



- GENERAL NOTES:**
- THE ELECTRICAL OWNERSHIP DEMARCATION POINT IS AT THE SECONDARY CONNECTOR SPADES ON A PADMOUNT TRANSFORMER AT (2) REFER TO PRIMARY SCHEMATIC.
  - THE CIVIL DEMARCATION IS AT THE PRIMARY DUCT TERMINATION POINT AT (10).
  - CUSTOMER MUST MEET AND SATISFY ESA REQUIREMENTS, ANY APPLICABLE STANDARDS AND CODES FOR THEIR CONSTRUCTION WORK.
  - CUSTOMER RESPONSIBLE FOR ALL COST ASSOCIATED WITH EASEMENT TO ALECTRA UTILITIES BRAMPTON SATISFACTION IF REQUIRED.
  - CUSTOMER IS RESPONSIBLE FOR SUPPLYING AND INSTALLING THEIR OWN BACK-UP GENERATOR IF REQUIRED, AT THEIR EXPENSE FOR THE DURATION OF THE POWER INTERRUPTION.
- STAGE 1:**
- CONSTRUCTION NOTES:**
- BY CUSTOMER:**
- DUCT STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STANDARD 37-199 FIGURES 3 & 4 FROM (3) TO (5), (7) TO (8) AND (10) TO (11)
  - MANHOLE #333 TO BE INSTALLED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STANDARDS 37-360, 37-363 AND 41-37 AT (8) TO (9)
- BY ALECTRA UTILITIES BRAMPTON:**
- RECOVERY OF EXISTING SINGLE PHASE PAD MOUNT TRANSFORMER #9909-R TO BE RECOVERED DURING SHUTDOWN.
  - PRIMARY SPLICES TO BE INSTALLED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STANDARD 37-73 AT (14)
  - CUT AND ABANDON PRIMARY CABLE FROM (3) TO (14)
  - GROUND PLATE TO BE INSTALLED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STANDARD 41-27 AT (12)
  - CUT AND ABANDON SECONDARY CABLE FROM (2) TO (13)
  - RECOVERY OF METERING EQUIPMENT IN THE MECHANICAL ROOM DURING SHUTDOWN.
- STAGE 2:**
- BY CUSTOMER:**
- INSTALL NEW THREE PHASE CONCRETE TRANSFORMER BASE TO BE INSTALLED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STANDARDS 37-114 AND 41-11.
  - REMAINING DUCT STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STD. 37-199 FIGURES 3 AND 4 FROM (3) TO (4)
  - THREE PHASE PADMOUNT TRANSFORMER CLEARANCES TO BE MAINTAINED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STD. 37-125.
  - CONSULT WITH ALECTRA UTILITIES I&E LAYOUTS TECHNICIAN WITH REGARDS TO TRANSFORMER CONCRETE LID ORIENTATION.
  - THE PROPOSED PRECAST BASE FOR ALECTRA UTILITIES BRAMPTON TRANSFORMER #23393 TO BE INSTALLED AS PER CURRENT REQUIREMENTS OF ONTARIO ELECTRICAL SAFETY CODE.
  - ONE (1) PARALLEL RUNS OF 4 \*500 MCM CU SECONDARY CABLE (AS STATED BY CUSTOMER) IN 4" DUCTS TO BE INSTALLED FROM (1) TO (2) IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STANDARD 37-121.
  - GUARD POSTS TO BE INSTALLED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STANDARDS 37-127, 37-380 AND 41-25.
  - METERING CABINET TO BE INSTALLED IN ACCORDANCE WITH A.U.B STANDARD 27-15.
  - SUPPLY ELECTRICAL SAFETY AUTHORITY (ESA) CONNECTION AUTHORIZATION PRIOR TO RECONNECTION.
- BY ALECTRA UTILITIES BRAMPTON:**
- THREE PHASE PADMOUNT TRANSFORMER #23393 IS TO BE INSTALLED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STD. 37-214 AND 35-42.
  - DIRECT BURIED PRIMARY CABLE IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STANDARD 37-201 FIGURE 1 FROM (1) TO (2)
  - TERMINATION OF PRIMARY CABLES AT THREE PHASE PADMOUNT TRANSFORMER #23393 TO BE IN ACCORDANCE WITH A.U.B STANDARDS 37-121 AND 15-15.
  - PRIMARY SPLICES TO BE INSTALLED IN ACCORDANCE WITH ALECTRA UTILITIES BRAMPTON STANDARD 37-73 AT (12)
  - CONNECTION OF CUSTOMER OWNED SECONDARY CABLES AT TRANSFORMER #23393 UPON RECEIPT OF ESA CONNECTION AUTHORIZATION.

**FINAL CIVIL CONSTRUCTION CERTIFICATE**

THE CONSTRUCTION AS RECORDED IN THIS DRAWING IS CONSISTENT WITH THE APPROVED PLAN, CERTIFIED CONSTRUCTION STANDARDS AND/OR WORK INSTRUCTION AND THAT APPROVED EQUIPMENT HAS BEEN USED.

NAME \_\_\_\_\_ DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ POSITION \_\_\_\_\_

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**LINES CONSTRUCTION CERTIFICATE**

THE CONSTRUCTION AS RECORDED IN THIS DRAWING IS CONSISTENT WITH THE APPROVED PLAN, CERTIFIED CONSTRUCTION STANDARDS AND/OR WORK INSTRUCTION AND THAT APPROVED EQUIPMENT HAS BEEN USED.

FINAL ENERGIZATION (APPLIES TO COMPLETE DRAWING)

NAME \_\_\_\_\_ DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ POSITION \_\_\_\_\_

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**CERTIFICATION OF APPROVAL**

THE DESIGN COVERED BY THIS DRAWING IS BASED ON, AND COMPLIES WITH ALECTRA UTILITIES (BRAMPTON) CERTIFIED STANDARD DRAWINGS.

THE INSTALLATION WORK COVERED BY THIS DOCUMENT MEETS THE SAFETY REQUIREMENTS OF SECTION 4 OF REGULATION 22/04

GOURAV ROBERT RAO, P. ENG, PMP 09/28/2022

NAME *Gourav Rao* DATE \_\_\_\_\_

SIGNATURE & PROFESSIONAL DESIGNATION \_\_\_\_\_ PROFESSIONAL ENGINEER

NO.	ISSUED FOR CONSTRUCTION	BY	DATE	CHECKED
1.	ISSUED FOR CONSTRUCTION	JF		
NO.	REVISION/DESCRIPTION	BY	DATE	CHECKED

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**13.8kV UNDERGROUND SERVICE UPGRADE TO 400A (SINGLE PHASE TO THREE PHASE) 1660 NORTH PARK DR**

DRAWN: YD SCALE: 1:500 DATE: JUN 10, 2021

CHECKED: \_\_\_\_\_ DESIGNED: S. TAN APPROVED: \_\_\_\_\_

E.P.F. FILE: K3-30

WORK ORDER: 638138

K3-110-18

DRAFTING: REG. NO. 21-139 \cscs\N\K3-110-18.dgn

**INSPECTIONS CONTACT:**  
 E-MAIL: INSPECTIONS-CENTRAL@ALECTRAUTILITIES.COM  
 PHONE: 905-283-4120

**CALL BEFORE YOU DIG**  
 ONTARIO ONE CALL 1-800-400-2255

DUCT	LENGTH	367m ± (3) TO (11)
CABLE	INSTALL	
	SIZE	1/0 AL 14kV CN
	LENGTH	6 x 377m (123393 TO (8) )
TRANS. No. 23393	SIZE	300kVA
	VOLTAGE	13860/8000 - 347/600V
	SWITCHES	
	FUSES	
	ARRESTERS	

K3-110-18