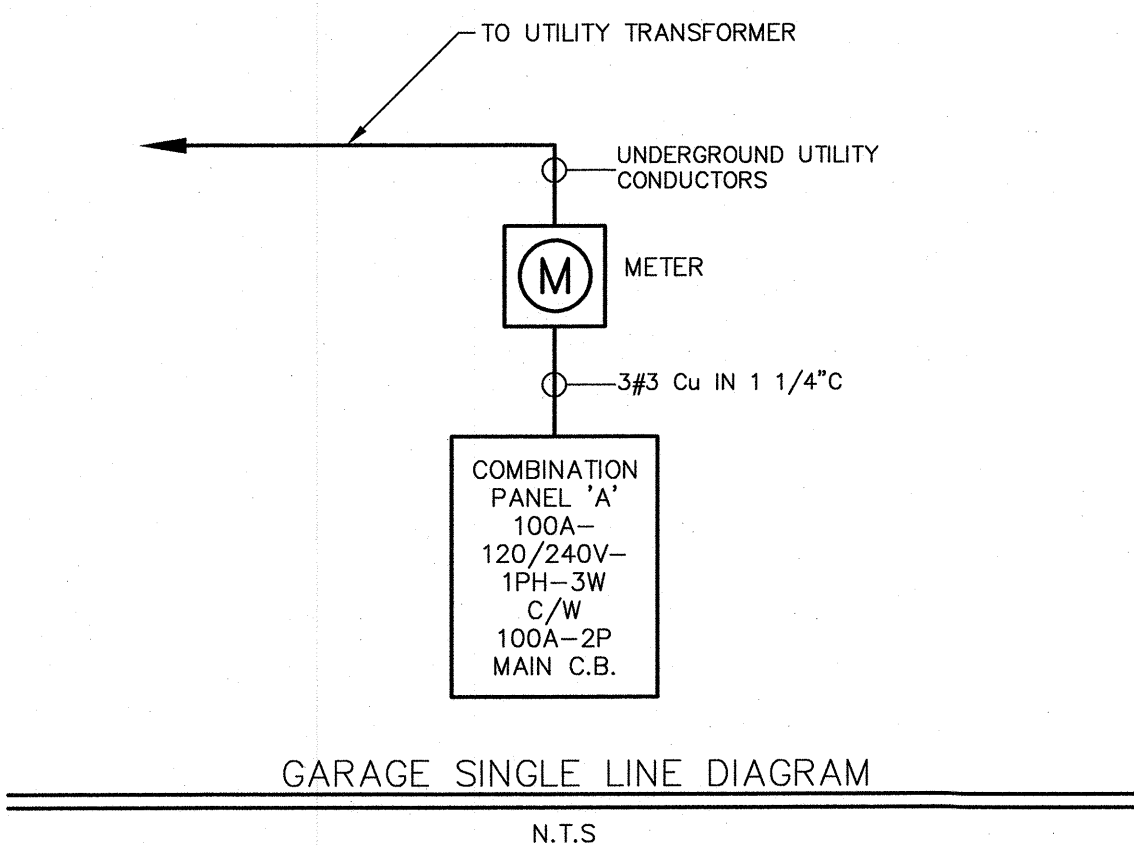


**ELECTRICAL SPECIFICATION**

1. Scope of Work - The contract shall include the furnishing of labour, new material, equipment and services necessary and reasonably implied and incidental to the complete installation of the electrical work shown on the plans and specifications. Supply and install all devices required for the complete approved system, operating to the complete satisfaction of the contract administrator.
2. Laws, Rules, Ordinances and Inspections - The entire electrical installation shall comply with the latest edition of the Canadian Electrical Code and with all provincial and municipal laws, rules and ordinances. Prepare and submit to the proper authorities all necessary permits and pay all permit fees.
3. Drawings - The Electrical Subcontractor shall carefully examine all drawings relating to the work, to be certain that the work under this contract can be carried out and, prior to the submission of his 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.
4. Responsibility - Be responsible for any damage caused the City or their contractors by improperly carrying out this contract.
5. Identification - Install designatory lettering on all electrical equipment.
6. Existing Work - The Electrical Subcontractor shall take into account items which he/she is responsible for due to the changes and alterations to the existing building and allow for such items that may occur in his/her tendered price.
7. Minimum wire size #12 AWG all wiring to be copper.
8. Unless otherwise instructed in writing, conceal all wiring.
9. Final electrical installation shall conform to electrical subcontractors contractual obligations with respect to this project. Responsible professional engineer is to be notified of any deviations contemplated to the design.
10. Owner to pay all utility contribution charges for associated power. Electrical subcontractor to provide trenching and backfilling as required. Coordinate all requirements with utilities prior to tender close to ensure availability and contribution costs of services.
11. All electrical outlets and devices to be labeled with circuit number and panel. Use black letters on white background for non emergency devices and black letters on red background for emergency devices.

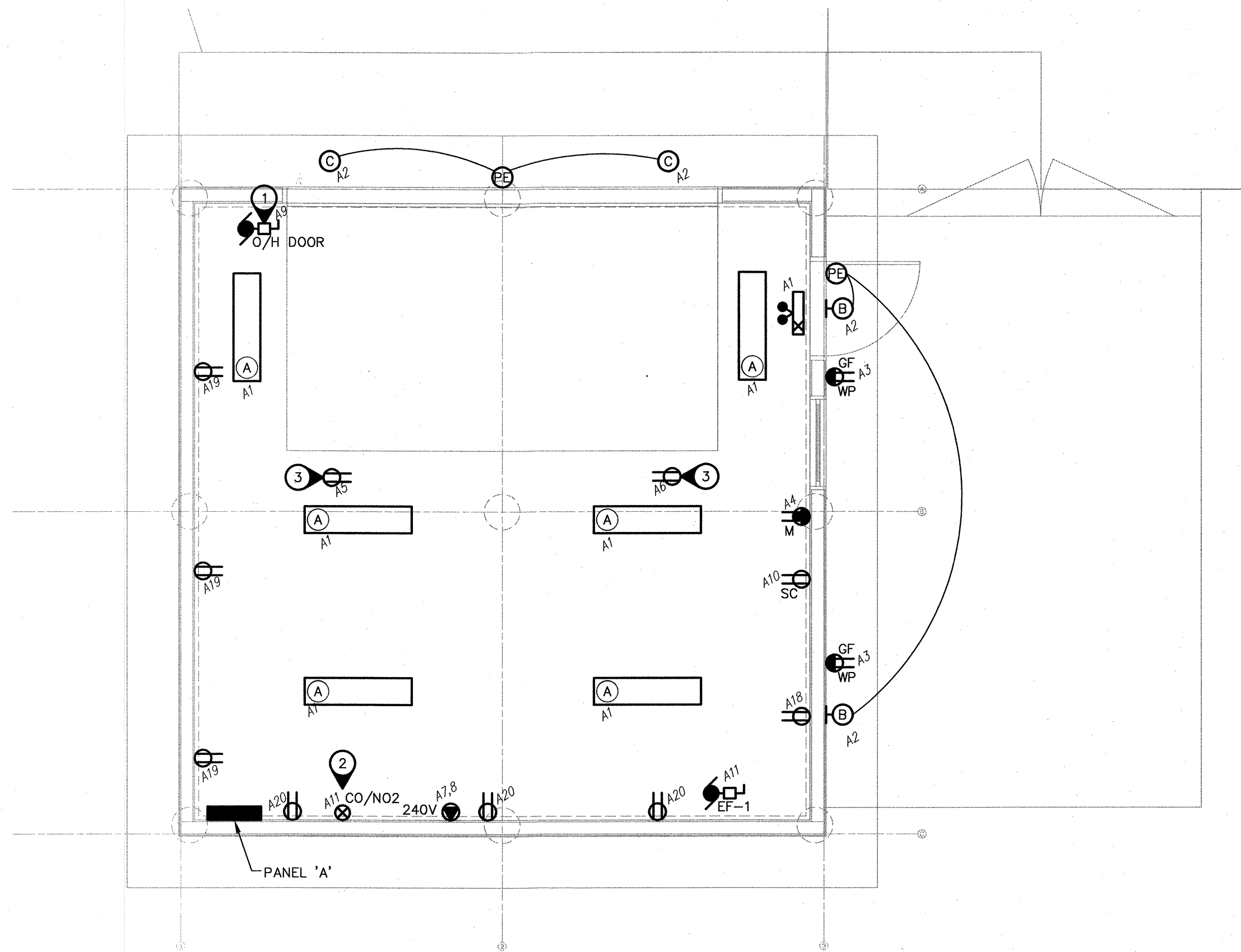


\* SIZE CIRCUIT BREAKER AND WIRING ACCORDING TO THE FINAL NAMEPLATE RATING ON THE EQUIPMENT.

PANEL LOCATION	'A'	MOUNTING SURFACE	VOLTAGE	120/208V-3PH-4W	MAIN BUS	100A	REMARKS	C/W DOOR
DESCRIPTION	BKR	CIRCUIT	BKR	DESCRIPTION				
LIGHTING, EMERGENCY LIGHTING	15	1-13	-	SPACE				
EXTERIOR LIGHTING	15	2-14	-	SPACE				
WP GF RECEPTACLE	15	3-15	-	SPACE				
MICROWAVE T-SLOT RECEPTACLE	20	4-16	-	SPACE				
CEILING REEL RECEPTACLE	15	5-17	-	SPACE				
CEILING REEL RECEPTACLE	15	6-18	15	RECEPTACLE				
AIR COMPRESSOR RECEPTACLE	15	7-19	15	RECEPTACLE				
	8	8-20	15	RECEPTACLE				
OVERHEAD DOOR OPERATOR	15	9-21	-	SPACE				
SC RECEPTACLE	15	10-22	-	SPACE				
EF-1, CO/NO2	15	11-23	15	SPARE				
SPACE	-	12-24	15	SPARE				

**SPECIFIC ELECTRICAL NOTES**

1. WIRE AND CONNECT OVER HEAD DOOR AND ALL ASSOCIATED CONTROLS AS PER MANUFACTURERS RECOMMENDATIONS.
2. WIRE AND CONNECT CO/NO2 ALARM AS PER MANUFACTURERS RECOMMENDATIONS. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL SUBCONTRACTOR.
3. RECEPTACLE MOUNTED ON CEILING.



**SYMBOL SCHEDULE**

- Linear luminaire, 'B1-a' denotes panel circuit # and switch.
- Ceiling mounted luminaire.
- Wall mounted luminaire. 'A' denotes type.
- Single pole switch.
- Single pole switches in multiple.
- Photozell by electrical contractor c/w occupancy sensor. Sensorswitch SBOR 6 ODP VLP TBD 2V.
- Duplex receptacle.
- Duplex receptacle on separate circuit. Provide lamacol label indicating "SC".
- 20A T-slot receptacle for microwave mounted above counter. Verify location before installation.
- Duplex receptacle mounted above counter level. (See architectural elevations.)
- Duplex receptacle weather proof.
- Ground fault duplex receptacle.
- Special outlet to match owners equipment. Confirm voltage, amperage, poles and configuration prior to installation.
- Motor. Refer to mechanical for exact location. For roof mounted equipment, supply and install wire and connect a separate circuit GFI receptacle in accordance with C.E.C. rule 26-704.
- Fusible disconnect switch to suit application. By electrical contractor.
- Junction box.
- Combination LED pictogram exit sign/emergency double head fixture c/w two(2) 6W (540 lumen) LED lamps and integral battery backup (minimum 30 minutes). Ailmitte.
- Underground service point. Co-ordinate location with Manitoba Hydro prior to rough-in. Run main feeders to utility preferred location. Provide adequate clearance from grade. Provide all necessary mounting attachments, trench, backfilling, mechanical protection, etc.

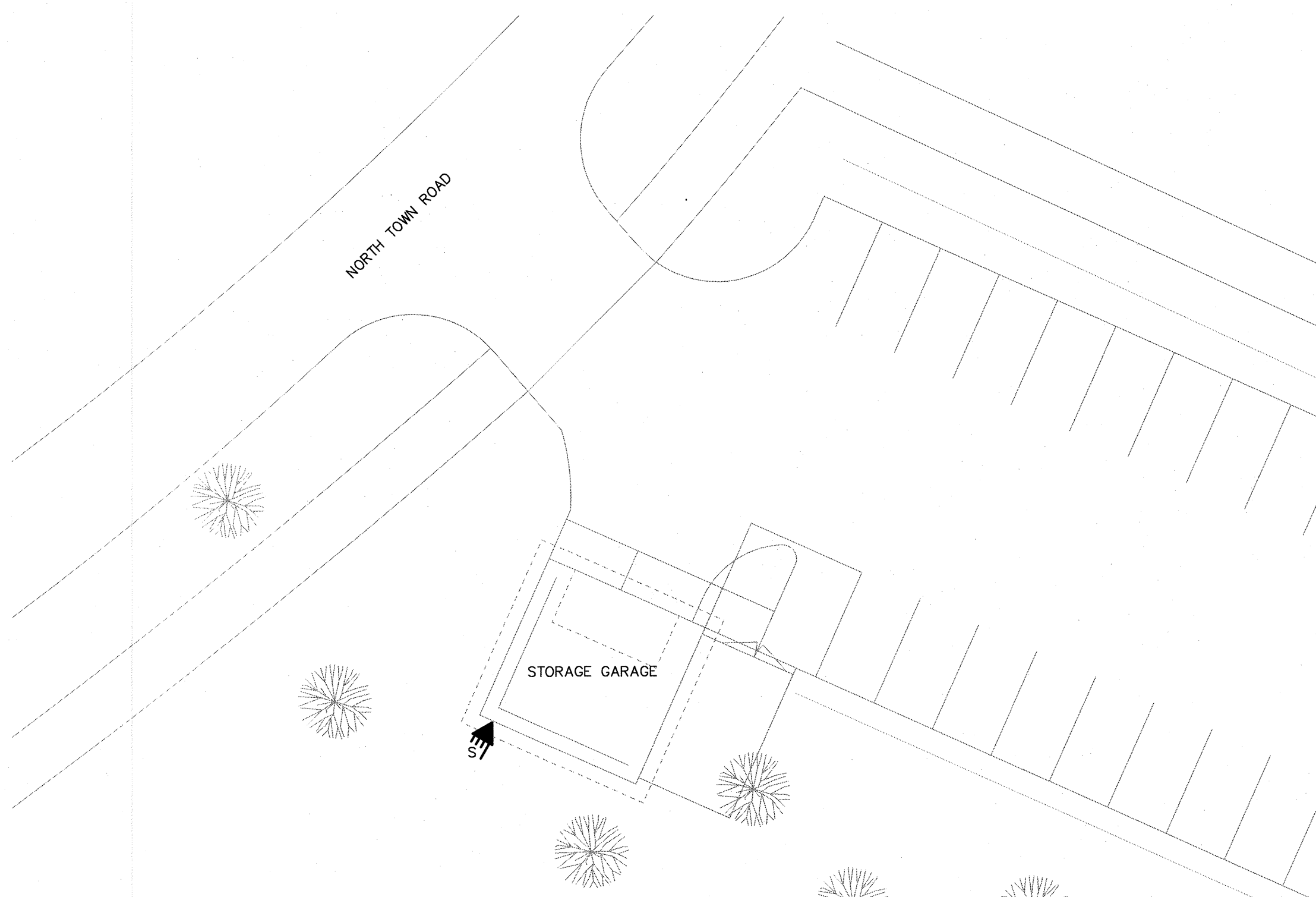
LUMINAIRE SCHEDULE				
TYPE	DESCRIPTION	MOUNTING	CATALOG NUMBER	LAMPS
A	4' LED VAPOR PROOF	SURFACE	LITHONIA FEM L48 4000LM IMAFL MD 120 GZ10 40K 80CRI	31W LED
B	LED EXTERIOR WALL PACK	SURFACE	LITHONIA DSXW1 10C 350 40K T4M 120 DMG TBD	13W LED
C	6" ROUND LED DOWN LIGHT	RECESSED IN SOFFIT	LITHONIA LDN6 40/05 L06AR LSS 120 GZ10 WL	7.6W LED

LUMINAIRE SCHEDULE NOTES:  
 1. ALL FLUORESCENT BALLAST TO BE ELECTRONIC.  
 2. UNLESS OTHERWISE NOTED, ALL FLUORESCENT LAMPS TO BE 3500K & 85 CRI, ALL LEDS TO BE 4000K & 80 CRI.  
 3. PROVIDE PHOTOCELL CONTROL FOR ALL OUTDOOR LUMINAIRES.  
 4. ALL LUMINAIRES TO BE MB HYDRO "POWER SMART" APPROVED.

MOTOR SCHEDULE								
NO.	DESCRIPTION	LOCATION	VOLTAGE	HP/W/MCA	C.B.	COND.	STARTER	NOTES
EF-1	EXHAUST FAN	GARAGE	120V-1PH	1/4 HP	15A-1P	#12	-	1

SPECIFIC NOTES  
 1. WIRE AND CONNECT AS REQUIRED. REFER TO MECHANICAL.

GENERAL NOTES  
 A. MANUAL STARTERS TO BE C/W OVERCURRENT PROTECTION.  
 B. ALL DISCONNECT SWITCHES TO BE SUPPLIED BY ELECTRICAL SUBCONTRACTOR.  
 C. ELECTRICAL SUBCONTRACTOR TO PROVIDE CIRCUIT BREAKERS AND WIRING ACCORDING TO THE FINAL NAMEPLATES OF ALL THE MECHANICAL EQUIPMENT.  
 D. ALL LOW VOLTAGE CONTROL WIRING BY MECHANICAL SUBCONTRACTOR.  
 E. ALL LINE VOLTAGE CONTROL WIRING BY ELECTRICAL SUBCONTRACTOR - REFER TO MECHANICAL SECTION. CO-ORDINATE EXACT REQUIREMENTS WITH MECHANICAL SUBCONTRACTOR.



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Revisions

Nov, 28, 2019	Issued for construction
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Sept, 04, 2019	Issued for 95% review
Date	Revision

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**APEGM**  
 Certificate of Authorization  
 Nova 3 Engineering Ltd.  
 No. 962 Date: 2019-11-29

Stamp

Project  
 City of Winnipeg  
**Bridgwater Storage  
 Garage**  
 200 North Town Road  
 Winnipeg, Manitoba

drawing title  
**MAIN FLOOR PLAN ELECTRICAL**

scale	as noted	designed by	ajt
date	August, 2019	drawn by	mv
project no.	19.236	reviewed by	ajt
reference no.	sheet	E1.0	REV.