

TENDER SPECIFICATIONS

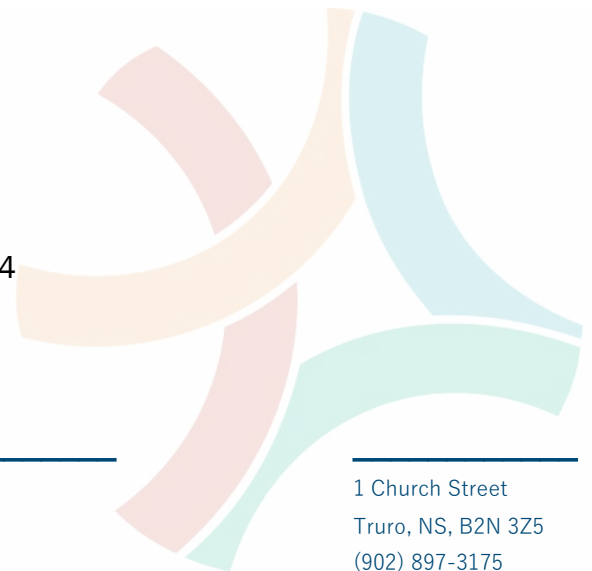
CCTV SURVEY CAMERA SYSTEM FOR SEWER PIPE INSPECTIONS

Tenders will be received by email to Crystal Deuille at cdeuille@colchester.ca until **3:00 pm (local time), Wednesday, August 7, 2024.**

Submissions must be received prior to the date and time indicated for Tender Closing. It is the responsibility of the tenderer to confirm receipt of their tender by the Municipality.

The Owner reserves the right to reject all tenders or any tender; not necessarily accept the lowest tender; waive any irregularities, formalities, informalities, or technicalities; and to accept or reject any offer whatsoever as considered by the owner to be in its best interest.

Issued Date – July 16, 2024



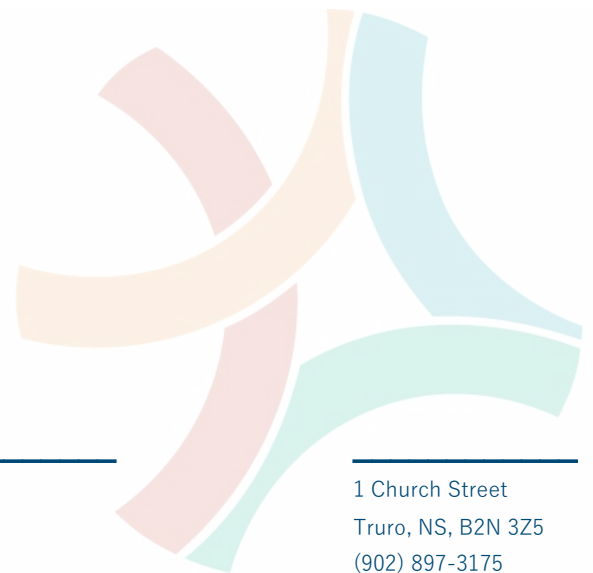
INSTRUCTIONS TO BIDDERS:

1. The attached Tender Form must be used for tabulation purposes. Specification sheets as provided herein form part of the tender and must not be removed. Please check the appropriate box under the “comply” section and include additional details under the “specify” section where applicable.
2. All bid submissions must be accompanied by manufacturer’s literature describing, in detail, the equipment bid upon. Bidder must provide further details as necessary to illustrate adherence to the tender. Where conflicting information exists between the manufacturer’s literature and manufacturer-supplied specifications, and the specification sheets in the tender form, the specification sheets in the tender form will govern.
3. Bid submissions must include freight, duty, and any other charges which are applicable at time of tender award.
4. The Municipality reserves the right to inspect any equipment supplied as a result of this tender, either during or after manufacture and delivery. Inspection will occur within 48 hours of delivery. Any failure to meet tender specifications or any defects discovered during this inspection shall be rectified by the supplier prior to payment.
5. The Municipality reserves the right to reject all tenders or any tender; not necessarily accept the lowest tender; waive any irregularities, formalities, informalities, or technicalities; and to accept or reject any offer whatsoever as considered by the owner to be in its best interest.
6. Tenders must be received by the Public Works Office of the Municipality of Colchester, via email to Crystal Deuville at cdeuville@colchester.ca, **no later than 3:00 pm (local time), Wednesday, August 7, 2024.**
7. Paper copies of bid submissions are not required.
8. Tenders will be opened privately.

GENERAL DETAILS:

1. The specifications below describe the supply and commissioning, training and installation of a new Portable CCTV Survey Camera System for Sewer Pipe Inspections compatible with existing WinCan software.
2. All pricing information shall be included on the attached tender form.
3. Provide three (3) full days on site training to municipal staff on actual field operation and maintenance during the first six (6) months of operation. A minimum of 1 of these days must be scheduled during the first month of operation.
4. The Supplier is to state an approximate time of delivery of the equipment in number of Calendar Days from receipt of Purchase Order.

5. While evaluating the equipment, due consideration shall be given to:
 - a. Experience of manufacturer and reputation of product's brand
 - b. Availability of local maintenance, spares and service facilities of each component
 - c. User friendliness and flexibility of system for future upgrades
6. In submitting a tender, the tenderer confirms that the proposed equipment meets the specifications outlined herein.
7. The successful tenderer must also provide at least one hard copy and one digital copy of the Operations and Maintenance Manual delivered with the equipment.
8. The tenderer shall make a written request for any deviations from these specifications. Such requests must be received at least three (3) working days prior to the tender closing.
9. The tenderer shall submit a description of all standard warranties on various components that are available and included in the price at the time of purchase of the equipment.
10. The tenderer shall submit the cost and description of optional warranties that are available, for example, extended warranty. The cost of such warranties should be identified as a separate optional item on the Tender Form.



SPECIFICATIONS (MINIMUM):

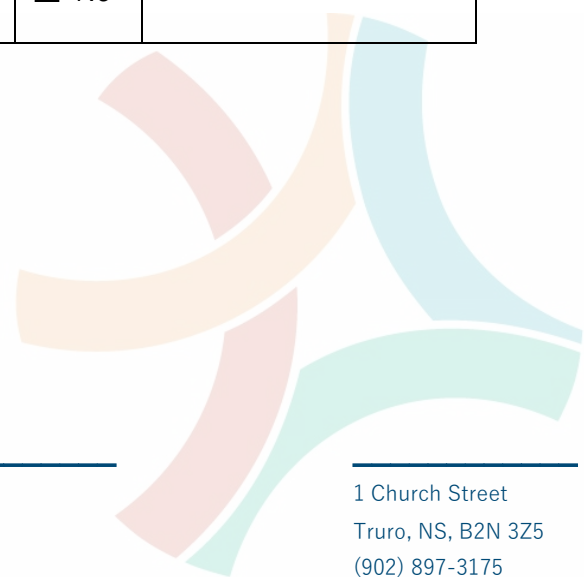
	COMPLY		SPECIFY
ZOOM/PAN/TILT COLOUR CAMERA: FRONT CAMERA			
Colour camera with auto focus and auto tracking white balance with zoom, pan and tilt capabilities	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Minimum 10x or greater optical and 4x or greater digital zoom, capable of viewing up laterals and magnifying observations	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Homing mechanism to view minute defects and voids all around the entire pipe circumference and then re-orient to the default location	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Must have mechanical stops to avoid slip-ring maintenance and prevent camera being directly positioned into dirty flow at bottom of pipe	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Built-in lighting with adequate light output to illuminate pipes from 8-inch to 60-inch diameter in order to produce clear pictures with enhanced details	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Front camera housing to be constructed of impact resistant, distortion-free material, fully sealed and waterproof to withstand external pressures up to 15 psi without damage or leaking	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Camera must connect directly to the cable with compatibility to connect to different size tractors/crawlers without modification to the cable, control unit, or any other part of the system. Minimal Cable wiring with 12 wires or less considered an asset.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
All camera electronics shall be of modular construction for ease of exchange and repair, and shall be designed to facilitate future upgrades	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Visible internal pressure indicator allowing the operator to detect a pressure loss	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Built-in inclinometer to read and transmit pipe grade variations. Optionally the inclinometer can be located in the transporter unit	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
External light-heads on each side of the camera, directional with pan and tilt movements	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Ability to provide live stream viewing of pipe inspection	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
CAMERA TRANSPORTER:			
Compact all-wheel drive unit for easy and rapid remote inspection under rough and adverse pipe conditions during inspection and retrieval	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

	COMPLY		SPECIFY
Capable of operation in freewheel, powered reverse and forward variable speed modes with left/right steerable movements controlled from the camera control unit	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Unit to be powered by two independent DC motors and designed to provide sufficient traction, under various conditions to tow a minimum 200 metres of transmission cable	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Unit shall be designed to operate with wheels of different diameters to inspect small, medium and large diameter pipes with easy, durable mechanism for attaching/detaching the wheels	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Supplier to include all wheels required to accommodate 6", 8", 10", 12" plastic PVC and concrete pipe. Unit to come with minimum four complete wheel sets - 3 1/4, 4 1/2, 5 1/2 rubber, 4.5" steel grease wheels	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Camera and cable to be easily removed from the transporter/crawler unit	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
When assembled with camera, compact size of the transporter shall allow operating inside different size pipes, (min. 150mm diameter pipe) and have full steering control to traverse meandering pipes with 45° and 90° turns	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Cable strain relief system and a machined mechanical cable connector that positively locks the cable to the crawler body for safety of cable	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Full protection from ingress of water and dirt and shall conform to the protection rating specified in IP68	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Rear camera and lighting for providing visibility when retrieving the transporter or driving the transporter in reverse	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Built-in sonde to facilitate locating the transporter up to a depth of 25ft using the receiver	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Standard inclinometer for tracking and outputting pipe rise and fall and integrate data with database inspection software compatible with WinCan software	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Camera riser kit to allow for manual lift and centering of camera, conforming to PACP and WRC recommended practices	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Transporter and cable strain-less connectors must have a lifetime warranty	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

	COMPLY		SPECIFY
CABLE DRUM:			
Motorized auto-sensing cable drum shall be provided to contain the cable for operation of camera and transporter	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
The hub of the cable drum shall be equipped with a continuous contact slip-ring assembly to allow the cable to be dispensed and retrieved while the camera and tractor are operational	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
200 metres multi-conductor Kevlar fiber armored combination TV transmission/tow cable or equivalent with <u>cable strain relief</u> . Cable feed out and retrieval must happen automatically via a motorized system with sensors that operate the cable drum at the speed and direction of the transporter	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Cable reel must have a level wind system which neatly rolls and stores cable without excessive loops or tangling	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Must have an emergency stop switch, a normal and inverse switch allowing transporter controls to be used normally if the transporter was to flip and operate in an upside-down position	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Capable of operation in both automatic and manual modes. A back up manual crank arm to be provided to operate cable drum in case of power loss	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Footage counter shall function electronically and transmit the measurement data for monitor display and video recording	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Cable reel system must have heat sensor for motor safety and to protect motor from overheating	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Speed and torque controls to adjust for different pipe conditions and user preferences	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
CAMERA CONTROL UNIT:			
Controls must be contained in a damage resistant housing with embedded keyboard and carrying handle	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Circuit protection for individual electronic components to provide safety in case of power interruption, surges, component malfunction or in inadvertent mis-operation of the system	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

	COMPLY		SPECIFY
High resolution flat screen LCD colour video monitor (minimum 10-inch), rack mounted for portable operations. Entire control unit including the colour video monitor must be adaptable for mounting in a vehicle installation configuration	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Video-out BNC connector if needed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
RS232 port for output of text and footage data to software if needed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Hour meter	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Fuse indicator per slide out card	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Control cable receptacle	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
External video BNC connector if needed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Pendant control cable receptacle	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Power On/Off switch	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Removable pendant with controls	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Pendant to have keyway mechanism for docking to camera control unit	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Sealed membrane style buttons with LED's	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Forward/reverse, left/right transporter joystick control	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Rheostat controlled variable transporter speed control	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Joystick control of pan and tilt	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Rheostat control of lighting (bright or dim)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Rear view camera toggle button if needed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Microphone for inspection narration	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Multi-unit (ft/m) footage counters	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

	COMPLY		SPECIFY
Video text generator capable of displaying alphanumeric text material directly onto the video monitor with internal memory of a minimum of 30 days when system is not in use	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Text generator capacity – 32 characters per line, 20 lines per screen page minimum for text storage and display for various items such as footage, date, time (real time), job descriptions, defect codes, etc	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Text generator capable of displaying footage, date and time at operator determined positions	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Characters generated by the video text generator shall include black on video, black on white background, white on video and white on black background	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Cable footage shall be displayed from input received from the cable counter on the cable drum	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Text generator capable of resetting, or pre-setting the footage count display by the operator by using the text generator	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Rack mounted digital video recorder with microphone on the portable system, housed in a protective casing, for high quality MPEG 4 digital recording	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Built in USB port for connecting a removable USB drive, to save and transfer the recorded data to an office PC/laptop for reviewing and storage	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Required computer specs to be provided by supplier for compatibility with MCC laptop
Data recorder shall be equipped with an RS-232 serial connector and an additional USB port for two-way communication with a computer running WinCan software	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Built in rechargeable memory back-up, to retain the last data entered in the event of power failure; stored data displayed once power is up	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

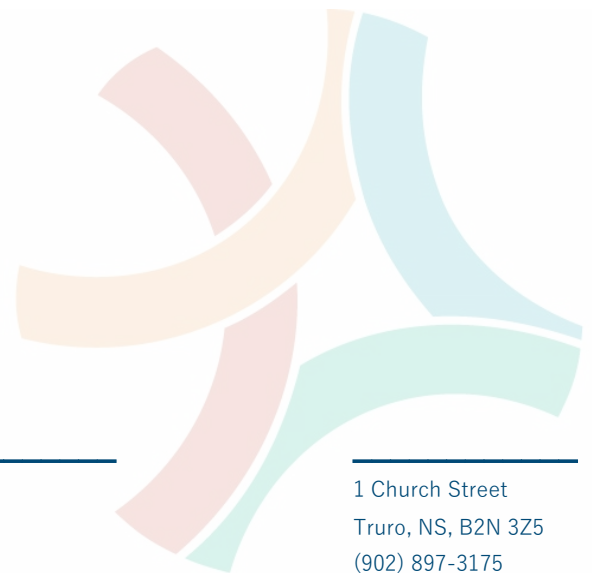


TRADE IN:

Envirosight Rovver Crawler Camera System, purchased in 2012 with Colchester being the original owner. The unit comes with approximately 200 metres of cable, on an Envirosight cable reel, monitor, control panel, Envirosight outpost compartment with access door all steel construction all in working order.

The camera will be traded in “as is” and can be viewed at least two days prior to tender closing. An appointment for viewing can be made with Blaise Watson, Manager of Operations, Transportation and Wastewater Collection, by phone at (902) 897-7930.

The Municipality reserves the right to trade in the 2012 camera system for the quoted trade in value or retain the camera and pay the quoted price of a new camera without the trade in value.



TENDER FORM

Price shall be F.O.B. to the Public Works Garage. The undersigned bidder has carefully examined the form of tender and the specifications to furnish and deliver the equipment listed below and described in the above specifications and will accept in full payment, the following price:

	AMOUNT \$
CCTV SURVEY CAMERA	
NET PRICE (EXCLUDING HST)	
LESS TRADE-IN VALUE (EXCLUDING HST)	
SUBTOTAL	
HST	
TOTAL DELIVERY PRICE (INCLUDING HST)	
OPTIONS	
ELEVATOR (EXCLUDING HST)	

OPTIONAL WARRANTY (EXCLUDING HST)	
Warranty Details (Duration/Coverage):	
DELIVERY TIME IN DAYS (after notification of order)	

SUBMITTED BY:

Company Name: _____

Mailing Address: _____

Phone Number: _____ Fax Number: _____

Contact Person: _____

Email Address: _____

