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February 28, 2020

Steve Saker, Development Consultant
Saker Realty
782 Richmond Street
London, ON N6A 3H5
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Re: Noise Feasibility Study
10915 Longwoods Road, Delaware, Ontario
RWDI Reference No. 2002177

Dear Mr. Saker,

Saker Realty retained RWDI to conduct a noise feasibility study in support of an application to sever the existing lot at 10915 Longwoods Road into eighteen separate lots. It is RWDI's understanding that the proposed uses of the lots include, but are not limited to, contractor's storage area and shops (i.e., plumbers, electricians, cabinet makers, etc.) and retail offices. The intent of the noise feasibility study is to identify where potential incompatible land uses could arise and conceptual recommendations to prevent incompatible land uses.



Figure 1: Site Location

The Site plan drawing dated February 2019 (see Appendix A) was reviewed and serves as the basis for this assessment.

Assessment Criteria

Sound levels from sources at the proposed development were assessed cumulatively at the nearest noise sensitive receptors. The allowable sound level limits at the noise sensitive receptors are established in the Ministry of Environment Conservation Parks (MECP) Publication NPC-300.



Noise sensitive receptors include properties that accommodate a dwelling, sensitive commercial buildings, or sensitive institutional buildings. Vacant lots may be considered sensitive if zoned to allow a sensitive use and accessible. There were no accessible vacant lots identified in proximity to the development. Ten residential dwellings identified through aerial photography surround the proposed development to the west, north and east. No noise sensitive receptors were identified to the south of the proposed development.

Impact Assessment

Modelling of proposed development was carried out using the Cadna/A software package, a commercially available implementation of the ISO 9613 noise propagation algorithms. Sound power level data for noise generating equipment associated with the proposed land uses were obtained from measurements of similar equipment on file at RWDI. The expected noise sources associated with the proposed land uses are as follows:

Offices

- General building HVAC

Plumbing or Electrician

- General building HVAC
- Exhaust fans

Cabinetry Makers or Warehouse

- General building HVAC
- Exhaust fans
- Forklift activity
- Dust collectors

Modelling also assessed five transport trucks arriving and departing the development during a worst-case hour in the daytime (07:00-19:00) and two trucks during the evening (19:00-23:00) and night (23:00-07:00). On-site passenger vehicle activity is generally considered to have negligible noise impacts and was not included in the assessment.

Recommendations

Based on the modelling completed, some restrictions will apply to the type of operations and equipment present on some of the lots. These restrictions are presented in Figure 2. Lots for cabinetry maker or warehouses are restricted to the lots coloured in red. Lots for plumbing or electrician are

restricted to the lots coloured in green and red. Lots for offices can be placed in all locations, but only offices can be placed in lots 1 and 2.

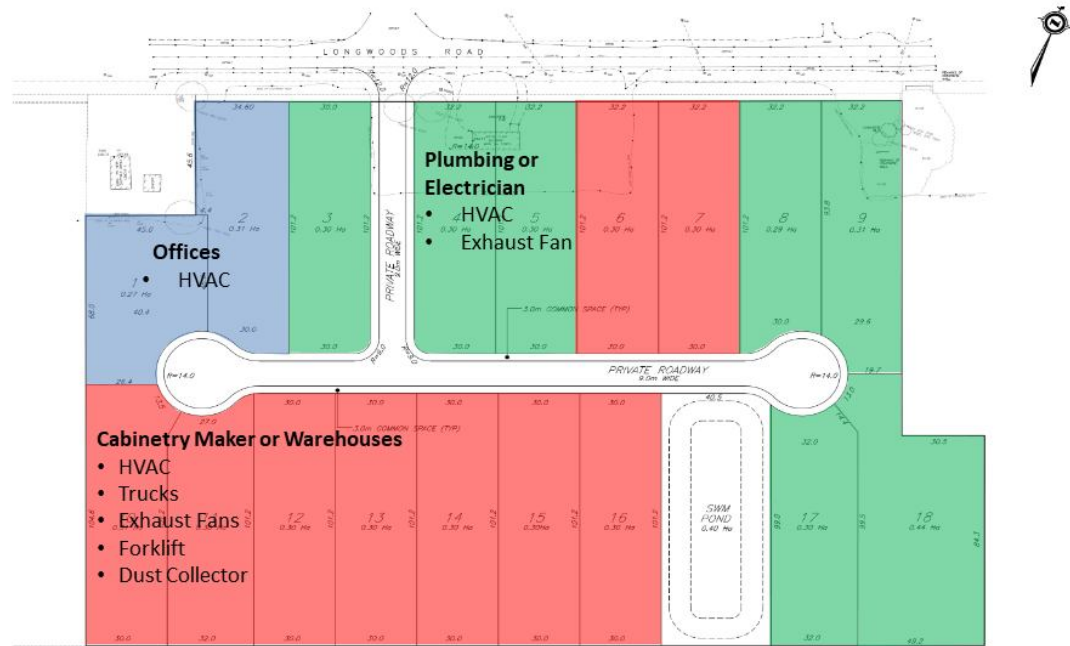


Figure 2: Noise Feasible Configuration

The recommendations listed below are in addition to the restricted uses shown in Figure 2 and will serve as design parameters and should be implemented as detailed design progresses.

1. Noise from forklift activity and the dust collectors should be limited to the southern portions of each lot and behind on-site buildings (where present) to provide adequate screening for northern residential dwellings.
2. Dust collectors, exhausts fans and forklifts are restricted to operate during the daytime period only (07:00 – 19:00).
3. HVAC units for lots 1 and 2 with proposed office uses located on the north western corner of the development are required to meet a maximum allowable sound power level of 82 dBA.
4. Dust collectors are required to meet a maximum allowable sound power level of 103 dBA.

Based on the results of this assessment, the proposed development is considered to be feasible provided that the recommendations outlined are implemented. Detailed assessments for each individual lot should be conducted to ensure that individual impacts do not exceed MECP sound level limits.



Steve Saker
Saker Realty
RWDI #2002177
February 28, 2020

Conclusions

RWDI completed a noise feasibility assessment for the severing of 10915 Longwoods Road into eighteen separate lots. Based on the proposed future land uses for the eighteen new lots, a noise feasible configuration was determined and is shown in Figure 2. In addition to this configuration, a number of recommendations are provided. If the configuration and recommendations are implemented, the proposed development is considered feasible.

Yours truly,

RWDI

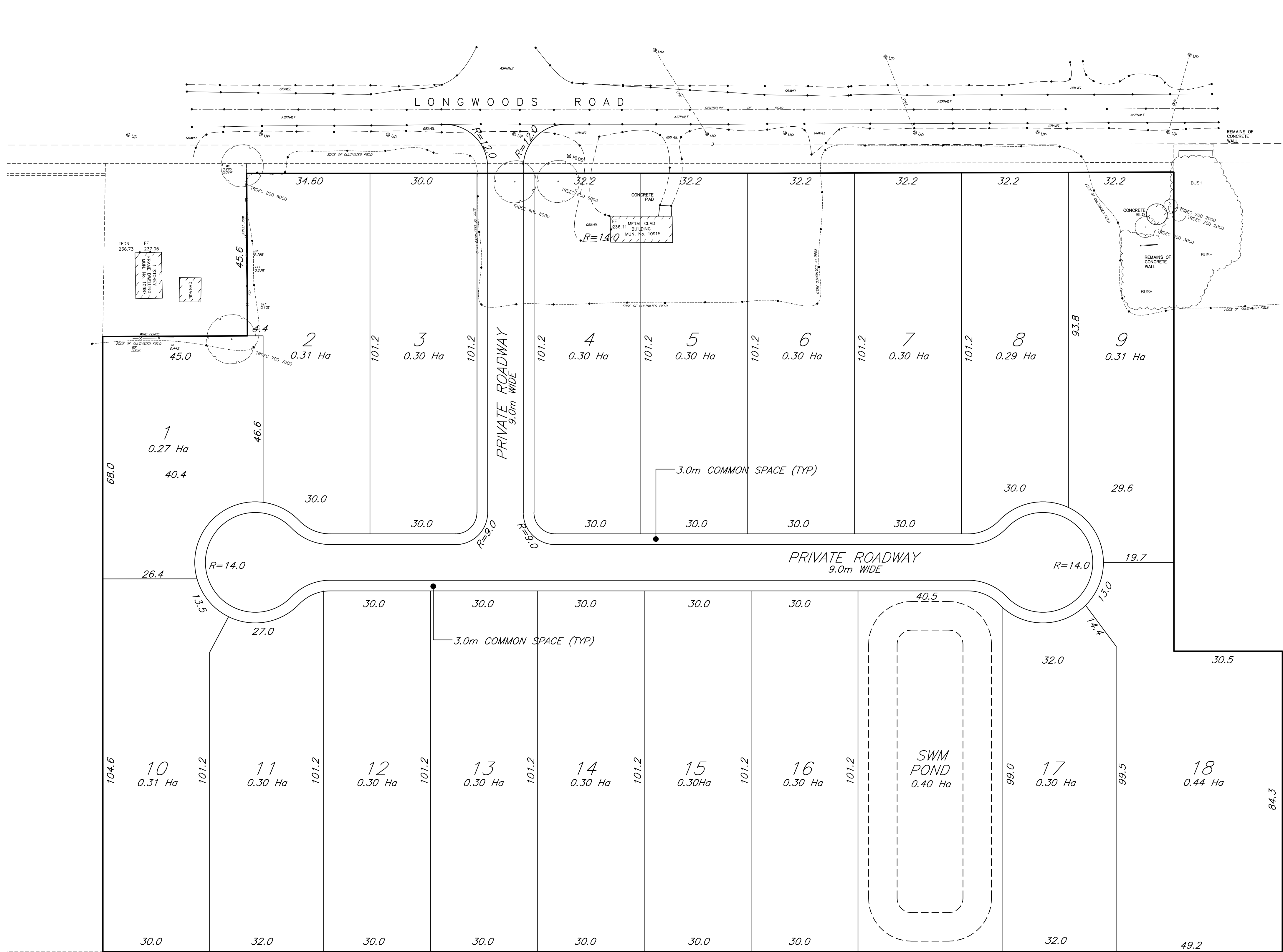
A handwritten signature in black ink, appearing to be 'CF', followed by a long horizontal wavy line.

Claire Finoro, P.Eng., B.Sc.
Project Manager

CIF/hta

APPENDIX A





EXISTING SERVICES	DRAWING #, SOURCE	DATE	CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE	PROJECT No.
					DESIGN	KAM				 Engineers Scientists Surveyors		HORIZONTAL SCALE - 1 : 1250 12.5m 0 25m	44559-100
					DRAWN BY	KAM							SHEET No.
					CHECKED	KAM							1
					APPROVED	KAM							PLAN FILE No.
					DATE	FEB/19							

LOT 6, CONCESSION 1
MUNICIPALITY OF MIDDLESEX CENTRE

PRELIMINARY SITE PLAN