ELECTRICAL SPECIFICATION:

SCOPE:

- 1. PROVIDE ALL LABOUR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY (INCLUDING ALL SUCH REASONABLY IMPLIED OR INCIDENTAL), TO COMPLETE THE ELECTRICAL INSTALLATION AS INDICATED ON THE ELECTRICAL DRAWINGS. THE COMPLETE SYSTEM IS TO BE APPROVED, INSTALLED AND OPERATIONAL TO THE SATISFACTION OF THE RESPONSIBLE PROFESSIONAL ENGINEER.
- 2. THE WORK IS TO INCLUDE (BUT NOT NECESSARILY BE LIMITED TO) THE FOLLOWING:
 - a. PROVIDE PEDESTRIAN LIGHTING, POLES AND BASES AS INDICATED ON THE DRAWINGS.
 - b. PROVIDE NEW CIRCUIT BREAKERS AS INDICATED ON THE DRAWINGS.c. COORDINATION WITH UTILITY FOR A NEW SERVICE DROP AND METERING TO SERVE THE PEDESTRIAN LIGHTS.
 - d. COORDINATE WITH CITY OF WINNIPEG REPRESENTATIVE ON SITE AND OFF SITE TO MEET THE INSTALLATION
 - e. PROVIDE EQUIPMENT AND MATERIAL AS SPECIFIED.
 - f. PROVIDE ALL REQUIRED GROUNDING AND BONDING. GROUNDING TO INCLUDE 2 GROUND RODS INSTALLED IN ACCORDANCE WITH CEC. PROVIDE AN INSULATED #12 BOND CONDUCTOR WITH EACH CIRCUIT IN CONDUIT.

STANDARDS AND REGULATIONS:

- 3. THE ENTIRE ELECTRICAL INSTALLATION IS TO BE IN ACCORDANCE WITH ALL CURRENT CODES, RULES AND REGULATIONS, INCLUDING (BUT NOT LIMITED TO) THE CURRENT EDITIONS OF THE CANADIAN ELECTRICAL CODE, WITH ALL APPLICABLE PROVINCIAL AND MUNICIPAL AMENDMENTS.
- 4. INSTALL ALL EQUIPMENT AND DEVICES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 5. ALL EQUIPMENT SUPPLIED UNDER THIS CONTRACT SHALL BE CSA APPROVED.

SUBMISSIONS:

- 6. ALL REQUIRED PERMITS AND THEIR APPLICATIONS ARE TO BE PROVIDED TO THE PROPER AUTHORITIES. PAY ALL ASSOCIATED FEES.
- 7. SHOP DRAWINGS ARE TO BE SUBMITTED TO THE RESPONSIBLE PROFESSIONAL ENGINEER PRIOR TO ORDERING EQUIPMENT, AND NO EQUIPMENT IS TO BE ORDERED WITHOUT THE ENGINEER'S REVIEW.
- 8. A CERTIFICATE OF APPROVAL FROM THE AUTHORITY HAVING JURISDICTION FOR THE COMPLETE ELECTRICAL INSTALLATION IS TO BE SUBMITTED TO THE RESPONSIBLE PROFESSIONAL ENGINEER AFTER ALL WORK IS COMPLETE, BUT BEFORE FINAL PAYMENT HAS BEEN MADE.
- 9. ONE(1) HARD COPY SET OF CORRECTED "AS-BUILT" DRAWINGS IS TO BE SUBMITTED TO THE OWNER AT CLOSE OF PROJECT.
- 10. A GUARANTEE THAT ALL NEWLY INSTALLED OR MODIFIED ELECTRICAL IS TO OPERATE SATISFACTORILY FOR A PERIOD OF TWELVE(12) MONTHS AFTER FINAL ACCEPTANCE OF ALL BUILDING WORK.

RESPONSIBILITY:

- 11. THE ELECTRICAL CONTRACTOR IS TO VISIT SITE TO CONFIRM THAT ALL ELECTRICAL WORK INDICATED CAN BE COMPLETED WITHOUT ANY ADDITIONAL COST TO THE OWNER.
- 12. THE ELECTRICAL CONTRACTOR IS TO REVIEW ALL DRAWINGS AND SPECIFICATIONS (INCLUDING RELATED ELECTRICAL, CIVIL, AND LANDSCAPE) TO CONFIRM THAT THE WORK REPRESENTED THEREIN CAN BE COMPLETED. ANY DEFECT, DISCREPANCY, OMISSION OR INTERFERENCE THAT IS DISCOVERED TO AFFECT THE SATISFACTORY COMPLETION OF THE WORK OR ITS WARRANTY IS TO BE REPORTED IMMEDIATELY TO THE RESPONSIBLE PROFESSIONAL ENGINEER.
- 13. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR ANY DAMAGE DONE BY PERFORMING THIS WORK IMPROPERLY.
- 14. THE ELECTRICAL CONTRACTOR IS TO TEST ALL SUPPLIED, INSTALLED, CONNECTED, OR MODIFIED ELECTRICAL IN THE PRESENCE OF THE OWNER UPON COMPLETION OF WORK, PRIOR TO FINAL PAYMENT.

MATERIALS AND EQUIPMENT:

- 15. PROVIDE IDENTIFICATION OF ALL PROVIDED ELECTRICAL EQUIPMENT, INCLUDING PANELBOARDS, PULL PITS AND LIGHT POLES, ETC.. IDENTIFICATION IS TO BE PROVIDED BY MEANS OF ENGRAVED LAMACOID LABELS FASTENED SECURELY TO THE EQUIPMENT.
- 16. CIRCUIT BREAKERS ARE TO MATCH NEW PANELBOARD MANUFACTURER. PROVIDE TYPEWRITTEN DIRECTORY C/W A CLEAR PLASTIC SHIELD, AFFIXED TO THE INSIDE OF THE PANEL DOOR.
- 17. PROVIDE CIRCUIT WIRING IN RPVC OR HDPE DUCT. WIRING TO BE RATED TO 600V AND 90°C. ALUMINUM CONDUCTORS WILL NOT BE ACCEPTED. CONDUCTOR SIZES INDICATED ARE FOR COPPER, UNLESS OTHERWISE INDICATED. MINIMUM WIRE SIZE: #10 AWG.
- 18. WHERE UNDERGROUND HAND HOLES AND PULL BOXES TO BE SUITABLY MANUFACTURED FOR THE INTENDED INSTALLATION. AVOID UNDERGROUND PULL BOXES IN VEHICULAR AREAS. REFER TO BOXES AND ENCLOSURES SECTION FOR FURTHER INSTRUCTIONS.
- 19. PROVIDE PRE-CAST CONCRETE BASE FOR NEW LIGHT STANDARDS AS NOTED ON LUMINAIRE SCHEDULE.

BOXES AND ENCLOSURES:

- 20. OUTDOOR UNDERGROUND PULL BOX SHALL BE LOCATED ON SITE AS NEEDED. SHALL BE HDPE OR FIBRELYTE COMPOSITE MINIMUM SIZE 14" W X 24" L X 24" D, LID MARKED "POWER" AND SHALL HAVE SECURITY BOLT FOR SECURING THE LID. ACCEPTABLE MANUFACTURER; OLDCASTLE OR APPROVED EQUAL.
- 21. PULL BOX THAT ARE TO CHANGE LOCATIONS AT NO EXTRA COST OR CREDIT, PROVIDED DISTANCE DOES NOT EXCEED 3000MM, AND INFORMATION IS GIVEN BEFORE INSTALLATION.
- 22. PROVIDE 19MM CLEAR CRUSHED STONE DRAINAGE POCKET AND FOUNDATION ALONG THE BASE OF THE PULL BOX.
- 23. PROVIDE A 5DEGREE DEFLECTION COUPLING WITHIN 600MM (2') OF THE PULL BOX EXTERIOR WALL.

SPARE PARTS:

- 24. PROVIDE THE FOLLOWING SPARE PARTS AS PART OF THE PROJECT. COORDINATE DELIVERY OF THESE ITEMS WITH CITY OF WINNIPEG REPRESENTATIVE ON SITE. CONTACT: JENNIFER KARPIAK (jenniferkarpiak@winnipeg.ca);
- A. 2 x SPARE LUMINAIRES
- B. 2 x SPARE POLES COMPLETE WITH MOUNTING ACCESSORIES

	LUMINAIRE SCHEDULE												
TYPE	FIXTURE DESCRIPTION	LAMP TYPE	VOLTS	WATTS	LUMENS	COLOUR TEMP	NOTES	MANUFACTURER	CATALOGUE No.				
А	POLE MOUNTED PARKING LOT LED FIXTURE	LED	240V	61	9000	4000K	1,2	ACUITY BRANDS	AWDE3 P30 40K MVOLT MS AL3 BK SH L20				

GENERAL NOTE:

A. LUMINAIRE AND POLE BASES TYPE REPRESENTS BASIS OF DESIGN. LUMINAIRES THAT ARE EQUIVALENT OR BETTER CAN REVIEWED AS EQUALS.

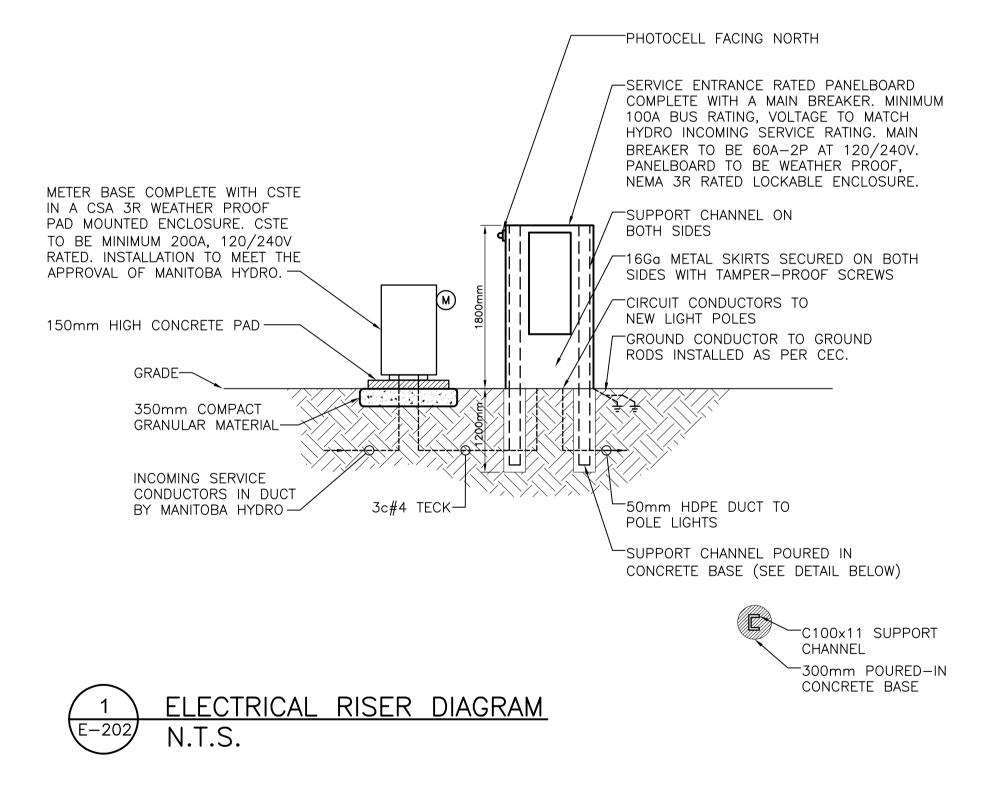
NOTES:

- 1. MINIMUM POLE HEIGHT TO BE 4570MM (15'8"). LIGHT ROLE STANDARD OF ACCEPTANCE: VALMONT WEST COAST ENGINEERING PART NUMBER: DR9748_SD-R03_KN BASE MOUNTED GALVANIZED WITH MATTE BLACK POWDER COAT FINISH PER MANITOBA HYDRO SPEC.
- 2. POLE TO BE INSTALLED ON PRE-CAST BASE. PRE-CAST BASE BE AS PER MANITOBA HYDRO DISTRIBUTION STANDARDS "CK 15-6 M". BASE TO BE INSTALLED AS PER MANITOBA HYDRO DISTRIBUTION STANDARDS "INSTALLATION OF PRE-CAST CONCRETE BASE CD 300-6".

						100A MAINS, MAIN BREAKER: 60A-2P			
PANEL: NAIRN PATH LIGHTING		12	20/240V, 1Ø, 3	3W		ENCLOSURE TYPE: CSA 3R			
						MOUNTING: SURFACE			
DESCRIPTION	ССТ	BRK AMP	АВ	BRK AMP	ССТ	DESCRIPTION			
PATH LIGHTING	1	15A		15A	2	SPARE			
-	3	2P		2P	4	_			
	5				6				
	7				8				
	9				10				
	11				12				

GENERAL NOTE:

1. PROVIDE A PHOTO CELL TO CONTROL WALK WAY LUMINAIRE. STANDARD OF ACCEPTANCE: TORK 3000 SERIES 208-277V SERIES UNIT. MOUNT PHOTO CELL ON THE NORTH FACE OF THE EQUIPMENT ENCLOSURE.



Certificate of Authorization
Stantec Consulting Ltd.

07560\030															No. 1301
ommee, Erica								LOCATION APPROVED UNDERGROUND STRUCTURES SUPV. U/G STRUCTURES COMMITTEE	B.M. BM52-16 ELEV. 232.706			Cantec Portage Avenue, Winnipeg MB Canada intec.com	ENGINEER'S SEAL ORIGINAL DRAWING SEALED BY S. SHARMA	THE CITY OF PUBLIC WORKS DEPARTM ENGINEERING DIVISION	
12:38 PM By: Den								NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT.			DESIGNED BY S.S. DRAWN E.D.	CHECKED BY A.A. APPROVED S.S.	MEMBER	ACTIVE TRANSPORTATION PATH	SHEET OF 5 5 CAD FILE DRAWING NUMBER 07560e-201-xxx.dwg
2024/02/08 2024/02/08 EXISTING	LEGEND-PLAN	PROPOSED EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PROFILE	PROPOSED	CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES	1 ISSUED FOR ADDENDUM 1 0 ISSUED FOR TENDER NO. REVISIONS	24.02.08 S.S. 24.01.23 S.S. DATE BY	HOR. SCALE: N/A VERTICAL: N/A DATE 2023.06.30	RELEASED FOR CONSTRUCTION: DATE	CONSULTANT DRAWING NO. E-202	ELECTRICAL - SPECIFICATION AND DETAILS	CITY DRAWING NUMBER P-3578-5

10/884