE 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 JOURNEYPERMANENT 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 B6.

- ### 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 JOB SITE, 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 APPROVAL WHERE REQUIRED.
 4. THE ELECTRICAL SUB-CRONTACTOR SHALL REVIEW ALL MECHANICAL SHOP DRAWINGS - 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 INCLUDING EARTH GROUNDING IN ACCORDANCE WITH THE LATEST EDITION OF CANADIAN ELECTRICAL CODE (CEC) AND AS SHOWN ON DRAWINGS. ENSURE GROUND RESISTANCE IS SUITABLE FOR GRID LOCATION.
 2. PROVIDE GROUNDING TO ALL RACEWAYS & EQUIPMENT TO CEC.
 3. WIRE CONNECTORS: TWIST-ON, BOLT-ON PRESSURE TYPE FOR #10 & SMALLER. HYPRRESS COMPRESSION TYPE FOR #8 & LARGER.
 4. INSTALL SEPARATE "GREEN" GROUND CONDUCTOR IN SAME CONDUIT WITH CIRCUIT (POWER WIRING) CONDUCTORS. BOND SECURELY TO GROUND SCREW IN EACH OUTLET, JUNCTION, PULL BOX & EQUIPMENT ENCLOSURE GROUND CONDUCTOR EQUAL IN AMPACITY TO SIZE OF CIRCUIT AMPACITY OR IN ACCORDANCE WITH CODE FOR EQUIPMENT GROUNDING.
 5. PROVIDE BONDING & DEDICATED GROUNDING CABLE DIRECTLY TO MAIN GROUND FOR ALL ELECTRICAL DISTRIBUTION EQUIPMENT AS PER LATEST EDITION OF CANADIAN ELECTRICAL CODE (CEC).

- ### 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 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. TIE WRAPS FOR WIRE HANGING AND FASTENING IS NOT ACCEPTABLE. PERFORATED STRAPPING IS ALSO UNACCEPTABLE. ALL ELECTRICAL COMPONENTS MUST BE SUPPORTED INDEPENDENTLY.
 6. ALL ELECTRICAL SUPPORTS AND HANGERS SHALL CONFORM TO LATEST EDITION OF CANADIAN ELECTRICAL CODE AND/OR MANUFACTURERS' 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.

- ### 2.2 WIRING METHODS
1. UNLESS OTHERWISE INDICATED, ALL WIRING SHALL BE COPPER, MINIMUM #12 AWG WITH 90 DEGREE CELSIUS X-LINK INSULATION.
 2. ALL WIRING TO BE INSTALLED IN WALL CAVITIES OR CLIPPED TO STRUCTURE WHERE NO CAVITY IS PRESENT. ALL CONDUCTORS AND CONDUITS SHALL BE RUN PERPENDICULAR OR PARALLEL TO THE BUILDING CORE WALLS.
 3. CONDUITS, CABLES AND WIRING SHALL BE GROUPED WHERE POSSIBLE AND CLIPPED IN A NEAT AND WORKMANLIKE MANNER.

- ### 2.3 IDENTIFICATION OF EQUIPMENT
1. ALL EQUIPMENT SHALL BE IDENTIFIED WITH 1/2" WIDE (1/4" LETTERS) ENGRAVED LAMACOID NAMEPLATES INDICATING PANEL AND CIRCUIT NUMBER. LAMACOIDS SHALL BE EITHER SCREWED OR RIVETED IN PLACE. FOR NORMAL POWER, LAMACOIDS SHALL BE BLACK LETTERING ON WHITE FACE. FOR EMERGENCY POWER, LIFE SAFETY AND FIRE ALARM DEVICES, WHITE LETTERING ON RED FACE.
 2. PROVIDE 1" X 3" ENGRAVED LAMACOID (BLACK LETTERING ON WHITE FACE) FOR PANEL INDICATE VOLTAGE, PHASE, # WIRES INCLUDING A TYPED PANEL LIST IN A TRANSPARENT LIST HOLDER AFFIX TO THE INSIDE OF THE PANEL DOOR.

- ### 2.4 DEVICES
1. COLORS OF RECEPTACLES, SWITCHES, OUTLETS SHALL BE BLACK WITH SST COVER PLATES, UNLESS NOTED OTHERWISE.
 2. SWITCHES SHALL BE COMMERCIAL QUALITY, HUBBELL, ARROW HART, BRYANT, LEVITON, WOODHEAD, PASS & SEYMOUR, 15 AMPS, 125/347 VAC. MOUNT RECEPTACLES & SWITCHES 42" AFF, UNLESS OTHERWISE NOTED.

- ### 2.5 EQUIPMENT
1. ALL EQUIPMENT TO BE RATED & SUPPLIED TO COORDINATE WITH ALL POSSIBLE FAULT CONDITIONS PRESENT AT SITE.
 2. SURFACE MOUNTED COMBINATION PANEL BOARD, TRIM & LOCKING DOOR TO BE BAKED GRAY.
 3. CONNECT NEUTRAL CONDUCTORS TO COMMON NEUTRAL BUS WITH RESPECTIVE CIRCUIT(S) IDENTIFIED.
 4. BREAKER MINIMUM INTERRUPTING RATING (SYMMETRICAL RMS VALUES) SHALL NOT BE LESS THAN 22KAIC. HALF SIZED BREAKERS ARE NOT PERMITTED.
 5. ACCEPTABLE COMBINATION PANEL BOARD MANUFACTURER: EATON, SCHNEIDER, SQUARE D
 6. STANDALONE DUAL-GAS DETECTORS (CO & NO₂) - HONEYWELL E3
 7. MOTORIZED DAMPER ASSEMBLY - BELIMO

- ### 2.6 RELOCATION
1. 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.
 2. 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.

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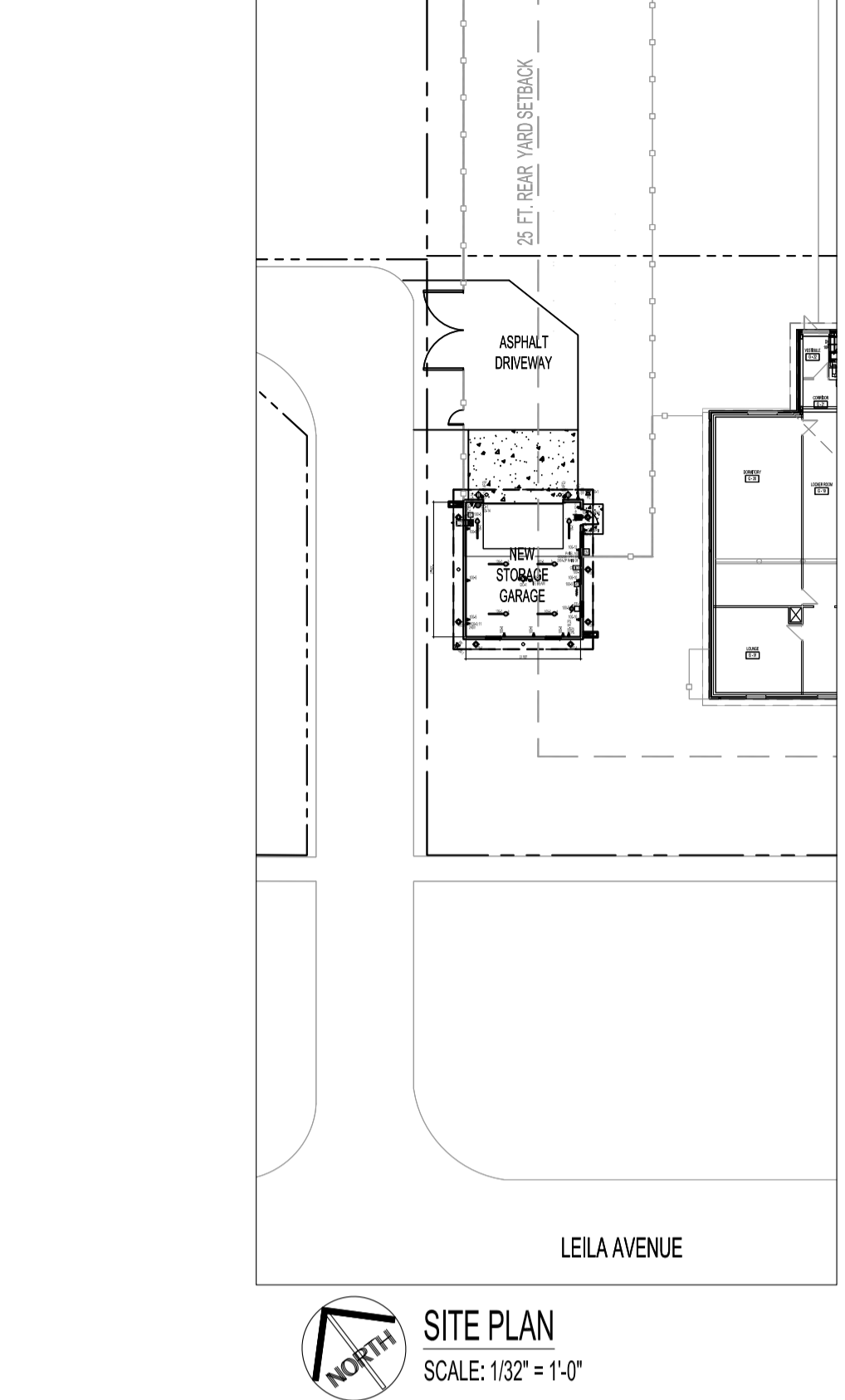
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- ### 2.22 WORKMANSHIP
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- ### 2.24 SHOP DRAWINGS
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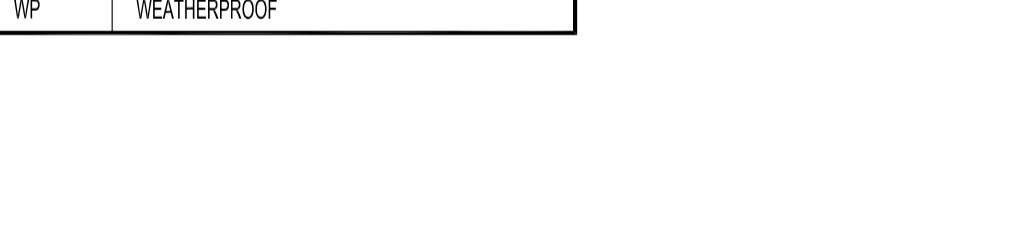


SITE PLAN SCALE: 1/32" = 1'-0"

ABBREVIATIONS	DESCRIPTION
A	AMPERE, AMPACITY
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE (DRIVE)
CB	CIRCUIT BREAKER
CCT	CIRCUIT, CCT: C-PANEL "B"; CT= CIRCUIT "1" (B1)
CEC	CANADIAN ELECTRICAL CODE, LATEST EDITION
D	DEMOLITION, REMOVE BACK TO SOURCE
DED	DEDICATED CIRCUIT
DSW	DISCONNECT SWITCH
DWG	DRAWING
E	EXISTING OR "NO DESIGNATION"
EM	ELECTRICITY METER
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

TYPE	DESCRIPTION
PNL 100	ELECTRICAL PANEL
GF (WP)	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE WEATHERPROOF
⊕	DUPLEX RECEPTACLE
⊖	RECEPTACLE, 240V
⊕	MOTOR STARTER/DISCONNECT SWITCH
⊖	DAMPER ASSEMBLY WITH ACTUATOR
CO/NO2	DUAL-GAS DETECTOR

No.	REVISION/DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	DTA	2021.11.05



DRAWN	DTA	CHECKED	DESIGNED	DTA	APPROVED
DATE	2021.10.12	USER	APPROVAL		

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

PROJECT
PARKS AND OPEN SPACE
AMBER TRAILS - STORAGE GARAGE

10 ALLAN BLYE DRIVE
SHEET TITLE
SITE AND MAIN FLOOR PLAN
ELECTRICAL
POWER, SYSTEMS AND SLD

SCALE	PROJECT No:	SHEET No:
AS SHOWN	2020-126	E1

NOTES:
THESE DRAWINGS SHALL NOT BE SCALED. CONSULT WITH CLIENT AND DESIGNER ON ANY CONCERNS.
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 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.

ALL NEW LIGHTING LUMINAIRES AND COMPONENTS SHALL BE MANITOBA HYDRO POWER SMART APPROVED.