Newfoundland Labrador

On-Site Training

Flushing Curriculum Update

Operator Training

- Hands-on training is provided to operators in their own community through the use of Mobile Training Units (MTUs)

- Many communities only have one operator so the idea of sending them out of town for training for more than a day is not feasible

- Flushing has been discussed in the education sessions delivered to the province by the Operator Education, Training & Certification Section (OETC)

- Up to this point the OETC had not been providing on-site training in water distribution system flushing

Newfoundland Labrador

Benefits of Flushing

- The on-site training curriculum for flushing assists in developing an individual flushing plan for every community that participates in the training

- The goal of this curriculum is to help the operators analyze their system components

- Determine a schedule of events to allow operators to flush their systems uni-directionally

Water Distribution System Flushing

- Establish a numbering system for valves & hydrants
- Measure static & dynamic pressures in the system
- Develop a set of instructions to flush the system

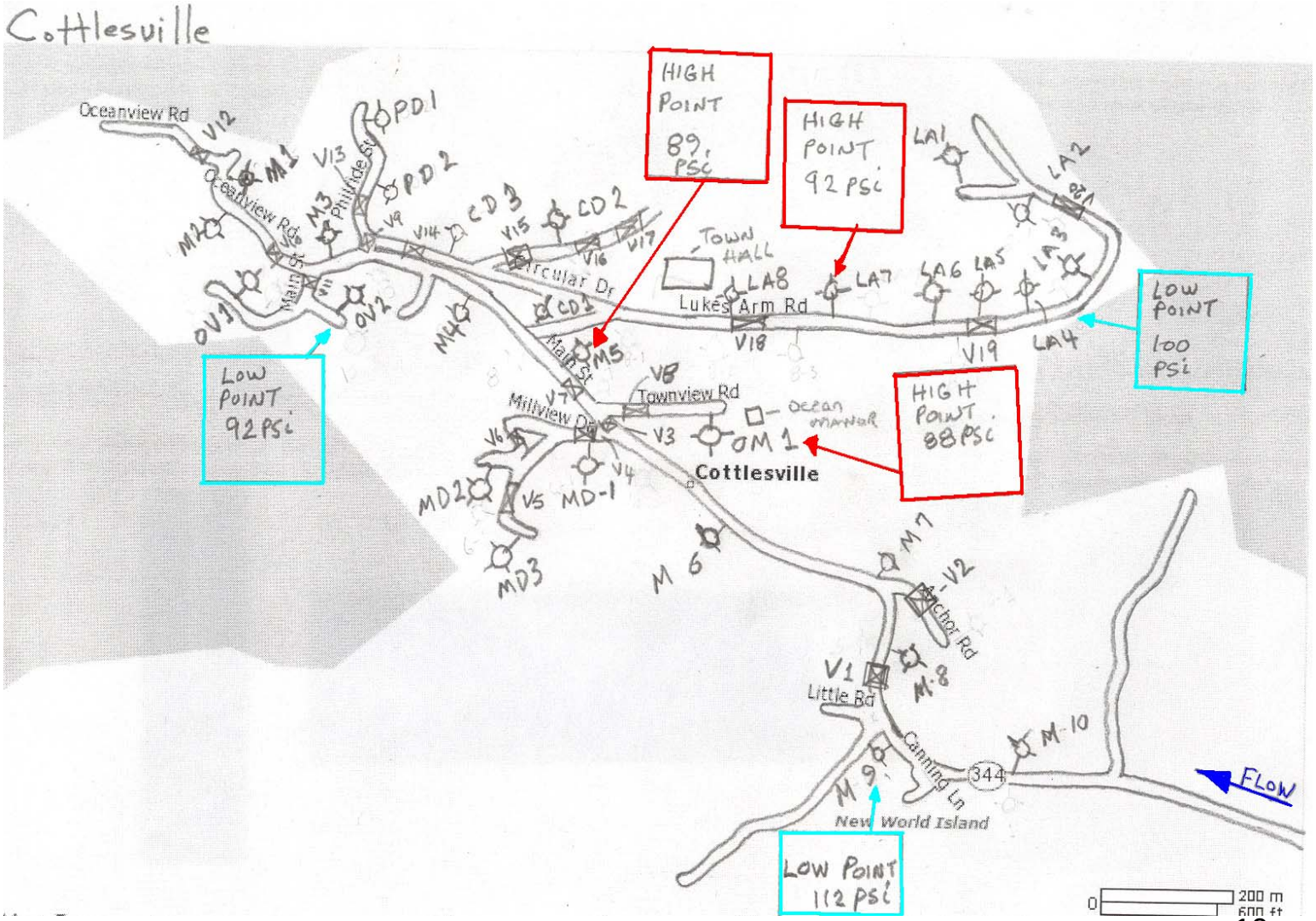
Cottlesville

- In the central region
- Population of approximately 300
- 26 hydrants

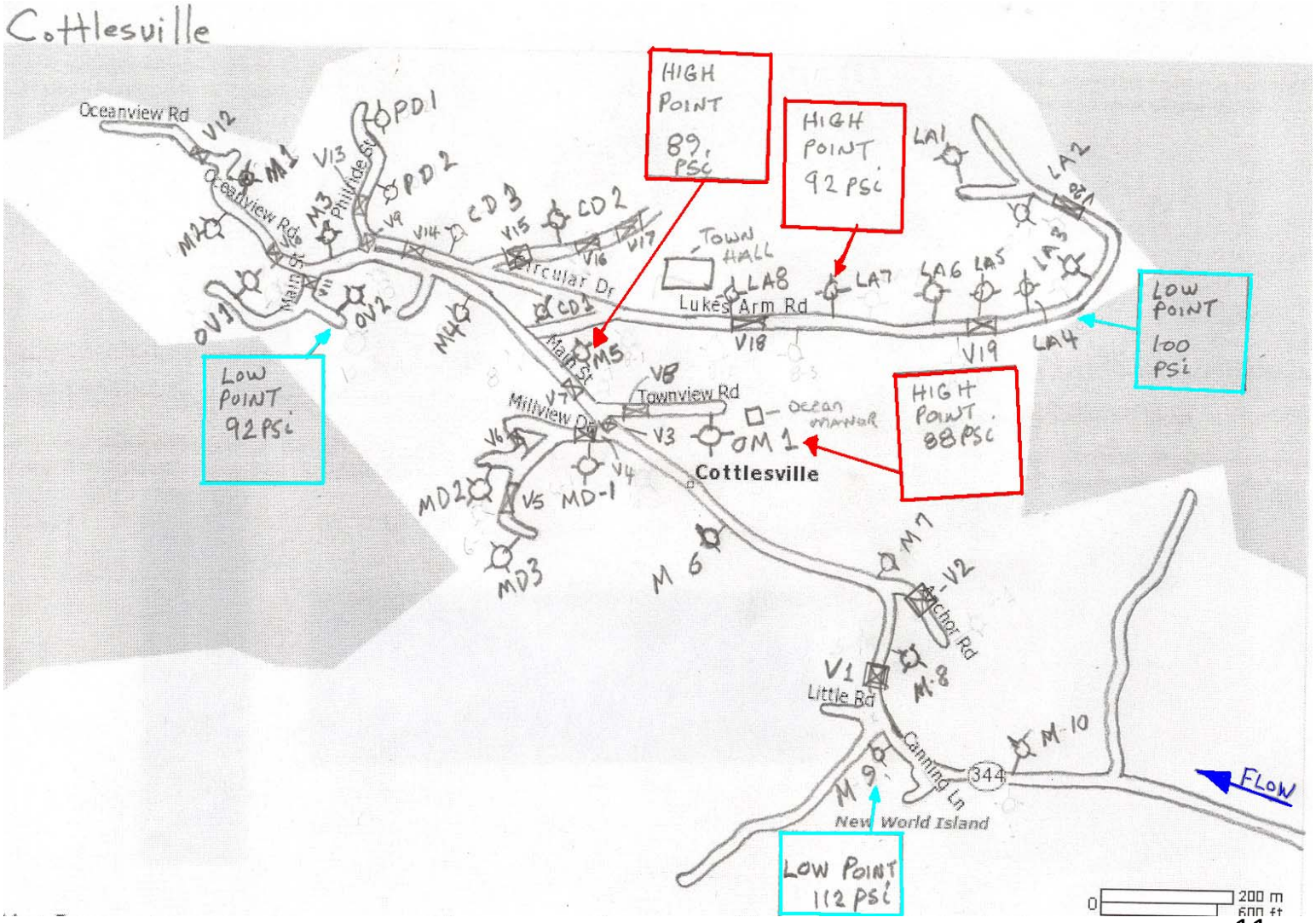
Cottlesville Session

- On the first visit the valves & hydrants were marked out and numbered on a drawing
- Static pressures were measured at several hydrants in high and low points in the system

Cottlesville Session



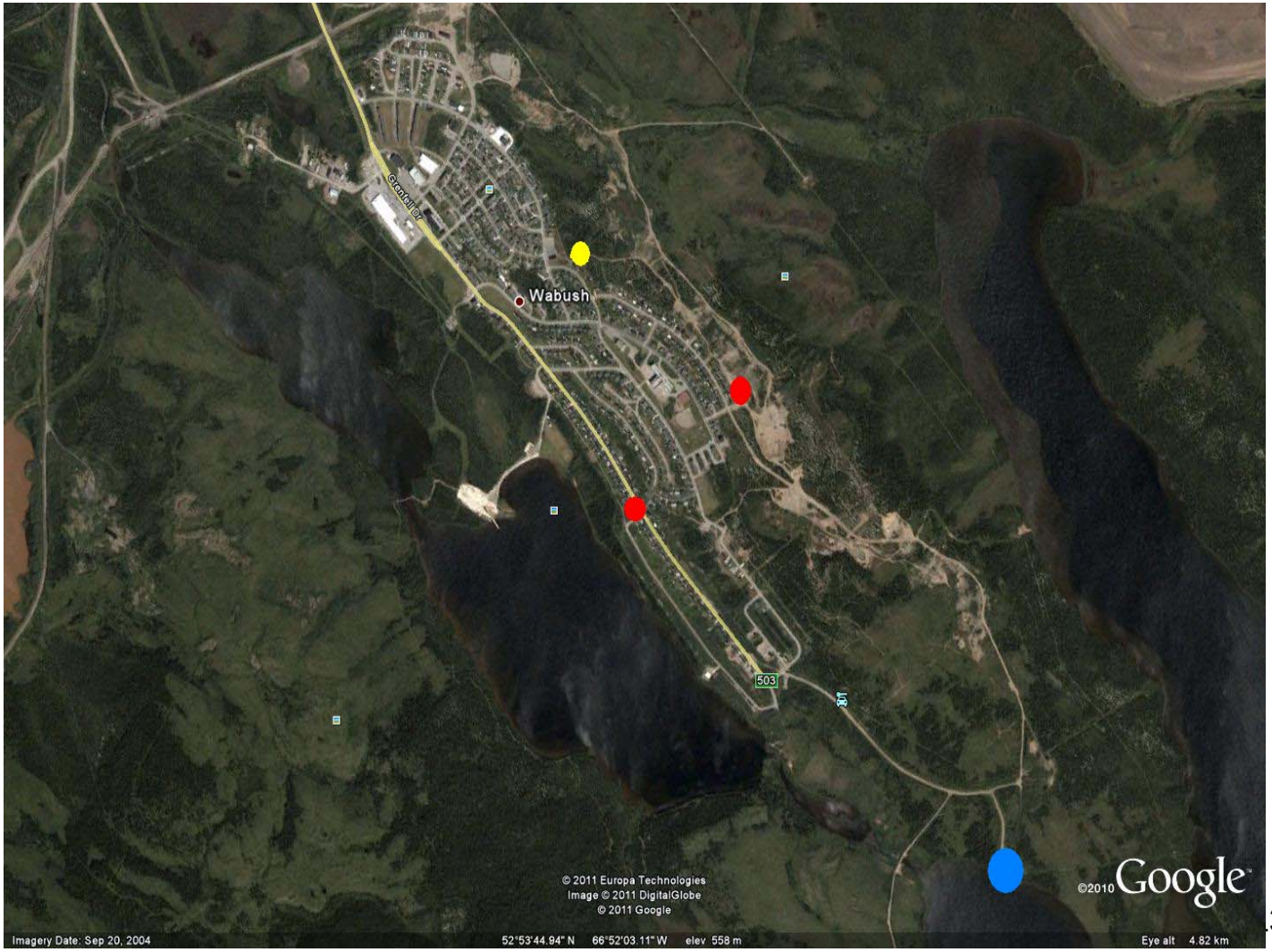
Cottlesville Session



Wabush Session

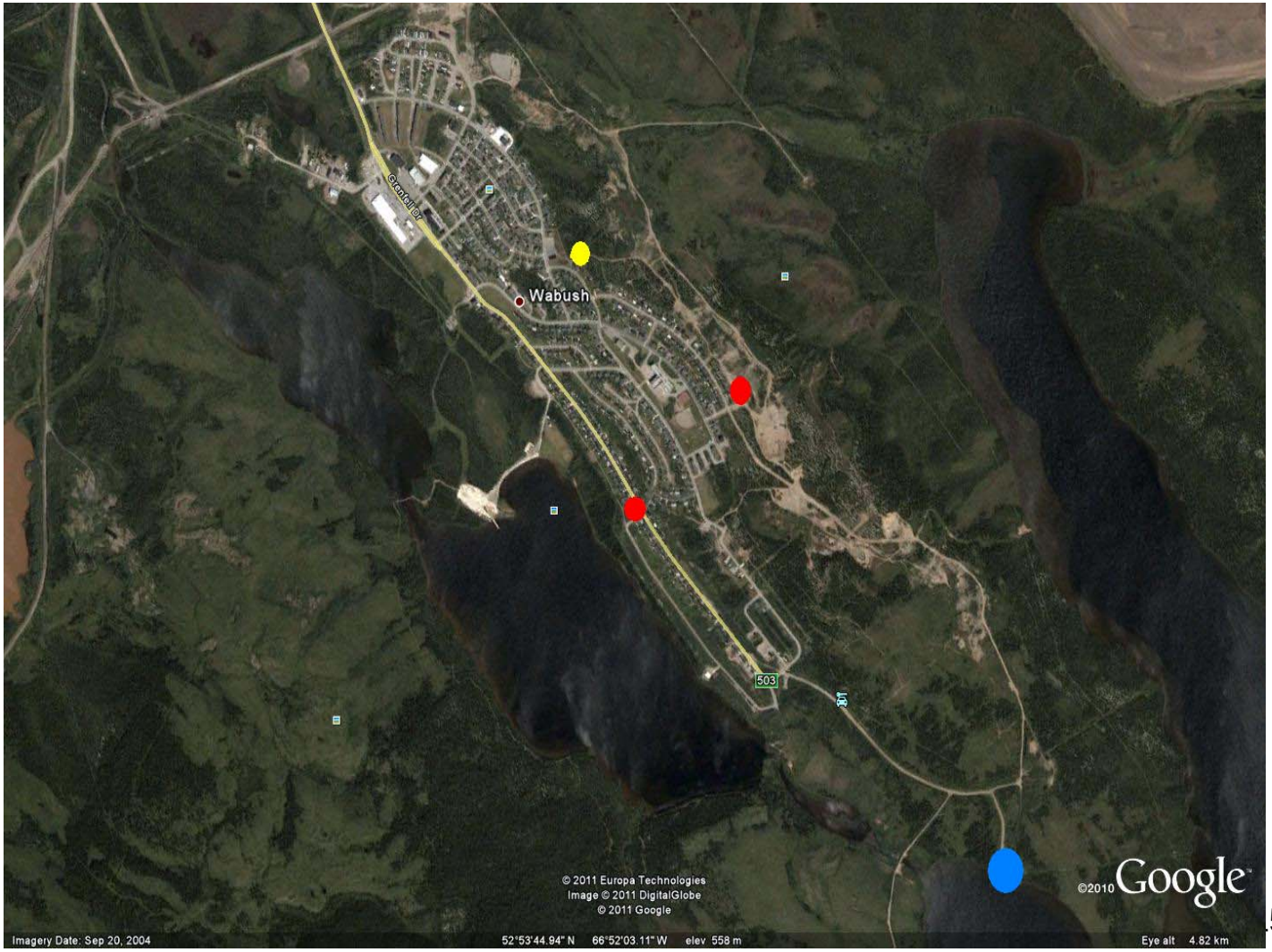
- Located in western Labrador
- Population of 1740
- Large industrial users

Wabush Session



Wabush Session

Wabush Session



Wabush Session

Water Distribution System Flushing

- Flow testing along the 300 mm main line down hill from guy street

Port Blandford

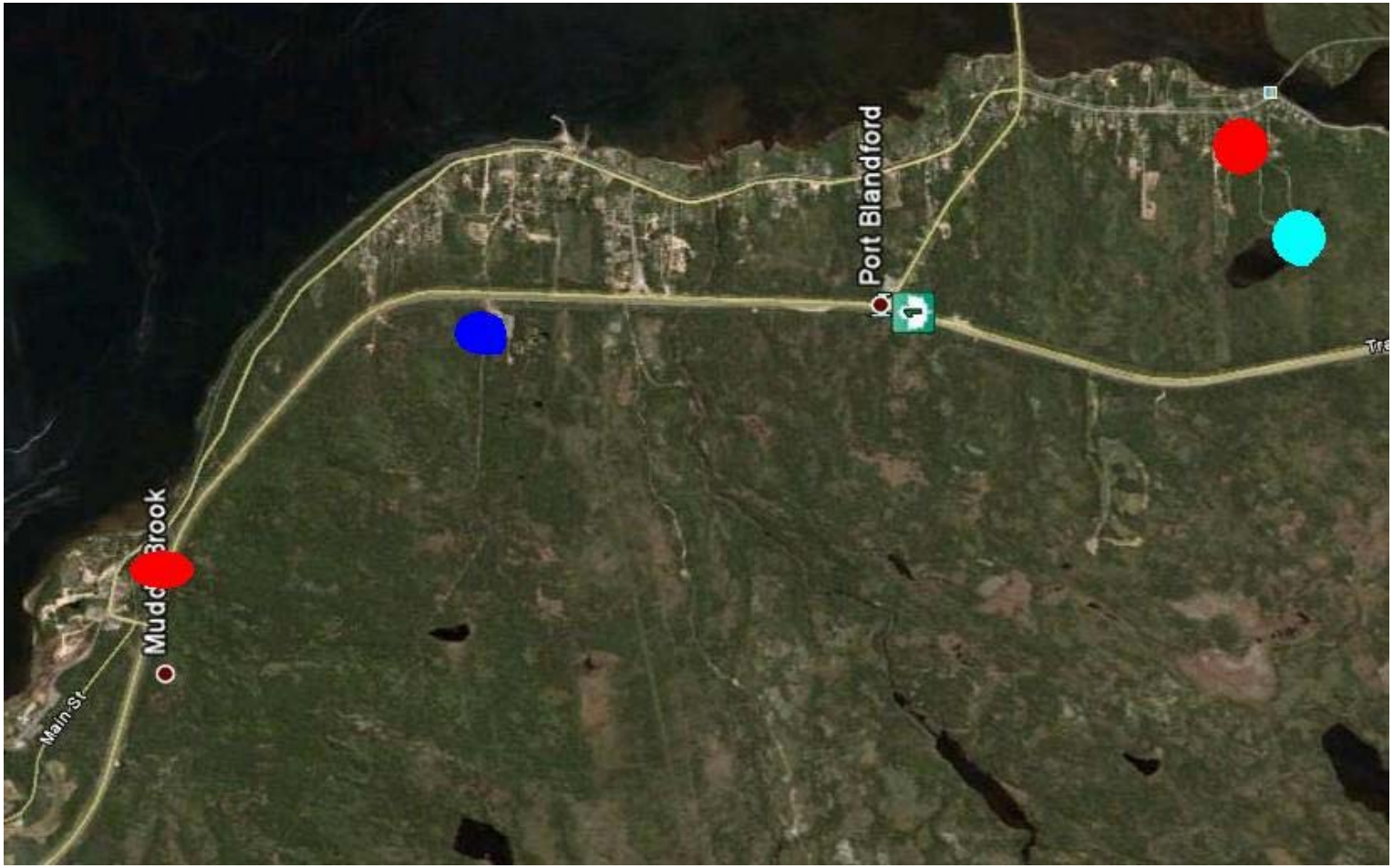
- In the eastern region
- Population of approximately 520
- 43 Hydrants in the system

Port Blandford Session

- In the first visit copies of the drawings were made
- The hydrants & valves were marked out and numbered
- Static pressures were measured at the high points in the system

Port Blandford Session

Port Blandford



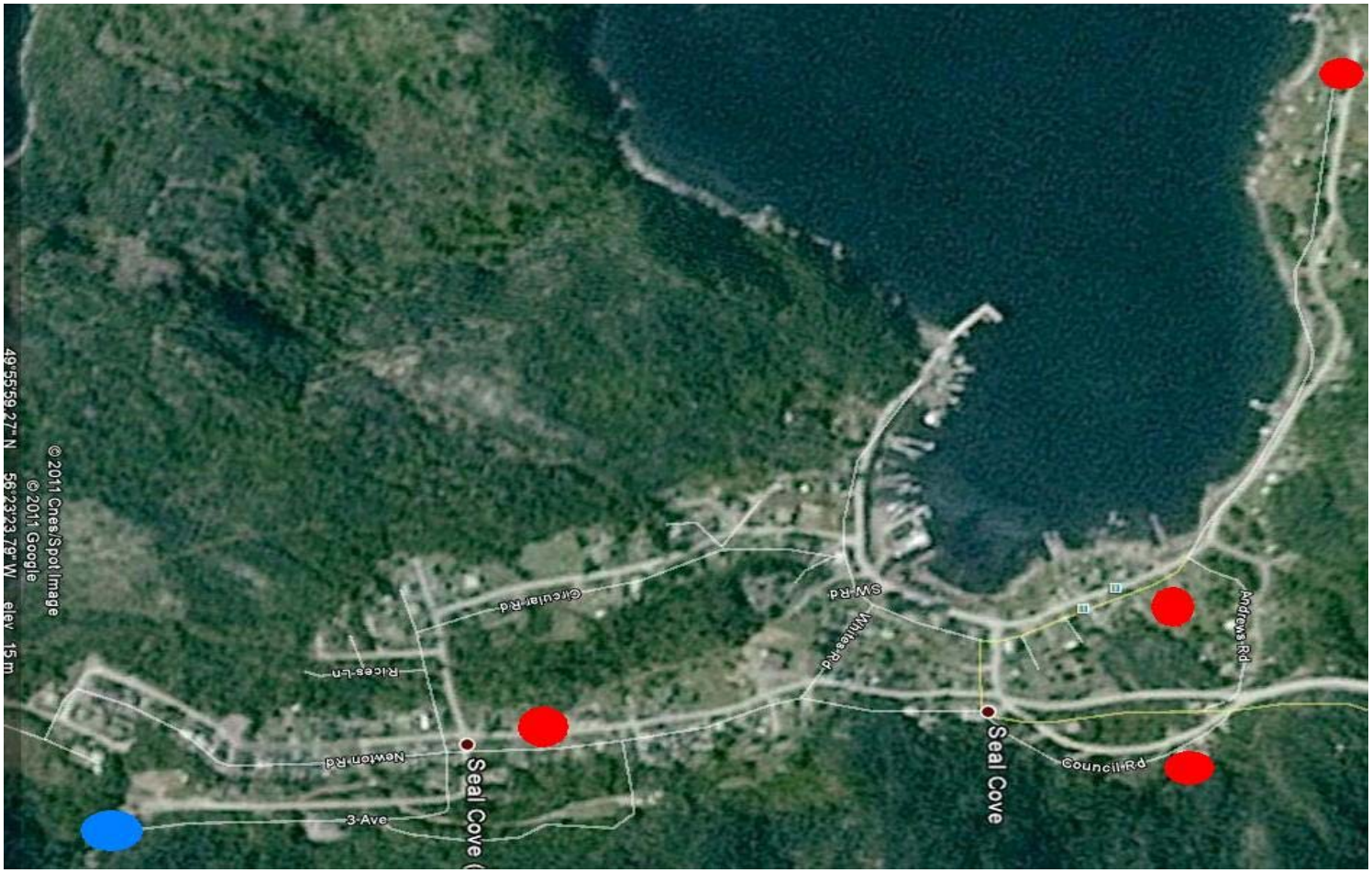
Port Blandford-Session

Port Blandford-Session

Seal Cove WB

- On the Baie Verte peninsula
- Population is 331
- Approximately 30 hydrants

Seal Cove, White Bay



Seal Cove

- No trouble getting required flushing velocities
- Averaged 700 US gpm at all hydrants with the exception of the high point where we got 480 US gpm

Seal Cove

- No way to shut off the high point or that section of town
- Could not prevent vacuum from occuring at the high point

Seal Cove


Circular Rd
SW Rd
Whites Rd
Andrews Rd
Rices Ln
Newton Rd
Seal Cove
Seal Cove
Council Rd
3 Ave
© 2011 Cnes/Spot Image
© 2011 Google
49°55'59.27" N 56°23'23.79" W elev 15 m

Results to date

- One issue that has arisen is the lack of accurate drawings

- Had a hard time maintaining pressure above 20 psi while flushing in anything smaller than an 200mm (8 inch) line

Results to date

- The infrastructure in some towns cannot handle proper flushing
- Not recommending any changes to current infrastructure design
- Will continue to deliver the curriculum and collect information for future consideration

Newfoundland Labrador

Questions?