



AGENDA

Monday January 26, 2026 at 5:30 p.m.
Council Chambers at the Tom Hornecker
Recreation Centre, 2nd Floor, 2122 – 18 Street

SPECIAL MEETING OF COUNCIL

We, the undersigned, hereby agree that a Special Meeting of the Council of the Town of Nanton will be held in the Council Chambers at the Tom Hornecker Recreation Centre, on **Monday, January 26, 2026 at 5:30 p.m.**, for the purpose of attending to the following items:

1. CALL TO ORDER & ADOPTION OF AGENDA:

1.1 Adoption of Agenda

2. PRIORITY ITEMS:

2.1 Sanitary Collection System Monitoring - E

2.2 Closed Session Item – Sanitary Collection System Monitoring ATIA Section 29 Advice from Officials

3. ADJOURNMENT:

Chief Elected Official	
Councillor	Councillor
Councillor	Councillor
Councillor	Councillor



REQUEST FOR DECISION

Meeting:
Agenda Item:

Long-term monitoring of wastewater collection system to determine the location(s) of groundwater infiltration

OPERATIONS RECOMMENDATION:

That Council approves the hiring of a specialized contractor (RH Borden) to install liquid level sensing equipment in sanitary manholes throughout the Town's wastewater collection system, for the purpose of locating the source(s) of groundwater inflow and infiltration (I & I). Once the sources have been located, local contractors can be used to repair the locations of the I & I, which will alleviate the strain currently being experienced by the Town's wastewater treatment plant and significantly decrease the likelihood of future backups due to I & I.

DECISION OPTIONS:

- #1 – Approve the hiring of RH Borden to complete an assessment of the Town's entire sanitary system (\$116,457.00 in US funds)
- #2 – Approve the hiring of RH Borden to complete a partial assessment of the Town's sanitary system (\$72,000.00 in US funds)
- #3 – Do not approve

PURPOSE:

BACKGROUND / IMPLICATIONS:

The Town's Manager of Operations received a call from RH Borden approximately two weeks ago, indicating they had learned about the Town's I & I challenges via an online interview conducted with Mayor Handley. RH Borden specializes in monitoring wastewater collection systems for the purposes of minimizing I & I, which saves municipalities the costs associated with managing uncontrolled water released into their respective sanitary systems. RH Borden is based in the United States, and to date there does not appear to be any Canadian company that offers these same services.

The setup of the project would be roughly as follows:

- 1) RH Borden field staff (2-3 employees) will arrive in Nanton to deploy their sensors and equipment into the sanitary manholes. No permanent modifications to the manholes will be required for sensor deployment. While in town, they will also create 3D models of the assessed manholes to determine their condition by using specialized camera/LIDAR equipment. Deployment and installation of the sensors will take approximately one week. A link to an information video for RH Borden's services is provided in the attachments section of this RFD.
- 2) The sensors will then gather flow data from the collection system for approximately 4 months. This should provide sufficient time to capture any sort of hydrological/hydrogeological event that would increase the flow of water in the collection system (ex: ground thaw and melt, rain events, etc.). As these events occur, data trends will begin to appear where water levels in the monitored manholes will fluctuate according to conditions outside of the collection system. Data collection

and upload will be performed in real-time via SIM card so trends can be identified immediately, instead of having to wait until the 4-month monitoring period is over.

- 3) Once the 4-month data collection period is over, RH Borden field staff will return to Nanton to collect the sensors. In the unlikely chance that real-time data collection was not possible from a sensor (ie bad cellular service), liquid level data will be obtained from the sensor at this point.

RH Borden estimates approximately a 3-week timeline after approval to provide their services to have their sensors deployed in Nanton's collection system for data collection. Ideally, the sensors would be deployed as soon as possible to capture the ground thaw and subsequent groundwater infiltration event that has occurred in March of the past two years.

ALTERNATIVES:

- REFER to (Administration or Committee) _____
- DEFER the matter to the Council meeting of (date) _____

Financial (GL# / Amount) :

Communications/Public Participation:

Applicable Legislation:

Attachments:

Information video - <https://www.youtube.com/watch?v=-Xbrvj191K8>

Prepared By:

Date:

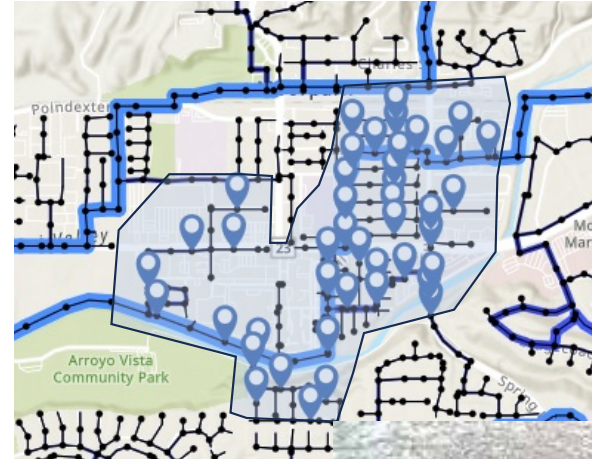
APPROVED BY: Neil Smith, Chief Administrative Officer:

NANTON STRATEGIC PLAN ALIGNMENT			
<input checked="" type="checkbox"/>	OPERATIONS	<input checked="" type="checkbox"/>	EMERGENCY SERVICES
<input type="checkbox"/>	PLANNING & DEVELOPMENT	<input type="checkbox"/>	COMMUNITY & ECONOMIC DEVELOPMENT
<input type="checkbox"/>	GOVERNANCE & CORPORATE SERVICES	<input type="checkbox"/>	NOT APPLICABLE
PRIORITY OR ACTION:			





I&I Detection Collection System Maintenance

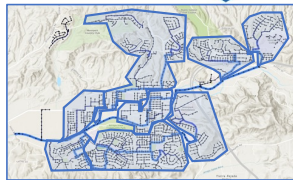


RH Borden I&I Assessment Services

RH Borden I&I Detection Services



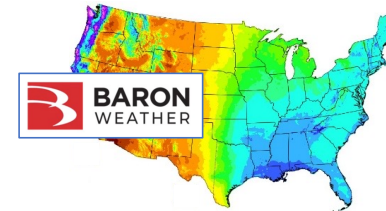
RH BORDEN
DELIVERING DATA TO SMART CITIES



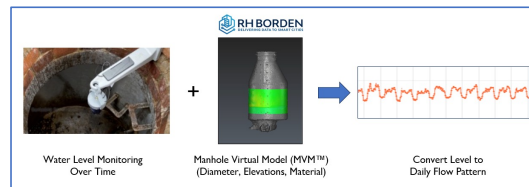
1) Basin / Flow map



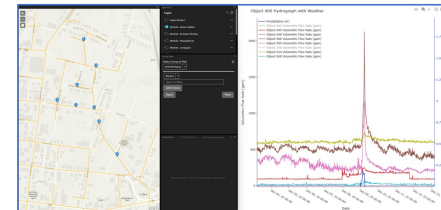
2) Simultaneous Sensor Network



3) Weather Event



4) Analytics



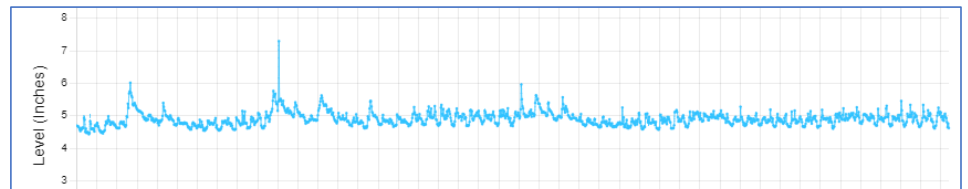
5) Data Visualization

Simultaneous Sensor Network



Water Level Sensors :

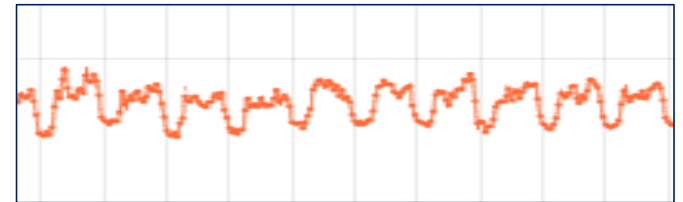
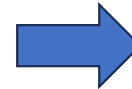
- ✓ Deployed as a network (20-200 sensors)
- ✓ 24X7 Monitoring of flow
- ✓ Measures every 15 minutes
- ✓ Generates baseline diurnal pattern



Establishing Flow Baseline



+

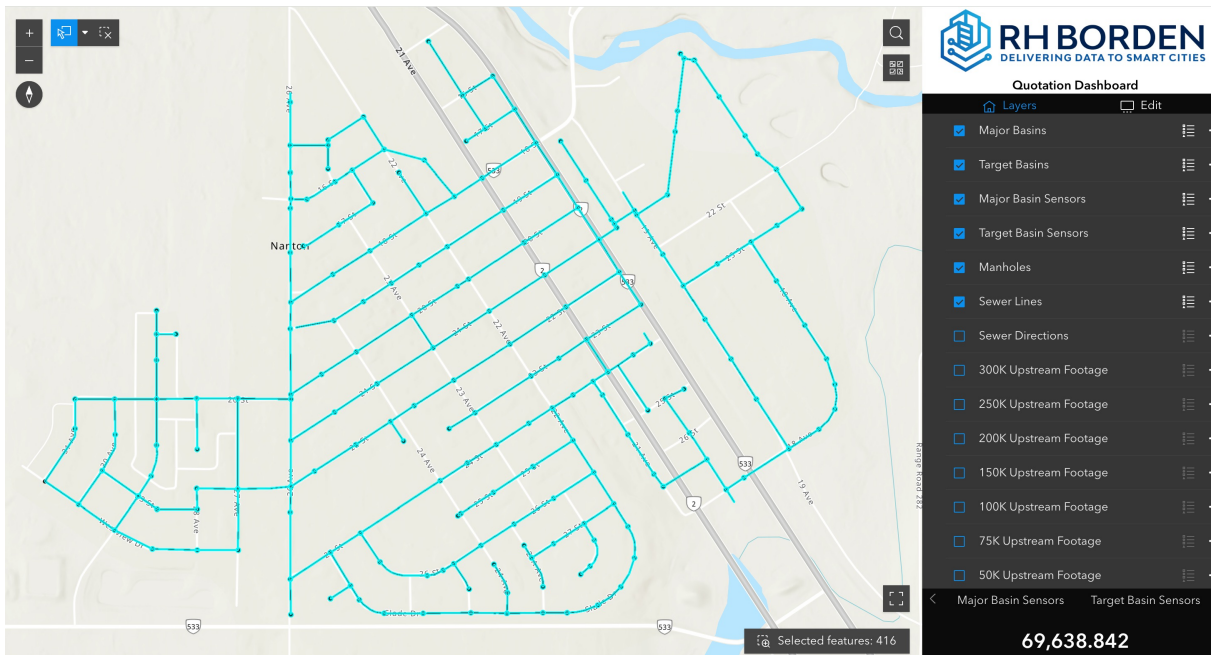


Water Level Monitoring
Over Time

Manhole Virtual Model (MVM™)
(Diameter, Elevations, Material)

Convert Level to
Daily Flow Pattern

Target Basin Sensor Map



Item	Qty
Sensor Count	92
Footage Assessed	69,638

[I&I Planning Dashboard Link](#)