



Celebrating Achievements in Aggregate

2022 INDUSTRY
ADVANCEMENT
& STUDENT
DESIGN AWARDS



Environmental Achievement

The Environmental Achievement Award recognizes OSSGA members that have developed and successfully implemented industry-leading policies, programs or projects that make positive contributions to the environment and motivate leadership within the industry.

Fowler Construction Company Limited

Rosewarne Quarry Township of Macaulay

The Rosewarne Quarry Power Project was launched with the aim of reducing operation emissions, saving costs and decreasing noise at the Macaulay Township site. As part of the project, the quarry replaced a 1250-kW diesel generator that powered its secondary cone crusher, tertiary cone crusher and wash plant with electricity supplied by Lakeland Power.

The electricity is delivered through a 27.6-kV powerline attached to a capacitor bank that stores the power to supplement high energy demand during the plant start-up. As a result of the electric conversion, Fowler Construction ended up reducing its annual diesel demand by 342,000 litres and eliminating the need for diesel exhaust fluid, oil and filters. Moreover, it successfully boosted its Power Factor from 0.6 to 0.9, exceeding its initial goals and improving energy efficiency.

The Rosewarne Quarry Power Project continues to generate benefits for its surrounding community. Replacing the diesel generator has eliminated an estimated 1.39 million kilograms of greenhouse gas (GHG) that would have been produced without the conversion, improving air quality for its Muskoka neighbours. The electrification initiative has also drastically reduced noise from the quarry and facilitated more aggregate production at the plant, further affirming the overall success of the conversion project.



A SPECIAL THANKS TO THE JUDGES

The Industry Awards Review Panel was comprised of judges invited from outside the industry, including: Danielle Solondz, The Ontario Aggregate Resources Corporation; Andrew MacDonald, Ministry of Natural Resources and Forestry; and Sandra Easton, Mayor of Lincoln. The Environmental Achievement Award was judged by Brian Sulley, RWDI, and Matt Bertram, Skelton Brumwell & Associates Inc.

The Student Design Award Review Panel was comprised of members of OSSGA's Rehabilitation and Ecology Committees: George Antoniuk, The Miller Group; Matt Bertram, Skelton Brumwell & Associates Inc.; and Kevin Fitzpatrick, WSP Canada Inc.



The Community Relations Award recognizes those who have demonstrated leadership in promoting good neighbour relations, community involvement, education, and industry awareness.

GIP Properties Corp.

Elginburg Quarry
City of Kingston



Elginburg Quarry's first OSSGA Community Relations Award recognizes the site's multifaceted approach to being a good neighbour. Since acquiring the quarry in 2018, GIP Properties Corp. has made dust, traffic and noise mitigation an ongoing focus while its Community Liaison Committee (CLC) has ensured that the public has many opportunities to share their feedback and concerns.

The quarry has also made strides to support its community. It sponsors several organizations and events, including the Kingston Construction Association, the Maritime Night event (for the Kingston Construction Association), the Kingston Home Builders Association's Golf Tournament and local hockey teams, and is in talks with its municipality to voluntarily complete improvements at a nearby intersection.

Communication is central to Elginburg Quarry's community relations strategy. To that end, it works to keep the public informed through its website, site tours, CLC outreach, and other community feedback initiatives.



Miller Paving Limited - A Colas Company

Carden Quarry
City of Kawartha Lakes

Carden Quarry aims to reach beyond the status quo to minimize the impact of its operations and to build ties with its community. Within its boundaries, the team controls onsite noise, dust and traffic generated from its operation through advanced practices, equipment and natural solutions, such as planting trees to dampen sound and green its footprint.

Outside its gates, Carden Quarry provides donations and support to local organizations and initiatives, including the Ramara Historical Society's Yesteryear event, the Couchiching Conservancy's Nuts for Nature event, the Ramara Soccer program, Ducks Unlimited Canada, the Métis Nation of Ontario Annual General Assembly, and local fundraisers. In partnership with Miller Paving and its E-Team, quarry staff are also involved in tree plantings, environmental cleanup events, invasive species removal, and garden planting. These and other community activities are regularly shared with the public on Miller Paving's website, and in its newsletter, e-blasts, and other communication tools.

GIP Aggregates Inc.

McCarthy Quarry
Township of Ramara



Neighbour relations rank high among McCarthy Quarry's priorities. Beyond going to great lengths to mitigate the noise, dust and traffic activity from its operations, the site is dedicated to making community improvements and to developing local highways and roads. Furthermore, the Quarry proudly contributes to the community by supporting the Ramara Chamber of Commerce, Food for the Poor Golf Tournament and local hockey teams.

The Quarry's Community Liaison Committee (CLC) is a pillar of McCarthy Quarry's public outreach strategy. The group meets several times a year to include the community in the quarry's current and future operations and to facilitate a forum to share their questions and feedback. Personal calls and visits are also made by staff to keep neighbours up to date, and the Quarry provides regular site updates to the local newsletter (*Trent Matters*) to keep everyone in the community in the loop.





Community Relations



Walker Aggregates & Construction

Duntroon Quarry Clearview Township

This is Duntroon Quarry's 12th OSSGA Community Relations Award. It spotlights the site's ongoing efforts to make a positive impact within its region. These efforts include donating $\frac{3}{4}$ clear stone to the Clearview Township for its Garden Harvest Party silent auction and 70 tonnes of stone to the Collingwood Agricultural Society for the Great Northern Exhibition, as well as providing financial support to the Hospice Georgian Triangle Foundation, Collingwood General & Marine Hospital, and the Stayner Siskins OHA Junior C Hockey Club.

On its site, the quarry takes daily measures to control the noise, dust and traffic impacts of its operations. It also ensures that its neighbours can share their feedback via in-person initiatives and online channels. Recognizing the value of industry education, the Duntroon Quarry has partnered with the local Highlands Outdoor Education Centre to host tours for students and raise awareness for the quarry's geology and operations.

Walker Aggregates & Construction

McGregor Quarry Town of Amherstburg

McGregor Quarry is a repeat recipient of OSSGA's Community Relations Award thanks to its strong long-term commitment to community relations. This year, the quarry built on that commitment by donating materials to community projects with the AMA Sportsmen's Association in Amherstburg, the Bryerswood Youth Camp Optimist Club, the Town of Essex's Co-An Park, the Essex County Steam & Gas Engine Museum, and the Gesstwood Camp and Education Centre. The Quarry also continued to support a number of local events and fundraisers and welcomed students from the University of Windsor's Environmental Sedimentology course for a site tour.

McGregor Quarry also demonstrated its ongoing commitment to limiting the impact of its operations. Blast noise and vibration levels are continually monitored; berms and tree screens, as well as covers and other measures are implemented to control noise; roads and stockpiles are continually maintained to prevent dust; and systems are in place to promote safe traffic behaviour.



Walker Aggregates & Construction

Shepherd Pit Township of Chatsworth

Shepherd Pit demonstrates an affinity for neighbour relations both on and off its site. Within the community, it provides financial support to many local initiatives, like the Owen Sound Festival of Northern Lights, the Big Brothers Big Sisters Grey Bruce Golf Fore Kids' Sake tournament, the Owen Sound Regional Hospital Foundation Charity Golf Classic and the Hospice Georgian Triangle Hike & Bike.

Additionally, the pit has provided materials and machine time, and greatly reduced service rates to aid habitat enhancement work along the Upper Sydenham River and Bighead River organized by the Owen Sound Outdoors Adventures group. In 2022, it donated material to fill the holes created during a ground-penetrating radar search.

Closer to home, Shepherd Pit staff employ best practices to reduce noise, dust and traffic risks from its site. Site updates and activities are shared in Walker Aggregates' bi-annual newsletter, and through personal calls and visits to nearby neighbours.





Walker Aggregates & Construction

Sutherland Quarry Expansion Township of Georgian Bluffs



This year's Community Relations Award for the Sutherland Quarry expansion site recognizes the team's ongoing work to make a positive impact in its region and to be a good neighbour to those around it. Within its boundaries, the quarry makes a consistent effort to reduce the noise and dust from its operations while keeping its roads safe for site visitors and nearby commuters. Its Stakeholder Liaison Committee meets twice yearly to educate community members on the expansion and its progress.

Beyond its site, the Quarry is an active supporter of numerous local organizations, fundraisers and events. Recent highlights include donating equipment, materials and supplying volunteers to support wildlife preservation efforts at Upper Sydenham River, as well as donating cash to Trout Unlimited for an electro-fishing survey along the same river. Throughout the years, the site has also regularly partnered with the Bluewater District School Board to offer high school students tours of the Sutherland Quarry.



Walker Aggregates & Construction

Vineland Quarries & Crushed Stone Town of Lincoln

Vineland Quarries & Crushed Stone is proud to be an integral participant in activities in its region. The site hosts a restored building for the Vineland Scouts group, which has joined some of the quarry employees in roadway cleanup initiatives and seasonal barbecues. As well, the local Megalomaniac Winery uses some of Vinelands' rehabilitated land to grow grapes, while White Meadows Farms taps sap from the site's sugar bush to produce its syrup. More recently, Quarry employees joined the Niagara Chapter of Trout Unlimited Canada and Land Care Niagara in planting trees along Twelve Mile Creek to enhance water quality and habitat along the region's only coldwater stream.

Mitigating the impacts of its operations is an important part of Vineland Quarries' community relations. So, too, is maintaining two-way communication with neighbours through personal calls and visits, online updates on the Walker Aggregates website, and updates in a bi-annual newsletter.

Walker Aggregates & Construction

Walker Brothers Quarries City of Niagara Falls



Walker Brothers Quarries' 14th Community Relations Award is a testament to the company's steadfast commitment to minimizing its impact on neighbours and forging solid relationships within the Niagara Falls region. Examples of the former include modernizing its blasting methods, investing in a new drill with a silencer to reduce noise and dust, employing a retired police officer to enforce traffic safety, and employing the latest noise and dust reduction techniques on a daily basis.

Within the community, Walker Brothers makes significant material and cash donations to various organizations. This year, it donated 80 tonnes of screening to the Mayor's Youth Advisory Committee Children's Memorial Garden in Niagara Falls and it made a monetary donation to the Niagara Peninsula Geological Society Kids Rock Club. Staff have also worked alongside the local Scouts group for an Earth Day roadside cleanup. News of all its community work and quarry activities are communicated through newsletters, website updates, telephone calls, and personal visits with neighbours.





Progressive Rehabilitation

The Progressive Rehabilitation Award recognizes the ongoing efforts of individual operators to progressively rehabilitate their sites per their site plans.



Cambridge Aggregates Inc. / Heidelberg Materials

North Dumfries Pit Township of North Dumfries

The objective for the North Dumfries Pit rehabilitation was twofold: to rehabilitate the 54-hectare pit floor back to agricultural condition and to rehabilitate the remaining 18.1 hectares of extraction area to a natural environment condition featuring Oak Savannah, Woodland, Prairie and native grassland ecological communities. Beginning in 2017, progressive rehabilitation has been carried out over four phases. At last check, the team had successfully returned 12.5 hectares of the pit floor to a healthy agricultural condition that has since been used to grow soybeans and cash crops. Currently, the team is in Phase 4 of its progressive rehabilitation plan, which began with the rehabilitation of three hectares and the grading of the setback area. Subsequent portions of Phase 4 were to be completed by fall 2022.

JUDGES' CHOICE



CBM, Aggregates Division

Archery Pit Municipality of Thames Centre

Archery Pit's progressive rehabilitation returned 6.3 hectares of land to a natural floodplain and wetland habitat area. Much of the project took place in 2011 after the pit floor was extracted between 2003 and 2010, with the final contouring occurring in 2020 along the boundary with the CBM Olalondo site.

The rehabilitation required moving approximately 30,000 cubic metres of material with a D6 Dozer and 980 Extractor, after which the site was mowed and treated to control phragmites, a particularly invasive reed grass. The area was then seeded with a tallgrass prairie grass mixture at a rate of 20 kgs per hectare. Thanks to Archery Pit's rehabilitation, in 2022 the site hosts a rich variety of wetland habitats, including ponds, wetland edges, vernal-type pool areas, a wet meadow, and an upland tallgrass prairie ecosystem.



CBM, Aggregates Division

Brown Pit Township of North Dumfries

Brown Pit began its rehabilitation in 2016, targeting 27 acres of its 47.8-hectare extractable area. The work required over 125,000 cubic metres of overburden and topsoil to be transported to the depleted floor, after which the material was contoured, rippled and trimmed in preparation for stone picking. During the latter phase of the project, the Brown Pit crew picked approximately 800 tonnes per acre of usable stone, leaving a quality seed bed ready for planting.

In 2021, the site was fertilized with chicken manure and seeded with a cover crop consisting of spring grains, brassicas and legumes. In spring 2022, a crop of oats was planted on both the rehabilitated site and an adjacent undisturbed field with the intent to compare crops at a later date.



CBM, Aggregates Division



Coburn Pit Township of Puslinch

A total of 2.5 hectares of Coburn Pit's northwest portion of land was targeted during its multi-year rehabilitation. The objective was to restore the site to a natural area and wetland that blends into the adjacent Mill Creek corridor. Contouring of the shoreline areas took place between 2018 and 2019, and crews established a shallow bench area at the water interface to promote wetland development. The site was seeded with a mix of fescue, bluegrass, trefoil and perennial ryegrass, as well as a seeding supplement of native grass and wildflowers and a direct seeding of oak acorns.

Additional work was implemented over the following years, including the planting of native tree species in 2019 and fill planting in 2022. A test plot survey was later conducted on the newly planted trees to determine the optimal growing seedling strategies moving forward.



CBM, Aggregates Division

Codrington Pit Municipality of Brighton

Codrington Pit's Rehabilitation Award reflects the team's work done to complete the top tier of the site's southern-facing slope. Beginning in the winter of 2021, crews cut a swale in the slope, and over 95,010 cubic metres of overburden was transported to the rehabilitation site with rock trucks and contoured with a D6 Dozer. Topsoil was then spread at a thickness of eight inches.

That summer, the site was seeded with 325 kilograms of perennial conservation grass seed mix that contained a number of herbaceous species native to southeastern Ontario. The mix was applied by Dekeyser Excavating at 144 kgs per hectare.

CBM, Aggregates Division



Dabrowski Pit Township of North Dumfries

Dabrowski Pit successfully rehabilitated 2.5 hectares of land between 2021 and 2022 to restore a portion of the pit floor area to high-quality agricultural land. Progressive rehabilitation efforts began with placing approximately 20,000 cubic metres of material on the Pit 1 floor, including topsoil sourced from a local project.

The topsoil supplemented onsite material that was found to be of poor quality for effective rehabilitation. In the summer of 2022, crews moved 14,000 cubic metres of topsoil from a nearby development to coat the area, and then that September, they seeded the area with oats (10kg/ha). This crop cover was applied to prevent soil erosion before the planned soil testing and row crop production in spring 2023.



Lafarge Canada Inc. - A Member of Holcim

Caledon Pit Town of Caledon

Caledon Pit has made significant headway in its progressive rehabilitation plans. Between April 2021 and September 2022, Lafarge rehabilitated 6.6 hectares of the Caledon Pit floor and 0.7 hectares of slope in Concession 3. Crews used onsite overburden material to slope the exhausted faces at a 3:1 ratio as per its site plan, after which 50,000 cubic metres of onsite overburden and topsoil was applied and the area was seeded with a Pasture/Paddock Horse Mix (26lbs/acre), Grass Seed Contractor Mix (8lbs/acre), and whole oats (18lbs/acre). As of November 2022, the self-sustainable grass had started to green up on the slopes. Since its last OSSGA Progressive Rehabilitation Award submission in 2011, the site has successfully rehabilitated 140 hectares within 497 hectares of its extractable area.



Progressive Rehabilitation



Miller Paving Limited - A Colas Company

E.C. King Contracting Ansley Pit Township of Bentinck

The Ansley Pit rehabilitation began in September 2021 with the intent of returning the site to agricultural use upon the lease expiration in 2022, when it would be returned to the Ansley family. Work began with grading the pit floor in the fall, followed by additional grading after the winter season on the south, east and west boundaries. Following that, the site was seeded with ryegrass at a rate of 25 lbs per acre, and a bulk fertilizer mix of 5-26-30 was applied at a rate of 65 lbs per acre. By June 2022, 2.58 hectares of land had been returned to agricultural use, representing 85 per cent of the site's total area slated for rehabilitation. The Ansley family plans to plant agricultural crops and farm the land now that Miller is no longer managing the site.

Miller Paving Limited - A Colas Company

Boyington Pit #3 Township of Uxbridge

Rehabilitation of the Boyington Pit #3 commenced after the extraction of its pit floor and slopes in 2021. Twelve hectares of the previously disturbed area were rehabilitated in 2021 and planted with soybeans and corn, the first of which was harvested in October 2021 and the second in November 2021. Rehabilitation work continued from April 2022 to October 2022 on eight hectares of land, during which time crews conducted 290 hours of dozer grading of overburden to shape the 960 linear metres of slopes over the rehabilitation zone. In total, 25,000 cubic metres of topsoil was deposited over the slopes, and the site was seeded with corn, soybeans and wheat.



Miller Paving Limited - A Colas Company

Murray Group Limited Simpson Pit Township of Centre Wellington

While progressive site rehabilitation has been ongoing for several years at the Simpson Pit, most of the work was completed in August and September 2022. Recent work included grading and backfilling the 10-hectare rehabilitation area with rock trucks to re-establish the grades on the pit so that the land would be conducive to crop production. The region was then covered in 20,000 cubic metres of overburden and a topsoil cover, which was chisel plowed to help mitigate compaction. Planting occurred over the final weeks of September 2022, during which time Fairview Farms seeded the site with winter wheat at a rate of approximately 150 lbs per acre and applied fertilizer at a rate of 180 lbs per acre. Next spring, Fairview plans to add nitrogen at 200 lbs per acre to facilitate the land's rehabilitation.

Miller Paving Limited - A Colas Company

Murray Group Limited Wridale Pit Municipality of West Grey

Wridale Pit's progressive rehabilitation activities have successfully returned nearly half (13.17 hectares) of the extractable site back to agricultural use. Earthwork and grading commenced in October, at which point crews graded the side slopes and the pit floor using cut and fill and backfilling to re-establish gentle sloping for crop production. Approximately 30,000 cubic metres of overburden and topsoil was used moved from onsite stockpiles for use during the rehabilitation. Following this, the rehabilitated area was seeded with a soybean crop at a rate of approximately 20.16 kgs per hectare. The first crop was harvested in late October, producing a yield of approximately 25 bushels per acre. Up next, Wridale Pit plans to rehabilitate the remaining disturbed area and continue planting in spring 2023.



Nelson Aggregate Co.

Burlington Quarry City of Burlington

Since 2011, Burlington Quarry has taken significant steps closer to its final rehabilitation plans. Its goal is to transform the site into a lake with an island near the centre of the Quarry and create 3:1 side slopes lining the perimeter of the licensed boundary. Over the past decade, rehabilitation efforts have been focused on the site's south face. Nearly 63,000 cubic metres of fill, waste rock and overburden material has been spread over a 502-hectare site using a D8 dozer and contoured to a slope ranging between 4:1 and 5:1. As per its Progressive & Final Rehabilitation site plan, nearly five metres at the top of the limestone quarry face was left exposed. The vegetative component includes a number of plant species such as curly dock, giant wild rye and white heath aster.



The Property Enhancement Award recognizes operational best practices at a site's entrance, approach and perimeter screening, office and scale house areas, employee areas, plant appearance, environmental controls, truck and mobile equipment, and communicative signage. Sites that initially meet the minimum requirements in each of the aforementioned sections are awarded a plaque. Site operators are then provided with an opportunity to win a "gold" bar for each section by meeting the comprehensive list of criteria for each. There are a total of seven "gold" bars that can be achieved.

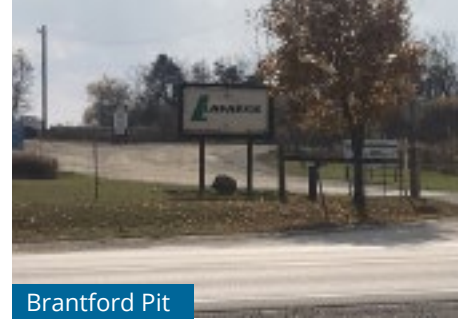
GIP Properties Corp.

Elginburg Quarry
City of Kingston

Plaque



Elginburg Quarry



Brantford Pit

Lafarge Canada Inc. - A Member of Holcim

Brantford Pit
County of Brant

 **Gold Bars:** Entrance, Approach & Perimeter Screening, Communicative Signage

Lafarge Canada Inc. - A Member of Holcim

Cambridge Pit
Township of North Dumfries

 **Gold Bar:** Plant Appearance




Cambridge Pit



Braeside Quarry

Miller Paving Limited - A Colas Company


Braeside Quarry
Township of McNab/Braeside

 **Gold Bars:** Entrance, Approach & Perimeter Screening, Office & Scale House Areas, Plant Appearance, Environmental Controls, Truck & Mobile Equipment, Communicative Signage

Miller Northwest Limited - A Colas Company

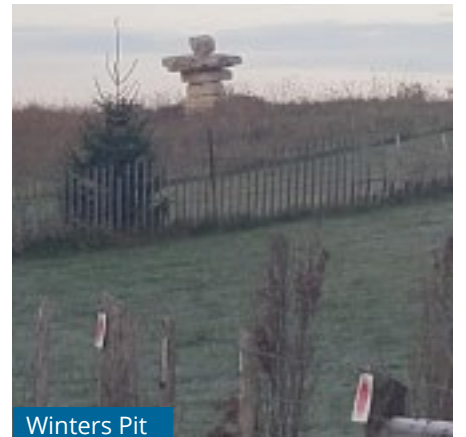
Sandy Beach Pit
City of Dryden

Plaque

 **Gold Bars:** Entrance, Approach & Perimeter Screening, Office & Scale House Areas, Employee Areas, Communicative Signage



Sandy Beach Pit



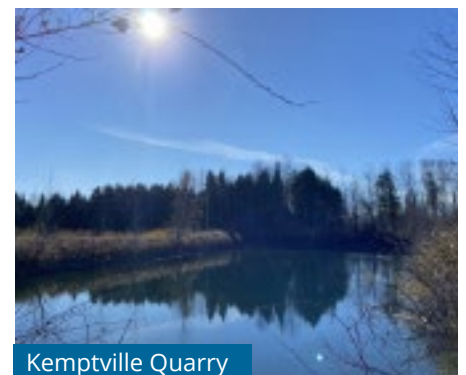
Winters Pit

Miller Paving Limited - A Colas Company

E.C. King Contracting Winters Pit
Township of Grey Highlands

Plaque

 **Gold Bars:** Entrance, Approach & Perimeter Screening, Communicative Signage



Kemptville Quarry

R.W. Tomlinson Limited

Kemptville Quarry
Township of South Gower

Plaque



Safety Innovation

The Safety Innovation Award recognizes innovative practices, programs and projects in Ontario's aggregate industry. The award honours innovations that improve the health and safety of employees, subcontractors and the public in the areas of OHS management systems, health and safety training, wellness programs and culture.

WINNER

CRH Canada Group Inc. **Dufferin Aggregates**

Crusher Camera System **Flamboro Quarry**

Project Team: Derek Lewis, Kyle Brown, Matt Erdmann, Paul Sardella

The secondary impact crusher is a critical component that had a tendency for downtime due to feed material building up and causing damage to the belting, lagging and guarding. As a result, employees often had to handpick the rocks and built-up material around the head pulley and surrounding catwalk. Due to the harsh nature of dust and debris characteristic of impactor crushers, a level sensor was not an appropriate option, so the team installed a camera on the I-Beam of the impactor building to allow the plant operator to be able to control and understand the material feed rate. This simple yet impactful innovation resulted in improved employee safety (employees have not had to lock out or pick rocks since project inception), reduced downtime, and reduced maintenance costs (there have been no lagging or belting repairs required since project inception).



HONOURABLE MENTIONS

CRH Canada Group Inc. **Dufferin Aggregates**

Blind Spot Alarm **Millcreek Pit**

Installation of a motion sensor that alerts the loader operator when it detects motion at the gate. By informing the loader operator of people and/or traffic crossing the equipment's work area, the risk of collision in a high traffic area was greatly reduced.

CRH Canada Group Inc. **Dufferin Aggregates**

Two Minute Safety Cards **Milton & Acton Quarry**

Compact, pocket-sized cards on a variety of topics (i.e., speeding, traffic, signage, PPE, traffic routes, box access) provided to haulers. The cards served as a daily reminder to always take safety precautions while doing a job.

CRH Canada Group Inc. **Dufferin Aggregates**

Haul Truck Box Access **Milton & Acton Quarry**

Installation of a portable stairs structure to give workers safe access for routine maintenance. The stairs eliminated the risk of falling while using a ladder to get in and out of the haul truck box.



The Student Design Competition recognizes the most innovative and impressive designs for the rehabilitation of a former pit or quarry. This year, students were challenged to create site plans for Nelson Aggregates Waynco Pit, in North Dumfries, Ontario.



ÉcoleLearning
1st Place (\$3,000)

School: Fanshawe College
Team: Meghan Thompson



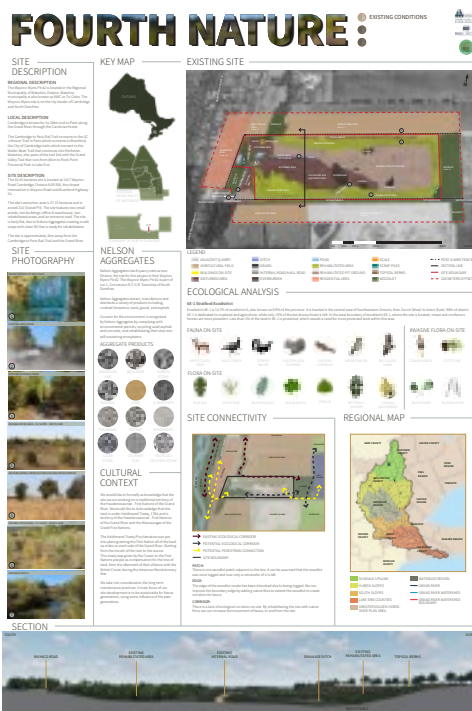
The ÉcoleLearning submission from Fanshawe College spares little detail in outlining the team's plans to "facilitate a relationship between local wildlife, local conservation authorities and the local community" by transforming the Waynco Pit into a place for ecological restoration and education.

"The landscape design is concentrated on restoring native at-risk species to the site while using human interaction in such a way that it positively impacts the rehabilitation process," the team says. "Each aspect of the landscape has been carefully considered and backed by research by OSSGA, TOARC and other academics in the field of studying mineral extraction site restoration practices."

Four overarching goals drive the plan: restoring four at-risk bird populations through the creation of breeding grounds and habitats, improving site connectivity for all flora and fauna via the mosaic model, achieving and maintaining the pit's "award-winning status" for biodiversity within the endangered Prairie Grasslands, and collaborating with the Grand River Conservation Authority to advance the site's education and conservation goals.

The 25-year rehabilitation journey includes adding 6.5 acres of endangered prairie grasslands, introducing treated sewage biosolids to rehabilitate the site's soil, and increasing an existing pond to expand the core area of the site's wetlands. Plans also call for rehabilitating and expanding the fresh moist White Cedar hardwood forest and planting native plants throughout. Walking paths, lookout points and decorative bird statues are also part of the final vision, as is a LEED-certified Educational Research Centre.

"The landscape design is concentrated on restoring native at-risk species to the site while using human interaction in such a way that it positively impacts the rehabilitation process," the submission declares.



Fourth Nature
Second Place (\$2,000)

School: Fanshawe College
Team: Jayme Hudyma & Emily Hurtubise

Fourth Nature addresses the region's housing shortage while restoring the site's natural environment. The design is described as a process-oriented concept that combines three aspects of nature: wilderness, before mankind; urban development and agriculture spaces; and parks and gardens.

As the team from Fanshawe College explains: "The land today is segregated and disproportionate. Our site design will combine the three natures to regenerate and rehabilitate the land to provide a balanced ecosystem that will help combat climate change, land degradation, and species extinction."

The submission outlines a seven to nine-year rehabilitation plan that will see the development of a sustainable "tiny home community." This community will include 315 homes, four mixed-use buildings with 96 apartment rentals, and commercial sites intended to provide revenue opportunities for the developer. Residents will also have access to a solar car park, playground, market and other amenities.

Ecological restoration is central to Fourth Nature's vision. The residential community will be surrounded by a natural earth trail, various forests, a Canada-Blue Joint Mineral Meadow Marsh and multiple eco-sites.

"The idea of Fourth Nature is to create a sustainable neighbourhood with ties to its rural Roots," says the team. "By creating net-zero buildings and adding a diverse range of native plants onsite, we can provide a restorative space for the community and wildlife to thrive, while being mindful of the need to generate income."



Student Awards

GreenBuilt Third Place (\$1,500)

Team: Fanshawe College
School: James Craig & Luis Robles Villarreal

The rehabilitation strategy from Fanshawe College recommends the Waynco Pit be transformed into a space demonstrating the potential for aggregate sites to become hubs for ecological renewal, public awareness, and outdoor recreation.

"GreenBuilt is designed to represent the limitless potential for rehabilitated aggregate sites across Ontario," says the team. "Immersion within rehabilitated natural space through the blending of recreation and environmental education will be embodied through low impact development and Indigenous acknowledgement."

The submission outlines methods for reclaiming as much of the site as possible for natural space. Key activities include planting a tallgrass prairie and a black oak savanna, adding native eco sites, and using prescribed burns to "maintain the landscape and ensure the success of native plant species while demonstrating traditional Indigenous land management practices."

GreenBuilt also endeavours to make the site more accessible to the public via a trail network, refinished haul road, a playground with Indigenous displays, an observational structure, and a boardwalk that will connect with the pit's existing scale. An 18-hole disc golf course has also been added to the plans to further promote public engagement with the natural landscape.

Rounding out the submission's strategy is a plan to renovate and expand existing pit buildings into an Aggregate and Ecology Centre to host events and presentations related to aggregate industry practices, ecological rehabilitation and Indigenous rights.



Helping Hands Urban Farm



Helping Hands Urban Farm Third Place (\$1,500)

School: Fanshawe College
Team: Connor Turnecliff

Balance is the theme behind this entry from Fanshawe College. With Helping Hands Urban Farm, it intends to "bridge the gap between rural and urban life" by re-imagining the pit as a site where the public can get a taste of the country lifestyle.

Central to this submission is the creation of a mixed-use urban farm where visitors can get "hands-on" education in agriculture and farming by working a community garden or crop, visiting the greenhouse or animal barns, browsing the onsite market, or taking part in public events. Notably, the rehabilitation plans call for developing a "farm-to-table" restaurant featuring a menu made with onsite ingredients and views of the Grand River Corridor.

In addition to the urban farm, Helping Hands Urban Farm recommends the development of significant ecological restorations throughout the pit, including a new forest buffer, an expansion of the site's aquatic ecosystem, and intensified planting to bulk up existing forested areas, among other environmental initiatives.

Overall, states the award-winning submission, "Helping Hands Urban Farm provides visitors with a truly unique experience and one that is founded on the pillars of balance, education and naturalness. These three major ideals behind the site allow for the site to flourish and be an important place for the residents of Cambridge."