

# City Of Nanaimo – Approved Products List

The APL lists all municipal infrastructure products approved for use within the City of Nanaimo and is supplemental to the Manual of Engineering Standards and Specifications. The fundamental intention of the APL is to provide a list of acceptable products for installation within the statutory and road right-of-ways within the City of Nanaimo boundaries.

As per the Manual of Engineering Products and Specifications’ “The Approved Products List does not imply automatic approval as a product substitution for a contract specified product. Product substitution is subject to the City Engineer’s approval.”

Revision April 25, 2022

SECTION	PRODUCT MANUFACTURER	MODEL	SIZE	COMMENTS
<b>05.10</b>	<b>PIPE - JOINT WRAP</b>			
	DENSO	Denso Tape	-	<i>All Purpose Petrolatum Tape</i>
	CANUSA - CPS	Canusa Wrap	-	<i>Heat activated adhesive coating on polyofin product</i>
	INTERPROVINCIAL CORROSION CONTROL	Petrowrap Anti Corrosion Tape	-	-
<b>05.22</b>	<b>EPOXY PAINT</b>			
	AMMERCOAT	395 & 400	16 – 20mm	<i>NSF 61 Approved</i>
	DEVOE BAR RUST	233H	16 – 20mm	<i>NSF 61 Approved</i>
	HYDRO-POX	251, 252, 212GL	See Specifications	<i>Not NSF 61 Approved</i>
	HYDRO-POX	193	-	<i>Not NSF 61 Approved, 16 mil thickness</i>
	HYDRO-POX	204 UHB, 204	-	<i>NSF 61 Approved, 16 mil thickness</i>
<b>05.22</b>	<b>PIPE - DUCTILE IRON</b>			
	CANADA PIPE	AWWA C151/C150	ALL	<i>Tyton or Restrained Joint</i>
	US PIPE	AWWA C151/C150	ALL	<i>Tyton Joint Pipe or TR Flex Restrained Joint</i>
<b>05.22</b>	<b>PIPE – PVC</b>			
	NAPCO Royal Pipe and Fittings	AWWA C900	4” – 12”	<i>Must have written certification from the manufacturer that the given batch of pipe conforms to ASTM D3139 Clause 6.2 and contains a fully thickened bell and a single elastomeric gasket to ASTM F477.</i>
	IPEX	AWWA C900 Bionax PVCO AWWA C909	4” – 12” 4” – 18”	<i>Must have written certification from the manufacturer that the given batch of pipe conforms to ASTM D3139 Clause 6.2 and contains a fully thickened bell and a single elastomeric gasket to ASTM F477.</i>
	JM EAGLE	AWWA C900	4” – 12”	<i>Must have written certification from the manufacturer that the given batch of pipe conforms to ASTM D3139 Clause 6.2 and contains a fully thickened bell and a single elastomeric gasket to ASTM F477.</i>
	DIAMOND PLASTICS	AWWA C900	4” – 12”	<i>Must have written certification from the manufacturer that the given batch of pipe conforms to ASTM D3139 Clause 6.2 and contains a fully thickened bell and a single elastomeric gasket to ASTM F477.</i>
	NORTHERN PIPE	AWWA C900	4” – 12”	<i>Must have written certification from the manufacturer that the given batch of pipe conforms to ASTM D3139 Clause 6.2 and contains a fully thickened bell and a single elastomeric gasket to ASTM F477.</i>

<b>05.23</b>	<b>FITTINGS – CAST IRON</b>			
	TERMINAL CITY	AWWA C110	4" – 12"	<i>Cement Mortar Lined only. All Configurations</i>
	SIGMA	AWWA C110	4" – 12"	<i>Cement Mortar Lined only. All Configurations</i>
	STAR-PIPE	AWWA C110	4" – 12"	<i>Cement Mortar Lined only. All Configurations</i>
	NORWOOD FOUNDRY	AWWA C110	4" – 12"	<i>Cement Mortar Lined only. All Configurations</i>
	METALFIT	AWWA C110	4" – 12"	<i>Cement Mortar Lined only. All Configurations</i>
<b>05.23</b>	<b>FITTINGS – DUCTILE IRON</b>			
	TERMINAL CITY	AWWA C110 or C153	4" – 12"	<i>Imported Fittings – CHINA A-1 Only</i>
	SIGMA	AWWA C110 or C153	4" – 12"	<i>All Configurations</i>
	STAR-PIPE	AWWA C110 or C153	4" – 12"	<i>All Configurations</i>
<b>05.24</b>	<b>VALVES – BUTTERFLY</b>			
	PRATT	Groundhog (150 psi)	4" – 12"	<i>Direct Bury</i>
	PRATT	HP250 (250 psi)	4" – 12"	<i>Requires a Chamber</i>
	MUELLER	XP2	4" – 12"	-
	DEZURIK	Class 150/250	4" – 12"	<i>Complete with LA – Series Operator</i>
<b>05.24</b>	<b>VALVES – GATE</b>			
	MUELLER	A-2380 Bronze Seat	2" – 12"	-
	CLOW	Gate Valves	2" – 12"	-
<b>05.24</b>	<b>VALVES – RESILIENT WEDGE</b>			
	AVK	Series 25	2" – 2.5"	<i>Stainless Steel Stem Only. UL/FM</i>
	AVK	Series 25	4" – 12"	<i>Bronze or Stainless Steel Stem. UL/FM</i>
	CLOW	Model 2639	4" – 12"	<i>Bronze or Stainless Steel Stem. UL/FM</i>
	MUELLER	Series 2360 & 2362	4" – 12"	<i>Bronze or Stainless Steel Stem. UL/FM</i>
	TERMINAL CITY	3000 Series	2.5" – 12"	<i>Stainless Steel Stem Only. UL/FM</i>
<b>05.25</b>	<b>VALVES – BOX</b>			
	TERMINAL CITY	MR 18 Style (Robar)	6"	<i>Paved Areas c/w Parsons Lid</i>
	SIKMA	VB-4182 – MR Style	6"	<i>Paved Areas c/w Parsons Lid</i>
	X – FOR RISER PIPE	AWWA C900	6"	<i>SEE 5.22 PIPE - PVC</i>
	TERMINAL CITY/DOBNEY FOUNDRY	ROBAR D-6, D-6A	6"	-
<b>05.27</b>	<b>HYDRANTS</b>			
	TERMINAL CITY	C71P	-	<i>C/W 4" Integral Storz Connection</i>
	AMERICAN AVK COMPANY	2780	-	<i>C/W 4" Integral Storz Connection</i>
	CLOW	M93 Brigadier	-	<i>C/W 4" Integral Storz Connection</i>
	MUELLER	Super Centurion 250	-	<i>C/W 4" Integral Storz Connection</i>
<b>05.27</b>	<b>HYDRANTS – PAINT</b>			
	TREMCLAD	Red, Yellow and Aluminium	-	-
<b>05.29</b>	<b>AIR VALVES</b>			
	GOLDEN ANDERSON INDUSTRIES	945-H	1"	-
	GOLDEN ANDERSON INDUSTRIES	945	2"	-
	TERMINAL CITY	TC 1" Air Valve	1"	-
	ARI VALVES INC.	ARI D-040 'Barak' Combination	1" – 2"	<i>For Above Ground Installations Only</i>
	CRISPIN	AL10	1"	-
	CRISPIN	AL20	2"	-
	VALMATIC	201C	1"	-

<b>05.29</b>	<b>BALL VALVE</b>			
	RED AND WHITE VALVE CORP.	5044AB	-	-
<b>05.30</b>	<b>NO LEAD BRONZE COMPRESSION FITTINGS</b>			
	A.Y. McDONALD	Q – Series Only	¾" – 2"	Full Flow Only
	CAMBRIDGE BRASS	H – Series Only	¾" – 2"	Full Flow Only
	FORD	Q – Fittings Only	¾" – 2"	Full Flow Only
	MUELLER	H – Series Only	¾" – 2"	Full Flow Only
	JONES STEPHENS CORP.	SG – Fittings Only	¾" – 2"	Full Flow Only
<b>05.30</b>	<b>NO LEAD CURB STOP</b>			
	A.Y. McDONALD	Q – Series Only	¾" – 2"	Full Flow Only
	CAMBRIDGE BRASS	H – Series Only	¾" – 2"	Full Flow Only
	FORD	Q – Fittings Only	¾" – 2"	Full Flow Only
	MUELLER	H – Series Only	¾" – 2"	Full Flow Only
	JONES STEPHENS CORP.	SG – Fittings Only	¾" – 2"	Full Flow Only
<b>05.30</b>	<b>METER BOX PRODUCTS</b>			
	REFER TO SECTION 6.36 SERVICE BOX PRODUCTS UNLESS OTHERWISE LISTED BELOW			
<b>05.30</b>	<b>PIPE SADDLES – CASTING WITH DOUBLE STRAPPING</b>			
	ROBAR INDUSTRIES LTD.	2706	4" – 12"	For Ductile Iron and PVC. Requires stainless steel back straps
	ROBAR INDUSTRIES LTD.	2408	4" – 12"	For Ductile Iron. Requires stainless steel back straps
	ROMAC INDUSTRIES INC.	202BS	4" – 12"	For Ductile Iron and PVC. Requires stainless steel back straps
	CAMBRIDGE BRASS INC.	812	4" – 12"	For Ductile Iron and PVC. Requires stainless steel back straps
	SMITH-BLAIR	Style 313	4" – 12"	For Ductile Iron. Requires stainless steel back straps
<b>05.30</b>	<b>PIPE SADDLES – STAINLESS STEEL BROADBAND</b>			
	CAMBRIDGE BRASS INC.	8403 Teck	4" – 12"	-
	CANPAC (CANADA PIPELINE)	SC-2SS	4" – 12"	-
<b>05.30</b>	<b>SERVICE PIPE - COPPER</b>			
	CERRO FLOW PRODUCTS	Type K Soft	¾" – 1½"	-
	GREAT LAKES COPPER INC.	Type K Soft	¾" – 1½"	-
	GREAT LAKES COPPER INC.	Type L Soft	1½" – 2"	-
<b>05.30</b>	<b>SERVICE PIPE – POLYETHYLENE</b>			
	IPEX INC.	Gold901	1" – 2"	Class 200 poly c/w tracer wires on all services. All PE ID's must be equivalent to copper tube flow capacity.
	POLYTUBES INC.	Muni	1" – 2"	Class 200 poly c/w tracer wire on all services. All PE ID's must be equivalent to copper tube flow capacity.
	REHAU	Municipex PEXa	1" – 2"	200 psi pressure class c/w tracer wire on all services. Stainless steel stiffeners must be used at each compression joint.
<b>05.30</b>	<b>WATER METERS</b>			
	SENSUS METERING	SR11	19mm	Register to be compatible with touch pad or Sensus RA MXU radio transmitter
	SENSUS METERING	SR11	25mm	Register to be compatible with touch pad or Sensus RA MXU radio transmitter
	BADGER	Recordall	19mm	Register to be compatible with touch pad or Sensus RA MXU radio transmitter. Provisional approval for 4 years expiring no earlier than December 2026.

	BADGER	Recordall	25mm	Register to be compatible with touch pad or Sensus RA MXU radio transmitter. Provisional approval for 4 years expiring no earlier than December 2026.
	NEPTUNE	T-10	19mm	Register to be compatible with touch pad or Sensus RA MXU radio transmitter. Provisional approval for 4 years expiring no earlier than December 2026.
	NEPTUNE	T-10	25mm	Register to be compatible with touch pad or Sensus RA MXU radio transmitter. Provisional approval for 4 years expiring no earlier than December 2026.
	NEPTUNE	Mach-10	19mm	Register to be compatible with touch pad or Sensus RA MXU radio transmitter. Provisional approval for 4 years expiring no earlier than December 2026.
	NEPTUNE	Mach-10	25mm	Register to be compatible with touch pad or Sensus RA MXU radio transmitter. Provisional approval for 4 years expiring no earlier than December 2026.
	SENSUS METERING	Omni R2	1½" – 2"	Touch Read Units / Radio Read Units AMR - MXU
	SENSUS METERING	Omni F2 Fireline	4" – 10"	Touch Read Units / Radio Read Units AMR - MXU
<b>5.31</b>	<b>PRESSURE REDUCING VALVES</b>			
	CLAYTON VALVE (CLA-VAL CO.)	-	4" – 12"	-
	SINGER VALVE	-	4" – 12"	-
<b>05.32</b>	<b>FLANGE ADAPTOR</b>			
	EBAA Iron	Series 1000 E-Z flange	3" – 10"	Ductile Iron Pipe Only (UL/FM)
	EBAA Iron	Series 2100 Megaflange	3" – 12"	Ductile Iron Pipe Only (UL)
	EBAA Iron	Megaflange	3" – 10"	Ductile Iron Pipe Only (UL/FM)
	FORD METER BOX	UNI FLANGE Series 400	3" – 8"	Ductile Iron Pipe Only (FM)
<b>05.32</b>	<b>REPAIR CLAMPS</b>			
	ROBAR INDUSTRIES LTD.	5626	4" – 12"	Two-Section Clamp
	MUELLER	530	4" – 12"	Two-Section Clamp
	ROMAC INDUSTRIES INC.	SS2	4" – 12"	Two-Section Clamp
	CANADA PIPELINE	SS CR Series	4" – 16"	Two-Section Clamp
<b>05.32</b>	<b>REPAIR COUPLING</b>			
	ROBAR INDUSTRIES LTD.	1408	4" – 12"	Requires Stainless Steel Bolts
	ROBAR INDUSTRIES LTD.	1506	4" – 12"	Requires Stainless Steel Bolts
	ROMAC INDUSTRIES INC.	XR501	4" – 12"	Requires Stainless Steel Bolts
	SMITH BLAIR	441	4" – 12"	Requires Stainless Steel Bolts
<b>05.32</b>	<b>REPAIR COUPLING – WIDE RANGE</b>			
	KRAUSZ INDUSTRIES	HYMAX 2000 Series	4" – 12"	-
	ROMAC INDUSTRIES INC.	MACRO	4" – 12"	-
	ROMAC INDUSTRIES INC.	ALPHA	4" – 12"	-
	KRAUSZ INDUSTRIES	HYMAX GRIP	4" – 12"	-
	ROBAR INDUSTRIES	1696 2 BOLT SS	100mm – 300 mm	-
	SMITH BLAIR	421 TOP-BOLT	100mm – 300 mm	-
<b>05.32</b>	<b>THRUST RESTRAINT – DUCTILE IRON (WEDGE-ACTION)</b>			
	EBAA IRON	Series 1100 Mega-Lug	3" – 12"	Ductile Iron Pipe (UL/FM)
	SIGMA	One Lok Series	4" – 12"	Ductile Iron Pipe (UL/FM)

	FORD METER BOX	UNI-FLANGE Series - 1400D/1450D	4" – 12"	Ductile Iron Pipe (UL/FM)
	FORD METER BOX (P)	UNI-FLANGE Series – 1300C	4" – 12"	Ductile Iron Pipe (UL/FM)
	STAR	StarGrip	4" – 12"	Ductile Iron Pipe (UL/FM)
	STAR	Series 1000	4" – 12"	Ductile Iron Pipe (UL/FM)
<b>05.32</b>	<b>THRUST RESTRAINT PVC</b>			
	ROMAC INDUSTRIES INC.	600 Series	4" – 12"	PVC (UL/FM)
	SIGMA	PV – Lok; PVP Series	4" – 12"	PVC Pipe (FM)
	FORD METER BOX (P)	UNI-FLANGE Series 1390 UNI-FLANGE Series 1399	4" – 12" 4" – 18"	For DR 18 or DR 14 PVC pipe only (FM) For C909/C900 PVCO/PVC pipe (FM)
	FORD METER BOX (P)	UNI-FLANGE Series 1300 UNI-FLANGE Series 1309	4" – 12" 4" – 18"	For DR 18 or DR 14 PVC pipe only (FM) For C909/C900 PVCO/PVC pipe (FM)
	EBAA IRON	Series 2000	4" – 12"	For DR 18 PVC pipe (UL/FM)
	EBAA IRON	Series 1600	4" – 12"	For DR 18 PVC pipe (FM)
	EBAA IRON	Series 1900	4" – 12"	For C909/C900 PVCO/PVC pipe (FM)
	FORD METER BOX	UNI-FLANGE Series 1350	4" – 12"	For DR 18 or DR 14 PVC pipe only (FM)
	EBAA IRON	Series 1500PF	4" – 12"	For DR 18 PVC pipe (FM)
	STAR	PVC StarGrip	4" – 12"	For DR 18 PVC pipe (UL/FM)
	STAR	Series 1000	4" – 12"	For DR 18 or DR 14 PVC pipe only (FM)
	STAR	Series 1100G2	4" – 14"	For C909/C900 PVCO/PVC pipe (FM)
<b>05.34</b>	<b>MANHOLE PRODUCTS</b>			
	REFER TO SECTION 6.0 FOR MANHOLE PRODUCTS UNLESS OTHERWISE LISTED BELOW			
<b>05.72</b>	<b>DETECTOR CHECK VALVE</b>			
	FEBCO	800 Series	4" – 10"	UL/FM
	HERSEY – Meters	EDC III	4" – 10"	UL/FM
	WATTS WATER TECHNOLOGIES	SSO7F	4" – 10"	UL FOR 4" – 10" / FM FOR 8" – 10"
<b>05.72</b>	<b>SILENT CHECK VALVE</b>			
	VALMATIC	Silent Check Valve	-	-
<b>06.22</b>	<b>FITTINGS – CONCRETE</b>			
	CANADA PIPE	ASTM C14M OR C76M	-	All configurations
	LOMBARD PRE-CAST INC.	ASTM C14M OR C76M	-	All configurations
	OCEAN PIPE	ASTM C14M OR C76M	-	All configurations
<b>06.22</b>	<b>FITTINGS – PVC</b>			
	GALAXY PLASTICS	ASTM D3034 / F679	-	All configurations
	IPEX	ASTM D3034 / F679	-	All configurations
	PRO – LINE FITTINGS INC.	ASTM D3034 / F679	-	All configurations
	NAPCO Royal Pipe and Fittings	ASTM D3034 / F679	-	All configurations
<b>06.22</b>	<b>FITTINGS – RUBBER REPAIR</b>			
	ROLLE INDUSTRIAL	SWIFT NO. SW51/44SS	4" – 12"	SS Anti Shear Bands, c/w 4SS Clamp
	ROLLE INDUSTRIAL	SWIFT NO. SW02/44SS	4" – 12"	SS Anti Shear Bands, c/w 4SS Clamp
	ROLLE INDUSTRIAL	SWIFT NO. SW06/44SS	4" – 12"	SS Anti Shear Bands, c/w 4SS Clamp

<b>06.22</b>	<b>INSPECTION ASSEMBLIES</b>			
	GALAXY PLASTICS	Orbit I.C.	4" – 6"	
	PRO – LINE FITTINGS INC.	70APICP04	4" – 6"	<i>IC Pre-Plugged 08x04</i>
	NAPCO Royal Pipe and Fittings	70A4PPAF / 70A6PPAF	4" – 6"	<i>8" Riser. Includes Plug</i>
<b>06.22</b>	<b>INSPECTION CHAMBER – HARDWARE</b>			
	PRO – LINE FITTINGS INC.	71ALID08WL	8"	<i>White IC Locking Lid</i>
	PRO – LINE FITTINGS INC.	73AL08HL	8"	<i>IC Locking Collar</i>
	PRO – LINE FITTINGS INC.	74ABLID / COLLAR08WL	8"	<i>White IC Locking Lid / Collar</i>
	NAPCO Royal Pipe and Fittings	73AL08HSL	8"	<i>Locking Collar</i>
	NAPCO Royal Pipe and Fittings	72ABFLAP04SS	4"	<i>Flaps c/w Hook, Stainless Steel</i>
	NAPCO Royal Pipe and Fittings	71ABLID08WGL	8"	<i>Lid, White with Gasket</i>
<b>06.22</b>	<b>PIPE – CONCRETE</b>			
	LOMBARD PRE – CAST INC.	ASTM C14M OR C67M	-	-
	OCEAN PIPE	ASTM C14M OR C67M	-	-
<b>06.22</b>	<b>PIPE – PVC (SMOOTH)</b>			
	IPEX	ASTM D2412	-	-
	JM EAGLE	ASTM D2412	-	-
	NAPCO Royal Pipe and Fittings	ASTM D2412	-	-
	NORTHERN PIPE	ASTM D2412	-	-
	DIAMOND PLASTICS	ASTM D2412	-	-
<b>06.22</b>	<b>PIPE – DUCTILE IRON</b>			
	CANADA PIPE	ASTM A746	-	-
<b>06.22</b>	<b>PIPE – PVC SERVICE</b>			
	IPEX	ASTM D2412	-	-
	JM EAGLE	ASTM D2412	-	-
	NAPCO Royal Pipe and Fittings	ASTM D2412	-	-
	NORTHERN PIPE	ASTM D2412	-	-
	DIAMOND PLASTICS	ASTM D2412	-	-
<b>06.22A</b>	<b>PIPE – DUCTILE IRON (FORCE)</b>			
	CANADA PIPE	AWWA C150 / C151	-	<i>Cement Mortar Lined Only</i>
<b>06.22A</b>	<b>PIPE – PVC (FORCE)</b>			
	IPEX	AWWA C900 OR C905	-	-
	NAPCO Royal Pipe and Fittings	AWWA C900 OR C905	-	-
<b>06.24</b>	<b>PIPE SADDLES</b>			
	NAPCO Royal Pipe and Fittings	Gazetted PVC Saddle Tee	4" – 6"	<i>Installation on Existing Mains Only</i>
	CLOW	Concord D-50	4" – 6"	<i>Installation on Existing Mains Only. Daigle Saddle</i>
	IPEX	Saddle Tee (c/w 2 straps)	4" – 6"	<i>Installation on Existing Mains Only</i>
	IPEX	Saddle Wye (c/w 2 straps)	4" – 6"	<i>Installation on Existing Mains Only</i>
<b>06.25</b>	<b>MANHOLE SECTIONS</b>			
	LOMBARD PRE – CAST INC.	ASTM C478M	All	-
	OCEAN PIPE	ASTM C478M	All	-
	DIAMOND PRECAST	ASTM C478M	All	-

<b>06.25A</b>	<b>MANHOLE BASES</b>			
	LOMBARD PRE – CAST INC.	ASTM C478M	All	-
	PREDL SYSTEMS NORTH AMERICAN INC.	ASTM C478M	All	<i>Fiberglass Base Liner for Precast MH Base</i>
	DIAMOND PRECAST	ASTM C478M	All	-
	OCEAN PIPE	ASTM C478M	All	-
<b>06.27</b>	<b>MANHOLE COVER AND FRAMES – HEAVY DUTY</b>			
	TERMINAL CITY / DOBNEY FOUNDRY	C18	All	<i>H2O Loading</i>
	SIGMA	MH-4182H	All	<i>H2O Loading</i>
	TR CASTINGS	TR-18	All	<i>H2O Loading</i>
	TERMINAL CITY / DOBNEY FOUNDRY	C44A	All	<i>H2O Loading Adjustable Frame and Support Ring</i>
<b>06.27</b>	<b>MANHOLE COVER AND FRAMES – UTILITY CHAMBER</b>			
	TERMINAL CITY/DOBNEY FOUNDRY	C-22	All	-
	TR CASTINGS	TR-37	All	-
<b>06.28</b>	<b>MANHOLE STEPS</b>			
	LOMBARD PRE–CAST INC.	ASTM C478	Standard	<i>Aluminium</i>
	OCEAN PIPE	ASTM C478	Standard	<i>Aluminium</i>
<b>06.36</b>	<b>SERVICE BOX (COMPOSITE)</b>			
	CIF COMPOSITES INC.	Pro–Eco–Lite B18 Service Box	432W X 600L X 457D	<i>For Single Service</i>
<b>06.36</b>	<b>SERVICE BOX (CONCRETE)</b>			
	BROOKS PRODUCTS	66	425 X 750	<i>For Twin Service</i>
	BROOKS PRODUCTS	37	300 X 500	<i>For Single Service</i>
	LOMBARD PRE–CAST INC. (LANGLEY CONCRETE)	37	300 X 500	<i>For Twin Service</i>
	LOMBARD PRE–CAST INC. (LANGLEY CONCRETE)	66	425 X 750	<i>For Single Service</i>
	AE CONCRETE PRODUCTS	-	425 X 750	-
<b>07.22A</b>	<b>PIPE FITTING PRODUCTS</b>			
	REFER TO SECTION 6.22 AND 6.24 FOR PIPE FITTING PRODUCTS UNLESS OTHERWISE LISTED BELOW			
<b>07.22A</b>	<b>INSPECTION ASSEMBLIES</b>			
	GALAXY PLASTICS	Orbit I.C.	4” – 6”	<i>Available in 4” and 6”</i>
	PRO–LINE FITTINGS INC.	70APICP04	4”	<i>IC Pre – Plugged 08 x 04</i>
	NAPCO Royal Pipe and Fittings	70A4PPAF / 70A6PPAF	4” – 6”	<i>8” Riser. Includes Plug</i>
<b>07.22A</b>	<b>INSPECTION CHAMBER - HARDWARE</b>			
	GALAXY PLASTICS	Orbit 8” Lid & Collar	8”	<i>Green Lid – Storm</i>
	PRO–LINE FITTINGS INC.	71ALID08GL	8”	<i>Green IC Locking Lid</i>
	PRO–LINE FITTINGS INC.	73AL08HL	8”	<i>IC Locking Collar</i>
	PRO–LINE FITTINGS INC.	74ABLID / COLLAR08GL	8”	<i>Green IC Locking Lid/Collar</i>
	NAPCO Royal Pipe and Fittings	71ABLID08GGL	8”	<i>Lid, Green with Gasket</i>
	NAPCO Royal Pipe and Fittings	72ABFLAP04SS	4”	<i>Flaps c/w Hook, Stainless Steel</i>
	NAPCO Royal Pipe and Fittings	73AL08HSL	8”	<i>Locking Collar</i>
<b>07.22A</b>	<b>PIPE PRODUCTS</b>			
	REFER TO SECTION 6.22 FOR PIPE FITTING PRODUCTS UNLESS OTHERWISE LISTED BELOW			

<b>07.25</b>	<b>MANHOLE PRODUCTS</b>			
	REFER TO SECTION 6.0 MANHOLE PRODUCTS UNLESS OTHERWISE LISTED BELOW			
<b>07.31A</b>	<b>PRECAST CATCH BASIN BARRELS</b>			
	REFER TO SECTION 6.25 PRODUCTS UNLESS OTHERWISE LISTED BELOW			
<b>07.31B</b>	<b>CATCH BASIN FRAME AND COVER – SW-6</b>			
	TERMINAL CITY / DOBNEY FOUNDRY	B40	-	-
	SIGMA	B23/24	-	-
	TR CASTINGS	B23/24	-	-
<b>07.31B</b>	<b>CATCH BASIN FRAME AND COVER – SW-6</b>			
	SIGMA	B40	-	-
	TERMINAL CITY / DOBNEY FOUNDRY	B23 TYPE 'D'	-	-
	TERMINAL CITY / DOBNEY FOUNDRY	B24 TYPE 'D'	-	-
	TR CASTINGS	TR 24D	-	-
<b>07.31B</b>	<b>CATCH BASIN AND FRAME COVER – SW-7</b>			
	SIGMA	B2324 Adjustable	-	-
	TERMINAL CITY / DOBNEY FOUNDRY	B24 Adjustable	-	-
	TR CASTINGS	B24 Adjustable	-	-
<b>07.31B</b>	<b>CATCH BASIN FRAME AND COVER – SW-8</b>			
	SIGMA	B26B	-	-
	TERMINAL CITY / DOBNEY FOUNDRY	B26B	-	-
	TR CASTINGS	B26B	-	-
<b>07.35A</b>	<b>CULVERT</b>			
	6.22 Pipe – PVC (Smooth) Listings	-	-	<i>As per MoESS Specifications 7.35A</i>
	6.22 Pipe – Concrete Listings	-	-	<i>As per MoESS Specifications 7.35A</i>
	ARMTEC	Boss 2000	-	<i>For Driveway Applications ONLY and 320 kPa ONLY</i>
	ATLANTIC INDUSTRIES LTD.	Trenchcoat	-	<i>For Driveway Applications ONLY</i>
	ADS CANADA	SaniTite HP Pipe	-	-
	ADS CANADA	N-12 Profile Pipe	-	-
<b>07.38</b>	<b>SERVICE BOX PRODUCTS</b>			
	REFER TO SECTION 06.36 SERVICE BOX PRODUCTS UNLESS OTHERWISE LISTED BELOW			
<b>08.25</b>	<b>THERMAL PLASTIC</b>			
	LAFRENTZ ROAD MARKING	System 300 – BC Formula White 0320/Yellow 0358	-	<i>General Use</i>
	LAFRENTZ ROAD MARKING	Skid Resistant Material (SRM)	-	<i>For Multiple Use Traffic Areas, 'Conflict Zones'</i>
<b>08.25</b>	<b>TRAFFIC PAINT</b>			
	ENNIS PAINT INC.	986061 Low VOC White Solvent	-	<i>For Applications Using Large Equipment</i>
	ENNIS PAINT INC.	986063 Low VOC Yellow Solvent	-	<i>For Applications Using Large Equipment</i>
<b>08.26</b>	<b>SIGN – STREET NAME</b>			
	SHERINE INDUSTRIES	Blanks, Traffic Grade Aluminium	All Sizes	<i>To Be Supplied and Manufactured by the CoN</i>
	3M	Diamond Grade, Yellow	All Sizes	<i>Primary Signal Head Backboard</i>
<b>08.26</b>	<b>SIGN – TRAFFIC – VINYLs</b>			
	3M	Diamond Grade Aluminium	All Sizes	<i>To Be Supplied and Manufactured by the CoN</i>
	AVERY	Diamond Grade Aluminium	All Sizes	<i>To Be Supplied and Manufactured by the CoN</i>

	GURBER	Diamond Grade Aluminium	All Sizes	<i>To Be Supplied and Manufactured by the CoN</i>
<b>08.26</b>	<b>SIGN FASTENERS</b>			
	DYNA ENGINEERING LTD.	All Fittings	All Sizes	<i>To Be Supplied by the CoN</i>
	UNISTRUT BLD SYSTEMS	All Fittings	All Sizes	<i>To Be Supplied by the CoN</i>
<b>08.26</b>	<b>SIGN BASES</b>			
	ALLIED	Square Fit Telespar	57mm x 57mm 12 gauge (3mm)	<i>To Be Supplied by the CoN</i>
<b>08.26</b>	<b>SIGN POSTS</b>			
	ALLIED	Square Fit Telespar	50mm x 50mm 12 gauge (3mm)	<i>To Be Supplied by the CoN</i>
<b>09.38</b>	<b>TRAFFIC TAPE</b>			
	ENNIS – FLINT CORP.	Hot Tape	-	-
	ENNIS – FLINT CORP.	Premark	-	-
<b>10.00</b>	<b>ROADWAY LIGHTING AND TRAFFIC SIGNAL PRODUCTS</b>			
	PRODUCTS THAT ARE RECOGNIZED AS ACCEPTABLE PRODUCTS BY THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE ARE ACCEPTABLE BY THE CITY OF NANAIMO AND REFERENCE TO THE RPL IS APPROPRIATE FOR STREETLIGHTING AND TRAFFIC SIGNAL PRODUCTS FOUND WITHIN SECTION 10.00. HOWEVER, THE CITY OF NANAIMO APL DOES LIST PRODUCTS THAT ARE SPECIFICALLY USED FOR CITY INFRASTRUCTURE AND ARE ACCEPTABLE FOR GENERAL USE WITHIN THE CITY AND THESE ARE LISTED BELOW; THEREFORE, LISTINGS WITHIN THE APL REBUTE THE RPL FOR ACCEPTABLE PRODUCTS WITHIN THE CITY LIMITS.			
<b>10.23</b>	<b>CONCRETE JUNCTION BOXES &amp; LIDS</b>			
	AE CONCRETE PRE-CAST PRODUCTS LTD.	5686	-	-
	KON KAST PRODUCTS LTD.	926	-	-
<b>10.25</b>	<b>LUMINAIRE POLE LOCKING HAND HOLE COVER</b>			
	NOVAPOLE	Material and finish to match pole	-	<i>Keyed to match CoN master – To Be Supplied by CoN</i>
	VALMONT	Material and finish to match pole	-	<i>Keyed to match CoN master – To Be Supplied by CoN</i>
<b>10.25</b>	<b>ORNAMENTAL STREET LIGHT POLE – HERITAGE</b>			
	KING LUMINAIRES	KM65EO–15 c/w banner assembly	-	<i>Pole for luminaires – colour to be black</i>
<b>10.25</b>	<b>SIDEWALK / PATHS / BIKE FACILITIES POLE</b>			
	NOVAPOLE	3.05m tall, 102x102mm galvanized square pole powder coated black c/w 102x127mm hand hole and CoN lockable handhole cover	-	-
	VALMONT	3.05m tall, 102x102mm galvanized square pole powder coated black c/w 102x127mm hand hole and CoN lockable handhole cover	-	-
<b>10.25</b>	<b>LANE AND ROADWAY POST TOP</b>			
	NOVAPOLE	4.5m galvanized and powder coated black	-	-
	VALMONT	4.5m galvanized and powder coated black	-	-
<b>10.26</b>	<b>SHIELDED DETECTOR LOOP LEAD-IN CABLES</b>			
	General Cable	C0456A	-	-
	BELDON	9316	-	-

<b>10.28</b>	<b>LED SIGNAL LAMPS (300 RED, AMBER, GREEN, 300 BIMODAL TURN, DON'T WALK)</b>			
	LEOTEK	-	-	-
	DIALIGHT	-	-	-
	DURALIGHT	-	-	-
<b>10.28</b>	<b>PEDESTRIAN HEADS</b>			
	DIALITE	430-6776-001	300 X 300	LED – Overlay
	GE	PS6-CFC4-01A-H3	300 x 300	LED – Overlay
<b>10.28</b>	<b>PEDESTRIAN CROSSWALK FLASHERS</b>			
	JSF TECHNOLOGIES	AB-9407	-	Dual sided RRFB (rectangular quick flash)
	INTELLIGENT TRAFFIC EQUIPMENT	Lane Light RRFB-CDN Climate	-	Dual sided RRFB (rectangular quick flash)
<b>10.29</b>	<b>SIGN MOUNTING KIT</b>			
	GREENLITE TRAFFIC	GEL 379	-	-
	PELCO	Astro Sign-Brac	-	-
<b>10.29</b>	<b>SIGNAL HEAD MOUNTING KIT</b>			
	GREENLITE TRAFFIC	GEL 378	-	-
	PELCO	Astro-Brac	-	-
<b>10.29</b>	<b>SIDE SIGNAL HEAD MOUNTING KIT</b>			
	GREENLITE TRAFFIC	GEL 189	-	-
<b>10.32</b>	<b>AUDIBLE SIGNALS</b>			
	NOVAX	DS102A-24SS	-	-
<b>10.34</b>	<b>TAGS</b>			
	ANDEC	A400Y	-	-
	THOMAS & BETTS LTD	TC 228-TB	-	-
<b>10.35</b>	<b>FUSE HOLDERS</b>			
	EATON BUSSMAN	HEB-AA	-	-
<b>10.35</b>	<b>FUSES</b>			
	GOULD SHAWMUT	OTM	10A	-
	LITELFUSE	BLN-10	10A	-
<b>10.37</b>	<b>PEDESTRIAN PUSHBUTTONS</b>			
	POLARA ENGINEERING INC.	BDL3-Y	-	Audible Press with Momentary LED
	Campbell Company	4 EVR	-	Audible Press with Momentary LED
<b>10.39</b>	<b>LUMINAIRES – 4,900 – 6,100 LUMEN COBRA HEAD</b>			
	AMERICAN ELECTRIC LIGHTING	ATB0-20BLEDE10-MVOLT-R2-NL-P7-SH	-	-
	AMERICAN ELECTRIC LIGHTING	ATB0-20BLEDE10-MVOLT-R3-NL-P7-SH	-	-
	SIGNIFY LUMEC	RFS-54W16LED4K-G2-R2S-UNV-DMG-RCD7-PH9-GY3	-	-
	SIGNIFY LUMEC	RFS-54W16LED4K-G2-R3S-UNV-DMG-RCD7-PH9-GY3	-	-
	COOPER STREETWORKS	VERD-C018-D-U-T2-4N7-AP-OA-RA1013	-	-
	COOPER STREETWORKS	VERD-C018-D-U-T3-4N7-AP-OA-RA1013	-	-

	LED ROADWAY LIGHTING	NXT-36S-0-7-2LB-4-GY-3-UL-X-2H	-	-
	LED ROADWAY LIGHTING	NXT-36S-0-7-3LB-4-GY-3-UL-X-2H	-	-
<b>10.39</b>	<b>LUMINAIRES – 9,000 – 13,500 LUMEN COBRA HEAD</b>			
	AMERICAN ELECTRIC LIGHTING	ATB0-30BLEDE13-MVOLT-R2-NL-P7-SH	-	-
	AMERICAN ELECTRIC LIGHTING	ATB0-30BLEDE10-MVOLT-R3-NL-P7-SH	-	-
	SIGNIFY LUMEC	RFM-108W48LED4K-G2-R2S-UNV-DMG-RCD7-PH9-GY3	-	-
	SIGNIFY LUMEC	RFM-108W48LED4K-G2-R3S-UNV-DMG-RCD7-PH9-GY3	-	-
	COOPER STREETWORKS	VERD-C02-D-U-T2-4N7-AP-OA/RA1013	-	-
	COOPER STREETWORKS	VERD-G-C028-D-U-T3-4N7-AP-OA/RA1013	-	-
	LED ROADWAY LIGHTING	NXT-48M-0-7-2ES-5-GY-3-UL-X-2H	-	-
	LED ROADWAY LIGHTING	NXT-48M-0-7-3LB-6-GY-3-UL-X-2H	-	-
<b>10.39</b>	<b>LUMINAIRES – 15,500 – 18,000 LUMEN COBRA HEAD</b>			
	AMERICAN ELECTRIC LIGHTING	ATB2-60BLEDE85-MVOLT-R2-NL-P7-SH	-	-
	AMERICAN ELECTRIC LIGHTING	ATB2-60BLEDE85-MVOLT-R3-NL-P7-SH	-	-
	SIGNIFY LUMEC	RFM-160W48LED4K-G2-R2S-UNV-DMG-RCD7-PH9-GY	-	-
	SIGNIFY LUMEC	RFM-160W48LED4K-G2-R3S-UNV-DMG-RCD7-PH9-GY3	-	-
	COOPER LUMARK	NAV-AF03-D-UNV-T2-10K-PER7-OA/RA1013	-	-
	COOPER LUMARK	NAV-AF03-D-UNV-T3R-10K-PER7-OA/RA1013	-	-
	LED ROADWAY LIGHTING	NXT-72M-0-7-2ES-5-GY-6-UL-X-2H	-	-
	LED ROADWAY LIGHTING	NXT-48M-0-7-3LB-6-GY-7-UL-X-2H	-	-
<b>10.39</b>	<b>ORNAMENTAL STREETLIGHT – HERITAGE</b>			
	KING LUMINAIRES	K199R-R1AR-[III/V]-[40/75/100](SSL)-1042-120:277-K3-3K	-	<i>Designer to select wattage and distribution option to suit installation location(s)</i>
<b>10.39</b>	<b>SIDEWALK / PATHS / BIKE FACILITIES</b>			
	CREE	Edge Series ARE-EDG, 25W, Type 2 Distribution, black, c/w bird spikes	-	<i>c/w backlight control when surrounded by single family residential properties</i>
	LITHONIA	D-Series SXWPM-LED-10C, 14/20/27W, type 2M distribution, c/w bird spikes	-	<i>c/w backlight control when surrounded by single family residential properties</i>
<b>10.39</b>	<b>LANE AND ROADWAY POST TOP</b>			
	HOLOPHANE	PTUE2-P20-XXK-AS-PY3-BK-B-NL2X2	-	<i>Colour temperature to suit design.</i>
<b>10.40</b>	<b>SERVICE PANEL – 100A STREET LIGHTING / TRAFFIC SIGNAL</b>			
	WESTCOAST ELECTRIC	-	-	<i>STD DWG E10.1</i>
	VALID MANUFACTURING	-	-	<i>STD DWG E10.1</i>

<b>10.40</b>	<b>SERVICE PANEL – 60A STREET LIGHTING</b>			
	WESTCOAST ELECTRIC	-	-	STD DWG E10.1
	VALID MANUFACTURING	-	-	STD DWG E10.1
<b>10.46</b>	<b>UPS EQUIPMENT</b>			
	ALPHA	FXM 1100, HP 1100 UPS System		-
<b>10.47</b>	<b>TRAFFIC CONTROLLERS AND CABINET</b>			
	ECONOLITE	P44	Size 6 – 55H x 44W x 26D	CABINET – To be supplied by the CoN
	ECONOLITE	Cobalt	-	CONTROLLERS – To be supplied by the CoN
<b>10.48</b>	<b>SIREN PRE-EMPTION SYSTEM</b>			
	Traffic Systems LLC & RGH PACIFIC	SONEM 2000 c/w LED Light	-	To be Supplied by the CoN Sec 10.26, DWG E6.6
<b>14.47</b>	<b>CONTROLLERS</b>			
	TORO	Toro Sentinel Field Satellite	-	Computerized
	RAINBIRD	TBOS–BT 9V	-	With permission
	RAINBIRD	ESP-ME3 110V	-	Preferred
	RAINBIRD	PEB PESB Electric Valves	-	Commercial grade
<b>14.50</b>	<b>BACKFLOW PREVENTION DEVICE</b>			
	WATTS	Double Check Backflow Preventer	-	-
	COMBRACO	Double Check Backflow Preventer	-	-
	ZURN	Double Check Backflow Preventer	-	-