

# **Preliminary Functional Servicing Report**

## **Sanitary Servicing in Support of a Proposed Soil Processing Facility**

### **102 Prouse Road**

Concession 1, Part Lots 16 and 17, RP 40R22895, Parts 1, 3 and 4  
Township of Uxbridge  
Durham Region

Prepared for:  
***Oland Holdings Inc***

Prepared by:  
***Gunnell Engineering Ltd.***

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### APPENDIX A

Original Sewage System Permit # 4UX91-10, dated November 6, 1991

Septic System Design Drawing, dated March 1991, prepared by Bruce A. Brown & Associates Limited

## **1.0 INTRODUCTION**

This preliminary Functional Servicing Report is prepared in support of an application to amend the Zoning By-Law of the subject property located at 102 Prouse Road and will demonstrate how the proposed change in expanded use will satisfy the demands of the proposed soil screening / clean-up facility, in terms of the sanitary servicing.

It is proposed to amend the site-specific zoning of the subject property to permit a soil screening / cleanup facility on the subject property. According to the Town of Uxbridge Zoning Bylaw 81-19, the southern portion of the site is zoned *Holding Aggregate Processing Exception No. 7 ((H) M5-7) Zone* and the northern portion of the site is zoned *Holding Aggregate Processing Exception No. 8 ((H) M5-8) Zone*. Both Zones are subject to (H) Holding provisions that require approval of a site plan agreement prior to removal of the (H). The (H) is required to be removed from the zoning in order to obtain approval to use the property as a screening and clean-up facility.

Gunnell Engineering Ltd. has been retained by Oland Holdings, on behalf of the Azure Group, to prepare a Functional Servicing Report for the proposed change in use of the subject property, in terms of sanitary servicing.

An updated Functional Servicing Report, for sanitary servicing, will be issued following our septic test pit investigation to assess the condition and sewage flow capacity to meet the required needs of the proposed operations.

### **1.1 Property Description**

The subject property is located on Part Lots 16 and 17, Concession 1; RP 40R22895 Parts 1, 3 and 4, Township of Uxbridge, Durham Region and is approximately 13.79 ha in size. The municipal address is 102 Prouse Road, and is situated north of Durham Road 47, and west of Highway No. 2. The location of the subject property is shown below on Figure 1.

The subject property currently consists of several buildings, outside storage areas for finished products, driveway and parking areas. The subject property is serviced by one (1) drilled water well and a private on-site sewage treatment system. The Site is surrounded by large sand and gravel pits to the north, southeast and west. Agricultural lands are located south and northeast of the Site.

**Figure 1 – Site Location Map**



The existing use(s) of the subject property is 'Aggregate Operation'. No new structures are being proposed. A Functional Servicing Study is required by the Township of Uxbridge to confirm that the proposed use can be adequately serviced by the existing on-site sewage treatment system, to allow for the expanded use of a soil screening facility, in conjunction with the existing batch plant.

## **2.0 SANITARY SERVICING**

### **2.1 Existing Sewage Treatment System**

The existing office building is currently serviced by a private Class IV on-site sewage system (permitted by existing Durham Department of Health Services Use Permit #4UX91-10, dated November 6, 1991), consisting of one (1) 13,500 L concrete septic tank, a 600 gallon pump chamber, a 2-outlet distribution box, and a sub-surface absorption trench field consisting of a total of 278m (910 feet) of 100mm distribution pipe (13 runs, each 21.4m in length and spaced 1.5m o/c). A copy of the original septic permit, dated 1991, as issued by the Durham Health Unit, has been provided in Appendix A of this report. A septic system design drawing, dated March 1991, as prepared by Bruce A. Brown & Associates Limited, is also included in Appendix A.

The original septic permit provides no details on employee occupancy, the allowed daily design sewage flow or native soil conditions.

### **2.2 Inspection of Existing Sewage Treatment System**

TO BE COMPLETED. A field septic test pit investigation of the existing septic field will be undertaken to verify the condition of the septic system and assess native soil conditions.

### **2.3 Site Investigation: Conclusions / Recommendations**

TO BE COMPLETED.

### **2.4 Proposed Daily Design Sewage Flows**

The proposed Soil Processing Facility will operate year-round and will employ 40 full-time employees for the soil processes and 5 full-time employees for the existing batch plant. Originally, the plant was occupied by 80 employees. As well, truck drivers will be accessing the site (4-5 drivers expected to be making round trips each day).

Since no water meter data is available the daily design sewage flow for the entire property has been calculated based on the Ontario Building Code as follows:

**Proposed Soil Processing Facility and Existing Batch Plant**

Fifty (50) employees x 75 L/day = 3,750 L/day

Five (5) truck drivers x 75 L/day = 375 L/day

Total Daily Design Sewage Flow  $Q_{TOT}$  = **4,125 L/day**

**Original Plant Facility**

Eighty (80) staff x 75 L/day = 6,000 L/day

**3.0 RECOMMENDATIONS / CONCLUSIONS**

TO BE COMPLETED.

Given that the proposed new uses will employ fewer employees (45 vs. 80) than previous operations, and depending on the condition of the existing septic field and native soil conditions, the existing septic field may be adequate for the new uses. As detailed, Gunnell Engineering will be undertaking a septic test pit investigation to assess the condition of the sewage system and native soil percolation rates. We will then assess the capacity of the existing sewage system to determine the daily design sewage flow it can accommodate. The existing sewage system may be adequate for the new uses, or required upgrades or expansion, or require a complete replacement based on our findings. We note that this is a large property, with sufficient lands to either expand or replace the sewage system to accommodate the new proposed uses.

Sincerely,  
**GUNNELL ENGINEERING LTD.**



Teika Zilans, BSc (Hons)  
Environmental Technician



Eric Gunnell, P.Eng.  
President

# **APPENDICES**



# **APPENDIX A**

Original Sewage System Permit # 4UX91-10, dated  
November 16, 1991

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