



## INFORMATIONAL MEMORANDUM

**TO: Transportation & Infrastructure Services Committee**  
**FROM: Hari Ponnekanti, Public Works Director**  
**Garron Herdt, Fleet Superintendent**  
**BY: Tanya Taylor, Fleet Admin Coordinator**  
**CC: Mayor McLeod**  
**DATE: May 17, 2024**  
**SUBJECT: Unit 2903 Purchase – TV Inspection Vehicle**

### **ISSUE**

Purchase replacement Video Inspection Vehicle new unit 2903 replacing unit 2900.

### **BACKGROUND**

Unit 2900, a 2013 Cues Sewer Inspection TV van, was purchased in 2013 with 501 capital funds, splitting the cost equally between the contributed fund balance of Sewer (SE) and Surface Water (SW) for \$190K. In 2015, additional camera equipment was purchased for \$23K. Total vehicle value is \$213,000.

This was a new piece of equipment and new technology for the City in 2013 and has proven to be a valuable asset aiding in giving Sewer and Surface Water staff the ability to see inside infrastructure to address what could be unseen maintenance issues such as blockages, breaks or complete failure of the sewer and surface water elimination system. Additionally, the City’s NPDES permit requires visual inspection of the entire system every 4 years.

Approximately 5 years into the ownership of the equipment, after the manufacturer’s warranty had expired, mechanical issues of the video inspection equipment and software began to surface. Subsequent years endured additional failures and equipment faults resulting in the unit being out of service more than available for service. Last year, crews even took the vehicle to Oregon for the manufacturer to repair. Currently, maintenance crews cannot even use the truck to complete daily tasks.

Unit 2903 was budgeted as a replacement for unit 2900 in the 2023 budget for \$250,000. Fleet and Sewer/Surface Water have found the best replacement unit from SWS Equipment using the Sourcewell purchasing consortium contracts which provide a 4% discount from list prices. Both departments contacted other jurisdictions currently using the SWS Equipment’s TV van and have received positive feedback on its functionality and the company’s support of their product.

The current purchase packet is expected to be over budget by \$188,254 due to inflation and normal manufacturer cost increases. The current quote is good for purchase this year. Purchasing in the next budget cycle would raise the price an expected 25% due to rising supplies costs.

**DISCUSSION & FISCAL IMPACT**

While the cost of the Unit is over budget, the Fleet Capital Budget has room to absorb the additional expense through savings this year.

	<b>Cost</b>		<b>Funding</b>
Unit 2903	<b>\$438,254</b>	Budgeted Total	<b>\$250,000</b>
		Remaining 2024 Capital Budget	<b>\$531,972</b>
Total	<b>\$438,254</b>		<b>\$647,972</b>

**RECOMMENDATION**

Approve the purchase of replacement unit 2903 in the amount of \$438,254 and consider this item on the Consent Agenda at the June 3, 2024 meeting.

**Attachments:** 2903 Platform Packet

# TV VAN

Unit (s): 2903

2024 BUDGET PAGE 390  
COST SHARE 50/50 SEWER & SURF WATER FUNDS

Vehicle	Part #	Qty	Description	Total Item Cost
2024 FORD E450 WITH 14' CARGO BOX AND CONVERSION		1	Base vehicle	\$397,887.00
			SALES TAX	\$40,186.59
PW501651C-564000			<b>BASE VEHICLE SUB TOTAL</b>	<b>\$438,073.59</b>
PW501650-537003				
		1	GRAPHICS	\$50.00
		1	FIRST AID KIT	\$50.00
		1	FIRE EXTINGUISHER	\$50.00
		1	BLOODBORNE PATH KIT	\$30.00
			<b>OUTFITTING TOTAL</b>	<b>\$180.00</b>
			<b>In-house Outfitting Labor</b>	
<b>Cost Summary</b>				
			<b>Base vehicle</b>	\$438,073.59
			<b>Outfitting</b>	\$180.00
			<b>Grand Total Capitalization</b>	<b>\$438,253.59</b>
			<b>Budget</b>	\$250,000.00
			<b>(Over) / Under Budget</b>	(\$188,253.59)
			<b>Outfitting Labor</b>	\$0.00
			<b>Grand Total</b>	\$438,253.59
<b>Approvals</b>				
<i>NOTE: All items listed are based on proper outfitting of this particular make, model and year of vehicle. All prices are based on supplier's pricing at time of quote and is subject to change without notice.</i>				
<b>Fleet Superintendent Signature:</b>				<b>Date:</b>
<b>Ops Manager Signature:</b>				<b>Date:</b>
<b>Department Director's Signature:</b>				<b>Date:</b>
<b>Public Works Director's Signature:</b>				<b>Date:</b>
<b>Finance Director's Signature:</b>				<b>Date:</b>
<b>CITY ADMINISTRATOR Signature:</b>				<b>Date:</b>

	UNIT #	PURCHASE YEAR		LEASE YEAR		REPLACEMENT UNIT
		2023	2024	2023	2024	
Variable Message Board	1430	30,000				Variable Message Board
3/4-ton Pickup Quad Cab	2205			10,752	10,752	Pickup 4x4, 8' bed w/ liftgate
Cargo van, Fiber Optic	2303			10,752	10,752	Pickup 4x4, 8' bed w/ liftgate
3/4-ton Pickup Quad Cab	2205	10,000				Pickup truck sander
	NEW	30,000				Pavement breaker backhoe attachment
	NEW	27,000				Asphalt Cutter
	NEW	30,000				Sweeper, Trailer-mounted
<b>SEWER</b>						
3/4-ton Pickup Supercab	2202			10,752	10,752	Pickup 4x4, 8' bed w/ liftgate
<b>SURFACE WATER</b>						
1-ton dump cab & chassis	1220		85,000			Flatbed w/ crane
Variable Message Board	1427	30,000				Variable Message Board
Sewer/Surface Water (shared)						
Van, TV Ford E350 chassis	2900	250,000				Van, TV <span style="color: red;">NEW UNIT 2903</span>
<b>WATER</b>						
3/4-ton pickup, reg cab	1270			10,752	10,752	F350 w/ liftgate & toolbox
1-1/2-ton Service Truck, Ford F450	1291			10,752	10,752	1-1/2-ton Service Truck, Ford F450
Variable Message Board	1426	30,000				Variable Message Board
<b>FLEET</b>						
Pickup	1237			5,000	5,000	Pickup
Heavy Duty mobile lifts (4)	9611	70,000				Heavy Duty mobile lifts (2)
<b>PARKS MAINTENANCE</b>						
3/4-ton Dump	1246			18,500	18,500	Ford F350 Chassis XL 4x2
1/4-TON PICKUP	1259			6,500	6,500	1/4-ton pickup
Mower, Front mount rotary 4WD	1673	60,000				Mower, 72"
3/4-ton Pickup, Ford F250	6200				10,752	3/4-ton Pickup 4x4
1/2-ton Pickup, Ford F150	6201				10,752	3/4-ton Pickup 4x4
<b>COMMUNITY DEVELOPMENT/PLANNING</b>						
Chevy Impala (Pool Car #1)	1188			6,500	6,500	Ford Escape
<b>TIS</b>						
Ford Windstar Cargo Van	1219			7,500	7,500	Ford Transit
Chevy Astro Cargo Van	1223			7,000	7,000	Ford Explorer
Lease Equity (Cash back on resale)				(161,750)	(124,040)	
<b>Total by Year</b>		<b>\$ 882,000</b>	<b>\$ 155,000</b>	<b>\$ 214,806</b>	<b>\$ 623,933</b>	
				<b>\$ 1,096,806</b>	<b>\$ 778,933</b>	



**City of Tukwila**  
 6200 Southcenter Blvd, Tukwila, WA 98188-2544  
 206-433-1800

## PURCHASE ORDER

NUMBER	PWFF2901-1
DATE	04/12/2024

### VENDOR INFORMATION

NAME	SWS EQUIPMENT	CONTACT OR SALESPERSON	RANDY TOUGH
STREET ADDRESS	PO BOX 13040	PHONE NUMBER	
CITY/STATE/ZIP	SPOKANE, WA 99213	EMAIL ADDRESS	

The PO number is the three-character department code and today's date, in the following format: XXXMMDDYY  
 XXX = Department Code (FIN, PWM, FIR, POL, etc...)  
 MM = Month (01, 02, 11, etc...)  
 DD = Day (01, 21, 29, 30, etc...)  
 YY = Year (14, 15, etc...)  
 Example: For a Fire PO created on June 1, 2014, the PO number would be: FIR060114

### PURCHASE INFORMATION

QUANTITY	DESCRIPTION	GENERAL LEDGER ACCOUNT						PROJECT ACCOUNTING				AMOUNT
		FUND	DEPT	BASUB	ELEMENT	OBJ	SUB-OBJ	PROJECT	PHASE	TASK	SUB-TASK	
1	2024 TV INSPECTION VAN	PW	501	651C	564	00	00					\$ 397,887.00
	SE/SW SHARED UNIT 50/50 COST SHARE											
	QUOTE RZOTQ7111-01 DATED 03/05/2024											

### NOTES

2024 BUDGET PAGE 393 - MACHINERY & EQUIPMENT  
 SE/SW NEW UNIT # 2903  
 PLATFORM - \$438,254  
 BUDGET - \$250,000  
 OVER - \$188,254 \*\*\* FUNDS USED FROM 501 FUND BALANCE.

### OTHER QUOTES

VENDOR	SOURCEWELL CONTRACT 120721-RVL	
QUOTE		DATE
VENDOR		
QUOTE		DATE

<b>Subtotal</b>	\$ 397,887.00
<b>Sales Tax</b>	40,186.59
<b>TOTAL</b>	\$ 438,073.59

### APPROVALS

PURCHASER/ INITIATED BY	DEPARTMENTAL APPROVAL	EXECUTIVE APPROVAL
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(Required if more than \$20,000.00)

# 2903



# SWS Equipment

PO Box 13040 Spokane WA 99213  
All Correspondence remit to: P.O. Box 13040, Spokane, WA 99213

## QUOTE

509-533-9000 1-800-892-7831 F 509-533-1050  
[www.SWSEquipment.com](http://www.SWSEquipment.com)

Quote #:	RZOTQ7111-01
Date:	03/05/24
Sales Rep:	Randy Tough
FOB:	
Ship Via:	
Est. Ship Date:	
Terms:	

### Quote To:

City of Tukwila, WA - HD Mainline  
Pat Bradley  
600 Minkler Blvd  
Tukwila WA 98188

### Ship To:

City of Tukwila - Fleet Maintenance  
Garron Herdt  
11210 Tukwila International Blvd  
Tukwila WA 98168

### We are pleased to propose the following for your consideration

Qty	Description	Unit Price	Ext. Price
1.0	VZ000700 E-450, 158" WB, 7.3L V8 Premium Rated Engine, 6-Speed Automatic Transmission with Overdrive w/ Tow-Haul Mode, includes; Remote Keyless Entry, 40-Gallon Fuel Tank, Grey Vinyl Seats and Flooring, Cruise Control, Power Group, Air Conditioning and AM/FM Stereo.  RapidView LLC (Vendor) reserves the right to increase the price of vehicle chassis, trailers, and all-terrain vehicles in proportion to any increase of costs to the VENDOR between the date of acceptance of the order and the date of delivery (including without limitation costs relating to exchange rates, model year changes, manufacturer price increases, labor, materials, transport and taxes).	\$47,452.26	\$47,452.26
1.0	VZ000601 FRP Cargo 14', Box * Dim: 14'x8'x6'6", Chassis purchased separately, call for required chassis specifications. * Includes installation of box on approved chassis, * Dual swing open rear doors, * Side entry door, * Aluminum plank flooring for easy cleaning and higher traction	\$19,987.00	\$19,987.00
1.0	VZ000620 Inspection Conversion for 14' Commercial RapidView FRP Box or Trailer * Walk-thru design with partition wall and door. * Tinted glass viewing window in bulkhead wall. * 12v LED lighting. * Roof Air. * Rear back up camera. * Exterior shore power package with extension cord. * Auxiliary battery and charging system installed with generator and MEPs systems. FRONT OFFICE: * Carpeted walls in Studio. * Laminated base cabinetry. * Laminate countertops in studio. * Vibration resistant electronics cabinet with rear door access to outside of truck for easy installation and troubleshooting.	\$26,563.00	\$26,563.00

Qty	Description	Unit Price	Ext. Price
	* Bench seat over generator. WORKSPACE: * Heavy-duty, 5 drawer toolbox. * Monitor mount in workspace for installing monitor ( monitor sold separately). * 14 Gallon pressurized wash down system. * Butcher block workbench. * Rugged FRP cabinets. * Closet with aluminum storage shelves. * Rugged FRP overhead cabinets with easy-open hardware. SAFETY: * Directional arrow board at rear. * Strobe light mounted on front roof. * LED side markers on Box.		
1.0	VZP000100 Generator Gas 5.5Kw, 120VAC	\$7,963.00	\$7,963.00
3.0	VZM000102 Monitor, 22" Widescreen	\$809.00	\$2,427.00
1.0	VZM000104 Monitor Mount - Double	\$295.00	\$295.00
2.0	VZ000712 Wall-Mount Electric Heater *Installed under desk in office. *Second heater installed in work area.	\$725.00	\$1,450.00
1.0	VZ000817 Powered Retractable Rear Canopy -Protects from Rain and Sun -Easy, Push Button Extension and Retraction	\$3,784.00	\$3,784.00
1.0	VZ000306 KW Reel cabinet, (W-22", L-39" & H-34"), with a slide out tray for the LISY Synchro drum and one locking drawer with a divider. All aluminum drawer construction.	\$2,092.00	\$2,092.00
1.0	VZFPB-4 Fiberglass Pole Bracket *** Lower support arm and 1 horizontal support with push on stays***	\$307.00	\$307.00
1.0	V000021 Lowering Poles for Tractors * Includes fiberglass poles and adapter to lowering claws.	\$873.00	\$873.00
	SubTotal		\$113,193.26
1.0	V0494050 ORION 3.0 Zoom HD/SD Adaptive PAN & TILT CAMERA * Pan, Tilt and Zoom for 4" and up * May be used on tractor or pushrod * Auto-uprighting, LED Lighting and 33 kHz Transmitter for locate * High resolution and superior picture quality * Laser diameter, deformation, defect and object measurement (third party software required - not included)	\$21,145.00	\$21,145.00
1.0	V4004025 ORPHEUS HD Pan & Tilt Camera WITH TRANSMITTER	\$34,145.00	\$34,145.00

Qty	Description	Unit Price	Ext. Price
	<ul style="list-style-type: none"> <li>* Pan&amp;Tilt, Zoom Camera of 6" pipelines</li> <li>* Full HD 1920x1080 Resolution, HD-SDI Standard (patent pending)</li> <li>* 160x Zoom (10x Optical, 16x Digital)</li> <li>* Pan-able zoom optics</li> <li>* High-power LED lighting with gap lighting</li> <li>* Intelligent Auto-Focus</li> <li>* Innovative HUD display</li> <li>* Includes installed 33hz transmitter</li> </ul>		
1.0	V9052009 T66.1 HD Camera Tractor <ul style="list-style-type: none"> <li>* For use with HD camera cable/systems</li> <li>* For camera operation in pipelines 4" and larger</li> <li>* Zero turn radius, full steering with ATC (Automatic Tilt Compensation)</li> <li>* Incl. test adapter, tool set and lowering claw.</li> <li>* Includes 4", 6" and 8" wheelsets</li> <li>* REQUIRES Camera Connection (Sold Separately)</li> </ul>	\$12,966.00	\$12,966.00
1.0	V9052021 Camera Connection Type 2-8 SD/HD for SD cameras and ORION 3 (SD or HD modes) <ul style="list-style-type: none"> <li>* Solid front connector for camera on T66.1 HD or T66.1</li> <li>* Accepts Standard Definition cameras (ORION, NANO) and the ORION 3 SD/HD Camera.</li> <li>* If used on a T66.1 HD the ORION 3 will operate in HD mode.</li> </ul>	\$2,176.00	\$2,176.00
1.0	905244001 Camera Connection Type 2.1 HD for T66.1HD <ul style="list-style-type: none"> <li>* For connection of HD cameras</li> <li>* Standard straight connector for camera on T66.1 HD tractor</li> </ul>	\$1,730.00	\$1,730.00
1.0	905211031 Additional Weight for T66 <ul style="list-style-type: none"> <li>* For 6" and up</li> <li>* Light and heavy weights included</li> <li>* Additional weight = additional traction = greater distance</li> </ul>	\$750.00	\$750.00
1.0	905253031 T66 Lowering Claw Used With Pole Adapter	\$335.00	\$335.00
1.0	905216291 High-Traction Tungsten Carbide Wheel Set 70 <ul style="list-style-type: none"> <li>* For use with T66 &amp; Panoram 150 Tractors</li> <li>**For use In 125mm or 5" (T66) &amp; 150mm or 6" (Panoram 150) and up Pipe</li> <li>* Large Grit</li> <li>((Uses Countersunk Screw 6001541)))</li> </ul>	\$1,200.00	\$1,200.00
1.0	905215991 High-Traction Tungsten Carbide Wheels for 6" and up <ul style="list-style-type: none"> <li>* For use with T66 and PANO 150 Tractors</li> <li>* Large Grit</li> <li>((Uses Countersunk Screw 6001541)))</li> </ul>	\$1,395.00	\$1,395.00
1.0	905216791 High-Traction Tungsten Carbide Wheels for 8" and up <ul style="list-style-type: none"> <li>* For use with T66 for 8" and up</li> <li>* For use with PANO 150 Tractors for 10" and up.</li> <li>* Large Grit</li> </ul>	\$1,590.00	\$1,590.00

Qty	Description	Unit Price	Ext. Price
	**Comes With 12 Each, 6001562 M5x20 Countersunk Torx, 6001043 M5x25 Cheese Head and 6000081 A5.3 Flat Washers**		
1.0	902211090 Pneumatic Wheels and Adapters for KRA65 / T66 Tractor Carriage ***Set of 4 with bolts and spacers*** (((Replacement Tire With Tube 4415370)))	\$1,399.00	\$1,399.00
1.0	905210191 Treaded Wheel Set 105 PUR Complete - Brown - **T66 & PAMORAMO 150 Only** *T66 Used In 6" / 150mm & Up Pipe* *PANORAMO 150 Used In 8" / 200mm & Up Pipe* (((Uses Replacement Tire P/N 905206342)))	\$898.00	\$898.00
1.0	905210991 Treaded Wheel Set 118 PUR Complete - Brown- **T66 & PANORAMO 150** *T66 Used In 8" / 200mm & Up Pipe* *PANORAMO 150 Used In 10" / 250mm & Up Pipe* (((Uses Replacement Tire P/N 900411042)))	\$1,227.00	\$1,227.00
1.0	V1971003 BS10X Vehicle Mounted Control - For operation of all camera and the tractor functions - For permanent installation in a vehicle in 19" technology - Separate keyboard surround with 2 joysticks, emergency stop, microphone for intercom - - Includes V0000189 on/off switch - Requires control monitor panel and monitor mount. - Requires PC for operation - HD, SD, LISY and PANORAMO operation - For use with KW505 and KW310 FO drums.	\$31,965.91	\$31,965.91
1.0	RAM-2461U VESA 75 Mounting Plate With Ball - C Size	\$39.66	\$39.66
1.0	RAM-201U-B Double Socket Arm - C Size Short	\$46.55	\$46.55
1.0	RAM-TRACK-EXA-9BU 9BU 9" Modulare Aluminum Black Tough Track	\$36.55	\$36.55
1.0	RAP-354U-TRA1 Track Ball With T-Bolt Attachment - C Size	\$34.31	\$34.31
1.0	10TS7M 10 Inch Touch Screen	\$637.89	\$637.89
1.0	GV-N710D3-2GL Graphics Card With HDMI Output	\$88.13	\$88.13
1.0	V8029020 KW505 FO2 4K Synchronized Power Cable Reel * Designed for use with 00/12 FO2 X2 fiber optic cable required for PANORAMO 4K systems * Synchronized cable payout and retraction * Automatic level wind * Requires vehicle installation	\$36,823.00	\$36,823.00

Qty	Description	Unit Price	Ext. Price
	<ul style="list-style-type: none"> <li>* Includes remote control pendant and LED boom light</li> <li>* Distance counter with rear display</li> <li>* Holds up to 2000' on 00/12 FO2 X2 fiber optic cable</li> <li>* Includes integrated tractor lowering winch and control</li> </ul>		
1.0	80071800 HD FO4 Camera Cable Type 00/12 <ul style="list-style-type: none"> <li>* Required for HD Systems</li> <li>* 1000 feet of fiber optic cable</li> <li>* Requires KW505 HD/FO Cable Drum with v.8 board, and BS7 Controller</li> <li>* Older drums may require upgrade to use this cable. Please contact your representative for more information.</li> </ul>	\$11,019.00	\$11,019.00
1.0	904350020 Cable Deflection Pulley KUV 2.7 with rope and holder (50ft of rope)	\$726.00	\$726.00
1.0	802617031 Cable Deflection Pulley KW305/505 *Attaches to the boom for off-manhole setups	\$1,105.00	\$1,105.00
1.0	900300130 Cable Deflection KUV3 <ul style="list-style-type: none"> <li>*Upper manhole deflection unit</li> <li>*Protects cable during remote setups</li> </ul>	\$1,347.00	\$1,347.00
1.0	802975001 Cable Cleaning Brush for KW305/310/505 *Attaches to drum boom and cleans cable during retrieval	\$502.00	\$502.00
1.0	800500841 KW Reel foot-operated winch switch (KW505, 310 and 305) * Control the lowering winch with foot to allow more control while lowering the tractor into the manhole	\$1,036.00	\$1,036.00
1.0	901601040 Pressure Test Set	\$508.00	\$508.00
	SubTotal		\$166,871.00
1.0	V0001017 19" Industrial PC These specifications or greater: <ul style="list-style-type: none"> <li>* Ruggedized Rack Mount Cabinet</li> <li>* Intel Quad Core Processor</li> <li>* 16 GB RAM</li> <li>* 256 GB Solid State Drive for Applications / OS</li> <li>* 2 TB Hard Drive for Data</li> <li>* DVD-R/CD-RW drive</li> <li>* Keyboard and Optical Mouse</li> <li>* Operating system Windows 10 Professional</li> <li>* 17" VGA LCD Monitor when purchased with vehicle conversion</li> <li>*** NO Video Capture Device Included (to be supplied by software vendor)</li> </ul>	\$5,958.00	\$5,958.00
1.0	V4702467 VMC-C9 Full HD MPEG Encoder Card *Only sold for use with IKAS Evolution. If using a 3rd party software, please contact your software vendor. *Approval from Rex is needed before shipment*	\$3,370.00	\$3,370.00

Qty	Description	Unit Price	Ext. Price
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1.0	VSP00200 IBAK EVOLUTION - VEHICLE	\$15,163.00	\$15,163.00
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Powerful database application for all types of inspections: including lateral launch, mainline, Panoramo, HD, laser scan and more. This software will allow you to capture video and images, and produce complete reports with defect identification and scoring. Data and videos can be exported for the customer to view the information. The software has an extensive list of expansion modules available to further its capabilities.

- \* Basic sewer data projects - basic module type
- \* Managed sewer objects: sections, manholes and laterals
- \* Standard?compliant sewer data acquisition
- \* Operation with task?related menus and dialogues
- \* Assistant for condition data acquisition
- \* Management of inspection projects with customer, project and job data
- \* Management of sewer objects with master and condition data, photo and video data
- \* Import and attribution of digital photos to condition data
- \* Digital single image capture from linked videos
- \* Data transfer assistant
- \* License?free sewer MPEG player for data transfer (without an MPEG decoder)
- \* Digital MPEG recording with:
  - \* Internal MPEG mobile encoder (Sensoray)
  - \* Configurable video overlay of master and condition data
  - \* Condition data acquisition synchronized with video recording
  - \* Single monitor display with:
    - \* Live video display
    - \* Switchover between the video picture and the IKAS dialogs
  - \* Also for Panoramo systems, Panoramo scanner control included
  - \* High performance MPEG encoder driver (requires Vitec)
    - > MPEG format see encoder description
  - \* Job rule management! Any desired number of profiles can be managed.
- IKAS Evolution Full HD
  - \* Full HD performance MPEG encoder driver (requires Vitec HD)
    - > Up to full HD video with MPEG4 AVC(H264)
    - > Adjustable resolution
    - > Software data overlay
- IKAS Evolution Laser Diameter Measurement
  - \* For IBAK laser cameras
  - \* During push rod operation for diameter estimation only with push cameras
- IKAS Evolution PACP & LACP Interface Extension

1.0	VSP00300 IKAS EVOLUTION - OFFICE	\$8,942.00	\$8,942.00
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- Office support application to allow users to review and manage data, generate reports, and produce viewer disk for delivery. Several expansion extensions are available to allowing post field inspection coding and further analysis.
- \* Basic sewer data projects - basic module type
  - \* Managed sewer objects: sections, manholes and laterals
  - \* Standard?compliant sewer data acquisition
  - \* Operation with task?related menus and dialogues
  - \* Assistant for condition data acquisition
  - \* Management of inspection projects with customer, project and job

Qty	Description	Unit Price	Ext. Price
	<p>data</p> <ul style="list-style-type: none"> <li>* Management of sewer objects with master and condition data, photo and video data</li> <li>* Import and attribution of digital photos to condition data</li> <li>* Digital single image capture from linked videos</li> <li>* Data transfer assistant</li> <li>* License?free sewer MPEG player for data transfer (without an MPEG decoder)</li> <li>- Import of videos with optional attribution to the inspection data</li> <li>- Condition data acquisition synchronized with video playback</li> <li>- Digital single image capture from video playback</li> <li>* No MPEG recording</li> </ul> <p>IKAS Evolution PACP &amp; LACP Interface Extension</p>		
1.0	<p>VS004521 SHAPE FILE IMPORT/EXPORT- IKAS EVOLUTION Data exchange in the ESRI ArcGIS Shape format for object parameters regarding section, manhole and laterals* -Primary keys must be available in the Shapes. - Export: &gt;Object geometry as Shape - User configuration of the object parameters that are to be exported (Alignment of the object data fields to the Shape file) - Import: &gt; User configuration of the object parameters that are to be imported (Alignment of the Shape data fields to the IKAS/IKIS object fields) &gt; load/save different field alignments * Depending on the data base configuration</p>	\$4,018.00	\$4,018.00
2.0	<p>VS004504 MAP VIEWER - IKAS EVOLUTION - Graphical display of the sewer network with manholes, sections and laterals from the coordinates of the sewer data according to the data interface - Interactive operation with links to the sewer and inspection data - Work progress indicator for graphical processing of the TV inspection - Display of pipe runs with inflection points - Site plans/background maps: -- Display in raster and vector format (DXF, TIF, JPG, PNG, BMP) -- Geo-referenced -- Fitting in of (scanned) background maps with 3 possible modes: 1. Aligning matching points; 2. Entering known co-ordinates; 3. Setting the scale and position of background maps -- Management of plan directories - Display configuration with GIS layer management - Per each IKAS Evolution workstation</p>	\$1,903.00	\$3,806.00
1.0	<p>VS004505 MAP EDITOR - IKAS EVOLUTION - Extends the Map Viewer with: - Graphical sewer network editing/digitizing functions - Digitization of sections, manholes and laterals &gt; Includes run of sections (laterals) via inflection points - Shifting of manholes and pipe run inflection points - Setting parameter texts free - ... (without a run assistant!)</p>	\$3,629.00	\$3,629.00

Qty	Description	Unit Price	Ext. Price
	** Map Viewer is required! **		
1.0	IKAS Evolution Support IKAS Evolution Support o Ongoing updates and support by phone or online via TeamViewer o First 6 months included with initial purchase o The service contract will automatically renew on January 1st of each subsequent calendar year. o Paid yearly upon renewal o Customer outside of contract will receive no updates and minimal support * Upon initial purchase, customer will be charged a pro-rated amount to include support for the current year, and until December 31st of the following calendar year.	\$2,844.64	\$2,844.64
	SubTotal		\$47,730.64
1.0	Training - Equipment Training Standard (2) day training at customer's location. * Includes review of operation and maintenance of supplied equipment. * Additional days of training can be added at \$1250.00 per day. * Training is no charge at RapidView's facility in Rochester, Indiana.	\$3,500.00	\$3,500.00
1.0	V9049001 T76 HD TRACTOR * HD Version required for HD System operation * Mainline tractor for use in pipelines 5" and up * Zero turn radius, full steering with ATC (Automatic Tilt Compensation) * Includes lowering claw, toolset and 5"/6"/8"/10" wheelsets * T76 can be used as the chassis for the LISY 3.2 HD Extension * Requires a HD Camera Base module for normal mainline operations * Add the Remote Elevator (904116031) to help in larger pipelines	\$22,870.00	\$22,870.00
1.0	V9040013 HD Camera Base Module for T76/86 Tractor * Required for operation of T76/86 HD as mainline tractor * Includes 33kHz and 512Hz transmitters for location	\$6,417.00	\$6,417.00
1.0	904116031 Remote Elevator for T76/86 * Raises the camera to allow centering in pipeline * Lifts camera above water line in pipes with flow	\$7,499.00	\$7,499.00
1.0	900406690 Pneumatic Tires for T76/86 KRA75/85 PANORAMO and LISY (Grey) ***Comes with 8 - 6000510 (M6x75) & 8 - 6000412 (M6x35) Wheel Bolts and 8 - 6000082 (A6.4) Washers***	\$1,381.00	\$1,381.00
1.0	904110390 Large Black Pneumatic Tires, Tubes and Rims (Set of 4) for T76/86/PANORAMO/LISY (Black) - 3.00-4 Comes with 6000082 x 8 ( A6.4 Washer), 6001522 x 8 (M6x113) and 6000510 x 8 (M6x75)	\$1,417.00	\$1,417.00
1.0	900406691 High-Traction Tungsten Carbide Wheels for 8" and up >>>Complete Set of 4 with bolts and washers<<<	\$1,479.00	\$1,479.00

Qty	Description	Unit Price	Ext. Price
	* For use with T76 / T86 / PANO2 Tractors * Large Grit * Uses Wheel Bolt 60000291 * Uses Flat Washer 6000082		
1.0	900410891 T76 Treaded Wheelset for 12" and up (Brown/Hard) - For 16" and up on a T86 - For 12" and up on a T76 - For 10" and up on a T66 ***Uses Replacement Tire 900411742***	\$1,618.00	\$1,618.00
1.0	904055000 Adapter 8 HD - 10 HD - For plug-in installation of IBAK ORION 3 - for Camera Connection CB 3.2 S HD - for Camera Connection CC 2.1 HD - for Camera Connection CC 4.1 HD - for Camera Connection CC 5.1 HD	\$2,176.00	\$2,176.00
1.0	802663201 KW 305 / 505 Boom Left Swing Bracket With Screws **Requires The Use Of Extended Cable & Protection** (Use 1.5 Meters of 4403716 & 4 Meters of 4403074 for Conversion)  (REPLACES - " KW Left Swing Bracket")	\$485.10	\$485.10
1.0	Equip Change Flip BOTH Office and Work Area - To achieve having cable reel on passenger side - Removes ability to have side access door	\$3,500.00	\$3,500.00
1.0	Flip ONLY WORK AREA - To achieve having cable reel on passenger side - Requires custom cables to be manufactured to get the proper length	\$4,750.00	\$4,750.00
1.0	Pre Delivery Inspection Performed by SWS Tacoma -Assuming Customer Chooses to have Unit Delivered from the Factory	\$3,000.00	\$3,000.00
1.0	Freight from RapidView to Tacoma SWS -Assuming Customer Chooses to have Unit Delivered to SWS Tacoma	\$10,000.00	\$10,000.00
1.0	Project Managed by Randy Tough - Sourcewell Contract 120721-RVL		

**Order Total            \$397,887.00**

Please contact me if I can be of further assistance.

*note: per RT, prices shown include the sourcewell 4% list price discount. + tax*

**QUOTE VALID FOR 10 DAYS**

**PRICING IS SUBJECT TO CHANGE BASED ON CURRENT MATERIALS AND AVAILABILITY  
APPLICABLE SALES TAX NOT INCLUDED UNLESS OTHERWISE NOTATED - AMOUNT BASED ON FINAL INVOICE DATE  
ANY IMPLIED WARRANTY AS PER MANUFACTURER'S STANDARD WRITTEN WARRANTY  
PAYMENT DUE UPON COMPLETION OF WORK OR AS SPECIFIED ABOVE**

*Due to a high level of uncertainty with regards to pricing changes from our vendors and the freight industry, the price and freight charges on this document may be adjusted prior to shipping.*

Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_