

ELECTRICAL SPECIFICATION

Electrical installation shall be in accordance with the current edition of The Canadian Electrical Code, Provincial, Municipal and other codes, rules and regulations.

The Contract shall include the furnishing of labor, new material, equipment and services necessary and reasonably implied and/or incidental to the complete installation of the electrical Work as shown on the plans and or specified. Supply and install all devices required for the complete approved system, operating to the complete satisfaction of the Contract Administrator.

Prepare and submit to the proper authorities all necessary permits and pay all fees.

Upon completion and before final payment is made, present to Contract Administrator a Certificate of Approval for all electrical Work from the inspection department having jurisdiction.

Electrical installation including electrical equipment supplied, installed or connected shall be tested in the presence of the Contract Administrator on completion of the Work.

The Contractor shall visit the site and ascertain that all Work indicated can be carried out without additional cost to the Contract Administrator.

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 complete building.

The Contractor shall be responsible for any damage caused the Contract Administrator or their Subcontractors by improperly carrying out this Contract.

The Contractor shall carefully examine all drawings and specifications relating to the Work to be certain that the Work under this Contract can be satisfactorily carried out and prior to the submission of his Bid, report at once to the Contract Administrator any defect, discrepancy, omission or interference affecting the Work of this section or the guarantee of same.

Submit one set of corrected "as-built" plans and one electronic copy 100% AutoCAD 2007 compatible to the Contract Administrator.

Grounding shall be in accordance with the latest edition of The Canadian Electrical Code.

Panelboards, motor starters, disconnect switches, etc., shall be properly identified by means of engraved lamacoid nameplates.

Conduits shall be rigid PVC unless otherwise noted on drawings or unless prohibited by regulations. Conduits shall not be exposed in any area where concealed Work is required without prior written approval.

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.

All wiring shall be in conduit.

Wire and cable shall be copper of standard AWG sizes with 600V (90 Degree C) insulation. Insulation shall be X-Link Polyethylene unless otherwise noted on drawings or prohibited by regulations. Aluminum conductors will not be accepted. Minimum wire size shall be # 12 AWG.

Panelboards shall be factory-assembled custom made of size, type and arrangement as shown on drawing. Circuit breakers shall be bolt-in, moulded-case, thermal and magnetic trip, and shall match existing. 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. All distribution equipment to be sprinkler-proof. Minimum fault rating of circuit breakers shall be 22KA S.C.I.C.

Wall-mounted flush switches shall be specification grade 15A,125VAC. White handle, side or back wiring. Mount switches 1200mm above finished floor unless otherwise noted on the drawings.

Duplex receptacles shall be specification grade 15A,125VAC, parallel slot, U-ground, white, side and back wiring. Mount receptacles 305mm above finished floor or 150mm above counter tops unless otherwise noted on the drawings.

Cover plates for flush-mounted receptacles and switches on concealed conduit system shall be stainless steel.

Mount surface-mounted equipment such as panelboards, telephone cabinets and other electrical equipment on plywood mounting boards, c/w gray enamel finish.

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.

Existing Work:
The Contractor shall take into account items which he is responsible for due to the changes and alterations to the existing building and allow for such items that may occur in his tendered price.

The Contractor is to notify the supply utility of all load increases to existing service.

Existing conduits, wire and outlets which are in good repair and sized to meet all code requirements, may be reused. All equipment to be reused must be approved by the local inspection department and the Contract Administrator.

The electrical contractor shall relocate outlets at no additional charge if requested prior to roughing in. The electrical contractor shall relocate outlets at no additional charge if requested by the local authority having jurisdiction.

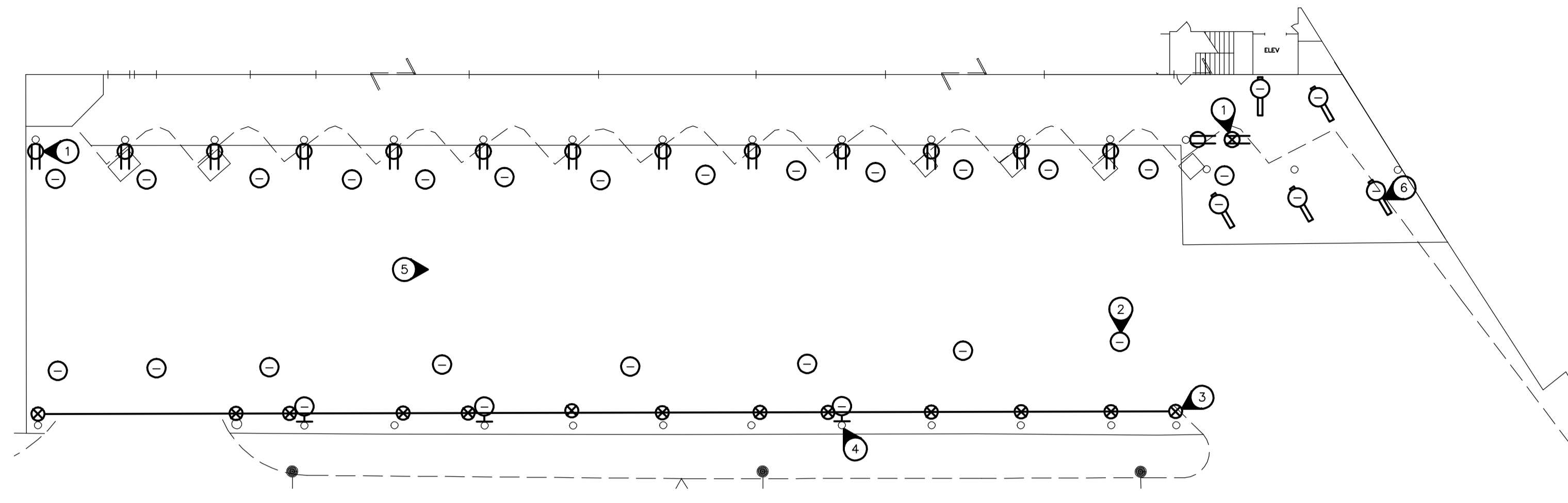
Electrical installation shall be installed in conformance with the barrier free requirements applicable in the Building Code.

Equipment and material shall be installed as specified. Requests for equal status shall be submitted to Contract Administrator in accordance with B6.

Contractor shall submit shop drawings to Contract Administrator for review prior to ordering equipment.

Supply and install, wire and connect all luminaires (to be complete with lamps) as indicated. All luminaires exceeding 150V shall be complete with an integral disconnecting means that will simultaneously open all circuit conductors and conductors supplying the ballast(s). All luminaires exceeding 150V shall be marked in a conspicuous, legible, and permanent manner adjacent to the disconnecting means, identifying the specific purpose. Refer to Canadian Electrical Code rule 30-308(4).

Pay all utility contribution charges for associated power service. Coordinate with utility to ensure availability of service.



DEMOLITION - MAIN FLOOR PLAN
SCALE: 1:250

SYMBOL SCHEDULE

	Fluorescent luminaire, B1-A - denotes panel circuit No. and switch.
	Night light fluorescent luminaire.
	Ceiling mounted luminaire.
	Wall mounted luminaire. 'A' denotes type.
	Junction box.
	Duplex receptacle.
	208V receptacle.

GENERAL ELECTRICAL NOTES

- PROVIDE ELECTRICAL DEMOLITION TO ACCOMMODATE NEW CONSTRUCTION/RENOVATIONS. EXAMINE THE SITE AND LOCAL CONDITIONS TO ESTABLISH ALL INFORMATION PERTAINING TO THE ELECTRICAL DEMOLITION SCOPE OF WORK. NO EXTRA COMPENSATION WILL BE ALLOWED DUE TO FAILURE TO MAKE THIS EXAMINATION.
- ALL ITEMS REQUIRED TO BE DEMOLISHED ARE NOT NECESSARILY SHOWN. THOSE INDICATED ARE FOR REFERENCE ONLY. ALL ITEMS INTERFERING WITH NEW CONSTRUCTION SHALL BE REMOVED AT NO ADDITIONAL COST.

SPECIFIC ELECTRICAL NOTES

- REMOVE EXISTING RECEPTACLES. CAP WIRING AND BLANK OFF, MAKE SAFE. (TYPICAL)
- EXISTING CEILING MOUNTED HID. DISCONNECT AND REMOVE ALL INCLUDING ALL ASSOCIATED WIRING AND CONDUIT. (TYPICAL)
- EXISTING CEILING CONDUIT AND J.B. TO BE REMOVED. (TYPICAL)
- EXISTING LUMINAIRE TO BE REMOVED. (TYPICAL)
- ALL EXISTING UNUSED ELECTRICAL ON UNDERSIDE OF PARKING GARAGE FLOOR ABOVE TO BE REMOVED BACK TO BUILDING ENVELOPE, MAKE SAFE.
- 8' FLUORESCENT LUMINAIRE TO BE REMOVED. (TYPICAL)

PANEL MOUNTING LOCATION	T SURFACE SEE DRAWING	VOLTAGE MAIN BUS	120/208V-3PH-4W 200A	REMARKS
DESCRIPTION	BKR	CIRCUIT	BKR	DESCRIPTION
NIGHT LIGHTING (#8 WIRE)	15	1	22	SPACE
NIGHT LIGHTING (#10 WIRE)	15	2	23	SPACE
NIGHT LIGHTING (#8 WIRE)	15	3	24	SPACE
NIGHT LIGHTING (#10 WIRE)	15	4	25	SPACE
LIGHTING (#8 WIRE)	15	5	26	15 SIGN (#10 WIRE)
LIGHTING (#8 WIRE)	20	6	27	30 HEATER
LIGHTING (#8 WIRE)	20	7	28	#8 WIRE
LIGHTING (#8 WIRE)	20	8	29	15 HEATER
LIGHTING (#10 WIRE)	15	9	30	#10 WIRE
LIGHTING (#10 WIRE)	20	10	31	15 LIGHTING (#10 WIRE)
LIGHTING (#10 WIRE)	20	11	32	15 SIGNS (#10 WIRE)
LIGHTING (#10 WIRE)	20	12	33	30 HEATER
LIGHTING (#10 WIRE)	15	13	34	#8 WIRE
LIGHTING (#10 WIRE)	20	14	35	15 HEATER
LIGHTING (#10 WIRE)	20	15	36	#10 WIRE
LIGHTING (#10 WIRE)	20	16	37	15 LIGHTING (#10 WIRE)
LIGHTING (#10 WIRE)	15	17	38	15 PANEL RECEPTACLE
LIGHTING (#8 WIRE)	20	18	39	15 SPARE
LIGHTING (#8 WIRE)	20	19	40	20 SPARE
LIGHTING (# 10 WIRE)	15	20	41	20 SPARE
SPACE	-	21	42	20 SPARE

* CONTROLLED BY ASTRONOMICAL TIME CLOCK - TO BE ON DURING ALL HOURS OF TRANSIT OPERATION
 ** CONTROLLED BY ASTRONOMICAL TIME CLOCK - TO BE ON DURING ALL DAYLIGHT HOURS

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF NOVA 3 ENGINEERING LTD. AND MAY ONLY BE REPRODUCED WITH THE WRITTEN PERMISSION OF NOVA 3 ENGINEERING LTD. THE CONCEPT AND DESIGN INCORPORATED INTO THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY THE CLIENT AND OTHER RELATED SOURCES. PROFESSIONAL ENGINEER ACCEPTS NO RESPONSIBILITY FOR DRAWING AND DESIGN UNLESS DRAWING IS ACCOMPANIED BY ORIGINAL SEALED AND SIGNED LETTER OF INTENT AND CERTIFICATE OF INSPECTION. REFER TO WWW.NOVA3.CA FOR CAUTIONARY NOTES.

UNDERGROUND STRUCTURES	B.M. ELEV.	BENCHMARK INFO HERE	
SUPPLY U/G STRUCTURES COMMITTEE	DATE		
NOTE:			
2	ISSUED FOR TENDER	2009.07.31	DZ
1	ISSUED FOR REVIEW	2009.07.15	DZ
NO.	REVISIONS	DATE	BY

DESIGNED BY	DZ
DRAWN BY	DF
CHECKED BY	WJT / DZ
APPROVED BY	
HOR. SCALE	AS SHOWN
VERTICAL	
DATE	JULY 31, 2009

NOVA 3 ENGINEERING LTD.
CONSULTING ENGINEERS

201-120 FORT STREET
WINNIPEG, MANITOBA R3C 1C7
TEL.: (204) 943-6142
FAX.: (204) 942-1276

RELEASED FOR CONSTRUCTION

ENGINEER'S SEAL

PROVINCE OF MANITOBA
ORIGINALLY STAMPED BY
D. P. ZILINSKI
2009.07.31
REGISTERED ENGINEER

CONSULTANT PROJECT NO.
29-016

THE CITY OF WINNIPEG
TRANSIT DEPARTMENT

BALMORAL TRANSIT TERMINAL

CITY DRAWING NUMBER
P-3313-09

SHEET 9 OF 10

ELECTRICAL SCHEDULES & DEMOLITION

540-2009