COUNTERPOINT LAND DEVELOPMENT BY | DILLON CONSULTING

ASTORIA INC.

STORMWATER MANAGEMENT MEMO

Residential Development at
3771, 3783, 3793 Howard Avenue, Windsor, Ontario

November 2025 – 24-8888

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APPENDICES

1.0 INTRODUCTION

Dillon Consulting Limited (Dillon) has been retained by Astoria Inc. to complete the functional stormwater scheme for the redevelopment of 3771, 3783 and 3793 Howard Avenue as a residential development, in the City of Windsor, Ontario.

The Subject Site is currently occupied by single detached dwellings and is bounded by existing located residential development on the north, east and south. There is an existing 600 mm diameter storm sewer main along Howard Avenue that conveys flows north. This Stormwater Management Memo has been prepared to support the planning applications for the proposed residential redevelopment.

The Subject Site is approximately 1.57 ha (3.88 acres) in size and, when developed, will consist of two (2) 6-storey multiple dwelling buildings and four (4) 2-storey townhome residential buildings. There are a total of 179 dwelling units proposed. Vehicular access is proposed from Howard Avenue.

The objective of this Memo is to propose stormwater management measures while restricting the peak outflow from the site to the allowable release rate. Storage on-site is to be recommended to attenuate the post-development peak flow rates for all events up to and including the 100-year event.

1.1 BACKGROUND REVIEW

The proposed SWM strategy was developed using the following background reports and guidelines:

- City of Windsor Development Manual (City of Windsor, 2015); and
- Howard/South Cameron Intersection – Stormwater Drainage Design and Analysis Memo (Dillon, 2024), which includes:
    - Appendix-B - Howard Avenue South Cameron Intersection Improvements - Future Storm and Sanitary Servicing Summary Letter (Revision 1) (Dillon, 2021).

1.2 STORMWATER MANAGEMENT DESIGN CRITERIA

Design criteria for the stormwater and sanitary servicing are based on the following reference documents:

- Stormwater Management Planning and Design Manual (Ministry of the Environment [MECP], 2003)
- Windsor/Essex Region Stormwater Management Standards Manual [WERSMSM] (Stantec, 2024)

1.2.1 DESIGN STORMS

The following design storm events, as recommended in the WERSMSM, are to be used to assess the on-site storage requirements under post-development conditions:

- 2-Year, 4-hour design storm using Chicago distribution with a 15-minute time interval and a total rainfall depth of 32 mm: Water Quality storm;
- 5-year, 4-hour design storm using the Chicago distribution with a 15-minute time interval and a total rainfall depth of 49.5 mm;
- 100-year, 4-hour design storm using the Chicago distribution with a 15-minute time interval with a total rainfall depth of 81.6 mm;

- 100-year, 24-hour design storm using the SCS Type-II distribution with a 2-hour time interval and a total rainfall depth of 108 mm; and
- Urban Stress Test (UST) storm using the Chicago distribution with a 15-minute time interval + a uniform distribution of an additional 42mm for a total rainfall depth of 150 mm.

1.2.2 QUANTITY CONTROL

Based on Appendix-B of the Howard/South Cameron Intersection – Stormwater Drainage Design and Analysis Memo (Dillon, 2024), the allowable release rate from the proposed development lands was fixed at 35 L/s/ha for all events up to and including the 100-year event. This unit release rate from future development lands was determined in the 2021 study to ensure no negative impacts on the downstream sewer system.

Surface ponding within parking lots and roadways are to be maintained below 0.30 m during all storms, up to and including the governing 100-year event. No surface ponding will occur during the 5-yr storm event.

1.2.3 QUALITY CONTROL

Runoff produced by the Subject Site is required to be treated to a “Normal” protection level, which is defined as the removal of 70% of total suspended solids (TSS) on an average annual basis.

1.2.4 MINOR SYSTEM CONVEYANCE:

Storm sewers on the Subject Site are to be designed to a 5-year level of service where the 5-year Hydraulic Grade Line (HGL) in the sewer system is to be 0.30m below the lowest road elevation.

1.2.5 MAJOR SYSTEM CONVEYANCE:

Major system overland flow depths are to be maintained below 0.30 m in depth during all storms, up to and including, the governing 100-year event. During the UST event, flow depths must be maintained below proposed building entrances and fully maintained on site.

2.0 EXISTING CONDITIONS

The existing site, encompassing a rectangular area of approximately 1.57 hectares, is classified as Brookston Clay Sand spot phase (BS) under hydrologic soil type D soil according to the Essex soils classification and lies under Turkey Creek watershed. The site currently bounded to the north and south by low density residential area with open backyards. LiDAR contours were reviewed to confirm no external area drains through the subject site.

2.1 ALLOWABLE RELEASE RATE

As noted above, for future development lands located along Howard Avenue, the allowable release rate is 35 L/s/ha for all events up to and including the 100-year event.

- Site Area: 1.57ha;
- Governing up to 100-year Site Flow = 35L/s/ha; and
- Allowable Release Rate for the Site = 55 L/s.

Based on the above, an allowable release rate of 55 L/s will govern the site SWM quantity control design.

3.0 POST DEVELOPMENT CONDITIONS

For the preliminary proposed condition modelling analysis, the Subject Site was assessed using the PCSWMM modelling software as a lumped catchment model. Modelling parameters to represent a developed condition are shown below in **Table 1**.

Table 1 – Post-Development Model Parameters

SITE	DRAINAGE AREA (HA)	IMPERVIOUS VALUE (%)	SUB-CATCHMENT PARAMETERS
3771-3783-3793 Howard Ave, Windsor, ON	1.57	90%	Flow Length = 150m Slope = 0.5 % Impervious Depression Storage = 2.5 mm Pervious Depression Storage = 7.5 mm Manning's N Impervious = 0.013 Manning's N Pervious = 0.12 Green-Ampt Infiltration Parameters (Type D Soils): Max. Infiltration rate = 3 mm/hr. Min. Infiltration rate (normal) = 0.5 mm/hr. Decay constant = 4/hr. Drying time = 7 days

The proposed condition PCSWMM model schematic is provided in **Appendix B.**

3.1 STORMWATER MANAGEMENT DESIGN AND ANALYSIS

The SWM design for the Site is to include both water quantity and water quality control.

3.1.1 WATER QUANTITY CONTROL

Based on the preliminary proposed condition modelling for the Subject Site, the water quantity control volume requirements for the development during the water quality, 5-year, 100-Year and UST storm events are presented below in **Table 2.**

Table 2 – Water Quantity Control Volume Requirements

RETURN PERIOD EVENT	RELEASE RATE (L/S)	STORAGE ONSITE (M^3)
32 mm Water Quality storm	7 L/s	398
Chicago 5-Year, 4-hour	15 L/s	599
SCS Type-II 100-Year, 24 hour	37 L/s	1004
Chicago 100-Year, 4-hour	52 L/s	1070
UST	53L/s	1092

Based on the preliminary model results shown in **Table 2**, it is estimated that during the governing 100-year, 4-hour storm event, a total storage volume of 1070 m^3 is required. The proposed SWM infrastructure was designed to control post-development flows to the allowable release rate for all events up to and including the 100-year design storm event. A 150 mm diameter orifice is proposed to control peak flows from the Subject Site to the existing 600 mm RCP storm sewer for all the storm events up to and including 100-year storm events. A flap gate is recommended at the outlet to prevent stormwater in the downstream storm sewer along Howard Avenue from backing up into the site during high HGL conditions.

On-site quantity control is proposed through a combination of underground storage and surface storage below the parking lot areas. The EZSTORM underground storage system provided by the Next Storm supplier has been sized to provide 1002.95 m^3 of storage. Details of the underground storage system are provided in **Appendix C.**

Site grading will be designed to provide safe overland conveyance during the UST runoff toward the city right-of-way. However, the proposed stormwater management system provides extra capacity, offering a total available storage volume of 1,092 m^3 through a combination of underground and surface storage. Any runoff exceeding this available capacity will be safely conveyed overland to the City right-of-way.

Surface grades will be further refined during detailed design to allow for overland flow to be captured on-site and directed to the proposed storm sewer network.

3.1.2 WATER QUALITY CONTROL

To meet the water quality requirements of the site at a 'Normal' protection level water quality treatment (70% TSS removal), on oil and grit (OGS) unit is proposed. The FD-4HC unit supplied by ADS Pipe issued for approved equivalent is recommended for this site.

The details of this OGS sizing are provided in **Appendix B.**

3.1.3 CONVEYANCE

Storm sewer design and the overland flow runoff is to be completed during further design and submitted for Site Plan Control.

4.0 EROSION AND SEDIMENT CONTROL

Erosion and sediment control measures will be provided during detailed design and are to be implemented during construction in accordance with the “Guidelines on Erosion and Sediment Control for Urban Construction Sites” (Government of Ontario, May 1987) and “Construction Specification for Temporary Erosion and Sediment Control Measures” (OPSS 805).

5.0 CONCLUSIONS

The SWM design proposed for 3771, 3783 and 3793 Howard Avenue meets all regional and provincial requirements to satisfy the planning application requirements at this time.

Based on the analysis performed, the Subject Site under a redeveloped condition is to have the following SWM strategy:

- Maximum allowable release rate of 55 L/s, based on Appendix-B of the Howard/South Cameron Intersection – Stormwater Drainage Design and Analysis Memo (Dillon, 2024). The peak discharge from the site will be restricted to this value for all events up to and including the 100-Year return period rainfall event;
- Runoff from the Subject Site will be discharged to the existing 600 mm RCP storm sewer main along Howard Avenue that conveys flow north through a 150 mm orifice;
- A flap-gate at the outlet is recommended to prevent high HGLs in the downstream sewer system from backing up into the site;
- Estimated on-site storage volume of 1070 m^3 is required on-site to restrict flows to the allowable release rate during the governing 100-Year event;
- On-site storage is to be achieved through a combination of surface ponding and underground storage unit; and
- Water quality control will be achieved using an ETV verified FD-4HC OGS unit to achieve 70% TSS removal over an average annual basis.

The preliminary analysis demonstrates that the conceptual site design can address the established stormwater management criteria. At detailed design the analysis will be further refined.

This report is respectfully submitted for review and approval. Should you have any questions, we would be pleased to discuss the results of our evaluation in further detail.

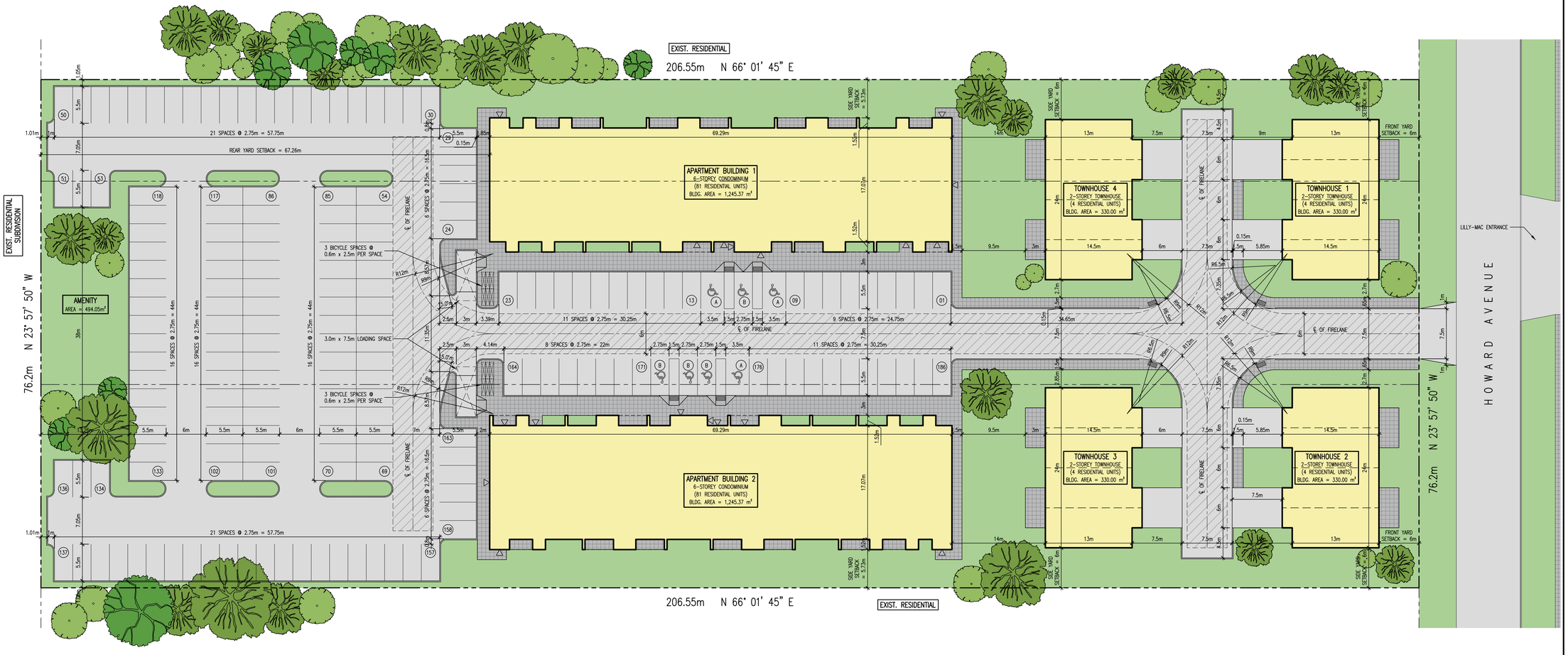
DILLON CONSULTING LIMITED

Yelena Koshenkov, P.Eng.
Stormwater Manager, Associate

Mansi Dhaked
Water Resources Designer

APPENDIX A

SITE PLAN



SITE PLAN

SCALE : 1 : 300

0 2 4 8 12 16 20 30m

2025/10/24	PLANNING REVIEW
2025/09/22	CLIENT REVIEW
2025/07/07	CLIENT REVIEW
2024/05/30	SITE PLAN CONTROL PRE-CONSULTATION

date (yyyy/mm/dd): issued for:

general notes:

1. THIS PRINT IS AN INSTRUMENT OF SERVICE ONLY AND IS THE PROPERTY OF THE ARCHITECT.
2. DRAWINGS SHALL NOT BE SCALED.
3. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND THIS OFFICE MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS.
4. ATTENTION IS DIRECTED TO PROVISIONS IN THE GENERAL CONDITIONS REGARDING CONTRACTOR'S RESPONSIBILITIES IN REGARD TO SUBMISSION OF SHOP DRAWINGS.
5. IN THE EVENT THE ARCHITECT IS RETAINED TO REVIEW SHOP DRAWINGS, SUCH REVIEW IS ONLY TO CHECK FOR CONFORMANCE WITH DESIGN CONCEPT AND WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS.
6. CONTRACTORS SHALL PROMPTLY NOTIFY THE ARCHITECT IN WRITING OF THE EXISTENCE OF ANY OBSERVED VARIATIONS BETWEEN THE CONTRACT DOCUMENTS AND ANY APPLICABLE CODES OR BY-LAWS.
7. THE ARCHITECT IS NOT RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS AND OR TECHNIQUES IN THE CONSTRUCTION OF THIS FACILITY.

stamp:

architectural design associates inc. architect
1670 mercer street
windsor ontario canada n8x 3p7
ph 519.254.3430 fax 519.254.3642
email - info@ada-architect.ca www.ada-architect.ca

project:
ASTORIA DEVELOPMENT

HOWARD AVENUE,
WINDSOR, ONTARIO

client:
FORTIS GROUP

title:
SITE PLAN & SITE DATA

scale:	AS SHOWN
drawn by:	SJP
checked by:	SMB
date:	MAY, 2024
comm. no.:	2024-078
sheet no.:	SPC1.0a

APPENDIX B

OGS DESIGN


ASTORIA DEVELEOPMENT
3771,3783 and 3793 Howard Ave.
(1.57 ha)
Legend
Outfalls
Storages
Orifices
Subcatchments
N
100 m

ADS OGS Sizing Summary

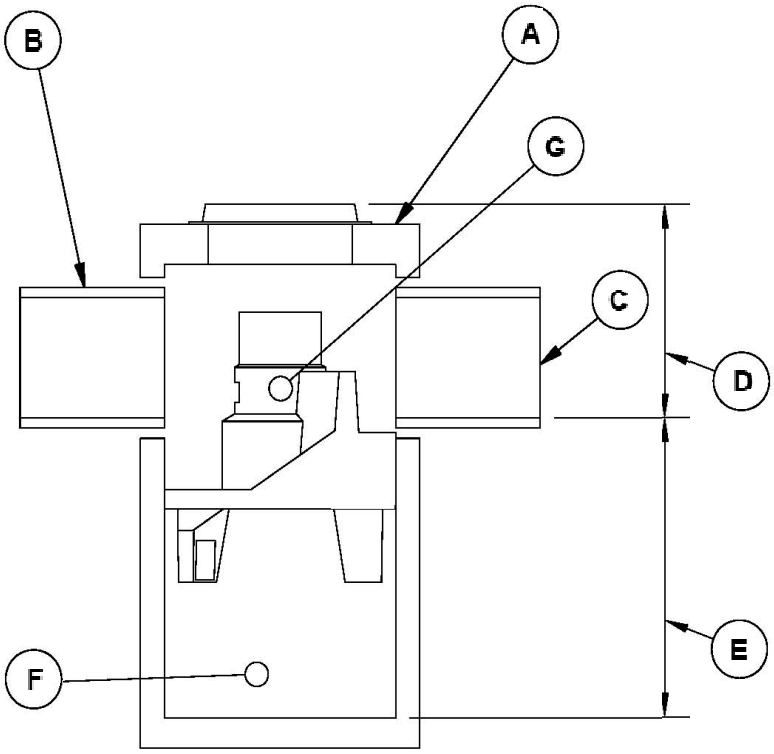
Project Name:	Astoria Inc
Consulting Engineer:	Dillon Consulting Limited
Location:	Windsor, ON
Sizing Completed By:	Kyle Robinson
Email:	kyle.robinson@adspipe.com

Treatment Requirements		
Treatment Goal:	Normal (MOE)	
Selected Parameters:	70% TSS	90% Volume
Selected Unit:	**FD-4HC**	

Site Details	
Site Area:	1.57 ha
% Impervious:	90%
Rational C:	0.84
Rainfall Station:	Windsor, ONT
Particle Size Distribution:	Fine
Peak Flowrate:	---

Summary of Results		
Model	**TSS Removal**	**Volume Treated**
FD-4HC	74.0%	>90%
FD-5HC	77.0%	>90%
FD-6HC	80.0%	>90%
FD-8HC	84.0%	>90%
FD-10HC	88.0%	>90%

FD-4HC Specification	
Unit Diameter (A):	1,200 mm
Inlet Pipe Diameter (B):	mm
Outlet Pipe Diameter (C):	mm
Height, T/G to Outlet Invert (D):	0 mm
Height, Outlet Invert to Sump (E):	1515 mm
Sediment Storage Capacity (F):	0.54 m³
Oil Storage Capacity (G):	723 L
Max. Pipe Diameter:	600 mm
Peak Flow Capacity:	510 L/s



Site Elevations:	
Rim Elevation:	0.000
Inlet Pipe Elevation:	0.000
Outlet Pipe Elevation:	0.000

Notes:

Removal efficiencies are based on NJDEP Test Protocols and independently verified.

All units supplied by ADS have numerous local, provincial, and international certifications (copies of which can be provided upon request). The design engineer is responsible for ensuring compliance with applicable regulations.

Project Name: Astoria Inc
Consulting Engineer: Dillon Consulting Limited
Location: Windsor, ON

Net Annual Removal Efficiency Summary: FD-4HC

Rainfall Intensity[1]	Fraction of Rainfall[1]	FD-4HC Removal Efficiency[2]	Weighted Net-Annual Removal Efficiency
mm/hr	%	%	%
3.00	13.2%	83.2%	11.0%
4.00	9.6%	81.0%	7.8%
5.00	7.5%	79.3%	6.0%
6.00	6.0%	78.0%	4.7%
7.00	4.8%	76.9%	3.7%
8.00	4.1%	76.0%	3.1%
9.00	3.6%	75.1%	2.7%
10.00	3.2%	74.4%	2.4%
11.00	2.8%	73.7%	2.1%
12.00	2.5%	73.1%	1.8%
15.00	6.6%	71.6%	4.7%
20.00	8.3%	69.8%	5.8%
25.00	5.8%	68.3%	4.0%
30.00	4.6%	67.2%	3.1%
35.00	3.8%	66.2%	2.5%
40.00	2.9%	65.4%	1.9%
45.00	2.4%	64.7%	1.6%
50.00	1.8%	64.1%	1.2%
65.00	6.6%	62.5%	4.1%
		Total Net Annual Removal Efficiency:	74.0%
		Total Runoff Volume Treated:	99.9%

Notes:

(1) Based on Windsor/Essex Region Stormwater Manual 2018, Table 3.4.1.5

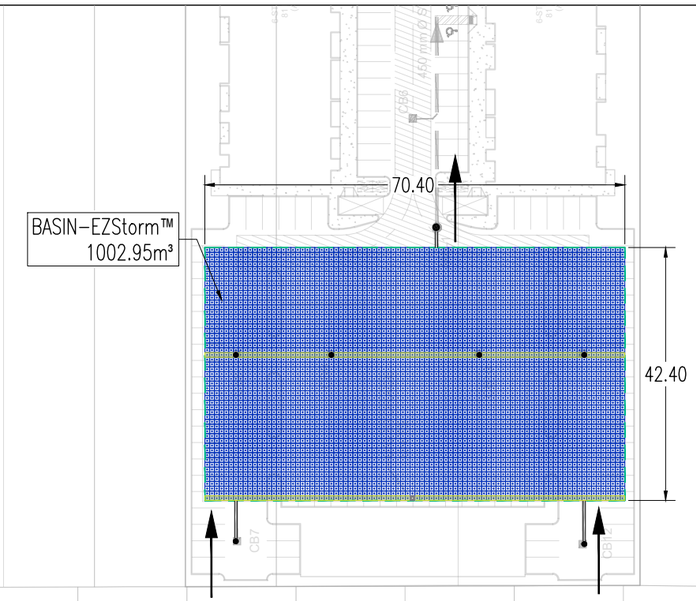
(2) Based on third party verified data and appoximating the removal of a PSD similar to the STC Fine distribution

(3) Rainfall adjusted to 5 min peak intensity based on hourly average.

APPENDIX C

UNDERGROUND STORAGE SYSTEM DESIGN

Astoria Development, Windsor, ON



1/01 IMPLANTATION
SCALE 1:1000

INDEX PAGE

CONTACTS			
SITE CONTACT	PARTH PUSHKARNA	647 278-7339	ppushkarna@brunet.cc
SALES REPRESENTATIVE	PARTH PUSHKARNA	647 278-7339	ppushkarna@brunet.cc
TECNICAL SUPPORT	NEXTSTORM	450 322-6260	info@nextstorm.ca

NOTE :

- These drawings may contain components, including but not limited to manholes, catch basins, storm pipes, fittings, manifolds, castings or other necessary appurtenances that may not be supplied by Nextstorm.
- It is the responsibility of the contractor to confirm all the material required is provided before installation.
- This drawing was prepared to support the project engineer of record for the proposed system. It is the ultimate responsibility of the project engineer of record to ensure that the EZSTORM™ System's design is in full compliance with all applicable laws and regulations. It is the contractor of record's responsibility to ensure that the Nextstorm products are designed in accordance with Nexstorm's minimum requirements. Nextstorm does not approve plans, sizings or systems designs.
- All measurements are in meters unless otherwise indicated.

N°.	REVISION	DATE	BY
A	ISSUED FOR APPROVAL	31/10/2025	O.T.

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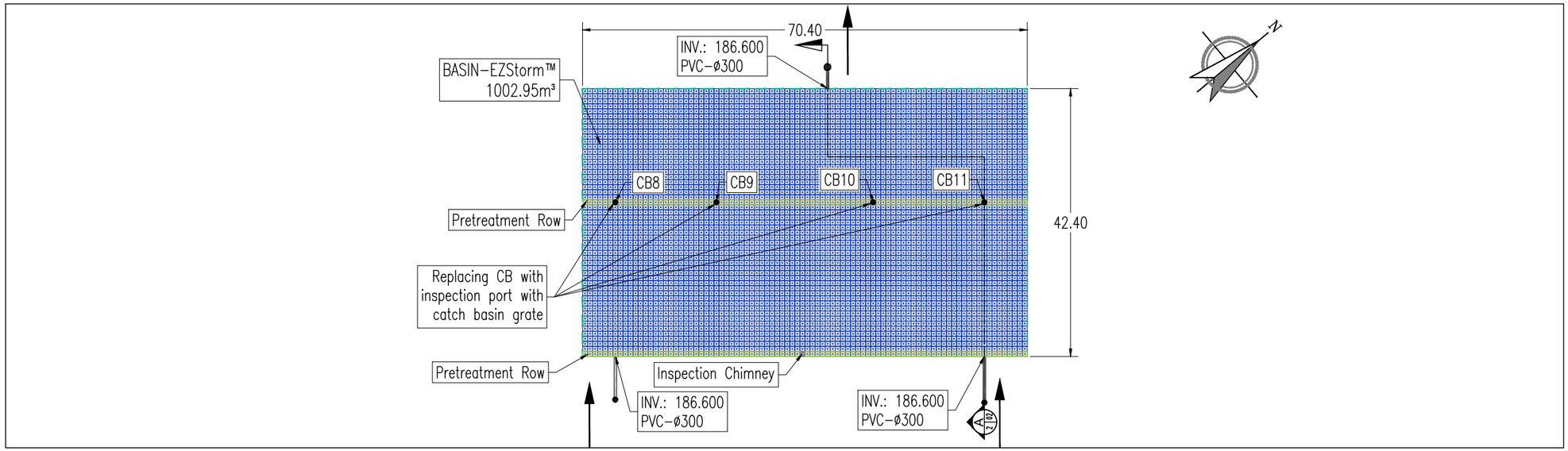
COVER

BASIN-EZSTORM™-1002.95M³

PROJECT NAME:
Astoria Development, Windsor, ON

PROJECT N°:	DATE:
251102-02	31/10/2025
DRAWN BY: O.T.	CHECKED BY: S.K.
SCALE: SCALE	SHEET N°: 1/6

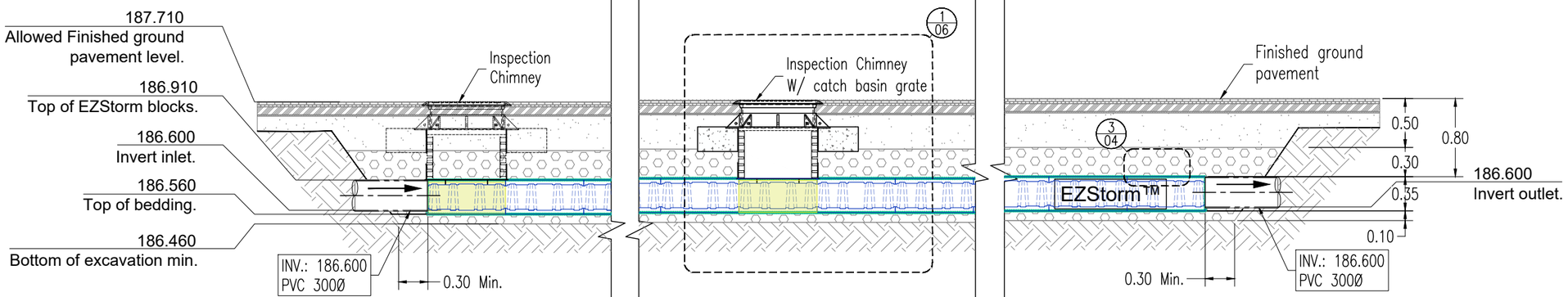
1625, Boulevard Monseigneur-Langlois
Salaberry-de-Valleyfield
J6S 1C2, Québec



1/02 — 1/2 LAYER PLAN VIEW

SCALE 1:750

EZSTORM™ SYSTEM	
Total volume storage capacity	1002.95m³
EZSTORM™ Storage Volume	1002.95m³
Clear Stone Storage Volume	000.0m³
System Area	2984.96m²
Number of blocks length	88
Number of blocks width	53
System's height	0.35m



2/02 — SECTION A-A

SCALE 1:50

LEGEND

- Inspection Chimney
- Catch basin
- Connection–access concrete manhole
- Manhole
- A. Geotextile EZ-226.
- B. Geomembrane EZ-LLDPE-30
- Drain HDPE 150Ø (By others)
- Clear Stone with maximum grain size of 20mm at 40% void ratio or MG-20 or MG-112 compacted sand at 90%PM
- A / B — Thickness of this layer may vary according to project requirements
- C — Paving bed

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BASIN'S PLAN AND SECTION VIEW

BASIN-EZSTORM™-1002.95M³

PROJECT NAME:
Astoria Development, Windsor, ON

PROJECT N°:	DATE:
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SCALE: SCALE	SHEET N°: 2/6

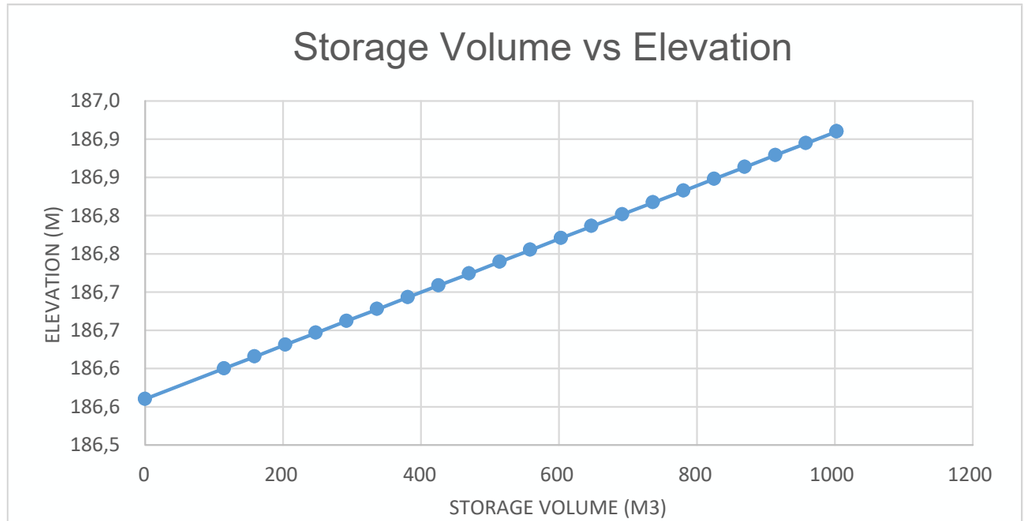
NEXT
1625, Boulevard Monseigneur-Langlois
Salaberry-de-Valleyfield
J6S 1C2, Québec

SYSTEM CHARACTERISTICS			
Model	EZSTORM™ system B1		
	Number of blocks (unit)	Dimensions / blocks (m)	Dimensions EZStorm (m)
Height	0,5	0,66	0,35
Length	88	0,80	70,40
Width	53	0,80	42,40

EZSTORM area (m2)	2985,0
EZSTORM + Clear stone area (m2)	0,0
Total storage volume (m3)	1002,9
Invert (m)	186,60
Min finished ground level (m)	187,71

EZSTORM volume (m3)	1002,9	Clear stone volume (m3)	0,0
Void in EZSTORM (%)	96%	Void in Clear stone (%)	40%

System height (m)	Storage volume (m3)	Elevation (m)	Notes
0,35	1002,95	186,910	Top EZSTORM
0,33	958,53	186,895	
0,32	914,11	186,879	
0,30	869,70	186,864	
0,29	825,28	186,848	
0,27	780,87	186,833	
0,26	736,45	186,817	
0,24	692,03	186,802	
0,23	647,62	186,786	
0,21	603,20	186,771	
0,20	558,78	186,755	
0,18	514,37	186,740	
0,16	469,95	186,724	
0,15	425,54	186,709	
0,13	381,12	186,693	
0,12	336,70	186,678	
0,10	292,29	186,662	
0,09	247,87	186,647	
0,07	203,45	186,631	
0,06	159,04	186,616	
0,04	114,62	186,600	Invert
0,00	0,00	186,560	Bottom EZSTORM



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VOLUME CALCULATION

BASIN-EZSTORM™-1002.95M³

PROJECT NAME:
Astoria Development, Windsor, ON

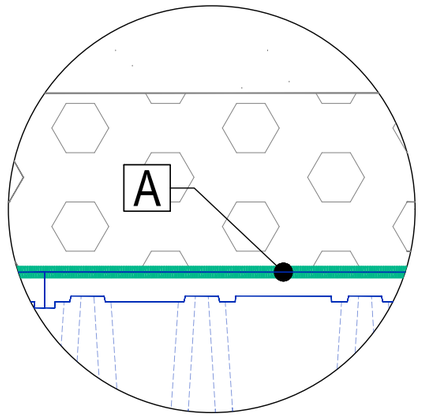
PROJECT N°:	DATE:
251102-02	31/10/2025
DRAWN BY: O.T.	CHECKED BY: S.K.
SCALE: SCALE	SHEET N°: 3/6

NEXT
1625, Boulevard Monseigneur-Langlois
Salaberry-de-Valleyfield
J6S 1C2, Québec

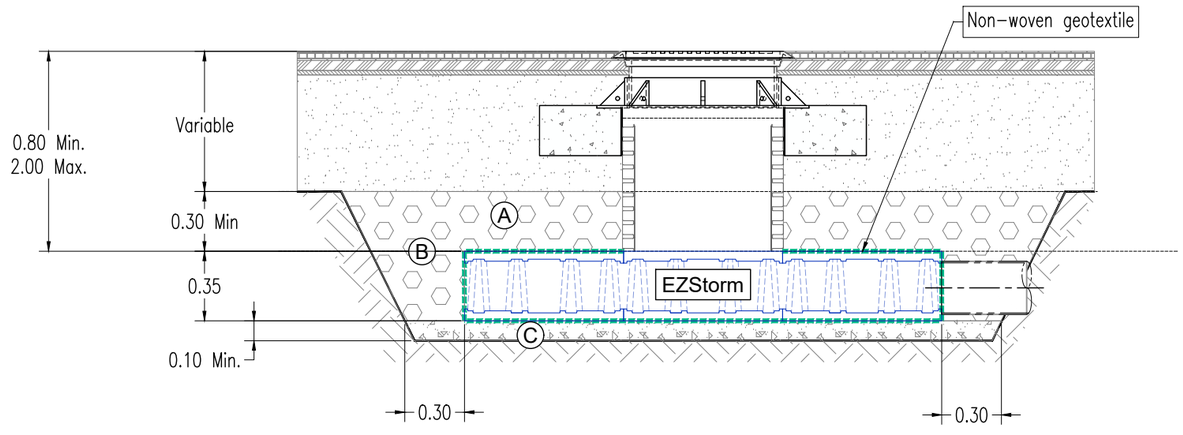
Acceptable backfill materials for this project

Live Load: CL-625 / HS-25 (CSA-S6: 19)

	Layer location	Backfill material	Density requirements
(A)	Top embakment: Embakment located directly above the EZStorm chambers abd below the road structure.	Backfill with a 20 mm Max. granular material compacted at a rate > 95 % S.P.D. (3/4 (20mm) granular material, clean stone or sand)	Without driving over the structure, place a first layer of 450mm thick on top then compact to 90% M.P. using light equipment not exceeding 5.000 kg and always driving in the same direction. Then add layers up to 300 mm thick using the same equipment and always in the same direction. Normal traffic is only permitted once the final backfill height has been reached.
(B)	Lateral backfill: Located between the lateral faces of the EZStorms and the limits of the excavated volume.	Frost-resistant granular earthwork material with a maximum grain diameter of 20 mm per 300 mm layer and compacted at a rate > 96% M.P.	Spread the backfill material with a hydraulic shovel or loader, then compact it with a compactor or vibratory plate to 90% M.P. in successive layers up to 300 mm thick, over the full width.
(C)	Laying bed: located under the EZStorm blocks, between the foundation floor and the base of the blocks.	Subgrade granular material 100 mm Min. 3/4 (20mm) granular material, clean stone or sand to 96% M.P.	Compact to 90% M.P. using a vibrating plate or roller compactor. Place the system on a flat, solid, horizontal and stable surface.



3/04 DETAIL
SCALE NOT AT SCALE



1/04 TYPICAL SECTION
SCALE 1:30

LEGEND

- Inspection Chimney
- Catch basin
- Connection-access concrete manhole
- Manhole
- A. Geotextile EZ-226.
- B. Geomembrane EZ-LLDPE-30
- Drain HDPE 150Ø (By others)
- Clear Stone with maximum grain size of 20mm at 40% void ratio or MG-20 or MG-112 compacted sand at 90%PM
- A / B: Thickness of this layer may vary according to project requirements
- C: Paving bed

N°.	REVISION	DATE	BY
A	ISSUED FOR APPROVAL	31/10/2025	O.T.

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STANDARD BACKFILL REQUIREMENTS

BASIN-EZSTORM™-1002.95M³

PROJECT NAME:
Astoria Development, Windsor, ON

PROJECT N°:	DATE:
251102-02	31/10/2025
DRAWN BY: O.T.	CHECKED BY: S.K.
SCALE: SCALE	SHEET N°: 4/6

NEXT
1625, Boulevard Monseigneur-Langlois
Salaberry-de-Valleyfield
J6S 1C2, Québec

List of materials

CODE DE L'ARTICLE	DESCRIPTION	B1
EZ-SHD	EZStorm - half block 2 units/block (units)	4664
FL-EZSHD	EZSTORM Sidewall grid (units)	0
FL-EZSHD 1/2	EZSTORM Sidewall grid for half block (units)	282
PR-EZSHD	EZSTORM Cover plate	4664
CONNECTEUR EZS-1	EZSTORM Single layer-connector (units)	10200
CONNECTEUR EZS-2	EZSTORM Multi layer-connector (units)	0
R-P	EZSTORM Pre-treatment row (0.8m / unit)	264
EZSTORM adapters		
FC-200mm-PVC	EZSTORM Adapter 200 mm PVC (units)	0
FC-250mm-PVC	EZSTORM Adapter 250 mm PVC (units)	0
FC-300mm-PVC	EZSTORM Adapter 300 mm PVC (units)	0
FC-375mm-PVC	EZSTORM Adapter 375 mm PVC (units)	0
FC-450mm-PVC	EZSTORM Adapter 450 mm PVC (units)	0
FC-450mm-TBA	EZSTORM Adapter 450 mm PCP (units)	0
FC-525mm-PVC	EZSTORM Adapter 525 mm PVC (units)	0
FC-600mm-PEHD	EZSTORM Adapter 600 mm HDPE (units)	0
Inspection Chimney		
EZSTORM-ACCES	EZSTORM half-elements with opening (units)	0
PP-EZSTORM	EZSTORM half-elements with positioning plate (units)	0
PP-EZSTORM 1/2	EZSTORM Cover plate with positioning plate (units)	5
REHAUSSE-PEHD-600	EZSTORM Extension Pipe - Chimney (units) - Ø 600mm - 1.5 m /unit	5
Dalle-répartition	EZSTORM Support concrete ring (units)	5
OPSD401.01ST	Cast iron frame and cover (unit)	1
OPSD400.02	Catch basin Frame and grates (unités)	4
Rectangulare concrete inspection manhole 1200mm x 1200mm		
R1212	EZSTORM rectangular inspection concrete manhole	0
EZ-226	EZSTORM Protection geotextile (226g/m2) - Rolls of 6 m x 100 m	14
EZ-450	EZSTORM Protection geotextile (450g/m2) -Rolls of 6 m x 50 m	0
EZ-LLDPE30	LLDPE 30 mils liner - Rolls of 4m x 50m	0
Clear Stone (by others)		
	Quantity of 20 mm (3/4 in) clear stone required (m3) (by others)	0

LEGEND

- **ACCESSORIES not included in all projects**
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N°.	REVISION	DATE	BY
A	ISSUED FOR APPROVAL	31/10/2025	O.T.

ISSUED FOR APPROVAL
NOT FOR PRODUCTION

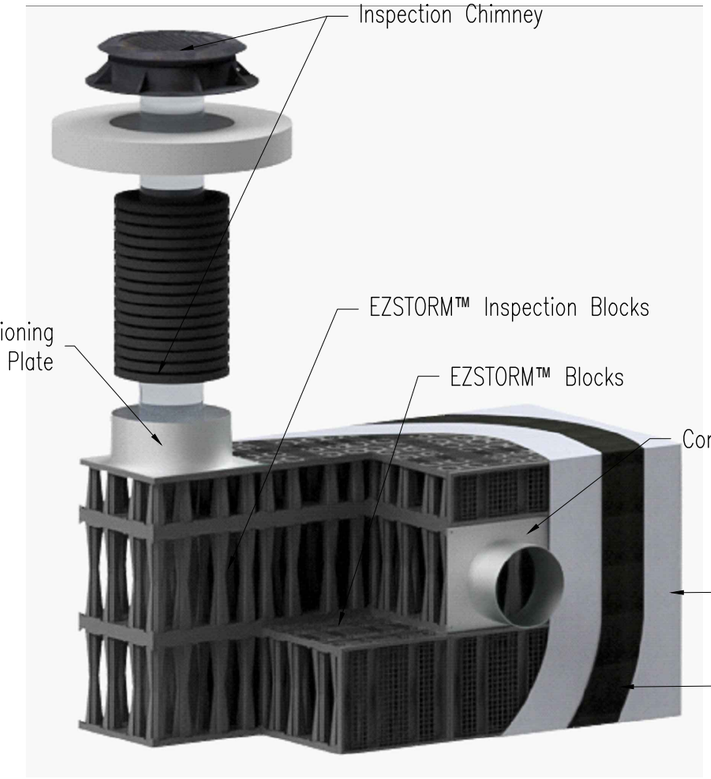
LIST OF MATERIALS

BASIN-EZSTORM™-1002.95M³

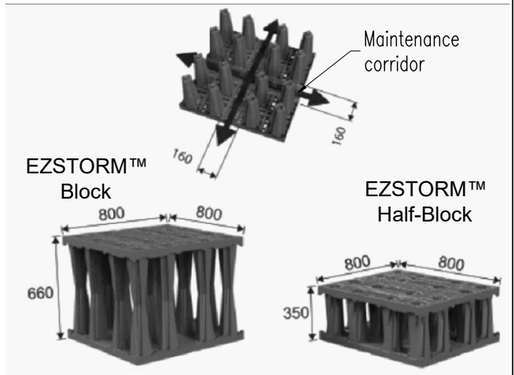
PROJECT NAME:
Astoria Development, Windsor, ON

PROJECT N°:	DATE:
251102-02	31/10/2025
DRAWN BY: O.T.	CHECKED BY: S.K.
SCALE: SCALE	SHEET N°: 5/6

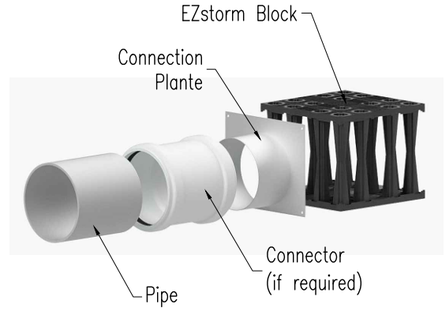
NEXT
1625, Boulevard Monseigneur-Langlois
Salaberry-de-Valleyfield
J6S 1C2, Québec



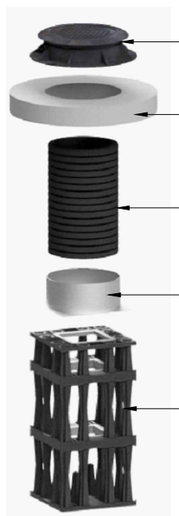
1. EZSTORM™ Components and Accessories (According on each project)



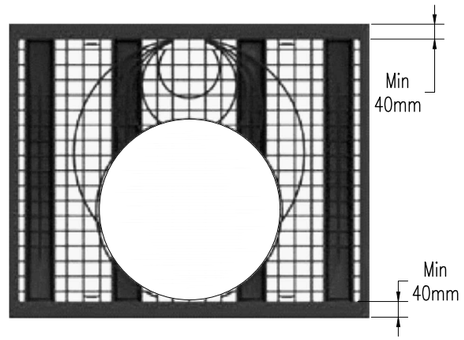
2. EZSTORM™ Block Standard Dimensions



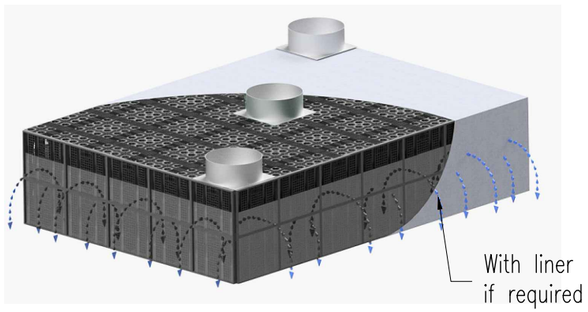
3.Connection Accessories Configuration



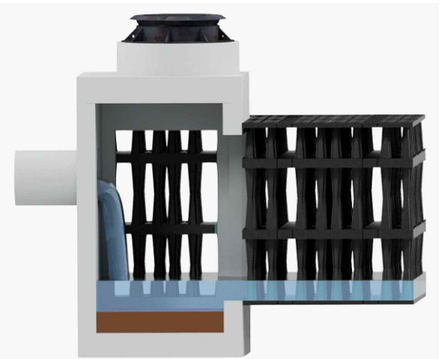
4. EZSTORM™ Block and Inspection Chimney



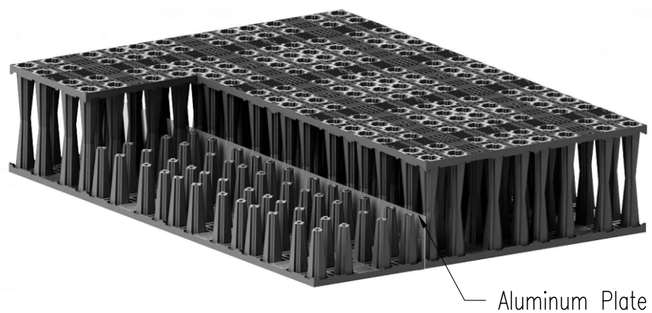
5. sidewall Grid with Connection Opening



7. Infiltration Basin Typical 3D Section View



6. Concrete Manhole for Access and Connection (if required)



8. Pretreatment Row (if required)

LEGEND

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N°.	REVISION	DATE	BY
A	ISSUED FOR APPROVAL	31/10/2025	O.T.

ISSUED FOR APPROVAL
NOT FOR PRODUCTION

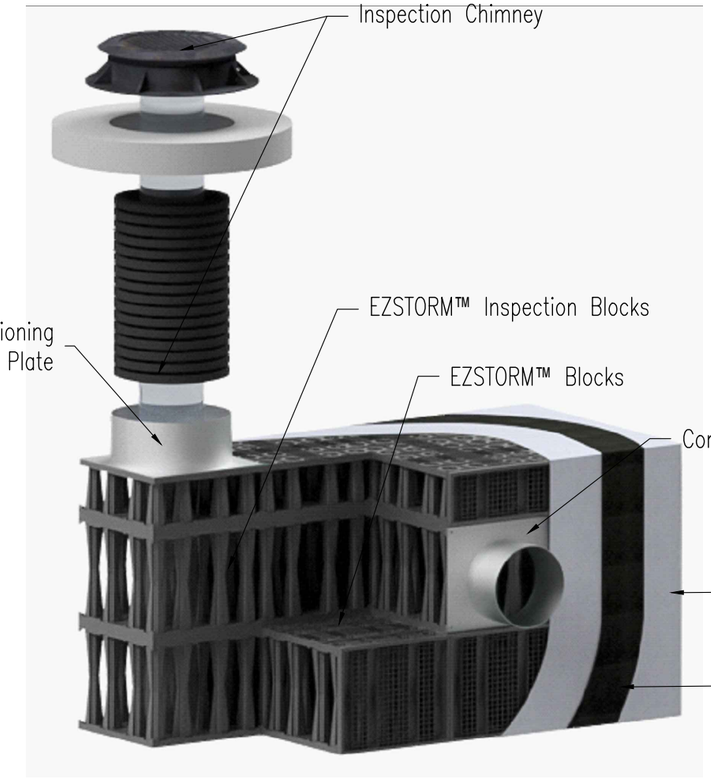
ACCESSORIES

BASIN-EZSTORM™-1002.95M³

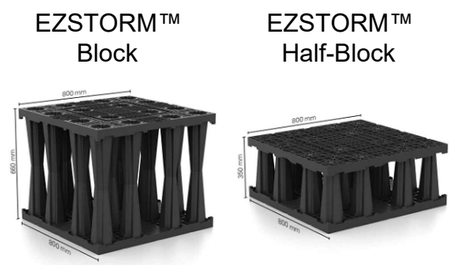
PROJECT NAME:
Astoria Development, Windsor, ON

PROJECT N°:	DATE:
251102-02	31/10/2025
DRAWN BY: O.T.	CHECKED BY: S.K.
SCALE: SCALE	SHEET N°: 6/6

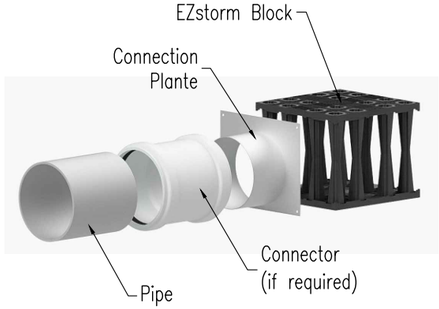
NEXT
1625, Boulevard Monseigneur-Langlois
Salaberry-de-Valleyfield
J6S 1C2, Québec



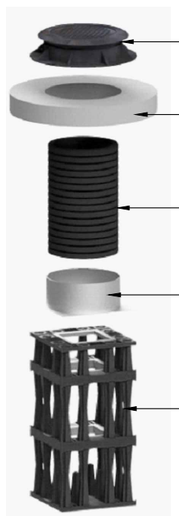
1. EZSTORM™ Components and Accessories (According on each project)



2. EZSTORM™ Block Standard Dimensions



3.Connection Accessories Configuration



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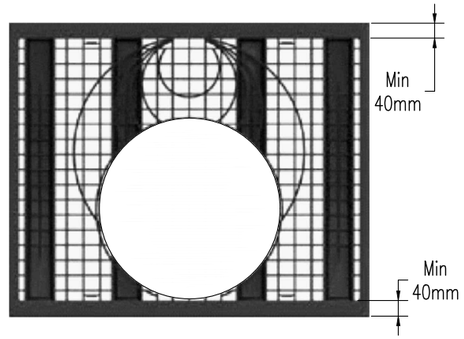
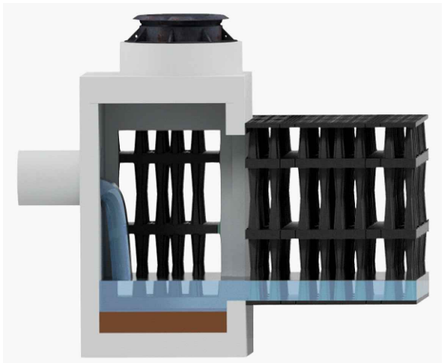


5. sidewall Grid with Connection Opening



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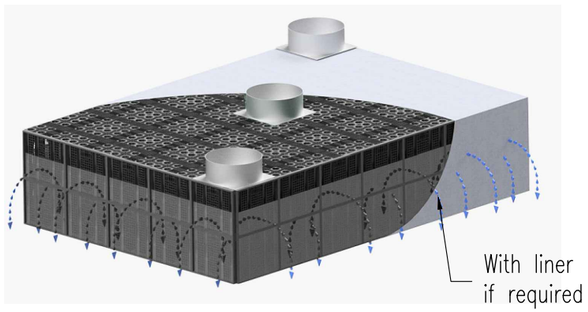

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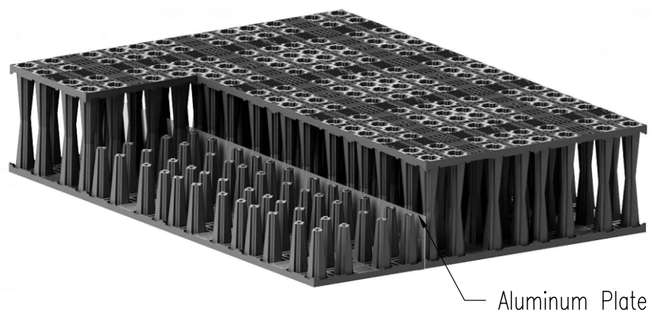

8. Pretreatment Row (if required)

LEGEND

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N°.	REVISION	DATE	BY
A	ISSUED FOR APPROVAL	12/12/2024	S.M.

ISSUED FOR APPROVAL
NOT FOR PRODUCTION

ACCESSORIES

BASIN-EZSTORM™-1001.01M³

PROJECT NAME:
RESIDENTIAL DEVELOPMENT
HOWARD AVENUE, WINDSOR, ON

PROJECT N°:	DATE:
XXXXXX-XX	12/12/2024
DRAWN BY: S.M.	CHECKED BY: S.K.
SCALE: SCALE	SHEET N°: 6/6

NEXT STORM
info@nextstorm.ca
Toll free : 1 877 565-6260
www.nextstorm.ca
1625, Boulevard Monseigneur-Langlois
Salaberry-de-Valleyfield J6S 1C2, Québec