CJDL Consulting Engineers

CYRIL J. DEMEYERE LIMITED
John D. Wiebe, P. Eng. | T. Paul Tuff, P. Eng.
Peter J. Penner, P. Eng. | Deren Lyle, P. Eng.
Andrew Gilvesy, P. Eng.

261 Broadway, P.O. Box 460, Tillsonburg, ON N4G 4H8 T: 519-688-1000 F: 519-842-3235 www.cjdleng.com

1406

5 October 2015

LAKEVIEW CONDOMINIUMS

WILLIAM STREET, PORT STANLEY

PRESPA CONSTRUCTION LIMITED

PRELIMINARY SERVICING REPORT

INTRODUCTION

Herein follows a Preliminary Servicing Report for Prespa Construction Limited's Lakeview Condominium Development. The proposed development consists of 0.63 ha of vacant land located at the northwest corner of Edith Cavell Boulevard and William Street in the Village of Port Stanley, Municipality of Central Elgin.

The site was originally part of a larger parcel of land owned by the Applicant. Located easterly adjacent to the site is a vacant land condominium at Municipal No. 355 Edith Cavell Boulevard (housing construction is currently underway by Prespa) and northerly adjacent to the site are two (2) single detached residential lands fronting Erie Street constructed c. 2009.

Existing lands north and south of the site are currently of commercial use, and lands east and west are of residential use.

The development proposal for this land is inclusive of three (3) detached units that front Edith Cavell Boulevard and a nine (9) storey, fifty-two (52) unit apartment condominium unit that fronts William Street. The three (3) units fronting Edith Cavell will appear contiguous with the easterly condominium development.

TRANSPORTATION

Primary vehicular access to the condominium site is proposed to be via First Street, which forms the westerly perimeter of the subject lands. The existing First Street right-of-way is approximately 6.1±m in width and contains a 3.3 to 4.0±m wide asphalt roadway. Road widening was negotiated during the Erie Street Development which will widen the First Street right-of-way to 11.43m (varies).

It is proposed to reconstruct First Street from Erie Street to the site entrance concurrent with development of this project. The cross-section of First Street is proposed as 7.38m back to back mountable curb (2 x 3.25m travel lanes, no parking), and a 1.2m sidewalk adjacent to the easterly sidewalk; further widening of travel lanes or addition of a parking lane is restricted by existing topography. Refer to Traffic Impact Study by F.R. Berry & Associates.

Internal road network within the condominium site has been designed to ensure 12m centreline turning radii and 6m clear travel path for designated emergency access routes, in accordance with the Ontario Building Code (OBC). An emergency access route is also proposed south of the building, designed to provide through access from the 355 Edith Cavell Boulevard Condominium site directly to William Street. This access route will be controlled by 'knock-down' bollards on the parking lot side to prevent vehicular access. There is no fencing to separate the roadway between the subject lands and the 355 Edith Cavell Boulevard site.

A total of eighty-two (82) standard and four (4) accessible parking spaces are proposed to be provided on site, which will service condominium residents as well as employees of the commercial development.

SANITARY SEWAGE

There is an existing sanitary sewer located within an easement that bisects the site, located south of the proposed apartment condominium building. The building has been located so the structure, including overhanging balconies, are clear of the easement limits.

A manhole and service stubs were installed in line to the existing sanitary sewer concurrent with servicing of the 355 Edith Cavell Condominium Development. These stubs were sized and at sufficient elevation for extension to service the proposed apartment condominium and three (3) detached units.

STORM DRAINAGE AND STORMWATER MANAGEMENT (SWM)

A 450mmø storm sewer was installed toward the southwesterly limit of the site concurrent with development of 355 Edith Cavell Condominium Development, which was designed with sufficient capacity to service the subject lands. Storm run-off will be conveyed to this outlet through an internal network of catchbasins and storm sewers. Sewers are sized to convey a 2-year design storm in accordance with standards previously employed by CJDL in Central Elgin; storms with greater intensity than 5-years will cause catchbasin surcharge in the internal system.

Due to the proximity to Lake Erie, it is recommended that SWM quantity controls not be required; delay in peak flow from the site may increase the duration of the localized area of flooding at Edith Cavell Boulevard and William Street, prior to outflow to Lake Erie. Site grading has been designed to ensure existing major flow paths to William Street and Edith Cavell Boulevard will be maintained under post-development conditions.

To reduce volume of storm outflow from the site, the proposed internal drainage network has been designed with a drywell system that will utilize groundwater recharge potential as its outlet. Surface water flows that exceed the gravity capacity of the outlet storm sewer will outlet (underground) to a series of "Equalizer 36 Chambers" by Infiltrator Water Technologies (or equivalent). These chambers are designed at an elevation above the outlet sewer to allow sediment to settle in catchbasin sumps (600mm deep min.) prior to entering infiltration systems, to ensure long-term functionality and minimize maintenance requirements.

Reconstruction of First Street includes installation of two (2) catchbasins to collect flows from the proposed curb and gutter. It is understood from the Municipality that the existing drainage outlet to this system is a series of drywells/french drains. Relocated catchbasins will be reconnected to the existing system as their primary outlet; however, a storm sewer is proposed as a relief outlet to the condominium site. The Municipality may elect to abandon the relief outlet in the future, if installation of storm sewers is pursued in the Crimmond's Beach Community.

WATERMAIN

Water service to the apartment condominium will be extended from the existing 200mmø watermain on William Street. Required service size will be confirmed by the building's Mechanical Engineer prior to permit application, which will include analysis of fire protection requirements.

Individual water services will be provided to the three (3) detached units from the existing watermain or Edith Cavell Boulevard. Sufficient fire protection for these units is provided by existing hydrants on Edith Cavell Boulevard.

ELECTRICAL AND UTILITIES

It is understood that Erie Thames Power is the electrical service provider for this site. Utility plant within the 355 Edith Cavell Condominium site was designed with capacity to extend electrical, communications and natural gas service to the three (3) detached units fronting on Edith Cavell Boulevard.

Utility companies will be contacted for detailed designs prior to filing of the Site Plan Application. Site lighting distribution design will also be completed at this time.

GRADING

The Lake Erie Flood Uprush Elevation applicable to this site is 176.8 MASL; habitable space of all buildings will be "dry flood proofed" below this elevation, in accordance with KCCA Guidelines.

Structures to be constructed on site will be of slab-on-grade foundation with finished floor elevation set to 176.8m. Setback to the front entrance of the apartment condominium and commercial areas will be designed to accommodate OBC requirements for accessible entry.

Some areas of green space will be landscaped with low maintenance native species. Design will be advanced and included as part of the Site Plan Application drawings.

All of which is respectfully submitted,

Deren Lyle, P. Eng.

DL/sed