

KEMSLEY FARM SUBDIVISION
MUNICIPALITY OF CENTRAL ELGIN
SERVICING REPORT

19 July 2017

1312

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Appendix 'A' - References

- Letter from PSTR re: Kemsley/Tarry Development, 11 March 2017
- PSTR "SPUR Requirements"

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1.0 Introduction

Kemsley Farm Subdivision property consists of approximately 29.98 ha (74.1 ac) of land, being part of Lots 2 and 3, Concession 6, Municipality of Central Elgin (Yarmouth). For the purposes of this report, “Kemsely Farm” also includes 42477 Southdale Line (0.29 ha (0.7 ac)) and part of 42405 Southdale Line (0.79 ha (2.0 ac)), both of which have been acquired by the Developer and are included in the Draft Plan Application. Of the Kemsley Farm lands, 25.12±ha (62.1 ac) is considered developable, and 4.86± ha (12.0 ac) is ravine/woodlot. Doug Tarry Limited is proposing to develop these lands as a 325± lot single family residential subdivision.

Interest in developing Kemsley Farm dates back at least to the 1980’s. CJD L has worked with a number of developers over the years exploring possible servicing and construction.

The farm is bounded on the north by Southdale Line, to the east by the Port Stanley Terminal Rail/existing development along Sunset Drive, to the west by Kettle Creek Valleylands/open farmland, and to the south by ravine/existing development. The lands drain westerly to Kettle Creek and are divided north (Titterington/Code Municipal Drain), central and south (Hepburn Municipal Drain) ravine watercourses.

The site generally consists of silty clay soils and is gently rolling with contours ranging from elevation 227 to 232.5±m in the table lands.

An overview of the proposed development is provided in the following report and referenced on the attached drawings. The report will provide a practical servicing concept for Kemsley Farm and has been authored to accompany the Phase 1 Draft Plan Application.

2.0 Parks and Trails

The Municipality of Central Elgin’s policy recommends that 5% of the development area be dedicated as park for low-density residential subdivisions. It is understood that cash-in-lieu is acceptable under certain circumstances, however is at the discretion of the Municipality. Central Elgin has communicated that land dedication is requested for this project.

The total area within the Draft Plan limits is 29.98 ha (74.1 ac). Of this area, Block 60 (2.65 ha) and Block 67 (2.21 ha) are natural heritage areas, and are not accounted for when calculating the required 5% dedication. The required parkland dedication for Kemsley Farm Subdivision is therefore 1.26 ha (3.1 ac), and is proposed to be satisfied by Park Block 66 (0.73 ha) and walkway/multi-use trail Blocks 61 - 65 (3.1 ha total) on the Draft Plan.

The location of the park has been selected to be central within the subdivision, adjacent to existing natural heritage and proposed stormwater management (SWM) features that may be integrated into the park. Access to the park will be via the municipal sidewalk proposed on Street 'A', with additional pedestrian access points proposed to interconnect residents on Street 'B' with Street 'A' and the park. Consideration will also be given to connecting the park with the Elgin Hiking Trail system to the west.

Construction of a multi-use trail is proposed along the easterly perimeter of the subject lands, adjacent to the Port Stanley Terminal Rail (PSTR) corridor. The cross-section of the trail is proposed as a 3.0m wide asphalt pathway, to be located within 5.0m wide Block 65. "Municipality of Central Elgin 10 Year Trails Master Plan & Implementation Strategy Final Report" (April 2017) identifies this trail segment as part of the Norman-Lyndale proposed trail network, and recommends implementation concurrent with subdivision development.

The north limit of the Kemsley Farm multi-use trail is Southdale Line. Possible routes to extend this trail and connect with the existing South Path and L&PS multi-use trail networks in the City of St. Thomas are currently being explored, with corridor options including Sunset Drive, PSTR corridor, or through Shaw Valley Subdivision lands.

The multi-use trail is recommended to remain along the east property line of Kemsley Farm subdivision until the top of bank is reached at Block 67. As it is understood that PSTR is not receptive to the multi-use trail being located on their lands at this time, it is therefore recommended that the multi-use trail transverse the Block 67 ravine slope southwesterly, and connect with the northerly terminus of Marlene Street. A pedestrian bridge is required to cross the existing ravine watercourse; wooden foot bridge or concrete box culvert alternatives will be explored during detailed design. Refer to Drawing 2: Parks and Trails Plan for further information.

3.0 Transportation

3.1 Southdale Line

The Kemsley property will contain the equivalent of 325± single family units and will require two (2) points of access from Southdale Line for vehicular connections. The Street 'A' easterly access, being 30.48m wide, was acquired with the purchase of 42477 Southdale Line. Existing structures on this property will be demolished prior to road construction. The Street 'D' westerly access, being 25.60 m wide, will be through Kemsley land opposite the future Shaw Valley Drive extension (Gloin property).

Southdale Line, west of Sunset Drive (Hwy. No. 4), is currently a local 2 lane rural roadway. The 1995 Annexation Agreement adjusted the municipal boundary; west of Lyndale Street, the north half of the road allowance in the City of St. Thomas while the south half is in the Municipality of Central Elgin; east of Lyndale Street the road allowance is entirely within the Municipality of Central Elgin. Central Elgin is responsible for maintenance. In 2006, the intersection of Southdale and Sunset was reconstructed by the Province. The Titterington Drain was also installed along the south side of the ROW outletting to the ravine crossing on Street 'D'.

The Southdale Line road reconstruction is identified in the City of St. Thomas' Development Charges Background Study (Hemson Consulting, May 2015), and is specifically listed as Project 11.1.18 in Appendix C1: Table 2 (Roads and Related). The Municipality of Central Elgin's Development Charge Background Study (Watson & Associates, 24 April 2015) also has Southdale Line reconstruction itemized on their list of Road DC projects. It is understood that cost to reconstruct the road will be shared between each municipality.

Principal components of the reconstruction of Southdale Line include; servicing upgrades to full municipal services (watermain and sanitary sewer extensions), reconstruction of roadway to urban cross-section, construction of left turn lanes to service Kemsley and Shaw Valley subdivision developments, and railway crossing improvements at the PSTR tracks. Further consultation with the Municipality of Central Elgin and the City of St. Thomas is acknowledged on this topic as detailed design is advanced.

Southdale Line road reconstruction was also identified in the December 2008 "Urban Area Expansion Transportation Master Plan" by Paradigm Transportation Solutions Ltd. Table 5.1 and Figure 5.3 indicate the reconstruction of 2 lanes plus railway signals (bell and light). Paradigm has also completed "Kemsley Farm Subdivision Transportation Impact Study" (Paradigm, May 2017) to better identify requirements specific to Kemsley Farm Subdivision;

- A westbound left-turn lane with 15 metres of storage length be constructed on Southdale Line at Street 'A' by 2023, if the extension of Shaw Valley is constructed with the future phases of the Shaw Valley Development.
- The eastbound left-turn queue at the intersection of Sunset Drive and Southdale Line should be extended by 40 metres, for a total of 50 metres. If the Shaw Valley Development is constructed, the eastbound left-turn queue should be extended by 70 metres, for a total of 80 metres, in a cost sharing agreement.
- The County to monitor and review the operation of the eastbound and southbound left-through-right movements at Sunset Drive and Southdale Line to determine the need for left-turn phases.
- PSTR shall monitor and review the operation of the railway crossing and implement a warning system at the crossing including flashing lights and bells once the exposure index reaches 2,000.

For full discussion, refer to "Kemsley Farm Subdivision Transportation Impact Study" (Paradigm, May 2017).

3.2 Railway

The railway bordering the east limit of Kemsley Farm is owned and operated by PSTR, and is classified as a 'spur' line under its current use. PSTR has developed a set of guidelines for application to development projects on adjacent lands, some of which include;

- Safety setback of dwellings from the railway rights-of-way to be a minimum of 15 metres.
- 1.83 m high chainlink fence along the mutual property line of PSTR/subdivision lands.
- A safety berm is not required under the 'spur' line classification.

Refer to Appendix 'A' of this report for a complete listing of all PSTR Spur Requirements and applicable correspondence.

"Noise Feasibility Study, Proposed Residential Development, Kemsley Farm" (HGC, 24 May 2017) was completed to study the impact of the PSTR tracks may have on the proposed Kemsley Farm residential development. Please refer to the report for further information.

3.3 Internal Streets

Kemsley Farm Subdivision will have an internal street network of crescents and cul-de-sacs with primary access off Southdale Line through Streets 'A' and 'D'. Street 'A' will form a continuous north/south connection through the site to the southwest limit of Municipality of Central Elgin Official settlement boundary. This road may be extended to provide a street connection to future development lands to the southwest, and ultimately may include connection to John Wise Line (Elgin County Road No. 45).

All municipal streets within the development are proposed to be constructed to Central Elgin 'local' cross section, including 8.96m back to back curb (20.00m ROW/8.08m asphalt width). Cul-de-sac radii will conform to municipal standards.

42477 Southdale Line, to be used for the Street 'A' connection at Southdale Line, provides for a right-of-way width of 29.0m in this location. Street 'A' right-of-way width will be reduced to standard 20.0m width as it is extended south through the subdivision. A centre island median is proposed to be constructed as an entrance feature to the subdivision, including a proposed road cross-section of 5.0m (wide) median, 2 x 6.0 m travel lanes, and 2 x 5.52m boulevards (Central Elgin standard). The proposed cross-section provides sufficient width for vehicles to perform a U-turn traffic movement. Upon advancement of detailed design, consideration will be given to providing a break half way through the median to provide access to possible future lots fronting Street 'A' from 42483 and/or 42443 Southdale Line.

Road construction at Street 'D' connection to Southdale Line requires crossing of a 5±m deep ravine. A culvert will be installed in the ravine to accommodate existing flows, while the roadway will be filled to design profile grade. Boulevard width will be reduced from standard in this location to allow grades to tie-in with existing within ROW limits.

A Vacant Land Condominium development is currently being contemplated as Phase 2C. This development would be approved under Site Plan control, and is proposed to have 7.50m back to back curb (13.50m common element/6.62m asphalt width) with radii conforming to the Ontario Building Code.

4.0 Grading & Geotechnical

Existing contours of the site show gently sloping terrain of 1-2±%, with localized areas of 3-5±% slopes. Steeper grades will be softened under post-development conditions, where centreline road grades are typically anticipated to fall within the 0.5 - 1.5% range. Road grades may be set in a saw-tooth pattern, as required, to suit proposed SWM wet pond drainage areas. Pre-development major flow paths are generally required to be maintained in post-development conditions.

Lot grading will be designed to minimize the number of rear-yard catchbasins, where practical. Back-to-back lots on parallel streets will generally be designed as back-to-front drainage, where catch basins are not required for lot drainage. Earth grading will raise boulevards and rear property lines to grade prior to sewer servicing. Surplus fill stripped from high points will be placed in low lying areas where it can be accommodated. Some engineered fill will be required adjacent to areas of ravine and wash-out fills.

Previous soils reports by Golders & Associates dated September 1986, July 1987 and September 1988 were done in contemplation of sanitary fieldbeds to determine the soil type and percolation rate. Three (3) 150mmØ steel wells were also drilled between 1985 and 1990 to determine water quality and quantity for anticipated private wells. MOECC water well records showing surficial silty clay overlaying basal sand/till.

“Geotechnical Investigation and Slope Assessment” (exp Services Inc., 27 March 2017) was completed to provide comments and recommendations for this development, including;

- 200 to 300mm of topsoil was found over sandy/clayey silt underlain by clayey silt till. While the stable water table was established at an 18 - 21m depth, some boreholes encountered areas of perched water table.
- Slope analysis completed identifies all existing slopes influencing the property to be stable, and further that a 6.0m erosion access allowance be provided from the existing top of bank to establish the rear property line. The rear property lines on the Draft Plan have been set to respect this restriction.
- Minor washout areas that have developed along the top of existing ravine banks can be filled to re-establish the former top of bank.
- Proposed SWM system within the existing ravine contours is acceptable from a geotechnical standpoint.

Please refer to the EXP Final Report for additional comment.

Portions of some rear yards next to ravine slopes lie within the KCCA Regulation Limit. KCCA permit will be sought prior to grading or servicing.

5.0 Watermain

The Kemsley property is proposed to be serviced by extending the existing 300mmØ stub on Southdale Line westerly from Sunset Drive. This will allow connection to and completion of the 150mmØ Lyndale Ave. watermain loop. Looping of the proposed Southdale Line watermain will ultimately be achieved when the existing 300mmØ watermain on Shaw Valley Drive is extended southerly to Southdale Line.

The 300mmØ Southdale Line watermain project is identified in the City of St. Thomas' Development Charges Background Study (Hemson Consulting, May 2015), and is specifically listed as Project 13.4.4 Appendix D: Table 1 (Southblock Service Area). The benefitting areas are identified as SA 1 (Mill Creek/Lake Margaret), 2 (Shaw Valley), and 3 (Kemsley) and UEA 3 (Parish) and 4 (Orchard Park South, Axford and Dunning), all of which contribute towards the funding of this project. The Municipality of Central Elgin's Development Charge Background Study (Watson & Associates, 24 April 2015) also has the proposed 300mmØ Southdale Line watermain itemized on their list of Water Services DC projects. It is understood that cost to reconstruct the road will be shared between each municipality.

A review of the November 2008 Earthtech/Aecom Phase 2 - Water Servicing Analysis Report (Appendix VI) in support of OPA 66 shows Kemsley to be beyond the scope of the report.

The 300mmØ Southdale Line watermain must be extended west to Street 'A' to service Phase 1 of Kemsley Farm subdivision. Depending on timing and/or staging of Southdale Line road reconstruction, consideration will be given as to whether the 300mmØ is extended further west to the intersection of Street 'D'/Shaw Valley Drive and Southdale Line at this time, or whether that work is deferred until Phase 2.

The 300mmØ Southdale Line watermain to service Kemsley Farm will temporarily be single-fed west of Lyndale Street until Shaw Valley Drive is extended to complete the northerly looped connection. Water servicing within Kemsley Farm will be looped internally with access points proposed on each Street 'A' and 'C'.

The proposed single-feed 300mmØ watermain will provide sufficient pressure and flow to service Kemsley Farm; however, looped redundancy in a watermain system is preferred for reliability of operation in the unlikely event of a main break. DTL estimates that, depending on market demand, sales may be in the order of 25±units/year, equating to a 13-year build-out window based on 325± lots. The warrant for the looped connection increases as Kemsley Farm approaches build-out. It is acknowledged that Shaw Valley Subdivision development is progressing southerly towards Southdale Line, and that the watermain through Shaw Valley Drive may reach Southdale Line in 5±years. It is recommended that the single feed be considered acceptable based on the foregoing estimated timelines; however, acknowledging that build-out rates may change, the topic should be revisited again in future phases. Alternatives for a temporary looped connection may include connecting a 50mmØ watermain to either Shaw Valley Subdivision or to Sunset Drive.

The 300mmØ watermain will be extended southerly through Kemsely lands to service future lands. Internal watermain shall be 200mmØ per Central Elgin standards, with water services being 25mmØ PEX tubing. Refer to Drawing 3: Watermain Servicing Concept Plan for further information.

6.0 Sanitary Sewage

Kemsley Farm falls within the 167 ha (413 ac) design tributary of the Shaw Valley Subdivision Pumping Station as outlined in the Functional Engineering Report (FER) for Phase 2 (updated November 2006) by Higgins Engineering Limited. The pumping station was constructed c. 2007 during servicing of Phase 1 of Shaw Valley Subdivision.

The servicing of Kemsley requires the extension of a 300mmØ sanitary trunk southerly from the existing Shaw Valley P.S. along the Shaw Valley Drive right-of-way (ROW) to Southdale Line. This ROW was registered and conveyed to the City of St. Thomas upon registration for the purposes of constructing this sewer, in the event of Kemsley being serviced prior to the completion of Shaw Valley Drive. Consultation with Shaw Valley is acknowledged to be required to determine optimal sewer alignment, private drain connection (PDC) strategy and whether a 'stacked' design is warranted along Shaw Valley Drive.

Refer to Drawing 4: Sanitary Servicing Concept Plan for sanitary trunk sewer servicing of Kemsley Farm, including an overlay of the sanitary tributary areas surrounding Kemsley Farm, as outlined within the reports for each of the Shaw Valley, Axford Parkway (Ed/Rec), and Karen Street sanitary pumping stations. Note that there is some overlap in the respective tributary areas, and an unaccounted area of ± fifteen (15) houses along Southdale Line, east of Sunset Drive (there is sufficient depth in the existing 250mmØ sanitary stub on Southdale Line west of Lake Margaret Trail to service these homes). As part of servicing of Kemsley Farm Phase 1, the sanitary sewer is proposed to be extended east from Shaw Valley Drive on Southdale Line to Street 'A', and south into Kemsley Farm.

Maximum sewer depth (>9m deep at parts through Shaw Valley lands) is to be maintained through Shaw Valley and Kemsley Farm to service future Gunn Property lands to the south west. Sewer depth on Southdale Line will be governed by providing gravity basement service to existing homes at Sunset Drive (the easterly service area limit), and will be installed shallower than originally intended subsequent to the construction of Karen Street P.S.

A summary of design criteria and capacities is as follows:

Table 7.1: SUMMARY OF SANITARY DESIGN CRITERIA

ITEM	CRITERIA		
	ST. THOMAS	CENTRAL ELGIN	SHAW VALLEY (MODIFIED ST. THOMAS)
Population - LD Residential c/ha	44	44	25.7
Sewage - L/c/d	250	400	340
Infiltration - L/ha/d (L/s/ha)	8,640 (0.100)	17,280 (0.200)	10,000 (0.116)
Peak Factor (M)	$M = 1 + 14(4 + P^{0.5})^{-1}$ P IN 1000'S		3.0*

*Constant peaking factor is based on the city of St. Thomas South Block Servicing and Utility Plan (observed peaking factor from P.S. report was 2.5.)

Table 7.2: COMPARISON OF PIPE CAPACITIES

DIAMETER mm	GRADE @ V ≥ 0.6 m/s %	GRAVITY CAP L/S	AREA CAPACITIES & CRITERIA		
			ST. THOMAS ha (Ac)	CENTRAL ELGIN ha (Ac)	SHAW VALLEY (modified St. Thomas) ha (Ac)
300	0.22	45.36	96.5 (163.9)	49.1 (121.3)	108.2 (267.4)
250	0.28	31.47	55.8 (109.9)	33.1 (81.8)	75.1 (185.6)
200	0.40	20.74	34.9 (70.1)	21.2 (52.4)	49.5 (122.3)

It is evident that capacities vary widely according to the criteria used with the modified St. Thomas values used by Shaw Valley being the most generous. It is proposed to use the City of St. Thomas criteria north of Southdale Line while adopting Central Elgin criteria on Southdale Line, Kemsley and areas south.

7.0 Storm Drainage Including Stormwater Management

Several studies to address stormwater management issues were put forward in response to urban expansion. Dillon's May 1997 "Mill Creek - South Block Area Subwatershed Study" looked at several pending developments in the south end of St. Thomas including Kemsley Farm. It is stipulated the need to detain a 25mm (1") quality/streambank erosion storm for at least 24 hours and to attenuate the 5 year post-development event to pre-development levels.

In May 2009, Dillon issued an Addendum to their 1997 report in support of Official Plan Amendment No. 66 to expand the City boundary. The Addendum reiterated the findings of the earlier report including the use of either an artificial wetland or a wet pond design. It confirmed that major storm quantity controls to mitigate potential flooding were not required due to the site's proximity to Kettle Creek.

The proposed SWM facility shall be designed as a 2-cell wet pond, to service a tributary of 28.34 ha (70.0 Ac), and shall be located in the north finger of the central ravine. Subdivision storm sewers will outlet to the upper quality control pond. After detention of the quality/streambank erosion event, run-off will discharge to the lower quantity control pond which will attenuate the 5 year storm events. Outflows from the SWM facility eventually discharge to Kettle Creek. Refer to Drawing 5: Storm Servicing Concept Plan for further information.

Refer to the Kemsley Farm Subdivision "Preliminary Stormwater Management Report (CJDL, 19 July 2017)" for further details.

8.0 Electrical and Utilities

Electrical power to the Kemsely Farm and other Southdale Line properties is presently provided by Hydro One. It is anticipated that Kemsley Farm will receive electrical power from Hydro One and that upgrading of existing plant and/or installation of a new feed may be required.

Similarly, it is understood that Bell, Rogers and Union Gas presently provide service to Southdale Line. Bell, Rogers and Union Gas will advise whether upgrades are required to accommodate Kemsley Farm.

Contact with the various utilities will continue following submission of this Draft Plan Application.

9.0 Other Related Studies

The following other related studies are in progress and shall follow this report:

- Archaeological Assessment, Stage I and II by Amec, Foster, Wheeler.
- Planning Justification Report by Zelinka Priamo Ltd.
- Environmental Impact Study (EIS) by Leonard + Associates.

10. Phasing - See Drawing 7

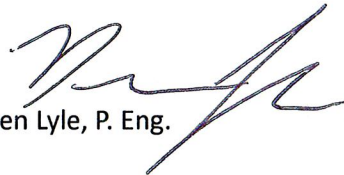
- Phase 1 - Street A (incl. intersection at Southdale), Street B
 - 59 single family lots
 - SWM pond, park and trail public land
- Phase 2A, B and C
 - Street D (incl. intersection at Southdale Line), Street C
 - 75± single family lots
 - 20 unit condo site
- Phase 3A, B and C
 - Streets A and B - middle portions, Street E cul-de-sac
 - 110± single family lots
- Phase 4
 - Streets A and B - southerly completion
 - 60± single family lots

Possible future development from backlotting along the south side of Southdale Line may occur during any phase following servicing during Phase 1.

All of which is respectfully submitted by,



T. Paul Tuff, P. Eng.

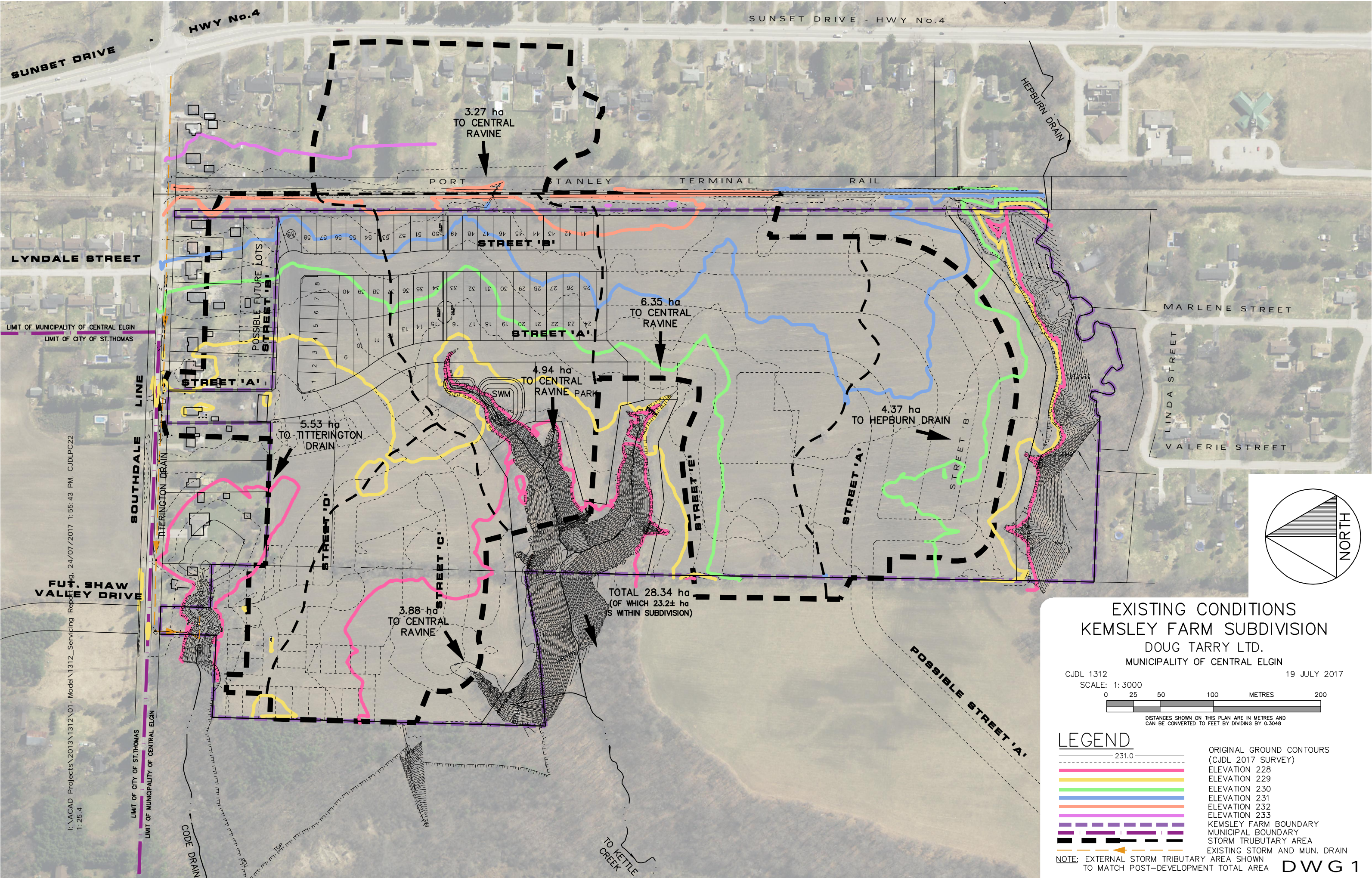


Deren Lyle, P. Eng.

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LIST OF FIGURES

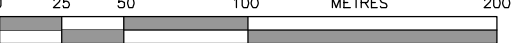
Drawing 1	Existing Conditions
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EXISTING CONDITIONS
KEMSLEY FARM SUBDIVISION
DOUG TARRY LTD.
MUNICIPALITY OF CENTRAL ELGIN

CJDL 1312 19 JULY 2017

SCALE: 1:3000



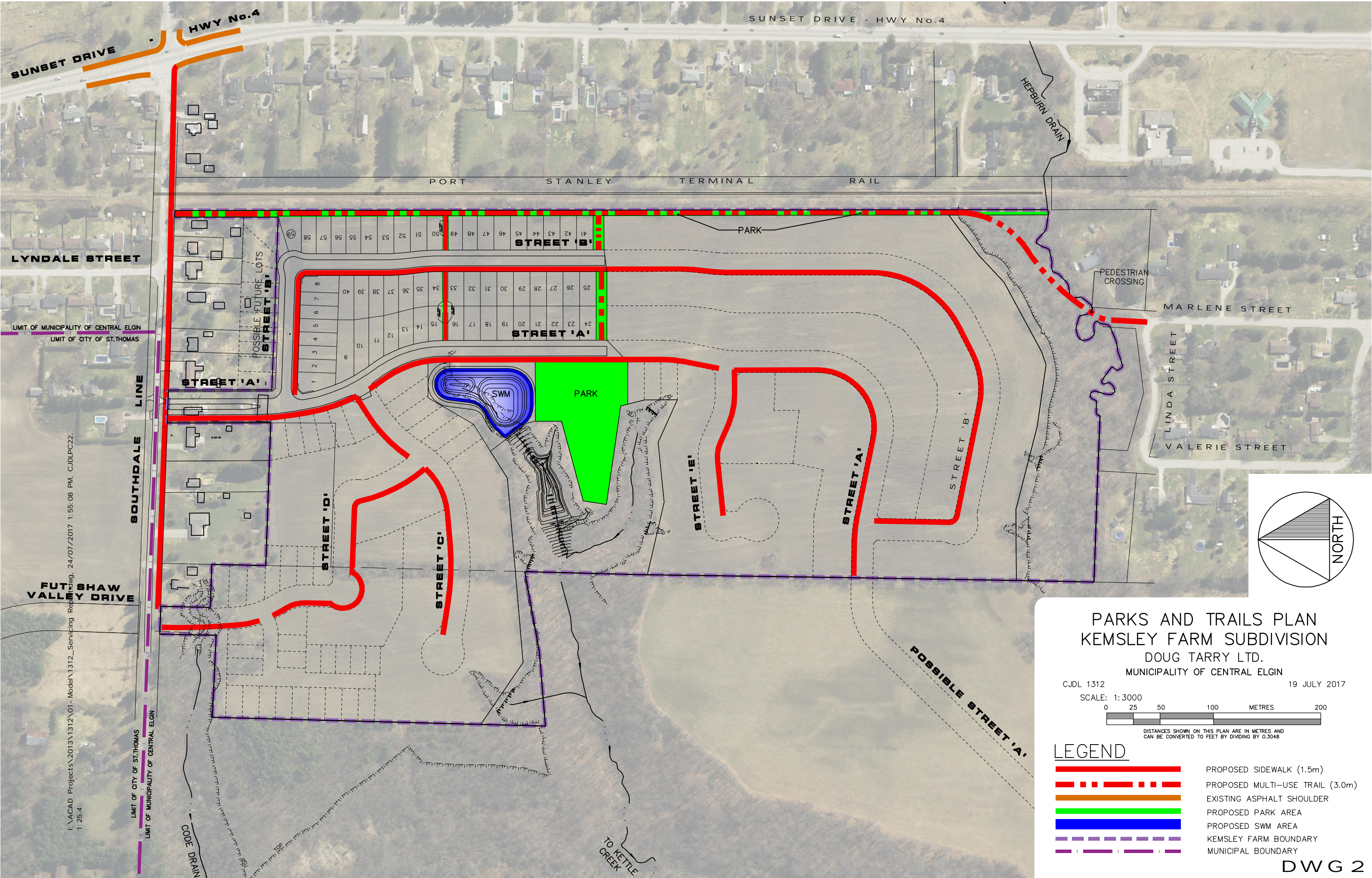
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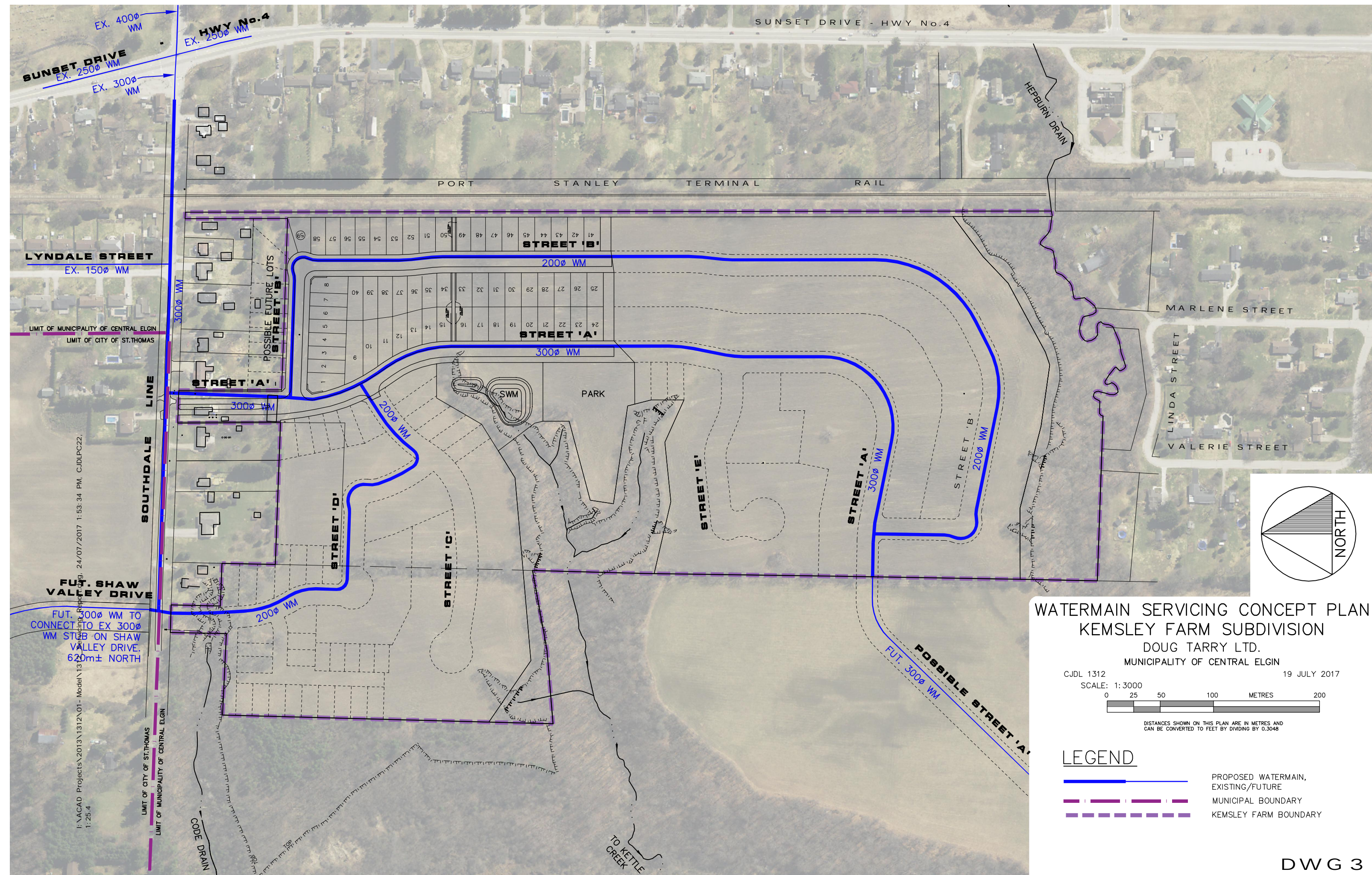
LEGEND

- 231.0
- ORIGINAL GROUND CONTOURS (CJDL 2017 SURVEY)
- ELEVATION 228
- ELEVATION 229
- ELEVATION 230
- ELEVATION 231
- ELEVATION 232
- ELEVATION 233
- KEMSLEY FARM BOUNDARY
- MUNICIPAL BOUNDARY
- STORM TRIBUTARY AREA
- EXISTING STORM AND MUN. DRAIN

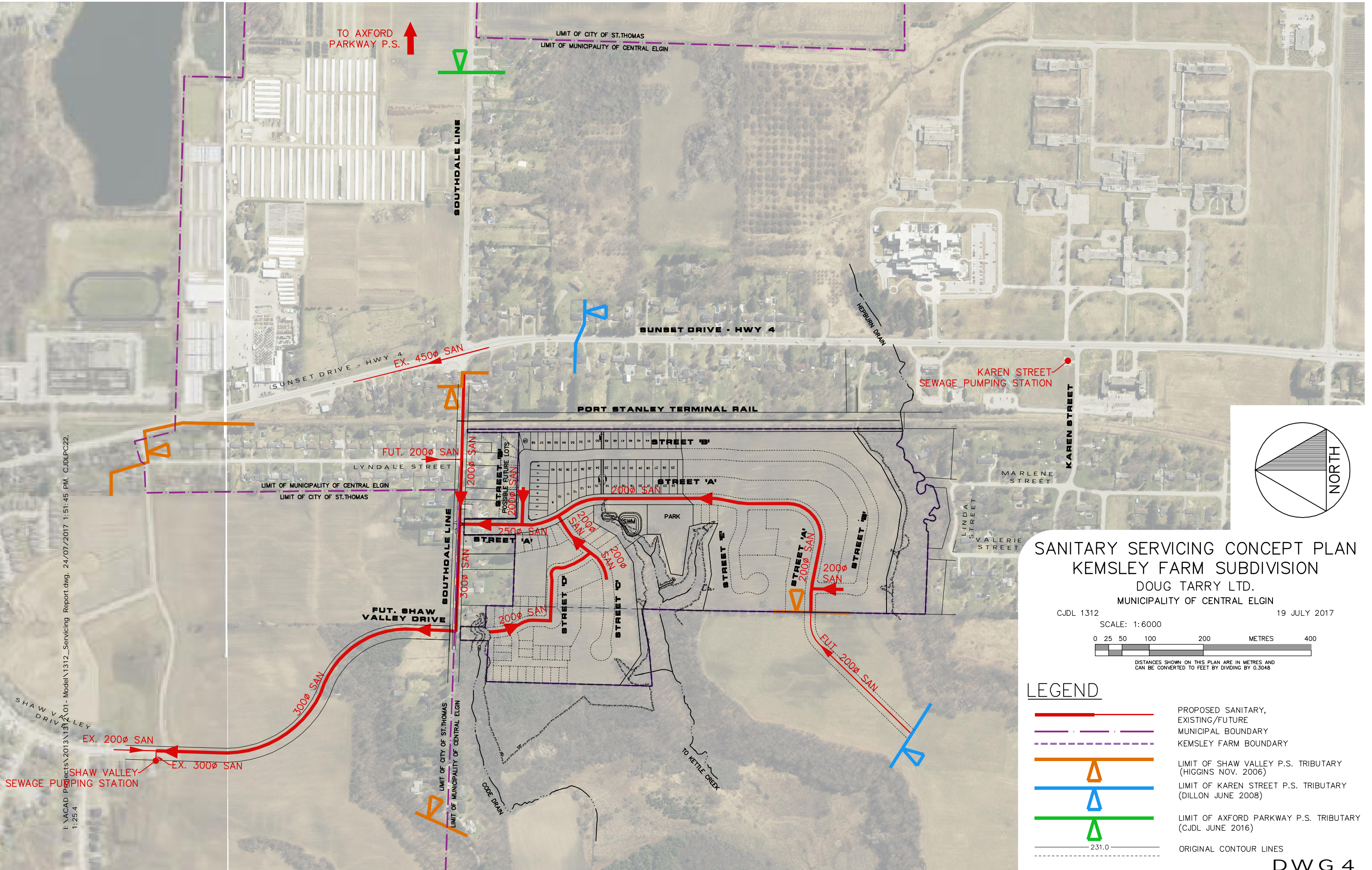
NOTE: EXTERNAL STORM TRIBUTARY AREA SHOWN TO MATCH POST-DEVELOPMENT TOTAL AREA

DWG 1





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SANITARY SERVICING CONCEPT PLAN KEMSLEY FARM SUBDIVISION

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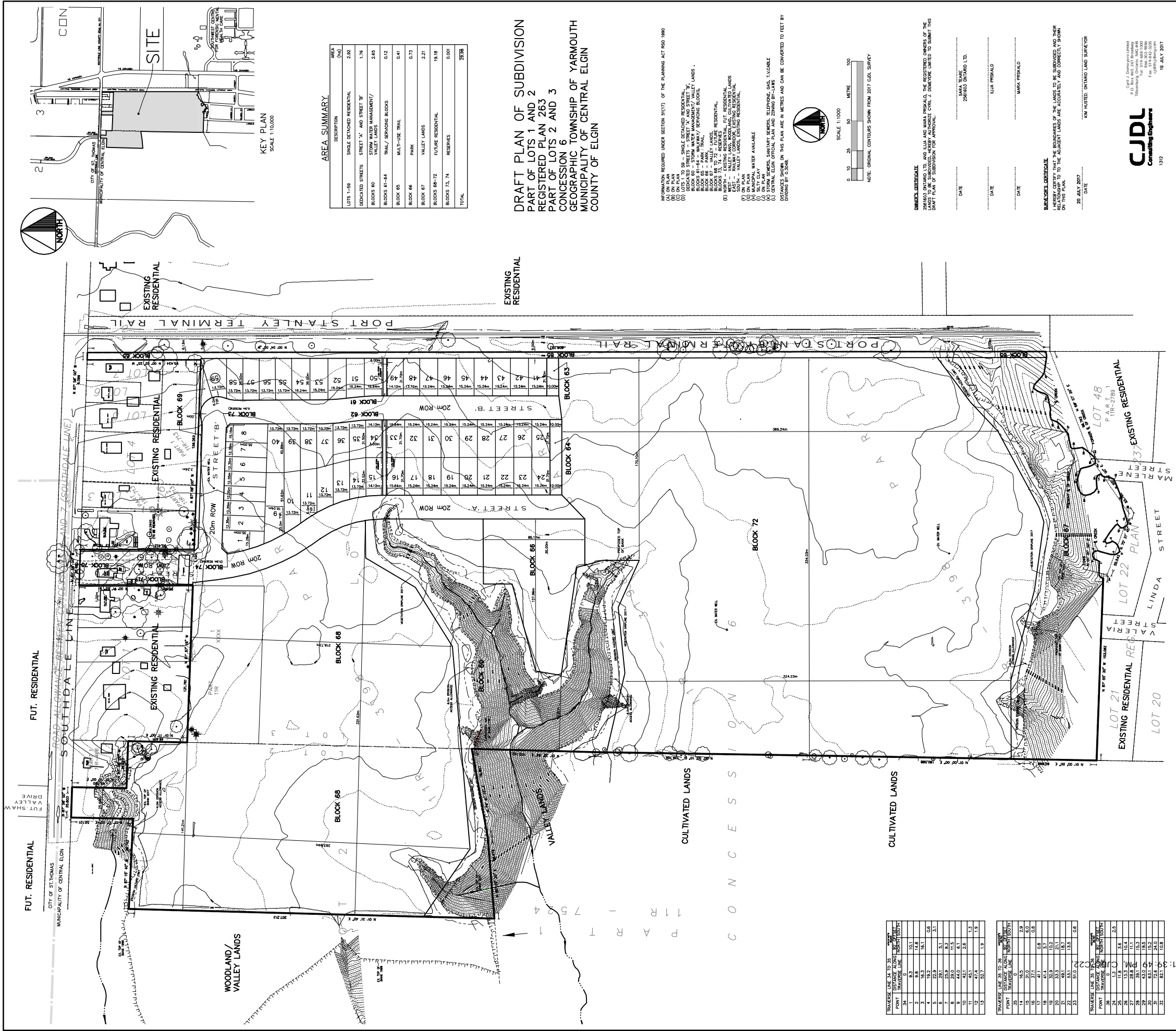
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DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

LEGEND

- PROPOSED SANITARY, EXISTING/FUTURE
- MUNICIPAL BOUNDARY
- KEMSLEY FARM BOUNDARY
- LIMIT OF SHAW VALLEY P.S. TRIBUTARY (HIGGINS NOV. 2006)
- LIMIT OF KAREN STREET P.S. TRIBUTARY (DILLON JUNE 2008)
- LIMIT OF AXFORD PARKWAY P.S. TRIBUTARY (CJDL JUNE 2016)
- ORIGINAL CONTOUR LINES



TRAVERSE LINE 35 TO 38			
POINT	STATION	DISTANCE ALONG LINE	COORDINATES
35	0.0	0.0	10.0
36	1.0	1.0	10.0
37	2.0	2.0	10.0
38	3.0	3.0	10.0
39	4.0	4.0	10.0
40	5.0	5.0	10.0
41	6.0	6.0	10.0
42	7.0	7.0	10.0
43	8.0	8.0	10.0
44	9.0	9.0	10.0
45	10.0	10.0	10.0
46	11.0	11.0	10.0
47	12.0	12.0	10.0
48	13.0	13.0	10.0
49	14.0	14.0	10.0
50	15.0	15.0	10.0
51	16.0	16.0	10.0
52	17.0	17.0	10.0
53	18.0	18.0	10.0
54	19.0	19.0	10.0
55	20.0	20.0	10.0
56	21.0	21.0	10.0
57	22.0	22.0	10.0
58	23.0	23.0	10.0
59	24.0	24.0	10.0
60	25.0	25.0	10.0
61	26.0	26.0	10.0
62	27.0	27.0	10.0
63	28.0	28.0	10.0
64	29.0	29.0	10.0
65	30.0	30.0	10.0
66	31.0	31.0	10.0
67	32.0	32.0	10.0
68	33.0	33.0	10.0
69	34.0	34.0	10.0
70	35.0	35.0	10.0
71	36.0	36.0	10.0
72	37.0	37.0	10.0
73	38.0	38.0	10.0
74	39.0	39.0	10.0
75	40.0	40.0	10.0
76	41.0	41.0	10.0
77	42.0	42.0	10.0
78	43.0	43.0	10.0
79	44.0	44.0	10.0
80	45.0	45.0	10.0
81	46.0	46.0	10.0
82	47.0	47.0	10.0
83	48.0	48.0	10.0
84	49.0	49.0	10.0
85	50.0	50.0	10.0
86	51.0	51.0	10.0
87	52.0	52.0	10.0
88	53.0	53.0	10.0
89	54.0	54.0	10.0
90	55.0	55.0	10.0
91	56.0	56.0	10.0
92	57.0	57.0	10.0
93	58.0	58.0	10.0
94	59.0	59.0	10.0
95	60.0	60.0	10.0
96	61.0	61.0	10.0
97	62.0	62.0	10.0
98	63.0	63.0	10.0
99	64.0	64.0	10.0
100	65.0	65.0	10.0

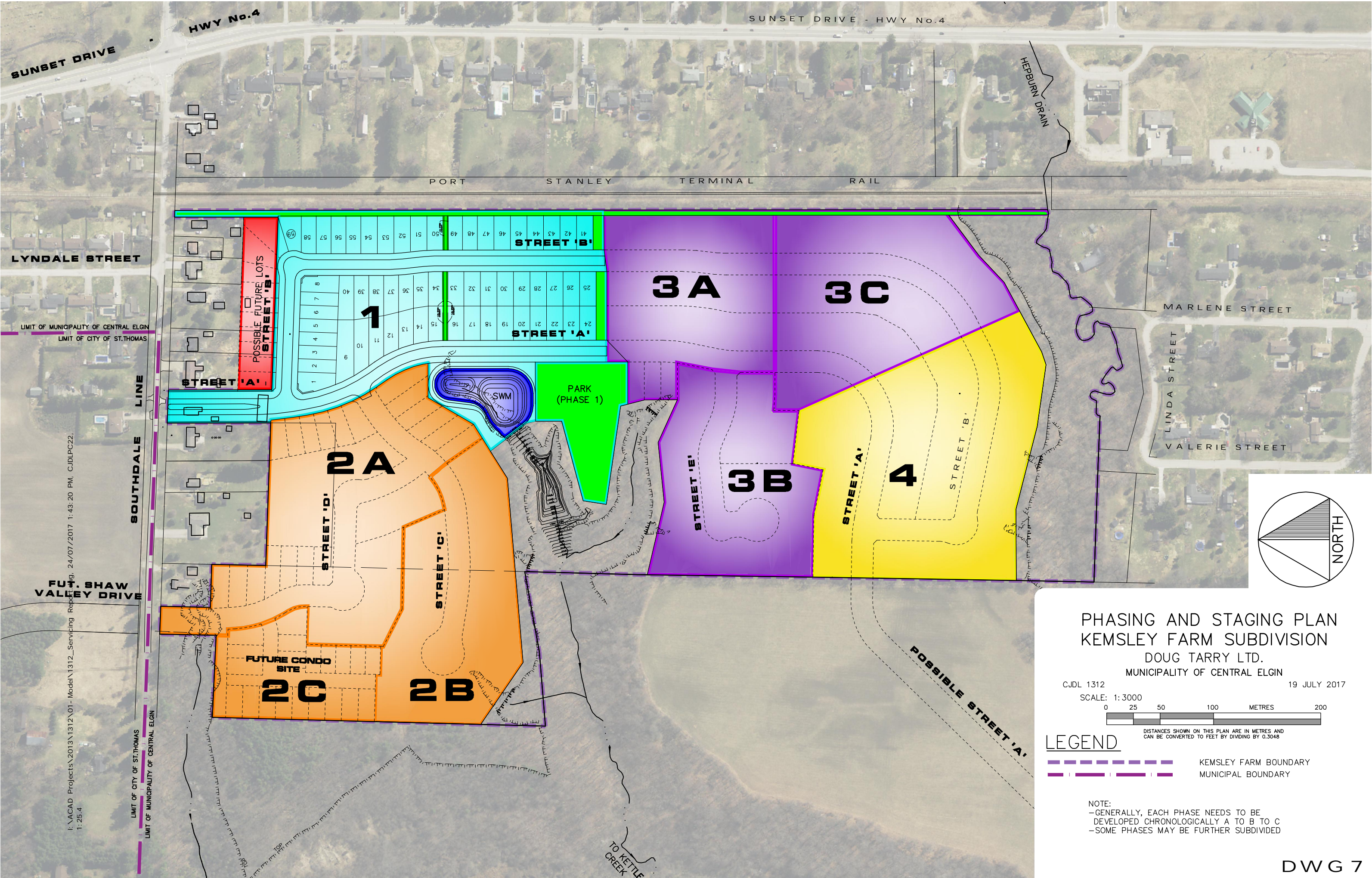
TRAVERSE LINE 35 TO 38			
POINT	STATION	DISTANCE ALONG LINE	COORDINATES
35	0.0	0.0	10.0
36	1.0	1.0	10.0
37	2.0	2.0	10.0
38	3.0	3.0	10.0
39	4.0	4.0	10.0
40	5.0	5.0	10.0
41	6.0	6.0	10.0
42	7.0	7.0	10.0
43	8.0	8.0	10.0
44	9.0	9.0	10.0
45	10.0	10.0	10.0
46	11.0	11.0	10.0
47	12.0	12.0	10.0
48	13.0	13.0	10.0
49	14.0	14.0	10.0
50	15.0	15.0	10.0
51	16.0	16.0	10.0
52	17.0	17.0	10.0
53	18.0	18.0	10.0
54	19.0	19.0	10.0
55	20.0	20.0	10.0
56	21.0	21.0	10.0
57	22.0	22.0	10.0
58	23.0	23.0	10.0
59	24.0	24.0	10.0
60	25.0	25.0	10.0
61	26.0	26.0	10.0
62	27.0	27.0	10.0
63	28.0	28.0	10.0
64	29.0	29.0	10.0
65	30.0	30.0	10.0
66	31.0	31.0	10.0
67	32.0	32.0	10.0
68	33.0	33.0	10.0
69	34.0	34.0	10.0
70	35.0	35.0	10.0
71	36.0	36.0	10.0
72	37.0	37.0	10.0
73	38.0	38.0	10.0
74	39.0	39.0	10.0
75	40.0	40.0	10.0
76	41.0	41.0	10.0
77	42.0	42.0	10.0
78	43.0	43.0	10.0
79	44.0	44.0	10.0
80	45.0	45.0	10.0
81	46.0	46.0	10.0
82	47.0	47.0	10.0
83	48.0	48.0	10.0
84	49.0	49.0	10.0
85	50.0	50.0	10.0
86	51.0	51.0	10.0
87	52.0	52.0	10.0
88	53.0	53.0	10.0
89	54.0	54.0	10.0
90	55.0	55.0	10.0
91	56.0	56.0	10.0
92	57.0	57.0	10.0
93	58.0	58.0	10.0
94	59.0	59.0	10.0
95	60.0	60.0	10.0
96	61.0	61.0	10.0
97	62.0	62.0	10.0
98	63.0	63.0	10.0
99	64.0	64.0	10.0
100	65.0	65.0	10.0

TRAVERSE LINE 35 TO 38			
POINT	STATION	DISTANCE ALONG LINE	COORDINATES
35	0.0	0.0	10.0
36	1.0	1.0	10.0
37	2.0	2.0	10.0
38	3.0	3.0	10.0
39	4.0	4.0	10.0
40	5.0	5.0	10.0
41	6.0	6.0	10.0
42	7.0	7.0	10.0
43	8.0	8.0	10.0
44	9.0	9.0	10.0
45	10.0	10.0	10.0
46	11.0	11.0	10.0
47	12.0	12.0	10.0
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49	14.0	14.0	10.0
50	15.0	15.0	10.0
51	16.0	16.0	10.0
52	17.0	17.0	10.0
53	18.0	18.0	10.0
54	19.0	19.0	10.0
55	20.0	20.0	10.0
56	21.0	21.0	10.0
57	22.0	22.0	10.0
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60	25.0	25.0	10.0
61	26.0	26.0	10.0
62	27.0	27.0	10.0
63	28.0	28.0	10.0
64	29.0	29.0	10.0
65	30.0	30.0	10.0
66	31.0	31.0	10.0
67	32.0	32.0	10.0
68	33.0	33.0	10.0
69	34.0	34.0	10.0
70	35.0	35.0	10.0
71	36.0	36.0	10.0
72	37.0	37.0	10.0
73	38.0	38.0	10.0
74	39.0	39.0	10.0
75	40.0	40.0	10.0
76	41.0	41.0	10.0
77	42.0	42.0	10.0
78	43.0	43.0	10.0
79	44.0	44.0	10.0
80	45.0	45.0	10.0
81	46.0	46.0	10.0
82	47.0	47.0	10.0
83	48.0	48.0	10.0
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85	50.0	50.0	10.0
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89	54.0	54.0	10.0
90	55.0	55.0	10.0
91	56.0	56.0	10.0
92	57.0	57.0	10.0
93	58.0	58.0	10.0
94	59.0	59.0	10.0
95	60.0	60.0	10.0
96	61.0	61.0	10.0
97	62.0	62.0	10.0
98	63.0	63.0	10.0
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100	65.0	65.0	10.0

AREA SUMMARY	
DESCRIPTION	AREA (m ²)
LOT 1-59	2.92
DEDICATED STREETS	1.76
STORM WATER MANAGEMENT/ VALLEY LANDS	2.69
BLOCKS 61-64	0.12
BLOCK 65	0.41
BLOCK 66	0.73
BLOCK 67	2.21
BLOCKS 68-72	19.18
BLOCKS 73, 74	0.00
TOTAL	25.98

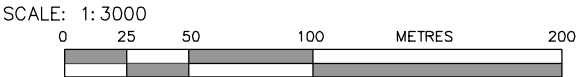
DRAFT PLAN OF SUBDIVISION
PART OF LOTS 1 AND 2
REGISTERED PLAN 263
PART OF LOTS 2 AND 3
CONCESSION 6
GEOGRAPHIC TOWNSHIP OF YARMOUTH
MUNICIPALITY OF CENTRAL ELGIN
COUNTY OF ELGIN

INFORMATION REQUIRED UNDER SECTION 5(17) OF THE PLANNING ACT RSO 1990
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PHASING AND STAGING PLAN
KEMSLEY FARM SUBDIVISION
DOUG TARRY LTD.
MUNICIPALITY OF CENTRAL ELGIN

CJDL 1312 19 JULY 2017



LEGEND

- KEMSLEY FARM BOUNDARY
- MUNICIPAL BOUNDARY

NOTE:
-GENERALLY, EACH PHASE NEEDS TO BE
DEVELOPED CHRONOLOGICALLY A TO B TO C
-SOME PHASES MAY BE FURTHER SUBDIVIDED

APPENDIX 'A' - REFERENCES

- Letter from PSTR re: Kemsley/Tarry Development, 11 March 2017
- PSTR "SPUR Requirements"



Port Stanley Terminal Rail Inc.

309 Bridge Street, Port Stanley, Ontario N5L 1C5 (519) 782-3730, Fax (519) 782-3250

March 11, 2017

Nicole Ooms
Planner
Doug Tarry Developments

Regarding Kemsley/ Tarry Development

The Port Stanley Terminal Rail (PSTR) is an Ontario Chartered Rail Company under the Ontario Shortline Railway Act of 1996 that provides service on the Port Stanley to St. Thomas corridor year round on a 24/7 basis.

Currently PSTR operates tourist trains with small lightweight locomotives and coaches. PSTR has developed a set of guidelines for proposed activity abutting our railway right of way. There is a definite possibility of schedule / equipment changes once the track in St. Thomas is connected to the mainline.

In addition the Board of Directors has voted to not allow any trail on our property due to the potential dangers and liabilities this structure might incur.

Please contact us with any further questions.

Regards,

Dan Vernackt,
President, PSTR



Port Stanley Terminal Rail Inc.

309 Bridge Street, Port Stanley, Ontario N5L 1C5 (519) 782-3730, Fax (519) 782-4385

SPUR REQUIREMENTS

- A. Safety setback of dwellings from the railway rights-of-way to be a minimum of 15 metres.
- B. The Developer/Owner shall, as a minimum, install and maintain a chain link fence of minimum 1.83 metre height along the mutual property line. The Developer/Owner may conduct this work up to 3 metres on the PSTR side of the mutual property line as to not interfere with normal train operations.
- C. The following clause should be inserted in all development agreements, offers to purchase, and agreements of Purchase and Sale or Lease of each dwelling unit within 300m of the railway right-of-way: "Warning: Port Stanley Terminal Rail or its assigns or successors in interest has or have a rights-of-way within 300 metres from the land the subject hereof. There may be alterations to or expansions of the railway facilities on such rights-of-way in the future including the possibility that the railway or its assigns or successors as aforesaid may expand its operations, which expansion may affect the living environment of the residents in the vicinity, notwithstanding the inclusion of any noise and vibration attenuating measures in the design of the development and individual dwelling(s). PSTR will not be responsible for any complaints or claims arising from use of such facilities and/or operations on, over or under the aforesaid rights-of-way."
- D. Any proposed alterations to the existing drainage pattern affecting railway property must receive prior concurrence from the Railway and be substantiated by a drainage report to the satisfaction of the Railway.
- E. The Developer/Owner shall through restrictive covenants to be registered on title and all agreements of purchase and sale or lease provide notice to the public that the fencing, and if necessary the safety berm, and vibration isolation measures implemented are not to be tampered with or altered and further that the Developer/Owner shall have sole responsibility for and shall maintain these measures to the satisfaction of PSTR.
- F. The Developer/Owner enter into an Agreement stipulating how PSTR's concerns will be resolved and will pay PSTR's reasonable costs in preparing and negotiating the agreement.
- G. The Developer/Owner may be required to grant PSTR an environmental easement for operational noise and vibration emissions, registered against the subject property in favour of PSTR.
- H. The owner acknowledges that should the usage on the Right of Way change the following caveats are in place.
 - 1. The fence as noted in paragraph B may be augmented with a safety berm. The safety berm shall be adjoining and parallel to the railway rights-of-way with returns at the ends, 2.0 metres above grade at the property line, with side slopes not steeper than 2.5 to 1
 - 2. Ground-borne vibration transmission to be evaluated in a report through site testing to determine if dwellings within 75 metres of the railway rights-of-way will be impacted by vibration conditions in excess of 0.14 mm/sec RMS between 4 Hz and 200 Hz. The monitoring system should be capable of measuring frequencies between 4 Hz and 200 Hz, ± 3 dB with an RMS averaging time constant of 1 second. If in excess, isolation measures will be required to ensure living areas do not exceed 0.14 mm/sec RMS on and above the first floor of the dwelling.
- I. The cost of all measures above will be borne by the Developer/Owner.