



STORMWATER MANAGEMENT REPORT

Donway Co-operative Development Corporation

Type of Document:

Final Report

Project Name:

230 and 240 The Donway West, Toronto

Project Number:

ALL-00256815-B0

Prepared and Reviewed By:

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Approved By:

Scott Passmore

Date + Time Submitted:

2021-05-26

2023-10-30 – Revision 1

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1. Introduction

EXP Services Inc. has been retained by the Donway Co-operative Development Corporation (“the agent” on behalf of the owner, The Donway Covenant United Church) to prepare a Stormwater Management Report (“Report”) in support of an application for a Zoning By-Law Amendment and Official Plan Amendment of the proposed residential use with an integrated church (“the site”) located at 230 and 240 The Donway West, in the City of Toronto.

This report has been updated to address the first ZBA submission comments from the City of Toronto dated June 2nd, 2022 and to accommodate the site plan changes.

The objective of this SWM Report is to outline an overview of the proposed SWM strategy while demonstrating how the City of Toronto Criteria have been met.

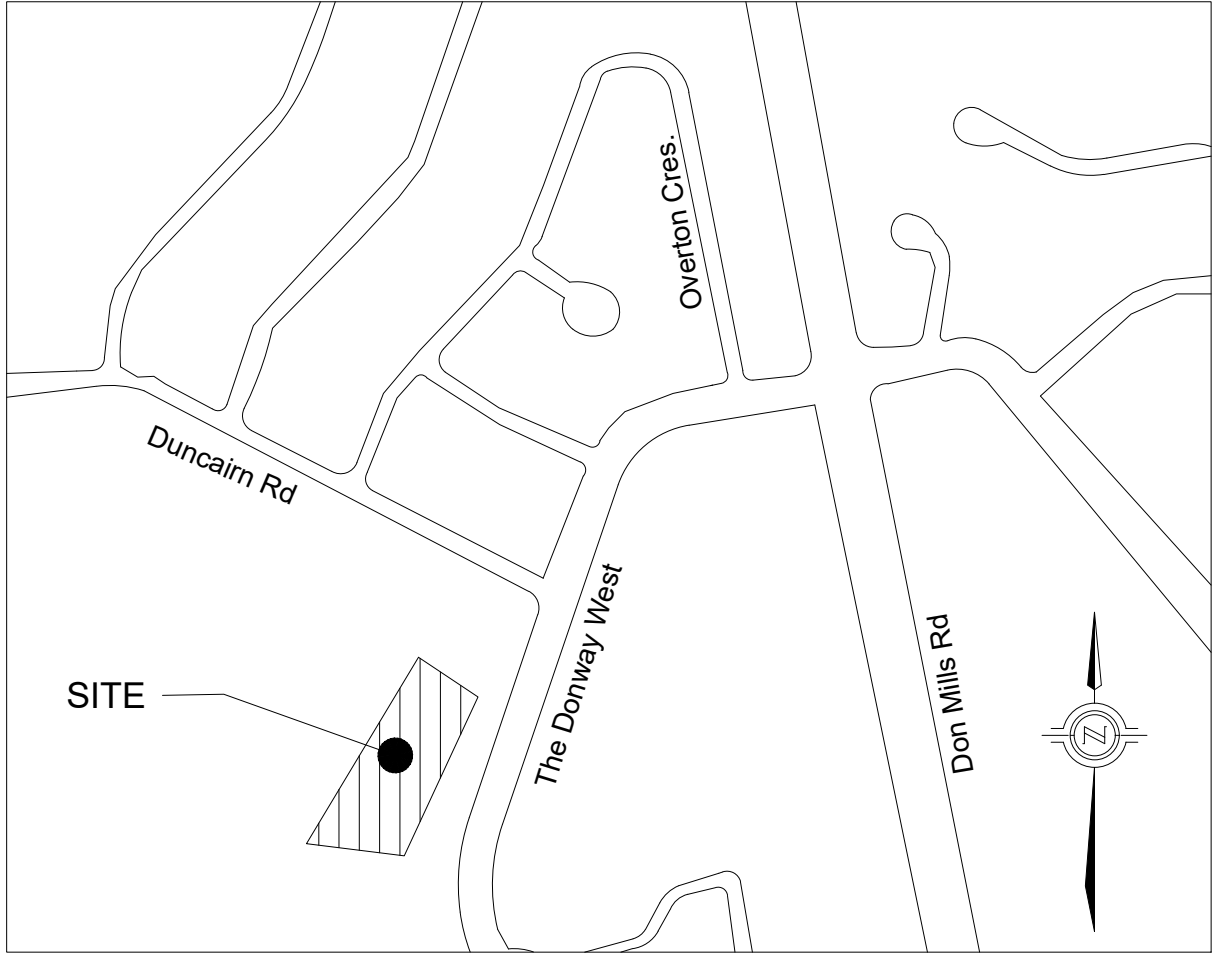
2. Site Description

The subject site is approximately 1.05 hectares in size and bounded by The Donway West to the east, existing residential developments fronting Duncairn Road to the north, and existing public park to the west and south. The legal description of the site is Block B Registered Plan 4332, in the City of Toronto. The subject site is currently occupied by church buildings with associated surface parking and two driveway accesses from The Donway West. Refer to Figure 1 for the Site Location Plan.

This application proposes to redevelop the site into a 6-storey residential development with 308 new condominium units integrated with a church. The south side of the property will have the integrated church with residential units while the remaining portion of the property will have only residential units. The development also includes three levels of underground parking with a single driveway access to The Donway West. A small portion on the south side of the site will be dedicated to be a City’s parkland. Refer to the Site Plan (prepared by Architect Unfolded) in Appendix A for additional details.

Be advised that should any party, including the owner or any subsequent owner, apply for more than one condominium corporation encompassing any or all of this development or make an application that results in a land division, Staff may require legal assurances, including but not limited to easements, with respect to the approved services. Such assurances will be determined at the time of application for condominium approval.

E:\MRK\ALL-00256815-A0160_Execution\65 Drawings\ Civil\256815-FIG-01 LOCATION PLAN.dwg



Project:		230 AND 240 THE DONWAY WEST, TORONTO, ON	
Title:		LOCATION PLAN	
Approved by:	S.P	Date:	APRIL, 2021
Project No.:	ALL-00256815-B0		
Drawn by:	J.L	Scale:	N.T.S.
Figure no.:	FIG-01		

3. Existing Drainage Conditions

To assess the existing site topography within and surrounding the site, EXP staff reviewed previously completed topographic surveys provided by the Agent and City record drawings for The Donway West. A site visit was then completed by EXP staff on November 27, 2020 to review current conditions including the above ground utility furniture. A sub-surface utility engineering (SUE) investigation was also completed by Multiview on January 17, 2023 to verify any existing underground utilities within the City's right-of-way abutting the site. Previously completed topographic surveys for the site show an existing drainage divide through the middle of the existing surface parking area east to west, where drainage on the west side of the drainage divide flows towards the northwest corner and the balance sheet flows out towards The Donway West. Along The Donway West adjacent to the site, existing elevations are shown to be falling in the easterly direction without any sags or low points. For additional details regarding the existing topography refer to the topographic survey (prepared by J.D. Barnes Limited dated July 2019), SUE investigation report by Multiview, and record drawings provided by the City of Toronto in Appendix A.

The existing minor and major drainage for the east catchment is conveyed in southerly and easterly directions where the majority of the flows is captured by two existing catchbasins at the southeast corner of the site. The existing minor and major drainage for the west catchment sheets out in the northwesterly direction towards the adjacent public park. The existing catchbasins located at the southeast corner of the site appear to capture some flows the east catchment, which are currently connected to the municipal storm sewer on The Donway West. Refer to the Existing Conditions Drainage Plan in Figure 2 for details.

In order to verify the existing site storm and domestic sewage drainage for the site, EXP staff coordinated a SUE investigation with Multiview on January 17, 2023 and a utility dye testing investigation with a utility locate contractor (Aquaflow) on September 12th, 2023. The SUE investigation results showed an existing storm service connection to the existing municipal storm sewer system on The Donway West. The dye testing results showed that all roof drains for existing Buildings (Buildings 1, 2, 3, 4 & 5) including the foundation drainage for an existing building (Building 3) drain to the existing 1800 mm storm sewer on The Donway West. The result also showed that the foundation drainage for building 5 connects to the 375 mm sanitary sewer on The Donway West. For additional details regarding the dye testing investigation, please refer to the dye testing report prepared by Aquaflow in Appendix A.

In order to calculate the theoretical peak flow runoff rates for the site, the maximum runoff coefficient of 0.50 and time of concentration of 10 min were used as per City of Toronto Criteria. Using the site area of 1.04 ha, a runoff coefficient of 0.50, and time of concentration of 10min, the following peak flows were calculated for the site and can be summarized in Table 1 below:

Table 1: Peak Flows (Existing Conditions):

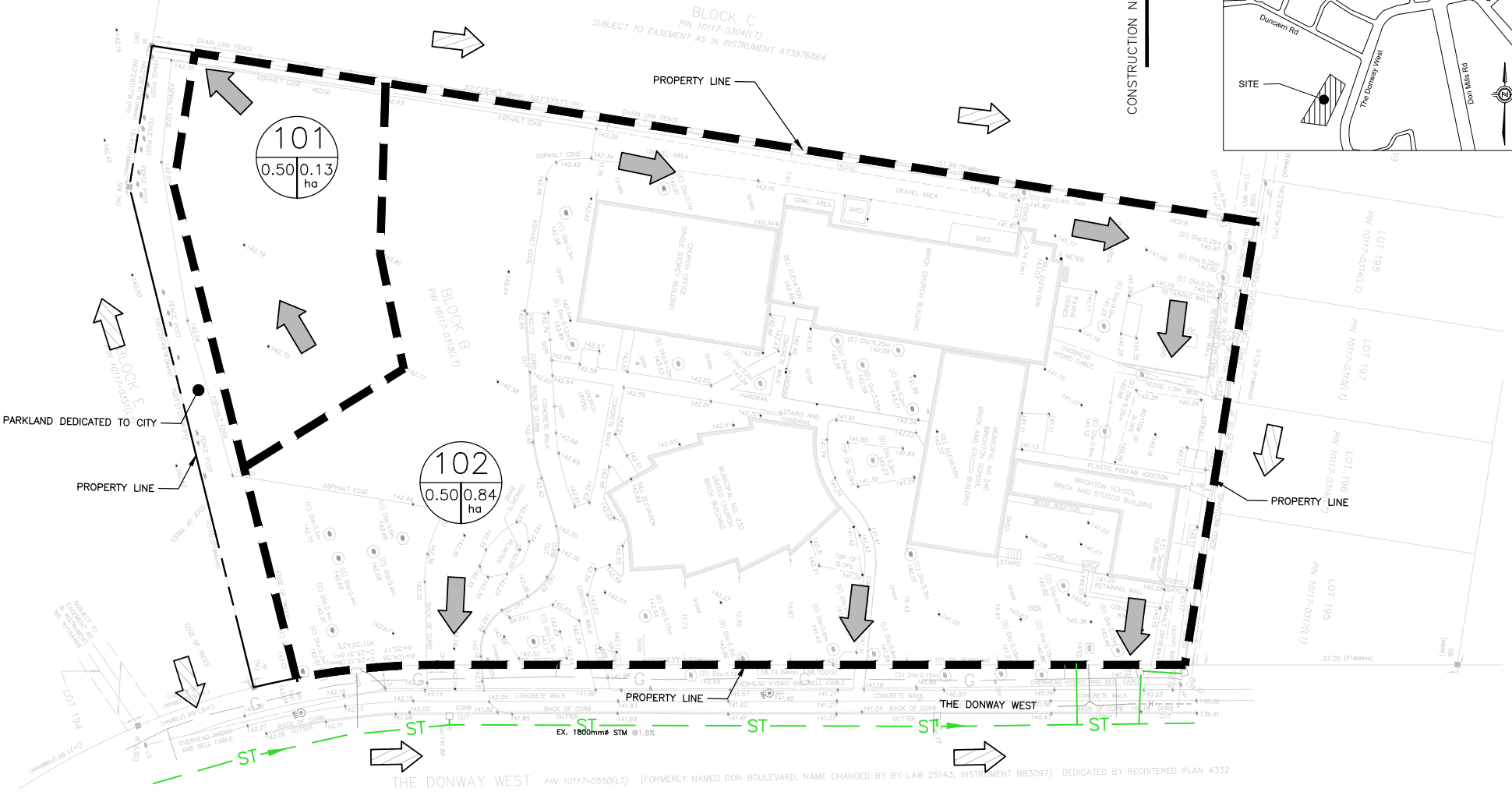
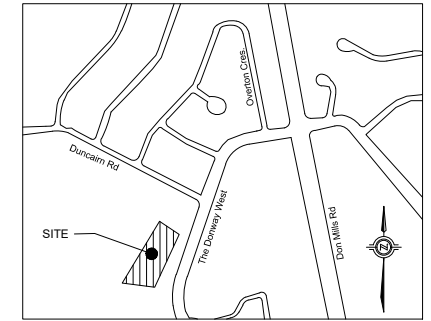
Contributing Area	ID#	Area (ha)	Runoff Coefficient	Peak Flow -2 Year (L/sec)	Peak Flow -5 Year (L/sec)	Peak Flow -100 Year (L/sec)
West Catchment (Discharge to City Park)	101	0.13	0.50	15.9	23.8	45.2

Contributing Area	ID#	Area (ha)	Runoff Coefficient	Peak Flow -2 Year (L/sec)	Peak Flow -5 Year (L/sec)	Peak Flow -100 Year (L/sec)
East Catchment (Discharge to Donway West)	102	0.84	0.50	102.9	153.8	292.0
Entire Site		0.97	-	118.8	177.6	337.2

Note: A low runoff coefficient of 0.5 has been used for the purposes of calculating the allowable release rate for the site as per City of Toronto standards.

The results showed the total runoff leaving the site towards The Donway West (Catchment ID#102) under the 2-year storm event was calculated to be 102.9 L/s which should be considered when designing the maximum allowance release rate for the proposed SWM facilities discharging to the Donway West municipal storm system. The peak flow runoff calculations can be found in Appendix B.

KEY PLAN



LEGEND

- PROPERTY LINE
- EXISTING CONTOUR (0.5m / 1.0m)
- EXISTING GRADE
- OVERLAND FLOW DIRECTION
- EXTERNAL FLOW DIRECTION
- STORM DRAINAGE ID NUMBER
AREA (ha)
RUNOFF COEFFICIENT
- CATCHMENT BOUNDARY

Project: 230 AND 240 THE DONWAY WEST
TORONTO, ON

Title: EXISTING CONDITIONS DRAINAGE PLAN

Approved by: S.P

Date: OCT, 2023

Project No.: ALL-00256815-B0

Drawn by: C.P

Scale: N.T.S.

Figure no.: FIG-02



4. Proposed Drainage Conditions

4.1 Proposed Grading

The preliminary grading design for the site generally maintains the existing drainage patterns for the site, while directing drainage away from building entrances and ensuring emergency major overland flows are divided per the existing drainage divide through the site. On the east side of the drainage divide, the drainage is conveyed in the southerly and easterly directions towards The Donway West, while on the west side of the drainage divide the drainage is conveyed in the northerly and westerly directions towards the northwest corner of the site. Due to the proposed lower elevations within the rear courtyard, the proposed grading and servicing design provides an allowance to convey all flows from the courtyard for all storm events up to and including the 100-year storm event where an emergency overflow pump system is provided within the proposed stormwater management (SWM) strategy for the site.

Due to the new driveway connection and new 2.1 m wide concrete sidewalk, some minor adjustments of the grading are required along the 230 The Donway right-of-way. The proposed grading design within the future parkland which will be dedicated to the City will be coordinated with City's parks, Forestry & Recreation Division.

Overall, the preliminary grading design for the site is to be completed in concert with the proposed stormwater management (SWM) strategy for the site which includes a network of high and low points, and inlet design to capture and attenuate the 100-year storm event. For additional grading details refer to the Preliminary Site Grading Plan provided in Appendix C.

4.2 Groundwater

The hydrogeological investigation completed by EXP shows a calculated short-term groundwater discharge to be 3.45 L/s (298,000 L/day) during construction and a calculated long-term groundwater discharge to be 0.13 L/s (11,000 L/day). EXP then undertook a detailed review of the available options for the proposed groundwater management strategy for the site. It has been confirmed with the owner and the consultant team that the proposed groundwater management strategy is to include a permanent drainage system (PDS) where all captured groundwater is to be collected and pumped to the municipal sanitary sewer under single ownership.

A proposed flow meter and sampling port shall be provided in accordance to Toronto Water requirements, before connection to the proposed sanitary service draining to the existing sanitary sewer on The Donway. As mentioned in Section 5 in the EXP Servicing Report, an allowance of 20 GPM or 1.3 L/s groundwater pumping has been included conservatively in the sanitary demand calculations where the pump size is confirmed with the mechanical engineer Novatrend Engineering Group Ltd.

Finally, a brief summary of the receiving municipal sewers for the proposed groundwater management strategy can be summarized as follows:

- Temporary discharge during construction = existing 375mm sanitary sewer on The Donway West
- Long term discharge = existing 375mm sanitary sewer on The Donway West

The hydrogeological investigation and correspondence with the mechanical engineer have been provided in Appendix C for reference. The proposed groundwater details are also shown on the Preliminary Site Servicing Plan and the Servicing Report Groundwater Review form can be found in Appendix C.

EXP staff have advised the Owner of the City's new foundation drainage policy that came into effect on January 1st, 2022 which generally prohibit any long-term discharge of foundation drainage to the City's municipal sewer system. The Owner has been confirmed that they will be pursuing approval to discharge the groundwater to the municipal sanitary sewer directly with City of Toronto staff for the corresponding Private Water Discharge Agreement with Toronto Water.

4.3 Methodology

The preliminary design of the SWM facilities for this site has been completed in accordance with;

- City of Toronto's Wet Weather Flow Management Master Plan (WWFMMP) guidelines, May 2023;
- City of Toronto Design Criteria for Sewers and Watermains, Second Edition, January 2021; and,
- Erosion and Sediment Control Guideline for Urban Construction, January 2008.

To design the proposed SWM facilities to meet the above requirements, the modified Rational Method was used to calculate the post development runoff.

4.4 Proposed Conditions Peak Flows

Based on the proposed preliminary grading and storm servicing design for the site, each catchment area was reviewed and calculated with corresponding runoff coefficients. The runoff coefficient calculations can be found in Appendix C, where the corresponding drainage areas and runoff coefficients are shown on Figure 3.

The theoretical peak flow runoff rates were then calculated for each year storm event using the conservatively estimated runoff coefficients and a time of concentration of 10 min, where the results are summarized in Table 2 below:

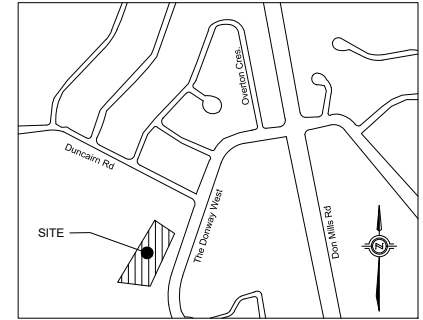
Table 2: Peak Flows (Proposed Conditions – no SWM Controls)

Catchment	ID#	Runoff Coefficient	Area (ha)	Peak Flow - 2 Year (L/sec)	Peak Flow - 5 Year (L/sec)	Peak Flow - 100 Year (L/sec)
Catchment #1	201	0.85	0.68	141.6	211.6	401.9
Catchment #2 (Courtyard)	202	0.85	0.11	22.9	34.2	65.0
Catchment #3	203	0.85	0.16	33.3	49.8	94.6
Uncontrolled Area 1	301	0.25	0.02	1.2	1.8	3.5
Total Controlled	201, 202, 203	0.85	0.95	197.8	295.6	561.5
Total Uncontrolled	301	0.25	0.02	1.2	1.8	3.5

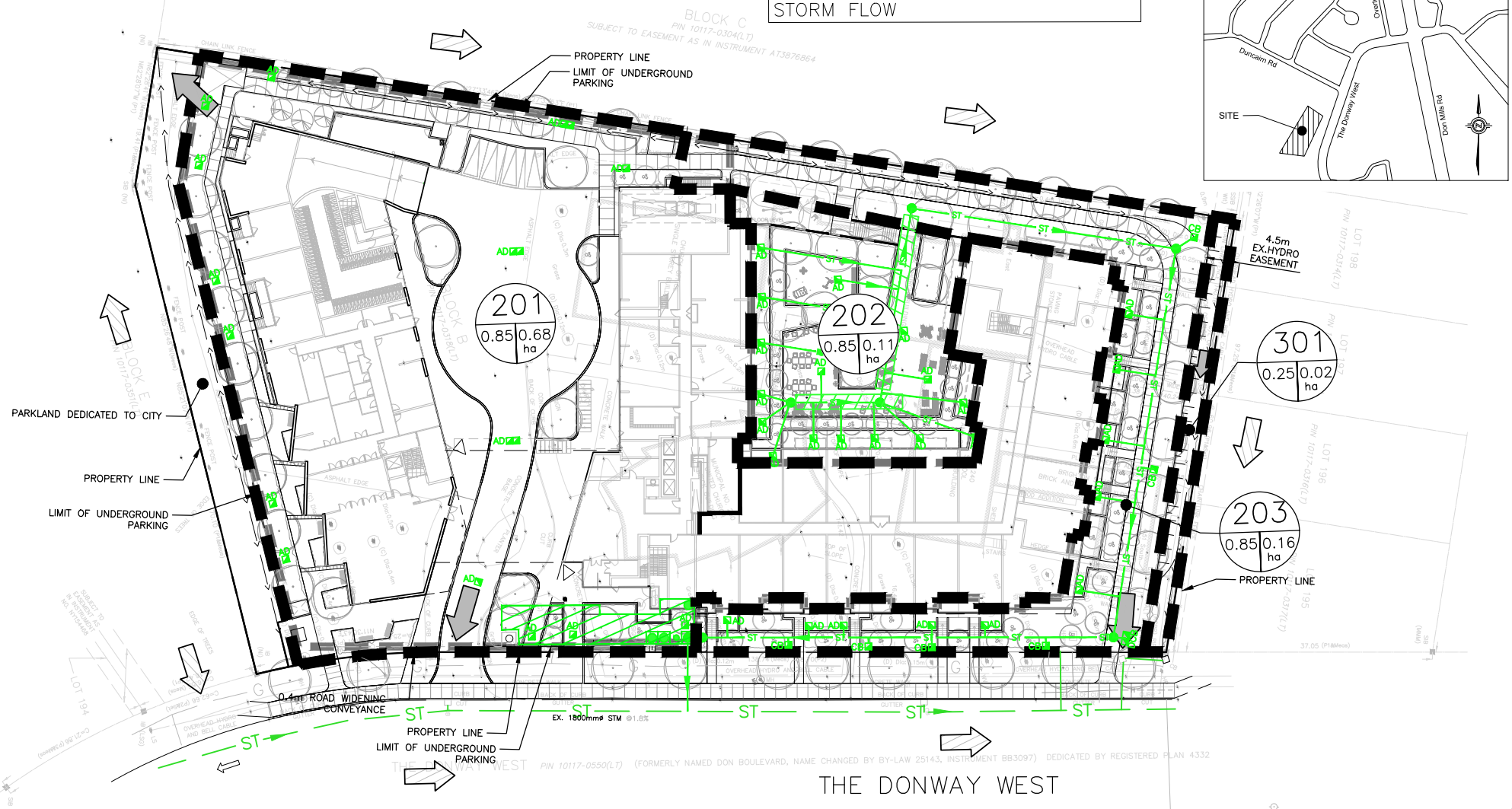
Catchment	ID#	Runoff Coefficient	Area (ha)	Peak Flow - 2 Year (L/sec)	Peak Flow - 5 Year (L/sec)	Peak Flow - 100 Year (L/sec)
Total	201, 202, 203, & 301	0.84	0.97	199.0	297.4	565.0

The above peak flows under proposed conditions were then reviewed to determine the SWM storage measures to attenuate flows to meet the maximum allowable release rate. The peak flow runoff calculations can be found in Appendix C.

KEY PLAN



ALL AREA DRAINS SHALL BE DESIGNED TO CAPTURE 100-YEAR STORM FLOW



LEGEND

- PROPERTY LINE
- EXISTING CONTOUR (0.5m / 1.0m)
- EXISTING GRADE
- EMERGENCY OVERLAND FLOW DIRECTION
- EXTERNAL FLOW DIRECTION
- STORM DRAINAGE ID NUMBER
- AREA (ha)
- RUNOFF COEFFICIENT
- CATCHMENT BOUNDARY

Project: 230 AND 240 THE DONWAY WEST TORONTO, ON

Title: PROPOSED CONDITIONS DRAINAGE PLAN

Approved by: S.P

Date: OCT, 2023

Project No.: ALL-00256815-B0

Drawn by: C.P

Scale: N.T.S.

Figure no.: FIG-03



4.4 Proposed SWM Quantity Controls

The proposed stormwater management (SWM) controls for the site are provided with a combination of a SWM Cistern located within the P2 level underground parking and a Superpipe system located along the north and east sides of the building that will directly be connected to the SWM Cistern. As per the City of Toronto's SWM criteria, all flows up to and including the 100-year storm event are captured and controlled to the allowable release rate of the pre-development flow for the 2-year storm event.

In order to determine the required SWM quantity controls for the site, the previously calculated peak flow rates for the existing site conditions were used. Based on the previously calculated allowable release rates, the uncontrolled flows were then subtracted from the controlled flow areas for all storms up to and including the 100-year storm event, which can be summarized in Table 3 below:

Table 3: Peak Flows (Proposed Conditions – with SWM Controls)

Phase	Area (ha)	2-year Peak Flows Allowable Release Rate (L/sec)	100-year Peak Flows to be controlled (L/sec)	Uncontrolled 100-year Peak Flows (L/sec)	Net Allowable Release Rate (L/sec)	Resultant Orifice Control Release Rate (L/sec)	Required SWM Storage Volume (m ³)	Provided Storage Volume (m ³)
Controlled (Discharge to Donway West)	0.95	102.9	561.5	0	99.4	98.6	279	352 (SWM Cistern + Superpipe)
Uncontrolled (Discharge to Donway West)	0.02	-	-	3.5	-	-	-	-
Total	0.97	102.9	561.5	3.5	99.4	98.6	279	352
Superpipe	0.27	-	159.6	0		129.3	54	70

Therefore, the incoming 100-year peak flow for both the SWM Cistern and Superpipe system was calculated to be 561.5 L/s, where using an orifice tube of approx. 210 mm diameter provides actual release rate of 98.6 L/s resulting in minimum required storage volume of 279 m³, where the SWM Cistern volume is optimized to be 282 m³ as a conservative approach. Then, the Superpipe system outside of the building was separately sized to convey 100-year peak flow of 159.6 L/s for the contributing catchment areas using a 200 mm diameter storm sewer that will work as an orifice control resulting in minimum required storage volume of 54 m³ where the Superpipe is optimized to be approx. 70 m³ in volume. All area drains and catchbasins shall also be sized to convey 100-year storm flows. The SWM storage calculations have been provided in Appendix C.

Based on the proposed grading design there are lower elevations within the rear courtyard and some lower patio areas that are below the available storm gravity outlet elevation. Therefore, the proposed SWM cistern is positioned on the P2 level and designed to capture the flows from the lower catchment where the stored stormwater will be pumped up to the oil grit separator (OGS) chamber positioned on the P1 level. The flows are to be drained by gravity and controlled with the above noted orifice control positioned between the OGS chamber and the storm control manhole before outletting to the existing 1800 mm diameter storm sewer on the Donway West. Any overflows beyond the 100-year storm event will be pumped with an additional emergency backup pump (and backup power system) directly to the surface discharging to The Donway West right-of-way. The pump sizes are to be confirmed with the mechanical design and the SWM Cistern is to be further refined during the detailed design process. For additional servicing details refer to the Preliminary Site Servicing Plan provided in Appendix C.

4.5 Proposed SWM Quality Controls

The City of Toronto Wet Weather Flow Targets include the long-term average removal of 80% total suspended solid (TSS) on an annual loading basis from all runoff leaving the proposed development site based on the post development level of imperviousness. The long-term removal requirement average of 80% TSS is consistent with the “enhanced protection” recommended in MOE SWM Planning and Design Manual, March 2003. As part of the preliminary SWM design for the site, a Stormfilter cartridge system is proposed inside the SWM Cistern envelope. Stormfilter is to be further refined during the detailed design process.

4.6 Water Balance

The objective of the water balance target is to preserve pre-development hydrology through the combination of various storm water management practices. As per Wet Weather Flow Management Guidelines, the first 5 mm of runoff across the site is to be through rainwater reuse or infiltration. Based on the site area of 0.97 ha, this gives a theoretical maximum required water balance volume of 49 m³ to be provided in the rainwater harvester component of the SWM cistern. However, during the detailed design stage an allowance for initial abstraction can be used to further determine and lower the rainwater harvester volume requirements. Once the design of the rainwater harvester is finalized it can then be pumped and reused for irrigation within landscaped areas and within the mechanical design for the building.

5. Erosion and Sediment Controls during Construction

During construction it is imperative that the contractor installs and maintains all the necessary erosion and sediment control measures to ensure there is no negative effects to the surrounding properties and the adjacent municipal sewer systems. Sediment controls such as catchbasin siltsacks are to be installed inside the existing catchbasins along The Donway West immediately adjacent to the site and monitored after rainfall events. Silt fencing is to be installed and maintained around the perimeter of the property. Mud tracking from truck transport is to be mitigated through use of a proposed mud mat and any other maintenance requirements necessary by the contractor before driving back on municipal roads. The required erosion and sediment controls details to be used during construction will be provided in the site plan application stage.

6. Conclusions

In summary, the proposed SWM strategy for the site outlined in this report can adequately meet the required City of Toronto criteria, where some of the key findings are summarized as follows:

- Based on a site area of 0.97 ha (after land conveyances to City) and runoff coefficient of 0.5 for a 2-year storm event, the maximum allowable release rate is 102.9 L/s for the site for discharging towards The Donway West right of way
- Based on the proposed preliminary grading and servicing design for the site, the runoff from the 100-year storm event (561.5 L/s) for the site is to be captured and controlled within an underground Superpipe (outside the building) and SWM Cistern (within the P2 level), discharging through a single storm service connection to the existing 1800 mm diameter municipal storm sewer on The Donway West
- The storage volumes for the SWM Cistern and Superpipe system are optimized to meet the minimum required combined storage volume of approx. 279 m³, using an orifice tube of approx. 210 mm diameter to meet the maximum allowable release rate for the site
- Due to the low lying elevations within the rear portions of the site, the proposed SWM Cistern is to be located on the P2 level within the building, where the flows are discharged through controlled pumping to the P1 level before gravity draining to the municipal storm system
- The proposed SWM Cistern pumping system is to include an emergency backup pumping and power system to discharge through a dedicated emergency overflow outlet at finished grades towards the Donway West right of way, to ensure SWM storage is not exceeded during an extreme storm event
- The required SWM quality controls and TSS removals can be met through the use of the proposed oil and grit filtration system located within the building on the P1 level
- Water balance objectives can be met by providing the maximum required 49 m³ volume within the rainwater harvester component of the SWM cistern and reuse for irrigation and circulation within the site landscape design and mechanical design of the building
- Emergency overland flow for storm events greater than the 100-year storm event can be generally managed through the proposed major overland flow grading design and site servicing design

Sincerely,
 EXP Services Inc.



Steve Park, P.Eng.
 Project Manager, Land Development



Scott Passmore, P.Eng.
 Vice President, Land Development

Appendix A – Site Plan, Topographic Survey, and City’s Record Drawing

NOTE: BE ADVISED THAT SHOULD ANY PARTY, INCLUDING THE OWNER OR ANY SUBSEQUENT OWNER, APPLY FOR MORE THAN ONE CONDOMINIUM CORPORATION ENCOMPASSING ANY OR ALL OF THIS DEVELOPMENT OR MAKE AN APPLICATION THAT RESULTS IN A LAND DIVISION, STAFF MAY REQUIRE LEGAL ASSURANCES, INCLUDING BUT NOT LIMITED TO EASEMENTS, WITH RESPECT TO THE APPROVED SERVICES. SUCH ASSURANCES WILL BE DETERMINED AT THE TIME OF APPLICATION FOR CONDOMINIUM APPROVAL.

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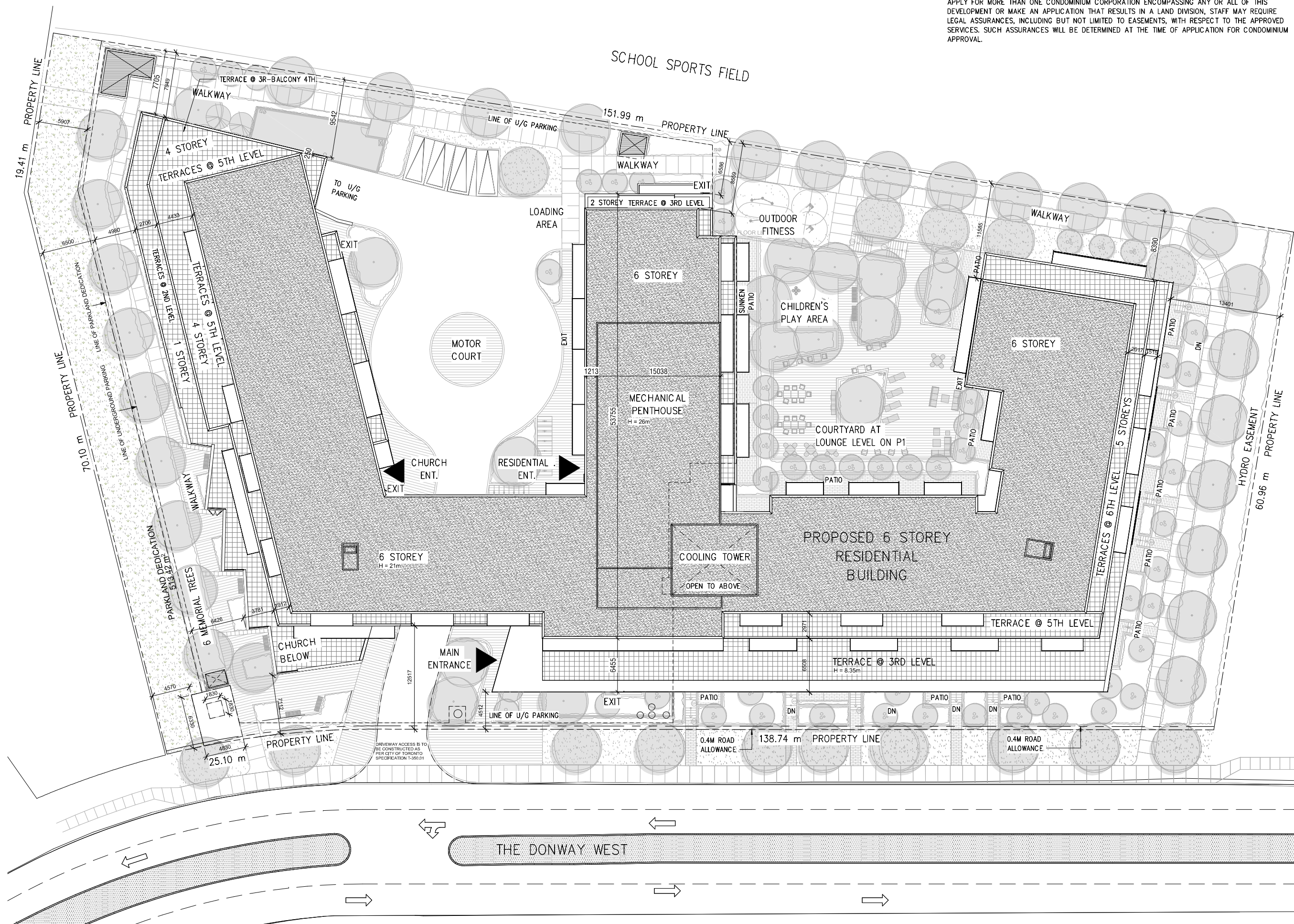
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Drawings are not to be used for construction unless noted below as "Issued for Construction".

All work to be carried out in conformance with the Code and below of the architect having jurisdiction.

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notes:



12	ISSUED FOR REZONING	2023.10.24
11	ISSUED FOR REZONING	2022.03.09
10	DRAFT REZONING SUBMISSION	2022.01.18
9	DRAFT REZONING SUBMISSION	2021.05.21
8	SUBMISSION FOR CONSULTANTS COORDINATION	2021.04.20
7	SUBMISSION FOR CONSULTANTS COORDINATION	2021.01.21
6	SUBMISSION FOR CONSULTANTS COORDINATION	2020.12.23
5	ISSUED FOR CLIENT REVIEW	2020.11.27
4	PRE-APPLICATION CONSULTATION WITH COMMUNITY PLANNING	2019.11.08
3	ISSUED FOR CLIENT	2019.10.20
2	ISSUED FOR CLIENT REVIEW	2019.09.30
1	FEASIBILITY SUBMISSION	2018.03.20
revisions:		dd-mm-yy

architectural team :

Eduardo Ortiz

Interior design:

planning:
BOUSFIELDS INC

structural:

electrical:

mechanical:

landscape:
O2 DESIGN (FORMERLY NAK DESIGN GROUP)

site services:
EXP

owner:
DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION AND THE DONWAY COVENANT UNITED CHURCH

project:
230 THE DONWAY WEST
230 The Donway W., North York, ON

SITE PLAN

2023.10.24
1 : 200
18-16
Author

date:
scale:
project:
drawn by:

drawing number:
A1011

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Drawings are not to be used for construction. Contractor to verify all existing conditions and dimensions required to perform the work and report any discrepancies with the Contract Documents to the architect before commencing work.

Positions of exposed or finished mechanical or electrical devices, fittings, and fixtures are indicated on architectural drawings. The locations shown on the architectural drawings govern over the Mechanical and Electrical drawings. These items not shown located will be located as directed by the architect.

These drawings are not to be used for construction unless noted below as "Issued for Construction".

All work to be carried out in accordance with the Code and bylaws of the jurisdiction having jurisdiction.

The Designer of these Plans and Specifications gives no warranty or representation to any person about the constructability of the represented by them. All contractors or subcontractors must satisfy themselves when preparing any of all times that they can properly construct the work represented by these Plans.

notes:

- 12 ISSUED FOR REZONING 2023.10.24
- 11 ISSUED FOR REZONING 2022.03.09
- 10 DRAFT REZONING SUBMISSION 2022.01.18
- 9 DRAFT REZONING SUBMISSION 2021.05.21
- 8 SUBMISSION FOR CONSULTANTS COORDINATION 2021.03.20
- 7 SUBMISSION FOR CONSULTANTS COORDINATION 2021.01.21
- 6 SUBMISSION FOR CONSULTANTS COORDINATION 2020.12.23
- 5 ISSUED FOR CLIENT REVIEW 2020.11.27
- 4 PRE-APPLICATION CONSULTATION WITH COMMUNITY PLANNING 2019.11.08
- 3 ISSUED FOR CLIENT REVIEW 2019.10.20
- 2 ISSUED FOR CLIENT REVIEW 2019.09.30
- 1 FEASIBILITY SUBMISSION 2018.03.20

revisions: dd-mm-yy

architectural team :

Eduardo Ortiz

Interior design:

planning: BOUSFIELDS INC

structural:

electrical:

mechanical:

landscape: O2 DESIGN (FORMERLY NAK DESIGN GROUP)

site services:

EXP

owner: DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION AND THE DONWAY COVENANT UNITED CHURCH

project:
230 THE DONWAY WEST
230 The Donway W., North York, ON

CONTEXT PLAN & STATISTICS

2023.10.24

1 : 500

18-16

Author

scale:

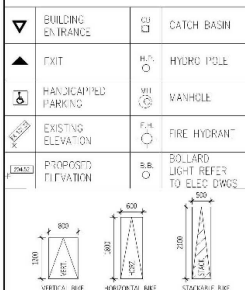
project:

drawn by:

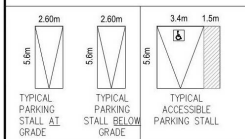


drawing number:
A100

LEGEND



PARKING LEGEND

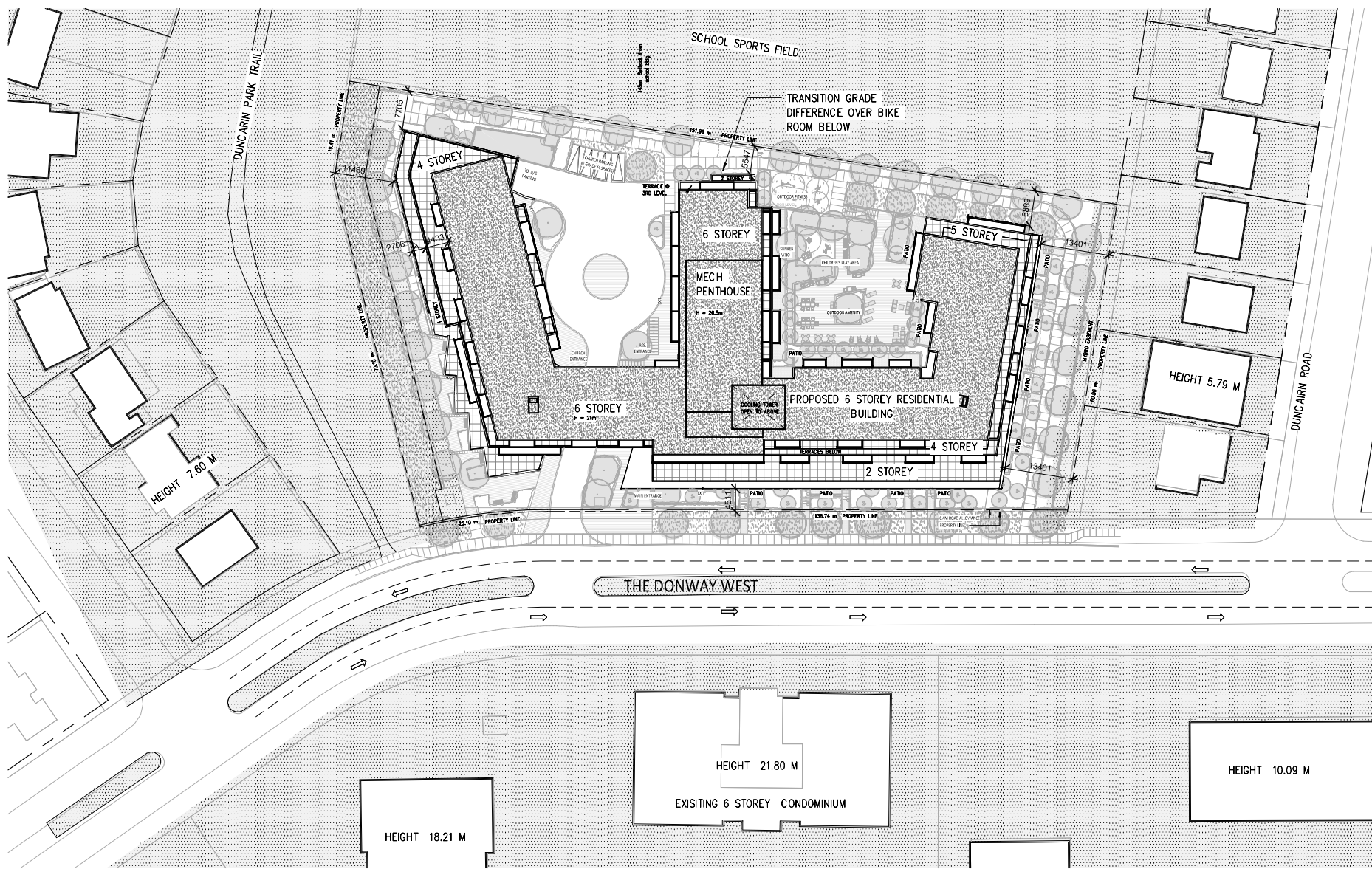


SURVEY DATA

PLAN OF SURVEY AND TOPOGRAPHY OF BLOCK B, REGISTERED PLAN 4332, CITY OF TORONTO (FORMERLY CITY OF NORTH YORK), BEING ALL OF PIN 10117-0318
PREPARED BY : J D BARNES LTD., 140 RENFREW DRIVE, SUITE 100, MARKHAM, ON L3R 6B3 (905) 477-3882 JULY 15, 2019

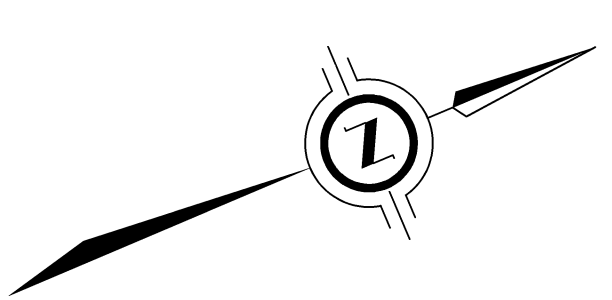
architecture unfolded

STATISTICS		230 AND 240 THE DONWAY WEST				PROJECT #	
1. ZONING		R18.16					
2. SITE AREA		10,268.00 m2	110,523.73 R2	2.54		ACRES	
PARK DEDICATION		513.42 m2	5,526.18 R2				
0.4M ROAD ALLOWANCE		47.00 m2	505.90 R2				
NET SITE AREA (INCLUDES 187 m2 HYDRO EASEMENT)		9,707.58 m2	104,491.42 R2	2.40		ACRES	
TOTAL SITE AREA		10,268.00 m2	110,523.73 R2	2.54		ACRES	
3. ESTABLISHED GRADE		141.69 m (AVERAGE GRADE AS PER BY-LAW)					
4. PROPOSED BUILDING:		22,390.8 m2		241,011.8 R2			
GFA		22,390.8 m2		241,011.8 R2			
BUILDING AREA		3,850.25 m2		41,443.71 R2			
DENSITY		2.18		FSI (GFA / SA)			
UNITS		308		Podium towns (Included in 308)		TOTAL	
PROPOSED UNIT TYPE		BACH	18	18HD	28	28HD	38
		11	57	92	65	51	32
TOTAL		11	57	92	65	51	32
5. DEPARTMENTS		477.4 m2		745			
AMENITY SPACE (INDOOR) 1.5m2/U		477.4 m2		5,139 R2			
AMENITY SPACE (LANDSCAPE) 1.5m2/U		462.0 m2		4,973 R2			
7. FLOOR AREA:		SOFT-HARD SCAPED		462.0 m2			
8. UNIT SUMMARY		INCLUDED IN 308					
FLOOR		BACH	18	18HD	28	28HD	38
P1		2	2	2	7	4	8
GF		0	2	10	7	2	6
2ND		1	9	21	12	5	6
3RD		0	12	21	6	12	4
4TH		0	12	21	9	8	5
5TH		4	11	9	11	10	2
6TH		4	9	8	13	10	1
TOTAL		11	57	92	65	51	32
TOTAL		3.6%	18.5%	29.9%	21.1%	16.6%	10.4%
CLIENT TARGET		5.0%	20.0%	25.0%	25.0%	15.0%	10.0%
9. ACCESSIBLE UNITS		INCLUDED IN 308					
FLOOR		BACH	18	18HD	28	28HD	38
P1		0	0	0	0	0	0
GF		0	1	2	1	1	1
2ND		0	1	3	1	1	1
3RD		0	1	3	3	2	1
4TH		0	1	2	3	1	1
5TH		0	1	2	1	1	1
6TH		0	1	2	1	1	1
TOTAL		0	6	15	10	9	6
10. EFFICIENCY (NSA/GFA)		PERMITTED		100%		PROPOSED:	
MECH. P.H. (EXCL.)		Max. 8.00 m FOR 40% OF ROOF AREA		MECH. P.H. (EXCL.) = 376 m2		(14% OF ROOF AREA)	
+ Max. 10.00 m FOR 25% OF ROOF AREA				ROOF AREA = 2683 m2		(5m)	
11. REZONING		REQUIRED (MAX)		BY-LAW 569-2013 (4)		PROPOSED:	
BACH		0.8 PER UNIT		18		0	
18		0.9 PER UNIT		149		=	
28		1.2 PER UNIT		116		=	
28HD		1.2 PER UNIT		78		=	
CHURCH		MAX. 4 PER 300 m2 OF WORSHIP AREA (743M2) =		44		=	
TOTAL		0.05 PER UNIT (*)		308		+ 2 =	
VIS. (MIN)		0.05 PER UNIT (*)		308		+ 2 =	
ELECTRICAL VEHICLE		REQUIRED (LEV 2 EVSE) 100% OF RES & 25% OF VIS =		228		PROPOSED: (LEV 2 EVSE) 100% OF RES & 25% OF VIS =	
		All remaining to have EV ROUGH-INS				All remaining to have EV ROUGH-INS	
13. ACCESSIBLE PARKING		REQUIRED: 11 Spaces		PROPOSED:		RES. (6) ON P1 + 128 ON P2 + 29 ON P3 =	
						VIS. (20 ON P1) =	
						CHURCH (16 ON P1 + 4 ON SURFACE) =	
						TOTAL (Includes 11 accessible parking spaces) =	
14. LOCKERS		REQUIRED: 1 PER UNIT (308) =		308		PROPOSED: (72%)	
						A/G	
						U/G	
						TOTAL	
15. BICYCLE		REQUIRED: 1 PER UNIT (308) =		308		PROPOSED: RETAIL	
						SHORT TERM	
						LONG TERM	
						RESIDENTIAL	
						SHORT TERM	
						LONG TERM	
						(Ground Floor) 22	
						TOTAL (120 Ground Floor + 90 P1) 210	
16. INDOOR AMENITY		REQUIRED:		PROPOSED:			
TOTAL		RES. 2 m2 / UNIT (308) = (m2) 616		1.55 m2 / U		477.40 m2	
BREAKDOWN							
				P1		76.00 m2	
				GROUND FL.		383.40 m2	
				2ND FL.		18.00 m2	
						477.40 m2	
17. OUTDOOR AMENITY		REQUIRED:		PROPOSED:			
TOTAL		RES. 2 m2 / UNIT (308) = (m2) 616		1.50 m2 / U		462.00 m2	
BREAKDOWN							
						AMENITY (INC. IN GFA) 477.40 m2	
						5,139.00 m2	
						OUTDOOR AMENITY 383.00 m2	
						1,322.57 m2	
						H2S SPACE 99.00 m2	
						1,065.61 m2	
						OUTDOOR WORKOUT 67.00 m2	
						721.18 m2	
						549.00 m2	
						5,509.38 m2	
18. LANDSCAPED OPEN SPACE		REQUIRED:		PROPOSED:			
TOTAL		SITE AREA 10,268.00 m2					
		REQUIRED OPEN SPACE ON SITE 10.0%					
		TOTAL 3,080.40 m2					
						TOTAL 4,680.2 m2	
						SOFTSCAPE 2,660.69 m2	
						HARDSCAPE 1,784.69 m2	
						TOTAL 4,398.0 m2	
19. REFUSE		REQUIRED:		PROPOSED:			
		GARBAGE ROOM AREA 65 m2				GARBAGE ROOM AREA (P1 LEVEL) 76 m2	
		BULK AREA 10 m2				BULK AREA 54 m2	
		BIN STAGING AREA 31 m2				BIN STAGING AREA 58 m2	
20. LOADING SPACES		REQUIRED:		PROPOSED:			
		1 TYPE G (13m L X 4m W X 6.1m H)					



PLAN OF SURVEY AND TOPOGRAPHY OF
BLOCK B
REGISTERED PLAN 4332
 CITY OF TORONTO
 (FORMERLY CITY OF NORTH YORK)

SCALE 1 : 300
 0 5 10 20 metres



METRIC
 DISTANCES AND/OR COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

DISTANCE NOTE
 DISTANCES SHOWN ON THIS PLAN ARE GROUND LEVEL DISTANCES. TO CONVERT TO GRID DISTANCE MULTIPLY BY COMBINED SCALE FACTOR 0.999885

BENCH MARK
 ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO THE CANADIAN GEODETIC VERTICAL DATUM 1928. PRE 1978 ADJUSTED AND ARE DERIVED FROM THE CITY OF TORONTO BENCH MARK NO 12319851314 HAVING A PUBLISHED ELEVATION OF 142.854 METRES.

BEARING NOTE
 BEARING SHOWN HEREON ARE ASTRONOMIC AND ARE REFERRED TO THE WESTERLY LIMIT OF THE DONWAY WEST, AS SHOWN ON BA PLAN 64A2009 HAVING A BEARING OF N192°23'27"E.

ROTATION NOTE
 FOR BEARING COMPARISONS, A ROTATION OF 0°02'33"7" COUNTER-CLOCKWISE WAS APPLIED TO BEARINGS ON REGISTERED PLAN 4332.

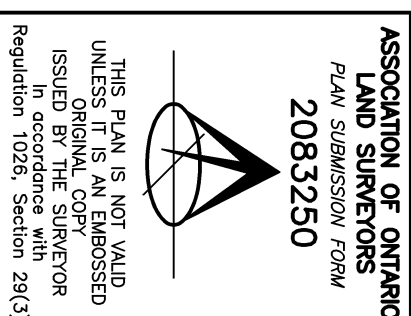
- LEGEND**
- DENOTES SURVEY MONUMENT SET
 - DENOTES SURVEY MONUMENT FOUND
 - SIB DENOTES STANDARD IRON BAR
 - SSIB DENOTES SHORT STANDARD IRON BAR
 - SSIB'S SET DUE TO A LACK OF OVERBURDEN AND/OR DUE TO THE PROXIMITY OF UNDERGROUND UTILITIES IN ACCORDANCE WITH 0360.555/91 5.1(14)
 - IB DENOTES IRON BAR
 - RIB DENOTES ROUND IRON BAR
 - CC DENOTES CUT CROSS
 - CP DENOTES CONCRETE PIN WITH OLS IDENTIFICATION WASHER
 - WH DENOTES WINKNS
 - NI DENOTES NOT IDENTIFIED
 - OB DENOTES OBSOLETE PLAN 4332
 - P1 DENOTES REGISTERED PLAN 4332
 - P2 DENOTES 64B-2009
 - P3 DENOTES SRPP BY LAND SURVEY GROUP DATED DECEMBER 22, 2015
 - MAM DENOTES MARSHALL MACKLIN MORGANHAN, OLS
 - LSG DENOTES LAND SURVEY GROUP, OLS
 - KOPP DENOTES KING, COONS, PHELAN AND PORTER, OLS
 - HED DENOTES HYDRO PRESTAL
 - G METER DENOTES GAS METER
 - MH DENOTES MANHOLE
 - HP DENOTES HYDRO POLE
 - LS DENOTES LIGHT STANDARD
 - FED DENOTES TELEPHONE PRESTAL
 - WD DENOTES WATER WALK
 - WD 0.5m DENOTES DECIDUOUS TREE, DIAMETER 0.5 METER
 - WD 0.5m DENOTES CONIFEROUS TREE, DIAMETER 0.5 METER

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
 1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEY ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
 2. THE SURVEY WAS COMPLETED ON 25th JUNE 2019.

JULY 16, 2019
 DATE

 GREG McDONALD
 ONTARIO LAND SURVEYOR



PART 2 - SURVEY REPORT

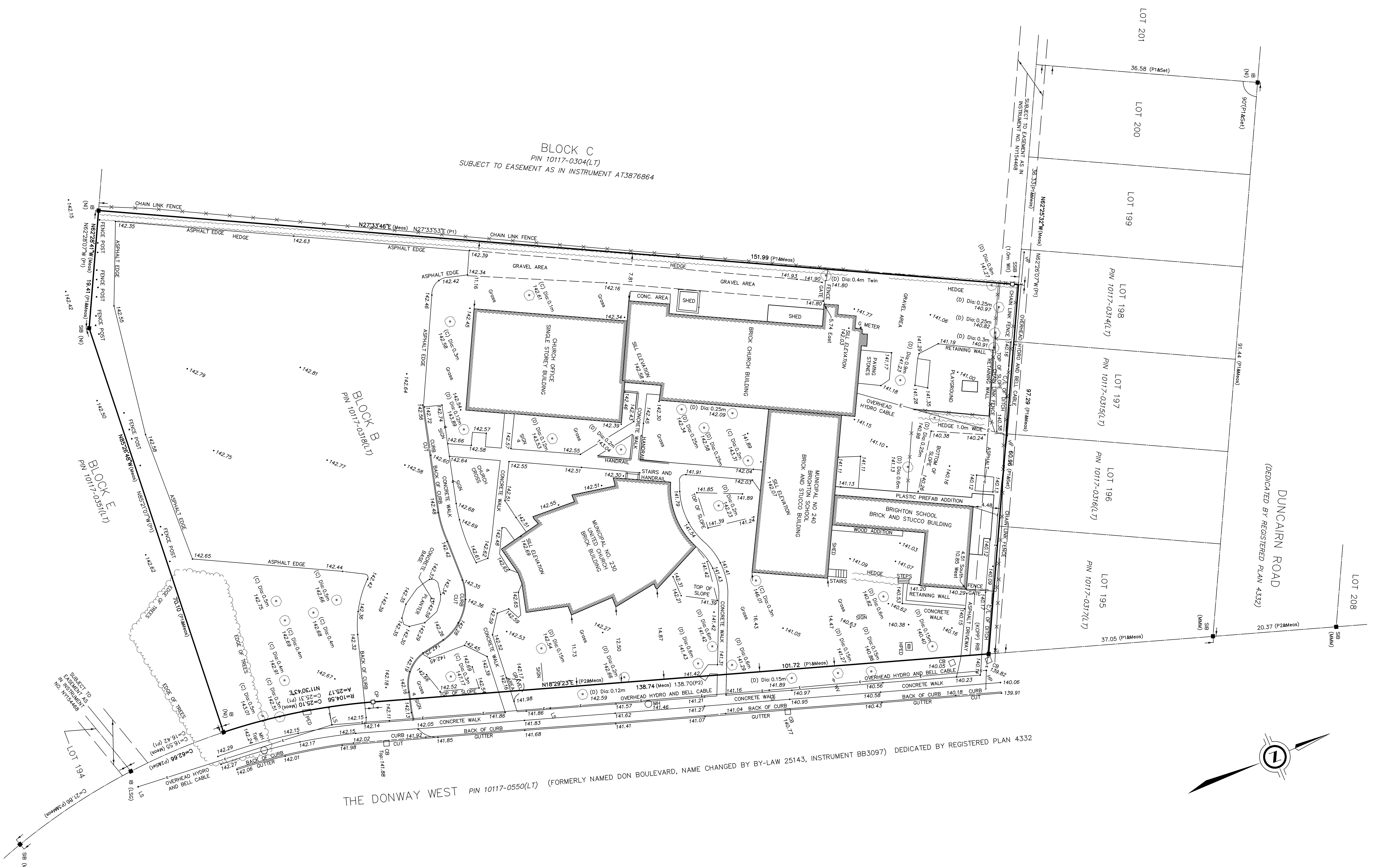
DESCRIPTION OF LAND
 220 The Donway West, Toronto
 All of Block B, Registered Plan 4332, City of Toronto
 Being All of PIN 10117-0318
REGISTERED EASEMENTS AND/OR RIGHTS-OF-WAY
 Subject to Easement As in Instrument No. N1554468

COMMENTS
 Chain Link Fence Exist Near The Northeast And Northwest Limit As Shown On The Plan.
 Hedge Exist Near The Northwest Limit As Shown On The Plan.
BOUNDARY FEATURES
 Building Ties to Concrete Foundation Limit, As Shown On The Plan
ZONING COMPLIANCE
 Not Reviewed

THIS REPORT WAS PREPARED FOR DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION



DRAWN BY: JL
 CHECKED BY: LL
 DATE: JULY 15, 2019
 JOB NO.: 19-15-129-00
 CAD FILE: G:\Survey\19-15-129\Donway\19-15-129-00.dgn
 PLOTTED: 7/16/2019



THE DONWAY WEST PIN 10117-0550(LT) (FORMERLY NAMED DON BOULEVARD, NAME CHANGED BY BY-LAW 25143, INSTRUMENT BB3097) DEDICATED BY REGISTERED PLAN 4332

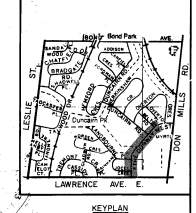
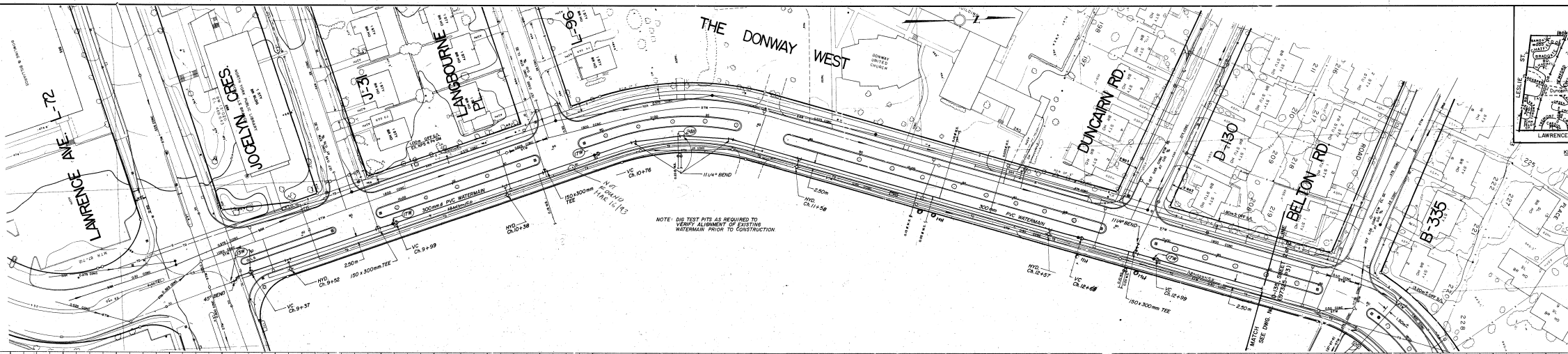
DUNCAIRN ROAD
 (DEDICATED BY REGISTERED PLAN 4332)

BLOCK C
 PIN 10117-0304(LT)
 SUBJECT TO EASEMENT AS IN INSTRUMENT AT3876864

BLOCK B
 PIN 10117-0318(LT)

BLOCK E
 PIN 10117-0351(LT)

BLOCK A
 PIN 10117-0314(LT)



REFERENCE: BA-587, BA-2009

GENERAL NOTES:
 1. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN METRES.
 2. THE PROPOSED WATERMAIN IS TO BE INSTALLED IN A 1.5M DEEP TRENCH WITH A 1.5M CLEARANCE BETWEEN SIDES.
 3. ALL DIMENSIONS REFERRED TO ARE TO THE CENTERLINE OF THE WATERMAIN UNLESS OTHERWISE SPECIFIED.
 4. ALL DIMENSIONS REFERRED TO ARE TO THE CENTERLINE OF THE WATERMAIN UNLESS OTHERWISE SPECIFIED.
 5. ALL DIMENSIONS REFERRED TO ARE TO THE CENTERLINE OF THE WATERMAIN UNLESS OTHERWISE SPECIFIED.

LEGEND:
 TC TELEPHONE CABLE
 TD TELEPHONE DUCT
 TM TELEPHONE MANHOLE
 PE PEDESTAL

NORTH YORK WATERMAIN REPLACEMENT
 CONTRACT NO. 971-033
 PROCTOR & REDFERN LTD. PROJECT E097325

Proctor & Redfern Limited
 Consulting Engineers and Planners
 Toronto

1	PHASED AS REQUIRED DRAWING	DATE	BY
2	WATERMAIN REPLACEMENT STA 9+26 TO STA 9+40	JULY 01 2009	...
3	"AS CONSTRUCTED" LAWRENCE TO DON MILLS (ROAD)
4	"AS CONSTRUCTED" LAWRENCE TO DON MILLS (ESTIMATE)

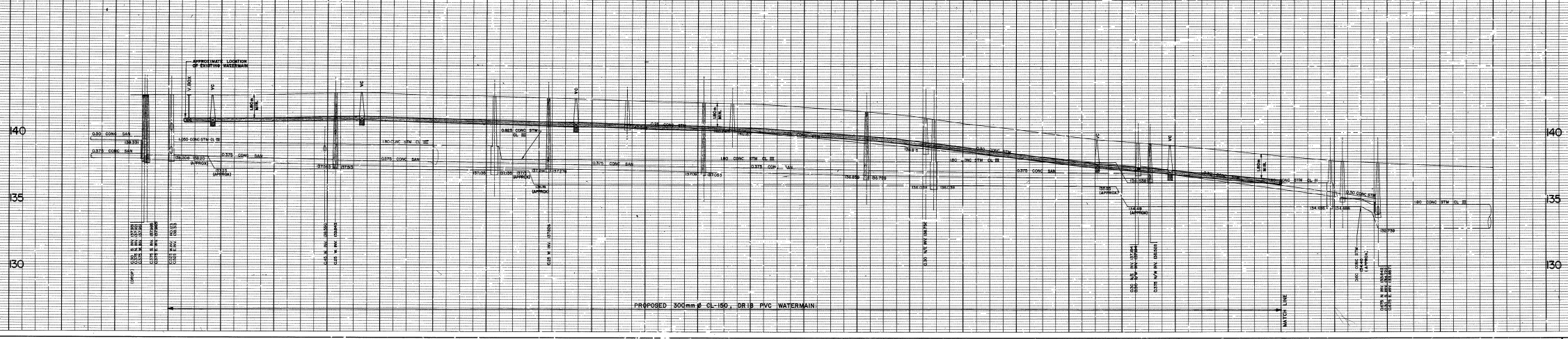
ALL MEASUREMENTS & ELEVATIONS ON THIS PLAN ARE IN METRES UNLESS OTHERWISE INDICATED.

CITY OF NORTH YORK
 DEPARTMENT OF PUBLIC WORKS

THE DONWAY WEST
 FROM LAWRENCE AVENUE
 TO DON MILLS ROAD

DESIGN: G. H. BRYAN
 DATE: ...
 SCALE: HOR. 1 : 500
 VERT. 1 : 100
 SHEET NO. D-135
 OF 2

97325-P2



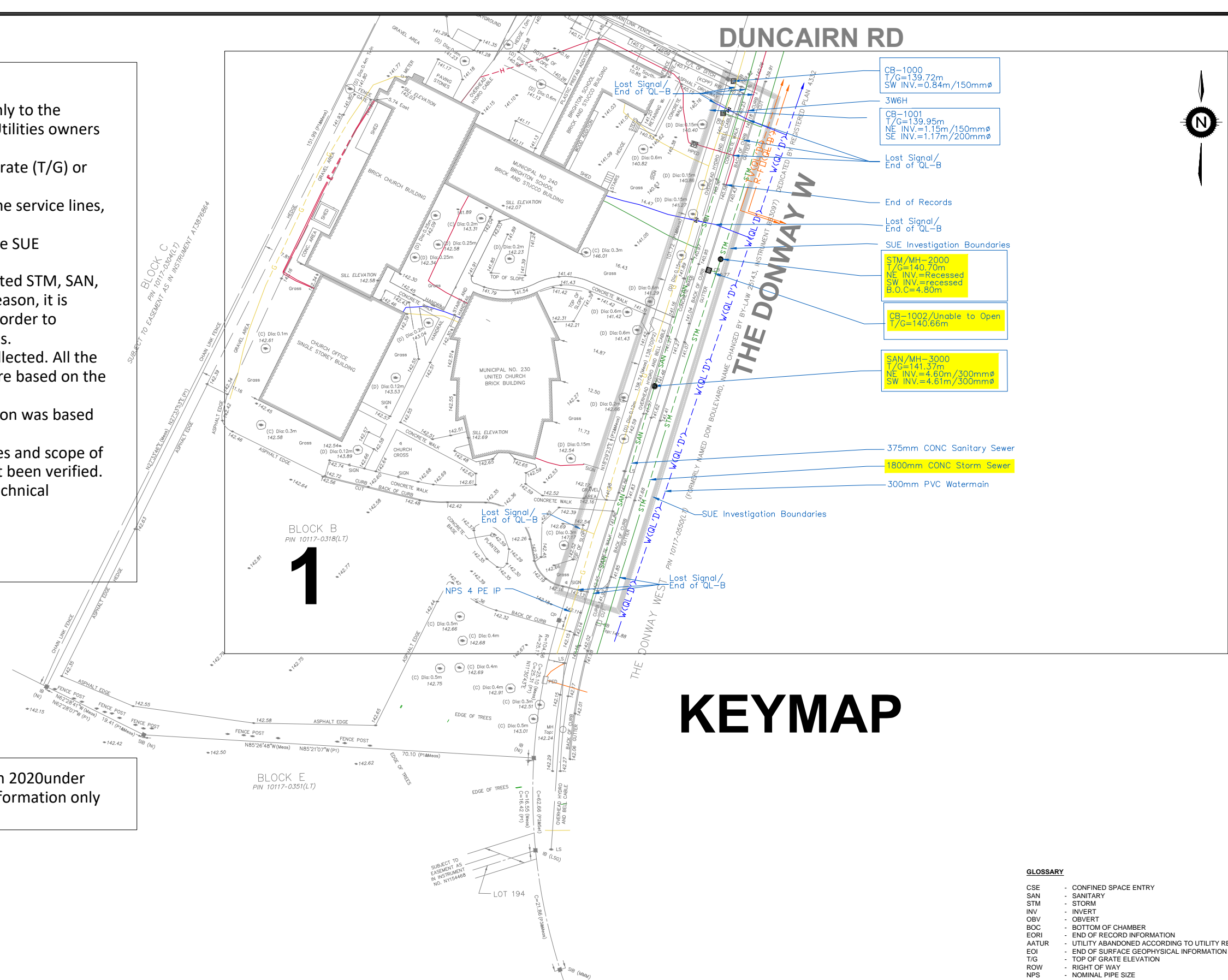
ELEVATIONS ARE ALONG WEST CURB OF MEDIAN

142.803	142.794	142.814	142.889	142.883	142.799	142.743	142.596	142.282	142.266	142.808	142.817	142.626	142.547	142.696	142.708	142.225	139.783	139.699	139.028	138.696	138.524	137.878	137.503	137.263
9+34	9+40	9+60	9+92	10+00	10+20	10+40	10+30	11+00	11+20	11+40	11+45	11+60	11+85	12+00	12+20	12+40	12+60	12+69	13+00	13+20	13+40	13+60	13+80	14+00

SUE NOTES:

1. The Project boundaries are not including the full ROW only to the center of the road. For this reason records from the main Utilities owners on The Donway West are not included.
2. All inverts are in meters and are taken from the Top of Grate (T/G) or Rim Elevation reference.
3. All the utility owners could not provide the records for the service lines, they only provided for the main lines.
4. Overhead Utilities are not within the scope of work of the SUE Investigation.
5. No update as built drawings were received, and all depicted STM, SAN, and water mains are based on these old records. For this reason, it is highly recommended to perform sonding for the sewers in order to establish and /or confirm connections for mains and laterals.
6. No records of service utilities lines were available nor collected. All the depicted service lines included in this composite drawing are based on the geophysical survey only.
7. Street Light (SL) and Traffic Lights (TL) utility lines depiction was based on the site investigation only.
8. Any data or information outside of the project boundaries and scope of work is provided for information purposes only and has not been verified.
9. Please see some SUE Investigation challenges and the Technical limitations on sheet # 2

SUE investigation of the private property was performed on 2020 under project #46592. Finding of this investigation is added for information only and has not been updated.



FOR: DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION

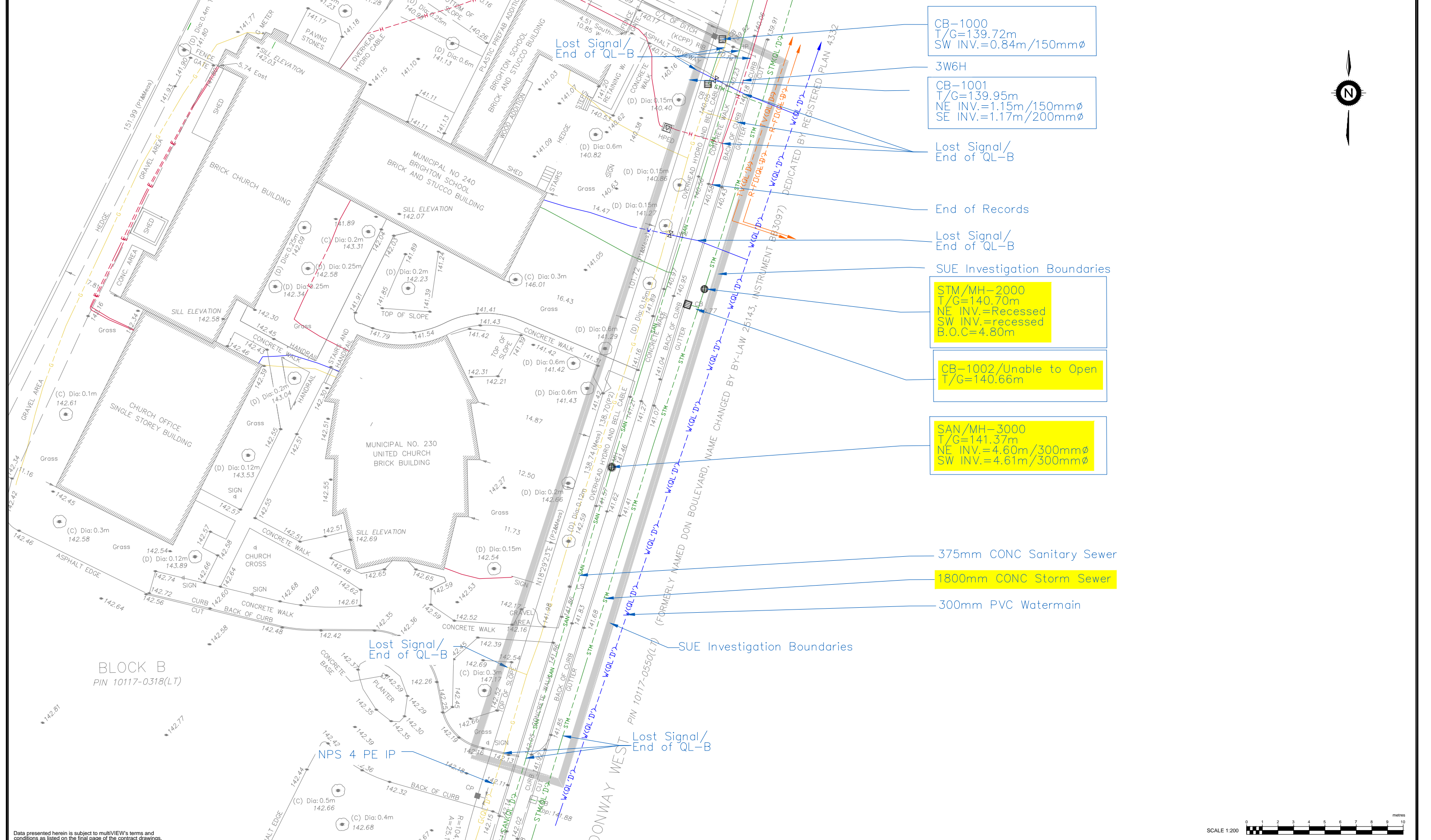
PROJECT NO:52787

PROJECT NAME: 230 THE DONWAY W, NORTH YORK, ON

DATE:2023-01-17



Tel: 1-800-363-3116
 Email: sales@multiview.ca
www.multiview.ca



CB-1000
T/G=139.72m
SW INV.=0.84m/150mmØ

3W6H
CB-1001
T/G=139.95m
NE INV.=1.15m/150mmØ
SE INV.=1.17m/200mmØ

Lost Signal/
End of QL-B

End of Records

Lost Signal/
End of QL-B

SUE Investigation Boundaries

STM/MH-2000
T/G=140.70m
NE INV.=Recessed
SW INV.=recessed
B.O.C=4.80m

CB-1002/Unable to Open
T/G=140.66m

SAN/MH-3000
T/G=141.37m
NE INV.=4.60m/300mmØ
SW INV.=4.61m/300mmØ

375mm CONC Sanitary Sewer

1800mm CONC Storm Sewer

300mm PVC Watermain

Lost Signal/
End of QL-B

SUE Investigation Boundaries

Lost Signal/
End of QL-B

NPS 4 PE IP

BLOCK B
PIN 10117-0318(LT)



Data presented herein is subject to multiVIEW's terms and conditions as listed on the final page of the contract drawings.

	Project No.:	Date:	Surveyed/Drawn By:	Checked:
	52787	2023-01-17	AS/NN	
For: DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION				
Site: 230 THE DONWAY W, NORTH YORK, ON				
SUBSURFACE UTILITY ENGINEERING HYDRO EXCAVATION & CCTV CONCRETE SCANNING UTILITY LOCATES NEAR-SURFACE GEOPHYSICS Tel: 1-800-363-3116 Fax: 1-866-571-5946 www.multiVIEW.ca 325 Matheson Blvd East Mississauga, ON, L4Z1X8				

Subsurface Utility Engineering C/ASCE 38-02 Quality Levels		GENERAL NOTES	
QL'A:	Visual verification of utility location and depth using excavation methods. I.e. Hydrovac.	1.	This information is provided for design purposes only.
QL'B:	Utility located using surface geophysical methods i.e. electronically applied or induced magnetic field using specific utility locate equipment or ground penetrating radar.	2.	All inverts shown on this plan by multiVIEW Locates Inc. are in meters and were measured from the top of the manhole and/or catch basin lids.
QL'C:	Utility plotted using record information in conjunction with a visual field survey of utility furniture.	3.	Subsurface utility information shown on this drawing was obtained on a best effort, best practices basis, within the technical limitations of the instrumentation.
QL'D:	Utility plotted using record information only. This can include oral recollection.	4.	Utilities shown on this map by multiVIEW Locates Inc. were located using ASCE 38-02 Quality Level 'B' methods unless otherwise noted. All other information herein has been supplied by others and is not certified.
		5.	Third party information provided on these drawings are for the convenience of use but do not constitute information obtained and delivered by multiVIEW Locates Inc. during the course of this project.
		6.	Elevations represented for this study were obtained by multiVIEW Locates Inc. utilizing datum derived by differential GPS observations and referred to the CAN-NET Reference Network.

UTILITY CODES & LEGEND	
Watermain	Sanitary Sewer
Gasmain	Gas QL-D
Hydro	Water QL-D
Gas Service	Storm QL-D
Storm Sewer	TV QL-D
Rogers FO (QL-D)	Hydro QL-D

SHEET 1 of 2				
Rev. No.	Drawn By	Checked By	Date	Revision

Technical Limitations

- Throughout this schedule, "multiVIEW" is the corporate entity multiVIEW Locates Inc.
- Pipe, cable, conduit, rebar, post-tension cables, anchors, containers, vaults, tanks and similar objects that are buried under the ground or embedded within a structure are referred to in multiVIEW's terms and conditions as Buried Assets
- Subsurface conditions such as depth to bedrock, change in soil type, presence of karst, voids, contaminated soil or ground water, residual construction or industrial debris or buried waste are referred to in multiVIEW's terms and conditions as Buried Liabilities.
- The Client acknowledges that the laws of fundamental physics apply and acknowledge that sensing instruments can not detect all Buried Assets and Buried Liabilities. Buried Assets and Buried Liabilities which are detectable by properly deployed and operated instruments are termed Locatable Buried Assets and Locatable Buried Liabilities. Buried Assets and Buried Liabilities which are not clearly detectable in an unambiguous manner due to the laws of fundamental physics are termed Unlocatable Buried Assets and Unlocatable Buried Liabilities. multiVIEW follows industry best-practice procedures but is not responsible for determining the presence and location of Unlocatable Buried Assets or Unlocatable Buried Liabilities.
- Instruments to locate Buried Assets use a variety of approaches to detect and infer the location of the Buried Assets. Standard pipe and cable locating instruments detect the magnetic fields associated with electrical current flowing in the Buried Asset. GPR (Ground Penetrating radar) techniques depend on the transmission of radio waves into the host material and detection of waves reflected back from the Buried Assets. Sounding methods require insertion of a source of magnetic field into the pipe or conduit and detection of the magnetic field created by source at the surface of the Work Area to locate the sonde position. For the purposes of this estimate, Locatable Buried Assets are normally characterized as:
 - metallic pipes, cables and conduits that are capable of carrying an electrical current and that can be physically accessed to allow an energizing current source to create an electrical current in the Buried Asset of sufficient magnitude as to be detectable by standard locating instruments;
 - metallic pipes, cables and conduits that actively carry an identifiable electric current that is sufficiently large and has suitable frequency as to be detectable by standard locating instruments;
 - metallic and non-metallic pipes, cables, conduits, rods, bars, wires, voids, and inclusions that represent a substantive electrical contrast to the host material and are embedded in a host material transparent to radio waves such that radio waves reflected from the feature are detectable by a GPR instrument;
 - non-metallic pipes, cables and conduits (i.e. composed of plastic, concrete, asbestos, clay, etc.) which have continuous associated tracer wire capable of carrying an electric current and that can be physically accessed to allow an energizing current source to create an electrical current in the tracer wire of sufficient magnitude as to be detectable by standard cable locating instruments;
 - non-metallic pipes, cables and conduits which have continuous associated tracer wire capable of carrying an electric current and that naturally carries an electrical current of sufficient magnitude and suitable frequency as to be detectable by standard cable locating instruments;
 - open pipe and conduits that can be accessed by a sonde and are sufficiently shallow to permit detectable magnetic fields to be sensed at the surface of the Work Area;

Examples of Unlocatable Buried Assets include, but are not limited to, the following:

 - pipes, cables and conduits whose depth of burial is too great to create and/or overtake by or in proximity to metallic material which results in signal distortion thus preventing physically measurable signals at the surface or where burial material interferes with current generation and signal emissions;
 - normally Locatable Buried Assets situated in, or emerging from, an area which is an Inaccessible Area;
 - normally Locatable Buried Assets with a break or breaks to the electrical continuity of any metallic pipe, cable or tracer wire (i.e. segmented lengths, corroded connections, sections of plastic repair, etc.);
 - non-metallic pipe, cable and conduits which do not have a continuous and/or accessible associated tracer wire;
 - the host material is opaque to radio waves;
 - Buried Assets that are normally characterized as Locatable become Unlocatable when either ambient interfering electromagnetic fields or the material surrounding and/or enclosing and/or above the Buried Asset disrupt the energizing current or the normal operation of the sensing instrument.
- Instruments used to locate Buried Liabilities use a variety of approaches to detect and infer the location of the Buried Liability. Magnetometers detect the distortion in the local magnetic field induced by the presence of some types of Buried Liabilities. GPR (Ground Penetrating radar) techniques depend on the transmission of radio waves into the host material and detection of waves reflected back from the Buried Liability. In some cases the lack of reflected GPR signal can be a Buried Liability indicator. Electromagnetic induction methods use electromagnetic induction to induce current flow in the subsurface and detect the resulting magnetic fields that are associated with these induced currents to identify Buried Liabilities. Electrical resistivity measurements use direct connect to pass current through host material and map out distortions in the current flow to indicate changes in the subsurface that may indicate the presence of Buried Liabilities. For the purposes of this estimate, Locatable Buried Liabilities are normally characterized as those features that will create a discernable change to the response of the measuring instrument and which differ in character from the background surrounding environment (that is, the features create an Anomalous Response) when industry best practices are followed.
- The Client acknowledges that the laws of fundamental physics apply and that equipment is subject to measurement distortions that are site specific resulting in limited precision when determining positional coordinates. multiVIEW will use best-practice procedures but is not responsible for determining the location of Buried Assets or Buried Liabilities to an accuracy better than what is typical of normal locate instruments.
- Determination of type composition, depth or size of the Buried Assets or Buried Liabilities is not possible and does not constitute part of this service. Identification of the type (i.e. gas, electric, communications, etc) of a specific Buried Asset is not technically possible except by visual surface appurtenance or excavation and visual exposure of the Buried Asset. Inferences that may be drawn by correlation with records and as-built drawings may be offered but such inferences are provided on a best effort basis with no guarantee of correctness.
- Client acknowledges the critical nature of having access to energize Buried Assets to enable locating and assumes full responsibility for identifying and providing access (including provision of licensed plumbing, electrical or confined space entry personnel if required and which adhere to multiVIEW health and safety procedures) to any and all points necessary for the energization of the Buried Assets. multiVIEW accepts no responsibility for locating any Buried Asset for which access and/or appropriate workplace safety measures are not provided.
- Individual Locatable Buried Assets are deemed Unlocatable Buried Assets where there are numerous Buried Assets clustered together either vertically and/or horizontally ("Clustered Utilities") making identification of individual elements physically impossible. multiVIEW is not responsible for identifying the individual Buried Assets in such situations.
- Non-metallic pipe and cable (i.e. fibre-optic systems, etc.) are Unlocatable Buried Assets for standard cable locating instruments unless either an unbroken tracer wire or continuous metallic sheathing surrounding such buried plant is easily accessible from the surface. The Client must provide direct and simple access to every traceable wire or continuous metallic sheathing. Otherwise, multiVIEW accepts neither liability nor responsibility for locating such features since they are deemed Unlocatable
- Non-metallic pipe and conduits (i.e. plastic, concrete, asbestos, clay, etc.) under pressure (i.e. water, gas, forcemain systems, etc.) are Unlocatable Buried Assets for standard cable locating instruments unless an unbroken tracer wire is attached to the pipe and this tracer wire is easily accessible from the surface. The Client must provide direct and simple access to every traceable wire.
- Non-pressurized, non-metallic (i.e. plastic, concrete, asbestos, clay, etc.) conduits or pipe (i.e. sewers, drains, empty ducts, etc.) are Unlocatable Buried Assets unless a transmitting sonde can be inserted throughout the full length of the pipe or conduit. It is the responsibility of the Client to identify and provide direct access (including provision of licensed plumbing, electrical or confined space entry personnel if required) to any and all access points for such lines. multiVIEW accepts no responsibility for locating such lines where the Client does not provide access and/or appropriate workplace safety measures.
- Any Buried Asset incapable of generating a reflected radar wave detectable by a GPR instrument is an Unlocatable Buried Assets.
- All or part of a Work Area is defined as an Inaccessible Area when inaccessible for surveying Inaccessible Areas include the following: those covered by a structure or object (i.e. buildings, vehicles, debris, stockpiled snow, building materials, etc.); those covered by open water; those covered by woods, vegetation, or snow too thick to permit easy walking; those where the surface terrain slopes steeper than 1:2; those covered by snow; and, those where the safety of the operator is jeopardized (i.e. unstable footing, environmental hazards, uncontrolled roads, etc.). The final decision for defining an area as an Inaccessible Area rests with the multiVIEW Health & Safety Officer.
- Utility data depicted on QL-D CAD lines are derived via utility owners record data and shown only for reference.

Liability Limitations

- Location and mapping services, marks, reports and results provided by multiVIEW cannot substitute as a legally defined Buried Asset location in jurisdiction where government regulation dictates that the Buried Asset owner is solely responsible for identifying and locating their own Buried Assets. In cases where multiVIEW is legally authorized to act on behalf of the Buried Asset owner to locate the owner's Buried Assets, any results provided by multiVIEW will clearly identify that the Buried Asset location is legally authorized on all records, documents, and reports.
- multiVIEW's markings of Buried Asset or Buried Liability locations are provided as information to be input into the Client's decision making process and the provision of this information does not relieve the Client, or any other person, party, or corporation, from liability for damages for personal injury including death, or for property damage or liability caused to or from any Buried Asset or Buried Liability, within the Work Area.
- Cables carrying DC voltages and/or small diameter cables (i.e. fire alarm or security systems, remote signal cables, inaccessible tracer wire, perfectly balanced AC cables, etc.) can only be detected by methods which create electrical currents and signals in the cables. Where a sensitive or dangerous connection is involved, the Client must provide qualified personnel to isolate and enable direct access to these systems. The Client is responsible for defining the impact of locating signals on sensitive electronics. multiVIEW accepts no responsibility for any damage to plant, or any third party, caused by locating signals. Technical information about locating signals is available from multiVIEW upon request.
- multiVIEW is not liable for damages resulting from physical exposure of any Buried Assets or Buried Liability by the Client, its representatives, their sub-contractors or any other person or corporation.
- multiVIEW will not accept any liability regarding inaccurate estimates of utility depth secured only by electronic means since multiVIEW recommends exposure of any such issues by vacuum excavating if any such depth information is critical to the design, engineering or construction of subsequent infrastructure.
- multiVIEW accepts no responsibility and is not liable for damages suffered by any third party as a result of decisions or actions based on the performance of the statement of work by multiVIEW.
- multiVIEW accepts no responsibility and is not liable for conduit blockage, or restoration of the site to pre-survey conditions, as a result of survey practices needed to fulfill the objectives of the Service provided.
- The completeness of work carried out by multiVIEW is based on information provided by the Client at or prior to the earlier of the time of issuance of this Estimate. If the scope work or size and/or extent of the Work Area changes, a signed Change Order must be issued so that scope of work can be adjusted to address Client requirement changes. Documents and maps provided by multiVIEW are the definitive means legally defining the extent of the Work Area investigated.
- multiVIEW accepts no responsibility for locating Buried Assets or Buried Liabilities outside the limit of the Work Area or in the Inaccessible Areas.
- Except as written in this contract, multiVIEW disclaims any and all promises, representations, warranties and covenants, express, implied, statutory or otherwise.
- multiVIEW shall not be liable for any amount in excess of the fees paid by the Client to multiVIEW for the work described in this estimate on account of any loss, injury, death, or damage whether resulting directly or indirectly to a person or property irrespective of the cause or origin of such loss, injury, death or damage including, without limitation, loss, injury, death or damage attributable to the negligence of multiVIEW, its employees and agents in the performance or non-performance of the Service.
- In any action, claim, loss or damage arising out of the work for which this estimate is provided, the Client agrees that multiVIEW Locates Inc.'s liability will be 'several' and not 'joint and several' and the Client may only claim payment from multiVIEW Locates Inc of multiVIEW Locates Inc.'s proportionate share of the total liability based on degree of fault. Any action against multiVIEW Locates Inc must be commenced on or before the date which is the earlier of: i) eighteen months from the date on which the work in this estimate is completed and, ii) the date by which an action must be commenced under any applicable legislation other than limitation legislation. In no event shall multiVIEW Locates Inc be liable to the Client whether the claim be in tort, contract or otherwise, for an amount in excess of the fees paid by the Company for the services work provided. In no event shall multiVIEW Locates Inc be liable to the Client, whether a claim be in tort, contract or otherwise for any consequential, indirect, lost profit or similar damages, or failure to realize expected savings. multiVIEW Locates Inc will use all reasonable efforts to complete within any agreed upon timeframe the performance of the services described herein; however, multiVIEW Locates Inc shall not be liable for failures or delays in performance that arise from causes beyond its control, including the untimely performance or non-performance by the Client of its obligations.

 <p>SUBSURFACE UTILITY ENGINEERING HYDRO EXCAVATION & CCTV CONCRETE SCANNING UTILITY LOCATES NEAR-SURFACE GEOPHYSICS</p> <p>Tel: 1-800-363-3116 Fax: 1-866-571-5946 www.multiVIEW.ca 325 Matheson Blvd East Mississauga, ON, L4Z1X8</p>	Project No.: 52787 Date: 2023-01-17 Surveyed/Drawn By: AS/NN Checked: -	SHEET 2 of 2		
	For: DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION		Revision	
Site: 230 THE DONWAY W, NORTH YORK, ON TERMS & CONDITIONS				



226 WILKINSON ROAD, BRAMPTON, ONTARIO L6T 4N7
(905) 792-8169

**COMBINED & STORM SEWER VIDEO INSPECTION REPORT
& DYE TEST**

**150 MM - 375 MM DIAMETER COMBINED SEWER
&
100 MM - 1800 MM DIAMETER STORM SEWERS**

FOR

**230 THE DONWAY WEST
(THE DONWAY COVENANT UNITED CHURCH)**

CITY OF TORONTO

FILE # 23260

**CONSULTANT: EXP
CONSULTANT'S REPRESENTATIVE: STEVE PARK. P. ENG.**

TUESDAY, SEPTEMBER 12TH, 2023

INDEX:

- 1. TITLE PAGE AND INDEX**
- 2. SUMMARY REPORT AND CONCLUSIONS**
- 3A. SKETCH OF SEWERS DYE TESTED & CCTV INSPECTED**
- 3B. SKETCH OF ARCHIVED PLUMBING PLAN**
- 4. SEWER INSPECTION REPORTS**

**SEWER CLEANING, VIDEO INSPECTION, INSITU REPAIRS &
MUNICIPAL ENGINEERING SERVICES**



3. 230 The Donway West



4. 230 The Donway West



5. BLDG 5, Sump Pump -2 connects to combined sewer



6. Combined sewer lateral (cleanouts) CO-COMB-1 on grass



7. Two downspouts for BLDG-3



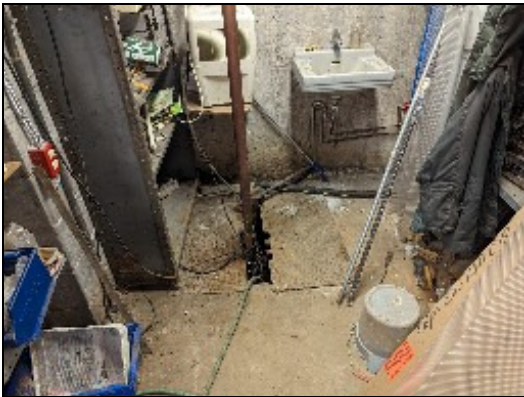
8. Two downspouts for BLDG-3



9. Flat roof - BLDG-4



10. Downspout BLDG-3 drains onto Flat roof of BLDG-4



11. BLDG-3, sump pump-1



12. BLDG-3, sump pump-1 outlet pipe



13. Roof BLDG-3



14. Roof BLDG-5



15. Flat roof - BLDG-5

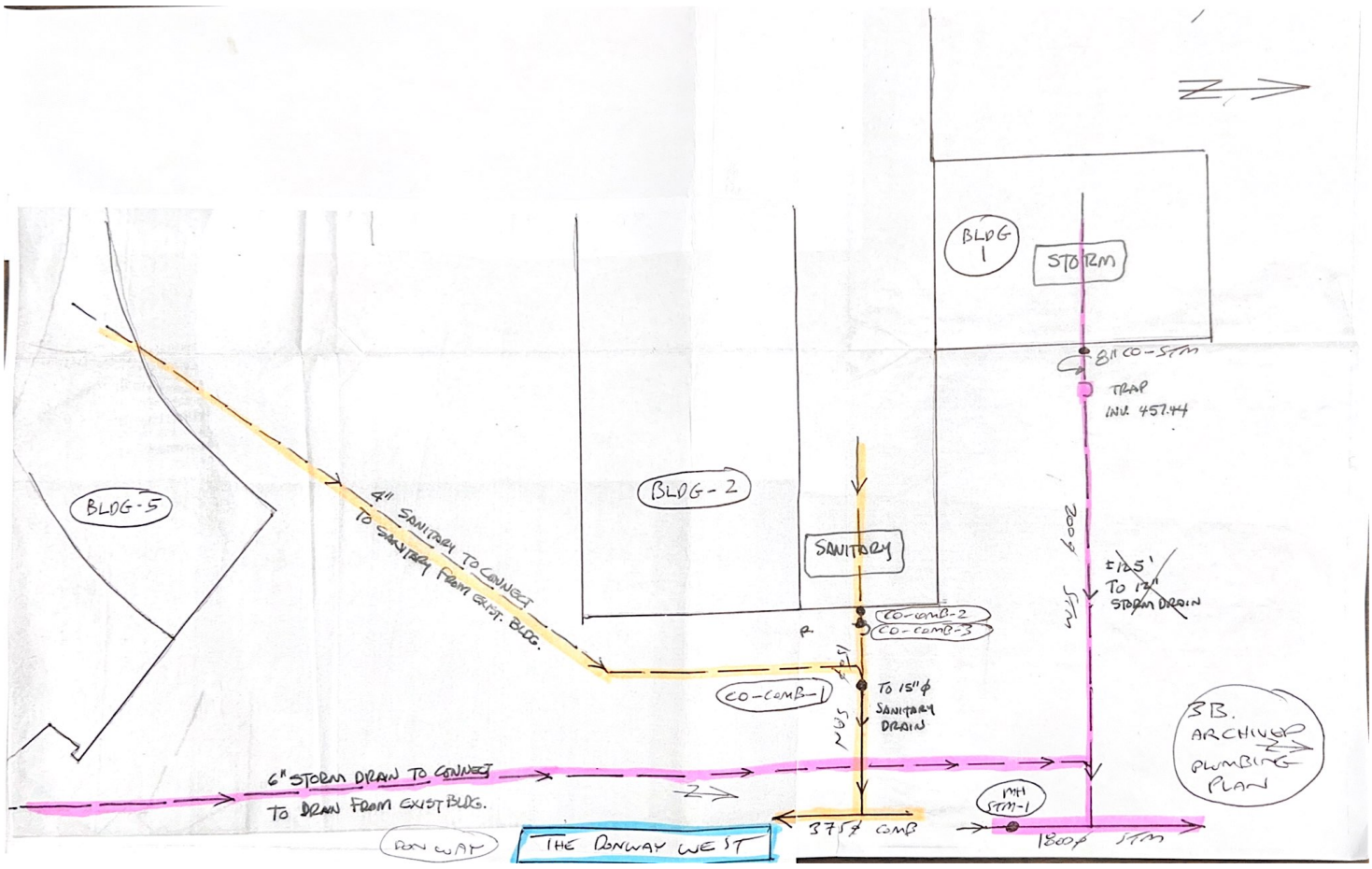


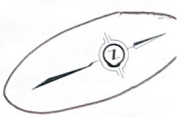
16. Flusher truck with blue dye

Report Prepared by:

A handwritten signature in blue ink, appearing to read "S. Lostracco".

Steven Lostracco, P. Eng.





3A Sewer O/C TEST



METRIC
CONVERSION TABLE FROM METRIC TO IMPERIAL
CONVERSION TABLE FROM IMPERIAL TO METRIC

DISTANCE NOTE
DISTANCES SHOWN ON THIS PLAN AND SHOWN IN THE NOTES ARE TO BE USED AS A GUIDE ONLY. THE DISTANCES SHOWN ON THIS PLAN ARE TO BE USED AS A GUIDE ONLY. THE DISTANCES SHOWN ON THIS PLAN ARE TO BE USED AS A GUIDE ONLY.

GENERAL NOTE
GENERAL NOTE: THE DISTANCES SHOWN ON THIS PLAN ARE TO BE USED AS A GUIDE ONLY. THE DISTANCES SHOWN ON THIS PLAN ARE TO BE USED AS A GUIDE ONLY.

BEARING NOTE
BEARING NOTE: THE DISTANCES SHOWN ON THIS PLAN ARE TO BE USED AS A GUIDE ONLY. THE DISTANCES SHOWN ON THIS PLAN ARE TO BE USED AS A GUIDE ONLY.

ROTATION NOTE
ROTATION NOTE: THE DISTANCES SHOWN ON THIS PLAN ARE TO BE USED AS A GUIDE ONLY. THE DISTANCES SHOWN ON THIS PLAN ARE TO BE USED AS A GUIDE ONLY.

- LEGEND**
- 1. MANHOLE
 - 2. SUMP
 - 3. CATCH BASIN
 - 4. SEWER LINE
 - 5. ...

SANITARY ENGINEER'S CERTIFICATE

I, the undersigned, being a duly qualified Sanitary Engineer, do hereby certify that the above is a true and correct copy of the Sanitary Engineering Plan as shown on the drawings and as described in the notes hereon.

Dated this 11th day of August, 2010.

Michael J. Barnes
Sanitary Engineer

PART 7 - SANITARY REPORT

DESCRIPTION OF WORK
RESIDENTIAL DEVELOPMENT FOR DONWAY WEST

THIS REPORT WAS PREPARED FOR DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION

I.D. BARNES
SANITARY ENGINEER

EXP
Sewer TV Inspection Report Summary

No.	Date	Street	Start MH	Finish MH	Surv'd Len	Video
1	2023-09-12	230 DONWAY WEST - STORM	STM-1	NORTH	7.2 m	23260
2	2023-09-12	230 DONWAY WEST - STORM	STM-1X	NORTH	7.2 m	23260
3	2023-09-12	230 DONWAY WEST - STORM	STM-1XX	NORTH	7.2 m	23260
4	2023-09-12	230 DONWAY WEST - STORM	STM-1XXX	NORTH	7.2 m	23260
5	2023-09-12	230 DONWAY WEST - COMBINED	COMB-1	MAIN	10.0 m	23260

Survey No: 1	Date: 2023-09-12	Time: 10:12
PipeLenRef: STM-1 X	Status: Abandoned	Surveyed Length: 007.2 m
Contractor: AQUAFLOW	Contract No: 1	Job No: 1
Catchment: -	Division: -	District: -
Street: 230 DONWAY WEST - STORM		City: TORONTO
Start MH: STM-1	Location: WEST SIDE ROAD - DONWAY WEST	
Depth: 00.00 m	Cover: 000.00 m	Invert: 000.00 m
Finish MH: NORTH	Location: FURTHER NORTH ON DONWAY WEST	
Depth: 00.00 m	Cover: 000.00 m	Invert: 000.00 m
PipeLength: 2.40 m	Size (Dia): 1800 mm	Total Length: 100.0 m
Use: Storm	Material: Concrete	Shape: Circular
Lining:	Purpose: Assessment	Category: Not Known
Weather: Light Rain	Location Code: Urban Street	Direction: Downstream
		Pre-cleaning: Yes
Year Laid:	Location:	
Video Tape: 23260	Comments:	

Structural Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0
Operational Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0

Index	Pho	Dist	CD	Code	Description/Remarks	Dim	Clock	Int	Score
0:00:11		000.0		ST	Start of Survey				
					Downstream (with flow)				
0:00:16		000.0		MH	Manhole				
					STM-1				
0:00:20		000.0		WL	Water Level				05%
0:01:18		006.7		CN	Connection	200mm	10		
0:01:22		007.1		GO	General Observation				
					PUMPING BLUE DYE, BLDG #1, #2, #3				
0:01:45		007.2		GO	General Observation				
					HEAVY RAIN - HVY FLOW -END OF INSPECTION				
0:01:46		007.2		SA	Survey Abandoned				
					-				

EXP
Sewer TV Inspection Report

Survey No: 2	Date: 2023-09-12	Time: 11:01
PipeLenRef: STM-1X X	Status: Abandoned	Surveyed Length: 007.2 m
Contractor: AQUAFLOW	Contract No: 1	Job No: 1
Catchment: -	Division: -	District: -
Street: 230 DONWAY WEST - STORM		City: TORONTO

Start MH: STM-1X	Location: WEST SIDE ROAD - DONWAY WEST
Depth: 00.00 m	Cover: 000.00 m Invert: 000.00 m
Finish MH: NORTH	Location: FURTHER NORTH ON DONWAY WEST
Depth: 00.00 m	Cover: 000.00 m Invert: 000.00 m

PipeLength: 2.40 m	Size (Dia): 1800 mm	Total Length: 100.0 m
Use: Storm	Material: Concrete	Shape: Circular
Lining:	Purpose: Assessment	Category: Not Known
Weather: Light Rain	Location Code: Urban Street	Direction: Downstream
		Pre-cleaning: Yes

Year Laid:	Location:
Video Tape: 23260	Comments:

Structural Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0
Operational Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0

Index	Pho	Dist	CD	Code	Description/Remarks	Dim	Clock	Int	Score
0:00:12		000.0		ST	Start of Survey				
					Downstream (with flow)				
0:00:18		000.0		MH	Manhole				
					STM-1X				
0:00:23		000.0		WL	Water Level				05%
0:00:29		000.0		GO	General Observation				
					RE-CCTV FOR ADDITIONAL DYE TESTING				
0:01:21		007.2		CN	Connection	200mm	10		
0:01:29		007.2		GO	General Observation				
					PUMPING DYE, BLDG #4				
0:01:37		007.2		SA	Survey Abandoned				
					END OF INSPECTION				

EXP
Sewer TV Inspection Report

Survey No: 3	Date: 2023-09-12	Time: 11:25
PipeLenRef: STM-1XX X	Status: Abandoned	Surveyed Length: 007.2 m
Contractor: AQUAFLOW	Contract No: 1	Job No: 1
Catchment: -	Division: -	District: -
Street: 230 DONWAY WEST - STORM		City: TORONTO

Start MH: STM-1XX	Location: WEST SIDE ROAD - DONWAY WEST
Depth: 00.00 m	Cover: 000.00 m
Finish MH: NORTH	Location: FURTHER NORTH ON DONWAY WEST
Depth: 00.00 m	Cover: 000.00 m

PipeLength: 2.40 m	Size (Dia): 1800 mm	Total Length: 100.0 m
Use: Storm	Material: Concrete	Shape: Circular
Lining:	Purpose: Assessment	Category: Not Known
Weather: Light Rain	Location Code: Urban Street	Direction: Downstream
		Pre-cleaning: Yes

Year Laid:	Location:
Video Tape: 23260	Comments:

Structural Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0
Operational Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0

Index	Pho	Dist	CD	Code	Description/Remarks	Dim	Clock	Int	Score
0:00:15		000.0		ST	Start of Survey				
					Downstream (with flow)				
0:00:20		000.0		MH	Manhole				
					STM-1XX				
0:00:24		000.0		WL	Water Level			05%	
0:00:30		000.0		GO	General Observation				
					+/-1800 MM STORM				
0:00:30		000.0		GO	General Observation				
					ADDITIONAL DYE TESTING				
0:00:49		007.2		CN	Connection	200mm	10		
0:01:24		007.2		GO	General Observation				
					PUMPING BLUE DYE- BLDG 5				
0:01:34		007.2		SA	Survey Abandoned				
					END OF INSPECTION				

Survey No: 4	Date: 2023-09-12	Time: 12:13
PipeLenRef: STM-1XXX X	Status: Abandoned	Surveyed Length: 007.2 m
Contractor: AQUAFLOW	Contract No: 1	Job No: 1
Catchment: -	Division: -	District: -
Street: 230 DONWAY WEST - STORM		City: TORONTO

Start MH: STM-1XXX	Location: WEST SIDE ROAD - DONWAY WEST
Depth: 00.00 m	Cover: 000.00 m Invert: 000.00 m
Finish MH: NORTH	Location: FURTHER NORTH ON DONWAY WEST
Depth: 00.00 m	Cover: 000.00 m Invert: 000.00 m

PipeLength: 2.40 m	Size (Dia): 1800 mm	Total Length: 100.0 m
Use: Storm	Material: Concrete	Shape: Circular
Lining:	Purpose: Assessment	Category: Not Known
Weather: Light Rain	Location Code: Urban Street	Direction: Downstream
		Pre-cleaning: Yes

Year Laid:	Location:
Video Tape: 23260	Comments:

Structural Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0
Operational Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0

Index	Pho	Dist	CD	Code	Description/Remarks	Dim	Clock	Int	Score
0:00:11		000.0		ST	Start of Survey				
					Downstream (with flow)				
0:00:15		000.0		MH	Manhole				
					STM-1XXX				
0:00:19		000.0		WL	Water Level			05%	
0:00:30		000.0		GO	General Observation				
					PIPE +/-1800 MM				
0:00:50		007.2		CN	Connection	200mm	10		
0:01:06		007.2		GO	General Observation				
					WEeping TILE DYE TEST INSPECTION				
0:01:13		007.2		GO	General Observation				
					SUMP PUMP-1 (BLDG-3) CONNECTS TO STM				
0:01:13		007.2		SA	Survey Abandoned				
					-				

Survey No: 5	Date: 2023-09-12	Time: 12:25
PipeLenRef: COMB-1 X	Status: Completed	Surveyed Length: 010.0 m
Contractor: AQUAFLOW	Contract No: 1	Job No: 1
Catchment: -	Division: -	District: -
Street: 230 DONWAY WEST - COMBINED		City: TORONTO

Start MH: COMB-1	Location: PROPERTY LINE CLEANOUT
Depth: 00.00 m	Cover: 000.00 m
Finish MH: MAIN	Location: DON WAY 375 MM COMBINED SEWER
Depth: 00.00 m	Cover: 000.00 m

PipeLength: 4.00 m	Size (Dia): 0150 mm	Total Length: 010.0 m
Use: Combined	Material: Polyvinyl Chloride	Shape: Circular
Lining:	Purpose: Assessment	Category: Not Known
Weather: Light Rain	Location Code: Urban Street	Direction: Downstream
		Pre-cleaning: Yes

Year Laid:	Location:
Video Tape: 23260	Comments:

Structural Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0
Operational Grade: 1	Total Score: 0	Peak Score: 0	Mean Score: 0

Index	Pho	Dist	CD	Code	Description/Remarks	Dim	Clock	Int	Score
0:00:11		000.0	ST		Start of Survey				
					Downstream (with flow)				
0:00:15		000.0	MH		Manhole				
					COMB-1				
0:00:20		000.0	WL		Water Level			00%	
0:01:29		005.0	GO		General Observation				
					VERTICAL 100 MM PVC STACK PIPE AT P.L.				
0:01:32		005.0	GO		General Observation				
					WYE INTO MAIN DRAIN +/-150 MM DIA.				
0:01:36		005.0	GO		General Observation				
					VIEW OF COMBINED SEWER LATERAL				
0:01:38		005.0	GO		General Observation				
					SUMP PUMP-2 (BLDG-5) SANCTUARY				
0:02:06		005.0	GO		General Observation				
					VIEW OF BLUE DYE IN COMBINED DRAIN				
0:02:13		005.0	GO		General Observation				
					CONSTANT CLEAR WATER FLOW IN SANITARY				
0:02:31		008.0	GO		General Observation				
					LATERAL IS A.C. PIPE				
0:02:44		010.0	GO		General Observation				
					375 MM COMBINED SEWER MAIN				
0:02:44		010.0	MH		Manhole				
					MAIN				
0:03:54		010.0	FH		Finish of Survey				

Appendix B – Existing Conditions Storm Runoff Calculations

Pre-Development Runoff Coefficient and Peak Flows City of Toronto

Contributing Area	ID#	Runoff Coefficient	AREA (Ha)
West Catchment	101	0.5	0.13
East Catchment	102	0.5	0.84
Total		0.50	0.97

Pre-Development Flows for West Catchment (#101)

Time of Concentration	10 minutes		
2 Year Intensity	88.19 mm/hr	Q(2year)	15.9 l/s
5 Year Intensity	131.79 mm/hr	Q(5year)	23.8 l/s
100 Year Intensity	250.32 mm/hr	Q(100year)	45.2 l/s

Pre-Development Flows for East Catchment (#102)

Time of Concentration	10 minutes		
2 Year Intensity	88.19 mm/hr	Q(2year)	102.9 l/s
5 Year Intensity	131.79 mm/hr	Q(5year)	153.8 l/s
100 Year Intensity	250.32 mm/hr	Q(100year)	292.0 l/s

Pre-Development Flows for Total Site

Time of Concentration	10 minutes		
2 Year Intensity	88.19 mm/hr	Q(2year)	118.8 l/s
5 Year Intensity	131.79 mm/hr	Q(5year)	177.6 l/s
100 Year Intensity	250.32 mm/hr	Q(100year)	337.2 l/s

Appendix C – Proposed Conditions SWM Calculations & Supporting Information

**Post-Development Runoff Coefficient and Peak Flows
 City of Toronto**

Contributing Area	ID#	Runoff Coefficient	AREA (Ha)
Catchment #1	201	0.85	0.68
Catchment #2 (Courtyard)	202	0.85	0.11
Catchment #3	203	0.85	0.16
Uncontrolled Area	301	0.25	0.02
Total Controlled Area		0.85	0.95
Total Uncontrolled Area		0.25	0.02

Runoff Coefficients

Rooftops	0.9
Landscape	0.25
High-rise residential	0.75-0.85
Pavement/Concrete	0.9

Post-Development Controlled Flows (201)

Time of Concentration	10 minutes		
2 Year Intensity	88.19 mm/hr	Q(2year)	141.6 l/s
5 Year Intensity	131.79 mm/hr	Q(5year)	211.6 l/s
100 Year Intensity	250.32 mm/hr	Q(100year)	401.9 l/s

Post-Development Controlled Flows (202)

Time of Concentration	10 minutes		
2 Year Intensity	88.19 mm/hr	Q(2year)	22.9 l/s
5 Year Intensity	131.79 mm/hr	Q(5year)	34.2 l/s
100 Year Intensity	250.32 mm/hr	Q(100year)	65.0 l/s

Post-Development Controlled Flows (203)

Time of Concentration	10 minutes		
2 Year Intensity	88.19 mm/hr	Q(2year)	33.3 l/s
5 Year Intensity	131.79 mm/hr	Q(5year)	49.8 l/s
100 Year Intensity	250.32 mm/hr	Q(100year)	94.6 l/s

Post-Development Uncontrolled Flows (301)

Time of Concentration	10 minutes		
2 Year Intensity	88.19 mm/hr	Q(2year)	1.2 l/s
5 Year Intensity	131.79 mm/hr	Q(5year)	1.8 l/s
100 Year Intensity	250.32 mm/hr	Q(100year)	3.5 l/s

Total Post-Development Controlled Flows (201, 202, 203)

Time of Concentration	10 minutes		
2 Year Intensity	88.19 mm/hr	Q(2year)	197.8 l/s
5 Year Intensity	131.79 mm/hr	Q(5year)	295.6 l/s
100 Year Intensity	250.32 mm/hr	Q(100year)	561.5 l/s

Total Post-Development Uncontrolled Flows (301)

Time of Concentration	10 minutes		
2 Year Intensity	88.19 mm/hr	Q(2year)	1.2 l/s
5 Year Intensity	131.79 mm/hr	Q(5year)	1.8 l/s
100 Year Intensity	250.32 mm/hr	Q(100year)	3.5 l/s

230 and 240 The Donway West, Toronto

SWM Cistern

INPUT

Required Discharge (l/s) =	99.40
Max. Water Surface Elev. (m) =	138.700
Discharge Pipe Invert (m) =	137.950
Discharge Pipe Diameter (mm) =	300
Orifice Diameter (mm) =	210
Orifice Flow Loss (C) =	0.8

OUTPUT

H =	0.645	m
g =	9.806	
$V = (2 * g * H)^{0.5} =$	3.557	m/s
A = X-section Area =	0.0346	m ²

Orifice Flow = $Q = C * A * V * 1000 =$	98.6	l/s
---	-------------	------------

230 and 240 The Donway West, Toronto
Superpipe

INPUT

Required Discharge (l/s) =	n/a
Max. Water Surface Elev. (m) =	138.700
Discharge Pipe Invert (m) =	137.250
Discharge Pipe Diameter (mm) =	200
Orifice Diameter (mm) =	200
Orifice Flow Loss (C) =	0.8

OUTPUT

H =	1.35	m
g =	9.806	
$V = (2 * g * H)^{0.5} =$	5.146	m/s
A = X-section Area =	0.0314	m ²

Orifice Flow = $Q = C * A * V * 1000 =$	129.3	l/s
---	--------------	------------

Required Storage Volume - Entire Site

City of Toronto

Control 100 year Post Development to 2 Year Pre Development

Controlled Site Area	0.95 ha
Allowable Release From Site (2 year)	102.9 l/s
Uncontrolled Runoff From Site (100year)	3.5 l/s
Allowable Release From Site	99.4 l/s
Orifice Allowable Release From Site	98.6 l/s
Composite Runoff Coefficient (Controlled Area)	0.85
Time of Concentration	10 minutes
100 Year Storm I = 59.7/(t/60)^0.80	

Storm Duration (minutes)	Rainfall Intensity (mm/hr)	Total Runoff Q (l/s)	Required Storage Volume (m ³)
2	907.134	2034.8	232.3
4	521.012	1168.7	256.8
6	376.682	844.9	268.7
8	299.243	671.2	274.9
10	250.320	561.5	277.7
12	216.347	485.3	278.4
14	191.246	429.0	277.5
16	171.870	385.5	275.4
18	156.415	350.8	272.4
20	143.771	322.5	268.7
22	133.216	298.8	264.3
24	124.259	278.7	259.4
26	116.551	261.4	254.0
28	109.842	246.4	248.3
279m³ of Storage is required			

Required Storage Volume - Superpipe (#202 & #203)

City of Toronto

Control 100 year Post Development to 2 Year Pre Development

Controlled Site Area		0.27 ha
Allowable Release From Site (2 year)	n/a	l/s
Uncontrolled Runoff From Site (100year)		0.0 l/s
Allowable Release From Site	n/a	l/s
Orifice Allowable Release From Site		129.3 l/s
Composite Runoff Coefficient (Controlled Area)		0.85
Time of Concentration		10 minutes
100 Year Storm I = 59.7/(t/60)^0.80		

Storm Duration (minutes)	Rainfall Intensity (mm/hr)	Total Runoff Q (l/s)	Required Storage Volume (m ³)
1	1579.412	1006.9	52.7
2	907.134	578.3	53.9
3	655.841	418.1	52.0
4	521.012	332.1	48.7
5	435.832	277.8	44.6
6	376.682	240.1	39.9
7	332.979	212.3	34.8
8	299.243	190.8	29.5
9	272.334	173.6	23.9
10	250.320	159.6	18.2
11	231.943	147.9	12.3
12	216.347	137.9	6.2
13	202.927	129.4	0.1
14	191.246	121.9	-6.2
54m³ of Storage is required			

City of Toronto

Stage 1 - Obvert of highest pipe

Stage Elevation (max Crown el) 138.70 m

Pipe Storage Superpipe #1	LENGTH (m)	Storage (m3)
300	186.08	13.15
525	189.10	40.94
375	1.71	0.19

TOTAL PIPE STORAGE 54.28 m³

Structure Storage #1						
ID	Type	Area m3	Max Elev m	Min Invert m	Depth m	Storage (m3)
AD	CB	0.360	138.70	138.25	0.45	0.16
AD	CB	0.360	138.70	138.26	0.44	0.16
AD	CB	0.360	138.70	138.33	0.37	0.13
MH8	1200 MH	1.131	138.70	138.17	0.53	0.60
AD	CB	0.360	138.70	138.26	0.44	0.16
AD	CB	0.360	138.70	138.24	0.46	0.17
AD	CB	0.360	138.70	138.25	0.45	0.16
AD	CB	0.360	138.70	138.23	0.47	0.17
AD	CB	0.360	138.70	138.24	0.46	0.17
AD	CB	0.360	138.70	138.37	0.33	0.12
MH7	1200 MH	1.131	138.70	138.05	0.65	0.74
AD	CB	0.360	138.70	138.28	0.42	0.15
AD	CB	0.360	138.70	138.16	0.54	0.19
AD	CB	0.360	138.70	138.39	0.31	0.11
AD	CB	0.360	138.70	138.05	0.65	0.23
AD	CB	0.360	138.70	138.39	0.31	0.11
AD	CB	0.360	138.70	138.17	0.53	0.19
AD	CB	0.360	138.70	138.4	0.30	0.11
MH6	1200 MH	1.131	138.70	137.89	0.81	0.92
CB	CB	0.360	138.70	137.81	0.89	0.32
MH5	1200 MH	1.131	138.70	137.7	1.00	1.13
AD	CB	0.360	138.70	137.77	0.93	0.33
AD	CB	0.360	138.70	137.76	0.94	0.34
CB	CB	0.360	138.70	137.73	0.97	0.35
AD	CB	0.360	138.70	137.65	1.05	0.38
AD	CB	0.360	138.70	137.71	0.99	0.36
AD	CB	0.360	138.70	137.67	1.03	0.37
DCB	CB	0.360	138.70	137.71	0.99	0.36
MH3	1200 MH	1.131	138.70	137.65	1.05	1.19
CB	CB	0.360	138.70	137.45	1.25	0.45
AD	CB	0.360	138.70	137.44	1.26	0.45
CB	CB	0.360	138.70	137.42	1.28	0.46
AD	CB	0.360	138.70	137.42	1.28	0.46
CB	CB	0.360	138.70	137.38	1.32	0.48
AD	CB	0.360	138.70	137.38	1.32	0.48
AD	CB	0.360	138.70	137.36	1.34	0.48
CB	CB	0.360	138.70	137.35	1.35	0.49
AD	CB	0.360	138.70	137.34	1.36	0.49
MH2	1200 MH	1.131	138.70	137.26	1.44	1.63

TOTAL STRUCTURE STORAGE 15.73 m³

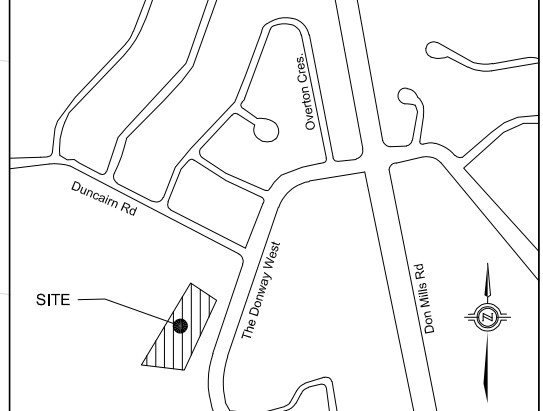
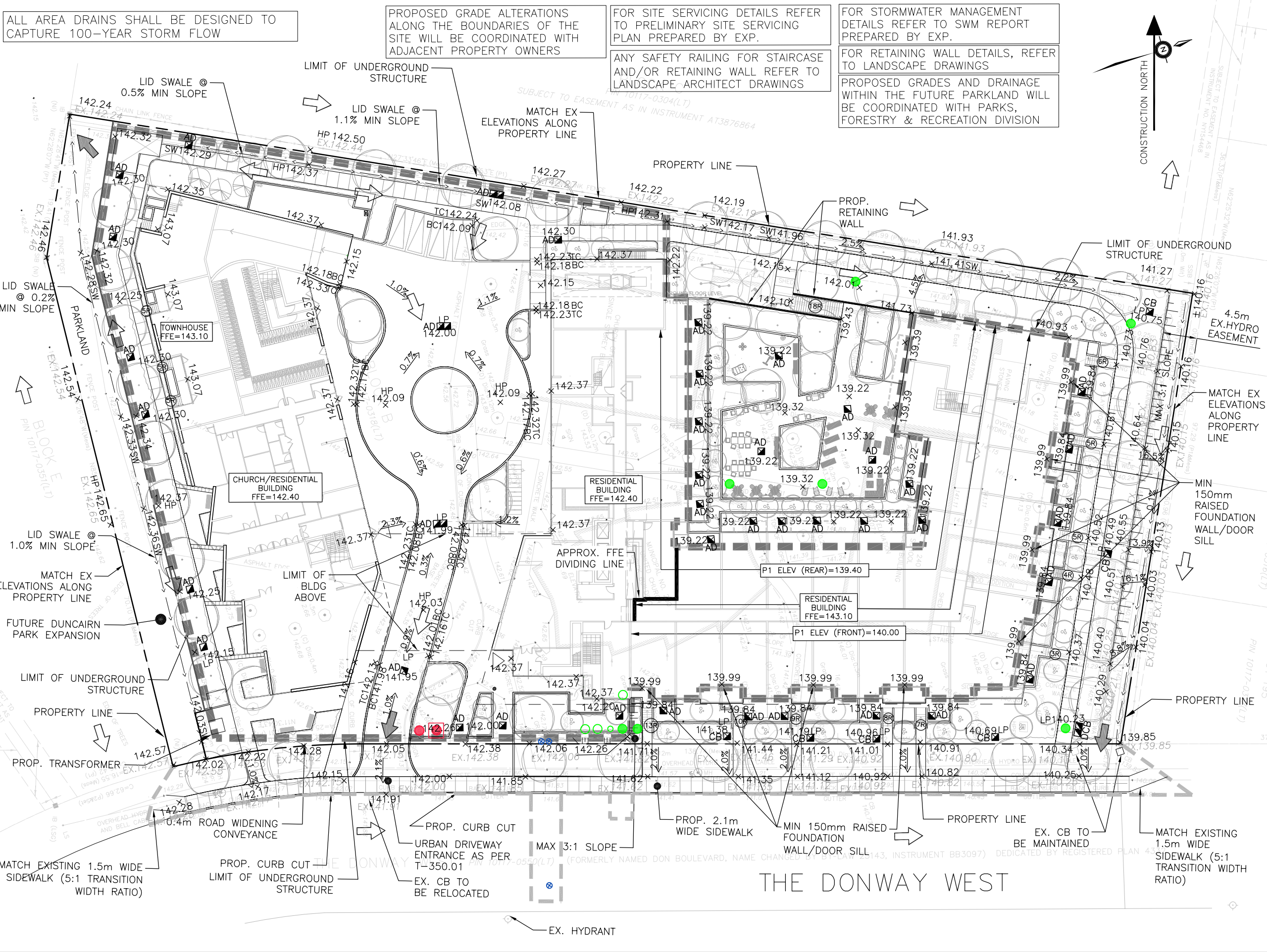
Total Superpipe #1 Storage = 70.01 m³

ALL AREA DRAINS SHALL BE DESIGNED TO CAPTURE 100-YEAR STORM FLOW

PROPOSED GRADE ALTERATIONS ALONG THE BOUNDARIES OF THE SITE WILL BE COORDINATED WITH ADJACENT PROPERTY OWNERS

FOR SITE SERVICING DETAILS REFER TO PRELIMINARY SITE SERVICING PLAN PREPARED BY EXP.
 ANY SAFETY RAILING FOR STAIRCASE AND/OR RETAINING WALL REFER TO LANDSCAPE ARCHITECT DRAWINGS

FOR STORMWATER MANAGEMENT DETAILS REFER TO SWM REPORT PREPARED BY EXP.
 FOR RETAINING WALL DETAILS, REFER TO LANDSCAPE DRAWINGS
 PROPOSED GRADES AND DRAINAGE WITHIN THE FUTURE PARKLAND WILL BE COORDINATED WITH PARKS, FORESTRY & RECREATION DIVISION



LEGEND:

- EXISTING WATER VALVE
- EXISTING HYDRO POLE
- EXISTING TREE
- EXISTING TREE DRIPLINE
- EXISTING OVERHEAD HYDRO WIRES
- EXISTING FENCELINE
- EXISTING CURBS
- EX. VALVE CHAMBER
- EX. STORM/SANITARY M.H.
- EX. CATCH BASIN
- PROP. STORM M.H.
- PROP. SANITARY M.H.
- PROP. GW SAMPLING PORT
- PROP. AREA DRAIN
- PROPOSED CURBS
- EXISTING HYDRANT
- MAJOR OVERLAND FLOW ARROW
- EMERGENCY MAJOR OVERLAND FLOW ARROW
- x 255.54 PROP. GRADES
- 255.54 EX. GRADES FROM TOPO. SURVEY
- x EX. 256.66 ESTIMATED EX. GRADES
- ± 255.54 APPROX LIMIT OF DISTURBANCE
- x EX. 256.66 LIMIT OF UNDERGROUND STRUCTURE

SOURCE:

- BACKGROUND LEGAL AND TOPOGRAPHIC SURVEY PREPARED BY J.D. BARNES
- SITE PLAN PREPARED BY ARCHITECTUREUNFOLDED.
- LANDSCAPE DRAWINGS PREPARED BY NAK DESIGN GROUP

SCALE: 1:600

	DRAWN BY	CHECKED BY
	C.P.	S.P.
PRELIMINARY SITE GRADING PLAN	FIGURE 2	
DONWAY CO-OPERATIVE DEVELOPMENT 230 AND 240 THE DONWAY WEST CITY OF TORONTO		
PROJECT NUMBER: ALL-00256815-80		DATE: OCT 2023

ALL AREA DRAINS SHALL BE DESIGNED TO CAPTURE 100-YEAR STORM FLOW

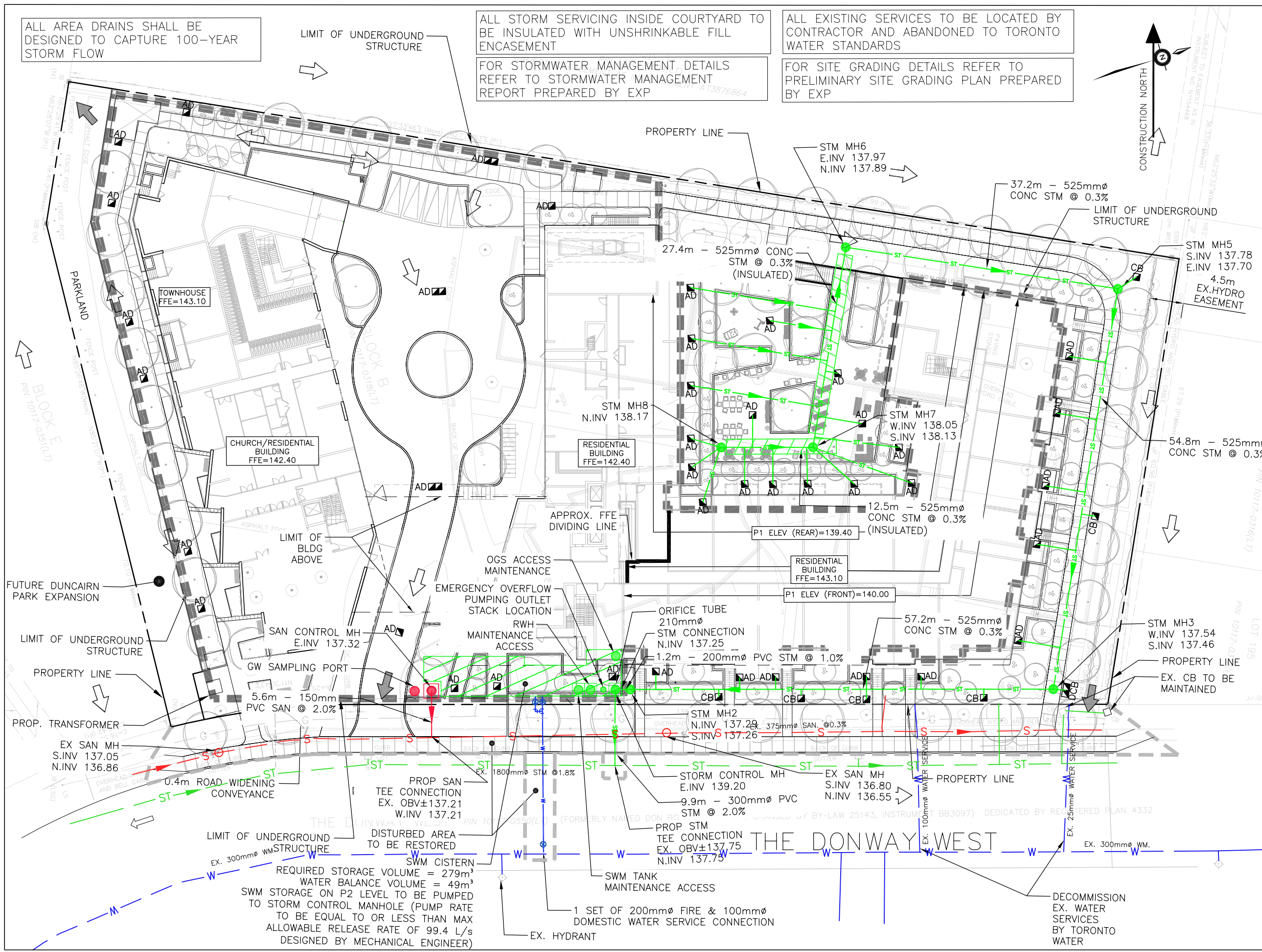
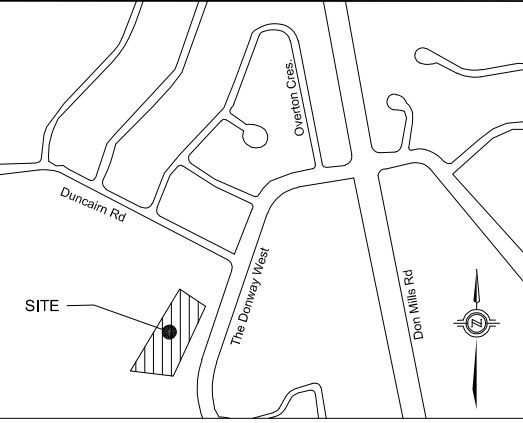
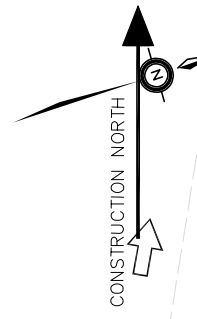
LIMIT OF UNDERGROUND STRUCTURE

ALL STORM SERVICING INSIDE COURTYARD TO BE INSULATED WITH UNSHRINKABLE FILL ENCASUREMENT

FOR STORMWATER MANAGEMENT DETAILS REFER TO STORMWATER MANAGEMENT REPORT PREPARED BY EXP

ALL EXISTING SERVICES TO BE LOCATED BY CONTRACTOR AND ABANDONED TO TORONTO WATER STANDARDS

FOR SITE GRADING DETAILS REFER TO PRELIMINARY SITE GRADING PLAN PREPARED BY EXP



LEGEND:

- EXISTING WATER VALVE
- EXISTING HYDRO POLE
- EXISTING TREE
- EXISTING TREE DRIPLINE
- EXISTING OVERHEAD HYDRO WIRES
- EXISTING FENCELINE
- EXISTING CURBS
- EX. VALVE CHAMBER
- EX. STORM/SANITARY M.H.
- EX. CATCH BASIN
- PROP. STORM M.H.
- PROP. SANITARY M.H.
- PROP. GW SAMPLING PORT
- PROP. AREA DRAIN
- PROPOSED CURBS
- PROP. STORM SEWER
- PROP. WATERMAIN
- PROP. SANITARY SEWER
- EX. SANITARY SEWER
- EX. STORM SEWER
- EX. WATERMAIN
- EX. HIGH VOLTAGE CONDUIT
- EX. GAS
- EX. UNDERGROUND HYDRO
- EX. UNDERGROUND BELL CABLE
- EX. UNDERGROUND TV CABLE
- PROPERTY LINE
- APPROX LIMIT OF DISTURBANCE
- EXISTING HYDRANT
- LIMIT OF UNDERGROUND
- MAJOR OVERLAND FLOW ARROW
- EMERGENCY MAJOR OVERLAND FLOW ARROW

SOURCE:

- BACKGROUND LEGAL AND TOPOGRAPHIC SURVEY PREPARED BY J.D. BARNES
- SITE PLAN PREPARED BY ARCHITECTUREUNFOLDED.
- LANDSCAPE DRAWINGS PREPARED BY NAK DESIGN GROUP

SCALE: 1:600

exp.	DRAWN BY	CHECKED BY
	C.P.	S.P.

PRELIMINARY SITE SERVICING PLAN FIGURE 3

DONWAY CO-OPERATIVE DEVELOPMENT
230 AND 240 THE DONWAY WEST
CITY OF TORONTO

PROJECT NUMBER: ALL-00256815-B0 DATE: OCT 2023

SWM CISTERN
REQUIRED STORAGE VOLUME = 279m³
WATER BALANCE VOLUME = 49m³
SWM STORAGE ON P2 LEVEL TO BE PUMPED TO STORM CONTROL MANHOLE (PUMP RATE TO BE EQUAL TO OR LESS THAN MAX ALLOWABLE RELEASE RATE OF 99.4 L/s DESIGNED BY MECHANICAL ENGINEER)

1 SET OF 200mmØ FIRE & 100mmØ DOMESTIC WATER SERVICE CONNECTION

DECOMMISSION EX. WATER SERVICES BY TORONTO WATER

Woo Hyun Kim

To: Steve Park
Subject: RE: Donway - Review of Updated Civil Plans

From: Apollo Lam <alam@novatrend.ca>
Sent: Thursday, October 5, 2023 2:43 PM
To: Steve Park <Steve.Park@exp.com>; Liana Carnevale <LianaC@optionsforhomes.ca>
Cc: Scott Passmore <Scott.Passmore@exp.com>; Joe Kwok <jkwok@novatrend.ca>; Eric Pun <epun@novatrend.ca>;
Geoffrey McGrath <geoffrey@optionsforhomes.ca>; Emiliano Cervini <ECervini@Tridel.com>; Masood Molanian <molanian@unfolded.ca>; Gerlyanne Gomes <gomes@unfolded.ca>; Joseph Lupo <JLupo@Deltera.com>
Subject: RE: Donway - Review of Updated Civil Plans



CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Steve and Liana,

On-site sump pump analysis was performed successfully yesterday. Result as follow for your reference,

1. The GW sump pit in BLDG 5 was inspected, with 2 set of sump pump lifted up to confirm the pump model (See attached photos and reference pump curve).
2. The sump pumps are in duty & backup setting. The backup pump will not kick-in until the water overflow from the sump pit (the float control is near the top of the pit).
3. From the site performed drain-down test, the flow rate of the pumps is found to be approx. at **40GPM i.e. 2.5L/s** which is reasonable referring to the pump curve for the corresponding head.

Kindly let us know if you have further question. Thanks!

Apollo Lam P.Eng.
Mechanical Engineer



54 West Beaver Creek Road, Unit 200

Richmond Hill, ON L4B 1G5

Tel: (905) 882-5445

Cel: (416) 230-3335

<http://www.novatrend.ca>

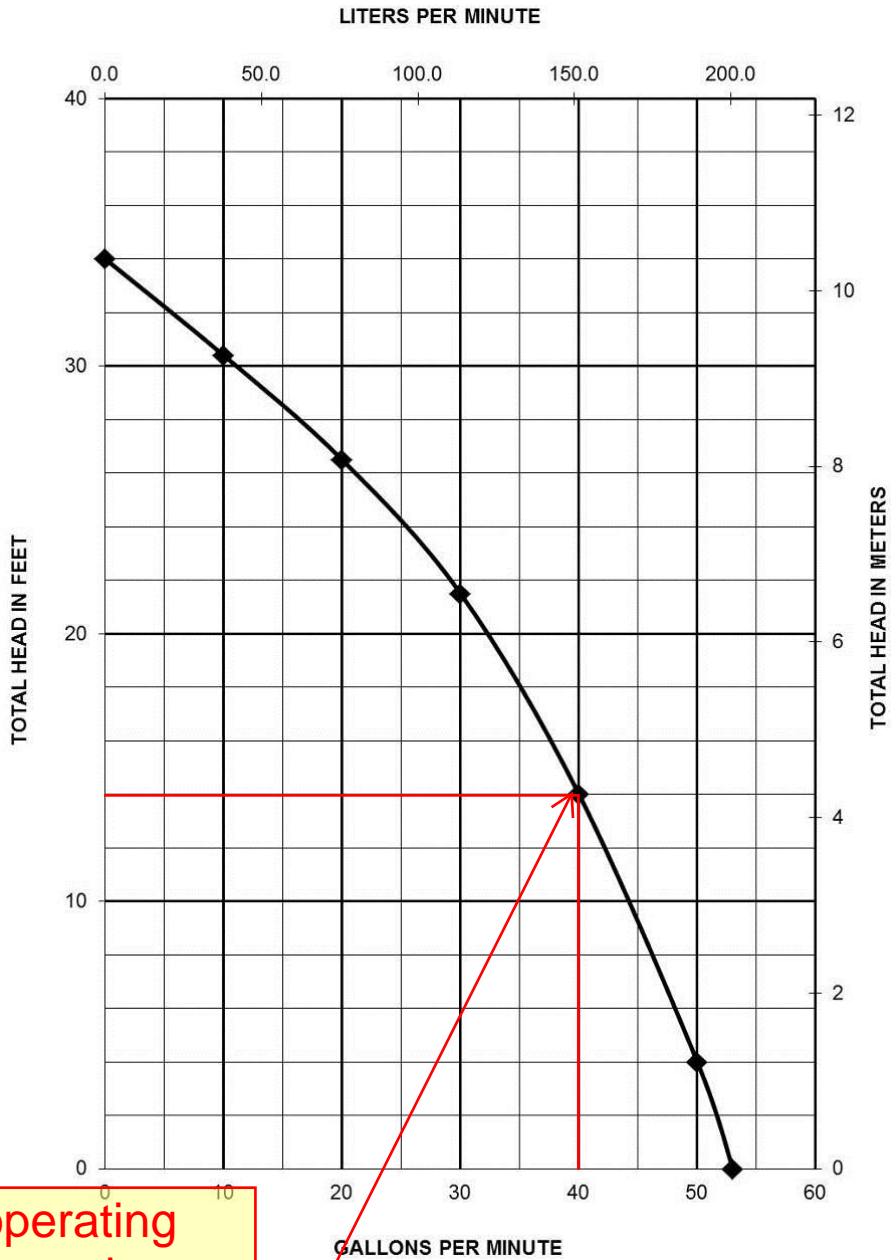
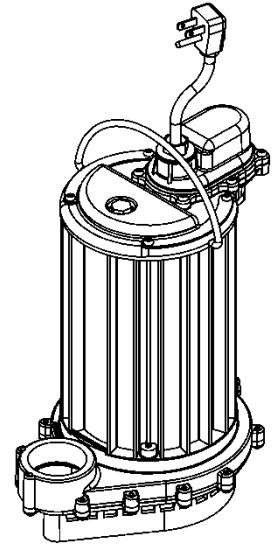


Please consider the environment before printing this email.

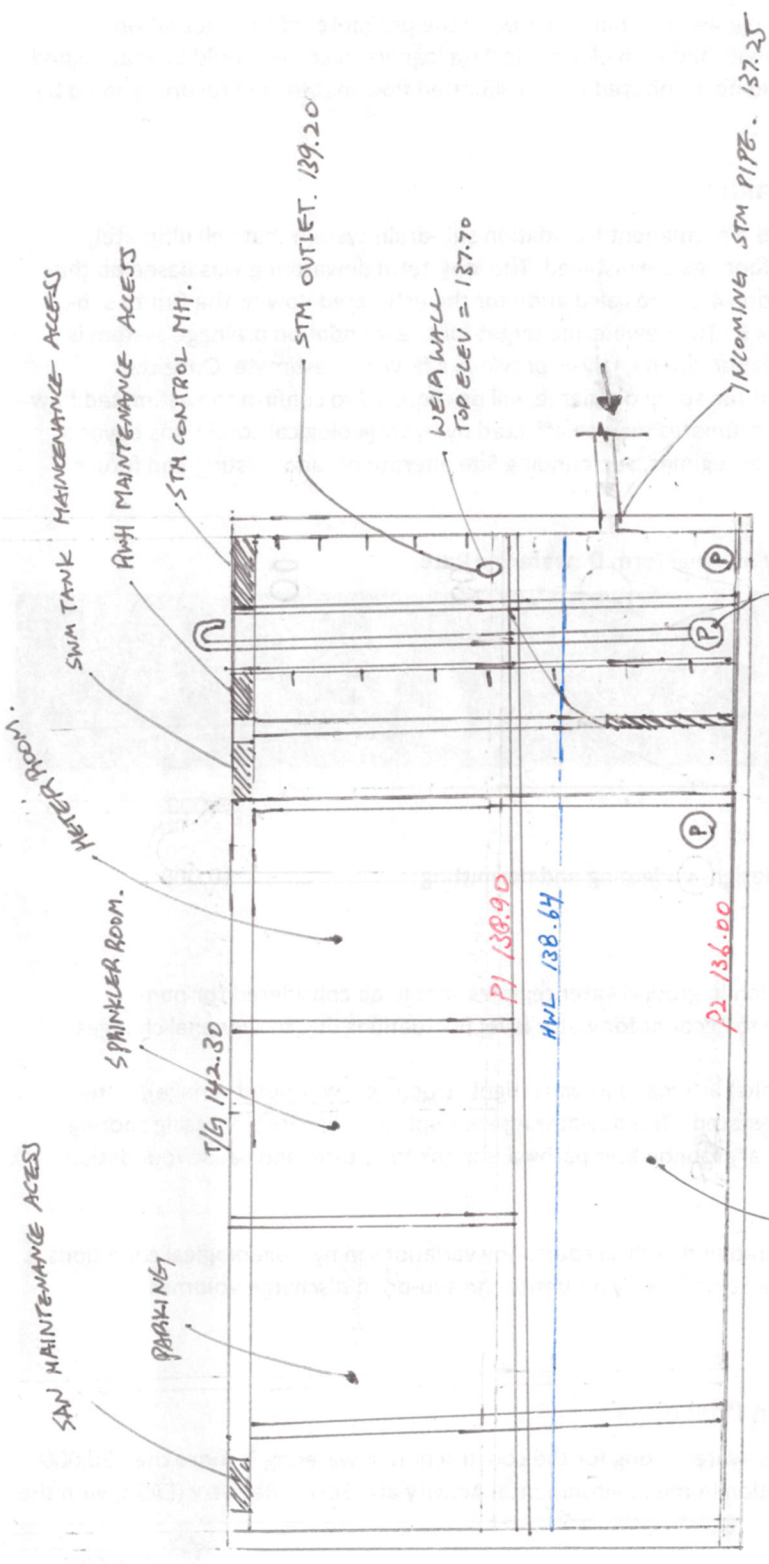
Liberty Pumps®

Pump Specifications

450 Series 1/2 hp Submersible Sump Pump



Approx. pump operating point accordingly to the site drain-down test result.



MAIN WATER HARVESTER CHAMBER
 $V = 53 \text{ m}^3$
 TO BE PUMPED TO IRRIGATION
 OR MECHANICAL USE.

MAIN STORAGE CHAMBER
 $V = 310 \text{ m}^3$
 TO BE PUMPED TO DES UNIT
 ON P1 LEVEL AT MAX $103.10 \frac{1}{5}$

A-A

SAN TANK MAINTENANCE ACCESS

RMH MAINTENANCE ACCESS

STM CONTROL MH.

STM OUTLET. 139.20

WEIR WALL
TOP ELEV = 137.70

INCOMING STM PIPE. 137.25

WETTER ROOM

SPRINKLER ROOM.

SAN MAINTENANCE ACCESS

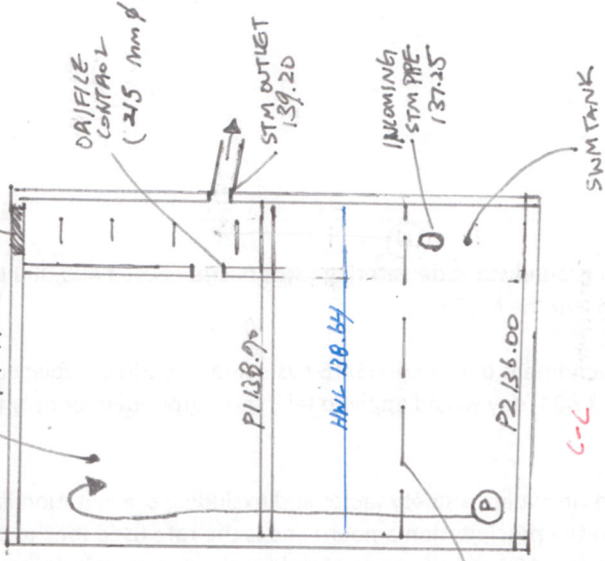
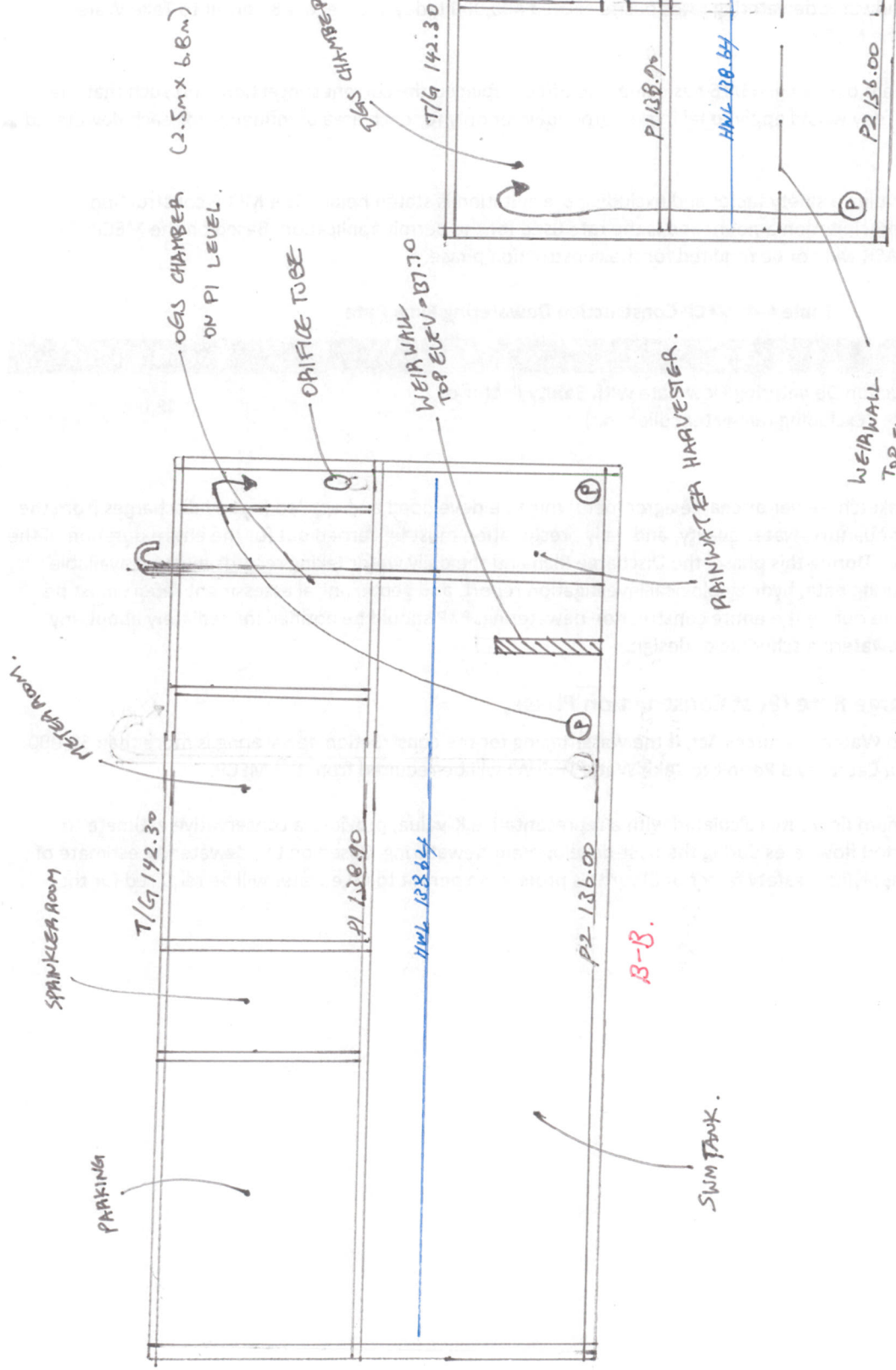
PARKING

T/G 142.30

P1 138.90

MWL 138.64

P2 136.00



B-B

C-C

SERVICING REPORT GROUNDWATER SUMMARY

The form is to be completed by the Professional that prepared the Servicing Report.
 Use of the form by the City of Toronto is not to be construed as verification of engineering/hydrological content.

For City Staff Use Only:	
Name of ECS Case Manager (please print)	
Date Review Summary provided to to TW	

A. SITE INFORMATION	Included in SR (reference page number)	Report Includes this information City staff (Check)
Date Servicing Report was prepared: October 20, 2023	Title	
Title of Servicing Report: Servicing Report	Title	
Name of Consulting Firm that prepared Servicing Report: EXP Services Inc.	Title	
Site Address 230 The Donway West Toronto, Ontario	Title	
Postal Code M3B 2V8	Title	
Property Owner (identified on planning request for comments memo) Donway Co-operative Development Corporation	Title	
Proposed description of the project (ex. number of point towers, number of podiums, etc.) 6 storey residential complex with residential units and church	pg 2	
Land Use (ex. commercial, residential, mixed, industrial, institutional) as defined by the Planning Act Residential with Church	pg 2	
Number of below grade levels Three levels	pg 2	

SERVICING REPORT GROUNDWATER SUMMARY

<p>Does the SR include a private water drainage system (PWDS)?</p> <p>PWDS: Private Water Drainage System: A subsurface drainage system which may consist of but is not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water on the surface of the ground or to a private sewer connection or drainage system for disposal in a municipal sewer.</p>	<p>If Yes continue completing Section B (Information Relating to Groundwater) <u>ONLY</u></p> <p>If Yes, Number of PWDS? <u>1</u></p> <p><i>(Each of these PWDS may require a separate Toronto Water agreement)</i></p> <p>If No skip to Sections C (On-site Groundwater Containment) and/or D (Water Tight Requirements) as applicable</p>	<p><input checked="" type="radio"/> YES</p> <p><input type="radio"/> NO</p>	
<p>B. INFORMATION RELATING TO GROUNDWATER</p>		<p>Included in SR (reference page number)</p>	<p>Report Includes this information City Staff (Check)</p>
<p>A copy of the pump schedule(s) for ALL groundwater sump pump(s) for the development site has been included in the SR</p> <p style="text-align: center;">or</p> <p>A letter written by a Mechanical Consultant (signed and stamped by a Professional Engineer of Ontario) shall be attached to the SR stating the peak flow rate of the groundwater discharge for the development site for all groundwater sump pump(s). This peak flow rate must be based on the pump schedule(s) that have been designed by the Mechanical Consultant. A template of this letter is attached in Schedule A.</p>		<p>Refer to the written letter by mechanical engineer attached in this GW review form</p>	

SERVICING REPORT GROUNDWATER SUMMARY

<p>**If there is more than one groundwater sump they must ALL be included in the letters along with a combined flow**</p>			
<p>Is it proposed that the groundwater from the development site will be discharged to the sanitary, combined or storm sewer?</p>	<p><input checked="" type="radio"/> Sanitary Sewer</p> <p><input type="radio"/> Combined Sewer</p> <p><input type="radio"/> Storm Sewer</p>	<p>p10</p>	
<p>Will the proposed PWDS discharge from the site go to the Western Beaches Tunnel (WBT)?</p> <p>*Reference attached WBT drainage map*</p>	<p><input type="radio"/> YES <input checked="" type="radio"/> NO</p> <p>If Yes, private water discharge fees will apply and site requires a sanitary discharge agreement.</p>		
<p>What is the street name where the receiving sewer is located?</p>	<p>The Donway West</p>	<p>p10</p>	
<p>What is the diameter of the receiving sewer?</p>	<p>375 mm</p>	<p>p10</p>	
<p>Is there capacity in the proposed local sewer system?</p> <p><input checked="" type="radio"/> YES <input type="radio"/> NO</p>	<p>Are there any improvements required to the sewer system? If yes, identify them below and refer to the section and page number of the SR where this information can be found.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Trenchless improvements are recommended to address extreme wet weather flow conditions</p> </div> <p>If a sewer upgrade is required, the owner is required to enter into an Agreement with the City to improve the infrastructure?</p> <p><input type="radio"/> YES</p>	<p>p9</p>	
<p>Has Toronto Water-WIM confirmed that there is there capacity in the proposed infrastructure listed below?</p> <p>- Trunk System?</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO</p> <p>-Pumping Station?</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO</p>	<p>Pending Toronto Water approval</p>		

SERVICING REPORT GROUNDWATER SUMMARY

<p>-Wastewater treatment plant? <input type="radio"/> YES <input checked="" type="radio"/> NO</p> <p>-Outfall? <input type="radio"/> YES <input checked="" type="radio"/> NO</p> <p>-Combined Sewer Overflow? <input type="radio"/> YES <input type="radio"/> NO <input type="text" value="N/A"/></p> <p>*If there is no capacity in any of the above then alternative options need to be considered by the Owner and site cannot discharge to City sewer system.</p>			
<p>Total allowable peak flow rate during a 100 year storm event (L/sec) to storm sewer</p> <p>When groundwater is to be discharged to the storm sewer the total groundwater and stormwater discharge shall not exceed the permissible peak flow rate during a 2 year pre development storm event, as per the City's Wet Weather Flow Management Guidelines, dated 2006</p>	<p><u>99.4</u> L/sec</p> <p>GW is to be discharged to the municipal sanitary sewer for this development</p>	p10 & p11	
<p>Short-Term Groundwater Discharge Provide proposed total flow rate to the sanitary/combined sewer in post-development scenario</p> <p>Total Flow (L/sec) = sanitary flow + peak short-term groundwater flow rate</p>	<p>Total Flow = Sanitary Flow (0L/s) + Peak Short-Term GW Rate (3.45L/s) = 3.45L/s</p> <p><u>3.45</u> L/sec</p>	p10 & p11	
<p>Long-Term Groundwater Discharge Provide proposed total flow rate to the sanitary/combined sewer in post-development scenario</p>	<p>Total Flow = Sanitary Flow (6.6L/s) + Peak Long-Term GW Rate (1.3L/s) = 7.9L/s</p> <p><u>7.9</u> L/sec</p>	p10 & p11	

SERVICING REPORT GROUNDWATER SUMMARY

<p>Total Flow (L/sec) = sanitary flow + peak long-term groundwater flow rate</p>			
<p>Does the water quality meet the receiving sewer Bylaw limits?</p> <p><input checked="" type="radio"/> YES</p> <p><input type="radio"/> NO</p>	<p>If the water quality does not meet the applicable receiving sewer Bylaw limits and the applicant is proposing a treatment system the applicant will need to include a letter stating that a treatment system will be installed and the details of the treatment system will be included in the private water discharge application that will be submitted to TW EM&P.</p>	<p>EXP's HG report in Appendix D</p>	
<p>C. ON-SITE GROUNDWATER CONTAINMENT</p>		<p>Included in SR (reference page number)</p>	<p>Report Includes this information City Staff (Check)</p>
<p>How is the site proposing to manage the groundwater discharge on site?</p>			
<p>Has the above proposal been approved by:</p>	<p><input type="radio"/> TW-WIM</p> <p>And</p> <p><input type="radio"/> TW-EM&P</p> <p>And</p> <p><input type="radio"/> ECS</p>		
<p>If the site is proposing a groundwater infiltration gallery, has it been stated that the groundwater infiltration gallery will not be connected to the municipal sewer?</p> <p>A connection between the infiltration gallery/dry well and the municipal sewer is not permitted</p> <p>Please be advised if an infiltration gallery/dry</p>	<p><input type="radio"/> YES</p> <p><input type="radio"/> NO</p>		

SERVICING REPORT GROUNDWATER SUMMARY

<p>well on site is not connected to the municipal sewer, the site must submit two letters using the templates in Schedule B and Schedule C.</p>			
<p>Confirm that the infiltration gallery can infiltrate 100% of the expected peak groundwater flow year round, ensure that the top of the infiltration trench is below the frost line (1.8m depth), not less than 5 m from the building foundation, bottom of the trench 1m above the seasonally high water table, and located so that the drainage is away from the building.</p>			
<p>D. WATER TIGHT REQUIREMENTS</p>		<p>Included in SR (reference page number)</p>	<p>Report Includes this information City Staff (Check)</p>
<p>If the site is proposing a water tight structure:</p> <ol style="list-style-type: none"> 1. The owner must submit a letter using the template in Schedule D. 2. A Professional Engineer (Structural), licensed to practice in Ontario and qualified in the subject must submit a letter using the template in Schedule E. 3. A Professional Engineer (Mechanical), licensed to practice in Ontario and qualified in the subject must submit a letter using the template in Schedule F. 			

Provide a copy of the approved SR to Toronto Water Environmental Monitoring & Protection Unit at pwapplication@toronto.ca.

Consulting Firm that prepared Servicing Report: EXP Services Inc.

Professional Engineer who completed the report summary: Steve Park
 Print Name



October 19, 2023

Attention: Executive Director, Engineering and Construction Services
c/o Manager, Development Engineering
Engineering & Construction Services
City of Toronto
100 Queen St. W
Suite 16E
Toronto, ON M5H 2N2

c.c. General Manager, Toronto Water
c/o Manager, Environmental Monitoring and Protection Unit
2126 Kipling Ave, Toronto ON M9W 4K5

Re: Proposed Co-operative Development at 230 and 240 The Donway West, Toronto – Private Water Discharge

Dear Sir or Madam,

This letter is to confirm that ground water from the Private Water Drainage System, consists of two submersible sump pumps (duty-standby) inside a 1,200mm sump pit in lower P-2 level of U/G parking, will be collected and discharged into the sanitary control manhole, at a maximum peak flow rate of [0.65 L/sec].

The groundwater sump pumps will be sized at [0.65 L/sec] and are expected to run approximately [4.7 hours per day].

This peak flow rate will be used for assessing capacity for the peak discharge flow into the City's sanitary sewer system.

Once the proposed groundwater peak flow rate of [0.65 L/sec] is approved by Engineering Construction Services (ECS), City of Toronto at the zoning stage, the property owner will not be allowed to amend this flow rate in the future. Should there be any amendment to the peak flow rate of [0.65 L/sec] total in future, the property owner shall re-submit either the updated pump schedule or a revised letter to ECS. In addition, the sewer capacity will need to be re-assessed.

Sincerely,

Novatrend Engineering Group Ltd.

Eric Pun, P. Eng.



End Document