ADDENDUM #2

Tender No. ENG 26-03 – TOE Esquimalt Rd Phase 2 – Active Transportation and Underground Utility Renewals

Please note the following Clarifications, Questions and Answers for the above noted Tender is to be known as Addendum #2. Bidders are to reference receipt of Addendum #2 in their submission.

Bidder Questions and Township Answers:

Question #1: Can you please confirm which brand of detection camera is required at Esquimalt Road and Nelson Street? Is the Contractor or Township supplying the video detection camera and equipment? If the Township is supplying the equipment, what is included?

Answer#1 To maintain consistency with existing signalized intersections within the Township of Esquimalt, the video detection equipment at Esquimalt Road and Nelson Street shall be **Iteris Vantage Next.**

The Contractor shall supply and install all video detection cameras and associated equipment required for a complete and operational installation. The Township will not be supplying any video detection equipment for this project.

Question #2: What is the colour of the traffic signal heads and secondary heads?

Answer#2: Primary traffic signal heads shall be green with yellow backboards. Secondary traffic signal heads shall be green to match existing Township of Esquimalt traffic signal installations.

Question #3: Is the Contractor supplying the road signs located on the traffic signal arms?

Answer#3: The Contractor shall supply and install all road signs shown on the contract drawings, including those mounted on traffic signal arms.

The cost of supplying and installing signs shown on the electrical drawings shall be included within the applicable lump sum traffic signal items in the Schedule of Quantities for each location. No separate payment will be made for these signs under Division 34 signage items (SOQ Items 6.9 through 6.14).

Question #4: Are Guardian Wave push buttons an approved alternate for traffic signals and RRFBs?

Answer#4 No. To maintain consistency with existing Township of Esquimalt installations and the Approved Products List, Polara push buttons shall be used for both traffic signal and RRFB installations.

Question #5: Please confirm yellow finish on the RRFB flashers.

Answer#5 Confirmed. RRFB flashers shall have a yellow finish.

Additions, Revisions, and Clarifications

1. Updated City of Victoria Approved Product List (Revised 2025-06-10) is attached and to be included in *Form of Agreement – Supplemental Detail Drawings* and supersedes any prior version referenced in the Contract Documents. All waterworks materials and products shall conform to the attached Approved Product List.

2. City of Victoria Supplementary Standard Detailed Drawing (W2a, W2b, W2c, and W2d) are attached and to be included in *Form of Agreement – Supplemental Detail Drawings.* The Contractor shall refer to the City of Victoria works-and-services-bylaw-no-26-004 for all applicable City of Victoria standard waterworks details

3. *Supplementary Specifications Section 33 11 01 – Waterworks, Sub-Section 1.8.16.1– Valve Removal and Abandonment:* the payment item description is revised in full to read as follows: Valve Removal and Abandonment (per each): Payment includes closure of the existing valve in the fully closed position, excavation to expose the valve box assembly, removal of the valve box casting, riser, and sleeve to a minimum of 300 mm below finished grade, off-site disposal of removed components, granular backfill and compaction, and temporary surface restoration. The valve body shall remain in place. No separate payment will be made for excavation, backfill, or compaction associated with valve box removal.

4. *Supplementary Specifications Section 33 11 01 – Waterworks, Sub-Section 1.8.16.2 – Hydrant Removal (per each):* the payment item description is revised in full to read as follows: Hydrant Removal (per each): Payment includes excavation to expose the hydrant boot, disconnection of the hydrant assembly from the hydrant boot a minimum of 300 mm below finished grade, removal of the hydrant body, capping of the hydrant boot with a mechanical joint cap or blind flange acceptable to City of Victoria Operations, granular backfill and compaction, and surface restoration to match surrounding conditions. The removed hydrant shall be delivered to the City of Victoria Public Works Yard in good condition; the Contractor shall coordinate the return and delivery schedule with City of Victoria Operations prior to removal. Delivery to the Public Works Yard is included in this item. The hydrant lead pipe, hydrant lateral gate valve, and tee connection at the mainline shall remain in place. The hydrant lateral gate valve shall

be closed and the valve box casting, riser, and sleeve removed in accordance with Sub-Section 1.8.16 – Valve Removal and Abandonment.

5. *Supplementary Specifications Section 33 11 01 – Waterworks, Sub-Section 1.8.2. Water Service Connection (per each):* the payment item description is amended to include the following: Where the trench excavation for a new water service connection encounters an existing valve shown to be abandoned in place, closure of the valve and removal and off-site disposal of the existing valve box casting, riser, and sleeve to a minimum of 300 mm below finished grade shall be included in the unit price for the Water Service Connection. No separate payment will be made under the Valve Removal and Abandonment item for valves abandoned within the Water Service Connection trench excavation footprint.

6. *Supplementary Specifications Section 33 11 01 – Waterworks, Sub-Section 1.8.14– Measurement and Payment: Clause 1.8.14 is amended by adding the following item to the list of items included in payment for hydrants:* .10 Closure of the valve and removal and off-site disposal of the existing valve box casting, riser, and sleeve to a minimum of 300 mm below finished grade for any existing valve shown to be abandoned in place that is encountered within the trench excavation footprint of a new hydrant lead. No separate payment will be made under the Valve Removal and Abandonment item for valves abandoned within the trench excavation footprint of new hydrant leads.

7. *A revised – Appendix 1 – Schedule of Quantities and Prices - Form of Tender* is attached to this Addendum: the quantity for Valve Removal and Abandonment is reduced from 10 each to 6 each, reflecting the removal from this item of valves that fall within the trench excavation footprint of new water service connections (3 each) and the new hydrant lead (1 each). Bidders must use the revised Schedule of Quantities and Prices when submitting their Tender.

Clarification:

Please note: No more tender questions will be received after June 11TH 2026.

FORM OF AGREEMENT >> SUPPLEMENTAL DETAIL DRAWINGS (page 9 of 9)

Revised to include:

COV APPROVED PRODUCT LIST (REVISED 2025-06-10)
COV-SD-W2a WATER SERVICE CONNECTION FOR 19mm TO 25mm
COV-SD-W2b WATER SERVICE CONNECTION FOR 38mm TO 50mm
COV-SD-W2c METER INSTALLATION FOR 19mm AND 25mm WATER SERVICE CONNECTIONS
COV-SD-W2d METER INSTALLATION FOR 38mm AND 50mm WATER SERVICE CONNECTIONS

UNIT PRICE CONTRACT	ENG 26-03 TOE ESQUIMALT ROAD PHASE 2 FORM OF AGREEMENT REVISED	FORM OF AGREEMENT PAGE 9 OF 9

The above drawings are supplemented by the below listed standard detail drawings included with the specifications as follows:

SUPPLEMENTAL DETAIL DRAWINGS	
Drawing Number	**Title**
TOE-SD-C2.1	CONCRETE SIDEWALK
TOE-SD-C7.1	TYPICAL DRIVEWAY CROSSING
TOE-SD-C7.2	TYPICAL DRIVEWAY CROSSING CROSS SECTION
TOE-SD-C9.1	DOUBLE WHEELCHAIR RAMPS (PREFERRED)
TOE-SD-C9.2	SINGLE RADIAL WHEELCHAIR RAMP
TOE-SD-C9.3	SINGLE DIRECTIONAL WHEELCHAIR RAMP
TOE-SD-C9.4	T - INTERSECTION/MID-BLOCK WHEELCHAIR RAMP
TOE-SD-C16	SIGN POST SLEEVE
TOE-SD-G5.1	PAVEMENT RESTORATION
TOE-SD-S7a	SANITARY AND STORM SEWER SERVICES
TOE-SD-S9a	INSPECTION CHAMBER FOR 100 TO 200 DRAIN & SEWER CONNECTION
TOE-SD-S11.1	TOP INLET CATCH BASIN
COV-SD-S11C	STANDARD OFFSET CATCHBASIN DETAIL
R-7301	RELIANCE FOUNDARY BOLLARD COVER
COV	APPROVED PRODUCT LIST (REVISED 2025-06-10)
COV-SD-W2a	WATER SERVICE CONNECTION FOR 19mm TO 25mm
COV-SD-W2b	WATER SERVICE CONNECTION FOR 38mm TO 50mm
COV-SD-W2c	METER INSTALLATION FOR 19mm AND 25mm WATER SERVICE CONNECTIONS
COV-SD-W2d	METER INSTALLATION FOR 38mm AND 50mm WATER SERVICE CONNECTIONS

MMCD Supplementary Specifications and requirements are supplemental to the "Master Municipal Construction Documents – General Conditions, Specifications and Standard Detail Drawings".

In cases of conflict, the order of precedence for specifications and standards is as per the Supplementary General Conditions, Section 2.2.4, Document Hierarchy.

MMCD Section 33 11 01 - WATERWORKS

NOTE:
1. All waterworks product to conform to NSF61.
2. All waterworks product to conform to NSF372 to be "lead free"..
3. All bolts, nuts, rods and washers for use on all fittings and restraints shall be Core 10
4. Waterworks products shall conform to CSA Standard, where applicable.

MAINLINE PIPES

MMCD Sub-Section	Manufacturer	Make / Model	Size Range	Comments/Restrictions.
2.2.1 Ductile Iron	Canada Pipe, US Pipe	Ductile PC350 AWWA C151	100mm to 450mm	
2.2.2 PVC Pressure Pipe	IPEX, NAPCO Royal Pipe	PVC DR18, PR235 AWWA C900	100mm to 300mm	
	IPEX, NAPCO Royal Pipe	PVC CIOD, PR235 AWWA C909	100mm to 450mm	Thickened bells
	NAPCO Royal Pipe	Cobra Lock PVC DR18, PR235 AWWA C900	100mm to 300mm	For use on temporary / by-pass piping situations only

FITTINGS

MMCD Sub-Section	Manufacturer	Make / Model	Size Range	Comments/Restrictions.
2.2.4.3 Compact Ductile Iron	Sigma Star Pipe Canada Terminal City / ACS Westview Sales	AWWA C153	100mm to 450mm	Fittings may be HxH, HxFl, MJxMJ, MJxFl or FlxFl Hub ends shall have lugs with holes sutitable for restraint rods.
2.2.4.4 & PVC Injection & 2.2.4.5 Fabricated	IPEX NAPCO Royal Pipe	C900 / C907 / C909	100mm to 450mm	Pressure class to meet or exceed mainline
2.2.4.12 Couplings and Flanged Coupling Adaptors	EBAA ROBAR ROBAR ROMAC	3800 1506 1508 501	100mm to 400mm 100mm to 400mm 100mm to 400mm 100mm to 400mm	400mm available only for C900 including C909
Wide Range Couplings:	ROMAC ROMAC ROBAR ROBAR Smith-Blair Smith-Blair Mueller Canada	XR501 Macro 1596 1696-2B 421 461 Hymax	100mm to 300mm 100mm to 400mm 100mm to 300mm 100mm to 300mm 100mm to 400mm 100mm to 300mm 38mm to 400mm	 including C909 Stainless steel not approved for use with C909
Restrained Couplings:	EBAA Ford Meter Box Ford Meter Box Ford Meter Box Mueller Canada ROMAC Smith-Blair Smith-Blair Smith-Blair	3800 Uniflange RCDD Uniflange RCPP Uniflange RCDP Hymax Grip Romac Alpha 471 472 473	100mm to 400mm 75mm to 400mm 75mm to 400mm 75mm to 400mm 100mm to 300mm 100mm to 400mm 100mm to 400mm 100mm to 400mm 100mm to 400mm	400mm for PVC only including C909 including C909 NOTE: Hymax not approved for use with C909 including C909 400mm for DI only
2.2.4.13 Joint Restraint Devices				
Restraining MJ & PO Fittings to Ductile	EBAA EBAA EBAA Ford Meter Box Ford Meter Box ROMAC Sigma Smith-Blair Star Pipe Products Star Pipe Products Star Pipe Products	1100 15MJ00TD 15PF00TD Uniflange 1309 Uniflange 1400 PVC Romagrip SLD 111 StarGrip All StarGrip Series 1000		 including C909

MMCD Sub-Section	Manufacturer	Make / Model	Size Range	Comments/Restrictions.
Restraining MJ & PO Fittings to PVC:	EBAA	15MJ00TD		
	EBAA	15PF00TD		
	EBAA	2000PV		
	EBAA	19MJ00		
	EBAA	19PF00		
	EBAA	2016PV	400mm	C909
	Ford Meter Box	Uniflange 1309		
	ROMAC	PVC Romagrip		
	ROMAC	612		
	Sigma	SLD		
	Smith-Blair	120		use limited to SDR26 or heavier wall thickness
	Star Pipe Products	StarGrip		
	Star Pipe Products	All StarGrip		
	Star Pipe Products	Series 1000		
Restraining Bell & Spigot Joints for Ductile & PVC:	EBAA	1500 TD		C900 and DI
	EBAA	1900		C909 and DI
	EBAA	2916	400mm	C909
	Ford Meter Box	Uniflange 1390 and 1399	100mm to 400mm	C900
	Ford Meter Box	Uniflange 1390 and 1399	100mm to 300mm	C909 and DI **(with reduced pressure rating)**
	Ford Meter Box	UFR 1559		C909 new installation only
	ROMAC	611		C900 and DI
	Sigma	SLC		C900 and C909
	Sigma	SLDE		DI only
	Smith-Blair	165		C900 and DI
	Star Pipe Products	1100G2C	100mm to 300mm	AWWA CI OD C900/C909 PVC/PVCO Pipe Joints
	Star Pipe Products	StarGrip		C900, C909 and DI
	Star Pipe Products	Series 1000		C900, C909 and DI
Restraining PVC Fittings to PVC:	EBAA	2500		
	EBAA	2600		including C909
	Smith-Blair	136		
	Star Pipe Products	1200G2C	100mm to 300mm	AWWA CI OD C900/C909 PVC/PVCO Pipe Joints
	Star Pipe Products	Series 1000		
Restrained Flange Adaptors	Ford Meter Box	Uniflange RFAD	75mm to 400mm	DI
	Ford Meter Box	Uniflange RFAP	75mm to 400mm	Including C909, not approved for DI
2.2.4.14 Tapping Sleeves for branch connections (75mm & larger)	ROBAR	6606		Stainless steel
	ROMAC	SSTIII		Stainless steel
	Smith-Blair	622		Stainless steel
	Smith-Blair	664		Stainless steel
	Smith-Blair	665		Stainless steel
2.2.4.15 Repair Clamps	ROBAR	5616		Stainless steel
	ROBAR	5626		Stainless steel
	ROMAC	SS1		Stainless steel
	ROMAC	SS2		Stainless steel
	Smith-Blair	261		Stainless steel
	Smith-Blair	262		Stainless steel
	Cambridge	825		Stainless steel
2.3.1 Mainline Valves - General Requirements	Clayton			Control Valves
	Singer			Control Valves
	Watts			Control Valves
	Red & White		50mm and under	Ball & Gate Valves
	Watts		50mm and under	Ball & Gate Valves
2.3.2 Mainline Gate Valves	American Flow Cont	Series 2500	100mm to 450mm	Resilient wedge only
	CLOW		100mm to 450mm	Resilient wedge only
	Mueller Canada		100mm to 450mm	Resilient wedge only
	Terminal City	3200 Series PO x FL	100mm to 450mm	Resilient wedge only
	VAHN-TECH Intl. Inc.		100mm to 450mm	Resilient wedge only
2.3.3 Mainline Butterfly Valve	Dezurik			
	M & H	Series 4500		
	Mueller Canada			
	Pratt			
	VAHN-TECH Intl. Inc.			

	MMCD Sub-Section	Manufacturer	Make / Model	Size Range	Comments/Restrictions.
2.3.5	Air Release/Combination Air Valves	ARI Valves Inc. Valmatic	D040		epoxy coated on inside (fusion bonded)
2.3.8	Detector Check Valves	Febco Mueller Watts Watts	800 EDCIV SS07F 1000DCV EPX	100mm	
2.5	Service Connection Pipe	 REHAU	Type K Copper PEX-a	19mm to 50mm 19mm to 25mm	
2.6	Hydrants	CLOW Mueller Canada Terminal City / ACS	 Canada Valve C71P	150mm 150mm 150mm	c/w Storz fitting c/w Storz fitting c/w Storz fitting; C71P long body only
2.7.2	Corporation Stops	AY Mcdonald Cambridge Mueller		19mm to 50mm 19mm to 50mm 19mm to 50mm	Ball type, compression Ball type, compression Ball type, compression

OTHER

	MMCD Sub-Section	Manufacturer	Make / Model	Size Range	Comments/Restrictions.
	Municipal Castings	Terminal City / ACS Westview Sales			as per MMCD and Cov Supplementals as per MMCD and Cov Supplementals
	Service Saddles	Cambridge Cambridge Canpac ROBAR ROMAC Smith-Blair	8403 8413/15 304 2616 306 373	 19mm to 25mm up to 200mm 	Stainless steel Stainless steel - integral c/w corp stop Stainless steel Stainless steel Stainless steel Stainless steel
	Bell Joint Leak Clamps	ROBAR ROMAC Smith-Blair	5508 516 274		Stainless steel Stainless steel Stainless steel
	Displacement & Floating Ball Meters	Badger Neptune Sensus Sensus Sensus	Recordall T-10 AccuSTREAM iPEARL Omni R2	19mm to 25mm 19mm to 50mm 19mm to 25mm 19mm to 25mm 38mm to 50mm	Touch read Touch read Touch read Touch read Touch read; Flanged
	Compound Meters	Neptune Sensus	TRU/FLO Omni C2	50mm to 150mm 50mm to 150mm	Touch read Touch read
	Turbine Meters	Neptune Sensus	High Performance Omni T2	50mm to 150mm 50mm to 150mm	Touch read Touch read
	Ultrasonic Meters	Kamstrup	FIQ3101 Stainless	50mm (2")	For use on combined Domestic/Fire service
	Meter Setters and Meter Resetters	AY Mcdonald Cambridge Mueller		19mm to 25mm 19mm to 25mm 19mm to 25mm	
	Meter Box	Brooks Box Brooks Box DFW	37 66 Heavy duty polymer	300mm x 500mm 425mm x 750mm	H20 Loading H20 Loading not for use in road or driveways
	Meter Box Lids	Terminal City / ACS Terminal City / ACS	37 66	300mm x 500mm 425mm x 750mm	H20 Loading, labeled with "Water" H20 Loading, labeled with "Water"
	Meter Vault Hatches	Norinco	Model # TI4S106070AV (Roadway) Model # TI3S106070AV (Sidewalk)		Triangular lids, Traffic (H20 Loading) & Non-Traffic
	Tracer Wire	Copperhead Industries Ltd.	Soloshot EHS		

MMCD Section 33 30 01 - SANITARY SEWER (Gravity)

NOTE:

1. All concrete used in construction shall be sulphate resistant Type HS (Type 50) or alternate cement type may be approved by City Engineer.
2. Sanitary Sewer products shall conform to CSA Standard, where applicable.
3
4

MAINLINE PIPES

MMCD Sub-Section		Manufacturer	Make / Model	Size Range	Comments/Restrictions.
2.2	Plastic Pipe, Mainline Smooth Profile	IPEX Northern Pipe NAPCO Royal Pipe	Ring Tite DR35 PVC DR35 PVC DR35	100mm to 1200mm 100mm to 375mm 100mm to 1200mm	

OTHER

MMCD Sub-Section		Manufacturer	Make / Model	Size Range	Comments/Restrictions.
	Municipal Castings	Terminal City / ACS Westview Sales			as per MMCD and Cov Supplementals as per MMCD and Cov Supplementals
	Inspection Chamber	Orbit Plastics Ltd. Proline Fittings Inc. NAPCO Royal Pipe		100mm & 150mm 100mm & 150mm 100mm & 150mm	for 100mmØ and 150mmØ service connections
	Inspection Chamber surface box	Brooks Box Brooks Box Raven	37 66	300mm x 500mm 425mm x 750mm	H20 Loading H20 Loading not for use in road or driveways
	Inspection Chamber surface box lids	Terminal City / ACS Terminal City / ACS	37 66	300mm x 500mm 425mm x 750mm	H20 Loading, labeled with "Sanitary" H20 Loading, labeled with "Sanitary"
	Couplings & Bushings	Fernco Mission Rollee ROMAC	 Kwik couplings bolted couplings		w/stainless steel sheer band w/stainless steel sheer band w/stainless steel sheer band w/stainless steel sheer band (to AWWA C219)
	Tapping Saddles	Fernco Mission Rollee		100mm & 150mm 100mm & 150mm 100mm & 150mm	flexible saddle flexible saddle flexible saddle

MMCD Section 33 34 01 - SEWAGE FORCEMAINS

NOTE:

1 All bolts, nuts, rods and washers for use on all fittings and restraints shall be Core 10
2 Sewage forcemain products shall conform to CSA Standard, where applicable.
3
4

MAINLINE PIPES

MMCD Sub-Section		Manufacturer	Make / Model	Size Range	Comments/Restrictions.
2.2.1	Ductile Iron	Canada Pipe, US Pipe	Ductile PC350 AWWA C151	100mm to 450mm	
2.2.2	PVC Pressure Pipe	IPEX, NAPCO Royal Pipe	PVC DR18, PR235 AWWA C900	100mm to 300mm	
		IPEX, NAPCO Royal Pipe	PVC CIOD, PR235 AWWA C909	100mm to 450mm	Thickened bells
		NAPCO Royal Pipe	Cobra Lock PVC DR18, PR235 AWWA C900	100mm to 300mm	For use on temporary / by-pass piping situations only

FITTINGS

MMCD Sub-Section	Manufacturer	Make / Model	Size Range	Comments/Restrictions.
2.2.5 Fittings				All ferrous fittings to be epoxy coated.
2.2.5.3 Compact Ductile Iron	Sigma Star Pipe Canada Terminal City / ACS Westview Sales	AWWA C153	100mm to 450mm	Fittings may be HxH, HxFl, MJxMJ, MJxFl or FlxFl Hub ends shall have lugs with holes sutitable for restraint rods.
2.2.5.4 & CIOD PVC Injection & 2.2.5.5 IPSOD Fabricated	IPEX NAPCO Royal Pipe	C900 / C907 / C909	100mm to 450mm	Pressure class to meet or exceed mainline

MMCD Section 33 40 01 - STORM SEWERS (Gravity)

NOTE:
1. All concrete used in construction shall be sulphate resistant Type HS (Type 50) or alternate cement type may be approved by City Engineer.
2. Sanitary Sewer products shall conform to CSA Standard, where applicable.
3
4

MAINLINE PIPES

MMCD Sub-Section		Manufacturer	Make / Model	Size Range	Comments/Restrictions.
2.2	Plastic Pipe, Mainline Smooth Profile	IPEX Northern Pipe NAPCO Royal Pipe	Ring Tite DR35 PVC DR35 PVC DR35	100mm to 1200mm 100mm to 375mm 100mm to 1200mm	

OTHER

MMCD Sub-Section		Manufacturer	Make / Model	Size Range	Comments/Restrictions.
	Municipal Castings	Terminal City / ACS Westview Sales			as per MMCD and Cov Supplementals as per MMCD and Cov Supplementals
	Inspection Chamber	Orbit Plastics Ltd. Proline Fittings Inc. NAPCO Royal Pipe		100mm & 150mm 100mm & 150mm 100mm & 150mm	for 100mmØ and 150mmØ service connections
	Inspection Chamber surface box	Brooks Box Brooks Box Raven	37 66	300mm x 500mm 425mm x 750mm	H20 Loading H20 Loading not for use in road or driveways
	Inspection Chamber surface box lids	Terminal City / ACS Terminal City / ACS	37 66	300mm x 500mm 425mm x 750mm	H20 Loading, labeled with "Storm" H20 Loading, labeled with "Storm"
	Couplings & Bushings	Fernco Mission Rollee	 Kwik couplings		w/stainless steel sheer band w/stainless steel sheer band w/stainless steel sheer band
	Tapping Saddles	Fernco Mission Rollee		100mm & 150mm 100mm & 150mm 100mm & 150mm	flexible saddle flexible saddle flexible saddle

34 41 13 Traffic Signals

2.16		Vehicle Signal Heads		McCain	
2.19		Vehicle Signal Mounting Hardware		Astro-Brac (Pelco Products)	
2.16		Pedestrian Signal Heads		Model 7090 McCain #141SPO	
2.2		Audible Pedestrian Signal Heads		Novax DS2000	
2.26.2.2		Conflict Monitors		Eberie Model 210E	
2.26.4		Controller Cabinets - 332, 226 & 338		Safetran & Signal Control Company (SCC, Peak)	

32 17 23 Painted Pavement Markings

2.1	.5 Glass Beads	Swarco	Premium Glass Bead Type-I (T-20 coated)		
	.6 Pavement Markings	Ennis-Flint	Solvent based traffic marking paint		
			Yellow road marking paint prod # 986063		
			White road marking paint prod # 986061		
	.7S Thermoplastic	Ennis-Flint	Pave Mark (both yellow and white)		

32 01 17.6 Sealing Pavement Cracks for Maintenance Purposes

2.1		Cold Pour Crack Sealer	Cold Pour Crack Sealer	CRF Wilco	Good for over 5 minute cure rate only
		Hot Pour Crack Sealer	Hot Pour Crack Sealer	KOCH - 9211, Crafco & Tremco	

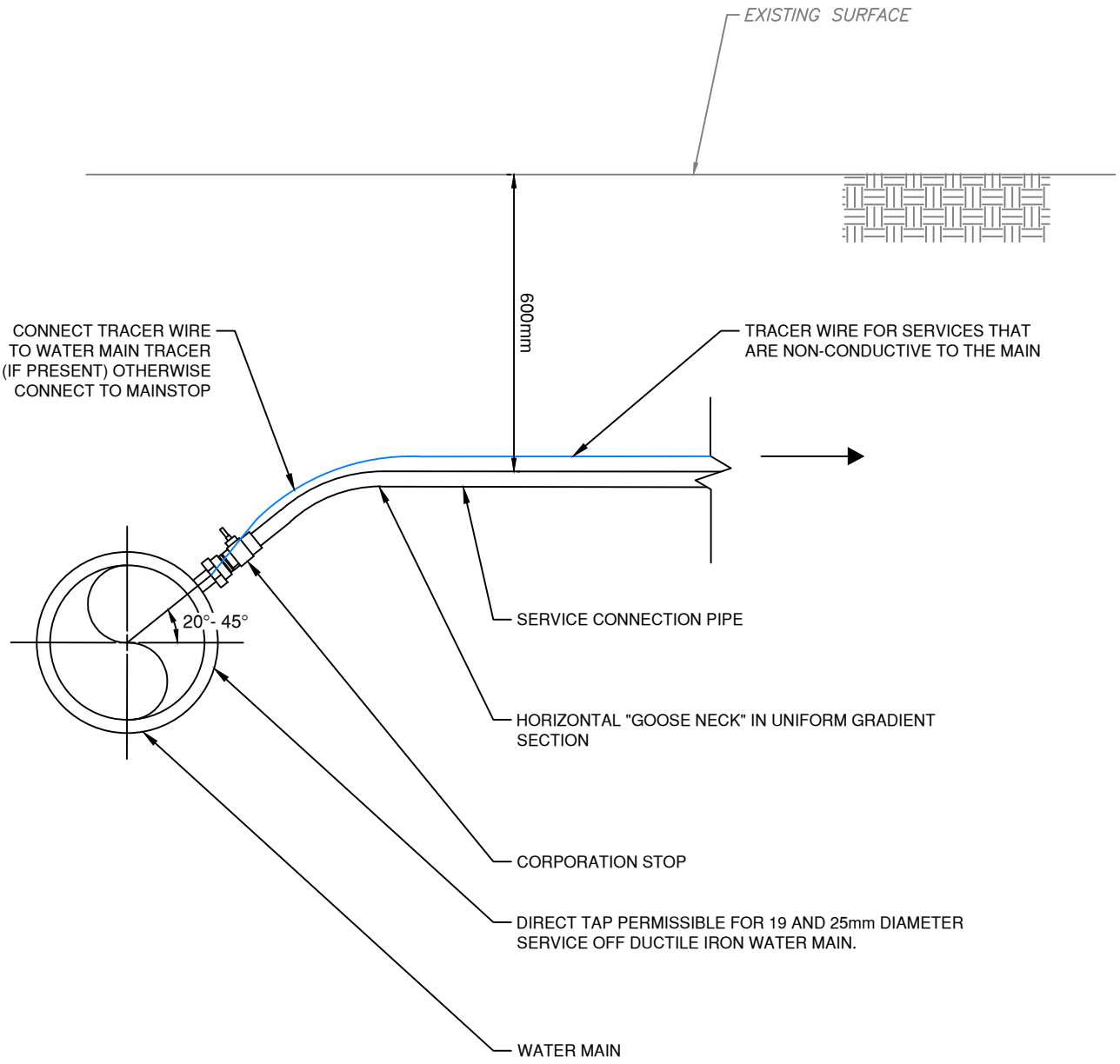
31 32 19 Geosynthetics

2.1		Stress Absorbing Membrane	Stress Absorbing Membrane	Amopave 4599 & Trevira S-112-C	

Other

1	Petrolatum Tape Systems	Winn & Coales		Denso	
		Chase Construction Products		Longwrap	

SUPPLEMENTARY STANDARD DETAIL DRAWING



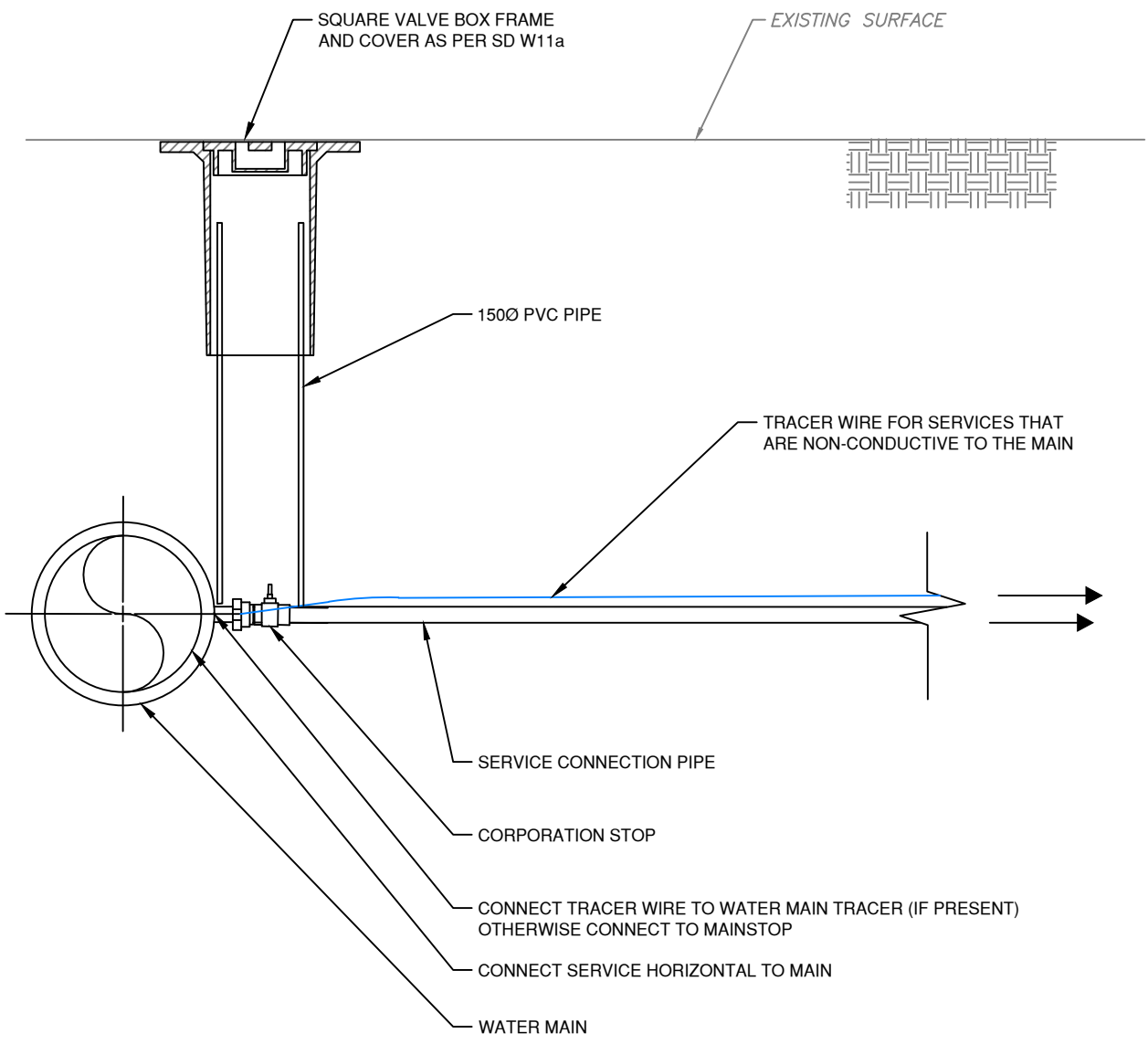
NOTES:

1. THIS DETAIL FOR SERVICES 19-25mm ONLY.
2. PVC SADDLES AS PER THE APPROVED PRODUCT LIST.
3. INSTALL SERVICE PIPE WITH "GOOSE NECK" IN HORIZONTAL POSITION.
4. MIN. 100mm BEDDING TO BE USED UNDER SERVICE PIPE (NO ROCK). MIN. 150mm BEDDING TO BE USED UNDER SERVICE PIPE (ROCK).

NOT TO SCALE

WATER SERVICE CONNECTION FOR 19mm TO 25mm	Revision Date	Drawing Number
	JULY 2025	SD W2a

SUPPLEMENTARY STANDARD DETAIL DRAWING



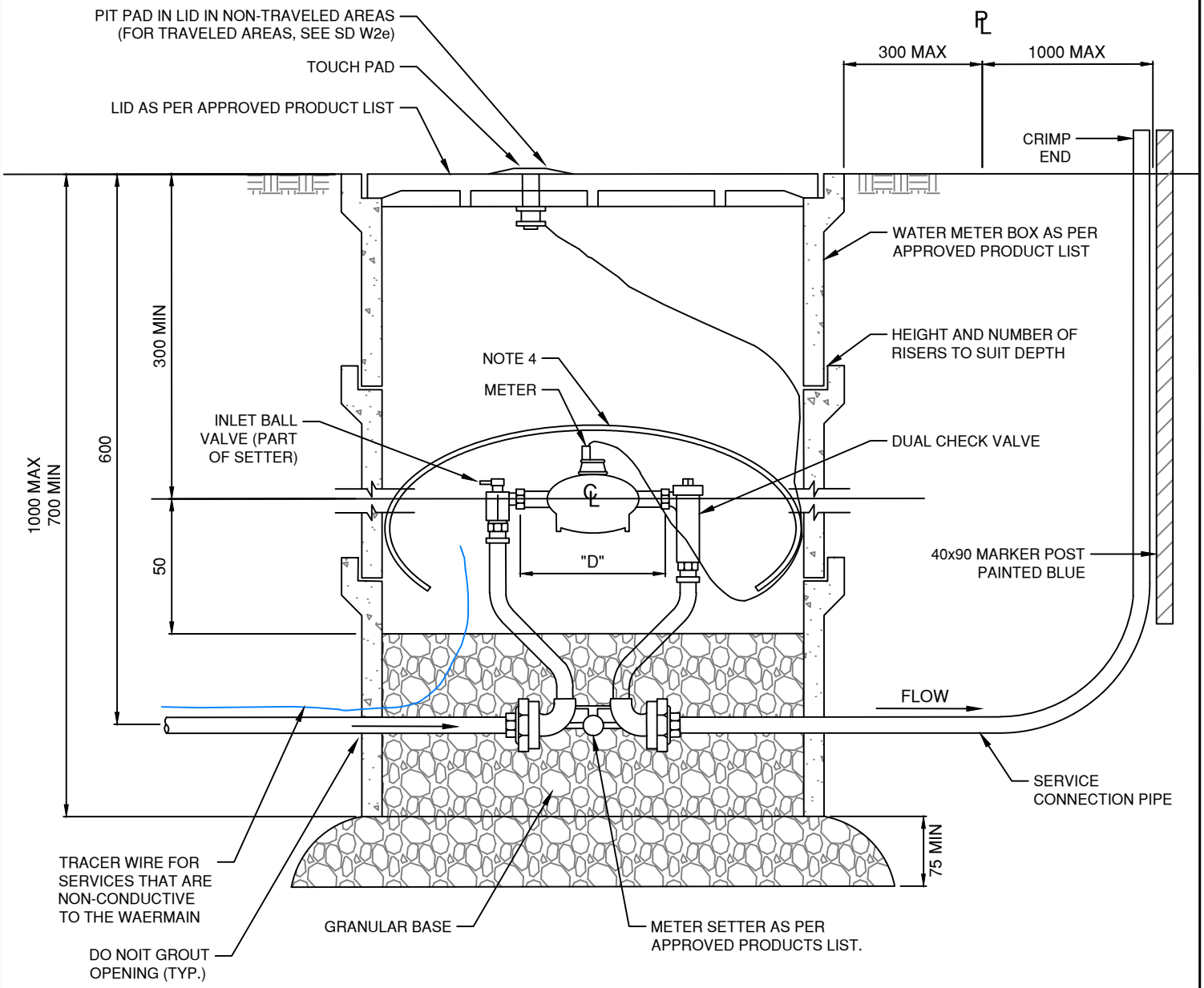
NOTES:

1. THIS DETAIL FOR SERVICES 38-50mm ONLY.
2. PVC SADDLES AS PER THE APPROVED PRODUCT LIST.
3. SERVICE CAN BE BROGHT UP TO 0.6m COVER, ONCE CLEAR OF MAIN CONNECTION (UNLESS OTHERWISE SPECIFIED).
4. MIN. 100mm BEDDING TO BE USED UNDER SERVICE PIPE (NO ROCK). MIN. 150mm BEDDING TO BE USED UNDER SERVICE PIPE (ROCK).

NOT TO SCALE

WATER SERVICE CONNECTION FOR 38mm TO 50mm	Revision Date	Drawing Number
	JULY 2025	SD W2b

SUPPLEMENTARY STANDARD DETAIL DRAWING



METER SIZE	'D' (mm)
16x19	191
19	229
25	273

NOTES:

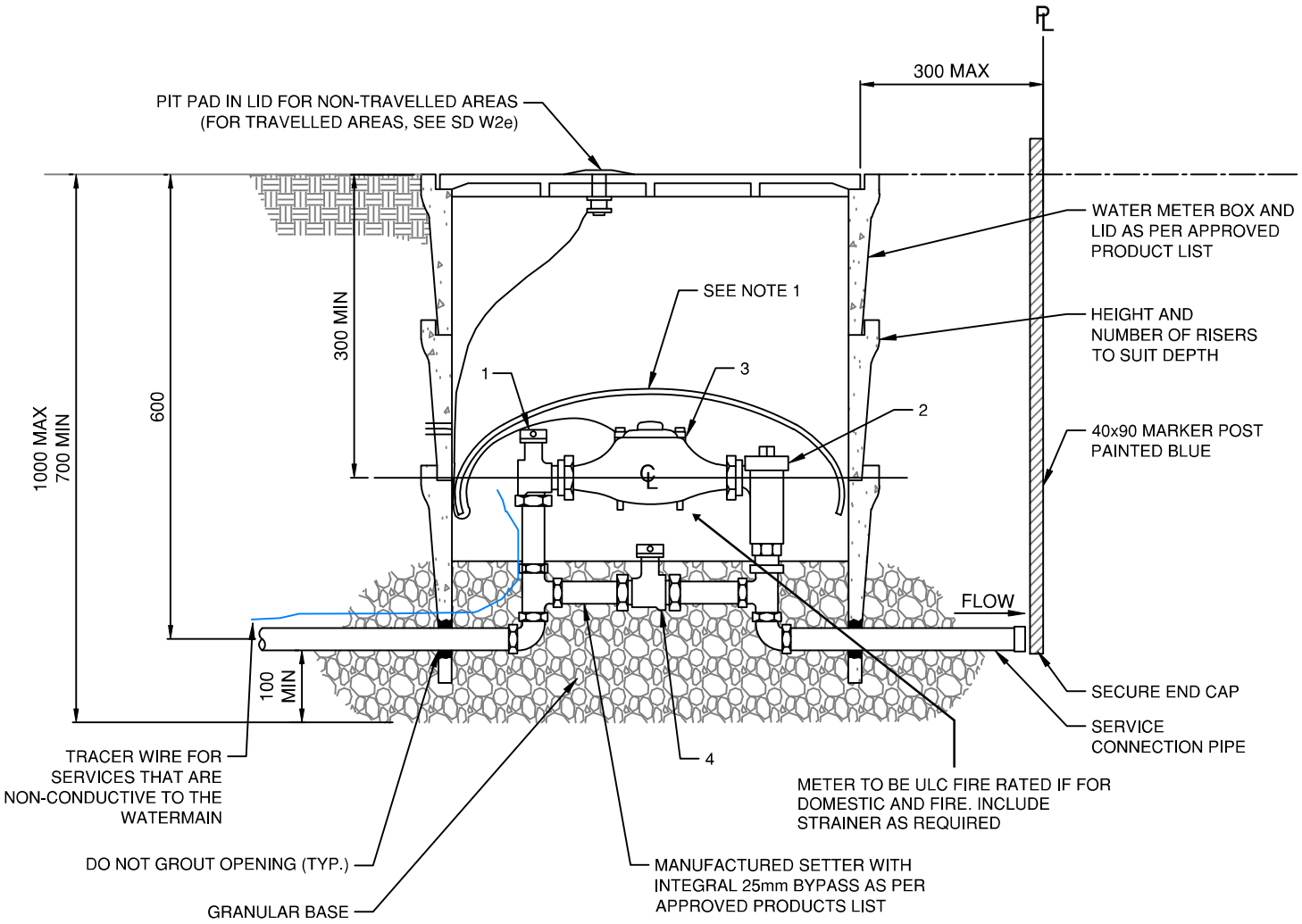
1. FOR 38mm AND 50mm DIA SERVICE REFER TO DRAWING SD W2d.
2. REFER TO CONTACT DRAWINGS, SECTION 33 11 01 FOR DETAILED SPECIFICATIONS.
3. REFER TO DRAWING NUMBER SD W2a FOR DETAIL OF SERVICE CONNECTION TO WATER MAIN.
4. AIR DOUBLE REFLECTIVE POLYETHYLENE INSULATION OR EQUIVALENT.

NOT TO SCALE

METER INSTALLATION FOR 19mm AND 25mm WATER SERVICE CONNECTIONS

Revision Date	Drawing Number
JULY 2025	SD W2c

SUPPLEMENTARY STANDARD DETAIL DRAWING



No.	DESCRIPTION
1	STOP WITH LOCKING
2	DUAL CHECK VALVE
3	METER AS PER APPROVED PRODUCTS LIST
4	BYPASS STOP WITH LOCKING

NOTES:

1. FOR 38mm AND 50mm DIA SERVICE REFER TO DRAWING SD W2b.
2. REFER TO CONTACT DRAWINGS, SECTION 33 11 01 FOR DETAILED SPECIFICATIONS.
3. REFER TO DRAWING NUMBER SD W2b FOR DETAIL OF SERVICE CONNECTION TO WATER MAIN.
4. AIR DOUBLE REFLETIVE POLYETHYLENE INSULATION OR EQUIVALENT.

NOT TO SCALE

METER INSTALLATION FOR 38mm AND 50mm WATER SERVICE CONNECTIONS

Revision Date	Drawing Number
AUG. 2025	SD W2d

33 01 30.2		**Cleaning of Sewers**	
	1.5	Measurement and Payment	**Revised Clause 1.5.4 to read:** "Root cutting will be measured in lineal metres of pipe requiring root removal. Payment will be made at the unit price bid in the Form of Tender. Measurement will be determined by the length of pipe, as shown on the Contract Drawings or as directed by the Contract Administrator, where root cutting is performed."
33 05 24		**Cured In Place Pipe Liners**	
	1.9	Measurement and Payment	**Delete Clause 1.9.1 and replace with the following:** "Payment for Bypass Pumping / Flow Control for CIPP Works shall be made as a Lump Sum. Payment shall include all work related to the management of sanitary and storm sewer flows required to complete the CIPP works, including preparation and submission of an approved bypass pumping / flow management plan; noise-attenuated bypass pumping; isolation, blocking, plugging, diverting, temporary piping, hoses, pumps, standby pumps, power supply, fuel, controls, monitoring, maintenance, protection, emergency response, environmental protection, installation, operation, maintenance, and removal of the temporary bypass system; and all incidentals required to complete the Work.The Contractor will be entitled to 50% of the payment item on the first progress payment after the bypass system is installed, operational, and accepted by the Contract Administrator, and 50% of the payment item on the first progress payment following dismantling and removal of the bypass system."
33 11 01		**Waterworks**	
	1.7	Scheduling of Work — Construction Sequencing Plan	**Delete Clause 1.7 and Replace with the following:** .1 The Contractor shall schedule work to minimize interruptions to the local supply of water. The Contractor shall provide a water supply system Construction Sequencing Plan (CSP) to the Contract Administrator at least 10 Days in advance for review. The CSP shall include: timing and duration of service interruptions; requirements for temporary bypass piping; proposed methodology, sequence and timing for construction, flushing, testing and verification including pressure testing, disinfection, flushing and verification, and proposed tie-in sequence/procedure. .2 The schedule and CSP shall be reviewed by the Contract Administrator before approval is given for any Work affecting the regular supply of water. The earliest time to shut down existing water mains for tie-ins is 10:00 am. .3 The Contractor shall review the tie-in plan on-site with Contract Administrator and City of Victoria Operations staff at least one (1) week prior to confirm valve location and operation, extent and duration of water shutdown, and notification distribution area. .4 During the tie-in, a City of Victoria appointed staff member must be on-site. All isolated valves and services are to be marked upon isolation and again once service is restored. .6 The Contractor shall notify the City of Victoria Water Department and the Contract Administrator three (3) Days

			in advance of any planned interruptions to water or service connections to properties adjoining the water main. .7 Interruptions shall not exceed four (4) hours in duration without written approval of the Contract Administrator. .8 The Contractor shall immediately notify the Contract Administrator and City of Victoria Water Department of any accidental interruption of water supply to hydrants.
	1.8.2	Measurement and Payment	**Revise Clause 1.8.2:** Payment for watermain and service connections shall include saw cutting pavement, trench excavation, disposal of surplus excavated material, bedding, supply and installation of all pipe, bolts, gaskets and tie rods, polyethylene encasement as shown on the Drawings, imported or native backfill as shown on the Drawings, cleaning, pressure and leakage testing, flushing, disinfection, all surface restoration as specified under Section 31 23 01 (except permanent pavement restoration), and all other work and materials necessary to complete the installation as shown on the Drawings and specified under this Section. Where the trench excavation for a new water service connection encounters an existing valve shown to be abandoned in place, closure of the valve and removal and off-site disposal of the existing valve box casting, riser, and sleeve to a minimum of 300 mm below finished grade shall be included in the unit price for the Water Service Connection. No separate payment will be made under the Valve Removal and Abandonment item for valves abandoned within the Water Service Connection trench excavation footprint.

	1.8.14	Measurement and Payment	**Add Clause 1.8.14:** "Payment for hydrants shall be made on a per-each basis and shall include: .1 Supply and installation of the hydrant body and all appurtenances as shown on City of Victoria Standard Detail Drawing SD W4; .2 Supply and installation of the hydrant service lead from the mainline tee to the hydrant, including all fittings, thrust restraint, polyethylene encasement where required, and granular bedding and backfill for the service lead trench; .3 Supply and installation of the gate valve and adjustable valve box on the hydrant service lead; .4 All saw cutting, trench excavation, and backfill associated with the hydrant service lead and hydrant installation; .5 Temporary surface restoration (cold-mix asphalt patch or compacted granular) over the hydrant service lead trench to provide a safe and trafficable surface until permanent restoration is complete; .6 Height adjustment of the hydrant to meet finished grades — no additional payment will be made for hydrant extensions or reductions required to match final grade; .7 All required curb painting to City of Victoria standards upon completion; .8 Submission of completed hydrant cards to the City of Victoria upon project completion; .9 Coordination of removed hydrant return and delivery with City of Victoria Operations; removed hydrants shall be delivered to the City of Victoria Public Works Yard. Permanent surface restoration over the hydrant service lead trench is NOT included in this item and will be paid separately under the applicable Division 3 and Division 32 items." .10 Closure of the valve and removal and off-site disposal of the existing valve box casting, riser, and sleeve to a minimum of 300 mm below finished grade for any existing valve shown to be abandoned in place that is encountered within the trench excavation footprint of a new hydrant lead. No separate payment will be made under the Valve Removal and Abandonment item for valves abandoned within the trench excavation footprint of new hydrant leads.

	1.8.16	Measurement and Payment	**Add Clause 1.8.16:** "Payment for watermain removals and abandonments shall be made on the basis set out below for each item. Unless otherwise noted, all items include saw cutting of existing pavement or concrete surfaces, trench excavation, granular backfill and compaction to 300 mm below the underside of the applicable permanent surface restoration layer, temporary surface restoration (cold-mix asphalt patch or compacted granular) to provide a safe and trafficable surface, and all incidentals required to complete the work. Permanent surface restoration is NOT included in any removal or abandonment item and will be paid separately under the applicable Division 3 and Division 32 items. .1 Payment includes closure of the existing valve in the fully closed position, excavation to expose the valve box assembly, removal of the valve box casting, riser, and sleeve to a minimum of 300 mm below finished grade, off-site disposal of removed components, granular backfill and compaction, and temporary surface restoration. The valve body shall remain in place. No separate payment will be made for excavation, backfill, or compaction associated with valve box removal. .2 Payment includes excavation to expose the hydrant boot, disconnection of the hydrant assembly from the hydrant boot a minimum of 300 mm below finished grade, removal of the hydrant body, capping of the hydrant boot with a mechanical joint cap or blind flange acceptable to City of Victoria Operations, granular backfill and compaction, and surface restoration to match surrounding conditions. The removed hydrant shall be delivered to the City of Victoria Public Works Yard in good condition; the Contractor shall coordinate the return and delivery schedule with City of Victoria Operations prior to removal. Delivery to the Public Works Yard is included in this item. The hydrant lead pipe, hydrant lateral gate valve, and tee connection at the mainline shall remain in place. The hydrant lateral gate valve shall be closed and the valve box casting, riser, and sleeve removed in accordance with Sub-Section 1.8.16.1 – Valve Removal and Abandonment. .3 Watermain Removal and Off-Site Disposal (per lineal metre, measured by nominal diameter): Payment includes removal and off-site disposal of the existing watermain pipe, couplings, and incidentals within the trench limits, cutting of the pipe at each end of the removal limits as directed by the Contract Administrator, capping or plugging of remaining pipe ends or connections with fittings acceptable to City of Victoria Operations, granular backfill and compaction of the trench, and temporary surface restoration. Measurement shall be made horizontally along the pipe centreline between the cut points as accepted by the Contract Administrator. .4 Abandon Existing Water Service at Curb Stop (per each): Payment includes locating and exposing the existing curb stop, closing the curb stop valve, sealing or plugging the service pipe at the curb stop in a manner acceptable to City of Victoria Operations, removal of the Brooks box and meter setter where accessible, granular backfill and compaction of any excavation required, and temporary surface restoration. Where the curb stop cannot be located, the Contractor shall notify the Contract Administrator

REVISED - APPENDIX 1
SCHEDULE OF QUANTITIES AND PRICES
(SEE PARAGRAPH 5.3.1 OF THE INSTRUCTIONS TO TENDERERS – PART II)

(All prices and *Quotations* including the *Contract Price* shall include all *Taxes*, but shall not include *GST*. *GST* shall be shown separately.)

Any work called for in these Contract Documents, shown on the plans, or which is necessary for the completion of the Work called for in these Contract Documents and which is not specifically listed as a separate payment item in this Appendix shall be deemed incidental to the performance of the Work and to the general purpose of the Contract; no separate payment will be made on account of any such Work, but the costs of any such incidental Work shall be included in the Unit and Lump Sum Prices.

TENDER SUMMARY SHEET

Esquimalt Road Phase 2– Active Transportation Improvements & Underground Utility Renewals		**AMOUNT**
Esquimalt Road Phase 02		
	SUBTOTAL TENDER PRICE	_____
	GST @ 5%	_____
	TENDER PRICE plus GST	_____

ITEM	SSMP REF.	DESCRIPTION	Unit	Est. Qty.	Unit Price	Amount
DIVISION 1 - GENERAL REQUIREMENTS						
01 10 00SS - General Requirements						
1.1	1.2S	**Survey Layout, Quantity Survey, Volume Calculations and Record Survey**	Lump Sum	1		
01 52 01 - Temporary Structures						
1.2	1.6.2S	**Mobilization/Demobilization**	Lump Sum	1		
1.3	1.6.3S	Contaminated Soil Testing **(Optional)**	Lump Sum	1		
1.4	1.6.4S	**Pothole Locates at Tie-ins and Critical Crossings** Inc. Backfill, and Temporary Pavement Restoration	Each	8		
01 55 00 - Traffic Control, Vehicle Access and Parking						
1.5	1.5.1	**Traffic Management Plan**	Lump Sum	1		
1.6	1.5.2S	**Traffic Control, Vehicle Access and Parking**	Lump Sum	1		
DIVISION 3 - CONCRETE						
03 20 01 - Concrete Reinforcement						
2.1	1.5.2S, 3.1.3S	**Welded Wire Mesh - Optional** Supply and install M133250W 3" x 3" x 0.250" dia. welded wire mesh as concrete reinforcement	Square Metre	20		
03 30 20 - Concrete Walks, Curb And Gutter						
2.2	1.4.3S	**Hand And Machine Formed Curb and Gutter** Hand Formed Curb and Gutter - Concrete Barrier - MMCD Type C4 barrier - Including Granular Base	Lineal Metre	260		
2.3	1.4.5S	**Concrete Walks, Infill Strips, and Walkways** Including Ramps and Granular Base - Broom Finish	Square Metre	447		
2.4	1.4.6S	**Concrete Driveway Crossings** Per STD DWG TOE-SD-C7.1 and TOE-SD-C7.2 including Granular Base	Square Metre	75		
2.5	1.4.12S	**Concrete Crossing Medians** Including Ramps and Granular Base - Broom Finish	Square Metre	20		
2.6	1.4.12S	**Concrete Medians - Type 1 (Varying Heights)** Including Rebar Pins and Grout - Broom Finish	Square Metre	7		
03 40 01 - Pre-Cast Concrete						
2.7	1.4.4S	**Precast Concrete Sanderson Curbs** Standard Curb – Including layout and 20M rebar pinning	Each	191		
2.8	1.4.4S	**Precast Concrete Sanderson Curbs** Bull Nose Curb End. - Including layout and 20M rebar pinning	Each	52		
2.9	1.4.4S	**Precast Concrete Sanderson Curbs** Dual Bull Nose Curb End. - Including layout and 20M rebar pinning	Each	13		

2.10	1.4.5S	**Precast Concrete Sanderson Curbs - Optional** relocation and removal of precast Sanderson curbs	Each	15		
DIVISION 31 - EARTHWORK						
31 11 01 - Clearing and Grubbing						
3.1	1.4.1S	**Stump Removal**	Each	1		
31 22 16 - Reshaping Granular Roadbeds						
3.2	1.4.1	**Reshaping Granular Roadbed - Optional** c/w Proof Rolling	Square Metre	100		
31 23 01 - Excavating, Trenching and Backfilling						
3.3	1.10.3	**Overexcavating - Optional** Including Backfilling	Cubic Metre	20		
31 23 17 - Rock Removal						
3.4	1.6.3	**Mass Rock - Optional**	Cubic Metre	20		
31 24 13 - Roadway Excavation, Embankment and Compaction						
3.5	1.8.5S	**Common Excavation** Remove Existing Asphalt Pavement, Sidewalks - Including Sawcutting	Square Metre	420		
3.6	1.8.5S	**Common Excavation** Softscaped Areas	Cubic Metre	100		
3.7	1.8.5S	**Common Excavation** Remove Existing Concrete Pavement, Median, Sidewalks, Utility Strips, Driveways and Pavers - Including Sawcutting	Square Metre	350		
3.8	1.8.5S	**Common Excavation - Optional** Roadway and Sidewalk Granular Material	Cubic meters	85		
3.9	1.8.5S	**Common Excavation** Remove Existing Concrete Curb and Gutter - Including Sawcutting	Lineal Metres	325		
3.10	1.8.5S	**Contaminated Soil Disposal - Optional (Provisional sum)**	tonne	330		
DIVISION 32 - ROAD AND SITE IMPROVEMENTS						
32 01 11 - Pavement Surface Cleaning and Removal of Pavement Markings						
4.1	1.2.3S	**Removal of Existing Pavement Markings** Eradication by hydro blasting	Lump Sum	1		
32 01 16.7 - Cold Milling						
4.2	1.5.1S	**Cold Milling** Maximum 50mm depth	Square Metres	13,015		
4.3	1.5.1S	**Cold Milling - Optional** Full depth 50mm - 150mm	Square Metres	1,301		
32 11 16.1 - Granular Sub-Base						
4.4	1.4.3	**75mm Minus Granular Sub-Base - Bulk Fill** 250mm thickness	Square Metres	240		
32 11 23 - Granular Base						
4.5	1.4.1S	**19mm Minus Granular Base** 100-150mm thickness	Square Metres	240		
32 12 13.1 - Asphalt Tack Coat						

4.6	1.5.1	**Asphalt Tack Coat**	Square Metres	13,265		
32 12 16 - Hot-Mix Asphalt Concrete Paving						
4.7	1.5.1S, 1.5.2	**Machine Laid - Upper Course** 50mm Thick	Square Metres	13,265		
4.8	1.5.1S, 1.5.2	**Machine Laid - Lower Course** 50mm Thick	Square Metres	1831		
4.9	1.5.1S, 1.5.2, 1.5.3S	**Hand Placed - Upper Course** 50mm Thick Hand Laid Hot Mix Asphalt - including granular bases 50-100mm	Square Metres	178		
32 17 23 - Painted Pavement Markings						
4.10	1.5.2, 1.5.3S	**Permanent Thermoplastic Pavement Markings**	Lump Sum	1		
4.11	1.5.2, 1.5.3S	**MMA** Including Stencils within Green Conflict Paint	Square Metres	430		
32 31 13 - Chain Link Fences & Gates						
4.12	1.5.5S	**Pexco City Posts 24" C/W 2-3" HI White Bands, Surface Mount** Supply and Install	Each	119		
4.13	1.5.6S	**Remove Existing Bollards** Return to ToE PW Yard	Each	24		
4.14	1.5.5S	**Install Only - Steel Bollard on Median**	Each	1		
4.15	1.5.7S	**Existing Street Planter** Remove, Relocate, Reinstall, or Deliver Existing Planters to Township of Esquimalt Public Works Yard	Each	2		
32 91 21 - Topsoil and Finish Grading						
4.16	1.4.1S	**Boulevard Topsoil**(150mm Thickness)	Square Metres	155		
32 92 20 - Seeding						
4.17	1.8.1S	**Seeding**	Square Metres	155		
DIVISION 33 - Utilities						
33 01 30.1 - CCTV Inspection of Pipelines						
5.1	1.6.2	**CCTV pre-inspection of Sewers**	Lineal Metres	670		
5.2	1.6.2	**CCTV post lining inspection of Sewers**	Lineal Metres	670		
33 01 30.2 - Cleaning of Sewers						
5.3	1.5.4S	**Root Cutting**	Lineal Metres	206		
33 05 24 - Cured In Place Pipe Liners						
5.4	1.9.1S	**Bypass Pumping / Flow Control**	Lump Sum	1		
5.5	1.9.8	**CIPP Lining Sani 200**	Lineal Metres	220		
5.6	1.9.8	**CIPP Lining Sani 150**	Lineal Metres	50.5		
5.7	1.9.8	**Service CIPP Lining Sani 100**	Each	4		
5.8	1.9.8	**Service CIPP Lining Sani150**	Each	2		

5.9	1.9.8	**CIPP Lining Storm 200**	Lineal Metres	170		
5.10	1.9.8	**CIPP Lining Storm 250**	Lineal Metres	12		
5.11	1.9.8	**Storm Sewer Main Rehabilitation, 200 mm Dia –** Sectional CIPP Lining - includes sealing of liner termination **(Optional)**	Lineal Metres	10.5		
5.12	1.9.8	**Service CIPP Lining Storm 150**	Each	7		
5.13	1.9.9	**Service Reconnection**	Each	19		
33 11 01 - Waterworks						
5.14	1.8.1, **1.8.2S**	**Watermain PVC** 200mm Dia. At 0 - 2 m depth Inc. granular backfill	Lineal Meter	20		
5.15	1.8.1, **1.8.2S**	**Watermain PVC** 250mm Dia. At 0 - 2 m depth Inc. granular backfill	Lineal Meter	10		
5.16	1.8.1, **1.8.2S**	**Watermain Ductile Iron** 250mm Dia. At 0 - 2 m depth Inc. granular backfill	Lineal Meter	5		
5.17	1.8.3	**In-line Gate Valve** 200mm Dia. - H x H - c/w mechanical restraints	Each	6		
5.18	1.8.3	**In-line Gate Valve** 200mm Dia. - H x F - c/w mechanical restraints **(Optional)**	Each	1		
5.19	1.8.3	**In-line Gate Valve** 250mm Dia. - F x MJ - c/w mechanical restraints	Each	1		
5.20	1.8.3	**In-line Gate Valve** 250mm Dia. - H x H - c/w mechanical restraints	Each	1		
5.21	1.8.3	**In-line Gate Valve** 250mm Dia. - F x F - c/w mechanical restraints	Each	1		
5.22	1.8.3	**In-line Gate Valve** 250mm Dia. - H x F - c/w mechanical restraints	Each	2		
5.23	1.8.3	**Water Bend** 200mm Dia. - H x H - 45 degrees	Each	1		
5.24	1.8.3	**Water Bend** 200mm Dia. - H x F - 45 degrees	Each	1		
5.25	1.8.3	**Water Bend** 250mm Dia. - MJ x MJ - 90 degrees	Each	1		
5.26	1.8.3	**Water Tee** 200mm x 200mm x 150mm - H x H x H - c/w mechanical restraints	Each	3		
5.27	1.8.3	**Water Tee** 200mm x 200mm x 200mm - H x H x H - c/w mechanical restraints	Each	1		
5.28	1.8.3	**Water Tee** 250mm x 250mm x 200mm - F x F x F - c/w mechanical restraints	Each	1		
5.29	1.8.3	**Water Cross** 250mm x 250mm x 250mm x 250mm - H x H x H x H - c/w mechanical restraints	Each	1		
5.30	1.8.3	**Water Reducer** 200mm Dia. to 150mm Dia.- F x MJ	Each	1		
5.31	1.8.3	**Water Reducer** 250mm Dia. to 175mm Dia. - F x H	Each	1		
5.32	1.8.3	**Water Reducer** 250mm Dia. to 200mm Dia. - F x H	Each	1		

5.33	1.8.3	**Cap** 150mm Dia. - Inc. excavation, cutting, abandonment, and granular backfill	Each	1		
5.34	1.8.3	**Cap** 175mm Dia. **-** Inc. excavation, cutting, abandonment, and granular backfil**l**	Each	3		
5.35	1.8.3	**Cap** 250mm Dia. - Inc. excavation, cutting, abandonment, and granular backfill	Each	2		
5.36	1.8.3	**Blind Flange Assembly** 250mmØ DI c/w gasket, S/S bolts, petrolatum wrap & poly encasement per tie-in detail	Each	1		
5.37	1.8.4, **1.8.2S**	**Water Service 25mm** as per CoV SD W2a, Including Brooks Box, Touch Read Meter (City of Victoria will supply meter) as per SD W2c, Tie-in to Existing Main, Corp. Stop	Each	5		
5.38	1.8.4, **1.8.2S**	**Water Service 38mm** as per CoV SD W2b, Including Brooks Box, Touch Read Meter (City of Victoria will supply meter) as per SD W2d, Tie-in to Existing Main, Corp. Stop	Each	1		
5.39	1.8.4, **1.8.2S**	**Water Service 50mm** as per CoV SD W2b, Including Brooks Box, Touch Read Meter (City of Victoria will supply meter) as per SD W2d, Tie-in to Existing Main, Corp. Stop	Each	4		
5.40	**1.8.14S,** **1.8.2S**	**Hydrant Assembly** Per MMCD standard Drawing W4. c/w 150 DI PC350 Hydrant watermain lead installed at depth of 1m and imported granular backfill. to be c/w 19mm Granular base and 250mm - 75mm Minus Pit Run Gravel where under asphalt or concrete. Inclusive of all required appurtenances prior to valve.	Each	3		
5.41	1.8.9	**Concrete Encasement, Thrust & Anchor Blocks** Extra over Items I.8.2 if shown on Contract Drawings	Cubic Metres	2		
5.42	1.8.13	**Joffre Water Tie-In** 150mm Dia. And 200mm DIA Inc. Robar Coupler	Each	1		
5.43	1.8.13	**Lampson Water Tie-In** 175mm Dia., 200mm DIA., 250mm Dia. Inc. Robar Coupler	Each	2		
5.44	**1.8.16S**	**Valve Removal and Abandonment** Inc. cutting, backfilling	Each	**6**		
5.45	**1.8.16S**	**Hydrant Removal** Including return of hydrant to City of Victoria Public Works Yard	Each	1		
5.46	**1.8.16S**	**Watermain Removal and Off-Site Disposal250mm Dia. Cast Iron** Inc. excavation, cutting, removal, off-site disposal, and granular backfill	Lineal Meter	6		
5.47	1.8.17S	**Meter Vault Modification at 1149 Esquimalt** cast-in-place concrete around new meter and existing fire line DCDA, supply and install new Norinco TI3S106070AV vault hatch.	Each	1		

5.48	**1.8.16S**	**Abandon Existing Water Service at Curb Stop** Including locating curb stop, closing valve, sealing	Each	10		
33 40 01 - Storm Sewers Open Trenching						
5.49	1.6.5	**Catch basin Lead** PIPE DIA. 150mm SDR28 PVC	Lineal Metres	20		
5.50	1.6.1, 1.6.2	**DGM0919** PIPE DIA. 200mm, installed at depth 1-3m **(Optional)**	Lineal Metres	10.5		
5.51	1.6.9	**Tie-in to Existing Storm Sewer**	Each	2		
33 44 01 - Manholes and Catch basins						
5.52	1.5.4	**Remove Existing Catch Basins** c/w cap of Existing Lead - offsite Disposal	Each	2		
5.53	1.5.2	**New Catch Basin** as per ToE-SD-S11.1	Each	3		
5.54	1.5.2	**New Offset Catch Basin** as per CoV-SD-S11C	Each	1		
5.55	1.5.3S	**Adjust valves, Junction Boxes, Inspection chambers, and Catch Basin Castings to Finished Grade**	Each	16		
5.56	1.5.3S	**Adjust Manhole to Finished Grade - includes Third Party Manholes**	Each	1		
5.57	1.5.2	**Storm Inspection chambers**	Each	6		
5.58	1.5.2	**Sani Inspection chambers**	Each	5		
DIVISION 34 - TRANSPORTATION						
34 41 13 - Traffic Signals						
6.1	26 56 01 1.9.1 / 34 41 13 1.9.2	**RRFB - Esquimalt Rd at St Paull Pl**	Lump Sum	1		
6.2	26 56 01 1.9.1 / 34 41 13 1.9.2	**RRFB - Esquimalt Rd at Sturdee St**	Lump Sum	1		
6.3	26 56 01 1.9.1 / 34 41 13 1.9.2	**RRFB - Esquimalt Rd at Constance Ave**	Lump Sum	1		
6.4	26 56 01 1.9.1 / 34 41 13 1.9.2	**RRFB - Esquimalt Rd at Fraser St**	Lump Sum	1		
6.5	26 56 01 1.9.1 / 34 41 13 1.9.2	**RRFB - Esquimalt Rd at Fernhill Rd**	Lump Sum	1		
6.6	26 56 01 1.9.1 /	**Esquimalt Road at Admirals Road**	Lump Sum	1		

	34 41 13 1.9.2					
6.7	26 56 01 1.9.1 / 34 41 13 1.9.2	**1188 Esquimalt Road**	Lump Sum	1		
6.8	1.9.1	**Signal Poles - Esquimalt Rd at Nelson St**	Lump Sum	1		
6.9	1.9.4S	**Remove Existing Sign and Dispose offsite**	Each	34		
6.10	1.9.4S	**Relocate Existing Sign and/or Post**	Each	1		
6.11	1.9.4S	**Install New Sign on Existing Post**	Each	3		
6.12	1.9.4S	**Install New SIgn and New Post**	Each	15		
6.13	1.9.4S	**Install Custom WA-36L Knockdown Sign**	Each	2		
6.14	1.9.4S	**Install Coroplast Sign on New or Existing Post**	Each	33		