

	NTC.										
NOTES: 1. BACKFILL: ENSURE DB2 CONDUIT IS ENVELOPED WITH MASONRY SAND UPON INSTALLATION (7.5cm MINIMUM BELOW AND 15cm MINIMUM ABOVE). REMAINDER OF BACKFILL MUST BE CLEAN AND FREE OF DEBRIS TO PREVENT DAMAGE TO THE DUCT. BACKFILL SHALL BE WELL TAMPED.											
2.	2. STRAIGHT DUCT SHALL BE EMPLOYED IN THE TRENCH TO HOUSE THE CABLE. IT SHALL BE 100mm (4") DIAMETER PVC TYPE DB2 CONDUIT. THE ENDS OF THE DUCT SHALL BE CAPPED OR BAGGED TO PREVENT DEBRIS AND MOISTURE FROM ENTERING THE DUCT PRIOR TO CABLE INSTALLATION. AFTER CABLE INSTALLATION, INSTALL THE FLEXIBLE CONDUIT TO MAKE 90' TRANSITION. SEE DU11-102-0500 OPTION 1. SCHEDULE 40 PVC CONDUIT AND ASSOCIATED FITTINGS ARE ACCEPTABLE POSITIVE DEVIATION, IF DB2 CONDUIT IS NOT AVAILABLE,										
_	PROVIDED SEPARATIONS SPECIFIED ON THIS DRAWING ARE MAINTAINED. SEE OPTION 2 FOR ALTERNATE METHODS.										
3.	PULL TAPE: A 1/2" WIDE POLYESTER PULLING TAPE MUST BE INSTALLED THROUGH THE ENTIRE LENGTH OF THE DUCT.										
4.	INSERT FLEXIBLE CONDUIT 60cm IN THE DB2 CONDUIT. THE SIZE OF THE FLEXIBLE CONDUIT WILL VARY BASED ON THE CONDUCTOR SIZE.										
		RADIUS MUST BE GREATER THAN THE SPECIFIED CABLE MINIMUM BENDING RADIUS.									
	NSTALL METER COMPARTMENT AS PER ONTARIO ELECTRICAL SAFETY CODE (OESC), USE ONLY HYDRO ONE APPROVED METER BASES LISTED IN THE HYDRO ONE 'METER SOCKET BASE' LIST.										
	TELECOMMUNICATION PLANT MAY SHARE SERVICE TRENCH BUT MUST BE INSTALLED IN ITS OWN CONDUIT.										
	PREFERRED ROUTING FOR GAS SERVICE SHALL BE ON OPPOSITE SIDE OF THE BUILDING THAN THAT OF THE ELECTRICAL SERVICE. IF COMMON TRENCHING IS UNAVOIDABLE, 30cm MINIMUM CLEAR SEPARATION SHALL BE MAINTAINED IN ALL DIRECTIONS BETWEEN GAS SERVICE AND ELECTRICAL SUPPLY CABLE.										
9.	 CLEARANCES, DEPTHS, SEPARATIONS AND FORMS OF MECHANICAL PROTECTION OF THE CABLE ARE MINIMUM REQUIREMENTS. INCREASED CLEARANCES AND OR ADDITIONAL FORMS OF MECHANICAL PROTECTION ARE CONSIDERED POSITIVE DEVIATIONS AND ARE ALLOWED. 										
	10. IF FURTHER TRENCHING ALONG ROAD ALLOWANCE IS REQUIRED, IT SHALL BE CONSTRUCTED PER HYDRO ONE STANDARD TRENCH PROFILES.										
	11. RISER CONDUIT TO BE EASILY REMOVED BY HYDRO ONE FOR CABLE INSTALLATION PURPOSES. FOR HYDRO ONE DIP POLE PARTS AND FRAMING REFER TO SECTION 5.										
	12. FINAL METER BASE HEIGHT IN REFERENCE TO FINISHED GRADE. 13. CUSTOMER SUPPLIED AND INSTALLED CONDUIT, METER BASE, CLAMPS AND ASSOCIATED HARDWARE INSTALLED										
14	PER ONTARIO ELECTRICAL SAFETY CODE (OESC) . THE METER BASE CONDUITS WILL VARY IN SIZE		ON CONE	DUCTOR SIZE (i.e. 2" DIAMETER F	FOR 3/0						
	14. THE METER BASE CONDUITS WILL VARY IN SIZE DEPENDING ON CONDUCTOR SIZE (i.e. 2" DIAMETER FOR 3/0 AWG, 3" FOR 250 kcmil OR 500 kcmil CONDUCTOR). FLEXIBLE CONDUIT WILL ALSO VARY IN SIZE (i.e. 2" OR 3" FOR 3/0 AWG OR 3" FOR 250 kcmil OR 500 kcmil CONDUCTOR) WHEN USED TO CONNECT THE RISER CONDUIT TO THE HORIZONTAL DUCT PER OPTION 1. FLEXIBLE CONDUIT WILL BE 4" FOR ALL CONDUCTOR SIZES IF USED AS MAIN CONDUIT (HORIZONTAL DUCT) PER OPTION 2. APPROPRIATELY SIZE COUPLERS (SHOWN AND LISTED IN THE PARTS LIST) SHALL BE USED TO CONNECT THE SCHEDULE 40 PVC TO THE FLEXIBLE CONDUIT. ONLY ONE SERVICE CABLE PERMITTED PER CONDUIT.										
15	15. THE SUPPLY SERVICE CABLE PERMITTED PER CONDUIT. 15. THE SUPPLY SERVICE CABLE AT THE METER BASE SHALL BE HOUSED IN ITS OWN DISTINCT CUSTOMER SUPPLIED CONDUIT (CONDUIT SHALL NOT HOUSE ANY OTHER PLANT), AND SHALL NOT HAVE ANY ACCESS PORT (LB CONDUIT FITTING, JUNCTION BOX, ETC.). ANY MODIFICATION TO CUSTOMER OWNED METER-BASE WHICH VOIDS CSA CERTIFICATION IS NOT PERMITTED.										
	 METER BASE TO MAINTAIN 1 MOINT I HUMINUL METER BASE TO MAINTAIN 1 MINIMUM CLEARANCE FROM DISCHARGE OF ANY COMBUSTIBLE GAS RELIEF DEVICE OR VENT. IF 1 CLEARANCE IS NOT AVAILABLE IT CAN BE REDUCED TO 0.3 MINIMUM CLEARANCE WHICH IS ONLY APPLICABLE IF REGULATORS EQUIPPED WITH CERTIFIED OVERPRESSURE CUT-OFF/SHUT-OFF WITH LIMITED OR NO RELIEF IS INSTALLED FOR THE GAS DISCHARGE OPENING. THE OVERPRESSURE RELIEF DEVICES MUST BE MARKED "LR-OPCO", "P-OPCO" OR "OPSO". FOR CONDUIT SIZES AND TRANSITION OPTIONS AT THE DIP POLE SEE DU5-303-0500. 										
				PARTS LIST							
		DART	·	1							
		PART No.	MM No.	DESCRIPTION COUPLER KIT, 2", FLEX TO 2"	QTY.						
			30030348 30031161 30030236	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3"	RIGID RIGID A/R						
			30030348 30031161 30030236 30030366 30030235	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 2" CONDUIT, FLEX, 3"	RIGID RIGID A/R RIGID A/R						
		No. 1	30030348 30031161 30030236 30030366 30030235 30005908 30005915 30005959	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 2" CONDUIT, FLEX, 3" SERVICE CABLE, 3/O AWG, 3-CC SERVICE CABLE, 250Kcmil, 3-CC SERVICE CABLE, 500Kcmil, 3-CC	RIGID RIGID RIGID A/R DND., AL. DND., AL. DND., AL.						
		No. 1 2	30030348 30031161 30030236 30030235 30005908 30005915 30005959 30007710	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 2" CONDUIT, FLEX, 3" SERVICE CABLE, 3/0 AWG, 3-CC SERVICE CABLE, 250Kcmil, 3-CC	RIGID RIGID RIGID A/R OND., AL. OND., AL. OND., AL. A/R A/R						
	THIS DRAWING SEE DU11-102-0501 THIS DRAWING SEE DU11-102-0502	No. 1 2 3 4	30030348 30031161 30030236 30030235 30005908 30005959 30007710 20002181 30007687	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 2" CONDUIT, FLEX, 3" SERVICE CABLE, 3/0 AWG, 3-CC SERVICE CABLE, 3/0 AWG, 3-CC SERVICE CABLE, 500Kcmil, 3-CC CONDUIT, PVC, 4", DB2 CAUTION TAPE, BURIED ELECTRIC SWEEP, 4" x 16" RADIUS, SCHEI	RIGID RIGID RIGID A/R OND., AL. OND., AL. OND., AL. OND., AL. A/R A/R LINE A/R DULE 40, PVC A/R						
FOR SHEET 3 OF	THIS DRAWING SEE DU11-102-0502	No. 1 2 3 4 5 6 7 8	30030348 30031161 30030236 30030305 30005908 30005915 30005959 30007710 20002181 30007687 30007583 30031602	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 2" CONDUIT, FLEX, 3" SERVICE CABLE, 3/O AWG, 3-CC SERVICE CABLE, 500Kcmil, 3-CC SERVICE CABLE, 500Kcmil, 3-CC CONDUIT, PVC, 4", DB2 CAUTION TAPE, BURIED ELECTRIC SWEEP, 4" x 16" RADIUS, SCHEI CONDUIT, 4", SCHEDULE 40, PVC	RIGID RIGID RIGID A/R DND., AL. DND., AL. DND., AL. A/R LINE LINE A/R DULE 40, PVC A/R A/R A/R						
FOR SHEET 3 OF ALL DIMENSIONS UNLESS OTHERWIS	THIS DRAWING SEE DU11-102-0502 IN CENTIMETRES SE STATED	No. 1 2 3 4 5 6 7 7 8 9 100	30030348 30031161 30030236 30030235 30005908 30005908 30005909 30007710 20002181 30007687 30007583 30007583 30007583 30031602 20000007 30031918	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 2" CONDUIT, FLEX, 2" CONDUIT, FLEX, 3" SERVICE CABLE, 3/0 AWG, 3-CC SERVICE CABLE, 3/0 AWG, 3-CC SERVICE CABLE, 3/0 AWG, 3-CC CONDUIT, PCC, 4", DB2 CAUTION TAPE, BURIED ELECTRIC SWEEP, 4" x 16" RADIUS, SCHEI CONDUIT, 4", SCHEDULE 40, PV CAP, 4", SCHEDULE 40, PVC CAP, 4", SCHEDULE 40, PVC CAP, 4", SCHEDULE 40, PVC CAP, 4", SCHEDULE 40, PVC CAP, 4", SCHEDULE 40, PVC	RIGID RIGID RIGID A/R DND., AL. DND., AL. DND., AL. DND., AL. A/R LINE A/R DULE 40, PVC A/R C A/R A/R C A/R A/R DULE 40, PVC A/R RIGID A/R						
FOR SHEET 3 OF ALL DIMENSIONS UNLESS OTHERWIS ORIGINA SUPERS CHANGE	THIS DRAWING SEE DU11-102-0502 IN CENTIMETRES SE STATED L DU-03-209.1-0501-R05 IS NOW PC MM MM EDED BY THIS NEW DRAWING/REVISION. DT O SECTION 11. GENERAL UPDATES.	No. 1 2 3 4 5 6 7 8 9 10 11 MM#	30030348 30031161 30030236 30030366 30005908 30005915 30005959 30007710 20002181 30007687 30007687 30007687 30007583 30031602 20000007 30031917 = REFER T	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 2" CONDUIT, FLEX, 3" SERVICE CABLE, 250Kcmil, 3-CC SERVICE CABLE, 250Kcmil, 3-CC SERVICE CABLE, 500Kcmil, 3-CC CONDUIT, PVC, 4", DB2 CAUTION TAPE, BURIED ELECTRIC SWEEP, 4" x 16" RADIUS, SCHEI CONDUIT, 4", SCHEDULE 40, PVC TAPE, PULLING, 1/2" WIDE, POI COUPLER KIT, 4" FLEX TO 4" F CONDUIT, FLEX, 4"	RIGID RIGID RIGID A/R OND., AL. DND., AL. DND., AL. A/R A/R LINE A/R DULE 40, PVC A/R A/R A/R A/R A/R A/R A/R A/R						
FOR SHEET 3 OF ALL DIMENSIONS UNLESS OTHERWIS ORIGINA SUPERS CHANGE 01 2023 UPDATE	THIS DRAWING SEE DU11-102-0502 IN CENTIMETRES SE STATED IL DU-03-209.1-0501-R05 IS NOW EDED BY THIS NEW DRAWING/REVISION.	No. 1 2 3 4 5 6 7 8 9 10 11 MM# * = Drawn By	30030348 30031161 30030236 30030235 30005908 30005908 30005959 30007510 20002181 30007687 30007583 30031602 20000007 30031918 30031917 = REFER T SUPPLIED	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 3" SERVICE CABLE, 3/O AWG, 3-CC SERVICE CABLE, 500Kcmil, 3-CC SERVICE CABLE, 500Kcmil, 3-CC CONDUIT, PVC, 4", DB2 CAUTION TAPE, BURIED ELECTRIC SWEEP, 4" x 16" RADIUS, SCHEI CONDUIT, 4", SCHEDULE 40, PVC TAPE, PULLING, 1/2" WIDE, POI COUPLER KIT, 4" FLEX TO 4" F CONDUIT, FLEX, 4" O SECTION 16 ONLY A/R = BY CUSTOMER Checked By: Designed By:	RIGID A/R RIGID A/R RIGID A/R DND., AL. A/R DND., AL. A/R DND., AL. A/R DUL. A/R DULE 40, PVC A/R A/R LYESTER A/R A/R A/R LYESTER A/R A/R A/R Dular Approved By: Design Approved By:						
FOR SHEET 3 OF ALL DIMENSIONS UNLESS OTHERWIS ORIGINA SUPERS CHANGE 2023 UPDATE 11 & 1 CONTEN DU15-1	THIS DRAWING SEE DU11-102-0502	MM 10 1 2 3 4 5 6 7 8 9 10 11 MM# * = Drawn By PC Scole: N.T.S.	30030348 30031161 30030236 30030235 30005908 30005908 30005959 30007510 20002181 30007687 30007583 30031602 20000007 30031918 30031917 = REFER T SUPPLIED	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 2" CONDUIT, FLEX, 3" SERVICE CABLE, 250Kcmil, 3-CC SERVICE CABLE, 250Kcmil, 3-CC CONDUIT, PVC, 4", DB2 CAUTION TAPE, BURIED ELECTRIC SWEEP, 4" × 16" RADIUS, SCHEI CONDUIT, 4", SCHEDULE 40, PVC TAPE, PULLING, 1/2" WIDE, POI COUPLER KIT, 4" FLEX TO 4" F CONDUIT, FLEX, 4" O SECTION 16 ONLY A/R = BY CUSTOMER	RIGID A/R RIGID A/R RIGID A/R DND., AL. A/R DND., AL. A/R DND., AL. A/R DUD., AL. A/R DUL. A/R LINE A/R DULE 40, PVC A/R YC A/R RIGID A/R RIGID A/R RIGID A/R = AS REQUIRED A/R						
FOR SHEET 3 OF ALL DIMENSIONS UNLESS OTHERWIS 01 SUPERS CHANGE 2023 01 SEPT 11 & 1 CONTEN	THIS DRAWING SEE DU11-102-0502	MM 1 1 2 3 4 5 6 7 8 9 10 11 MM# * = Drawn By PC Scale: N.T.S. TREN	30030348 30031161 30030236 30030366 30030235 30005908 30005915 30005959 30007510 20002181 30007687 30007583 30007598 30007598 30007598 30007598 30007598 30007598 30007598 300	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 3" CONDUIT, FLEX, 2" CONDUIT, FLEX, 2" CONDUIT, FLEX, 3" SERVICE CABLE, 3/0 AWG, 3-CC SERVICE CABLE, 500Kcmil, 3-CC SERVICE CABLE, 500Kcmil, 3-CC SERVICE CABLE, 500Kcmil, 3-CC CONDUIT, PVC, 4", DB2 CAUTION TAPE, BURIED ELECTRIC SWEEP, 4", x 16" RADIUS, SCHEI CONDUIT, 4", SCHEDULE 40, PVC CAP, 4", SCHEDULE 40, PVC TAPE, PULLING, 1/2" WIDE, POI COUPLER KIT, 4" FLEX TO 4" F CONDUIT, 1EX, 4" O SECTION 16 ONLY A/R = BY CUSTOMER Checked By: M.MATEVSKI Date: (yyyy/mm/dd) Pole ID:	RIGID RIGID RIGID A/R DND., AL. DND., AL. DND., AL. A/R DND., AL. A/R A/R LINE A/R DULE 40, PVC A/R C A/R A/R A/R A/R A/R A/R A/R A/R						
FOR SHEET 3 OF ALL DIMENSIONS UNLESS OTHERWIS 01 SEPT CHANGE 2023 UPDATE 11 & 1 CONTEN DU15-1 Rev No. Date	THIS DRAWING SEE DU11-102-0502 IN CENTIMETRES E STATED IL DU-03-209.1-0501-R05 IS NOW EDED BY THIS NEW DRAWING/REVISION. ID TO SECTION 11. GENERAL UPDATES. D TO NEW WG&& NUMBERING FORMAT. D DETAILS TO FIGURES. UPDATED NOTES 2, 6 5. ADDED NOTES 16 & 17. DIRECT BURIED IT WAS MOVED TO NEW SECTION 15 AND 32-0500/0501 R01. Revision Particulars dwn ckd des	MM 1 2 3 4 5 6 7 8 9 10 11 MM# * = Drawn By PC Scole: N.T.S. TRENU FROM in	30030348 30031161 30030236 30030235 30005908 30005915 30005908 30007710 20002181 30007687 30007583 30007583 30007583 30031602 20000007 30031918 30031917 = REFER T SUPPLIED	DESCRIPTION COUPLER KIT, 2", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" COUPLER KIT, 3", FLEX TO 2" CONDUIT, FLEX, 3", FLEX TO 3" CONDUIT, FLEX, 3", FLEX TO 3" SERVICE CABLE, 3/0 AWG, 3-CC SERVICE CABLE, 500Kcmil, 3-CC SERVICE CABLE, 500Kcmil, 3-CC SERVICE CABLE, 500Kcmil, 3-CC CONDUIT, PVC, 4", DB2 CAUTION TAPE, BURIED ELECTRIC SWEEP, 4" x 16" RADIUS, SCHEI CONDUIT, 4", SCHEDULE 40, PVC TAPE, PULLING, 1/2" WIDE, POI COUPLER KIT, 4" FLEX TO 4" F CONDUIT, FLEX, 4" O SECTION 16 ONLY A/R = BY CUSTOMER Checked By: M.MATEVSKI Date: (yyyy/mm/dd) 2022/05/03 IL – SECONDARY SERVICE	RIGID RIGID RIGID A/R OND., AL. OND., AL. OND., AL. OND., AL. OND., AL. A/R OND., AL. A/R DULE 40, PVC A/R A/R C A/R A/R A/R A/R A/R A/R A/R A/R						
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Hydro One trenching guidelines:

<u>Secondary service trench with supply taken from dip pole</u> per Hydro One Networks Inc. standard drawing DU11-102-0500

The installation options listed below explain Hydro One Networks' Standard (DU11-102-0500) for the installation of Hydro One owned single-phase secondary underground cables. Regardless of who installs the cable, the trench must be constructed per DU11-102-0500/0501. Note: Options described below will allow the cable installer crew to perform their work without a coordinated site visit with the trench installer.

For most installations, either Option 1 or Option 2 can be selected by the customer (Option 2 calls for increased mechanical protection via more rigorous conduit); however, Option 2 must be selected for installations where a minimum cover of 60cm is not possible.

Option 1 (requires minimum cover of 60cm): Ducted cable encapsulated in masonry sand at trench ends as shown in DU11-102-0500

- The trench can be backfilled, excluding open pit area, at either end of trench prior to cable installation.
- The trench must be backfilled with clean masonry sand in areas indicated in DU11-102-0500 and clean native backfill to finished grade immediately after installation of flexible conduit and cable.

Since trench end(s) is(are) temporarily left open (i.e. if backfilling cannot occur immediately after cable installation), a length of flexible conduit (specified by Hydro One and listed in DU11-102-0500) shall be applied between the horizontal DB2 conduit and the vertical Schedule 40 PVC at both the meter base and the source pole to provide temporary protection of the cable. See 'Fig.1' in DU11-102-0500. The flexible conduit shall be inserted inside the 100mm DB2 duct a minimum of 60cm.

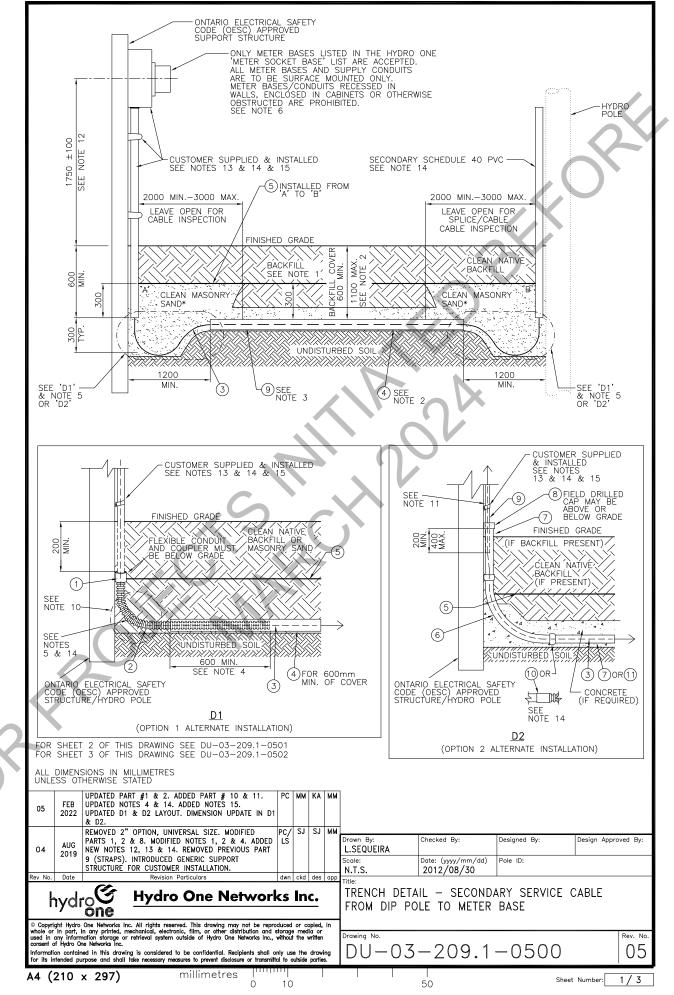
Option 2 (reduced cover): Schedule 40 PVC / flexible conduit, and sweeps

- In areas of poor soil conditions (e.g. rocky) and where installing straight lengths of Schedule 40 PVC is impossible, flexible conduit can be installed at the sole discretion of Hydro One. This flexible conduit, as listed in DU11-102-0500, shall be 100mm diameter electrical grade corrugated flexible conduit. Flexible drainage pipe or thin wall conduit is NOT acceptable.
- In a case where 60cm of cover is not possible, the secondary cable may be installed in Schedule 40 PVC or in a continuous length of flexible conduit (see above for details on flexible conduit) at a minimum cover of 30cm.
- In a case where 30cm of cover is not possible, such as on bald rock, Schedule 40 PVC (or alternatively the flexible conduit as mentioned above) will be covered in a minimum thickness of 3" (7.5cm) of concrete wherever reduced cover is encountered. The concrete shall cover the conduit at all points until the vertical component of the sweep is reached. If flexible conduit is employed, it shall not permanently extend beyond the concrete and be left exposed.
- Schedule 40 PVC sweeps shall be used at the trench ends to make the transition to the meter base and dip pole conduits. See 'Fig.2' in DU11-102-0500.

NOTE: If any discrepancies between this document and the referenced standard are found, the standard shall prevail. It is <u>the customer's responsibility to ensure compliance</u> to the standard. Not complying with the standard will result in Hydro One not completing their work and an "extra trip charge" being applied.

FOR ALL	SHEET	1 OF THIS DRAWING SEE DU11-102-0500 2 OF THIS DRAWING SEE DU11-102-0501 SIONS IN CENTIMETRES HERWISE STATED									
01	SEPT 2023	ORIGINAL DU-03-209.1-0501-R05 IS NOW SUPERSEDED BY THIS NEW DRAWING/REVISION. CHANGED TO SECTION 11. GENERAL UPDATES. CHANGED TO NEW DWG. & NUMBERING FORMAT. UPDATED DETAILS TO FIGURES. UPDATED NOTES 2, 6 11 & 15. ADDED NOTES 16 & 17. DIRECT BURIED CONTENT WAS MOVED TO NEW SECTION 15 AND DU15-132-0500/0501 R01.	PC	ММ	мм	I MM	Drawn By: PC Scale:	Checked By: M.MATEVSKI Date: (yyyy/mm/dd) 2020 (05 (07	Designed By: M.MATEVSKI Pole ID:	Design App M.MATEV	
Rev No.	Date	Revision Particulars	dwn	ckd	des	app	N.T.S.	2022/05/03			
r © Copyrig	iydi aht Hydro	Cone Networks Inc. All rights reserved. This drawing may not be repro-				l, in	TRENCH DETA	IL – SECONDA LE TO METER		CABLE	
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44 (2	210	x 297) millimetres	וויו 10)				50	Shee	t Number:	3/3

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	 CLEARANCES, DEPTHS, SEPARATIONS AND FORMS OF MECHANICAL PROTECTION OF THE CABLE ARE MINIMUM REQUIREMENTS. INCREASED CLEARANCES AND OR ADDITIONAL FORMS OF MECHANICAL PROTECTION ARE CONSIDERED POSITIVE DEVIATIONS AND ARE ALLOWED. 								
	10. IF FURTHER TRENCHING ALONG ROAD ALLOWANCE IS REQUIRED, IT SHALL BE CONSTRUCTED PER HYDRO ONE STANDARD TRENCH PROFILES.								
	11. RISER CONDUIT TO BE EASILY REMOVED BY HYDRO ONE FOR CABLE INSTALLATION PURPOSES. 12. FINAL METER BASE HEIGHT IN REFERENCE TO FINISHED GRADE.								
	13. CUSTOMER SUPPLIED AND INSTALLED CONDUIT, METER BASE, CLAMPS AND ASSOCIATED HARDWARE INSTALLED PER ONTARIO ELECTRICAL SAFETY CODE (OESC).								
	14. THE METER BASE AND DIP POLE CONDUITS WILL VARY IN SIZE DEPENDING ON CONDUCTOR SIZE (i.e. 2" DIAMETER FOR 3/0 AWG, 3" FOR 250 kcmil QR 500 kcmil CONDUCTOR), FLEXIBLE CONDUIT WILL ALSO VARY IN SIZE (i.e. 2" OR 3" FOR 3/0 AWG OR 3" FOR 250 kcmil QR 500 kcmil CONDUCTOR) WHEN USED TO CONNECT THE RISER CONDUIT TO THE HORIZONTAL DUCT PER OPTION 1. FLEXIBLE CONDUIT WILL BE 4" FOR ALL CONDUCTOR SIZES IF USED AS MAIN CONDUIT (HORIZONTAL DUCT) PER OPTION 2. APPROPRIATELY SIZE COUPLERS (SHOWN AND LISTED IN THE PARTS LIST) SHALL BE USED TO CONNECT THE SCHEDULE 40 PVC TO THE FLEXIBLE CONDUIT.								
	15. THE SUPPLY SERVICE CABLE AT THE METER BASE SHALL BE HOUSED IN ITS OWN DISTINCT CUSTOMER SUPPLIED CONDUIT (CONDUIT SHALL NOT HOUSE ANY OTHER PLANT).								
	PARTS LIST								
	PART MM No. DESCRIPTION QTY.								
	30030348 COUPLER KIT, 2", FLEX TO 2" RIGID 1 30031161 COUPLER KIT, 3", FLEX TO 2" RIGID 30030236 COUPLER KIT, 3", FLEX TO 3" RIGID								
	2 30030366 CONDUIT, FLEX, 2" A/R 30030235 CONDUIT, FLEX, 3" A/R								
	30005908 SERVICE CABLE, 3/0 AWG, 3-COND., AL. 3 30005915 SERVICE CABLE, 250Kcmil, 3-COND., AL. 4 30005959 SERVICE CABLE, 500Kcmil, 3-COND., AL.								
	5 20002181 CAUTION TAPE, BURIED ELECTRIC LINE A/R 6 30007687 SWEEP, 4" × 16" RADIUS, SCHEDULE 40, PVC A/R								
	FOR SHEET 1 OF THIS DRAWING SEE DU-03-209.1-0500 7 30007583 CONDUIT, 4", SCHEDULE 40, PVC A/R FOR SHEET 3 OF THIS DRAWING SEE DU-03-209.1-0502 8 30031602 CAP, 4", SCHEDULE 40, PVC A/R								
4	ALL DIMENSIONS IN MILLIMETRES 9 2000007 TAPE, PULLING, 1/2" WIDE, POLYESTER A/R UNLESS OTHERWISE STATED 10 30031918 COUPLER KIT, 4" FLEX TO 4" RIGID A/R								
1 201	FEB UPDATED PART #1 & 2. ADDED PART # 10 & 11. PC MM KA MM 05 FEB UPDATED NOTE 6 # 14 ADDED NOTE 15 UPDATED PC MM KA MM								
AUGUST	2022 D1 & D2 LAYOUT. DIMENSION UPDATE IN D1 & D2. L* = SUPPLIED BY CUSTOMER REMOVED 2" OPTION, UNIVERSAL SIZE. MODIFIED PC/ SJ SJ MM								
– Al	04 AUG 2019 PARTS 1, 2 & 8. MODIFIED NOTES 1, 2 & 4. ADDED NEW NOTES 12, 13 & 14. REMOVED PREVIOUS PART 9 (STRAPS). INTRODUCED GENERIC SUPPORT LS Drawn By: L.SEQUEIRA Checked By: L.SEQUEIRA Designed By: Designed By: Designed By: Designed By:								
03	STRUCTURE FOR CUSTOMER INSTALLATION. N.T.S. 2012/08/30 Rev No. Date Revision Particulars dwn ckd des app Title: Title: Title: Title: Title: Title: Title:								
CK REV	hydro One Networks Inc. TRENCH DETAIL – SECONDARY SERVICE CABLE FROM DIP POLE TO METER BASE								
BLOCK	© Copyright Hydro One Networks Inc. All rights reserved. This drawing may not be reproduced or copied, in whole or in part, in any printed, mechanical, electronic, film, or other distribution and storage media or used in any information storage or retrieval system outside of Hydro One Networks Inc., without the written Drawing No.								
TITLE	consent of Hydro One Metworks Inc. United to be confidential. Recipients shall only use the drawing for its interaction contained but this drawing is considered to be confidential. Recipients shall only use the drawing for its interaction and shall take messary measures to prevent discourse or transmittation to utside parties. $DU-03-209.1-0501$								
F	A4 (210 × 297) millimetres 100 50 Sheet Number: 2 / 3								

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Hydro One trenching guidelines:

<u>Secondary service trench with supply taken from dip pole</u> <u>per Hydro One Networks Inc. standard drawing DU-03-209.1-0500</u>

The installation options listed below explain Hydro One Networks' Standard (DU-03-209.1-0500) for the installation of Hydro One owned single-phase secondary underground cables. Regardless of who installs the cable, the trench must be constructed per DU-03-209.1-0500/0501. <u>Note: Options described below will allow</u> the cable installer crew to perform their work without a coordinated site visit with the trench installer.

For most installations, either Option 1 or Option 2 can be selected by the customer (Option 2 calls for increased mechanical protection via more rigorous conduit); however, Option 2 must be selected for installations where a minimum cover of 600mm is not possible.

Option 1 (requires minimum cover of 600mm): Direct buried cable encapsulated in masonry sand at trench ends as shown in DU-03-209.1-0500

- The trench can be backfilled, excluding open pit area, at either end of trench prior to cable installation.
- The trench must be backfilled with clean masonry sand in areas indicated in DU-03-209.1-0500 and clean native backfill to finished grade immediately after installation of cable.

If the trench end(s) is(are) temporarily left open (i.e. if backfilling cannot occur immediately after cable installation), a length of flexible conduit (specified by Hydro One and listed in DU-03-209.1-0500) shall be applied between the horizontal DB2 conduit and the vertical Schedule 40 PVC at both the meter base and the source pole to provide temporary protection of the cable. See 'D1' in DU-03-209.1-0500. The flexible conduit shall be inserted inside the 100mm DB2 duct a minimum of 600mm.

Option 2 (reduced cover): Schedule 40 PVC / flexible conduit, and sweeps

- In areas of poor soil conditions (e.g. rocky) and where installing straight lengths of Schedule 40 PVC is impossible, flexible conduit can be installed at the sole discretion of Hydro One. This flexible conduit, as listed in DU-03-209.1-0500, shall be 100mm diameter electrical grade corrugated flexible conduit. Flexible drainage pipe or thin wall conduit is NOT acceptable.
- In a case where 600mm of cover is not possible, the secondary cable may be installed in Schedule 40 PVC or in a continuous length of flexible conduit (see above for details on flexible conduit) at a minimum cover of 300mm.
- In a case where 300mm of cover is not possible, such as on bald rock, Schedule 40 PVC (or alternatively the flexible conduit as mentioned above) will be covered in a minimum thickness of 3" (75mm) of concrete wherever reduced cover is encountered. The concrete shall cover the conduit at all points until the vertical component of the sweep is reached. If flexible conduit is employed, it shall not permanently extend beyond the concrete and be left exposed.
- Schedule 40 PVC sweeps shall be used at the trench ends to make the transition to the meter base and dip pole conduits. See 'D2' in DU-03-209.1-0500.

<u>NOTE</u>: If any discrepancies between this document and the referenced standard are found, the standard shall prevail. It is <u>the customer's responsibility to ensure compliance</u> to the standard. Not complying with the standard will result in Hydro One not completing their work and an "extra trip charge" being applied.

		1 OF THIS DRAWING SEE DU-03-209.1-05 2 OF THIS DRAWING SEE DU-03-209.1-05								
		SIONS IN MILLIMETRES HERWISE STATED								
05	FEB 2022	UPDATED PART #1 & 2. ADDED PART # 10 & 11. UPDATED NOTES 4 & 14. ADDED NOTES 15. UPDATED D1 & D2 LAYOUT. DIMENSION UPDATE IN D1 & D2.			KA					
04	AUG 2019	PARTS 1, 2 & 8. MODIFIED NOTES 1, 2 & 4. ADDED NEW NOTES 12, 13 & 14. REMOVED PREVIOUS PART	PC/ LS	SJ	SJ	мм	Drawn By: L.SEQUEIRA	Checked By:	Designed By:	Design Approved By:
		9 (STRAPS). INTRODUCED GENERIC SUPPORT STRUCTURE FOR CUSTOMER INSTALLATION.					Scale: N.T.S.	Date: (yyyy/mm/dd) 2012/08/30	Pole ID:	
Rev No.	Rev No. Date Revision Particulars dwn ckd des app hydro					TRENCH DETAIL - SECONDARY SERVICE CABLE FROM DIP POLE TO METER BASE				
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