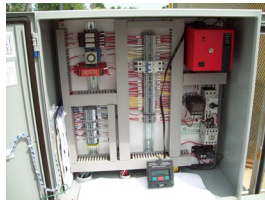


## PROJECT PORTFOLIO

- 1) **PROJECT NAME:** TOM HOWE MUNICIPAL LANDFILL  
**CITY:** HAGERSVILLE, ON  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**PROJECT SUMMARY:** Design, install and maintain all electrical control systems for enclosed Flare System (800 CFM)  
**YEAR COMPLETED:** 1998

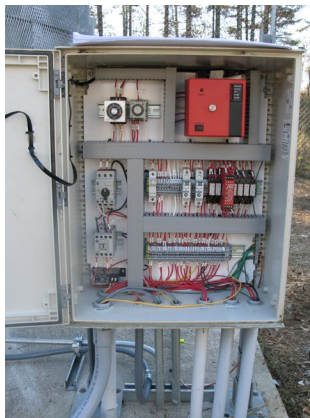


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- 2) **PROJECT NAME:** GLENRIDGE LANDFILL  
**CITY:** ST. CATHERINES, ON  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**PROJECT SUMMARY:** Design, install and maintain all electrical control systems for enclosed Flare System (800 CFM)  
**YEAR COMPLETED:** 1997



- 3) **PROJECT NAME:** **WALKERS INDUSTRIES EAST LANDFILL**  
**CITY:** THOROLD, ON  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**PROJECT SUMMARY:** Design, install and maintain all electrical control systems for enclosed Flare System (2500 CFM)  
**YEAR COMPLETED:** 2002
- 

- 4) **PROJECT NAME:** **EASTVIEW LANDFILL**  
**CITY:** GUELPH, ON  
**DESIGN CONSULTANTS:** CONESTOGA ROVERS & ASSOCIATES  
**PROJECT SUMMARY:** Design, install and maintain all electrical control systems for enclosed Flare System.  
**YEAR COMPLETED:** 2004



- 5) **PROJECT NAME:** SUDBURY LANDFILL  
**CITY:** SUDBURY, ON  
**DESIGN CONSULTANTS:** CONESTOGA ROVERS & ASSOCIATES  
**PROJECT SUMMARY:** Design, install and maintain all electrical control systems for enclosed Flare System. (800 CFM)

**YEAR COMPLETED:** JULY 2005

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- 6) **PROJECT NAME:** OXFORD COUNTY LANDFILL  
**CITY:** SALFORD, ON  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**PROJECT SUMMARY:** Design, install and maintain all electrical control systems for enclosed Flare System. (1400 CFM)

**YEAR COMPLETED:** OCTOBER 2010



- 7) **PROJECT NAME:** REGION OF WATERLOO LANDFILL  
**CITY:** WATERLOO, ON  
**DESIGN CONSULTANTS:** CONESTOGA ROVERS & ASSOCIATES  
**PROJECT SUMMARY:** Design, install and maintain all electrical control systems for enclosed Flare System. (800 CMF)

**YEAR COMPLETED:** MARCH 2011

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- 8) **PROJECT NAME:** **EASTVIEW LANDFILL**  
**CITY:** BRANDON, MANITOBA  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**PROJECT SUMMARY:** Design, install all electrical control systems for a 750 CFM Candlestick flare.  
**YEAR COMPLETED:** NOVEMBER 2010
- 

- 9) **PROJECT NAME:** **LAFLECHE EASTERN ONTARIO LANDFILL**  
**CITY:** MOOSE CREEK, ONTARIO (Near Ottawa)  
**DESIGN CONSULTANTS:** INTEGRATED GAS RECOVERY SERVICES  
**PROJECT SUMMARY:** Design, install and maintain all electrical control systems for enclosed Flare System. (2500 CFM) with custom support buildings.  
**YEAR COMPLETED:** MAY 2011



**10) PROJECT NAME:**

**OTTAWA VALLEY WASTE RECOVERY CENTER**

**CITY:**

PEMBROKE, ONTARIO (Near Ottawa)

**DESIGN CONSULTANTS:**

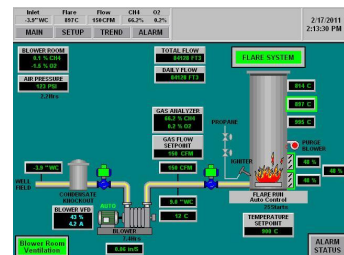
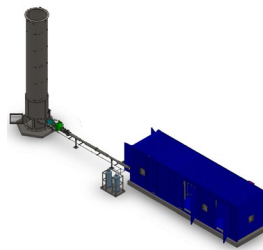
GOLDER ENGINEERING

**PROJECT SUMMARY:**

Design, install and maintain all electrical control systems for enclosed Flare System. (300 CFM) including a containerized extraction plant and all on-site electrical installations.

**YEAR COMPLETED:**

FEBRUARY 2011



**11) PROJECT NAME:**

**REGION OF WATERLOO**

**CITY:**

WATERLOO, ONTARIO

**DESIGN CONSULTANTS:**

CONESTOGA ROVERS & ASSOCIATES

**PROJECT SUMMARY:**

Design, install and maintain all electrical control systems for a proFlare System.

Design, manufacture and supply a portable 700 CFM Candlestick Flare system complete with Extraction Blower, Valves and Moisture Knock-out Pot. This system was supplied as a complete functional stand-alone flare with an independent electrical and control system.

**YEAR COMPLETED:**

DECEMBER 2011

- 12) **PROJECT NAME:** City of Kawartha Lakes OPS Landfill  
**CITY:** LINDSAY, ONTARIO  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**GENERAL CONTRACTOR:** MAPLE REINDERS  
**PROJECT SUMMARY:** Design, manufacture and installation of a turn-key 250 CFM totally enclosed Landfill Gas Flare and Extraction skid. System supply included design, manufacture and installation of a support building containing the complete electrical, compressed air and gas analyzer systems.
- YEAR COMPLETED:** DECEMBER 2011

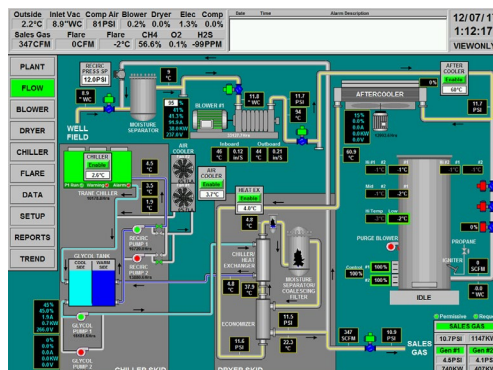


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- 13) **PROJECT NAME:** CITY OF STRATFORD (Landfill Site)  
**CITY:** STRATFORD, ONTARIO  
**DESIGN CONSULTANTS:** CONESTOGA ROVERS & ASSOCIATES  
**GENERAL CONTRACTOR:** Flare was supplied directly to the city  
Mechanical/Installation was done on behalf of JAAR Excavating  
**PROJECT SUMMARY:** Design, manufacture and install 300 CFM totally enclosed Landfill Gas Flare complete with Extraction skid. Project included the complete mechanical and electrical installation.
- YEAR COMPLETED:** DECEMBER 2012



- 14) **PROJECT NAME:** CITY OF SASKATOON - Utility Services  
**CITY:** SASKATOON, SK  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**GENERAL CONTRACTOR:** NOT APPLICABLE- DIRECT SALE  
**PROJECT SUMMARY:** Design, manufacture and supply of a Landfill Gas Cooler and Dehydration System for an Extraction and Flaring plant. This plant is designed to either flare the landfill gas or pump the gas to a 1.6 MW Utilization Plant located 1.5 kms from the Extraction Plant on the same landfill site.

**YEAR COMPLETED:** SEPTEMBER 2013



15) **PROJECT NAME:**  
**CITY:**  
**DESIGN CONSULTANTS:**  
**GENERAL CONTRACTOR:**

**BRADY ROAD LANDFILL**  
WINNIPEG, MB  
COMCOR ENVIRONMENTAL  
INTEGRATED GAS RECOVERY SERVICES  
INC.

**PROJECT SUMMARY:**

Design, manufacture and installation of a turn-key 3500 CFM totally enclosed Landfill Gas Extraction and Flaring System. This project included a 40' containerized Extraction Plant and a separate 20' Electrical and Control container all supplied and installed at the site.

**YEAR COMPLETED:**

OCTOBER 2013





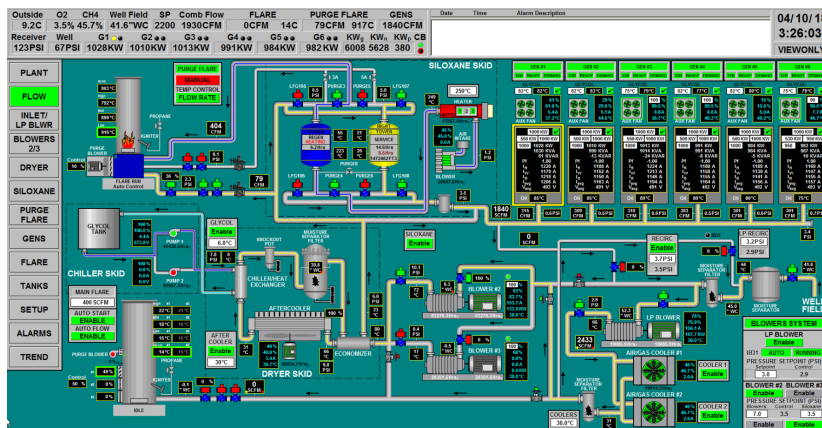
- 16) **PROJECT NAME:** WOOLWICH BIO-EN POWER INC.  
**CITY:** ELMIRA, ON  
**DESIGN CONSULTANTS:** ENVIRO EMD INC.  
**GENERAL CONTRACTOR:** NOT APPLICABLE-DIRECT SALE  
**PROJECT SUMMARY:** Design, manufacture and supply a 850 CFM Biogas Blower Skid with a Candlestick.  
**YEAR COMPLETED:** MARCH 2014



- 17) **PROJECT NAME:** TRAIL ROAD LANDFILL  
**CITY:** OTTAWA, ON  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**GENERAL CONTRACTOR:** INTEGRATED GAS RECOVERY SERVICES INC.  
**PROJECT SUMMARY:** Design, manufacture and supply a 3000 CFM totally-enclosed Landfill Gas Flare including a complete control system integrated into the plant's existing control system.

**YEAR COMPLETED:**

MAY 2014



- 18) **PROJECT NAME:** **NORTH SHERIDAN LANDFILL**  
**CITY:** MISSISSAUGA, ON  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**GENERAL CONTRACTOR:** M.N. DYNAMIC CONSTRUCTION  
**PROJECT SUMMARY:** Design, manufacture and supply a containerized dual-stream landfill gas extraction system to supply gas to a Zink ZBRID flare including a full control system built to the Region of Peel PAIDS specifications.

**YEAR COMPLETED:** OCTOBER 2015





- 19) **PROJECT NAME:** GREENLANE LANDFILL  
**CITY:** SOUTHWOLD, ON  
**DESIGN CONSULTANTS:** GHD  
**GENERAL CONTRACTOR:** W.S. NICHOLLS  
**PROJECT SUMMARY:** Design, manufacture and supply a 1,186 CFM totally-enclosed Landfill Gas Flare including a complete control system integrated into the plant's existing control system.  
**YEAR COMPLETED:** 2016



- 20) **PROJECT NAME:** REGION OF WATERLOO LANDFILL  
**CITY:** WATERLOO, ON.  
**DESIGN CONSULTANTS:** GHD  
**GENERAL CONTRACTOR:** W.S. NICHOLLS  
**PROJECT SUMMARY:** Design, manufacture and supply a 1,600 SCFM totally-enclosed Landfill Gas Flare including associated piping and a complete control system.
- YEAR COMPLETED:** 2018



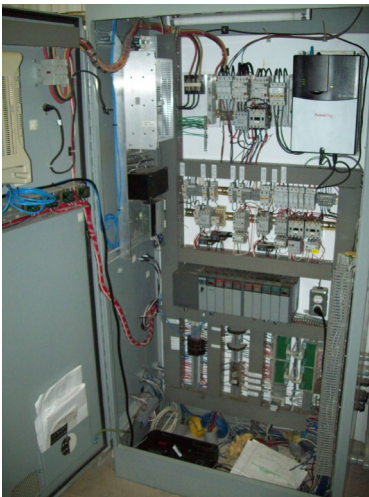
- 21) **PROJECT NAME:** **BROCK WEST LANDFILL**  
**CITY:** PICKERING, ON  
**DESIGN CONSULTANTS:** GHD  
**GENERAL CONTRCATOR** W.S. NICHOLLS  
**PROJECT SUMMARY:** Design, manufacture and supply a 1,186 SCFM  
Totally – enclosed landfill gas Flare including  
associated piping and control system
- YEAR COMPLETED:** 2018
- 

- 22) **PROJECT NAME:** **SPY HILL LANDFILL**  
**CITY:** CALAGARY, AB  
**DESIGN CONSULTANTS:** COMCCOR ENVIRONMENTAL  
**GENERAL CONTRCATOR** TERVITA  
**PROJECT SUMMARY:** Design, manufacture and installation of a turn-key  
800 SCFM totally enclosed Landfill Gas Flare.  
Including the extraction supply skid assembly  
systems, the retrofit of a support buildings, design  
install and commissioning of control systems
- YEAR COMPLETED:** 2018





- 23) **PROJECT NAME:** **PATROLIA LANDFILL**  
**CITY:** PATROLIA, ON  
**PROJECT SUMMARY:** Design and manufacture and install complete (3400 SCFM). Flare including thermocouples, actuators, and dampers.
- YEAR COMPLETED** 2018
- 
- 24) **PROJECT NAME:** **WALKERS INDUSTRIES EAST LANDFILL**  
**CITY:** THOROLD, ON  
**DESIGN CONSULTANTS:** COMCOR ENVIRONMENTAL  
**PROJECT SUMMARY:** Control upgrade. Power upgrade purge flare And supporting piping and controls  
 Complete design manufacture and supply a 5000 SCFM totally includes Gas flare including associated piping and complete control system
- YEAR COMPLETION:** 2018



**25) PROJECT NAME:**

**CITY:**

**DESIGN CONSULTANTS:**

**PROJECT SUMMARY**

**RED DEER LAND FILL FLARE**

RED DEER ABERTA

COMCOR ENVIRONMENTAL

Design and manufacture control system  
Including 3 control panels, training and  
Commissioning

**YEAR COMPLETION:**

2019



**26) PROJECT NAME:**

**VANCOUVER LAND FILL FLARES**

**CITY:**

**VANCOUVER BRITISH COLUMBIA**

**DESIGN CONSULTANTS:**

**COMCOR ENVIRONMENTAL**

**PROJECT SUMMARY**

Design and manufacture 2 flare stacks  
Including 5 pilot fuel trains and associated  
programing and control panels

**YEAR COMPLETION:**

**2019**



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**OTHER PROJECTS RELATED TO LANDFILL PROJECTS:**

**BRITANNIA ROAD LANDFILL - POWER GENERATION PLANT**

- H.S. Electric designed and built a complete Electrical/SCADA control system for a 5.6 MW Power Generation Plant (IGRS). Methane gas from landfill is used as source of energy to operate the generators. The work included the design, construction and installation of custom PLC-based engine control systems for three re-purposed 1.8 MW generators.

**Year Completed:** 2005

### **THOROLD – WALKERS INDUSTRIES EAST QUARRY LANDFILL**

- H.S. Electric designed, built and installed a complete electrical power and control system for the facility which has grown over the years to extract up to 6000 CFM of Landfill Gas from two adjacent landfills. At this time, the site includes 1200 HP of extraction blowers and 300 HP of flare blowers along with a 5000 CFM flare, a 2500 CFM flare, a 1 MW power generation plant and an underground pipeline to pump up to 5000 CFM of landfill gas to a 300 MW Co-Gen facility located nearly 2.5 kms from the site.

**Year Completed: 2002/Upgrades in 2007, 2009 & 2010**

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**HSE has carried out the following TSSA upgrades to existing Flares:**

- Qty 1 Flare for City of Guelph (Landfill)
  - Qty 1 Flare for City of Cornwall (Landfill)
  - Qty 3 Flares for Thorold East Quarry Landfill
  - Qty 1 Flare for City of Peterborough (Landfill)
  - Qty 1 Flare of Halton Region (Landfill)
-

## **WATER POLLUTION CONTROL PLANTS:**

- |       |                            |   |
|-------|----------------------------|---|
| 1)    | <b>PROJECT NAME:</b>       | HANOVER WATER POLLUTION<br>CONTROL PLANT  |
|       | <b>CITY:</b>               | HANOVER, ON   |
|       | <b>DESIGN CONSULTANTS:</b> |   |
|       | <b>PROJECT SUMMARY:</b>    | Design and manufacture of a Digester Gas totally-<br>enclosed Flare.                            |
|       | <b>YEAR COMPLETED:</b>     | 1996<br>Flare was subsequently upgraded to meet current<br>B149 code requirements in Feb, 2012. |
| <hr/> |                            |   |
| 2)    | <b>PROJECT NAME:</b>       | MIDLAND WATER POLLUTION<br>CONTROL PLANT  |
|       | <b>CITY:</b>               | MIDLAND, ON   |
|       | <b>DESIGN CONSULTANTS:</b> | MAPLE ENGINEERING & CONSTRUCTION  |
|       | <b>PROJECT SUMMARY:</b>    | Design and manufacture of a Digester Gas totally-<br>enclosed Flare (82 CFM).                   |
|       | <b>YEAR COMPLETED:</b>     | 1996  |
| <hr/> |                            |   |
| 3)    | <b>PROJECT NAME:</b>       | GRIMSBY WATER POLLUTION CONTROL<br>PLANT  |
|       | <b>CITY:</b>               | GRIMSBY, ON   |
|       | <b>DESIGN CONSULTANTS:</b> | EARTHTECH   |
|       | <b>PROJECT SUMMARY:</b>    | Design and manufacture of a Digester Gas totally-<br>enclosed Flare (82 CFM).                   |
|       | <b>YEAR COMPLETED:</b>     | 1997  |
-

- 4) **PROJECT NAME:** HIGHLAND CREEK WASTE WATER  
POLLUTION CONTROL PLANT  
CONTROL PLANT  
**CITY:** SCARBOROUGH, ON  
**DESIGN CONSULTANTS:** EARTH TECH  
**PROJECT SUMMARY:** Design and manufacture of three paralleled  
totally-enclosed Digester Gas Flares with a total  
flow capacity of 906 CFM  
**YEAR COMPLETED:** 2003  
All three flares were subsequently upgraded to  
meet current B149 code requirements in October,  
2010.
- 

- 5) **PROJECT NAME:** MUSKOKA DISTRICT  
QTY 1: MOUNT VIEW POLLUTION  
CONTROL PLANT  
QTY1: GOLDEN PHEASANT POLLUTION  
CONTROL PLANT  
QTY 1: BEECH ROAD POLLUTION  
CONTROL PLANT  
**CITY:** HUNTSVILLE/GRAVENHURST, ON  
**DESIGN CONSULTANTS:** EARTH TECH  
**PROJECT SUMMARY:** Upgrade Digester Gas totally-enclosed flare to  
meet current B149 code requirements.  
**YEAR COMPLETED:** 2012
-





## **Agmedica Bioscience**

Targeting to Become one of the largest indoor grow-ops in Canada

- Full electrical requirements
- Custom control system
- Custom SCADA
- On-going Maintenance



- Started in 2017
- Ongoing build-out and indefinite maintenance
- One of our main focus on 2019 and beyond

## Lakeview Green Houses

- Blenheim Ontario
- Electrical support
- programming and SCADA
- Remote and onsite maintenance



see featured projects for more details

completed – ongoing systems and on-site maintenance

## **Organic Resource Loblaws**

- currently providing system level monitoring at 3 locations

completed – ongoing system maintenance

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## **Highline Mushrooms**

- Electrical support
- programing and SCADA
- Remote and on-site maintenance

completed – ongoing system maintenance

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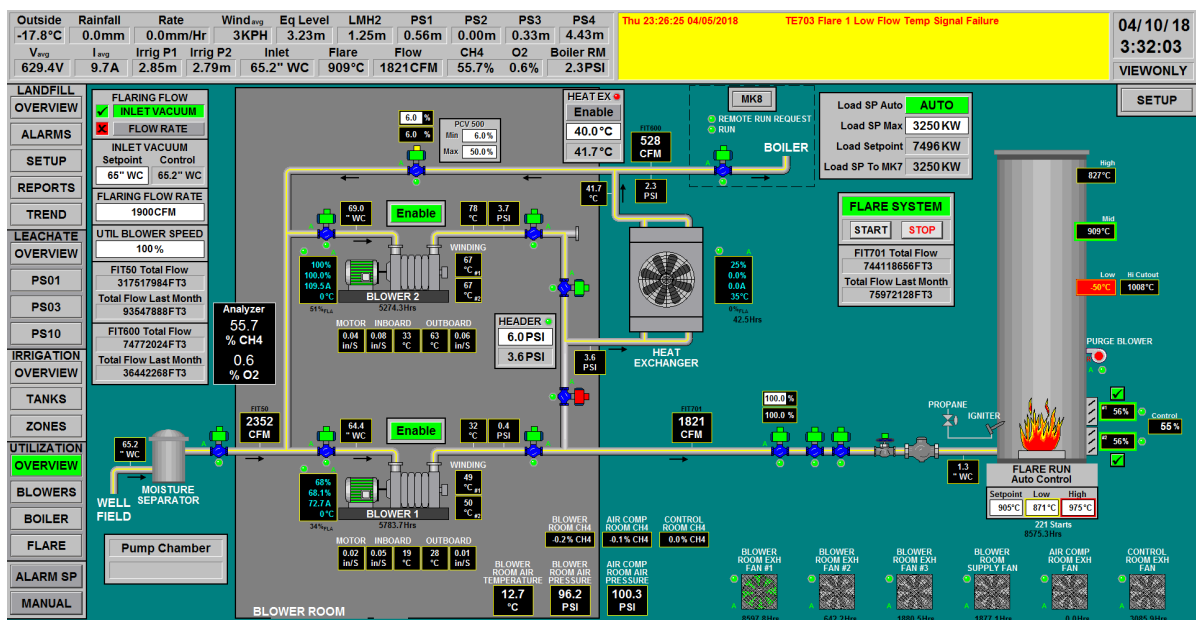
## **Ravine Mushrooms**

- Electrical support
- programing and SCADA
- Remote and onsite maintenance at 4 locations

completed – ongoing system maintenance

## Waste management

- Electrical and fiber install
- programming and SCADA
- Remote and onsite maintenance at 2 locations



ongoing new programs and system maintenance