ARTHUR KEY PLAN

LIST OF DRAWINGS

00 - COVERSHEET

RECONSTRUCTION OF PRESTON STREET NORTH (ARTHUR)

01 - REMOVALS PLAN 1

02 - REMOVALS PLAN 2

03 - PLAN AND PROFILE, SMITH ST TO STA. 0+160

04 - PLAN AND PROFILE, STA. 0+160 TO 0+330 05 - PLAN AND PROFILE, STA. 0+330 TO DOMVILLE ST

06 - TYPICAL SECTIONS

07 - DETAILS

TOWNSHIP OF WELLINGTON NORTH



CONTRACT FOR

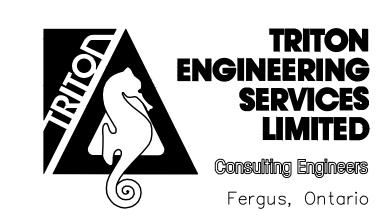
RECONSTRUCTION OF PRESTON STREET NORTH

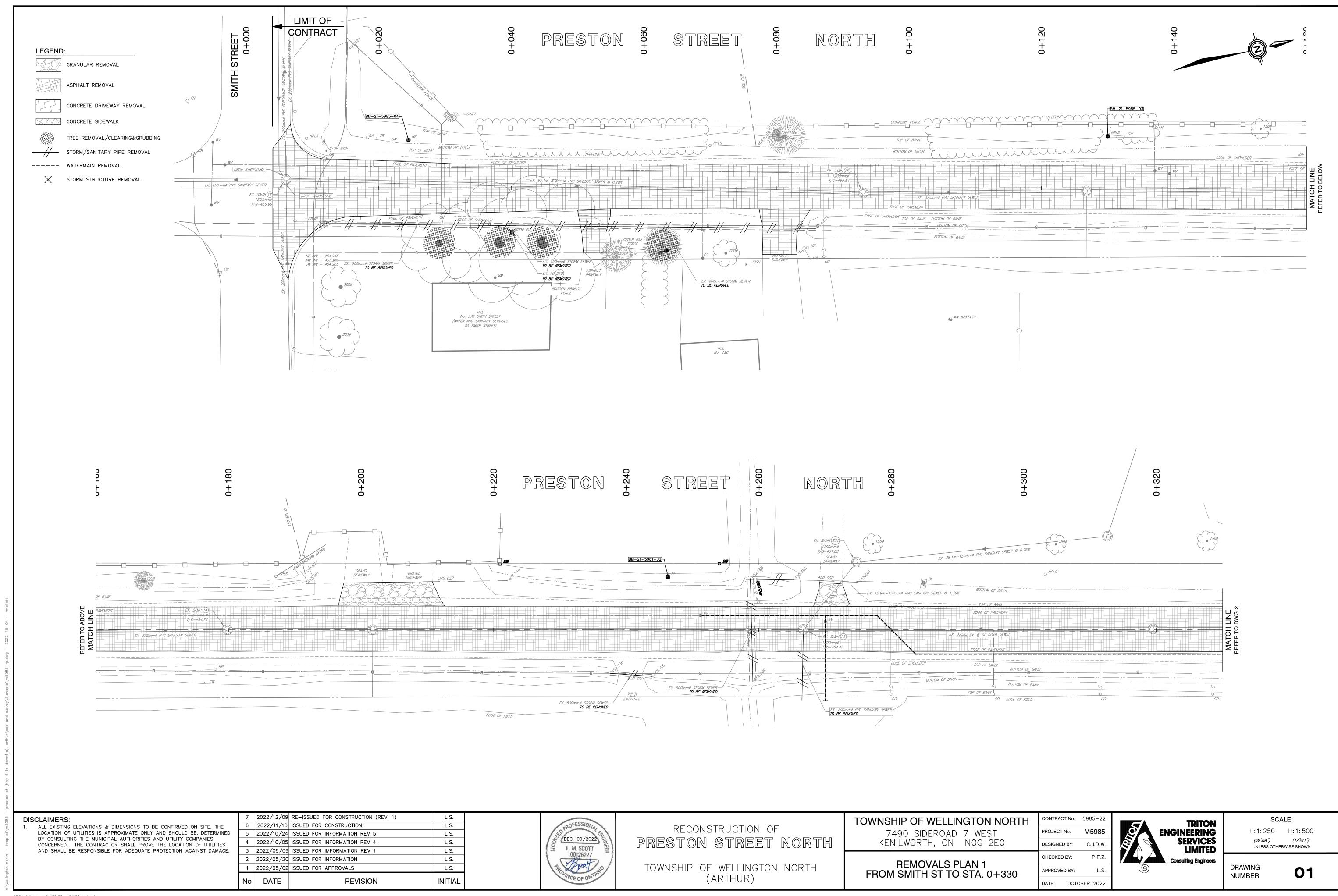
ARTHUR

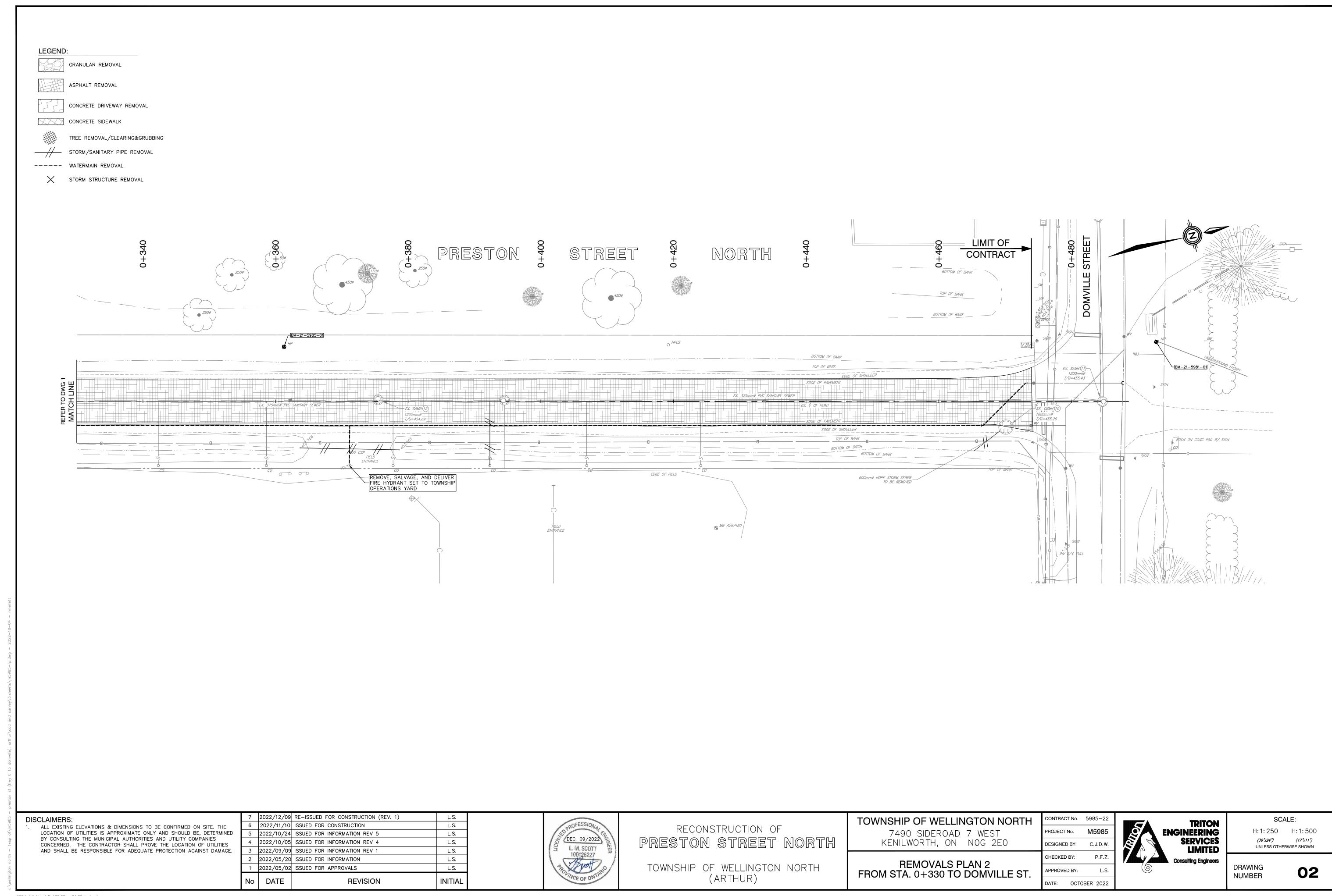
CONTRACT No. 5985-22

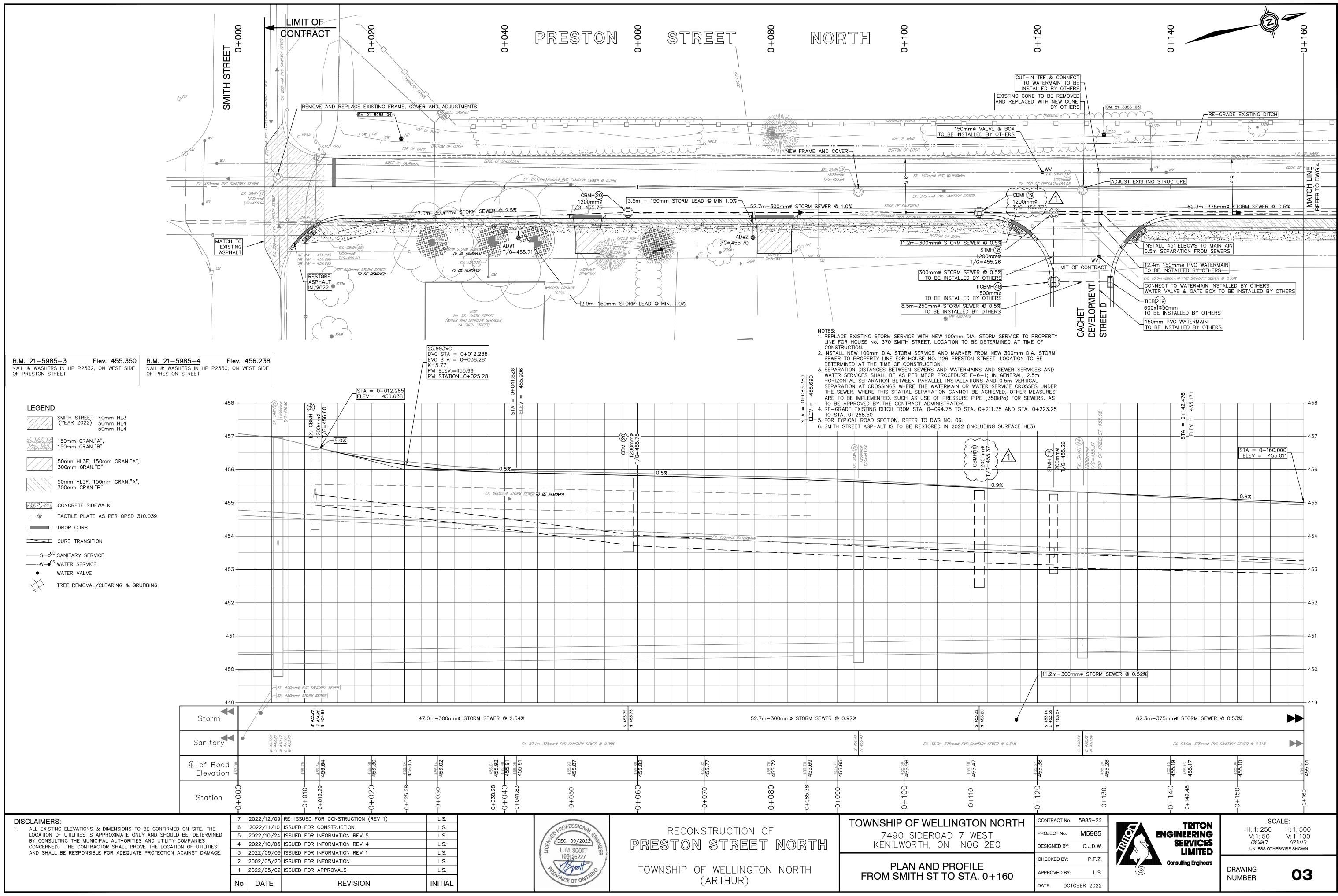
Mayor: ANDREW LENNOX

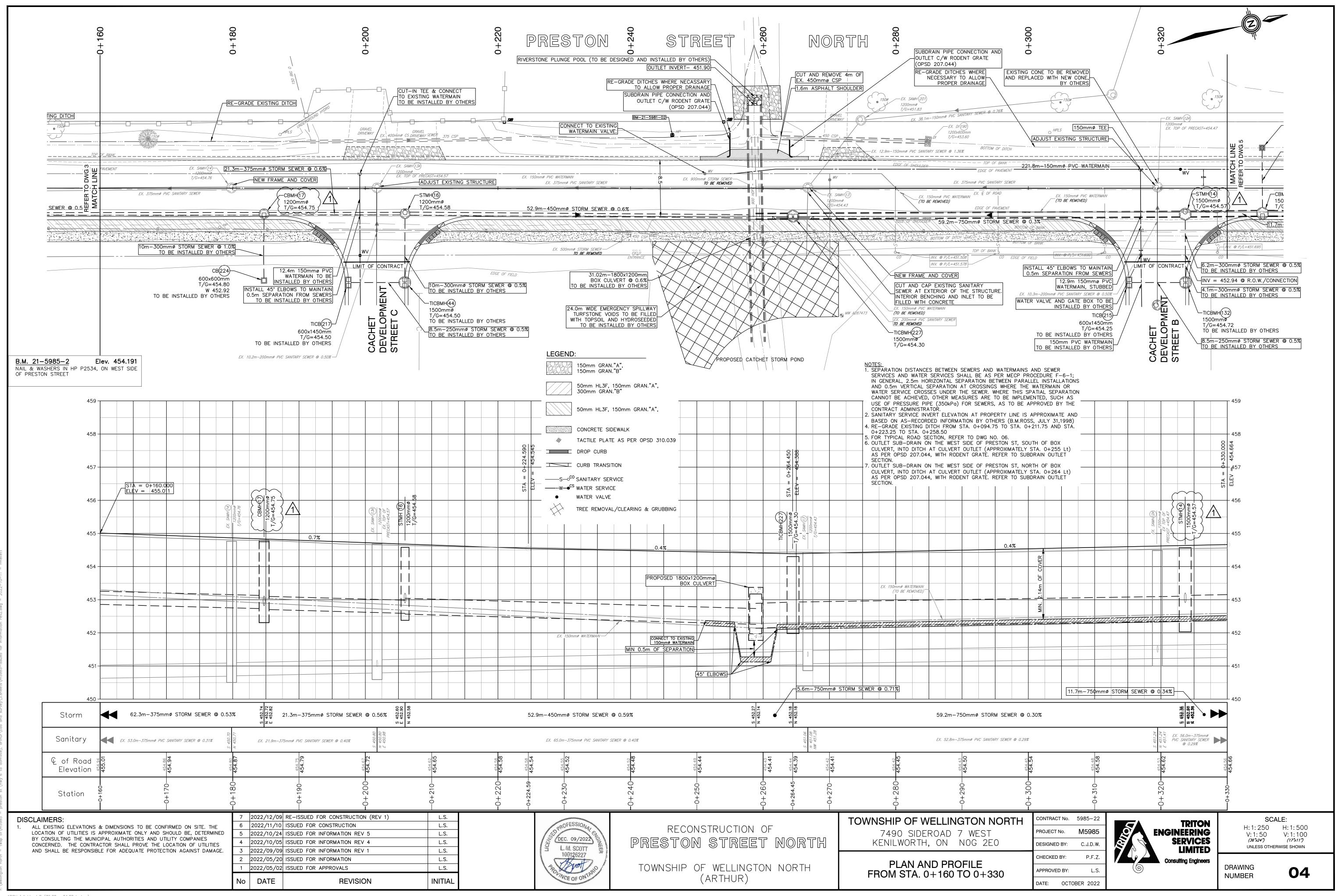
ISSUED FOR	APPROVALS			_	MAY	2022
ISSUED FOR	INFORMATION				JUNE	2022
ISSUED FOR	INFORMATION	(REV	1)	_	SEPTEMBER	2022
ISSUED FOR	INFORMATION	(REV	4)	_	OCTOBER	2022
ISSUED FOR	INFORMATION	(REV	5)		OCTOBER	2022
	CONSTRUCTIO	`	,		NOVEMBER	
RE-ISSUED	FOR CONSTRUC	CTION	(REV	1) —	DECEMBER	2022
AS RECORDE			`			

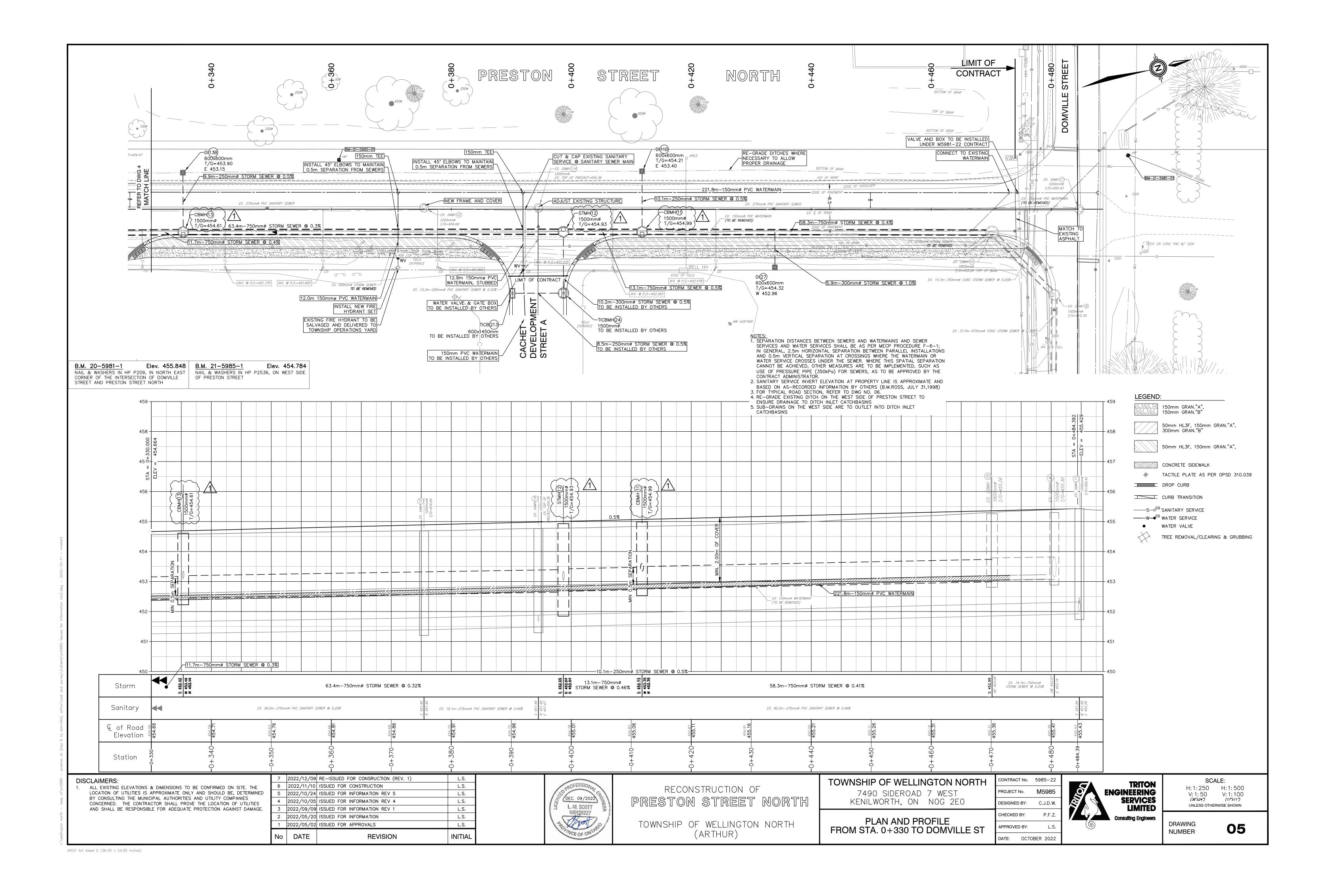


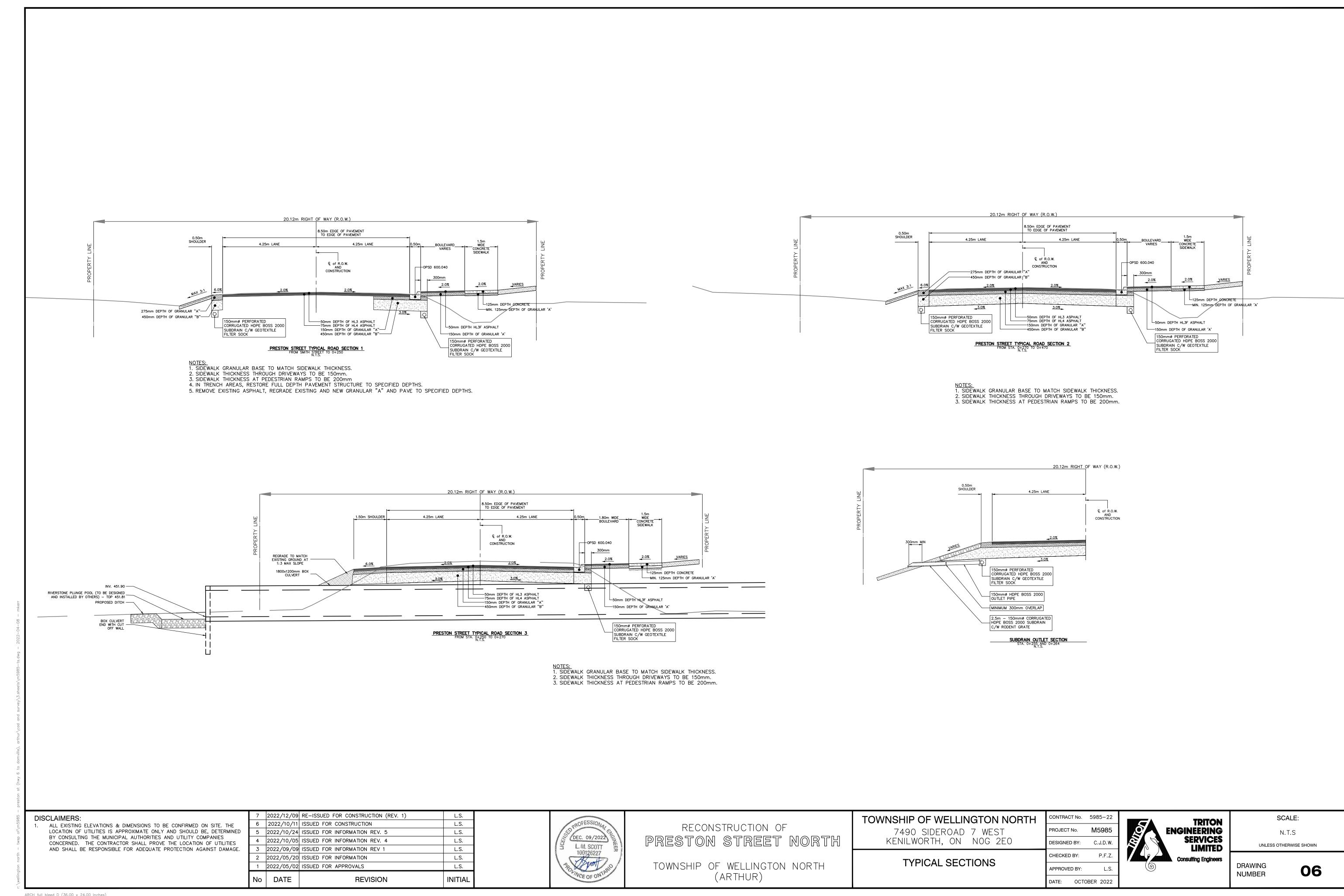


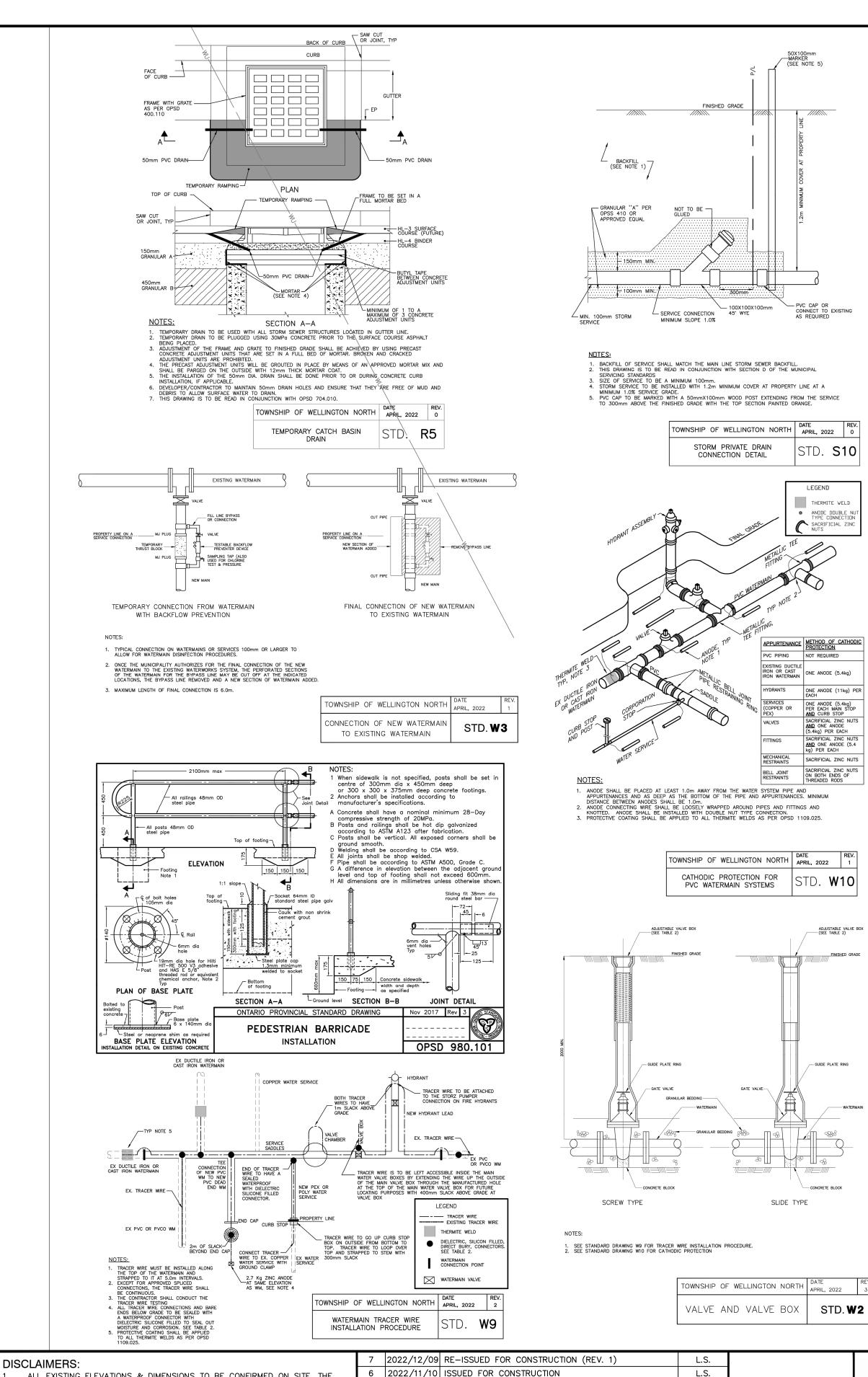












ALL WORK TO CONFORM TO THE LATEST TOWNSHIP OF WELLINGTON NORTH MSS. AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS. 2. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CURRENT "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONTRACTOR AS DEFINED IN THE ACT.

3. ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT ONTARIO TRAFFIC MANUAL BOOK 7: TEMPORARY CONDITIONS FIELD EDITION. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR OR OWNER'S CONSULTANT SHALL CONTACT THE TOWNSHIP OF WELLINGTON NORTH

THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY LOCATES AND ANY DAMAGE OR DISTURBANCE DURING CONSTRUCTION. 6. THE CONTRACTOR SHALL RECTIFY ALL EXISTING DISTURBED AREAS TO THE ORIGINAL CONDITION OR BETTER AND TO THE SATISFACTION OF THE TOWNSHIP OF WELLINGTON NORTH ENGINEERING DEPARTMENT.

THROUGHOUT CONSTRUCTION. 8. ALL PROPERTY BARS TO BE PRESERVED AND REPLACED BY O.L.S. AT CONTRACTORS EXPENSE IF REMOVED DURING CONSTRUCTION. 9. CONTRACTOR IS TO SUBMIT A LIST OF MATERIAL TO THE TOWNSHIP TO REVIEW FOR APPROVAL WITH A MINIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION.

7. THE CONTRACTOR SHALL ESTABLISH A STREET SWEEPING/ FLUSHING PROGRAM THAT SUITS THE NEEDS OF THE PUBLIC WORKS DEPARTMENT THAT IS MAINTAINED

PVC DR 35 (CSA B182.2 CERTIFIED, CONFORM TO ASTM D3034, F679- DR 35) OR LATEST VERSION.

BEDDING AND COVER SHALL BE GRANULAR "A" IN ACCORDANCE WITH OPSD 802.010. 2. STORM SEWER (MAIN LINE SEWER)

PVC DR35 (CSA B182.4 - CLASS 320) OR PE (CSA - B182.6) OR LATEST VERSION OR HDPE BOSS 2000 MAY BE USED FOR SEWER PIPES 600mm DIAMETER AND SMALLER, UNLESS OTHERWISE SPECIFIED. FLEXIBLE PIPE BEDDING AND COVER SHALL BE GRANULAR "A" IN ACCORDANCE WITH OPSD 802.010.

CONCRETE - REINFORCED CONCRETE PIPE 675mm DIAMETER AND LARGER SHALL CONFORM TO CSA A257.2 (MINIMUM CLASS 50-D), UNLESS OTHERWISE SPECIFIED. RIGID PIPE BEDDING SHALL BE GRANULAR "A" IN ACCORDANCE WITH OPSD 802.030 CLASS 'B'. 3. MAINTENANCE HOLES SHALL CONFORM TO OPSD 701.010, 701.011, AND 701.012 SANITARY MAINTENANCE HOLE MUST COME COMPLETE WITH KOR-N-SEAL RUBBER

BOOTS/PREFAB TEE. 4. ONLY SANITARY MANHOLES ARE TO USE THE OPSD 401.010 TYPE 'A' COVER. STORM MANHOLES ARE TO USE TYPE 'B'

5. PIPE SUPPORT AT MH'S, CB'S, AND CBMH'S AS PER OPSD 708.020. . MH'S TO BE INSTALLED WITH CRETEX RUBBER SEALS BETWEEN MH SECTIONS AND KOR-N-SEAL RUBBER BOOTS USED FOR ALL SANITARY PIPE CONECTIONS.

. SEWERS SERVICES TO HAVE PREFABRICATED 'T' CONNECTION. 8. ALL MH WITH IN ROAD WAY ARE TO BE SET TO BASE COURSE ASPHALT ELEVATION AND RAISED WITH CONCRETE MODULOC IN ACCORDANCE WITH TOWNSHIP OF WELLINGTON NORTH AND OPSS SPECIFICATIONS PRIOR TO TOP ASPHALT. ALL CATCHBASIN AND CATCHBASIN MAINTANCE HOLES WITH IN THE CURB SHALL HAVE THE FRAME AND GRATE SET TO FINISHED ELEVATION WITH TEMPORARY DRAINS

INSTALLED AS PER TOWNSHIP OF WELLINGTON NORTH STANDARD DRAWING R5. 9. ALL CATCHBASIN AND CATCHBASIN MANHOLES REQUIRE SUMPS, AND STRUCTURE ADJUSTMENT, IN CONFORMANCE WITH WELLINGTON NORTH MSS (STORM SECTION). 10. ALL SANITARY MH'S EXTERNAL JOINTS TO BE WRAPPED IN DENSO TAPE, OR APPROVED EQUIVALENT. 11. SINGLE CATCHBASIN LEAD IS 250mmØ AND SLOPE 1.00% DOUBLE CATCHBASIN LEAD IS 300mmØ AND SLOPE 1.00%

12. BENCHING IS REQUIRED IN ALL SANITARY MANHOLES. IT IS ALSO REQUIRED IN STORM MANHOLES AND CATCHBASIN MANHOLES WHERE PIPES ARE OVER 450mmØ. 13. REQUIRED MINIMUM SLOPE FOR SANITARY SERVICES IS 2% AND STORM SERVICES IS 1% 14. MINIMUM REQUIRED DIAMETER OF SANITARY SERVICE IS 125mm AND MINIMUM DIAMETER FOR STORM SERVICES ARE 100mm. STORM SERVICES ARE ALSO TO BE LOCATED

1.5m FROM THE LOT LINE OR AS DETERMINED DURING CONSTRUCTION.

PRIOR TO BASE ASPHALT BEING PLACED ALL SANITARY AND STORM SEWERS (MAINS AND SERVICES) ARE TO BE FLUSHED PRIOR TO DEFLECTION TESTING (MANDREL PASSAGE) AND VIDEO CAMERA INSPECTION.

THE TOWNSHIP WILL REQUEST A VIDEO INSPECTION OF THE SEWER MAIN AND SERVICE CONNECTIONS TO PROPERTY LINE. 3. THE TOWNSHIP REQUIRES ALL SANITARY SEWERS AND SERVICE LATERALS TO BE TESTED FOR LEAKAGE.

1. GENERAL INSTALLATION AND TESTING OF SEWERS AND APPURTENANCES TO BE IN ACCORDANCE WITH OPSS 407, 408, 409, (CCTV), 410 & 421 AND AS DIRECTED BY THE

5. A SECOND VIDEO CAMERA INSPECTION OF THE SANITARY SEWER (MAIN ONLY) IS REQUIRED PRIOR TO THE INSTALLATION OF SURFACE ASPHALT.

STORM SERVICE CONNECTIONS TO BE 100mm MINIMUM, PVC (CSA B182.2 CERTIFIED, CONFORM TO ASTM D3034, F679 - DR 28) OR LATEST VERSION EXCEPT THE COLOUR

SHALL BE WHITE AND INSTALLED AT 1% MIN

CATCHBASINS SHALL CONFORM TO OPSD 705.010 (SINGLE) AND OPSD 705.020 (DOUBLE). FRAMES AND GRATES TO CONFORM TO OPSD 400.110 2. DITCH INLET CATCHBASINS SHALL CONFORM TO OPSD 705.030 OR 705.040 ALL CATCHBASIN LEADS TO BE SET SQUARELY ON THE STRUCTURE WITH NO OVERHANG INTO THE ROADWAY OR BOULEVARD.

1. CATCHBASIN LEADS TO BE 250mmØ FOR SINGLE CATCHBASINS AND 300mmØ FOR DOUBLE CATCHBASINS UNLESS OTHERWISE NOTED AND APPROVED BY THE TOWNSHIP CATCHBASIN LEADS MAY BE REINFORCED CONCRETE CSA A257.1 - CLASS 3, EXTRA STRENGTH, HDPE BOSS 2000, OR PVC DR 35 MATERIAL. AREA DRAINS SHALL BE 360mmø INCLUDING GREY STRUCTURAL FOAM POLYOLEFIN GRATE BY NYLOPLAST DRAINAGE AS APPLIED BY CORIX. GRANULAR BEDDING SHALL BE GRANULAR A. CLEAR STONE MAY BE SUBSTITUTED IN WET TRENCH CONDITIONS.

FOR PIPE SIZES 100mm TO 300mm WATERMAIN SHALL BE PVC CLASS 235 DR18 CONFORMING TO AWWA C900-07 AND CAN/CSA B137.1-09 WTH GASKETED BELL END. 2. A 12 GAUGE, 7 STRAND COPPER TRACER WIRE, WITH OUTER PLASTIC COATING, SHALL BE ATTACHED TO EVERY NON-METALIC WATERMAIN, HYDRANT LEAD AND SERVICE CONNECTION- SEE STANDARD DRAWINGS W9.

BACKFILL AND EMBEDMENT SHALL BE PER OPSD 802.010 WITH GRANULAR "A" BACKFILL TO BE SELECT NATIVE MATERIAL AS APPROVED BY THE GEOTECHNICAL CONSULTANT. BACKFILL OF WATER SERVICES TO BE BEDDED AND COVERED IN TO BE APPROVED SAND WITH FINE AGGREGATE PASSING THE 4.75mm SIEVE AND RETAINED ON A 75 MICROMETER SIEVE AS PER OPDSS 1001 TO 300mm ABOVE THE TOP OF THE PIPE ON PUBLIC PROPERTY.

MINIMUM COVER ON WATERMAIN AND SERVICES SHALL BE 2.0 m. ALL NEW WATERMAINS SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH TOWNSHIP SPECIFICATIONS AWWA C651, WATERMAIN DISINFECTION PROCEDURE AUGUST 1, 2020, AND PROVINCIAL GUIDELINES, THE SYSTEM SHALL BE CONSTRUCTED AND TESTED AS PER OPSS 701.

OPERATION OF IN SERVICE FIRE HYDRANTS AND VALVES ARE TO BE OPERATED BY THE TOWNSHIP OF WELLINGTON NORTH LICENSED OPERATORS. ALL HYDRANTS SHALL BE MUELLER CANADA CENTURY HYDRANTS. COMPRESSION TYPE, OR CLOW CANADA, BRIGADIER SERIES M-67-B, WITH 2 - 65mm THREADED OUTLETS

AND 1 - 100mm PUMPER NOZZLE WITH A STORZ CONNECTION THAT IS COMPATIBLE WITH THE TOWNSHIP EQUIPMENT. HYDRANT SHALL BE SELF-DRAINING, COUNTER CLOCKWISE OPENING AND PAINTED BED CONNECTION SHALL FACE THE ROADWAY. STORZ CAP AND HOSE CONNECTION TO BE PAINTED BLACK. ALL FITTINGS, VALVES AND HYDRANT LEADS SHALL HAVE STAINLESS STEEL MECHANICAL RESTRAINTS AND ALL T-BOLTS TO BE STAINLESS STEEL. NO CONCRETE THRUS' BLOCKING IS PERMITTED OR AS LISTED ON TOWNSHIP APPROVED LIST.

9. WATERMAINS MUST FOLLOW THE MINISTRY OF ENVIRONMENT PROCEDURES THAT GOVERN THE SEPARATION OF SEWERS AND WATERMAINS F 6-1. A MINIMUM VERTICAL CLEARANCE OF 0.5m IS REQUIRED BETWEEN PIPES AND HORIZONTAL SEPARATION BETWEEN WATERMAIN AND SEWERS TO BE 2.5m. AT THE SOLE DISCRETION OF THE DIRECTOR OF PUBLIC WORKS, THAT REQUIREMENT MAY BE WAIVED IN LIEU OF OTHER MITIGATING MEASURES AS DIRECTED.

10. ALL VALVES LESS THAN 300mm SHALL BE IN VALVE AND BOX. VALVES SHALL BE MUELLER OR CLOW AS PER TABLE 2, OR APPROVED EQUIVALENT AND SHALL INCLUDE RESILIENT SEAT GATES, COUNTER CLOCKWISE OPENING, TO AWWA C509-09, WITH MECHANICAL JOINT END CONFIGURATIONS. 11. CATHODIC PROTECTION SHALL BE INSTALLED AS PER STANDARD DRAWING W10. 12. CORPORATION STOPS SHALL BE CAMBRIDGE BRASS OR MUELLER CANADA WITH AWWA THREAD ON THE INLET SIDE AND COPPER TUBE TUBE SIZE COMPRESSION FITTING

END ON THE OUTLET SIDE OR AS LISTED ON THE APPROVED MATERIAL LIST. CORPORATION STOP ARE TO HAVE ELECTICAL FITTING/NUT THAT THE ANODE IS ATTACHED TO. CURB STOPS SHALL BE CAMBRIDGE BRASS OR MUELLER CANADA WITH COPPER TUBE SIZE COMPRESSION FITTING ON BOTH ENDS OR AS LISTED ON THE APPROVED MATERIAL LIST. CURB ARE TO HAVE ELECTRICAL FITTING/NUT THAT THE ANODE IS. 14. CURB BOXES SHALL BE THE SLIDING TYPE, IRON CURB BOXES. THE OPERATING ROD AND PIN SHALL BE STAINLESS STEEL AS LISTED ON THE APPROVED MATERIAL LIST. 15. MINIMUM WATER SERVICE SIZE IN 19mm.

16. HYDRANT MARKERS SHALL BE ID STICK TYPE. 17. WATERPROOF CONNECTORS TO BE DRYCONN DIRECT BURY LUG AWAY FILLED WITH DIELECTRIC SILICONE.

ALL TESTING WILL FOLLOW AWWA C651 DISINFECTING WATER MAINS, WATERMAIN DISINFECTION PROCEDURE AUGUST 1, 2020, ONTARIO REGULATION 170 / 03 AND WELLINGTON NORTH MSS. 2. CONTRACTOR TO SUBMIT A WATERMAIN COMMISSIONING PLAN THAT DETAILS THE WATERMAIN DISINFECTION, TESTING, SAMPLING AND FINAL CONNECTION PROCEDURES TO THE TOWNSHIP ENVIRONMENTAL SERVICES WITH A MINIMUM 2 WEEKS PRIOR TO THE START OF CONSTRUCTION FOR REVIEW AND APPROVAL.

NO ALTERATIONS TO EXISTING BOUNDARY ELEVATIONS OR ADJACENT LANDS SHALL BE UNDERTAKEN UNLESS WRITTEN AGREEMENT WITH THE ADJACENT PROPERTY OWNER IS OBTAINED AND SUBMITTED IN A FORMAT ACCEPTABLE TO THE TOWNSHIP.

2. MUNICIPAL BOULEVARDS ARE 200mm TOPSOIL AND SOD AS PER MSS. 3. ALL BEDDING AND BACKFILL MATERIAL, ROAD SUBGRADE AND BOULEVARD ETC., SHALL BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY (SPD)

(UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER). ALL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300 mm LIFTS. 4. SUBGRADE TO BE PROOF ROLLED AND CERTIFIED BY THE SOILS CONSULTANT PRIOR TO THE PLACING OF ANY GRANULAR ROAD BASE MATERIALS. 5. PER GEOTECHNICAL REPORT, BOTH GRANULAR COURSES SHOULD BE COMPACTED TO 100% SPD.

3. ALL GRANULAR AND ASPHALT MATERIALS AND PLACEMENT TO BE IN ACCORDANCE WITH OPSS 314, 1010, AND 310 OR OTHERWISE SPECIFIED. GRANULAR "B" TO BE IN ACCORDANCE WITH TOWNSHIP STANDARDS.

8. CONCRETE SIDEWALK SHALL BE AS PER TOWNSHIP STANDARD, OPSD 310.010, 310.050, 350.010, 351.010 AND OPSS 351. SIDEWALK SHALL BE MINIMUM THICKNESS OF 125mm, THE THICKNESS SHALL BE INCREASED TO 150mm WHERE SIDEWALK CROSSES A DRIVEWAY. 30 MPa COMPRESSIVE, WITH MINIMUM OF 150 mm GRANULAR "A" BASE. ALL 9. CONCRETE RAMPS ARE TO BE MINIMUM OF 200mm THICK. TACTILE WALKING SURFACE INDICATOR SHALL BE CLAY RED COLOUR AND TO BE INSTALLED AS PER OPSD

310.039. SEE TABLE 2 FOR APPROVED MATERIAL LIST 10. CONCRETE CURB AND GUTTER TO BE AS PER OPSD 600.040 OR AS PER TOWNSHIP STANDARD. 11. SUBDRAIN IS TO BE 150mm BOSS 2000 WITH GEOTEXTILE FILTER WRAP, CLASS 1 WITH FILTER OPENING SIZE OF 130-100 μ m. ADDITIONALLY, THE MAXIMUM STONE SIZE FOR

THE GRANULAR BACKFILL FOR SUBDRAINS IS TO BE 50mm DIAMETER. 12. INTERSECTION CURB RETURN RADIUS TO BE 10.0m UNLESS NOTED OTHERWISE ON THE DRAWINGS. 13. DRIVEWAYS SHALL BE 50mm HL3 AND 300mm GRANULAR "A".

14. WHERE NEW ASPHALT MATCHES EXISTING ASPHALT, LAP JOINT SHALL BE INSTALLED A MINIMUM OF 0.5m WIDE. APPLY HOT RUBBER SEALING COMPOUND IN ACCORDANCE WITH OPSS 1212. ALL SURFACES TO BE TACK COATED WITH SS-1. 15. WHERE APPLICABLE, THE CONTRACTOR IS TO SUBMIT SHOP DRAWINGS FOR RETAINING WALLS (INCLUDE RAILING IF APPLICABLE) TO THE TOWNSHIP'S BUILDING DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION. THE BUILDING DEPARTMENT SHALL BE CONTACTED REGARDING THE DESIGN, REVIEW, CERTIFICATION, PERMIT

ISSUANCE, AND INSPECTION PROCESS REQUIRED FOR THE RETAINING WALL. ONTARIO PROVICIAL STANDARD SPECIFICATIONS

ONTARIO PROVICIAL S	TANDARD SPECIFICATION	<u>vs</u>			
MUNI.100 (Nov. 2019)	MUNI.102 (NOV. 2018)	127 (Nov. 2017)	MUNI.412 (Nov.2018)	MUNI.441 (Nov. 2016)	MUNI.442 (Nov. 2016
128 (Apr. 2006)	MUNI.180 (Nov. 2016)	MUNI.201 (Apr. 2019)	MUNI.490 (Nov.2018)	MUNI.491 (Nov. 2017)	MUNI.492 (Nov.2018)
MUNI.206 (Apr. 2019))	MUNI.212 (Nov. 2019)	MUNI.310 (Nov. 2017)	MUNI.493 (Nov. 2019)	MUNI.501 (Nov. 2017)	MUNI.506 (Nov. 2017
MUNI.311 (Nov. 2018)	MUNI.314 (Nov. 2019)	MUNI 351 (Nov. 2019)	MUNI.510 (Nov. 2018)	MUNI.517 (Apr. 2017)	MUNI.518 (Nov. 2018
MUNI.353 (Nov. 2019)	MUNI.355 (Nov. 2014)	MUNI.401 (Nov. 2018)	MUNI.539 (Nov. 2014)	MUNI 703 (Apr. 2019)	MUNI.706 (Apr. 2018
MUNI.402 (Nov. 2016)	MUNI.404 (Nov. 2017)	MUNI.405 (Nov. 2017)	MUNI.708 (Apr. 2018)	MUNI.709 (Nov. 2018)	710 (Nov. 2010
407 (Nov. 2015)	408 (Nov. 2015)	MUNI.409 (Nov. 2017)	MUNI.801 (Nov. 2019)	MUNI.802 (Nov. 2019)	MUNI.803 (Apr. 2018)
MUNI.410 (Nov. 2018)	MUNI.410 (Nov. 2018)	411 (Nov. 2015)	MUNI.804 (Nov.2014)	MUNI.805 (Nov. 2018)	

TABLE 1: STANDARD DRAWINGS LIST

TITLE	PROVINCIAL STANDARD DRAWING	WELLINGTON NORTH STANDARD	REVISIONS & UPDATES	
			Rev. 3 Nov '14	
	802.010		Rev. 3 Nov '14	
oe Bedding-Granular 'A'	802.013		Rev. 3	
over Material-Granular 'A' or nd	802.030 802.031		Nov '15 Rev. 3	
nu -	802.032 802.033		Nov '15 Rev. 3	
			Nov '15 Rev. 3	
			Nov '15	
H. Frame and Cover			Rev. 4	
Standard – Sanitary Standard – Storm	401.010 (Type 'A') 401.010 (Type 'B')	-	Nov '18 Rev. 4	
Watertight – Sanitary	401.030	-	Nov '18 Rev. 4	
			Nov '18 Rev. 3	
atchbasin Frame and Grate	400.110	- Special	Nov '13 Rev. 3	
ame and Grate	403.010	Special where required	Nov '17	
H. Steps	405.010 (Circular Aluminum)	-	Rev. 4 Nov '18	
fety Platform, Aluminum	404.020	-	Rev. 4 Nov '18	
ewer Service Connections	1006.010	-	Rev. 4 Nov '21	
H. (precast)	Section 700	-		
atchbasin (precast) atchbasin M.H. (precast)	Section 700 Section 700	-		
H. Benching	701.021	-	Rev. 4	
ernal Drop Structure for Ex.	1003.030		Nov '14 Rev. 4 5	
H	1003.030	- W8	Nov '21	
ater Service		W9	D 4 A (00	
mm Blow Off Installation	-	W1 W2	Rev. 1 Apr '22 Rev. 3 Apr '22	
drant Setting	1105.010	-	Rev. 3	
onnection of New Watermain to	_	W3	Nov '18 Rev. 1 Apr '22	
isting Watermain	_	****	Rev. 3	
rust Blocks	1103.010 1103.020	-	Nov '18 Rev. 4	
	1100.020		Nov '18	
pacer For Water Meter	-	W4		
pical Water Meter Installation ost Collar Installation For Curb	-	W5		
op Boxes Located In Driveways	-	W6		
onnection Detail For Non-	-	W7		
etallic Watermain 50 mm ameter or less services				
etallic Water Service onnection Detail For Non-	_	W8		
etallic Watermain 25 mm ameter or Less Services	-	VVO		
atermain Tracer Wire stallation Procedure	-	W9	Rev. 2 Apr '22	
thodic Protection For PVC	-	W10	Rev. 1 Apr '22	
atermain Systems m Right-of-Way	-	R1	Rev. 3 Apr '22	
m Right-of-Way	-	R2	Rev. 1 Apr '22	
m Right-of-Way pical Rural Section	-	R3	Rev. 1 Apr '22	
m Right-of-Way	-	R4 R5	Rev. 2 Apr '22	
mporary Catch Basin Drain oncrete Sidewalk		N3	Rev. 3	
25 mm Concrete) 25 mm Granular "A" minimum)	310.010	-	Nov '19	
	310.030		Rev. 1 Nov '15	
dewalk Ramps	310.033	-	Rev. 1 Nov '19	
ctile Warning Plates	310.039	-	Nov '15	
rrier Curb and Gutter	600.040	-	Rev. 2 Nov '12	
ountable Curb and Gutter	600.100	-	Rev. 2 Nov '12	
rb with Gutter Method of	608.010	-	Rev. 2 Nov '12	
phalt Gutter	601.010	-	Rev. 2	
nain Link Fence	972.130	-	Nov '13 Rev. 2	
			Nov '12	
ghway Wire Fence	971.101	-	Rev. 4 Nov '16	
t Grading Plan Detail	-	G1	Rev. 2 Apr '22	
t Grading Plan Townhouse	-	G2		
pical Servicing Layout Single d Semi-Detached	-	S1	Rev. 1 Apr '22	
pical Servicing Layout wnhouse	-	S2		
pical Servicing Layout For Infill ts Townhouse	-	S3		
pical Servicing Layout For Infill ts Townhouse	-	S4		
de Yard Easement on 3.0m	-	S5		
de Easement initary Service Connection With	_	S6		
ean-Out Imp Pump To Storm Service	_	S7	Rev. 1 Apr'22	
onnection Initary Connection ≥ 4m Deep	-	S8	Rev. 1 Apr '22	
esidential Sanitary Service	-	S9		
etail orm Private Drain Connection	-	S10		
etail ility Plan	-	U1		
eciduous Tree Planting Detail	-	L1		
re Root Tree Planting Detail	-	L2		
ail Barrier Gate ainless Steel Security	-	L3		
rrel/Pin For Trail Barrier Gate & aintenance Access Gate	-	L4		
aintenance Access Gate	-	L5		

TABLE 2: APPROVED MATERIAL AND PRODUCT LIST

SERVICE	ITEM	APPROVED PRODUCT
SANITARY	Sewer Pipe	- PVC SDR 35 - Concrete CSA #A257.1/A257.2
	Service Pipe Connections	- PVC SDR 28 to building foundation - Kor-N-Seal (Maintenance Hole) - Prefabricated tees (Services on new sanitary sewer - Kor-N-Tee (Services on existing sanitary sewer)
	Adiustraants	Stainless Steel Straps and saddles (Services on existing sanitary sewer) 150mm Min. and 300mm max concrete adjustment
STOPM	Adjustments	units complete with parging on the outside joints 600 mm diameter or less:
STORM	Sewer Pipe	PVC SDR35 PVC pipe "Ultra Rib" as manufactured by IPEX, in accordance with CSA B182.4 Concrete - CSA A257.2 (reinforced) HDPE Boss 2000, 320 kPa stiffness c/w Ultra Sta
		75 Joint as manufactured by Armtec, in accordance with CSA B182.8-02 Storm Sewer Grade. Pipe ar fittings must bear CSA logo (B182.6 is als acceptable) - PVC pipe, "KORFLO" as manufactured by Roy Pipe Company, in accordance with CSA B182.4 675 mm diameter or greater:
		Concrete - CSA A257.2 (reinforced) Leads to rear yard catchbasins (ie. Side yard) are to be concrete All pipes to be bell and spigot joints and shall have
	Culverts	elastomeric gaskets to provide a water tight seal. -HDPE corrugated BOSS 2000, 320 kPa stiffness c/ Ultra Stab 75 joint manufactured by Armtec in accordance with CSA B182.8-02 Storm Sewer
	Service Pipe	Grade with 0.6 m minimum cover PVC SDR 28 to building foundation - Kor-N-Seal (Maintenance Hole)
	Connections	- Adaptor with sand (ribbed) (new storm main existing storm sewer) - Prefabricated tee (services on new storm main) - Kor-N-Tee (services to existing storm sewer only)
	Subdrain	150mm Polyethylene Big 'O' BOSS 2000 with geotextile filter wrap, class 1 with filter opening size of 130-100 µm
	Inlet Basin (rear yard	Nyloplast
Watermain	drainage only) Watermain Pipe	PVC pipe DR 18, Class 235 PVC and conform to ASTM D1784, AWWA Standard C900 or C905 and CSA Standard CAN3-B137.3-M86.
	Valves	Mueller Resilient Wedge Gate Valve AWWA C-509, A-2362 mechanical joint ends with:
		- fusion-bonded epoxy coating - bronze stem - open counter clockwise
		Or; Clow Resilient Wedge Valve AWWA C-509, F-6100 mechanical joint with:
		- fusion-bonded epoxy coating - bronze stem
	Valve Boxes	- open counter clockwise - Bibby-Ste-Croix VB2200, Slide Type - Bibby-Ste-Croix VB3200, Screw Type - Star Pipe Canada VB-5006, Slide Type
	Hydrants	- MVB Composite Valve Box All with "Storz" pumper connection and open counter clockwise: - Canada Valve, Century Type Compression (as
		manufactured by Mueller) - Clow Canada, Brigadier Series M-67-B (as manufactured by Clow Canada) - Red in colour, storz pump cap and both 2.5" caps painted black - Hydrant marker 4' yellow with hydrant ID sticker manufactured by Owl Lite Model D1FHM804Y
	Corporation Stop	- Cambridge Brass, Ball Style, Series 301NL(no-lead) with electrical connection, AWWA x CB assembly Or; - Mueller Canada, Mueller Ground Key Design Typer H-15008N (no-lead) with electrical connection,
	Curb Stop	Mueller 110 Compression Joint Cambridge Brass, Ball Style, Series 202NL (nolead) with electrical connection, CB Compression CB Compression assembly; Or: Mueller Canada, Mueller Mark II Oriseal, Type H-15209N (no-lead) with electrical connection,
		Mueller 110 Compression Joint. ALL ROD AND PIN SHALL BE STAINLESS STEEL
WATER cont'd	Saddle	Robar Stainless Steel 2616 Double Bolt, Wide Band Cambridge Brass Series 403 Stainless Steel Type AMMA Thread
	Mechanical Joint Restraints	304 Double Bolt, AWWA Thread "PVC Romagrip" (black ring) pipe Restrainer manufactured by Romac Industries Inc. (Iron Watermains only) One-LOK Series for PVC pipe manufactured by Sigma Uni-Flange Series 1300 manufactured by Ford Meter Box Company Inc.
		Megalug Series 2000 PV for PVC C900 pipe PVC Stargrip Series 4000 Restrainers manufactured by Star Pipe Products 600 Series pipe restraint manufactured by Romac
	Thrust Bell Joint Restraint	Industries Inc Uni-Flange Series 1390 for PVC Pipe Bell Joints manufactured by Ford Meter Box Company Inc PV-LOK Series PWPR manufactured by Sigma - Pipe Restrainers Series 1100C manufactured by Star Pipe Products
	Tracer Wire	12 gauge, 7 strand copper with plastic coating, colour blue. Attached to storz pumper connection Direct Bury Lug Aqua, dielectric silicone filled to
	Water Service	seal out moisture and corrosion manufactured by DryConn
	Water Service Material	Copper seamless Type "K" Crosslinked polyethylene ("Municipex" by Rehau and "Blue904" by Ipex)
	Service Boxes	All service boxes to be adjustable slide type and complete with stainless steel rod and pin with a minimum 2.0m cover: - Mueller A-726
	Water Meters	Concord Clow Canada, D-1-10 or D-2-10 T-10 coupled with E-CODER R900i manufactured by Neptune Technology Group sizes 16mm (5/8") to 25mm (1"), or approved equivalent. TRU/FLO Compond Meter manufactured by Neptune Technology Group sizes 25 mm to 150 mm, or approved equivalent. Assembly Sensor device

Material List Updated – May 2022

6 2022/11/10 ISSUED FOR CONSTRUCTION ALL EXISTING ELEVATIONS & DIMENSIONS TO BE CONFIRMED ON SITE. THE LOCATION OF UTILITIES IS APPROXIMATE ONLY AND SHOULD BE, DETERMINED 5 2022/10/24 ISSUED FOR INFORMATION REV 5 BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES 4 2022/10/05 ISSUED FOR INFORMATION REV. 4 CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES 3 2022/09/09 ISSUED FOR INFORMATION REV 1 AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION AGAINST DAMAGE. 2 2022/05/20 ISSUED FOR INFORMATION

1 2022/05/02 ISSUED FOR APPROVALS

REVISION

DATE



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INITIAL

RECONSTRUCTION OF PRESTON STREET NORTH

TOWNSHIP OF WELLINGTON NORTH (ARTHUR)

TOWNSHIP OF WELLIN	IGTON NORTH
7490 SIDEROAD KENILWORTH, ON	—

DESIGNED BY: C.J.D.V CHECKED BY: **DETAILS** APPROVED BY:

CONTRACT No. 5985-22

DATE: OCTOBER 2022

PROJECT No.

M5985



H: 1: 258 H: 1: 516 V: 1: ## V: 1: ### (36"x24") UNLESS OTHERWISE SHOWN

> DRAWING NUMBER

07

(17"x11")