

Renown Sewage Pumping Station Environmental Assessment

Schedule 'B' Class Environmental Assessment

Public Information Centre No. 1



**MOVING
WATER
FORWARD**

CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

Niagara  Region

Niagara Region is situated on treaty land. This land is steeped in the rich history of the First Nations such as the Hatiwendaronk, the Haudenosaunee, and the Anishinaabe, including the Mississaugas of the Credit First Nation. There are many First Nations, Métis, and Inuit peoples from across Turtle Island that live and work in Niagara today.

The Regional Municipality of Niagara stands with all Indigenous peoples, past and present, in promoting the wise stewardship of the lands on which we live.

wsp

MOVING
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Niagara  Region

Renown Sewage Pumping Station Environmental Assessment

Purpose of Study

With the Renown Sewage Pumping Station (SPS) reaching the end of its life cycle, a Schedule 'B' Class EA was initiated to determine the best solution for:

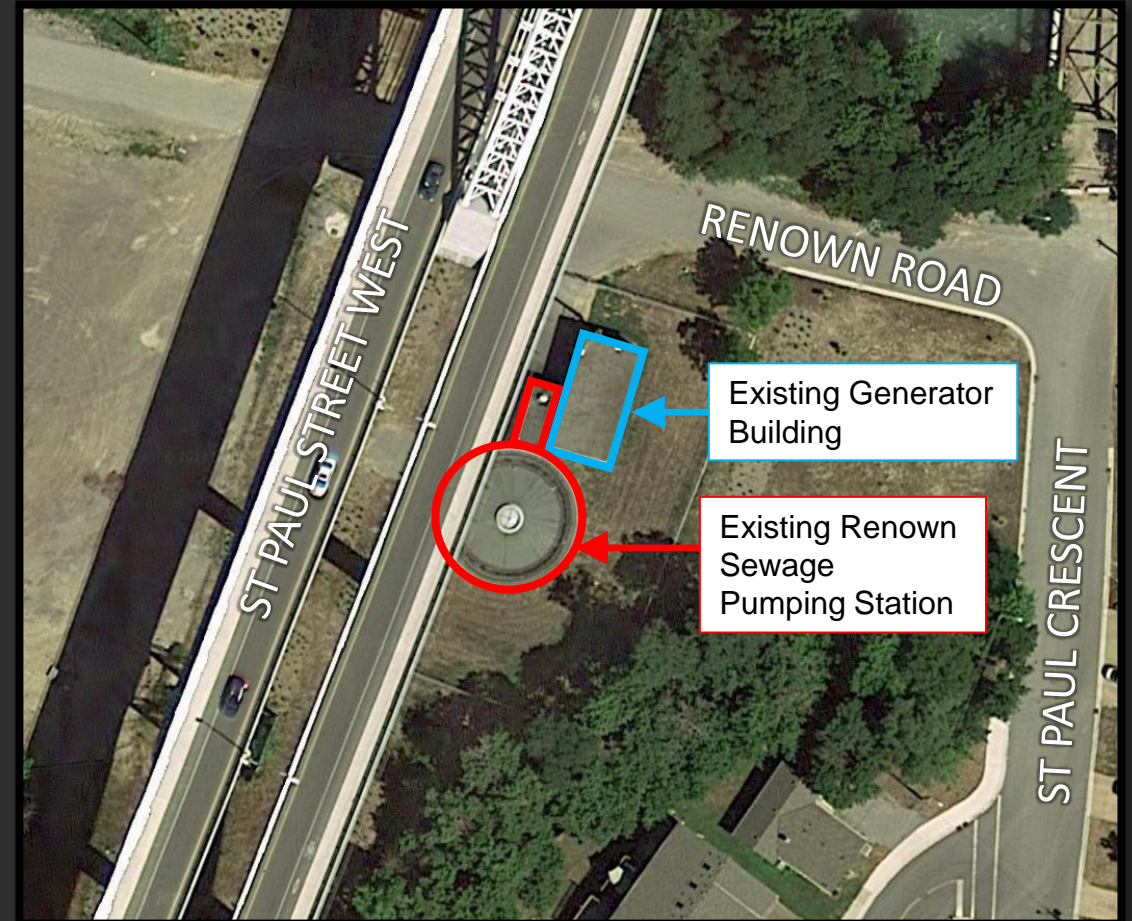
1. Maintaining the existing SPS capacity
2. Enhancing the functionality and operation of the SPS
3. Mitigating the risk of sewage overflows
4. Providing efficient capital cost investment

As one of the Region's largest pumping stations, the operation of the Renown SPS is essential in maintaining normal operations of the Region's wastewater system.

Purpose of Public Consultation

The purpose of this Public Information Centre is to:

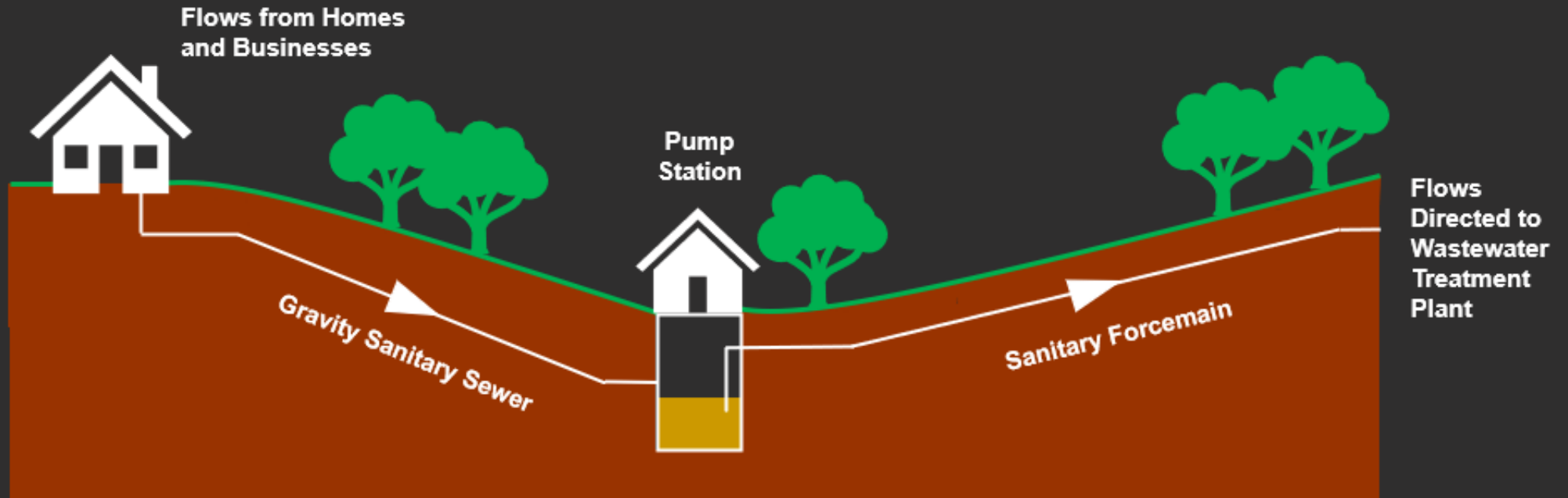
1. Outline the problem solving process
2. Present the proposed alternative solutions for evaluation
3. Obtain your feedback on the Renown SPS Class EA and answer any questions



Renown Sewage Pumping Station Environmental Assessment

What is a Sewage Pumping Station?

Sewers use gravity to move sewage from high to low points in the sanitary system. Sewage pumping stations are constructed at low points to push sewage to high points and direct sewage to the wastewater treatment plant.



Renown Sewage Pumping Station Environmental Assessment

Problem Solving Process

Alternative Selection

Alternative 1

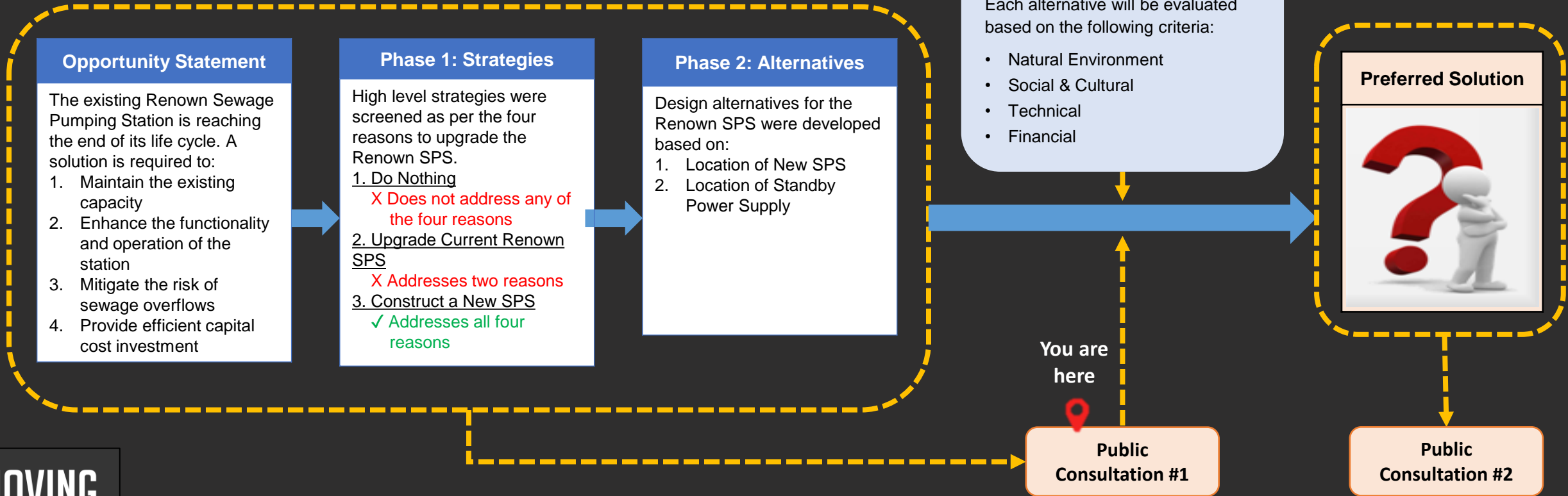
Alternative 2

Alternative 3

New Pump Station

Evaluation Criteria

Problem Solving Process



Renown Sewage Pumping Station Environmental Assessment

Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Alternative 3

New Pump Station

Evaluation Criteria

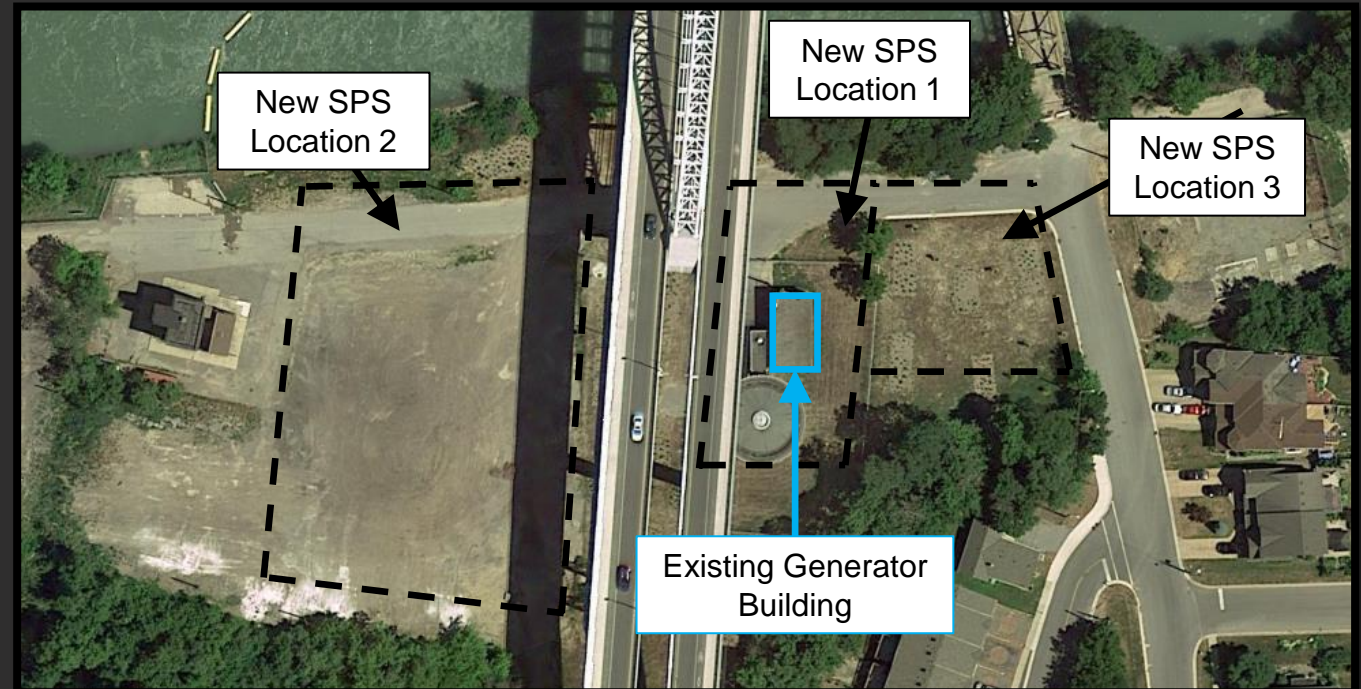
Alternative Solutions

Three locations were proposed for the construction of a new SPS:

1. Within existing property limits
2. West of existing property limits
3. East of existing property limits

Two locations were proposed for the standby power supply:

1. Within the existing generator building
2. Outdoors in an enclosure



Renown Sewage Pumping Station Environmental Assessment

Problem Solving Process

Alternative Selection

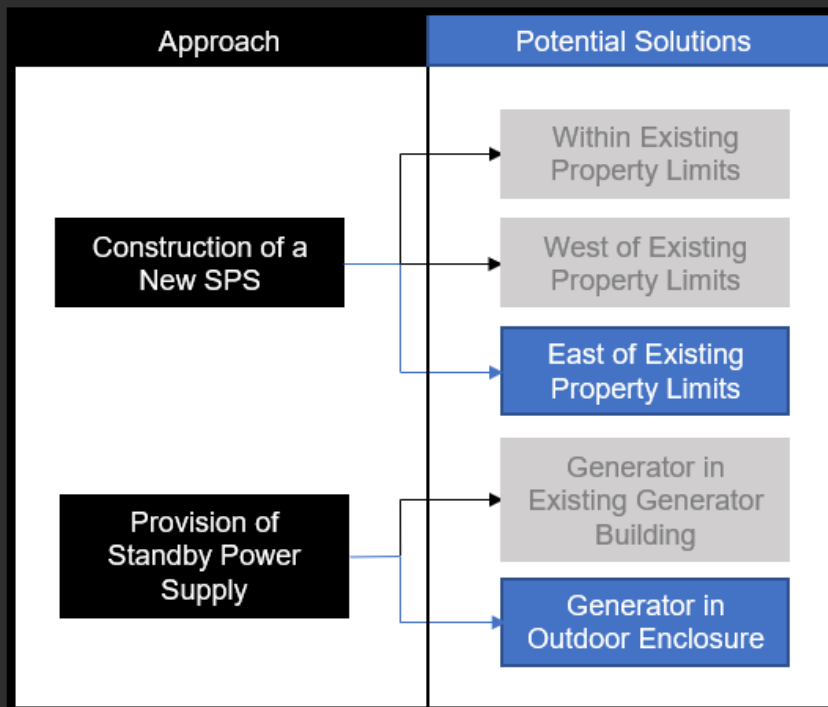
Alternative 1

Alternative 2

Alternative 3

New Pump Station

Evaluation Criteria



Alternative Selection

- ✓ • New SPS can be constructed with minimal space constraints
- Provides space for access to the new SPS during and after construction
- Shorter connections from the new SPS to the existing underground infrastructure
- ✓ • Noise reduction
- Separation of generator and electrical equipment

Renown Sewage Pumping Station Environmental Assessment

Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Alternative 3

New Pump Station

Evaluation Criteria

Alternative 1











Technical Features

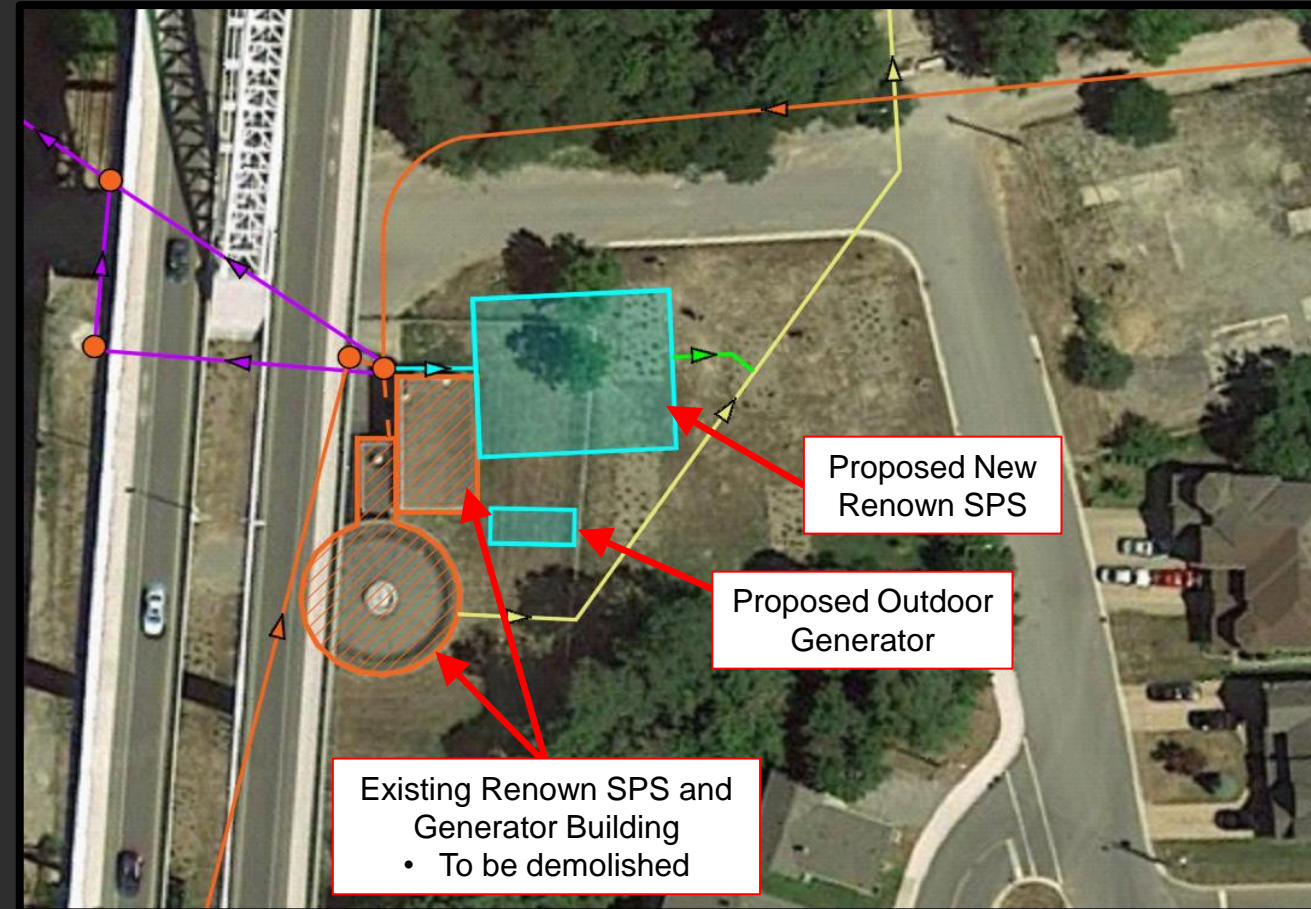
- Incoming sanitary flows will be redirected to the new Renown SPS through the existing inlet manhole
- The new Renown SPS will be connected to the existing forcemain
- An enclosed outdoor generator will be located south of the new SPS

Pros and Cons:

- Pros:
 - Lower capital cost
 - Less land required
- Cons:
 - Construction may impact existing infrastructure due to spatial constraints
 - New SPS is more visible

LEGEND

- | | |
|---|--|
|  Existing Maintenance Hole |  Existing Forcemain to be Removed |
|  Existing Sanitary Sewer |  Proposed Maintenance Hole |
|  Existing Overflow Sewer |  Proposed Sanitary Sewer |
|  Existing Sanitary Sewer to be Removed |  Proposed Forcemain |
|  Existing Forcemain |  Proposed Access Road |



Renown Sewage Pumping Station Environmental Assessment

Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Alternative 3

New Pump Station

Evaluation Criteria

Alternative 2











Technical Features

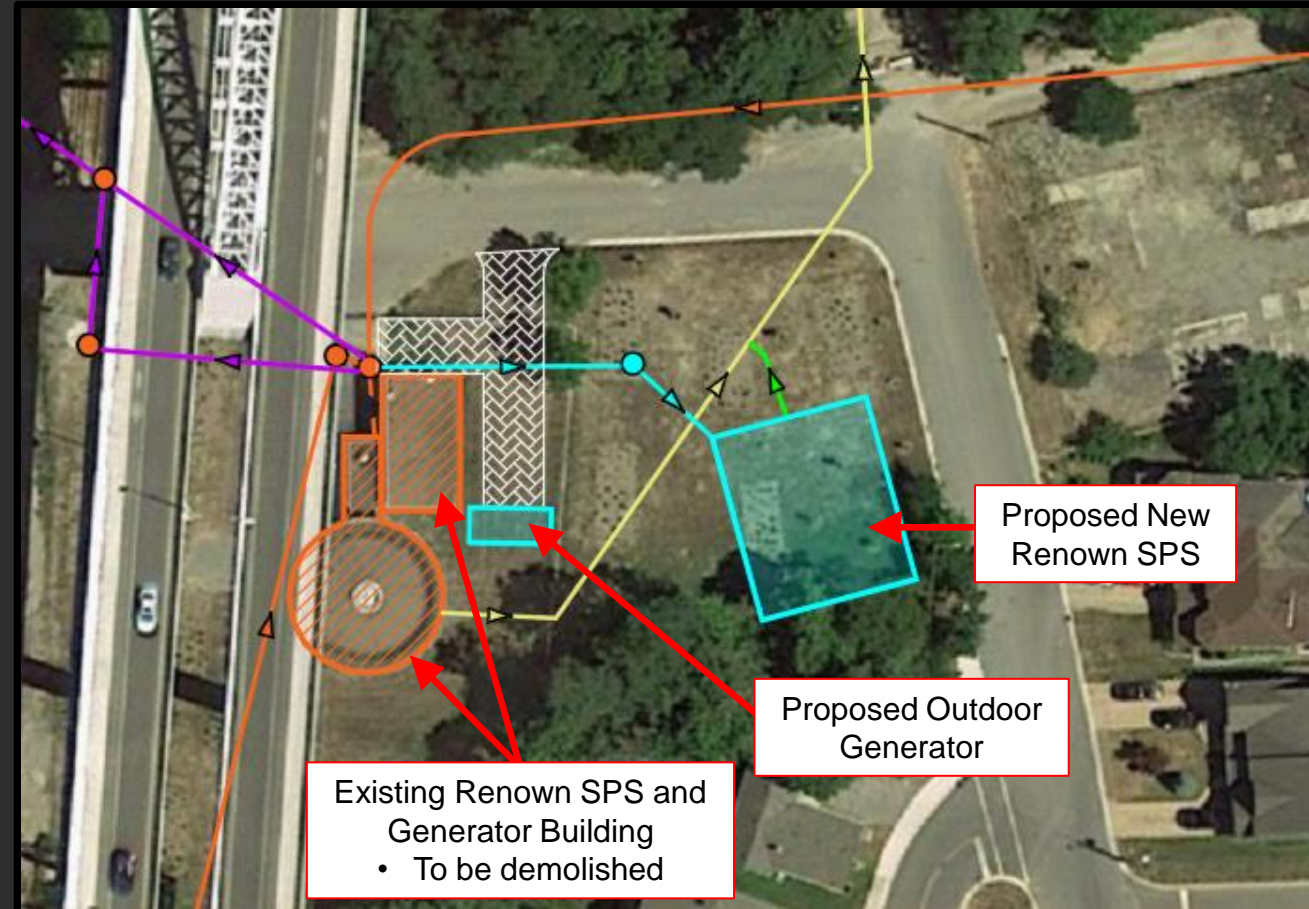
- Incoming sanitary flows will be redirected to the new Renown SPS through the existing inlet manhole
- The new Renown SPS will be connected to the existing forcemain
- An enclosed outdoor generator will be located west of the new SPS

Pros and Cons:

- Pros:
 - Fewer spatial constraints
- Cons:
 - Located closer to residential buildings
 - Greater land requirements

LEGEND

- | | |
|---|--|
|  Existing Maintenance Hole |  Existing Forcemain to be Removed |
|  Existing Sanitary Sewer |  Proposed Maintenance Hole |
|  Existing Overflow Sewer |  Proposed Sanitary Sewer |
|  Existing Sanitary Sewer to be Removed |  Proposed Forcemain |
|  Existing Forcemain |  Proposed Access Road |



Renown Sewage Pumping Station Environmental Assessment

Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Alternative 3

New Pump Station

Evaluation Criteria

Alternative 3











Technical Features

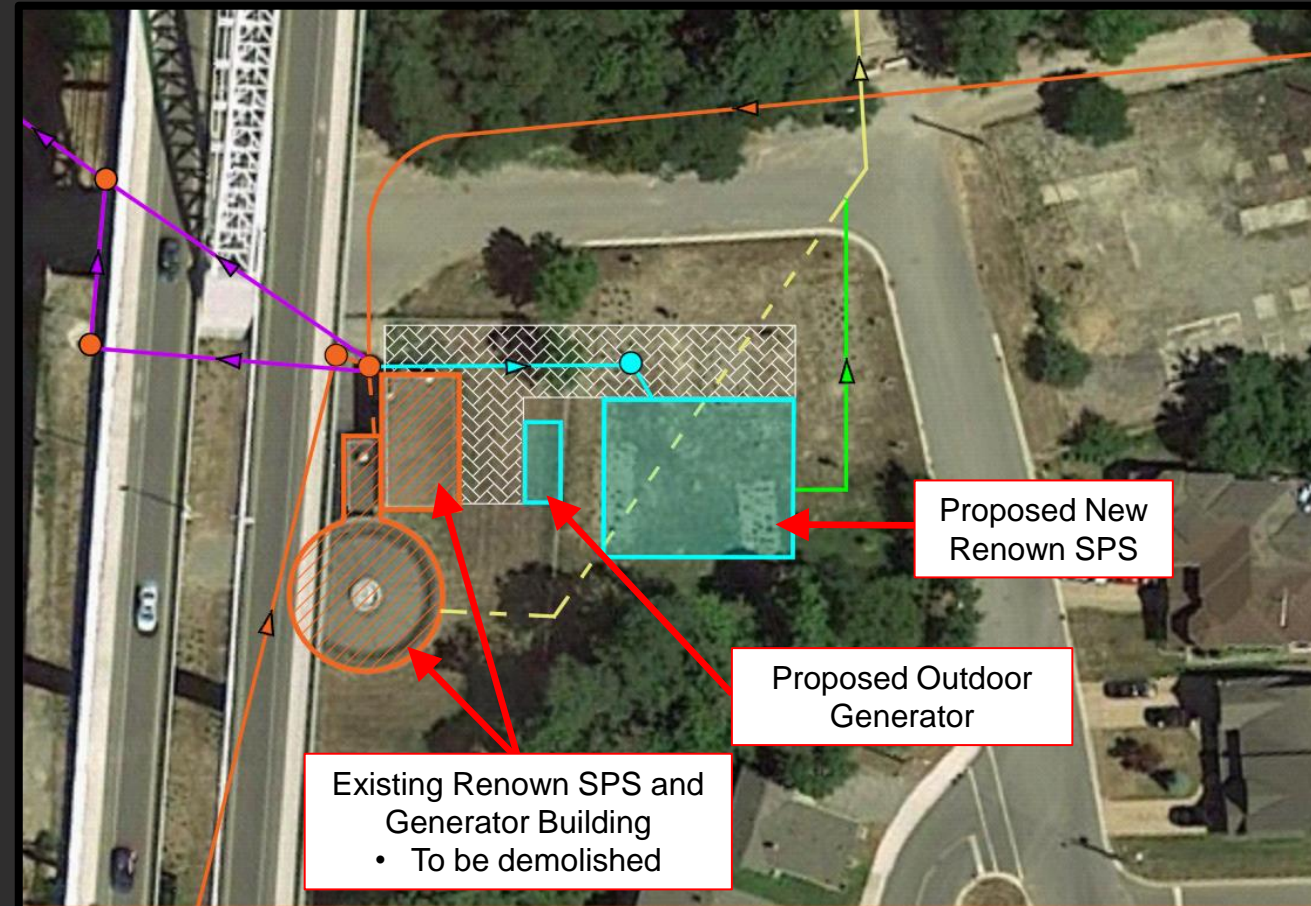
- Incoming sanitary flows will be redirected to the new Renown SPS through the existing inlet manhole
- The new Renown SPS will be connected to the existing forcemain
- An enclosed outdoor generator will be located west of the new SPS

Pros and Cons:

- Pros:
 - Fewer spatial constraints
 - New SPS is less visible
- Cons:
 - Higher capital cost
 - Greater land requirements

LEGEND

- | | |
|---|--|
|  Existing Maintenance Hole |  Existing Forcemain to be Removed |
|  Existing Sanitary Sewer |  Proposed Maintenance Hole |
|  Existing Overflow Sewer |  Proposed Sanitary Sewer |
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Renown Sewage Pumping Station Environmental Assessment

Problem Solving Process

Alternative Selection

Alternative 1

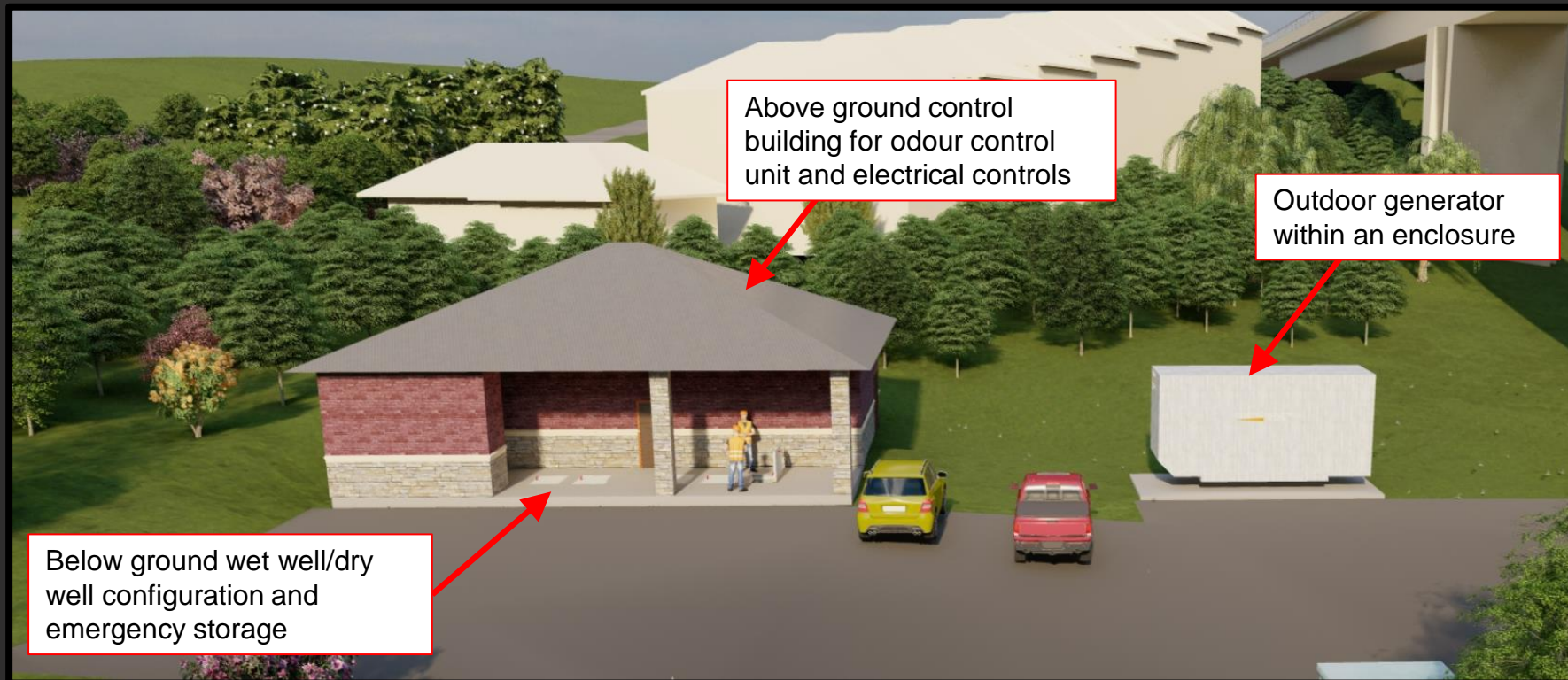
Alternative 2

Alternative 3

New Pump Station

Evaluation Criteria

New Sewage Pumping Station



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Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Alternative 3

New Pump Station

Evaluation Criteria

Evaluation Criteria

The following criteria have been selected to evaluate the alternatives:

Natural Environment

- Proximity to environmentally sensitive areas
- Impact to watercourses
- Impact to species at risk
- Impact to vegetation
- Potential for contamination
- Greenhouse gas emissions and carbon footprint



Social & Cultural

- Impact to cultural heritage resources
- Impact to archeological resources
- Land use compliance
- Traffic, noise, and dust impacts
- Removal of recreational space
- Visibility from streetscape



Technical

- Constructability Impact to existing utilities
- Permits and approvals
- Land acquisition process
- Ease of maintenance and operation



Economic

- Capital costs
- Life cycle/maintenance costs



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Next Steps

Stay Informed

If you would like to submit your comments directly to the Study Team, please contact one of the team members below:

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Please provide your feedback before January 16th, 2023.

Public Consultation
#1

Public Consultation
#2

Project File Report

Notice of Study
Completion

Construction



Opportunity for the public to provide feedback on the project.

Opportunity for the public to provide feedback on the project.

Document findings of the study. Incorporate comments received from the public and review agencies.

First Class EA Project File Report, with a mandatory 30 day public review period.

Construction estimated to begin in 2024.

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Thank you