

# Mill Creek End of Pipe Treatment

## Background

Several planning studies have recommended measures to improve water quality in Mill Creek, such as the installation of an oil skimmer facility at the outlet of the Argyll Storm Tunnel and sewer separation in parts of Ritchie and Strathcona neighborhoods.

**The purpose of this project is to treat stormwater runoff prior to discharge into Mill Creek and the North Saskatchewan River.**

The City has elected to pursue installation of oil and grit separators at two priority locations based on basin size. These locations are as follows:

- Location 1 – 96 Street south of 80 Avenue.
- Location 2 – at Outfall 93 located west of 73 Avenue and 87 Street.

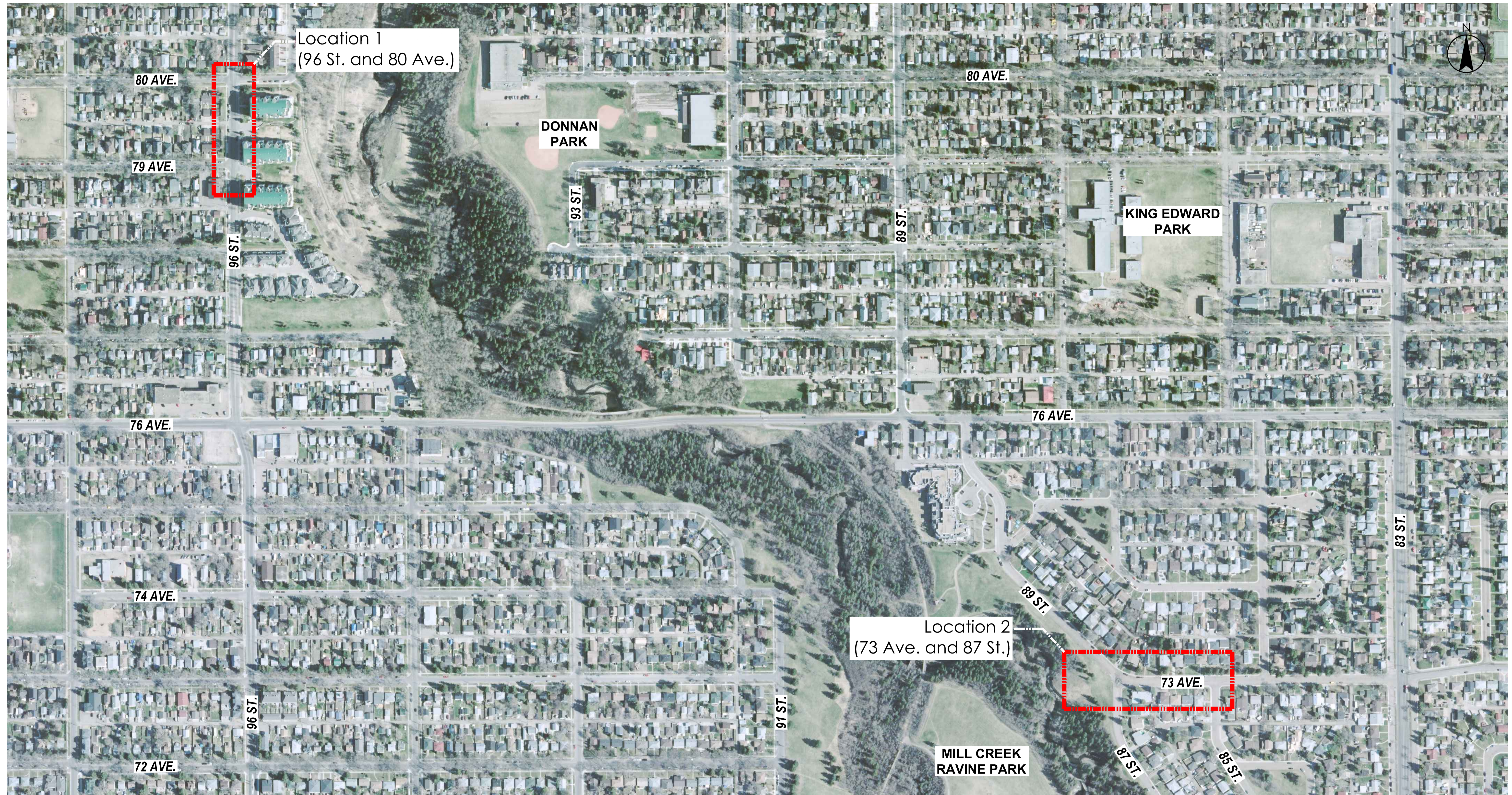


Location 1: 96 Street south of 80 Avenue



Location 2: Outfall 93 west of 73 Avenue and 87 Street

# Mill Creek End of Pipe Treatment Proposed Project



# Mill Creek End of Pipe Treatment Construction Activities

Construction Activities include:

- Excavation
- Installation of oil and grit separators
- Backfilling
- Restoration
- Water main relocation on 96 Street (south of 80 Avenue)

Construction of the oil and grit separators is expected to take place starting in October 2015 and continuing through to December 2015.

Restoration including landscaping and permanent road restoration will conclude in the spring of 2016.



Construction of a CDS Unit in March, 2013

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## Expected Construction Impacts

The City of Edmonton will ensure that impacts to residents are minimized as much as possible.

Construction Impacts include:

- Road / lane closures
- Sidewalk closure
- Construction noise during the day
- ETS bus detour / temporary bus stops (96 Street)

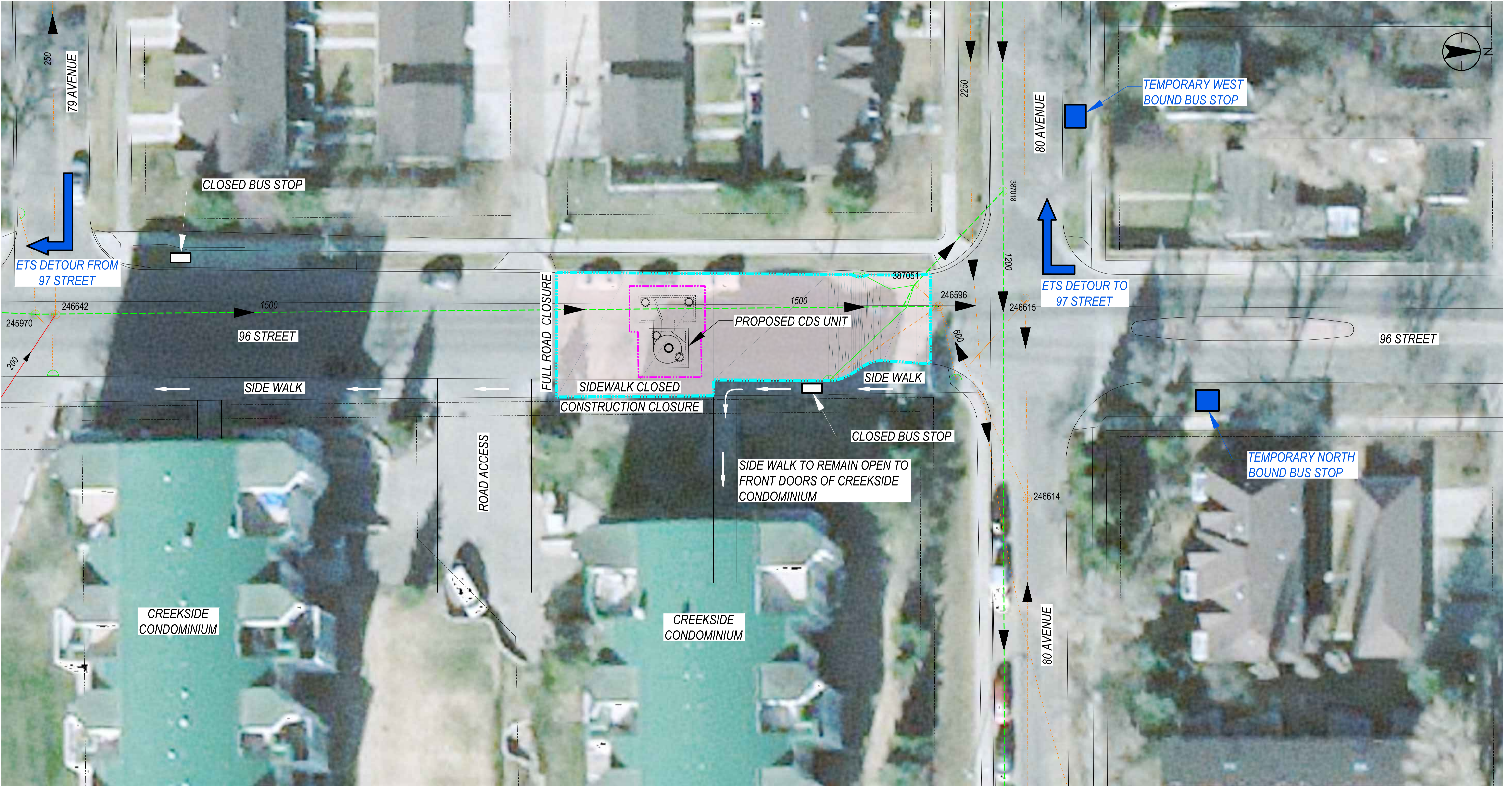
The Construction areas will be fenced off for public safety. All residents are asked to obey closures and detours.



Installation of a CDS unit in March, 2013

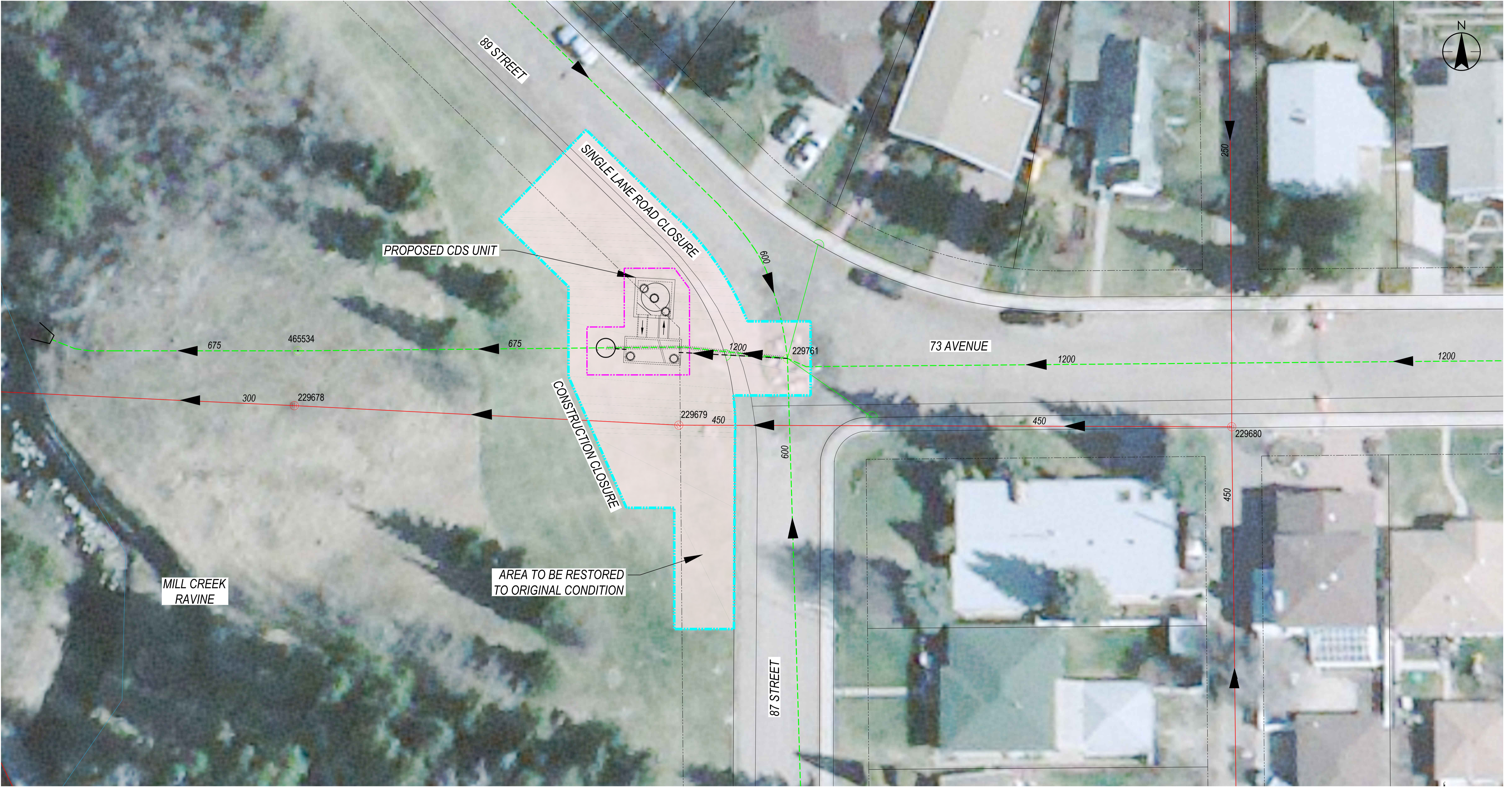
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## Location 1



# Mill Creek End of Pipe Treatment

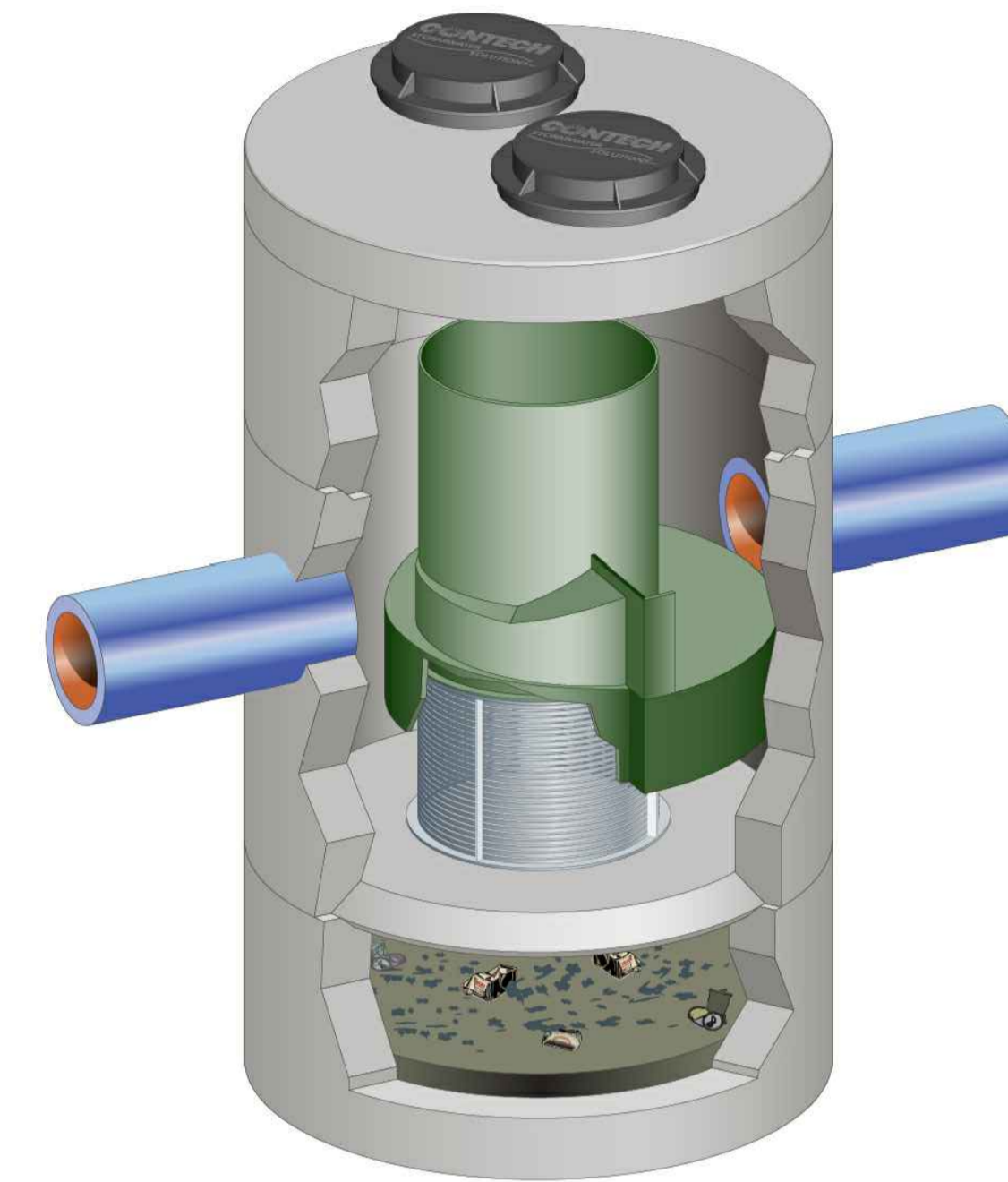
## Location 2



# Mill Creek End of Pipe Treatment

## Oil and Grit Separators

- Continuous Deflective Separation (CDS) Units are used to separate and trap oil and grit from stormwater.
- Stormwater enters the unit and creates swirling velocities to trap floatables and grit. Floatables remain in the separation cylinder while grit settles into the isolated sump. Hydrocarbons are trapped in the oil baffle. Treated water exits the unit through the outlet pipe.
- The CDS Unit will be inspected regularly and will be cleaned approximately twice a year (Spring and Fall).
- It is anticipated that the maintenance clean out will take approximately 2 days.
- A hydrovac truck will be used to clean out oils, grit and other debris from the CDS Unit.

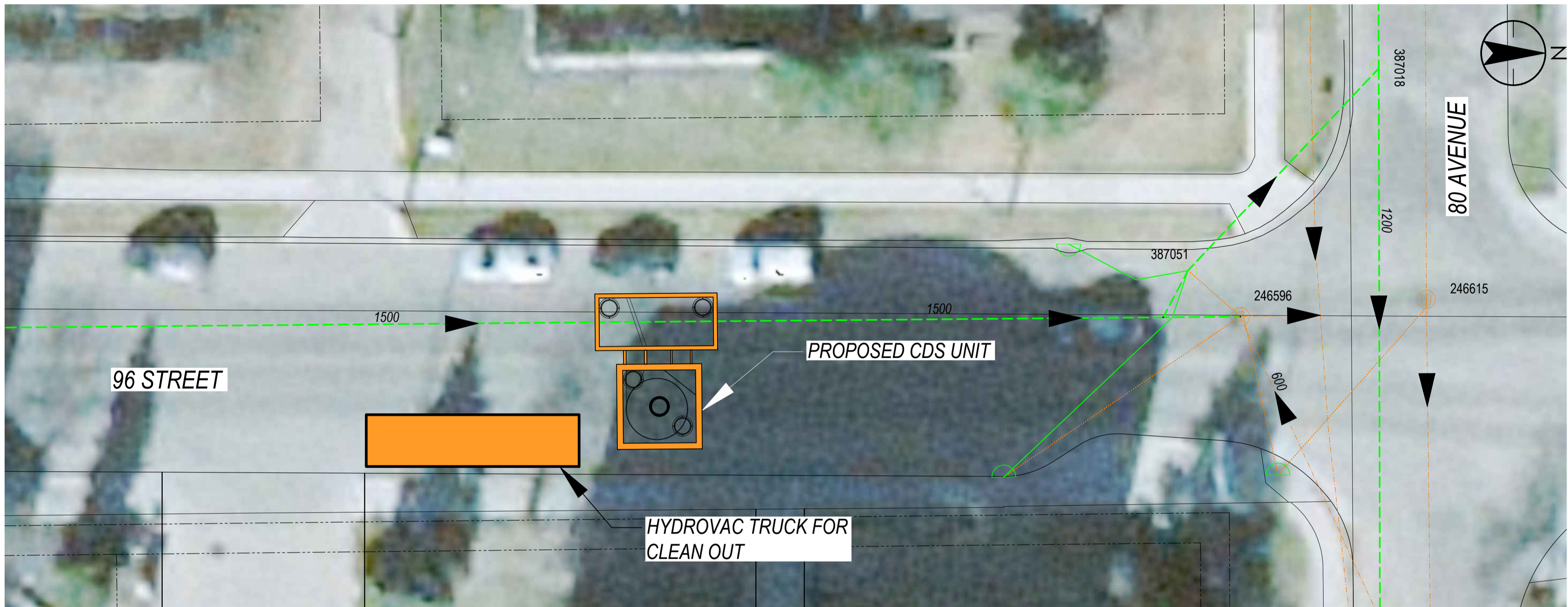


CDS Schematic

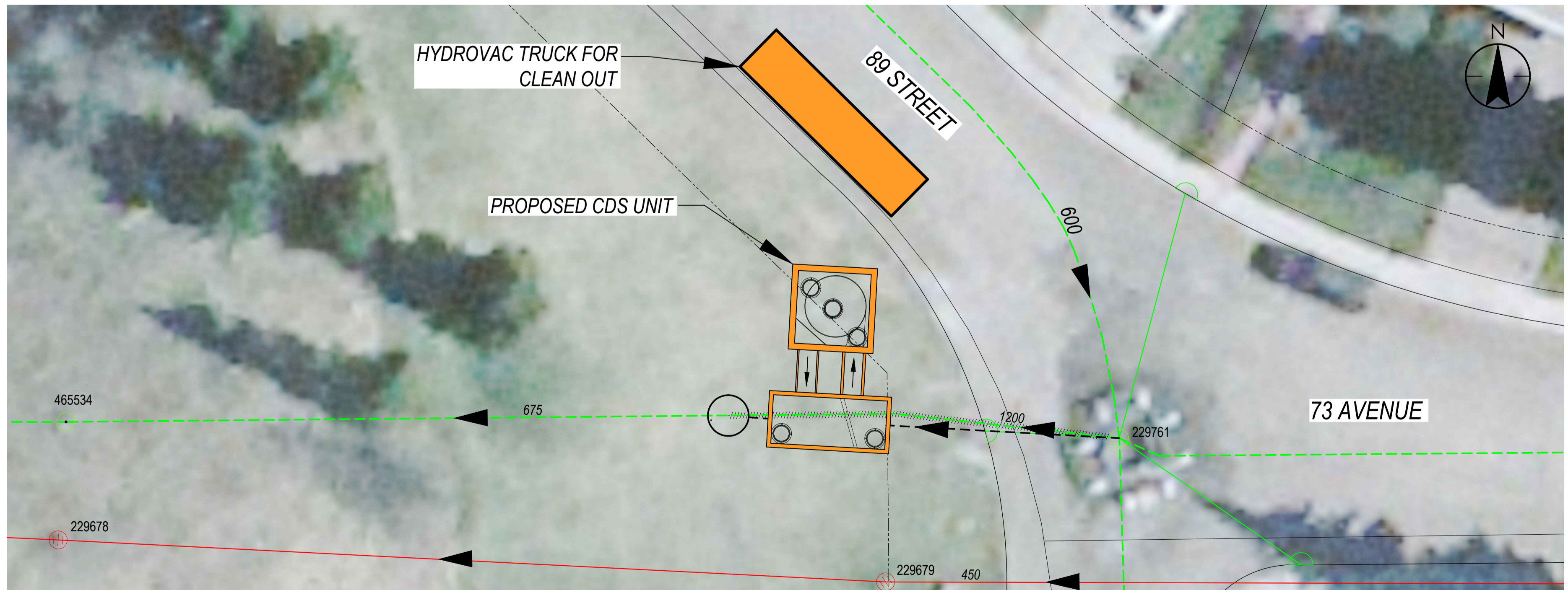


Hydrovac Truck Used for Cleaning

# Mill Creek End of Pipe Treatment Operation and Maintenance



Location 1



Location 2

There will be minimal disruption to the community during operation and maintenance