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Elliott Road under construction

## Project construction, tendering moves ahead

The first major construction contract for the Port Granby Project – the rebuilding of Elliott Road – is nearing completion. Paving is almost finished on the former dirt path that is now a nine metre-wide, two-lane roadway with gravel shoulders. Elliott Road forms part of the clean construction material transportation route that leads to the site of the new long-term waste management facility.

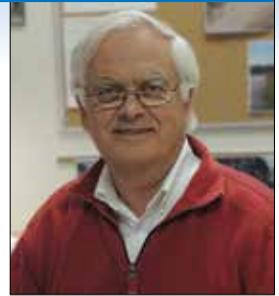
Work on the route continues with the resurfacing of Concession Road 1 from Elliott Road to Newtonville Road, and on Newtonville Road from Concession Road 1 to Highway 401. A contract was awarded to Cruickshank Construction Limited at the end of September to complete this work by the end of November.

The Water Treatment Plant contract, which was posted on October 15 to the federal government tendering system MERX, is expected to be awarded by the end of this year. The plant will be located on the long-term waste management facility site, on the east side of Elliott Road and south of the railway lines. It is anticipated the construction and commissioning work will take 20-22 months.

## Letter from the Port Granby Project director

Since joining the Port Hope Area Initiative Management Office (PHAI MO) in March 2012, it's been my privilege to be part of the significant progress clearly underway on the Port Granby Project.

As residents know, the first major construction contract for the rebuilding of Elliott Road got underway back in May. Five months later, and we're in the homestretch. Like any construction project, Elliott Road wasn't without its challenges, and the patience displayed by area residents is acknowledged and appreciated. It also marked the first in-field execution of the PHAI MO's Dust Management Requirements and Plan, and I'm happy to report that we were successful in our efforts to prevent and manage dust. More about dust management can be found on page six.



To those residents who took the time to express your concerns as we worked in your community – thank you. We need to hear from you throughout the Project so that we can fulfill our commitment to minimize its impacts in your community.

The attendance and interest by local residents at the Port Granby Discussion Group meetings continue to impress me. At the March 21 and Sept. 26 meetings, well over 25 residents turned out to discuss the Project. At the last meeting, we offered tours of the existing site and the Elliott Road construction activities. These are being made available for your interest and information, and we hope that you take advantage of them. You can contact our office at 905.885.0291 or [info@phai.ca](mailto:info@phai.ca) for more information or to sign up for a tour.

In the New Year, the Project will move ahead with the building of the new water treatment plant, followed by the start of construction of the long-term waste management facility later in 2013. As we move forward, we remain committed to keeping you updated on progress and responding to your concerns.

I look forward to seeing many of you again at the next Port Granby Discussion Group meeting.

Best regards,

A handwritten signature in black ink, which appears to read "David Smith". The signature is written in a cursive, flowing style.

David Smith  
Port Granby Project director

...Project construction continued from page 1

The tender posting for the construction of the long-term waste management facility and remediation of the existing Port Granby Waste Management Facility is planned for January, with a contract award anticipated by August of 2013.

Once the contract is in place, the first step will be to install the underpass below Lakeshore Road and to construct the new internal access road that will directly connect the existing site and the new long-term waste management facility. The activities to move the historic low-level radioactive waste and place it in the long-term, engineered aboveground mound are anticipated to begin in late 2014/2015. There will be no transportation of waste on public roads.



Paving at Elliott Road at CP Rail underpass



Weekly Elliott Road construction meeting

Throughout all work, environmental monitoring will be underway, and the PHAI MO will continue to work closely with the Municipality of Clarington and consult with local residents and other stakeholders to ensure the Project's impact on the community is minimized.

## Upgrading the clean material transportation route

Road improvements along Concession Road 1 and Newtonville Road got underway in October.

The contract for these improvements was awarded at the end of September to Cruickshank Construction of Kingston, Ontario.

Concession Road 1 and Newtonville Road are being resurfaced to accommodate the additional traffic flow from trucks carrying clean construction materials to the new long-term waste management facility. The smooth and well maintained road surfaces will help to minimize traffic noise and dust. Culverts along this route are being replaced to improve water flow and to protect fish habitat.

Over the course of the Port Granby Project, the Port Hope Area Initiative Management Office and the Municipality of Clarington will continue to conduct road inspections along these roadways and perform repairs as needed.



Cleaning out ditches along Concession Road 1

## Fish Habitat Compensation Plan helps protect local environment

An important environmental feature of the Port Granby area is the Port Granby Creek, which passes under Concession Road 1 and Elliott Road. Protecting the natural environment is one of the Port Hope Area Initiative Management Office's (PHAI MO) commitments while undertaking the Port Granby Project.

The PHAI MO has developed a *Fish Habitat Compensation Plan* as a key component of its environmental protection strategy. The plan will enhance and improve fish habitat along Port Granby Creek in the areas of Concession Road 1 and Elliott Road. It meets the requirements of the *Federal Fisheries Act*, which sets out regulations developed by Fisheries and Oceans Canada.

The improvements include the installation and replacement of several culverts, which run beneath Elliott Road and Concession Road 1, providing a passageway for the Port Granby Creek and its tributaries into Lake Ontario.

Earlier this year, the Project installed a fence on private property along a stretch of the Port Granby Creek, north of Concession Road 1 and just east of Elliott Road. The fence creates a 30-metre buffer between the property owner's cattle and the waterway to protect the creek and



Collecting water samples in Port Granby Creek

allow the bank to return to a more natural state. To assist with the naturalization process, the Project has also committed to remove invasive plant species from the banks of the creek and replace them with indigenous trees and shrubs.

These improvements will help to enhance the overall ecological health of the creek, ensure the protection of fish and plant species that populate the ecosystem, and improve the quality of water entering Lake Ontario.

## Improvements to existing facility focus on safety

Since assuming operation of the existing Port Granby Waste Management Facility in March 2012, the Port Hope Area Initiative Management Office (PHAI MO) has installed a new fire alarm system, security cameras and additional lighting and signage at the facility site.

The PHAI MO took responsibility for the facility in March 2012 after the Canadian Nuclear Safety Commission granted the licence for the Port Granby Project. The licence enabled the Government of Canada to acquire 275 hectares of land from Cameco Corporation, which includes the existing facility and the site of the future long-term waste management facility.

“The PHAI MO is committed to the safe operation of the Port Granby Waste Management Facility,” said Dave Smith, Port Granby Project director. “Since taking



**New signage is just one of the new security features at the Port Granby Waste Management Facility**

over the facility, the PHAI MO has made improvements to the building and site to ensure that work can be carried out safely and efficiently.”

The PHAI MO will continue to operate the existing water treatment plant until the new plant is fully operational.



**Aerial view of the existing Port Granby Waste Management Facility**

## Plan proves effective to manage dust

The Port Hope Area Initiative (PHAI) Dust Management Requirements and Plan was implemented to control and monitor dust during the construction of Elliott Road. Despite the challenges of a hot and dry summer, the plan demonstrated that dust can be effectively managed and controlled.

The plan takes a three-pronged approach to Prevent, Monitor and Control dust and sets out actions, roles and responsibilities for all project staff and contractors carrying out work with the potential to cause dust. It also establishes limits – action and administrative control levels – to provide an early warning so action can be taken if real-time monitoring indicates levels are greater than expected.

### Prevent

Taking proactive measures to prevent dust is a key component of the Dust Management Requirements and Plan. If dust is observed or if monitoring indicates a level is exceeded, corrective actions are taken. The plan also prohibits work from starting when wind speed is predicted to exceed 36 km/hr throughout the day. The Port Granby Project has a dedicated meteorological station on site.

Ambler Inc., the contractor for the Elliott Road construction project, implemented preventive measures as set out in the plan throughout construction including:

- Spraying water on the roads and work site
- Employing two water trucks
- Requiring drivers to reduce speeds
- Placing wet earth on top of the dry soil



Independent dust monitoring consultant

### Monitor and control

The stringent dust monitoring plan identifies three distinct areas of responsibility to ensure dust is monitored at the source of work, the perimeter of the work site and the project boundary:

**Contractor** – Monitors at the source, at the work site. Contractors wear a portable device on their shirts or may use hand-held monitors which alert them immediately to dust that exceeds the required levels. Immediate action is taken whenever dust is visible or levels are exceeded.

**Independent Dust Monitoring Consultant** – Monitors inside the perimeter of the work site.



Water truck sprays water to suppress dust

## Online dust monitoring results



The PHAI MO posts daily results to its website, [www.phai.ca](http://www.phai.ca), under the Environmental Monitoring tab. Here, anyone can view the daily average along with the action required, if any.

**Green** – Less than 80% of the Action Level (<96  $\mu\text{g}/\text{m}^3$  averaged over 15 minutes)

**Yellow** - More than 80% and less than 100% of the Action Level ( $\geq 96$  and  $< 120 \mu\text{g}/\text{m}^3$  averaged over 15 minutes)

**Orange** - More than 100% of the Action Level ( $\geq 120 \mu\text{g}/\text{m}^3$  averaged over 15 minutes)

Using portable monitoring devices, real-time readings are taken every hour for 15 minutes. Monitors are positioned upwind and downwind of the work site and moved according to wind direction and speed.

**AECL Oversight** – Monitors at the project boundary. Stationary high-volume air samplers are placed at the project boundary to collect data continuously while work is underway. Filters are removed daily and sent to a third-party lab for analysis.

PHAI MO staff replaces the filters daily, and results are analyzed by an independent lab.

Data from the monitors over the course of the Elliott Road construction indicated that daily average dust levels were within limits as established in the PHAI Dust Management Requirements and Plan.



Mini-vol takes 12-hour readings

### Mini-Vols

The PHAI Management Office worked with two local residents to place miniature air volume monitors (mini-vols) at their properties. One is positioned near the Elliott Road construction on Concession Road 1. The second one is located at

Lakeshore Road and East Townline Road.

Mini-vols can be installed where needed and operate without a permanent source of hydro. They record dust levels on a 12-hour basis.

### Air movement study

The PHAI MO engaged a specialist consultant to determine the influence of a proposed wind turbine project on air movement in the area of the Port Granby Project in southeast Clarington. The study was undertaken to determine if the proposed project could have an impact on the PHAI MO's ability to effectively monitor and manage dust related to the Port Granby Project construction activities.

The investigation used computer modelling to predict if and how air movement might be affected at ground level as a result of the wind energy proposal.

The study concluded that there would be no impact on dust monitoring activities. The Municipality of Clarington's Peer Review Team reviewed the air movement study and fully supported its conclusions. A full copy of the report is available for pick-up at the Public Information Exchange at 115 Toronto Road in Port Hope or by requesting one via phone, 905.885.0291 or email [info@phai.ca](mailto:info@phai.ca)

## Community

### Project initiates graduation awards

Environmental stewardship is a responsibility that the Port Hope Area Initiative Management Office (PHAI MO) takes seriously as it endeavours to make positive impacts on the lives of the people who live and work in the local communities.

This past June, Port Granby Project director Dave Smith presented the PHAI MO's first Environmental Stewardship Award to Clarke High School graduate, Matthew Bradley, at the school's commencement ceremony. The award recognizes a student who, through academic



**Dave Smith, Port Granby Project director, congratulates Matthew Bradley, Clarke High School, recipient of the PHAI MO Environmental Stewardship Award**

and extra-curricular activities, demonstrates excellence and interest in environmental science or a related field and has been accepted to a post-secondary program in the sciences or environment. The award will be offered to a Clarke High School graduating student every year for the duration of the 10-year, Port Granby Project.

Also in June, the PHAI MO presented its first Natural Science Award for a graduating Grade 3 student at Curve Lake First Nation School. Judy Herod, acting manager Stakeholder Relations and Communications, represented the PHAI MO in presenting the award to Angus Blodgett at the graduation ceremony. The award will be offered to a Curve Lake Grade 3 graduating student every year during the 10-year project.



**Angus Blodgett (left) accepts the PHAI MO Grade 3 Curve Lake Natural Science Award from Judy Herod, acting manager, Stakeholder Relations and Communications, PHAI MO**

# Tree planting will screen views of future facility

As part of the landscaping for the long-term waste management facility, 140 trees are being planted this fall east of Elliott Road and north of Lakeshore Road. The planting, which is taking place on federal land, will help to screen views of the new long-term waste management facility.

To ensure the new trees adapt well, a variety of indigenous species have been selected, including 40 mature trees eight to 10 metres in height. The 2.5 hectare area of land is currently occupied by low-lying scrub and soybean fields and will not be affected by future construction activities.

A tree line is also being planted on a section of federal land along the south side of the CN rail line between Nichols Road and Elliott



Trees will be planted on federal lands

Road. Composed of varying heights, the trees will help the northern side of the aboveground mound to blend into the natural landscape.

# Project launches new citizen advisory group

The Port Hope Area Initiative Management Office (PHAI MO) is inviting members of the Southeast Clarington community to contribute their skills and perspectives to a new advisory group for the Port Granby Project.

The Port Granby Project Citizen Liaison Group (CLG) will bring together representatives from various sectors within the community to represent a broad cross-section of opinions and views. The CLG will provide an opportunity for information sharing and involvement.

Membership will be composed of up to six representatives from various organizations within the community that focus on areas such as the environment, business, education, health and community life. CLG members will suggest ways to enhance community relations, promote

an understanding of the Project and participate in verifying that environmental monitoring requirements have been met.

The PHAI MO is inviting expressions of interest during November and December through local advertising, letters to community organizations and on the PHAI MO website ([www.phai.ca](http://www.phai.ca)). Member selection is anticipated in early January with the first meeting to be held early in the New Year.

The CLG will complement other opportunities the PHAI MO provides for information sharing and public involvement such as the Port Granby Discussion Group, the Port Granby newsletter, public attitude survey and open houses and information sessions.

## Construction of new water treatment plant to begin in 2013

With Elliott Road construction moving toward completion, the Port Hope Area Initiative Management Office is preparing the second of three major contracts for the Port Granby Project. The new water treatment plant contract is scheduled to be tendered by the end of this year.

Construction of the new plant will begin in 2013 and is expected to take about 20-22 months to build and commission. The plant will treat all surface and groundwater at the site during construction of the long-term waste management facility, as well as leachate (moisture draining from waste) from within the aboveground mound after it is built. Water collected from the truck washing station and personnel showers will also be treated.

The plant will also treat groundwater and surface water collected at the existing Port Granby Waste Management Facility site,

which will be pumped to the new plant for treatment during waste excavation at that site. Following completion of the Port Granby Project, groundwater from the existing site's East Gorge will continue to be pumped and treated at the plant until monitoring confirms this is no longer necessary.

The plant will use best available technologies including a two-stage treatment process. The first stage will use micro biological treatment to remove nitrogen compounds, followed by a reverse-osmosis stage to remove metals and radionuclides. Once the water is treated and filtered it will be discharged into Lake Ontario. The treatment will substantially improve the quality of water discharged and protect the Great Lakes Basin ecosystem.

The plant will be operational before any excavating of waste begins.

Artist's rendering of the new water treatment plant



# Elliott Road under construction

A groundbreaking ceremony under sunny skies marked the beginning of the first major construction project for the Port Granby Project – that was May 24, 2012. Now, over five months later, it's a very different scene along Elliott Road as the extensive rebuilding of what once was a single-lane dirt path has come a long way.

Mississauga-based Ambler & Co. Inc. was awarded the \$4.4 million federal government contract to rebuild the 1.6 kilometre section of Elliott Road and to prepare the site for the new long-term waste management facility.

Record heat and dry conditions made this summer's construction activities challenging. In spite of this, dust monitoring teams made sure dust was controlled and successfully met the requirements of the PHAI Dust Management Requirements and Plan. Other challenges included CN Rail closing its rail crossing for safety reasons, which divided the construction zone into two sites – north and south. This unexpected closure meant that trucks could only access the south end of the construction site from Lakeshore Road. The CN Rail crossing is scheduled to be reopened by the end of this year.

A number of culverts cross under Elliott Road to provide a passageway for Port Granby Creek and its many tributaries into Lake Ontario.



Construction crews install culvert six on Elliott Road



Interior view of installed culvert

The construction of culvert six (pictured above), located a few hundred metres north of the CN tracks, was a substantial undertaking that required the installation of 22 individual culvert boxes weighing 22 tonnes each. The installation took three days and is engineered to withstand a 100-year storm.

Construction continues to move towards completion with paving expected to be finished in November, depending on weather conditions.

## Get to know our staff

### Gelu Tamas

Gelu joined the PHAI MO team in Jan. 2012 as the Port Granby Project Long-Term Waste Management Facilities manager. He manages operations at the existing waste management facility and will assume responsibility for the new long-term facility once it is built.

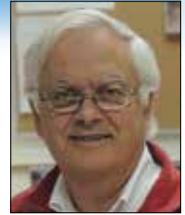


A mechanical engineer with over 15 years of experience, Gelu previously worked at Novopharm as a mechanical systems specialist and with Public Works and Government Services Canada as a project manager. While managing the Port Hope Project's access road construction, Gelu became passionate about what the PHAI is doing for the local environment.

"I'm proud to be part of this important project. It feels good to go to work every day knowing that you're making a difference." Gelu now calls Oshawa home with his wife and two young daughters.

### Dave Smith

Dave joined the PHAI MO in March 2012 as the Port Granby Project director.



A civil engineer for over 35 years, Dave has spent the majority of his career in Ottawa as an engineering consultant in the fields of municipal and environmental engineering. An active member of the Association of Professional Engineers of Ontario (PEO), Dave has served a term as chairman of the Ottawa Chapter, two terms as Eastern Region councillor and has spent the last 25 years as a member of the PEO's Discipline Committee adjudicating at hearings of professional misconduct.

While pursuing his engineering degree at the University of Toronto, Dave met and married his wife, Glenna. They have two grown sons and became first-time grandparents this year. "I'm thrilled to be part of the Port Granby Project and know that the work we are doing today will benefit future generations."

## Important Reminders & Upcoming Events

### Port Granby Discussion Group

- Wednesday, November 28

### Resident Tours

- Contact the PHAI MO at [info@phai.ca](mailto:info@phai.ca) or 905.885.0291

### Project Information Exchange & Property Value Protection Program

115 Toronto Road, Port Hope, ON L1A 3S4 • Tel: 905.885.0291 • Fax: 905.885.9344 • [info@phai.ca](mailto:info@phai.ca) • [www.phai.ca](http://www.phai.ca)

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