



PROJECT FILE REPORT ADDENDUM

The Regional Municipality of York

Northeast Vaughan Water Servicing Project
Class Environmental Assessment Revision
to Project File

MARCH 2023



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Neutral
Company



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REVISIONS PAGE

Northeast Vaughan Water Servicing Project
Class Environmental Assessment Revision
to Project File

Client:

Engineer:

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Issue	Date	Description	Prepared by/ Reviewed by	Client Review
1	2021-10-19	Draft Class EA Amendment Report	Andrea LaPlante / Andrew Moreton	
2	2022-09-21	Draft Class EA Amendment Report_v2	Andrea LaPlante / Andrew Moreton	
3	2022-10-06	Draft Class EA Amendment Report to MECP	Andrea LaPlante / Andrew Moreton	
5	2023-02-28	Updated Final Draft Class EA Amendment Report	Andrea LaPlante / Andrew Moreton	
6	2023-03-10	Final Class EA Amendment Report	Andrea LaPlante / Andrew Moreton	

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1 INTRODUCTION

Associated Engineering (Ont.) Ltd. (Associated) has been authorized by the Regional Municipality of York (York Region) to provide engineering services for the design and construction of the *Northeast Vaughan Water Servicing Project*. This document is an Addendum to the Municipal Class Environmental Assessment (MCEA) "Schedule B" Study completed in 2019 - the *Northeast Vaughan Water and Wastewater Servicing Project* (GHD, 2019).

1.1 Background

The northeast portion of the City of Vaughan (City) is one of the designated "white belt" areas within York Region for accommodating provincially approved population growth. The existing water and wastewater systems are unable to accommodate the projected population growth. As a result, water and wastewater servicing areas were established to help identify infrastructure needed to service the anticipated development in northeast Vaughan to 2051. The northeast Vaughan water service area is generally located from the King-Vaughan town boundary to Teston Road and from Highway 27 to Dufferin Street (Figure 1-1).

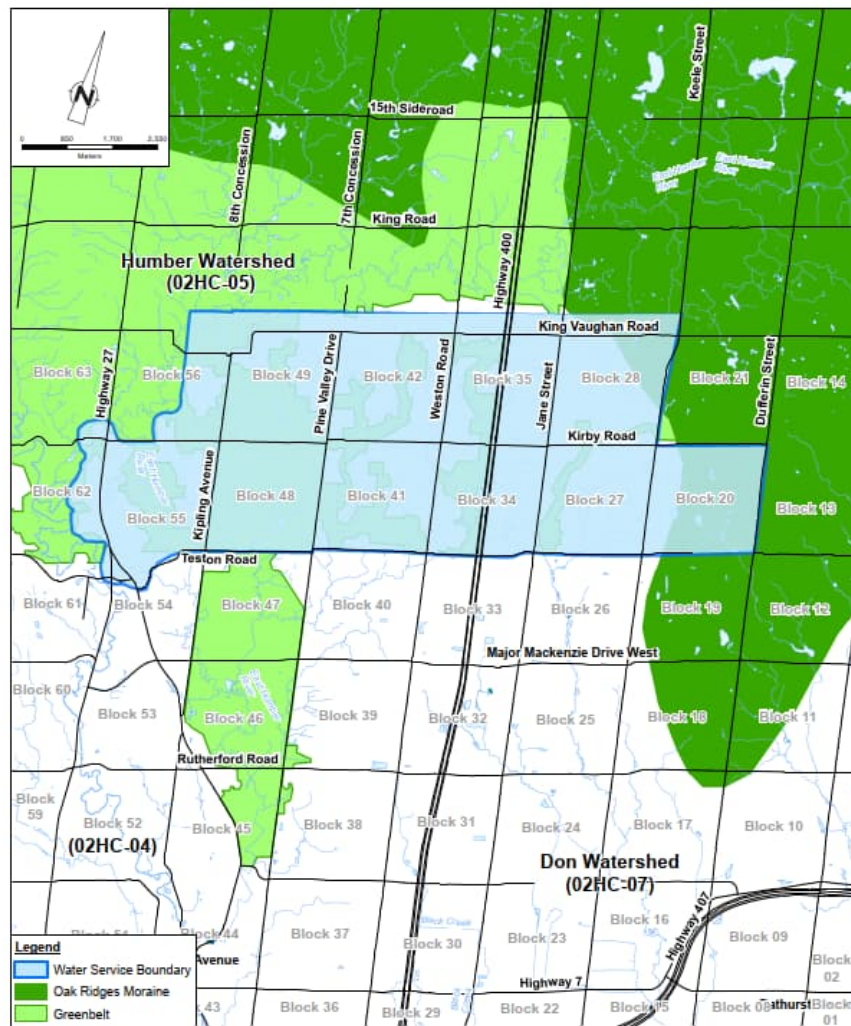


Figure 1-1: Northeast Vaughan Water Service Area

Source: *Northeast Vaughan Water and Wastewater Servicing Project File Report* (GHD, 2019)

In 2016, York Region completed the update of its Water and Wastewater Master Plan (Master Plan) to guide the implementation of infrastructure throughout the Region and accommodate population growth in the area. This update recommended broad strategies for servicing the northeast Vaughan area to 2041 in Pressure Districts (PD) 7, 8, and 9. In response to the updated Master Plan, York Region completed a Municipal Class Environmental Assessment (MCEA) "Schedule B" Study (the Study) in 2019 - the *Northeast Vaughan Water and Wastewater Servicing Project*. The Study identified the required water and wastewater infrastructure needed to service the northeast Vaughan area. The planning and design process taken during the Study was documented in a Project File Report (PFR) prepared by GHD (GHD, 2019).

The preferred water infrastructure for servicing the anticipated development in northeast Vaughan to 2051 as determined through the Study included:

- A PD8 Pumping Station at Site 4;
- A PD8 Water Storage Facility (Elevated Tank) and PD9 Pumping Station at Site 57;
- A second PD8 Water Storage Facility (Elevated Tank) at Site 71; and
- Watermains along Jane Street and King Vaughan Road connecting the new facilities to the existing York Water System (YWS).

Figure 1-2 illustrates the preferred water infrastructure, as identified during the Study.

The Study identified that the proposed PD8 Pumping Station be constructed in the northwest portion of Site 4 (within Block 34E), which is located approximately 420m northwest of Jane Street and Teston Road intersection (original location).

Following the filing of the PFR for the *Northeast Vaughan Water and Wastewater Servicing Project* in 2019, the landowner identified an alternative location for the PD8 Pumping Station outside the boundaries of the approved Class EA selected site. The alternative location is approximately 70m further northwest of the Jane Street and Testin Road intersection to better suit the planned development for Block 34E. This new location for the PD8 Pumping Station is subject to acceptance by Toronto and Region Conservation Authority (TRCA) and *Environmental Assessment Act* approval via an addendum to the 2019 PFR. Following general acceptance of the new location by TRCA, York Region completed an addendum to document this change in location and evaluate the potential impacts, which is summarized in this report.



Figure 1-2: Preferred Water Servicing Solution

Source: Northeast Vaughan Water and Wastewater Servicing Project File Report (GHD, 2019)

1.2 Purpose of MCEA Project Addendum

The requirements of the MCEA process indicate that any significant modifications proposed to the project after the PFR is filed requires an addendum to be written by the proponent. In addition to reviewing the new changes and the environmental impacts (includes the social, economic, and natural environments), the proponent is required to provide public notification of the addendum and its changes.

The addendum's purpose is in keeping with the original principles of the *Environmental Assessment Act*. This includes evaluating net environmental effects to all aspects of the environment and providing clear and complete documentation of the process.

1.3 Overview of the Addendum Process

This MCEA Addendum reflects a Schedule B (construct new pumping station) activity; therefore, will fulfil Schedule B requirements, focusing on amending Phase 2 (identifying a preferred solution), and Phase 5 (implementation) of the MCEA process. Phase 1 (identifying the problem) has not changed from the original MCEA Study (GHD, 2019) and will not be included in the Addendum. In order to comply with the MCEA process, this addendum has been prepared to review the proposed changes to the project and its potential impacts on the environment. This review documents:

- Identifying the circumstances necessitating the change;
- Determining potential environmental implications of the change with mitigation measures to mitigate potential adverse environmental effects; and
- Filing the addendum for a period of 30 calendar days, with the Notice of Filing of Addendum issued to potentially affected members of the public, review agencies, Indigenous Communities, and those who were notified in the preparation of the original PFR.

This MCEA Addendum should be reviewed in conjunction with the completed MCEA Study in 2019. Refer to the Region's website for details regarding the original Study (GHD, 2019) (<https://www.york.ca/business/land-development/environmental-assessment-study>).

1.3.1 30-Day Public Review and Section 16(6) Order

Following the issuance of the Notice of Filing of Addendum, a 30-day period is provided to allow the Addendum to be reviewed by the public and review agencies. Only the proposed changes to the alternative solution identified in this MCEA Addendum are open for review. Interested persons may provide written comments to the proponent during the 30-day public review, beginning from issuance of Notice of Filing of Addendum.

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks (MECP) for an order requiring a higher level of study (i.e.: requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g.: require further studies), only on the grounds that the requested order may prevent, mitigate, or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester contact information and full name for the Ministry.

Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate or remedy those potential adverse impacts, and any information in support of the statements in the request. This will ensure that the Ministry is able to efficiently begin reviewing the request.

The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
Ministry of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto, ON M7A 2J3
minister.mecp@ontario.ca

Director, Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Ave. West, 1st Floor
Toronto, ON M4V 1P5
EABDirector@ontario.ca

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Visit the Ministry's website for more information on requests for orders under Section 16 of the *Environmental Assessment Act* at: <https://www.ontario.ca/page/class-environmental-assessments-section-16-order>

1.4 Provincially Approved Growth in Northeast Vaughan

Provincial Growth Plan, Oak Ridges Moraine Conservation Plan and Greenbelt Plan

In response to municipal and stakeholder interest for provincial leadership to encourage managed population growth, the Province enacted the *Places To Grow Act*, 2005 and released the "Final Growth Plan for the Greater Golden Horseshoe" in 2006 (2006 Growth Plan). The 2006 Growth Plan established population forecasts to 2031. In 2013, Amendment 2 to the 2006 Growth Plan established population forecasts to 2041 for the upper and single tier municipalities making up the Greater Golden Horseshoe Area. The 2006 Growth Plan requires that a minimum 40 percent of this growth be accommodated through intensification in existing built up areas.

The 2006 Growth Plan was replaced with the Growth Plan for the Greater Golden Horseshoe, 2017 and 2019, which was then amended in August 2020 (2020 Growth Plan). The 2020 Growth Plan extend population and employment forecasts, the horizon year for planning, and updated intensification target to a minimum of 50 percent. However, Section 2.2.2 of the Growth Plan states that until the next municipal comprehensive review is approved and in effect, the annual minimum intensification target contained in the applicable upper- or single-tier official plan that is approved and in effect as of July 1, 2017 will continue to apply. Therefore, the 40 percent intensification target remains applicable to the Project.

For York Region, the 2006 Growth Plan established a 2041 population forecast of 1.79 million and an employment forecast of 900,000. The population and employment forecasts were updated in the 2020 Growth Plan to include 2.02 million and an employment forecast of 990,000. York Region's estimated population as of 2016 was 1.11 million.

In addition to the *Places to Grow Act*, 2005, other Provincial legislation, including the *Oak Ridges Moraine Conservation Act*, 2001 and the *Greenbelt Act*, 2005 contain requirements that inform and influence where growth in York Region will occur.

The Oak Ridges Moraine Conservation Plan was created by the Province in 2002, and updated in 2017, under the *Oak Ridges Moraine Conservation Act*, 2001. The Oak Ridges Moraine Conservation Plan aims to protect and enhance the hydrological and ecological integrity of the Oak Ridges Moraine, while recognizing existing rural settlements and allowing existing urban settlements to continue to develop within identified boundaries. The *Greenbelt Act*, 2005 and Greenbelt Plan (2005 and updated in 2017) protect and control the use of additional land outside the Oak Ridges Moraine Conservation Plan area designated as Protected Countryside.

Approximately 69 percent of York Region's total land area is protected from urban development through the *Oak Ridges Moraine Conservation Act*, 2001, the Oak Ridges Moraine Conservation Plan, the *Greenbelt Act*, 2005, and the Greenbelt Plan. Therefore, only the remaining 31 percent of York Region is available to accommodate the approved growth for York Region, and many of these defined areas are located within or adjacent to areas that have been developed. In fact, only 6 percent of York Region's land base is defined as new community areas where the bulk of the approved growth is to be accommodated. One such area is situated in the northern portion of the City of Vaughan on either side of Highway 400.

2 DESCRIPTION OF THE PROPOSED CHANGES, POTENTIAL EFFECTS AND MITIGATION MEASURES

2.1 Original Preferred Water Servicing Solution – PD8 Pumping Station

The preferred water servicing infrastructure for Northeast Vaughan includes a new PD8 Pumping Station (Site 4) which is proposed to be constructed at a location northwest of the intersection of Jane Street and Teston Road and will supply water to the new PD8 Elevated Tanks (Site 57 and Site 71) and new PD9 Pumping Station (Site 57) that will then be distributed through the City of Vaughan’s local water distribution infrastructure (refer to Figure 1-2).

As part of the MCEA Study for the *Northeast Vaughan Water and Wastewater Servicing Project* (GHD, 2019) several different locations for the proposed PD8 Pumping Station were proposed and critically evaluated. The Study concluded that Site 4 was the “most preferred” location as identified through a comparative evaluation and thorough stakeholder consultation. Therefore, the PD8 Pumping Station was proposed to be constructed in the northwest portion of Site 4 (within Block 34E). The proposed size of the facility footprint, as per the MCEA Study (GHD, 2019) is 0.45ha, which will be confirmed during detailed design.

Figure 2-1 identifies the footprint location, the site layout and a digital rendering of the PD8 Pumping Station at preferred Site 4 (looking northwest from Teston Road and Jane Street) from the original 2019 MCEA Study (GHD, 2019).

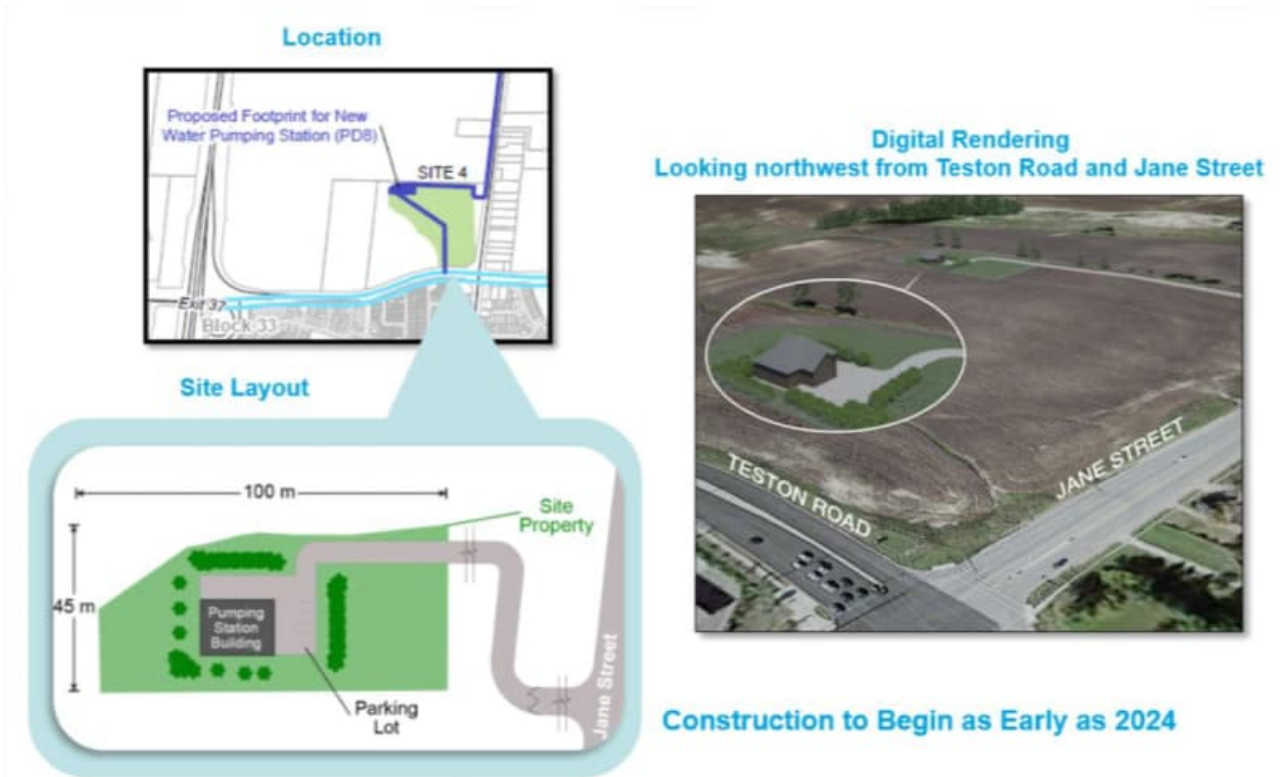


Figure 2-1: Proposed Footprint, Site Layout and Rendering of the PD8 Pumping Station

Source: *Northeast Vaughan Water and Wastewater Servicing Project File Report* (GHD, 2019)

2.2 Proposed Change to PD8 Pumping Station Location

During the MCEA Study, the landowner of Site 4 indicated a preference that the PD8 Pumping Station be relocated off of the Class EA identified site, and further to the northwest to better accommodate the future development of the site (Block 34E). Through further discussions between York Region and the landowner, an agreement between them was made that the preferred location for the PD8 Pumping Station (Site 4) would remain, for the purposes of the 2019 MCEA Study, with the potential to relocate it to the landowner's preferred off-site location in the future. The relocation would be subject to the acceptance by TRCA and others.

Following the MCEA Study and during property acquisition negotiations, the Landowners Group, representing the property owners of Block 34E, identified a preferred alternative location for the PD8 Pumping Station approximately 100m (centre of site) northwest of Site 4. This new location will increase the available development potential for the property owners without significantly reducing the property purchased by York Region. The Block 34E Block Plan has been approved by the City of Vaughan showing the alternative location. Figure 2-2 illustrates the original Site 4 (as per the 2019 MCEA Study) and the proposed Site 4 (henceforth referred to as Site 4 New).

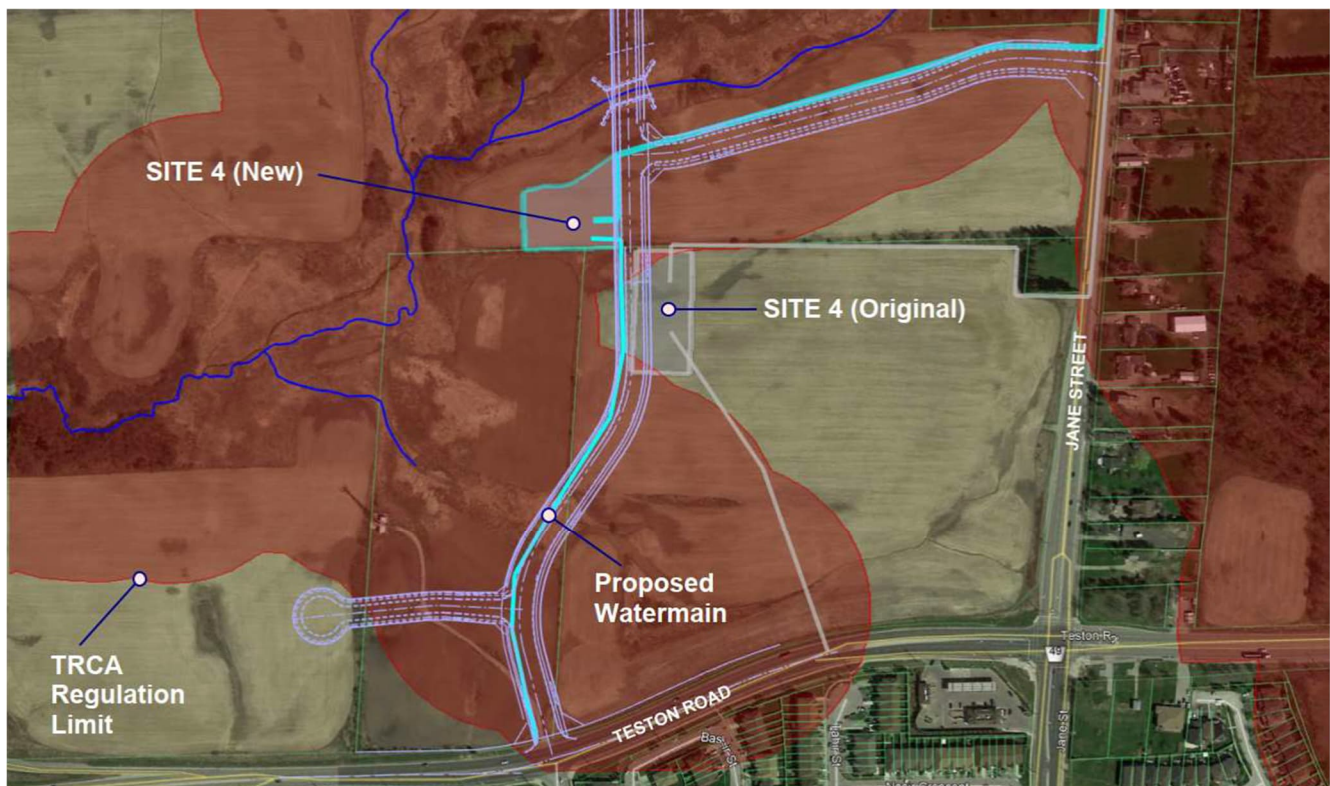


Figure 2-2: Proposed Location of the PD8 Pumping Station (Block 34E)

The Site 4 New location falls within TRCA Regulated Area. The Landowners Group have previously presented the Block Plan to TRCA showing the Site 4 New location. Further discussions between the Region, Associated and TRCA during November 2020, confirmed TRCA's general agreement in principle to the proposed location. Further opportunity for TRCA to comment will be realized through the various permits and approval processes including this

MCEA Addendum, TRCA Application for Development - Interference with Wetlands and Alterations to Shorelines and Watercourses, and Site Plan Approval. The proposed site does not encroach into the mapped floodplain and is outside of a buffer from the natural features that was agreed between TRCA and the Block Developer.

Based on the conceptual PD8 Pumping Station layout, the alternative site will accommodate the pumping station, driveway, parking spaces and standby generator and not encroach on the watercourse buffer area within TRCA regulated lands. Relocation of the PD8 Pumping Station site, will also require changing the watermain pipe alignment to and from the pumping station. Access to the site will be via a driveway off the new spine road within Block 34E. In the event the spine road is not constructed prior to the construction of the PD8 Pumping Station, an easement will be required for temporary construction access and a temporary access road from Jane Street.

As identified in the original MCEA (GHD, 2019) the PD8 Pumping Station is proposed to have the following design features/considerations:

- The new pumping station building would be approximately 2.5 m below grade and one storey in height as shown in the rendering in Figure 2-1. The design of the building will be further refined as part of detailed design in consultation with the City of Vaughan to accommodate their urban design considerations and architectural controls.
- A 900 mm diameter watermain connection would be made from the existing 1800 mm supply main along the north side of the Teston Road right-of-way (ROW) allowance to the new PD8 Pumping Station. The new PD8 watermain would extend from the new pumping station to Jane Street within the proposed access driveway.
- The new pumping station would be constructed through the use of standard heavy construction equipment. The building would be comprised both of cast in place and precast elements, where applicable, to reduce the overall construction schedule. In addition to being approximately one storey in height, the building would have at least a partial basement level to house isolation valves for the watermains and associated infrastructure.

2.3 Description of the Environment Potentially Affected

Similar to the original MCEA Study (GHD, 2019), the new location of the PD8 Pumping Station was reviewed to determine the environment potentially affected as defined in the *Environmental Assessment Act* (natural environment, built environment, social environment, economic environment and cultural environment). In addition to the investigations completed during the original MCEA, several investigations were carried out to support this MCEA Addendum and detailed design in order to provide a more detailed description and understanding of the environment, including:

- Geotechnical Report (Palmer, 2021c)
- Hydrogeological Investigation (Palmer, 2021b)
- Phase One Environmental Site Assessment (Palmer, 2021d)
- Headwater Drainage Feature Assessment (Palmer, 2021a)
- Archaeological Assessment Baseline Conditions and Peer Review (ASI, 2021)

2.3.1 Natural Environment

Areas of natural significance including the Don River West Headwater Wetland Complex on the north side of Teston Road and the Greenbelt's Natural Heritage System are present in the vicinity of Site 4 New. Reaches of the Don River West Branch and tributaries of the Humber River are adjacent to Site 4 New. As noted above, Site 4 New is located within TRCA Regulated lands.

Surface water on Site 4 New drains in a southern direction towards Teston Road, and west towards a tributary of Purpleville Creek, which is a tributary of the Humber River.

Natural heritage baseline investigations are currently being completed to support the detailed design and permitting/approval process required for the PD8 Pumping Station.

2.3.1.1 Headwater Drainage Features

HDF-1 and HDF-2 (Figure 2-3) were observed as two small depressions located east of Site 4 New for the PD8 Pumping Station. These features were surveyed on May 1, 2021 and July 21, 2021. HDF-1 was observed to be less than 1 m wide and was plowed through. HDF-2 was observed to be 2 to 3 m wide and was also plowed through. Standing water was observed within truck tire ruts in the field. Field Horsetail (*Equisetum arvense*) was observed growing at the northern part of this depression. No standing water, vegetation, or connection to the adjacent wetland was observed. There were no signs of continued drainage observed during the July site visit for both features. The terrestrial habitat is limited as these features have no defined channel, do not support amphibian habitat, do not appear to connect two features, and do not facilitate wildlife movement.

HDF-3, HDF-4, and HDF-5 (Figure 2-3) are located at the eastern limits of Site 4. These features were surveyed on March 22, 2021 from the roadside due to site access limitations at the time of the survey. All three features occurred through a Corn (*Zea mays*) field and connect to the roadside ditch along Jane Street that was dominated by dense invasive European Common Reed (*Phragmites australis* ssp. *australis*).

HDF-3 connects to the roadside ditch along Jane Street after passing through an invasive European Common Reed patch. HDF-3 was ill-defined near the roadside of Jane Street. Further west through the open field, it did not have defined banks, but was visible through being slightly depressed and having lighter coloured soils and a lack of corn crops within its alignment. The width of this feature was approximately 1.5 m, and no standing water was observed. This feature connects to a meadow marsh feature downstream.

HDF-4 was ill-defined near the roadside ditch, though this was difficult to assess due to the dense, tall Common Reed. The feature appeared to join with HDF-3 approximately 15 m from the road. This feature also did not have defined banks and was only visible through being slightly depressed and having darker coloured soils and a lack of corn crops within its alignment. Its width through the corn field was approximately 1.5 to 2 m and no standing water was observed. This feature connects to a meadow marsh feature downstream.

HDF-5 was better defined through darkened, depressed soils west of the Common Reed at the roadside edge, and occasional pockets of standing water throughout its alignment. The feature was approximately 0.5 – 1.5 m wide and appeared to connect to HDF-3 and HDF-4 approximately 50 m from Jane Street. Some pockets of standing water were observed. This feature connects to a meadow marsh downstream.

The terrestrial habitat is limited for HDF3, HDF-4, and HDF-5 as these features do not have well-defined banks, do not support amphibian habitat, and do not facilitate wildlife movement.

Due to the limited hydrological functions and absence of terrestrial habitat, HDF-1 and HDF-2 have no management recommendations. Due to the recharge hydrology functions associated with the downstream connection to a stream, HDF-3, HDF-4, and HDF-5 have the management recommendation to maintain recharge functions. The proposed

works associated with the constructions of the PD8 Pumping Station at Site 4 New will not be affected by matters regarding HDF features.

Refer to Appendix A for Palmer's *Headwater Drainage Feature Assessment - Northeast Vaughan Water Servicing Project* technical memorandum.



Figure 2-3: Headwater Drainage Features

Source: *Headwater Drainage Feature Assessment Technical Memorandum (Palmer, 2021a)*

2.3.1.2 Physiography and Surficial Geology

The project area is located within the South Slope physiographic region. This region is characterized by predominantly clay till soils, with some clay loam. The surficial geology of the site, as described by Ontario Geological Survey (OGS) mapping is characterized by the clay to silt-textured Halton Till and modern alluvial deposits.

Site 4 New was found to have fill materials consisting of clayey silt to sandy silt, and sand extending to depths approximately 2.4m below ground surface. Clayey silt till to silty clay till deposits were encountered below the fill materials to approximately 7.2m below ground surface.

Refer to Appendix B for Palmer's *Geotechnical Data Report - Northeast Vaughan Water Servicing Project*.

2.3.1.3 Hydrogeology

Groundwater levels in monitoring wells were measured and recorded in Spring 2021 at Site 4 New. Groundwater levels varied between 2.76 and 2.94 metres below ground surface at the northern limit of the site, while a groundwater level of 4.79m below ground surface was recorded in the middle of the site.

Refer to Appendix C for Palmer's *Hydrogeological Investigation - Northeast Vaughan Water Servicing Project: Part A Factual Report*.

2.3.1.4 Source Water Protection

The site is in the Toronto and Region Source Water Protection Area. Based on available Source Water Protection mapping, the site is situated within a WHPA-Q1/Q2 zone (recharge management), and within Significant Groundwater Recharge Area (SGRA) with a vulnerability score lower than 6. Although the site is not situated within Wellhead Protection Areas (WHPA A to F) or Highly Vulnerable Aquifers, the *Clean Water Act* applies because the site and associated infrastructure are situated within a SGRA. Consequently, the site will be subject to the compliance policies related to maintaining recharge on them. In addition, since the site is situated within the WHPA-Q1/Q2 policy area, which is specific to an area that has a water quantity threat, the proposed infrastructure are subject to the WHPA-Q1/Q2 policies for any required Permit to Take Water (PTTW).

2.3.2 Built, Social and Economic Environments

Site 4 New is located at the northwest corner of Jane Street and Teston Road and is currently used for agricultural purposes. The existing land uses adjacent to the south and east are agricultural land and a residence to the east. To the north and west is a watercourse/natural feature. There is one Area of Potential Environmental Contamination (APEC), an automotive repair garage at 10945 Jane Street, east of Site 4 New.

Although Site 4 New is currently agricultural land, it is proposed for urban development uses in the future. According to York Region's Official Plan, Site 4 New is designated as Urban and is located within the York Region Strategic Employment Lands. Site 4 New is located within the Highway 400 North Employment Lands and is designated as a Mixed Use Area - Employment/Commercial according to the City of Vaughan's Official Plan. Site 4 New is zoned as Agriculture in the City of Vaughan Comprehensive Zoning By-law 1-88.

In accordance with the City of Vaughan Highway 400 North Employment Secondary Plan, the intersection of Jane Street and Teston Road is designated as a Significant Interface Area (SIA) (i.e., significant intersection, which serve as a “gateway” into the employment area - permitted uses in SIAs shall be those in the underlying land use designations).

2.3.3 Cultural Environment

ASI completed an Archaeological Assessment Baseline Conditions and Peer Review of the previous archaeological assessments conducted within Site 4 New. Conclusions of the review confirmed that Site 4 New had been previously cleared of archaeological concern and there is no need for further archaeological assessment.

Similarly, there are no built heritage resources and cultural heritage landscapes on Site 4 New.

Refer to Appendix D for ASI's *Northeast Vaughan Water Servicing Archaeological Assessment Baseline Conditions and Peer Review*.

2.4 Climate Change

Climate change was considered in response to MECP's request and referencing the original MCEA Study (GHD, 2019).

To protect against future impacts of climate change, climate change is now being considered early in infrastructure planning and design in order to create more sustainable and resilient infrastructure. Sustainable and resilient infrastructure will allow for the flexibility needed to account for the uncertainty associated with climate change. With this in mind, the MECP developed a guide entitled *Consideration of Climate Change in Environmental Assessments in Ontario* (the Guide) to aid proponents in considering climate change as part of environmental assessments for infrastructure and facilities.

The Guide outlines MECP's expectations for considering climate change throughout the environmental assessment process. As stated in Section 3.1.2 of the Guide, consideration is to include:

- Effects of a project on climate change
- Effects of climate change on a project
- How the project will minimize identified negative effects on climate change

The preceding was considered for the Project to address potential climate risks to the construction and operation of the preferred water infrastructure.

2.4.1 Regional Perspective

Over the last several decades, Southern Ontario has already experienced a significant number of adverse impacts of extreme weather events and is experiencing changes in its historical climate. It is very likely that a further increase in temperature, precipitation and other climate drivers will continue to occur throughout the 21st century. Temperatures in York Region are very likely to increase in all seasons. Historically (1981-2010) average monthly temperatures have ranged from -7°C in January to 20.4°C in July.

While significant change in the range in average monthly temperatures is not anticipated, it is very likely average temperatures will increase by 3.3°C across all seasons. By the 2050s winter and summer months are likely to

experience more warming than those in fall and spring. Warmer winter temperatures will lead to more precipitation falling as rain instead of snow in York Region.

Furthermore, there is a risk of heavier precipitation events occurring in the region. As an increase in warmer weather will create more moisture to produce storms; 25-year storm events are expected to occur at least once in 10 years. Overall precipitation trends expect total volume increases, intensity, duration and variability. This factor combined with increasing urbanization, a growing population, additional system demands and aging infrastructure, add vulnerability and thus the need for enhanced resilience.

2.4.2 Effects of the Project on Climate Change

Potential effects of the Project on climate change include greenhouse gas (GHG) emissions associated with construction of the proposed water infrastructure. GHG emissions will be generated by the equipment and machinery required for construction, the distance traveled by construction workers to get to and from the site, and the sourcing of construction materials.

Mitigation

To minimize or offset the potential effects of the water infrastructure on climate change, in particular to reduce the GHG emissions associated with the construction, mitigation measures will be implemented. The Guide defines mitigation as “the use of measures or actions to avoid or reduce greenhouse gas emissions, to avoid or reduce effects on carbon sinks, or to protect, enhance, or create carbon sinks”. Mitigation measures include such actions as utilizing different technologies and construction materials.

Mitigation measures to reduce the Project’s effect on climate change will be considered and investigated as part of the detailed design of the water infrastructure and implemented at the onset of construction. Potential Best Management Practices (BMPs)/mitigation measures include the following:

- Implement and enforce an anti-idling policy for all vehicles and machinery on site during the construction stage
- Maintain vehicles/machinery and equipment in good repair, equipped with emission controls, as applicable, and operated within regulatory requirements
- Use construction materials that have a lower carbon footprint and a long lifespan
- Plant additional vegetation to create a carbon sink

2.4.3 Effects of Climate Change on the Project

There are a number of key potential effects of climate change that may occur during the construction and operation of the Project. These may include:

- Increasing frequency of unusually high or low daily temperature extremes
- Long-term increasing or decreasing mean annual temperatures and/or precipitation
- Increasing or decreasing frequency of storm events (e.g., rainfall, snowfall, extreme wind)

The potential impacts of the climate change effects during construction and operation of the proposed water infrastructure are considered to be "low" or "nil". "Low" indicates that the effect may cause a minor impact. "Nil" indicates that no effect is anticipated due to the potential change. Table 2-1 summarizes the estimated sensitivity of the Project to potential climate change effects, taken from the 2019 MCEA Project File Report (GHD, 2019).

Table 2-1: Estimated Sensitivity of the Project to Potential Climate Change Effects (GHD, 2019)

Climate Parameters	Estimated Sensitivity - Construction	Estimated Sensitivity - Operation
Mean Temperature	Nil - Construction of the preferred infrastructure is anticipated to be completed by 2028, during this time only a small variation in the mean temperature is anticipated. Furthermore, infrastructure similar to what is proposed for the Project is successfully constructed in areas with significantly higher/lower mean temperatures.	Low- An increase in mean temperature may cause an increase in damage throughout the life of the proposed infrastructure.
Frequency and/or Severity of Extreme Temperature	Nil - More frequent and/or severity of extreme temperature is not anticipated to effect the construction of the proposed infrastructure.	Low - More frequent and/or severity of extreme temperatures has the potential to increase damage to the infrastructure.
Total Annual Rainfall	Nil - Infrastructure similar to what is proposed for the Project is successfully constructed in areas with significantly higher/lower total annual rainfall volumes.	Nil - Infrastructure similar to what is proposed for the Project exists and successfully operates in areas with significantly higher/lower total annual rainfall volumes.
Total Annual Snowfall	Nil –Infrastructure similar to what is proposed for the Project is successfully constructed in areas with significantly higher/lower total annual snowfall amount.	Nil - Infrastructure similar to what is proposed for the Project exists and successfully operates in areas with significantly higher/lower total annual snowfall amounts.
Frequency and/or Severity of Precipitation and Weather Extremes	Low - More frequent and severe storms have the potential to cause construction delays. As well, there is the potential for more extreme rain events to cause increased erosion and sedimentation through runoff into nearby watercourses.	Nil- More frequent and severe storms and extreme temperatures have the potential to cause structural damage to the proposed infrastructure. However, the proposed infrastructure has been designed to accommodate the Regional storm event, so no potential adverse effects are anticipated.
Soil Moisture & Groundwater	Nil - Soil moisture and groundwater relate to potential weather changes. Infrastructure similar to what is proposed for the Project is successfully constructed in areas with significantly different weather conditions.	Nil - Soil moisture and groundwater relate to potential weather changes. Infrastructure similar to what is proposed for the Project successfully exists and operates in areas with significantly different weather conditions.
Evaporation Rate	Nil - Evaporation rate relates to potential weather changes. Infrastructure similar to what is	Nil - Evaporation rate relates to potential weather changes. Infrastructure similar to what is

Climate Parameters	Estimated Sensitivity - Construction	Estimated Sensitivity - Operation
Wind Velocity	Nil – Wind velocity is related to potential weather changes. Infrastructure similar to what is proposed for the Project is successfully constructed in areas with significantly different weather conditions.	Nil - Wind velocity is related to potential weather changes. Infrastructure similar to what is proposed for the Project successfully exists and operates in areas with significantly different weather conditions.

As the construction stage of the infrastructure will occur over a span of 4 years it has the potential to be impacted by changes in weather patterns. However, it is possible to minimize potential climate change effects related to rainfall, storms, temperature, and moisture by managing the overall construction schedule so that construction does not occur during periods beyond the typical/normal range for these weather parameters.

Throughout the lifetime of the infrastructure extreme heat and more frequent and extreme storm events have a potential to cause increased maintenance requirements. However, the effects are anticipated to be similar to the current weather impacts to infrastructure. Therefore, climate change is not anticipated to have any significant adverse effects on the infrastructure.

Adaptation

Adaptation is focused on addressing effects of climate change on the Project. The Guide defines adaptation as “the process of adjustment in the built and natural environments in response to actual or expected climate change and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects”.

Although it was determined climate change will have no appreciable adverse effects on the infrastructure, possible adaptation measures (energy efficiencies, equipment & material selection, compensation planning, oversizing when required, etc.) will be considered and investigated as part of the detailed design of the infrastructure to increase both the infrastructure’s and the local ecosystem’s resilience to climate change.

In addition to the adaptation measures that will be established during detailed design, York Region has a Regional Emergency Plan, standard operational efficiencies, effective response capacity, built in redundancies and warning systems that will be put in place to increase the resilience of the proposed infrastructure to climate change.

2.5 Proposed Impact Management Measures and Environmental Monitoring

The original MCEA Study (GHD, 2019) identified the potential effects, proposed impact management and measures and resultant net effects associated with the Preferred Water Servicing Solution. Table 2-2 provides an update to the proposed impact management measures and required pre-construction, construction and/or post-construction environmental monitoring associated with the proposed modification of the PD8 Pumping Station location and its connection to the 1800mm supply main along the north side of Teston Road. Where there are no changes to the

potential effects, management measures or monitoring programs compared to the original summary completed for the 2019 MCEA, it has been noted as 'no new effects expected', 'no previous or new mitigation', 'previously identified mitigation to be used' and/or 'previously identified monitoring programs to be used'. Refer to Appendix E for a copy of the Summary of Confirmation of Net Effects and Proposed Monitoring Programs (Table 6.3) from the 2019 MCEA Project File Report (GHD, 2019).

Table 2-2: Summary of Confirmation of Net Effects and Proposed Monitoring Programs for PD8 Pumping Station at Site 4 New (Including New Connection to 1800mm Supply Main)

Category/Criteria	Indicator	Potential Effects	Impact Management Measures	Net Effects	Proposed Monitoring Programs
Natural Environment					
Effect on groundwater	Temporary and/or long-term change in groundwater quality and quantity	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Effect on surface water	Temporary and/or long-term change in surface water quality and quantity	<ul style="list-style-type: none"> A temporary decrease in surface water quality in nearby water features (HDF's on-site) and provincially significant wetland (PSW) – off-site to the west) due to increased sediment in surface water runoff and unintentional release of deleterious substances during construction of the proposed PD8 pumping station at Site 4 New and connection. A temporary loss of a portion of a HDF (on-site) through open cut construction of the proposed connection to the water supply main. Permanent alteration of surface water inputs through increase in impervious surfaces to PSW (off-site to the west) and HDF (on-site). 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Effects on aquatic habitat and species	Temporary or permanent loss of aquatic features or categorical loss of functions by type – including Provincially Significant Wetland, Locally Significant Wetland, watercourses, and others	<ul style="list-style-type: none"> Temporary sedimentation of a HDF (on-site) and PSW (off-site to the west) through surface runoff during construction of the proposed PD8 pumping station at Site 4 New and connection to the 1800 mm supply main. A temporary loss of a portion of a HDF (on-site) through open cut construction of the proposed connection to the water supply main. Permanent alteration of surface water inputs to a HDF (on-site) and PSW (off-site to the west) through an increase in impervious surfaces. 	<ul style="list-style-type: none"> Implement the impact management measures associated with addressing the changes in surface water quality and quantity (see Criterion: Effect on surface water). Limit disturbance to water feature, riparian, and wetland habitat to the extent possible by keeping work site areas in previously disturbed or upland areas. Field delineate the HDF and PSW boundary prior to construction start to ensure impact management measures are appropriately applied to the features (e.g., 30 -120m distance from each feature). Design and construct the stormwater management controls at the proposed PD8 pumping station at Site 4 New to maintain existing surface water inputs to HDF and PSW. SWM controls will include infiltration galleries and bio-retention ponds and will follow both City of Vaughan and TRCA Guidelines. 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used

Category/Criteria	Indicator	Potential Effects	Impact Management Measures	Net Effects	Proposed Monitoring Programs
Effects on aquatic habitat and species	Aquatic communities including aquatic Species at Risk (species of special concern, threatened, endangered) species of local concern potentially affected temporarily or permanently	<ul style="list-style-type: none"> Temporary disturbance to coldwater aquatic species of the East Humber River PSW complex, associated with Purpleville Creek due to a decrease in surface water quality during construction of the proposed PD8 pumping station at Site 4 New and connection, but no permanent disturbance. 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> The potential for temporary disturbance to coldwater aquatic species of the East Humber River PSW complex, associated with Purpleville Creek due to a decrease in surface water quality (increased sediment in surface water runoff) during construction of the PD8 proposed pumping station on Site 4 New and connection would be minimized by implementing the impact management measures. The original Site 4 location identified similar effects, the Site 4 (New) locations does not improve or make worse this effect 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Effect on terrestrial habitat or species	Temporary and/or permanent loss of natural heritage, including vegetation, features by type – including ESAs, ANSIs, wildlife corridors, and others	<ul style="list-style-type: none"> Temporary disturbance/loss of roadside vegetation, including increased susceptibility to invasive species, in the work site area during open cut construction of the connection to the 1800mm supply main on the north side of the Teston Road allowance. Minor loss of mixed forb mineral meadow marsh (MAM2-2) and hedgerow (HR) due to the proposed PD8 pumping station at Site 4 New and the connection to the 1800mm supply main on Teston Road. 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> The disturbance/loss of vegetation, including increased susceptibility to invasive species, in the work site area during construction of the PD8 pumping station and connection to the 1800mm supply main would be minimized by implementing the impact management measures. The original Site 4 location identified similar effects, the Site 4 (New) location does not improve or make worse this effect. The proposed pipe alignment, for Site 4 (New) is through a corn field rather than following an existing hedge line so there is a small reduction in the possible effect. 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Effect on terrestrial habitat or species	Terrestrial species, including Species at Risk, (species of special concern, threatened, endangered) species of local concern, spread of invasive species, and area sensitive species potentially affected temporarily and/or permanently	<ul style="list-style-type: none"> Temporary disturbance to terrestrial species, including any potential Species at Risk, which may use intensive agricultural crops, and spread of invasive species present in surrounding areas during construction of the proposed PD8 pumping station at Site 4 New and connection to the 1800mm supply main, but no permanent disturbance. 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Built Environment					
Effect on agricultural operations and	Approximate area (ha) of active	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required

Category/Criteria	Indicator	Potential Effects	Impact Management Measures	Net Effects	Proposed Monitoring Programs
capital investment related to agriculture	agricultural operations affected				
Effect on agricultural operations and capital investment related to agriculture	Extent of disruption of active agricultural operations (i.e., removal and/or disturbance of farm fences, entrances and paddocks)	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> No previous or new mitigation required 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required
Effect on existing residences, businesses, and/or community, institutional, and recreational facilities	Number of residences, businesses and/or community, institutional, and recreational facilities displaced	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> No previous or new mitigation required 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required
Effect on existing residences, businesses, and/or community, institutional, and recreational facilities	Number of residences, businesses and/or community, institutional, and recreational facilities having their driveway access temporarily or permanently disrupted	<ul style="list-style-type: none"> No temporary or permanent disruption to any residences, businesses and community, institutional, and recreational facilities because only a connection between the proposed PD8 pumping station at Site 4 New and the 1800mm supply main would be constructed in the boulevard on the north side of Teston Road. 	<ul style="list-style-type: none"> No previous or new mitigation required 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required
Effect of vibration on existing buildings	Number of existing buildings affected and extent and duration of adverse effects	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Effect on property	Number and area of properties affected and ownership	<ul style="list-style-type: none"> Partial acquisition of 1 private property for the proposed PD8 Pumping Station at Site 4 New 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Partial acquisition of 1 private property for the proposed PD8 pumping station at Site 4 New would be compensated for at fair market value in accordance with York Region's policies and applicable laws. 	<ul style="list-style-type: none"> No previous or new monitoring program required
Effect on existing roadway/utility infrastructure	Number of roadways and type affected and extent and duration of adverse effects	<ul style="list-style-type: none"> No effect on any existing roadways because the connection of the proposed PD8 pumping station at Site 4 New to the existing 1800mm supply main would be completed within the northern boulevard of the Teston Road right-of-way. 	<ul style="list-style-type: none"> No previous or new mitigation required 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required
Effect on existing roadway/utility infrastructure	Number and type of utilities affected and extent and duration of adverse effects	<ul style="list-style-type: none"> Temporary disruption to 2 utilities during construction of the connection of the proposed PD8 pumping station at Site 4 New to the existing 1800mm 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required

Category/Criteria	Indicator	Potential Effects	Impact Management Measures	Net Effects	Proposed Monitoring Programs
		supply main: Overhead hydro and 1800 mm diameter supply main			
Effect on traffic	Temporary and/or permanent disruption to traffic operations	<ul style="list-style-type: none"> No temporary or permanent disruption to traffic operations on Teston Road because the connection of the proposed PD8 pumping station at Site 4 New to the existing 1800mm supply main would be completed in the northern boulevard of Teston Road without the loss of a traffic lane. 	<ul style="list-style-type: none"> No previous or new mitigation required 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required
Effect of environmental impairment areas on the proposed infrastructure	Proximity to areas of environmental impairment (AEI)	<ul style="list-style-type: none"> Impacted soil/groundwater affecting construction of the pumping station and watermain connection because of AEI (Existing Automotive Repair Garage at 10945 Jane Street) in close proximity to the work site 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Social Environment					
Effect on wells	Number of wells and type affected, extent and duration and nature (water quality/quantity) of adverse effects	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Effect of noise on sensitive receptors	Number of sensitive receptors affected and extent and duration of adverse effects	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Effect of perceptible vibration levels on sensitive receptors	Number of sensitive receptors affected and extent and duration of adverse effects	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Effect of particulate on sensitive receptors	Number of sensitive receptors impacted and extent and duration of impacts	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> Previously identified mitigation to be used 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> Previously identified monitoring programs to be used
Economic Environment					
Effect on approved/planned land uses	Number, extent, and type of approved/planned land uses affected	<ul style="list-style-type: none"> Site 4 New will impact approved/planned urban land use within Block 34E 	<ul style="list-style-type: none"> Site 4 New was identified as preferred location (compared to original Site 4) to minimize impacts on the land use plan for Block 34E 	<ul style="list-style-type: none"> Siting of the PD8 Pumping Station and resulting permanent impacts on Block 34 approved Block Plan has been minimized due to proposed Site 4 New location 	<ul style="list-style-type: none"> No previous or new monitoring program required
Effect on agricultural soil resources	Approximate area (ha) of Class 1, Class	<ul style="list-style-type: none"> Removal of approx. 0.45ha of Class 1 soils for the proposed PD8 pumping 	<ul style="list-style-type: none"> No previous or new mitigation required 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required

Category/Criteria	Indicator	Potential Effects	Impact Management Measures	Net Effects	Proposed Monitoring Programs
	2, and Class 3 soils removed (priority in that order)	station at Site 4 New, which are designated for future urban development uses.			
Cultural Environment					
Effects on known or potential significant archaeological resources	Number and type of potentially significant, known archaeological sites affected	<ul style="list-style-type: none"> No known archaeological sites affected at Site 4 New 	<ul style="list-style-type: none"> No previous or new mitigation required 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required
Effects on known or potential significant archaeological resources	Area (ha) of archaeological potential (i.e., lands with potential for the presence of significant archaeological resources) affected	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> No previous or new mitigation required 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required
Effects on built heritage resources and cultural heritage landscapes	Number and type of built heritage resources and/or cultural heritage landscapes displaced or disrupted	<ul style="list-style-type: none"> No new effects expected 	<ul style="list-style-type: none"> No previous or new mitigation required 	<ul style="list-style-type: none"> Net effects remain unchanged 	<ul style="list-style-type: none"> No previous or new monitoring program required

3 PUBLIC AND STAKEHOLDER CONSULTATION

Consultation with key stakeholders and Indigenous communities who may be potentially affected by the proposed modification to the PD8 Pumping Station location was carried out during the addendum process. Sections 3.1 and 3.2 below summarize stakeholder and Indigenous communities consultation. No public concerns were raised to date during the addendum process, however, will be addressed if any are brought forward in the 30-day public review of this report.

3.1 Stakeholder Consultation

A Notice letter was sent to several stakeholders on April 22, 2021 indicating that an Addendum was being initiated to review the proposed change in location for the PD8 Pumping Station; refer to Appendix F for a copy of the Notice letter. The key stakeholders contacted for their comments via the Notice letter included:

- City of Vaughan
- Toronto and Region Conservation Authority (TRCA)
- Ministry of Environment, Conservation and Parks (MECP)
- DG Group (DG Group represents the Block 34 Landowner Group, who currently own the proposed Site 4 (New) Property)

Comments and responses received during the Addendum process are also provided in Appendix F.

3.2 Indigenous Communities Consultation

A Notice letter was sent to Indigenous Communities, which were contacted during the original Class EA Study (GHD, 2019), via email indicating that an Addendum was being initiated to review the proposed change in location for the PD8 Pumping Station. Further contact was made to Indigenous Communities, using an updated contact list as per MECP request, through a pre-completion letter sent via email. Refer to Appendix F for a copy of the letters to Indigenous Communities.

The Indigenous Communities that were contacted during the addendum process included:

- Alderville First Nation
- Beausoleil First Nation
- Chippewas of Georgina Island First Nation
- Chippewas of Rama First Nation
- Curve Lake First Nation
- Hiawatha First Nation
- Huron Wendat Nation
- Kawartha Nishnawbe First Nation
- Mississaugas of Credit First Nation
- Mississaugas of Scugog Island First Nation
- Metis Nation of Ontario
- Metis National Council
- Williams Treaty First Nation

Responses received during the Addendum process from Indigenous communities are summarized in Table 3-1 and provided in Appendix F. Where no responses were received from the letters, follow up phone calls to the

Communities were completed. Table F-1, in Appendix F, provides a summary of the communication between the project team and Indigenous Communities.

Table 3-1: Responses from Indigenous Communities

Indigenous Community	Response	Outcome/Action by Project Team
Chippewas of Rama First Nation	<ul style="list-style-type: none"> Requested copy of EA Revision Report once available 	<ul style="list-style-type: none"> Provided commitment to send EA Revision Report once finalized
Curve Lake First Nation (CLFN)	<ul style="list-style-type: none"> Expressed interest in project and requested more information regarding project Requested copy of Stage 1 Archaeological Assessment Report Identified desire to be involved with project including environmental monitoring during construction Requested that environmental features be fully protected and CLFN rights are acknowledged and protected 	<ul style="list-style-type: none"> Provided further project information and Stage 1 Archaeological Assessment Report Scheduled a meeting with CLFN and 4 Directions to discuss project and involvement Conducted site walk with CLFN and 4 Directions representatives Region committed to further engagement with CLFN through the design and construction phases
Huron Wendat Nation	<ul style="list-style-type: none"> Requested copy of Stage 1 Archaeological Assessment Report 	<ul style="list-style-type: none"> Provided Stage 1 Archaeological Assessment Report
Mississaugas of Credit First Nation (MCFN)	<ul style="list-style-type: none"> Requested copy of EA Revision Report and Stage 1 Archaeological Assessment Report Provided comments on Archaeological Assessment Report with respect to ossuaries 	<ul style="list-style-type: none"> Provided Stage 1 Archaeological Assessment Report Provided commitment to send EA Revision Report once finalized Provided response to archaeological concerns

As outlined in the 'Protocol for First Nations Consultation', York Region will continue to communicate with Indigenous Communities during design and construction to identify and address specific cultural and heritage interests that Indigenous Communities may have within the project area and potential impacts to established or asserted Indigenous or Treaty rights or Claims within the project area.

3.3 Notice of Filing of Addendum

A Notice of Filing of Addendum will be issued, and a 30-day review period will be provided for the public, interested parties and review agencies to review and respond to the Addendum. The Region will notify all parties who were previously engaged in the 2019 *Northeast Vaughan Water and Wastewater Servicing Project* as well as newly potentially affected stakeholders. A copy of the Notice of Filing of Addendum is provided in Appendix G.

Ongoing consultation with interested and impacted parties will be conducted during the design and construction phases as required.

4 CONCLUSION

Due to the proposed location change of the PD8 Pumping Station, as part of the preferred water servicing works for northeast Vaughan, York Region has completed an addendum to the 2019 *Northeast Vaughan Water and Wastewater Servicing Project* PFR (GHD, 2019) that identifies the new location for the PD8 Pumping Station and potential impacts of the modification. The project modification will result in the proposed site being closer to the creek and within TRCA regulated area, but the floodplain will not be impacted, and the buffer agreed between the Block 34 Developer and TRCA will be respected. The overall net effects are small but positive and will reduce the property impacts of the original location identified in the PFR.

4.1 Next Steps

If no concerns are expressed by the conclusion of the 30-day review period, the Region may proceed with the design and implementation of the proposed works. The Region anticipates subsequent public consultation throughout the design and construction phases of the project. The project is expected to proceed as follows:

- Notice of Filing of Addendum April 6, 2023
- Project File Addendum Available for Public Review April 6, 2023
- Design 2022-2023
- Construction (Anticipated) 2024/2025
- Commissioning (Anticipated) 2025

REFERENCES

- Archaeological Service Inc (ASI), 2021. *Northeast Vaughan Water Servicing Archaeological Assessment Baseline Conditions & Peer Review*. Prepared for Associated Engineering and Regional Municipality of York.
- GHD, 2019. *Northeast Vaughan Water and Wastewater Servicing Project, Project File*. Prepared for Regional Municipality of York.
- Palmer, 2021a. *Headwater Drainage Feature Assessment for Northeast Vaughan Water Servicing Project*. Prepared for Regional Municipality of York.
- Palmer, 2021b. *Hydrogeological Investigation – Northeast Vaughan Water Servicing Project: Part A Factual Report*. Prepared for Regional Municipality of York.
- Palmer, 2021c. *Geotechnical Data Report – Northeast Vaughan Water Servicing Project*. Prepared for Regional Municipality of York.
- Palmer, 2021d. *Phase One Environmental Site Assessment (ESA) – Northeast Vaughan Water Servicing Project*. Prepared for Regional Municipality of York.

APPENDIX A – HEADWATERS DRAINAGE FEATURE ASSESSMENT

APPENDIX B - GEOTECHNICAL REPORT

APPENDIX C - HYDROGEOLOGICAL INVESTIGATION REPORT

APPENDIX D - ARCHAEOLOGICAL BASELINE REPORT

APPENDIX E - SUMMARY TABLE 6.3 (GHD, 2019)

APPENDIX F - CONSULTATION MATERIAL

APPENDIX G - NOTICE OF FILING OF ADDENDUM