

3119 Carp Road Plan of Subdivision  
Ottawa, Ontario  
Servicing Options and  
Stormwater Management Report

Prepared For:

Greg LeBlanc

Prepared By:

Robinson Land Development

Our Project No. 13084  
September 2014

## Legal Notification

This report was prepared by **Robinson Land Development** for the account of **Greg LeBlanc**.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. **Robinson Land Development** accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this project.

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**Draft Plan of Subdivision** of Part of Lot 12, Concession 3, Geographic Township of Huntley, City of Ottawa (prepared by Farley, Smith and Denis Surveying Ltd.)

### **Figure 2** – Storm Drainage Area Plan

Drawing # **13084- GR1, GR2 and GR3** Grading and Drainage Plans

**West Capital Airpark, Drawings # 102085-GR5, GR6, GR8 and GR9**, (prepared by Novatech Engineering Consultants Ltd.)

Drawing # **13084-ESC1**, Erosion and Sediment Control Plan

## 1.0 INTRODUCTION

Mr. Greg LeBlanc has retained Robinson Land Development to provide engineering services for a proposed 12 lot rural commercial/industrial development within the City of Ottawa. This report is being prepared to support the subdivision and condominium applications. It is intended that this report will summarize the existing conditions of the development area and will provide guidance for the future detailed servicing and grading design (required at the draft plan stage). The site is located at 3119 Carp Road in the City of Ottawa, Ontario (see Figure 1-Key Plan, Appendix A).

## 2.0 EXISTING CONDITIONS

The approximately 14 Ha undeveloped parcel (herein referred to as the *Development*) is proposed to be developed as a 12 lot/14 block rural condominium plan of subdivision noted in the section above. The *Development* is currently zoned RC-9 (Rural Commercial).

## 3.0 DEVELOPMENT PROPOSAL

The proposed *Development* will consist of the establishment of 12 rural industrial/commercial lots (to be developed individually by others as separate site plan applications at a later date) and 2 blocks (13 and 14) which will be developed as private common elements condominium streets (see Draft Plan of Subdivision and Draft Plan of Common Element Condominium, both prepared by Farley, Smith and Denis Surveying Ltd., Appendix A).

## 4.0 WATERMAIN AND SANITARY SERVICING

As municipal services are not available for this proposed *Development*, private services for each of the proposed 12 lots will be required. A hydrogeological and terrain analysis report has been prepared by Houle Chevrier (to be submitted under separate cover) to support this type of servicing.

The potable water service will be provided through the use of a new on-site drilled well for each lot. In addition, fire suppression for each lot will be required as part of the site plan applications. Accordingly, either individual on-site fire suppression tanks or one dry hydrant (located at the western end of Street #1) or a combination of the dry hydrant and individual on-site tanks can be provided to satisfy the fire suppression requirement. These details are to be provided within the individual site plan applications at the appropriate detailed design stage for each lot. Even though the dry hydrant option for fire suppression will not be finalized until a later detailed design stage, the City of Ottawa Fire Chief has been contacted to comment on the feasibility of the secondary option.

The proposed sanitary services for the site will utilize individual septic systems on each lot. As with the water supply, the septic system details are to be provided within the individual site plan applications at the appropriate detailed design stage to satisfy the individual site design.

## 5.0 STORM & STORMWATER MANAGEMENT REQUIREMENTS

For the proposed *Development*, the following is a list of recommendations for mitigating the post development storm water runoff for the proposed road right-of-ways (ROWs) that are being designed to support the condominium plan of subdivision application:

### 5.1 General Requirements

- Maintain pre-development drainage area boundaries as much as possible.
- Control post-development flow to meet pre-development levels.
- The excess stormwater for the 5-year and 100-year storm event for proposed street ROWs to be stored in the proposed road side ditches.
- Quality control measures for the roadway drainage to be provided by vegetation within the proposed roadside ditches.

These recommendations would need to be addressed (with supporting calculations) as part of the detailed design work at the detailed design stage.

### 5.2 Quantity Design

The post development runoff is restricted to the pre-development design event for up to and including the 100 year design event. However, the ROW portion of the proposed *Development* is only ~ 5% of the total area tributary to the outlet of the site; the off-site ditch on the Carp Airport lands (see Appendix A for Figure 2 – Storm Drainage Area Plan). In addition, the soils in this area are naturally sandy and will promote more infiltration than runoff. Therefore, it is our opinion that, the increase in flows from the proposed road ROWs will contribute negligibly to the overall flow and therefore would not require any on-site quantity mitigating measures. However, if necessary (at the detailed design stage), the proposed ditches within the ROW can be designed with the following additions in order to achieve a small amount of on-site storage in the post development scenario:

- increased bottom width and/or
- reduced side slopes and/or
- rock check dams within the ditch itself.

These measures would be easily incorporated into the design at the detailed design stage.

For the individual lots, they would need to provide on-site quantity control storage up to and including the 100 year design event as per the current City of Ottawa Sewer Design Guidelines. The site plan process would ensure that each development site follows this recommendation for their design.

### 5.3 Quality Requirements

At the detailed design stage, it is recommended that the design Engineer contact the local review Conservation Authority to obtain any additional or new stormwater management quality criteria for the site (if any). However, it is our opinion that the stormwater generated by the proposed road ROW already achieves a sufficient amount of quality cleansing by the incorporation of the following:

- vegetation within the ditches themselves
- shallow slopes within the ditches (due to outlet and tributary drainage constraints) promote infiltration through the soil and hence cleansing of the first flush storm that will be conveyed (see Drawing # 13084 – GR1, GR2 and GR3, Grading and Drainage Plans, Appendix A).

The quality measures identified above should be sufficient for the type of development proposed. Any additional on-site quality control measures have been deemed to be superfluous for the following reasons:

- the site is not directly tributary to a watercourse but instead tributary to a ditch on the Carp Airport lands.
- The ditch on the Carp Airport lands is tributary to the existing roadside ditches along Carp Road. The stormwater (that will have been cleansed by the on-site and off-site ditches) will once again mix with the untreated runoff generated from the Carp Road right-of-way and hence would require re-treatment.
- Some quality cleansing of the remixed stormwater (as noted in the bullet above) would be provided by the shallow sloped vegetated ditches that it flows through before ultimately reaching the Carp River ~3 km downstream of the site).

#### **5.4 Off-Site Requirements**

In order to achieve the City of Ottawa minimum ditch slope standard of 0.5% on-site (the proposed on-site ditches are currently sloped at 0.23%), lowering of the receiving outlet drainage ditch on the Carp Airport lands will be required. This lowering (from the north side of the private road to the new proposed ditch) will occur for approximately 320 meters where it will meet a newly located and lowered ditch on the Carp Airport Lands. This newly located and lowered ditch on the Carp Airport Lands has been designed and submitted for approval under a separate cover by Novatech Engineering Consultants Ltd. For continuity, the design drawings for this off-site ditch have been obtained and incorporated into our design work are included in Appendix A (see West Capital Airpark Drawings # 102085-GR5, GR6, GR8 and GR9). In addition, a new deeper culvert replacement under the private road at the northerly end of the site will be required. Two new drop structures to connect to the deeper culvert (within the ROW of the northerly private road) will direct the post development runoff to the lowered off-site ditch and new deeper culvert. The City has asked that the owner obtain a Letter of Understanding (LOU) from the owners of the Carp Airport lands for this work and for the provision of a future drainage easement. This process for obtaining this LOU is currently underway and will be submitted by others under separate cover.

#### **6.0 EROSION AND SEDIMENT CONTROL MEASURES**

Temporary erosion and sediment control measures are to be implemented and maintained during construction. At a minimum, the erosion and sediment control measures should include (but not be limited to) use of silt fences, straw bale check dams and sediment traps. These measures are to be inspected daily, and after every rain event to determine maintenance, repair or replacement requirements. It is recommended that these measures will be implemented prior to the commencement of construction and maintained in good order until vegetation has been established (see Drawing # 13084-ESC1, Erosion and Sediment Control Plan, Appendix A).

## 7.0 CONCLUSIONS

The 3119 Carp Road plan of subdivision can be adequately serviced to be in conformance with the City of Ottawa Design Guidelines. The water service for the site will be provided by individual on-site wells. The fire suppression for the *Development* can be provided by either of the following:

- Individual on-site fire suppression tanks or
- A dry hydrant at the western end of proposed Street #1 or
- A combination of the dry hydrant and some on-site fire suppression tanks.

The sanitary service will utilize a septic system. Both these services will be designed and submitted by others at the appropriate detailed design stage.

The following conclusions for the storm and stormwater management system are provided:

- Release of post development stormwater is to be controlled to the pre-development design events for up to and including the 100 year design event. It is anticipated that the individual sites will be required to control their on-site stormwater to pre-development levels (up to including the 100 year design storm). The individual stormwater management for each site will be prepared at the site plan application stage by others.
- Current pre-development drainage patterns have generally been maintained in the post development. Specifically, the site will continue to sheet drain the stormwater runoff towards the existing roadside culvert outlet and the ditch within the Carp Airport lands to the north and east.
- The on-site ditches will provide sufficient quality enhancing of the stormwater before it reaches the nearest tributary watercourses of the Carp River (~3 km downstream of the site). These ditches have also been graded as shallowly as possible to encourage infiltration and are to be vegetated to promote cleansing.
- Off-site works to accommodate the development and include:
  - Lowering of the outlet drainage ditch (for approximately 320 meters) on the Carp Airport lands (from the private road to the new proposed ditch that was designed and submitted under separate cover by Novatech Engineering Consultants Ltd.)
  - Provide a new deeper culvert underneath the private road
  - Provide 2 drop structures to connect to the deeper culvert (within the ROW of the northerly private road)
- Temporary erosion and sediment control measures for the site have been identified.

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Angela Jonkman, P.Eng.  
Senior Project Manager

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Sean Czaharynski, P.Eng.  
Manager – Land Development

## Appendix A

### **Figure 1 - Key Plan**

**Draft Plan of Subdivision**, Part of Lot  
12, Concession 3, Geographic Township of Huntley, City  
of Ottawa

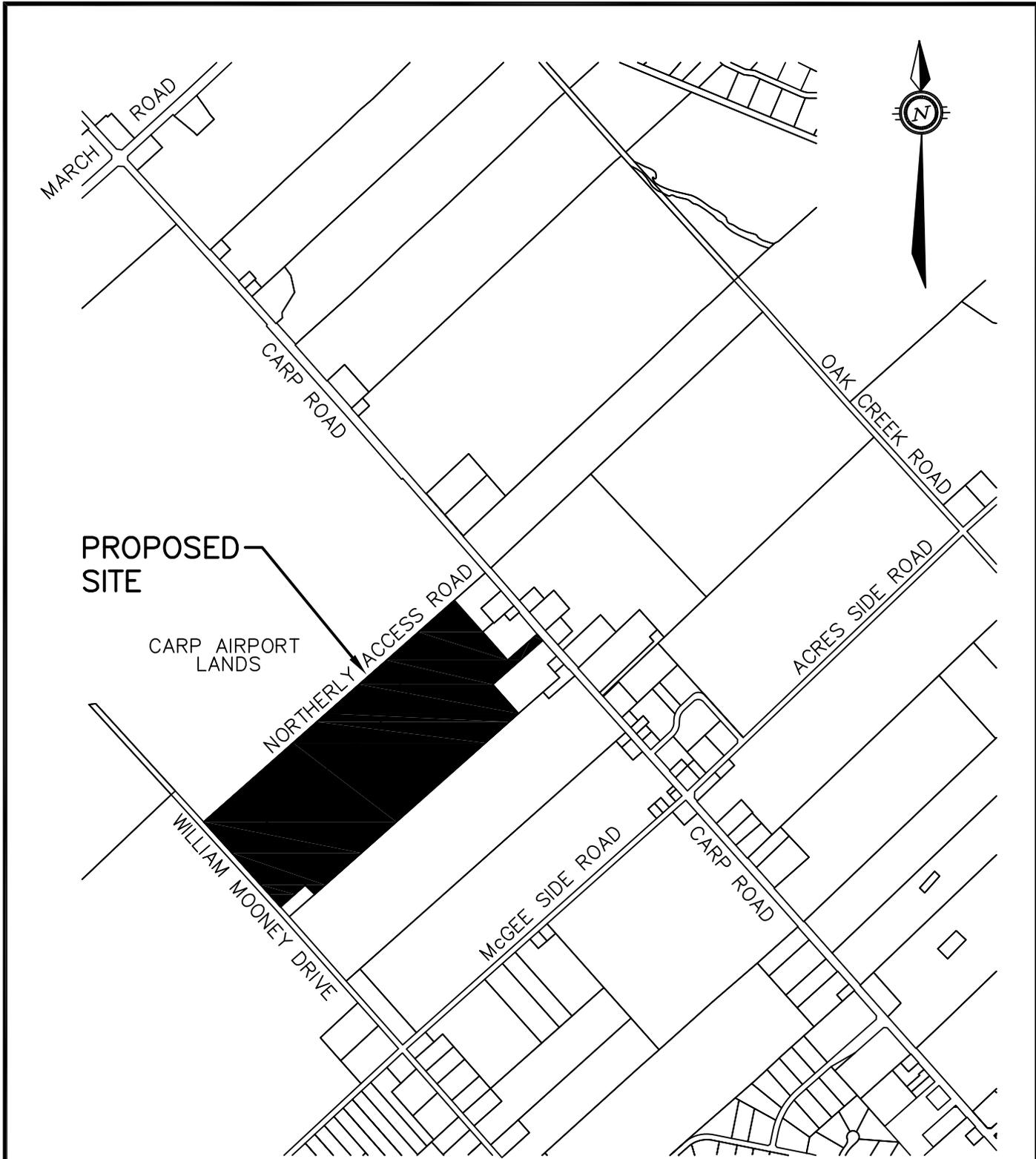
(Prepared by Farley, Smith and  
Denis Surveying Ltd.)

### **Figure 2 – Storm Drainage Area Plan**

Drawing # **13084- GR1, GR2 and  
GR3** Grading and Drainage Plans

**West Capital Airpark**, Drawings #  
**102085-GR5, GR6, GR8 and GR9**,  
(prepared by Novatech Engineering  
Consultants Ltd.)

Drawing # **13084-ESC1**, Erosion and  
Sediment Control Plan



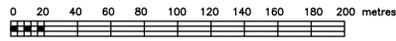
**Robinson**  
Land Development

scale N.T.S.	CLIENT: 3119 CARP ROAD	project no. 13084
date 03/09/14	TITLE: KEY PLAN	FIG 1.0
drawn by JHB		

DRAFT PLAN OF SUBDIVISION OF  
PART OF LOT 12  
CONCESSION 3  
Geographic TOWNSHIP OF HUNTLEY  
CITY OF OTTAWA

FARLEY SMITH & DENIS SURVEYING LTD  
2014

SCALE 1:2000



ELEVATION NOTE

ELEVATIONS ARE GEODETIC.

BEARING NOTE

BEARINGS ARE GRID AND ARE DERIVED FROM REFERENCE POINTS (A) AND (B) BY REAL TIME NETWORK OBSERVATIONS AND ARE REFERRED TO THE CENTRAL MERIDIAN 76°30'W LONGITUDE, MTM ZONE 9, N.A.D. 1983 (ORIGINAL).

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.999965.

CO-ORDINATES WERE DERIVED FROM REAL TIME NETWORK OBSERVATIONS (SMARTNET) MTM ZONE 9, N.A.D. 1983 (ORIGINAL).

POINT ID	NORTHING	EASTING
(A)	5020238.132	343475.480
(B)	5020018.420	343.661.184

CO-ORDINATES ARE MTM ZONE 9, N.A.D. 1983 (ORIGINAL), TO URBAN ACCURACY PER SEC. 14 (2) OF O.R.G. 216/10, AND CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

ADDITIONAL INFORMATION

- (o) SEE PLAN
- (b) SEE PLAN
- (c) SEE PLAN
- (d) COMMERCIAL
- (e) SEE PLAN
- (f) SEE PLAN
- (g) SEE PLAN
- (h) DRILLED WELL
- (i) SEE SOIL REPORT
- (j) SEE PLAN
- (k) SEPTIC SYSTEM
- (l) SEE PLAN

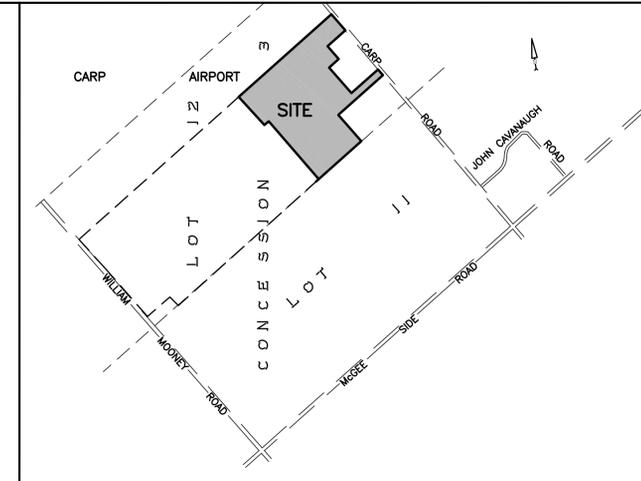
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- SURVEY MONUMENT SET
- SIB STANDARD IRON BAR
- IB SHORT STANDARD IRON BAR
- IB IRON BAR
- ROUND
- WIT WITNESS
- ORIGIN UNKNOWN
- PROP PROPORTIONED
- 647 H.R.FARLEY O.L.S.
- A00 ANNIS, O'SULLIVAN,NOLLEBEKK LTD.
- 857 FAIRHALL,MOFFATT&WOODLAND LTD.
- 688 C.D.COPELAND O.L.S.
- 1144 C.D.ROGERS O.L.S.
- 1287/FSD FARLEY, SMITH & DENIS SURVEYING LTD.
- 1692/FSD FARLEY, SMITH & DENIS SURVEYING LTD.
- P1 PLAN 4R-9722
- P2 PLAN 5R-8897
- P4 PLAN 5R-4255
- P5 PLAN 4R-25445
- UP UTILITY POLE
- O/H OVERHEAD WIRES
- GW GUY WIRE
- RT per FSD DENOTES RESULTANT TIE CALCULATED PER FSD RECORDS JUNE 20, 2005
- € DENOTES CENTRELINE OF ROAD

APPLICATION .....

SUBJECT TO THE CONDITIONS, IF ANY, SET FORTH IN OUR LETTER DATED ..... 2014.  
THIS DRAFT PLAN IS APPROVED BY THE CITY OF OTTAWA, UNDER SECTION 51 OF THE PLANNING ACT THIS ..... DAY OF.....2014.

.....  
DERRICK MOODIE, MANAGER  
DEVELOPMENT REVIEW, RURAL SERVICES  
PLANNING AND GROWTH MANAGEMENT DEPARTMENT  
PLANNING AND INFRASTRUCTURE PORTFOLIO  
CITY OF OTTAWA



KEY PLAN SCALE 1:15000

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT:

- THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO ADJOINING LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE ...AUGUST 18,.....2014

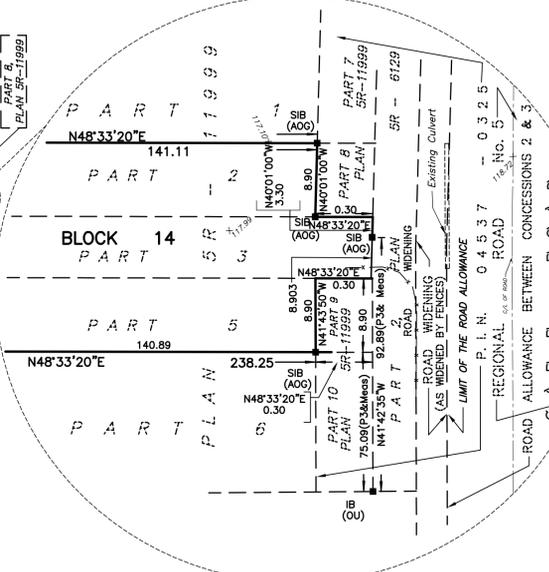
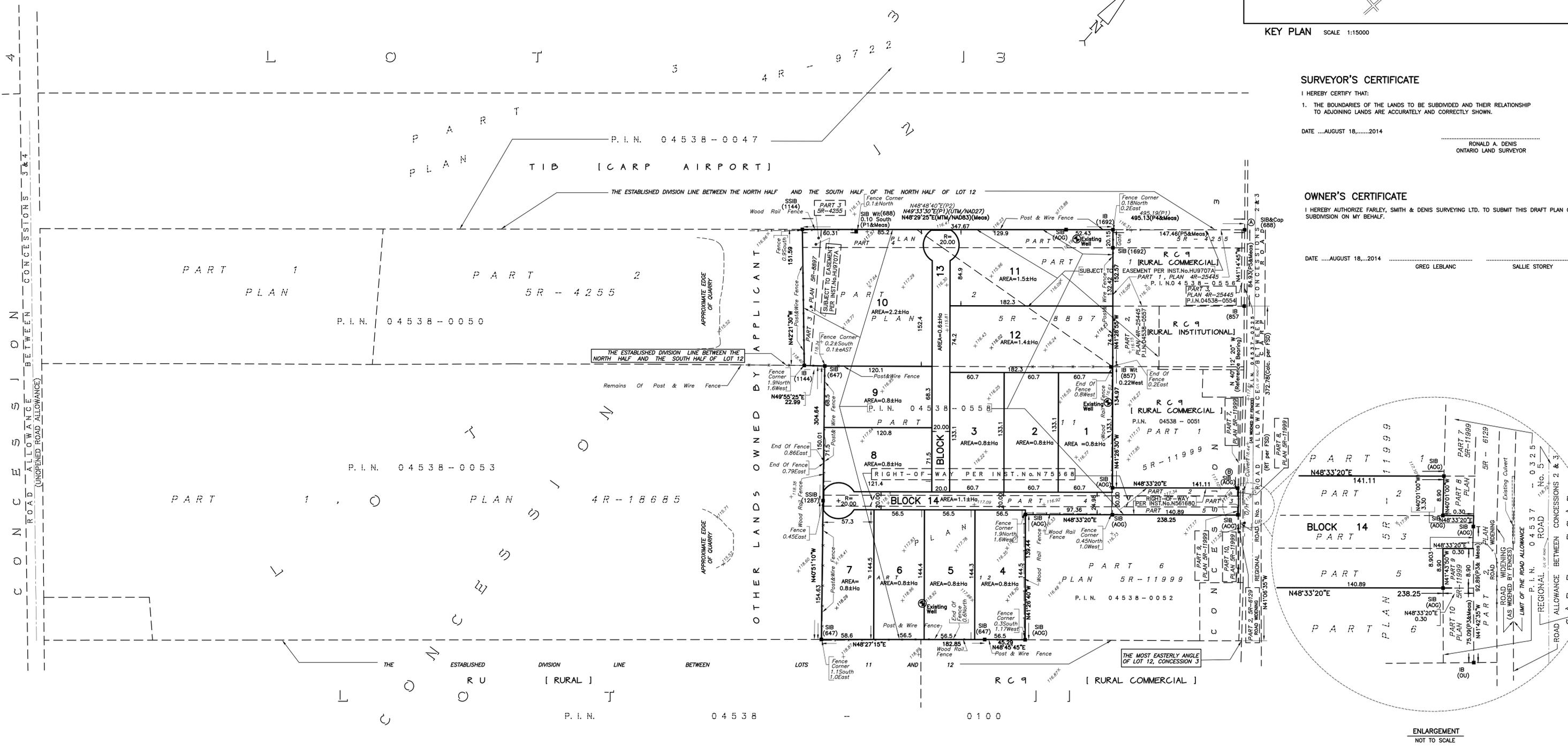
.....  
RONALD A. DENIS  
ONTARIO LAND SURVEYOR

OWNER'S CERTIFICATE

I HEREBY AUTHORIZE FARLEY, SMITH & DENIS SURVEYING LTD. TO SUBMIT THIS DRAFT PLAN OF SUBDIVISION ON MY BEHALF.

DATE .....AUGUST 18,.....2014

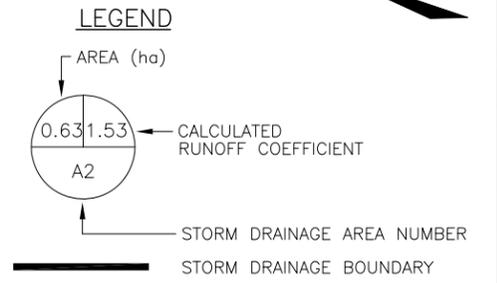
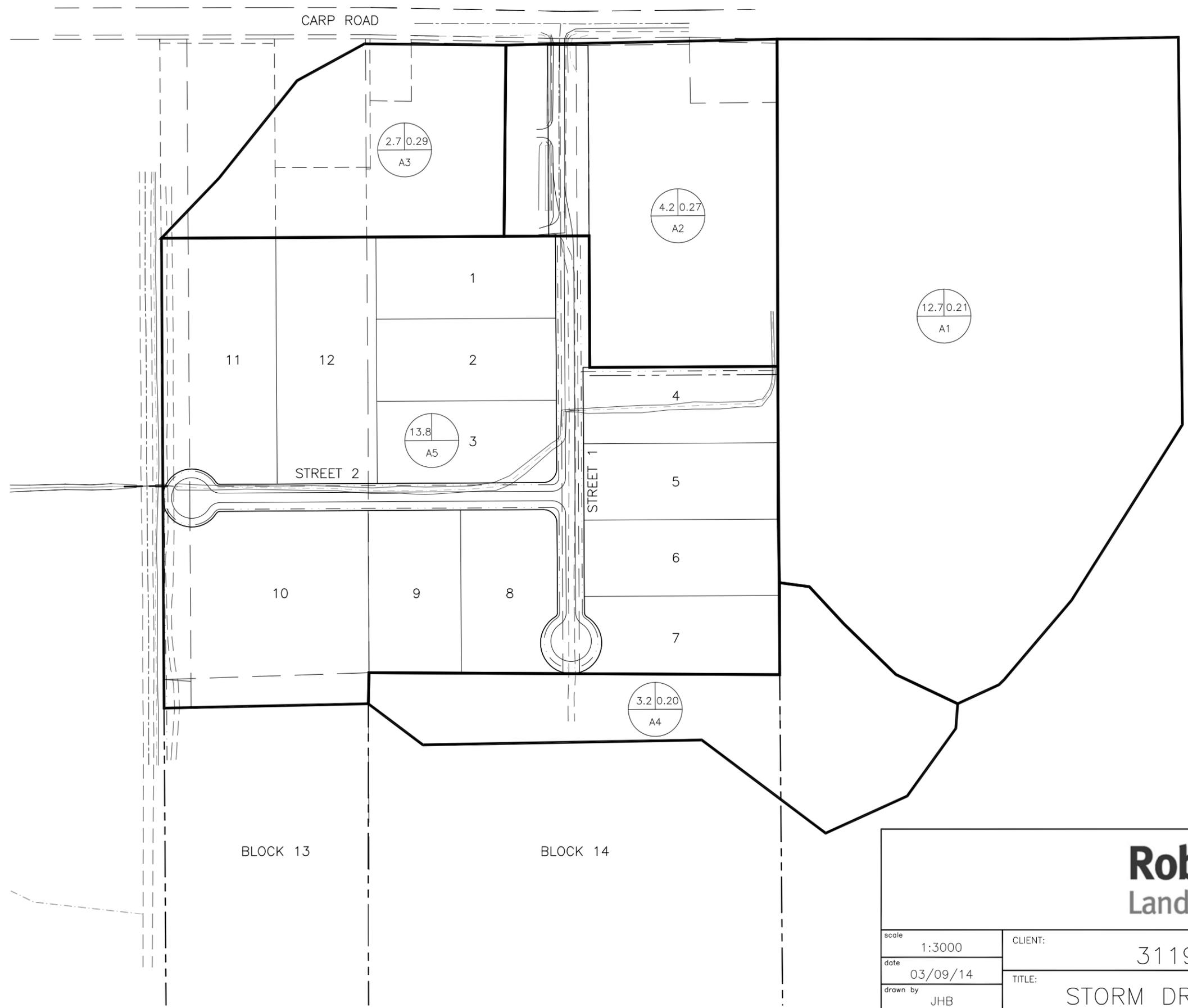
.....  
GREG LEBLANC  
SALLIE STOREY



FARLEY, SMITH & DENIS SURVEYING LTD.  
ONTARIO LAND SURVEYORS  
CANADA LANDS SURVEYORS

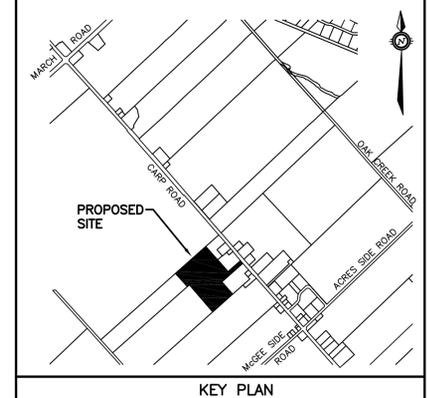


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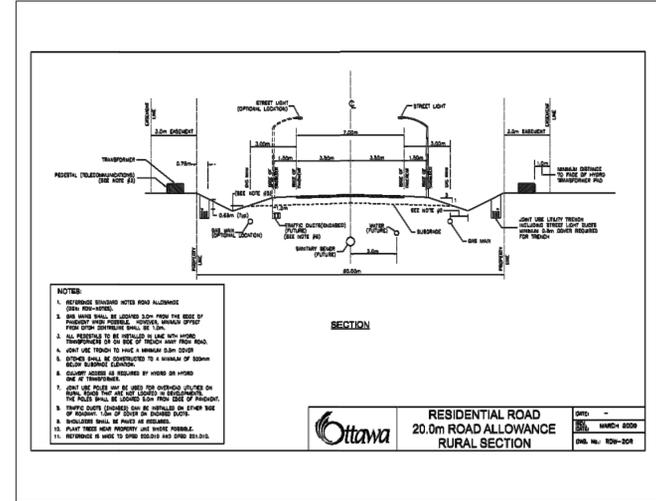
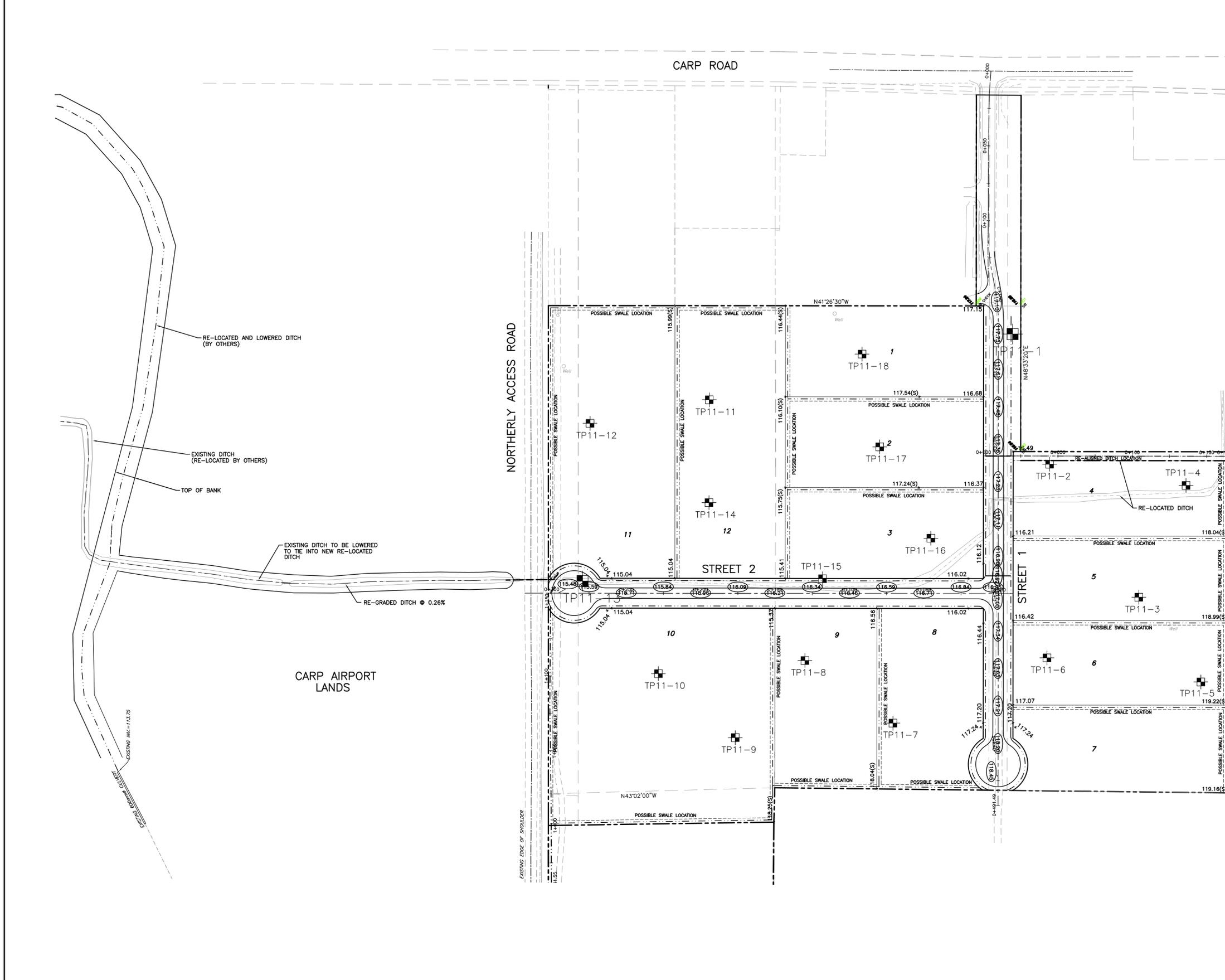
# Robinson Land Development

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date 03/09/14	TITLE: STORM DRAINAGE AREA PLAN	FIG. 2
drawn by JHB		



**LEGEND**

- EXISTING ELEVATION
- PROPOSED LOT CORNER GRADE
- PROPOSED SWALE GRADE
- DIRECTION & SLOPE OF PROPOSED SWALE
- PROPERTY LINE
- PROPOSED SWALE
- TEST PIT LOCATION



**NOTES**

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

NO.	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR SUBDIVISION APPLICATION	03/09/14	SMC

SCALE	
HORIZ. 1:1250	



**Robinson Land Development**  
 350 PALLADIUM DRIVE  
 KANATA, ONTARIO K2V 1A8  
 TELEPHONE (613) 592-8060

DESIGN	JHB
CHECKED	AHJ
DRAWN	JHB
CHECKED	AHJ
APPROVED	SMC

3119 CARP ROAD

**OVERALL GRADING PLAN**

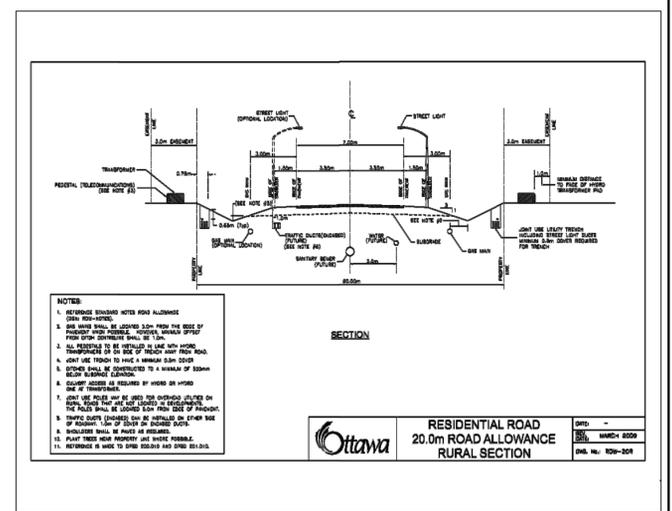
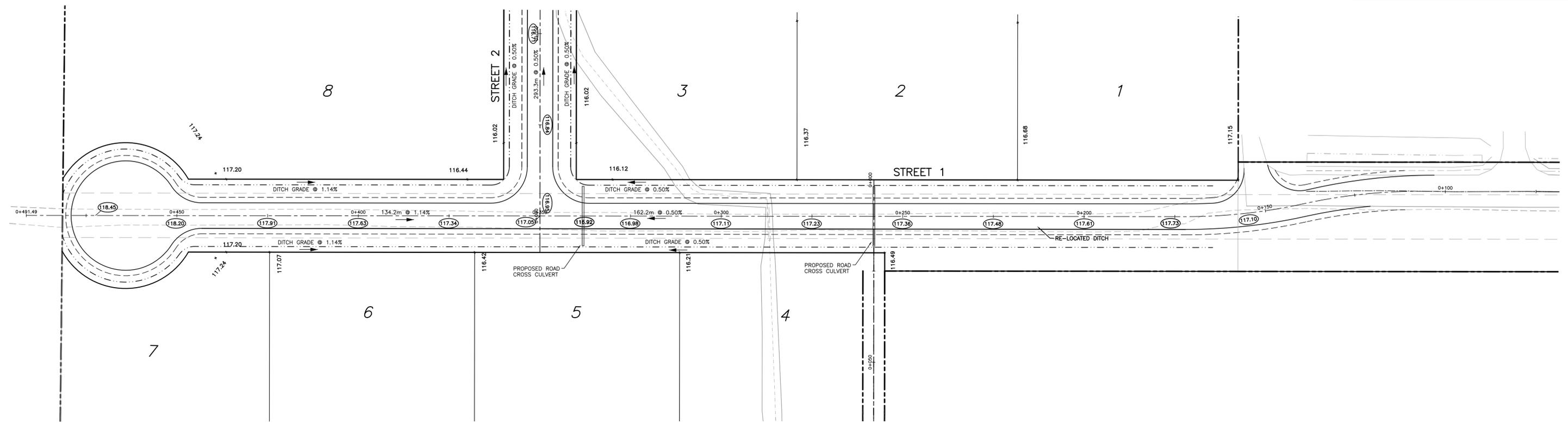
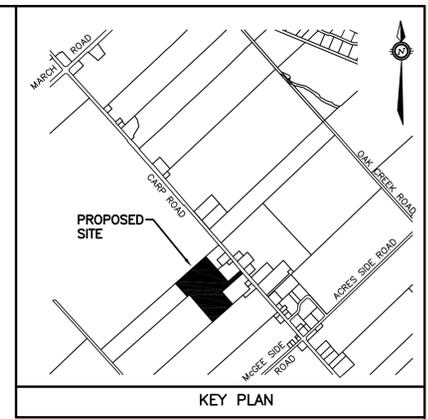
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**LEGEND**

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	PROPERTY LINE



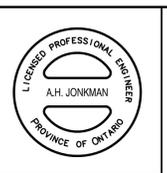
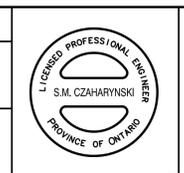
**PRELIMINARY**  
NOT FOR CONSTRUCTION

**NOTES**

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NO.	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR SUBDIVISION APPLICATION	03/09/14	SMC

SCALE	
HORIZ. 1:500	



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350 PALLADIUM DRIVE  
KANATA, ONTARIO K2V 1A8  
TELEPHONE (613) 592-6060

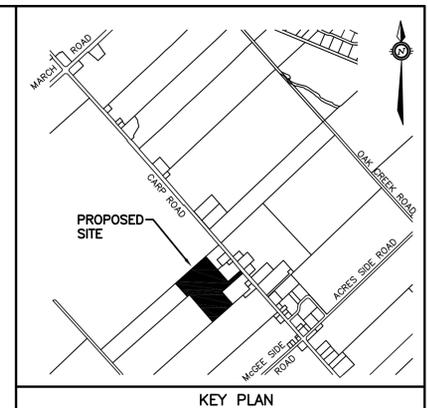
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APPROVED	SMC

**3119 CARP ROAD**

**GRADING PLAN**

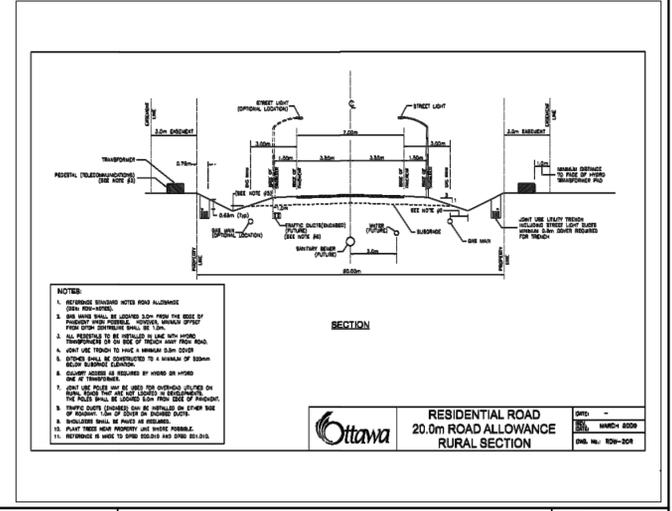
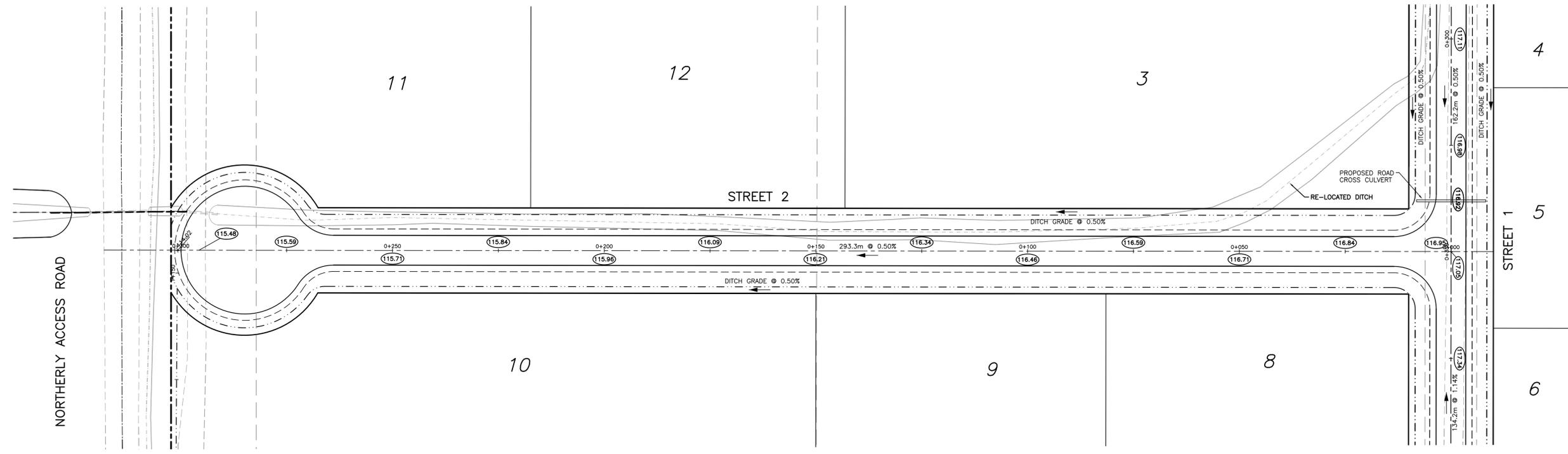
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**LEGEND**

- EXISTING ELEVATION
- PROPOSED CENTRELINE ROAD GRADE
- PROPERTY LINE



**PRELIMINARY**  
NOT FOR CONSTRUCTION

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SCALE	
HORIZ. 1:500	



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Land Development

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TELEPHONE (613) 592-6060

DESIGN	JHB
CHECKED	AHJ
DRAWN	JHB
CHECKED	AHJ
APPROVED	SMC

**3119 CARP ROAD**

**GRADING PLAN**

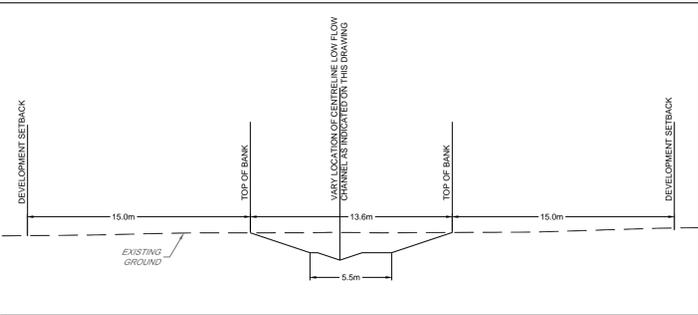
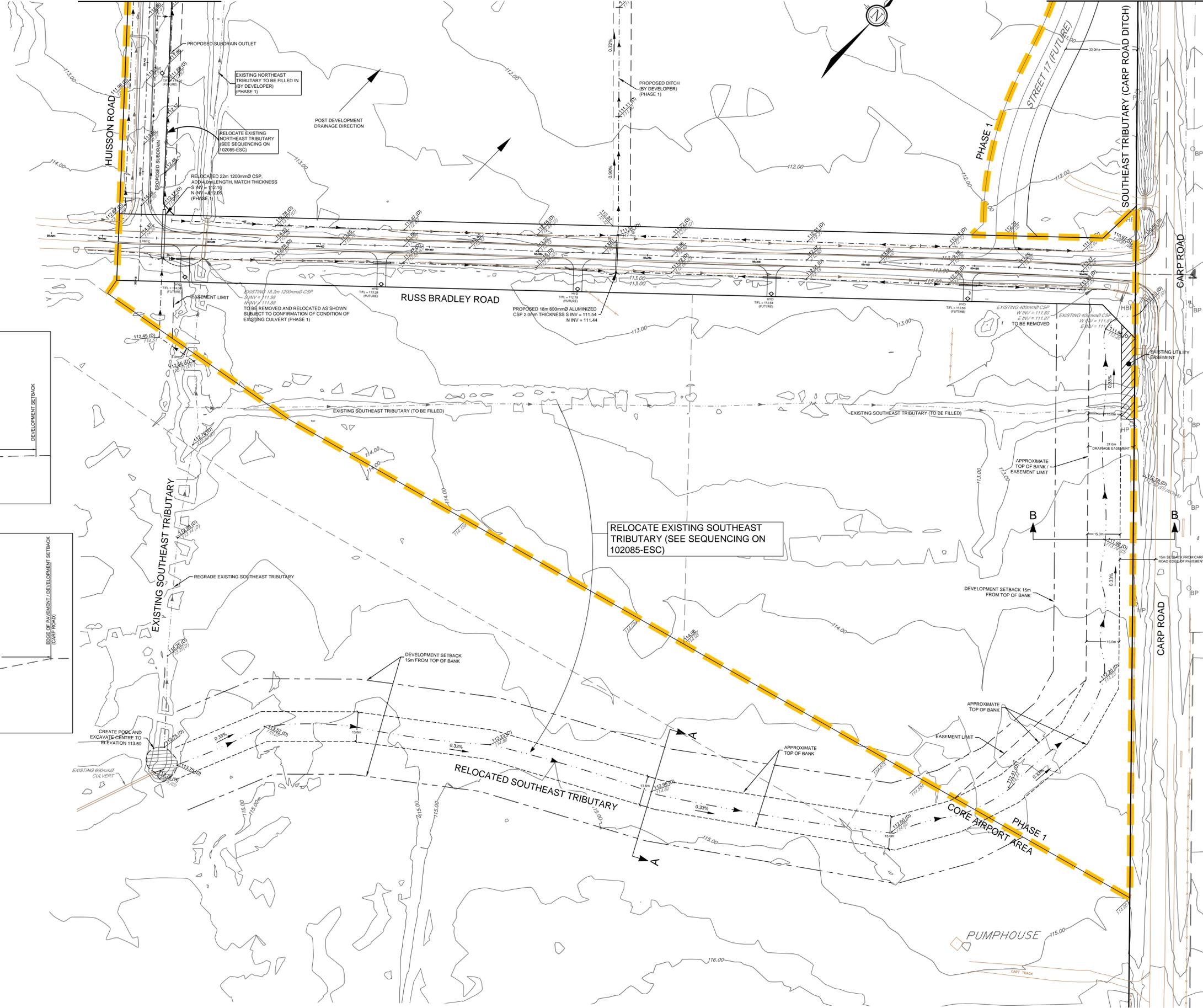
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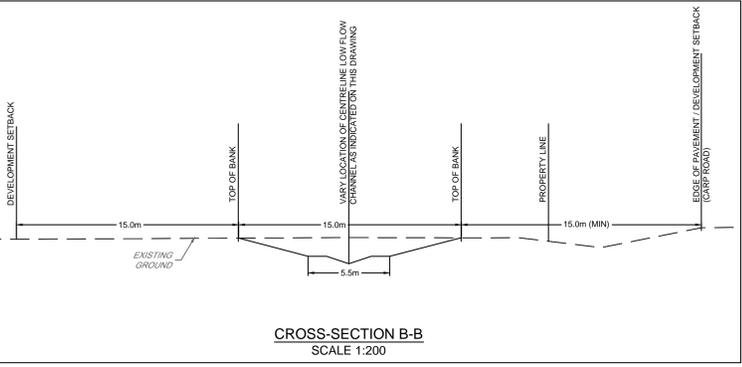
- LEGEND**
- Q SWALE
  - PROPOSED ELEVATION
  - EXISTING ELEVATION
  - PROPOSED DITCH ELEVATION
  - PROPOSED HIGH POINT ELEVATION
  - PROPOSED SLOPE ELEVATION
  - T/F=117.03 TOP OF FOOTING ELEVATION
  - USF=114.44 MINIMUM UNDERSIDE OF FOOTING ELEVATION
  - 116.63 PROPOSED TERRACE ELEVATION
  - 3.2% DRIVEWAY & PROPERTY GRADE
  - ◇ HYD PROPOSED HYDRANT LOCATION
  - T/F=127.55 PROPOSED TOP OF FLANGE ELEVATION
  - CB PROPOSED ROADSIDE CATCHBASIN
  - RVCB PROPOSED REARWARD CATCHBASIN
  - PROPOSED STORM MANHOLE
  - TERRACING
  - DRAINAGE DIRECTION (PROPOSED)
  - POST DEVELOPMENT DRAINAGE DIRECTION

SEE SHEET 102085-GR6

SEE SHEET 102085-GR9



CROSS-SECTION A-A  
SCALE 1:200



CROSS-SECTION B-B  
SCALE 1:200

- NOTES:**
- ALL PHASE 1 BUSINESS PARK LANDS NORTH OF RUSS BRADLEY ROAD AND EAST OF HUISSON ROAD ARE TO BE DIRECTED TO THE SOUTHEAST TRIBUTARY OUTLET.
  - SEE EROSION AND SEDIMENT CONTROL PLAN (102085-ESC) FOR DITCH CONSTRUCTION SEQUENCING

REFER TO DRAWING 102085-SWM6 FOR POST DEVELOPMENT DRAINAGE AREAS

REFER TO DRAWING 102085-NT FOR NOTES AND TABLES

REFER TO DRAWING 102085-PH FOR PHASE LIMITS

**NOTE:**  
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.



No.	REVISION	DATE	BY
8	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
7	REVISED AS PER MVC COMMENTS	DEC 20/13	DJC
6	REVISED AS PER CITY / MVC COMMENTS	NOV 29/13	DJC
5	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
4	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
3	ISSUED TO GEOTECHNICAL CONSULTANT	APR 24/13	DJC
2	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE: 1:750

FOR REVIEW ONLY

DESIGN: BBH

CHECKED: SMG

DRAWN: DJC

CHECKED: LAB

APPROVED: SMG

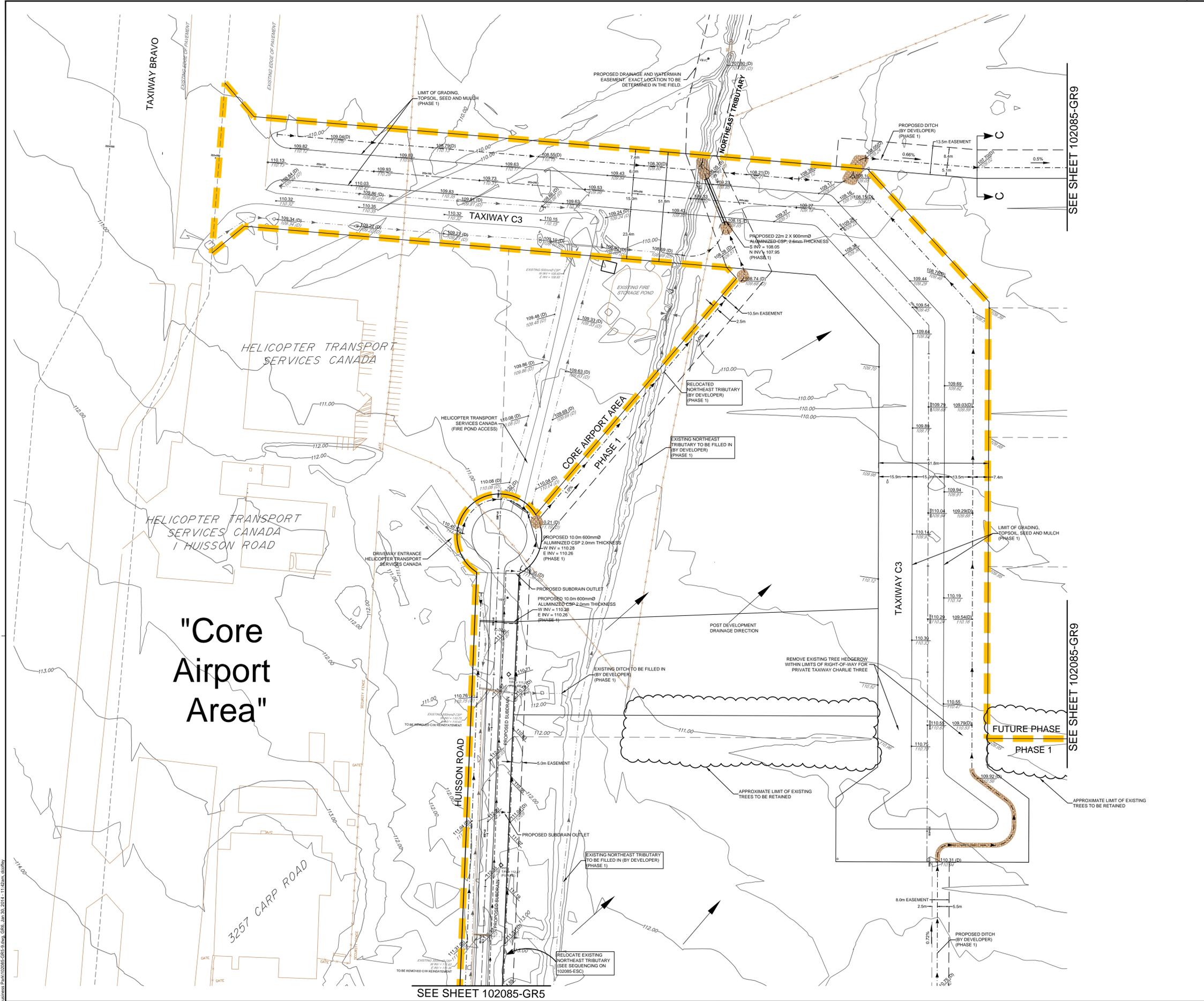
PROFESSIONAL ENGINEER  
S.M. GORDON  
PROVINCE OF ONTARIO

**NOVATECH**  
ENGINEERING  
CONSULTANTS LTD.  
ENGINEERS & PLANNERS  
Suite 200, 240 Michael Cowpland Drive  
Ottawa, Ontario, Canada  
K2M 1P6  
Telephone: (613) 254-9643  
Facsimile: (613) 254-9867  
Email: novatech@novatech-eng.com

CITY OF OTTAWA  
WEST CAPITAL AIRPARK

GRADING PLAN

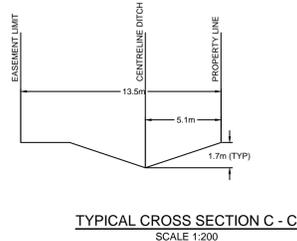
PROJECT No: 102085-01  
REV: 8  
DRAWING No: 102085-GR5



**NORTH**

**LEGEND**

- SWALE @ 1.5%      Q SWALE AND DIRECTION OF FLOW
- PROPOSED ELEVATION      PROPOSED DITCH ELEVATION
- EXISTING ELEVATION      PROPOSED HIGH POINT ELEVATION
- PROPOSED DITCH ELEVATION      TOP OF FOOTING ELEVATION
- PROPOSED HIGH POINT ELEVATION      MINIMUM UNDERSIDE OF FOOTING ELEVATION
- TOP OF FOOTING ELEVATION      PROPOSED TERRACE ELEVATION
- MINIMUM UNDERSIDE OF FOOTING ELEVATION      DRIVEWAY & PROPERTY GRADE
- PROPOSED TERRACE ELEVATION      PROPOSED HYDRANT LOCATION
- DRIVEWAY & PROPERTY GRADE      PROPOSED ROADSIDE CATCHBASIN
- PROPOSED HYDRANT LOCATION      PROPOSED REAR-YARD CATCHBASIN
- PROPOSED ROADSIDE CATCHBASIN      PROPOSED STORM MANHOLE
- PROPOSED REAR-YARD CATCHBASIN      TERRACING
- PROPOSED STORM MANHOLE      DRAINAGE DIRECTION (PROPOSED)
- TERRACING      PROPOSED RIP RAP
- DRAINAGE DIRECTION (PROPOSED)      POST DEVELOPMENT DRAINAGE DIRECTION
- PROPOSED RIP RAP      POST DEVELOPMENT DRAINAGE DIRECTION



"Core Airport Area"

**NOTES:**

- ALL PHASE 1 BUSINESS PARK LANDS NORTH OF RUSS BRADLEY ROAD AND EAST OF HUISSON ROAD ARE TO BE DIRECTED TO THE SOUTHEAST TRIBUTARY OUTLET.
- SEE EROSION AND SEDIMENT CONTROL PLAN (102085-ESC) FOR DITCH CONSTRUCTION SEQUENCING

REFER TO DRAWING 102085-SWM6 FOR POST DEVELOPMENT DRAINAGE AREAS

REFER TO DRAWING 102085-NT FOR NOTES AND TABLES

REFER TO DRAWING 102085-PH FOR PHASE LIMITS

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No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
8.	REVISED AS PER MVC COMMENTS	DEC 2013	DJC	8.	REVISED AS PER MVC COMMENTS	DEC 2013	DJC
7.	REVISED AS PER CITY / MVC COMMENTS	NOV 29/13	DJC	7.	REVISED AS PER CITY / MVC COMMENTS	NOV 29/13	DJC
6.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC	6.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
5.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC	5.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
4.	TREE PROTECTION AREAS ADDED	APR 30/13	BBH	4.	TREE PROTECTION AREAS ADDED	APR 30/13	BBH
3.	ISSUED TO GEOTECHNICAL CONSULTANT	APR 24/13	DJC	3.	ISSUED TO GEOTECHNICAL CONSULTANT	APR 24/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC	2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1.	ISSUED FOR REVIEW	NOV 21/11	DJC	1.	ISSUED FOR REVIEW	NOV 21/11	DJC
9.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC				

**SCALE**

1:750

0 10 20 30

FOR REVIEW ONLY

DESIGN: BBH

CHECKED: SMG

DRAWN: DJC

CHECKED: BBH

APPROVED: SMG

**NOVATECH**  
ENGINEERING  
CONSULTANTS LTD.

250, 240 Michael Cowpland Drive  
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Telephone: (613) 254-9643  
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Email: novatech@novatech-eng.com

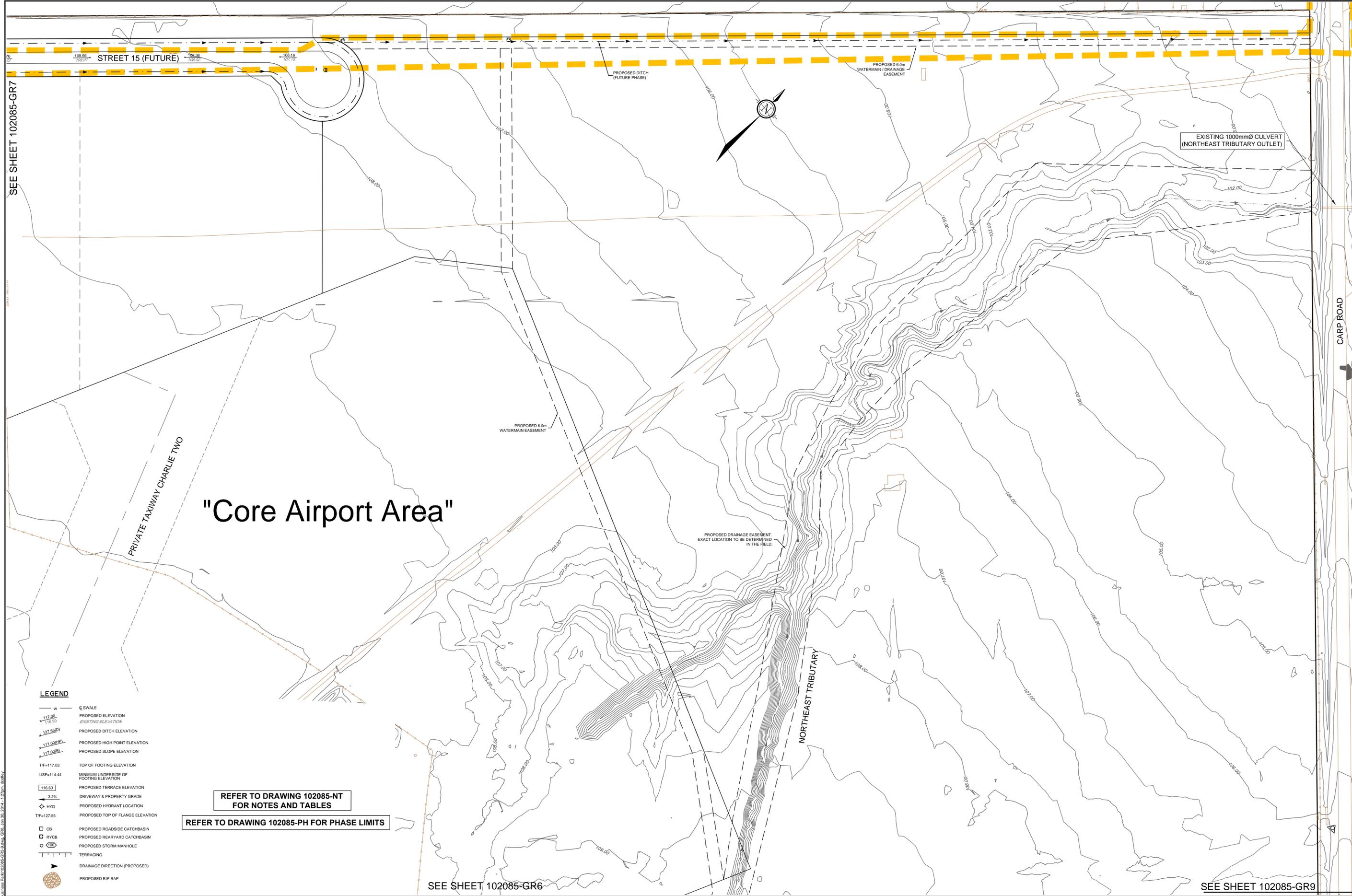
CITY OF OTTAWA  
WEST CAPITAL AIRPARK

**GRADING PLAN**

PROJECT No. 102085-01

REV # 9

DRAWING No. 102085-GR6



# "Core Airport Area"

**LEGEND**

	Q SWALE
	PROPOSED ELEVATION
	EXISTING ELEVATION
	PROPOSED DITCH ELEVATION
	PROPOSED HIGH POINT ELEVATION
	PROPOSED SLOPE ELEVATION
	TOP OF FOOTING ELEVATION
	MINIMUM UNDERSIDE OF FOOTING ELEVATION
	PROPOSED TERRACE ELEVATION
	DRIVEWAY & PROPERTY GRADE
	PROPOSED HYDRANT LOCATION
	PROPOSED TOP OF FLANGE ELEVATION
	PROPOSED ROADSIDE CATCHBASIN
	PROPOSED REARYARD CATCHBASIN
	PROPOSED STORM MANHOLE
	TERRACING
	DRAINAGE DIRECTION (PROPOSED)
	PROPOSED RIP RAP

REFER TO DRAWING 102085-NT FOR NOTES AND TABLES

REFER TO DRAWING 102085-PH FOR PHASE LIMITS

SEE SHEET 102085-GR6

SEE SHEET 102085-GR9

**NOTE:**  
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No.	REVISION	DATE	BY
8.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
7.	REVISED AS PER MVC COMMENTS	DEC 20/13	DJC
6.	REVISED AS PER CITY / MVC COMMENTS	NOV 29/13	DJC
5.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
4.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
3.	ISSUED TO GEOTECHNICAL CONSULTANT	APR 24/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE	
1:750	

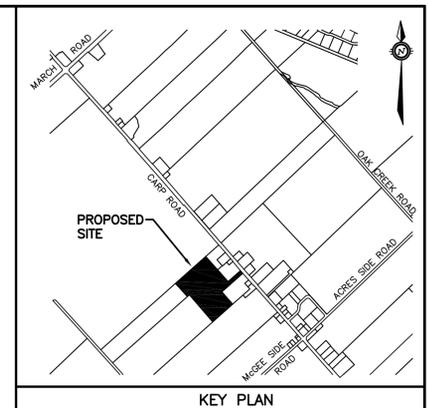
FOR REVIEW ONLY	
CHECKED:	BBH
DRAWN:	SMG
CHECKED:	DJC
APPROVED:	LAB
	SMG



CITY OF OTTAWA WEST CAPITAL AIRPARK	
PROJECT No.	102085-01
REV	REV # 8
DRAWING No.	102085-GR8

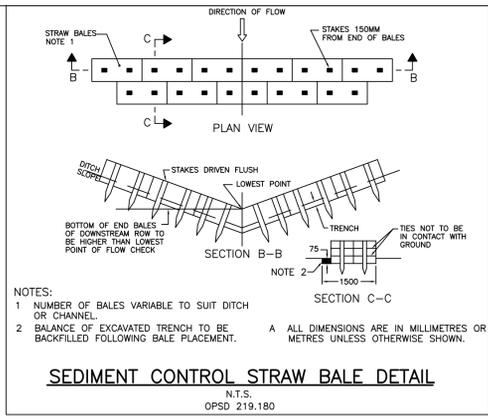
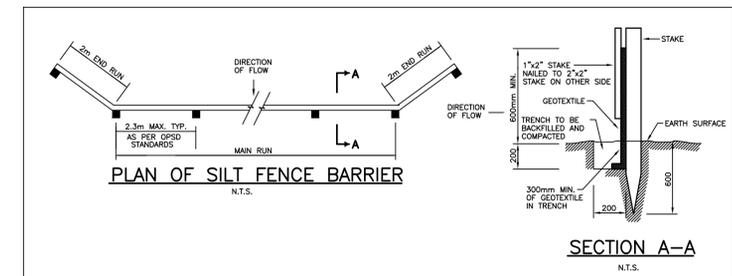
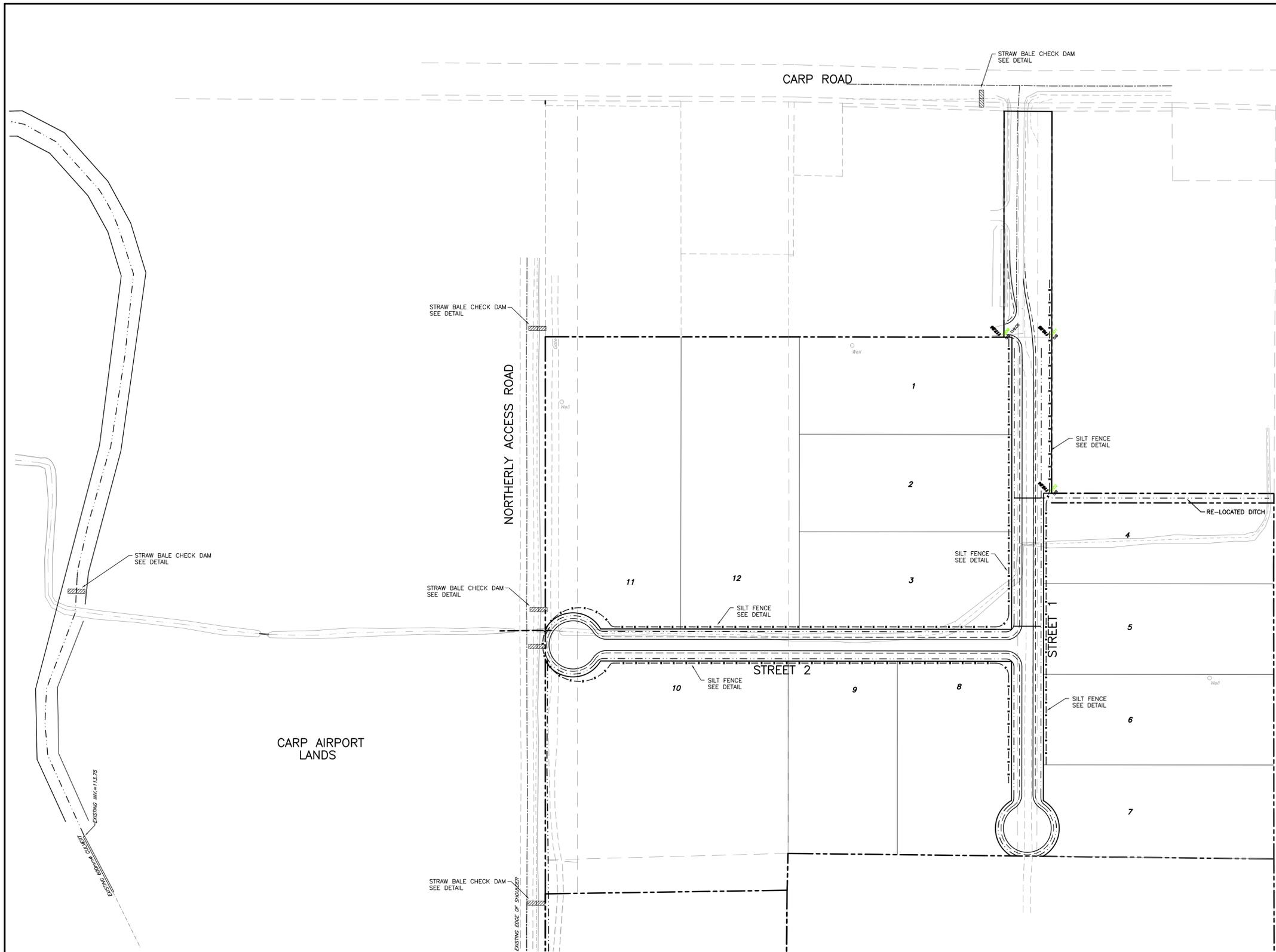
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**LEGEND**

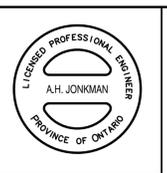
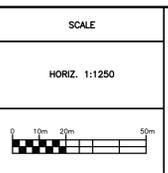
- x - x - x - EXISTING FENCE
- - - - - PROPERTY LINE
- - - - - SILT FENCE
- ▨▨▨▨▨▨ STRAW BALE CHECK DAM



**PRELIMINARY**  
NOT FOR CONSTRUCTION

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NO.	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR SUBDIVISION APPLICATION	03/09/14	SMC



**Robinson**  
Land Development

350 PALLADIUM DRIVE  
KANATA, ONTARIO K2V 1A8  
TELEPHONE (613) 592-6060

DESIGN	JHB
CHECKED	AHJ
DRAWN	JHB
CHECKED	AHJ
APPROVED	SMC

3119 CARP ROAD

**EROSION AND SEDIMENT CONTROL PLAN**

PROJECT NO.	13084
SURVEY	RLD
DATED	SEPTEMBER 2014
DWG. No.	13084-ESC1

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