

**ISAM Sequencing Batch Reactor**  
**130 m<sup>3</sup>/day****Case Study Details**

DESIGN CRITERIA FLOW 130m <sup>3</sup> /d ADF	INFLUENT	EFFLUENT
BOD:	200 mg/l	5 mg/l
TSS:	200 mg/l	5 mg/l
NH <sub>3</sub> -N:	40 mg/l	7 mg/l (NH <sub>3</sub> -N)
P:	8 mg/l	0.1 mg/l

This project was incorporated as part of a new housing development and the effluent is discharged to a subsurface tile bed. The plant is now operated by the Ontario Clean Water Agency.

H2FLOW EQUIPMENT INC. supplied a complete package with a PARKSON HELISIEVE 6mm fine screw screen unit followed by a FLUIDYNE ISAM SBR system, and PARKSON DYNASAND tertiary filtration.

System Process Startup was February 2010, once a minimum number of occupied dwellings were constructed and capable of providing sufficient base flow. The ISAM system is capable of sustaining viable biological operation with flows as low as 10-15% of design average flow in order to meet effluent BOD and TSS requirements, with sustained biological nutrient removal capable once 15-20% of design average base flow is available.

**Engineering Consultant:** Totten Sims Hubicki (now AECOM)

**Installation Contractor:** WESTERN MECHANICAL

**Start-Up:** 2010