
MEMORANDUM

DATE: 2026-01-13

SUBJECT: AOO Tewin Community / 1500mm Sanitary Pipe Capacity

OUR FILE: 21-1268

This memorandum summarizes the sanitary servicing assessment for a 1500 mm diameter sanitary trunk sewer at a slope of 0.15%.

A 1500 mm diameter pipe at a slope of 0.15% has a capacity of ~2856 L/s (Manning's $n=0.013$).

A population of 191,800 persons with 30,200 jobs, and total effective area of 2654 ha. generates a sanitary peak flow of 2,241 L/s using parameters from the City of Ottawa Design Guidelines.

The following ICI to residential equivalency parameters were applied:

- Floor Space per Worker (FSW) Factor: 50 m²/job
- Site Coverage: 40%
- Non-Residential Design Demand: 28 m³/ha/day

Accordingly, the use of a 1500 mm diameter sanitary pipe at 0.15% slope provides sufficient capacity to accommodate for a population of 191,800 and 30,200 job.

Yours Truly,

David Schaeffer Engineering Ltd.