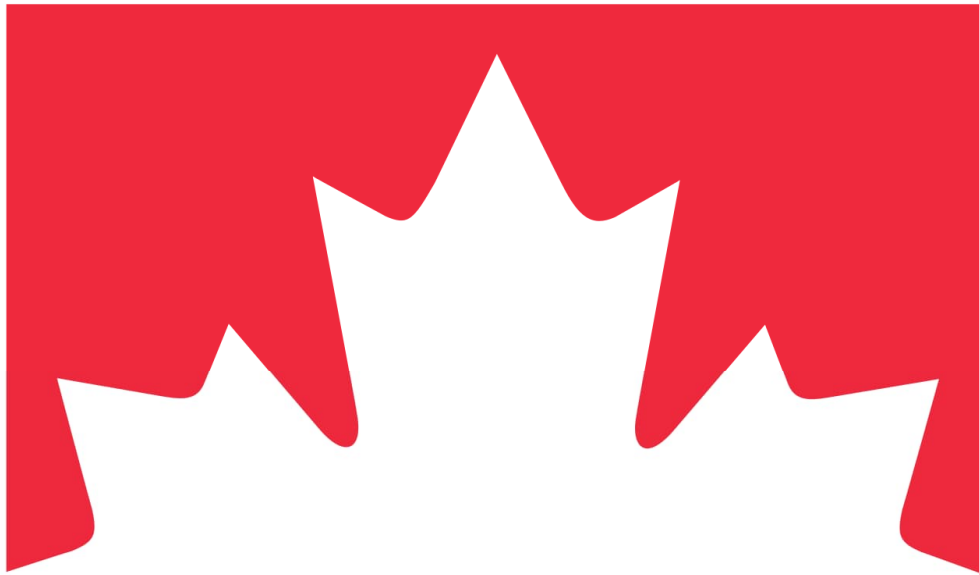




STORMWATER MANAGEMENT REPORT

FOR THE PROPERTY OF PETRO CANADA PRODUCTS LOCATED AT

**6250 HAZELDEAN ROAD @ CARP ROAD,
STITTSVILLE, ONTARIO**



PETRO-CANADA

Prepared For:
Suncor Energy Products Partnership

Prepared by:
J and B Engineering Inc.

25 Centurian Drive, Suite 201
Markham, Ontario, L3R 5N8

April 23, 2026



Stormwater Management Report

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Stormwater Management Report

1 INTRODUCTION

This stormwater management report was prepared on April 2026 by James Sam (P.Eng with direct experience with the Ministry related items for 15+ years in the civil field) for the site located in 6250 Hazeldean Rd to meet the stormwater management objectives set out by the MOE, City of Ottawa and the MECP and in a manner that mitigates any adverse effects. This report is accurate as of April 2026 based on the site assessment conducted in respect to the catchment area of the stormwater management works and following information provided:

- (1) Topographical and Legal survey by Annis, O’Sullivan, Vollebekk Ltd dated 24 Dec 2025
- (2) City Record Drawing obtained from City of Ottawa:
 - a. Dwg No. 13546-012R by McCormick Rankin Corporation revision dated 28 Jan 2010
 - b. Dwg No. 13546-017 by McCormick Rankin Corporation revision dated 28 Jan 2010
 - c. Dwg No. 13546-024R by McCormick Rankin Corporation revision dated 28 Jan 2010
 - d. Dwg No. 02 by Trow Associates Inc. revision dated 14 Sep 2005
 - e. Dwg No. 03 by Trow Associates Inc. revision dated 13 Oct 2005
- (3) Site plan prepared by K Paul Architect Inc dated 02 April 2026
- (4) Geotechnical Investigation for Pre-Construction Support of Future Development by SLR Consulting (Canada) Ltd. dated 20 Feb 2026.

2 GENERAL INFORMATION

2.1 Study Area

The study area is located at the North-East quadrant of Hazeldean Road – Carp Road intersection with a municipal address of 6250 Hazeldean Road, Stittsville, Ontario. The location of Study area is shown in Figure 1.

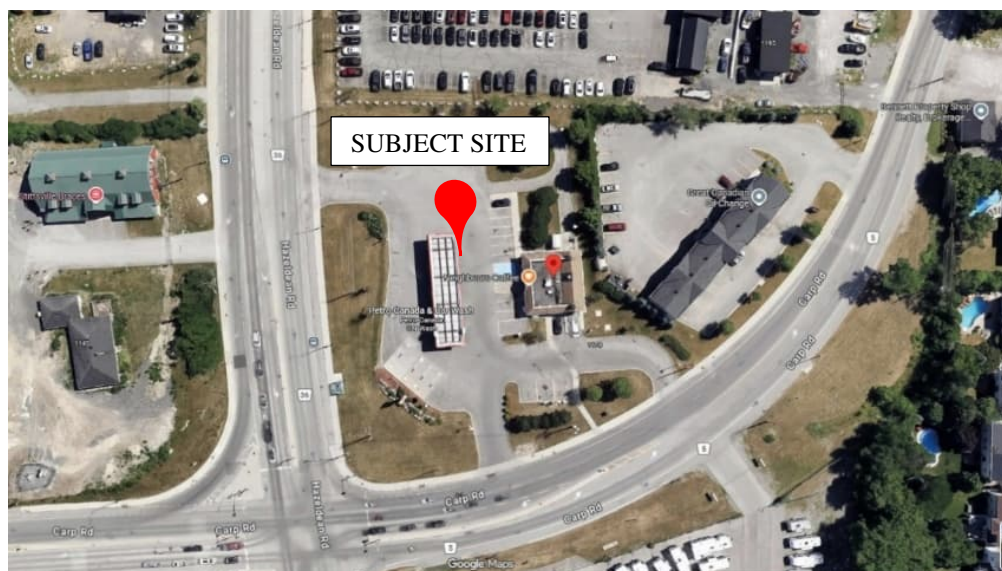


Figure 1 Study Area



Stormwater Management Report

I James Sam, conducted a site assessment and in my opinion, the proposed activity is an activity prescribed by section 2 of Environmental Protection Act - O. Reg. 245/11 -Registration under Part II.2 of the Act – General. The main activities proposed at this site as part of this redevelopment are fuel refilling, instore sales, drive through sales, and a carwash. Monitoring wells have been installed at various locations throughout the site to monitor any impact to the groundwater from the proposed activities at this site.

The site is located within the Mississippi valley source protection area and not within any drinking water intake protection zones or wellhead protection areas. Moreover, the site is situated in Ottawa, and not located in the Lake Simcoe watershed, Niagara escarpment planning area, the portion of the Oak ridges moraine area or the protected countryside in the greenbelt plan established under the Greenbelt Act 2025.

The precipitation patterns in this area are characterized by a humid continental climate with precipitation throughout the year, including snowy winters and wet summer months. Although annual precipitation is consistent, the highest rainfall typically occurs in late spring and summer, particularly in June while early spring conditions are influenced by snowmelt and increased runoff.

The overland flow route is in the northerly direction towards Hazeldean Road. As per the Geotechnical Report prepared by SLR Consulting Ltd dated Feb 20, 2026, the groundwater depth at the site varies between 5.0 - 7.7 meters below ground surface. The nature of the soil beneath the topsoil is mentioned in the report to be mostly sand.

2.2 Background

This study has been prepared on behalf of Petro Canada Products to address Stormwater Management (SWM) requirements for the proposed C-store and drive-thru restaurant re-development. The proposed construction consists of a single storey commercial building addition, drive-thru lanes and an underground storage tank.

This SWM Report provides details for stormwater quantity and quality control to ensure that the proposed re-development will not have any adverse effects on the existing drainage condition.

2.3 Objectives of Drainage and Stormwater Management Study

The objectives of the stormwater management study are to develop a strategy for the project that will:

- Identify potential stormwater runoff (quality) impacts to the receiving watercourses from the proposed development area.
- Address concerns from the review agencies including the City of Ottawa, Mississippi Valley Conservation Authority (MVCA) and the Ministry of Environment, Conservation and Parks (MECP) for the preparation of a Stormwater Management study for quantity, quality, and erosion and sediment control purposes.
- Provide an appropriate site drainage system for safe operational use.



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The existing study area is currently a developed commercial site. The site is proposed to construct a building addition to the existing c-store and the associated drive-thru lanes. The existing gas bar and carwash will remain as-is. Proposed land use is expected to be maintained as commercial. Record drawings obtained from the City of Ottawa were reviewed to obtain information relative to drainage and stormwater management within the project area.

The Site Grading Plan 13776-02 and the Site Services plan 13776-3 prepared by Trow Associates Inc., revision dated Sep 14, 2005, and Oct 13, 2005, respectively, were combined with a current topographical survey and locates information prepared by Annis, O’Sullivan, Vollebakk Ltd., dated Dec 24, 2025, to provide an accurate design. Refer to Appendix A for details.

3 DESIGN

3.1 Design Criteria

General Stormwater Management guidelines and information was obtained from the City of Ottawa Design Criteria and Standard Drawings and the record Site Services Drawing prepared by Trow Associates Inc.

3.2 Site Drainage Conditions

3.2.1 Existing Drainage Conditions

The subject property is completely developed and occupies a total area of approximately 0.61 ha of which 0.21 ha is landscape. The general topography of the site has an overland flow route in the northerly direction towards Hazeldean Road. For minor storm events, the site is self contained the storm runoff which is conveyed and capture by catchbasins located throughout the site prior to discharging into the 525mm storm sewer system along Carp Road. The surface runoff coefficient for the study area under existing conditions is shown in Table 3-1 below.

Surface Composition		Impervious	Pervious	Combined
Existing Condition	(m ²)	3940.72	2118.58	6059.30
	(ha)	0.39	0.21	0.61
Runoff Coefficient		0.90	0.25	0.67

Table 3-1 Existing Runoff Coefficients



Stormwater Management Report

3.2.2 Future Drainage Conditions

The proposed development will consist of a single-story commercial building addition with associated drive-thru lanes and will maintain the existing car wash and gas bar. The coverage area will remain the same as 0.61 ha; however, the stormwater runoff is expected to increase from $C= 0.67$ to $C= 0.71$ as the overall imperviousness increases with the re-development due to increase of drive through lanes. Table 3-2 below shows the weighted surface runoff coefficient.

Surface Composition		Impervious	Pervious	Combined
Proposed Condition	(m ²)	4272.18	1787.12	6059.30
	(ha)	0.43	0.18	0.61
Runoff Coefficient		0.90	0.25	0.71

Table 3-2: Future Runoff Coefficients

The change in runoff coefficient is approximately 8.4%. Therefore, an increase in storage amount by the same increase in runoff shall be considered to account for the additional flow.

3.3 Proposed Stormwater Management Plan

3.3.1 Quantity Control

Based on review of the existing record drawings prepared by Trow Associates Inc., revision dated Oct 13, 2005, the stormwater management quantity control for the site is managed by an existing 122mm orifice at the storm outlet at EX. CBMH#5.

The existing orifice will generate a storm storage requirement of 64.86 m³ based on a 100-year maximum ponding elevation of 124.18m. The existing storage was met by a combination of surface ponding and underground conduits, refer to P-301 and Appendix for additional details.

However, considering the runoff coefficient has increased for the proposed redevelopment, to account for increase (8.4%) in impervious, it is proposed to increase the storage by 8.4% from 64.86 m³ to 70.32m³. The storage requirements will be achieved by a combination of above-ground ponding, underground conduits and stormwater infrastructure as shown in Table 3-3 below.



Stormwater Management Report

Structure	Diameter	Area	TOP	Max Water Level	Invert	Volume
	(mm)	(m ²)	(m)	(m)	(m)	(m ³)
EX. CBMH 5	1200	1.13	124.98	124.18	122.01	2.45
EX. CBMH 4	1200	1.13	124.68	124.18	122.10	2.35
EX. CBMH 3	1200	1.13	124.70	124.18	122.25	2.18
EX. CBMH 1	1200	1.13	124.08	124.08	122.36	1.95
EX. CB 1	600x600	0.36	124.01	124.01	122.58	0.51
NEW STM MH 1	1200	1.13	125.15	124.18	122.37	2.05
NEW CB 2	600x600	0.36	124.60	124.18	122.46	0.62
EX. DICB 2	600x600	0.36	124.70	124.18	122.94	0.45
EX. CB 2	600x600	0.36	125.25	124.18	123.63	0.20
NEW CB 1	600x600	0.36	124.61	124.18	122.57	0.58
NEW CB 3	600x600	0.36	123.88	123.88	122.48	0.50
					Sum	15.37

U/G Conduit		Diameter	Area	Length	Volume
From	To	(mm)	(m ²)	(m)	(m ³)
EX. CB 2	EX. CBMH 5	250	0.0491	16.50	0.81
C-Store	EX. CBMH 5	150	0.0177	16.00	0.28
Carwash	EX. CBMH 5	100	0.0079	5.50	0.04
EX. DICB 2	EX. CBMH 2	450	0.1590	16.50	2.62
NEW CB 2	EX. CBMH 2	250	0.0491	7.50	0.37
EX. CBMH 2	EX. CBMH 3	450	0.1590	20.00	3.18
EX. CB 1	EX. CBMH 3	250	0.0491	17.00	0.83
EX. CBMH 1	EX. CBMH 3	300	0.0707	26.50	1.87
EX. CBMH 3	EX. CBMH 4	600	0.2827	34.00	9.61
Gasbar	EX. CBMH 4	100	0.0079	9.00	0.07
Gasbar	EX. CBMH 4	100	0.0079	9.00	0.07
EX. CBMH 4	EX. CBMH 5	450	0.1590	15.50	2.47
NEW CB 1	EX. CBMH 2	250	0.0491	17.00	0.83
NEW CB 3	EX. CBMH 1	200	0.0314	18.00	0.57
				Sum	23.64
Ponding Location	Pond Top Area	Pond Bottom Area	100-yr Elev	Depth	Volume
	(m ²)	(m ²)	(m)	(m)	(m ³)
EX. CB 1	94.22	0.00	124.18	0.17	5.34
EX. CBMH 1	79.26	0.00	124.18	0.10	2.64
NEW CB 3	130.04	93.07	124.18	0.30	31.62
				Sum	39.60

Table 3-3 Storage volumes provided by stormwater infrastructure and underground conduits.

Proposed Storage Volume For 100-Year Event (m ³)	
Catch Basins & Manholes	15.37
Underground Conduits	23.64
Surface Ponding	39.60
Total Provided	78.61

Table 3-4 Total storage volumes



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Table 3-4 provides a summary of the storage volume proposed for the subject site for a total storage of 78.61m³ which is more than the 70.32m³ estimated; hence maintaining the surface runoff storage requirements for the 100-year storm.

3.3.2 Quality Control

Quality control is serviced by an existing Oil water separator located at the storm outlet for the subject site just downstream of the control manhole identified as EX. CBMH 5. The existing OWS will be maintained to continue to provide water quality treatment. Refer to Appendix C for details.

Monitoring of discharge from the OWS is required in accordance with the ECA and documentation of the monitoring to be kept on file for a period of 5 years.

4 OPERATIONS AND MAINTENANCE

A sediment collection device (stormwater pretreatment device) and other methods are utilized to treat discharge that is leaving the site. Examples of pretreatment devices include, but are not limited to, an appropriately sized catch basin with sump, pretreatment catchment device and an OWS. Installation, operation, and maintenance of these devices shall be in accordance with manufacturer's recommendations. With this in place, most of the suspended solids captured on the site will be settle into the OWS. The pretreatment structures shall be inspected for any debris that will restrict inlet flow rates. Outfall structures such as orifice tube must also be inspected for any obstructions that would restrict outlet flow rates. OSHA Guidelines must be followed when inspecting or cleaning any structure. This manual should be used in conjunction with but does not supersede local regulations or regulatory authorities.

5 EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION

The erosion potential of the study area was assessed using methods described in the "*MTO Drainage Management Manual*" of temporary erosion and sediment control measures suitable for construction sites close to highways.

During Site construction, various temporary measures will be implemented to prevent the discharge of sediment laden Stormwater from the Site. These measures include silt fencing, catchbasin buffers and mud-mats, etc., as shown on Appendix D – Erosion and Sediment Control Plan P-302.

In addition to the above, the following "good housekeeping" measures are recommended:

- All exposed soil shall be stabilized as soon as possible with a seed and mulch application as directed by the Engineer.
- No construction activity or machinery shall intrude beyond the silt/snow fence or limit of construction area. All construction vehicles shall leave the site at designated locations as shown on the plans.
- Stockpiles of soil shall be set back from any watercourse and stabilized against erosion as soon as possible. A set back of at least 15m from any top-of-bank, watercourse or pond is required.
- Cleaning and repairs of mud-mats and any other temporary sediment control measures shall be completed as deemed necessary through regular inspection.

Stormwater Management Report

- Sediment/slit shall be removed from the sediment control devices after storm events and deposited in areas as approved by the engineer.
- All re-graded areas within the development which are not occupied by buildings, roadways, sidewalks, or driveways shall be top-soiled and sodded/seeded immediately after completion of final grading operations as directed by the engineer.

6 SUMMARY AND CONCLUSIONS

In summary, all required conditions for City of Ottawa and other authorities have been satisfied as follows:

- There is no increase in Stormwater flow from the Site.
- The existing OWS will be maintained to continue to provide water quality treatment.
- The Sediment and Erosion Control Plan demonstrates how erosion and sedimentation will be minimized during construction.

This SWM Report satisfies all requirements for stormwater quantity, quality, and erosion & sedimentation control.



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PETRO CANADA PRODUCTS
6250 HAZELDEAN ROAD
STITTSVILLE, ON

Stormwater Management Report

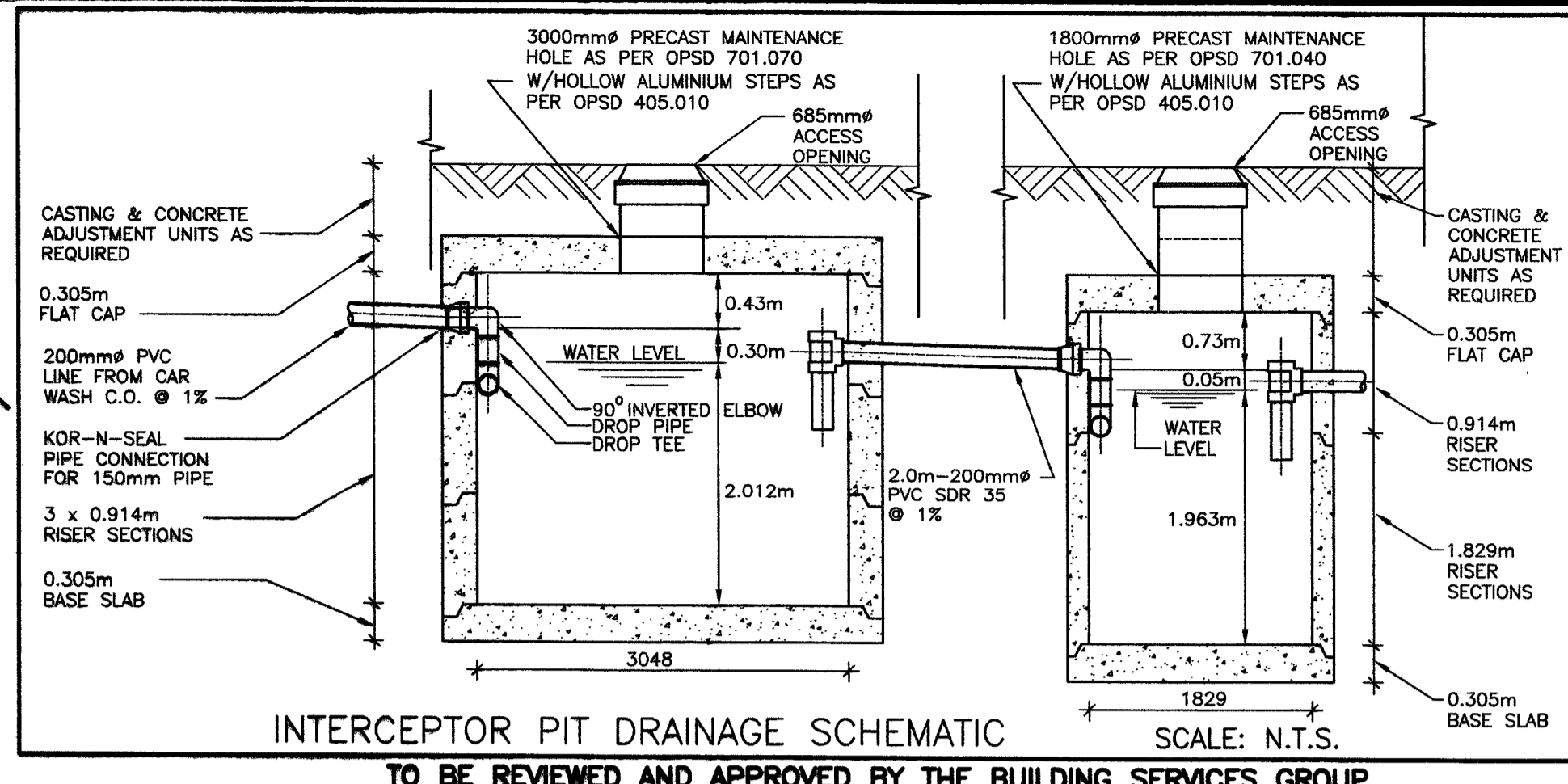
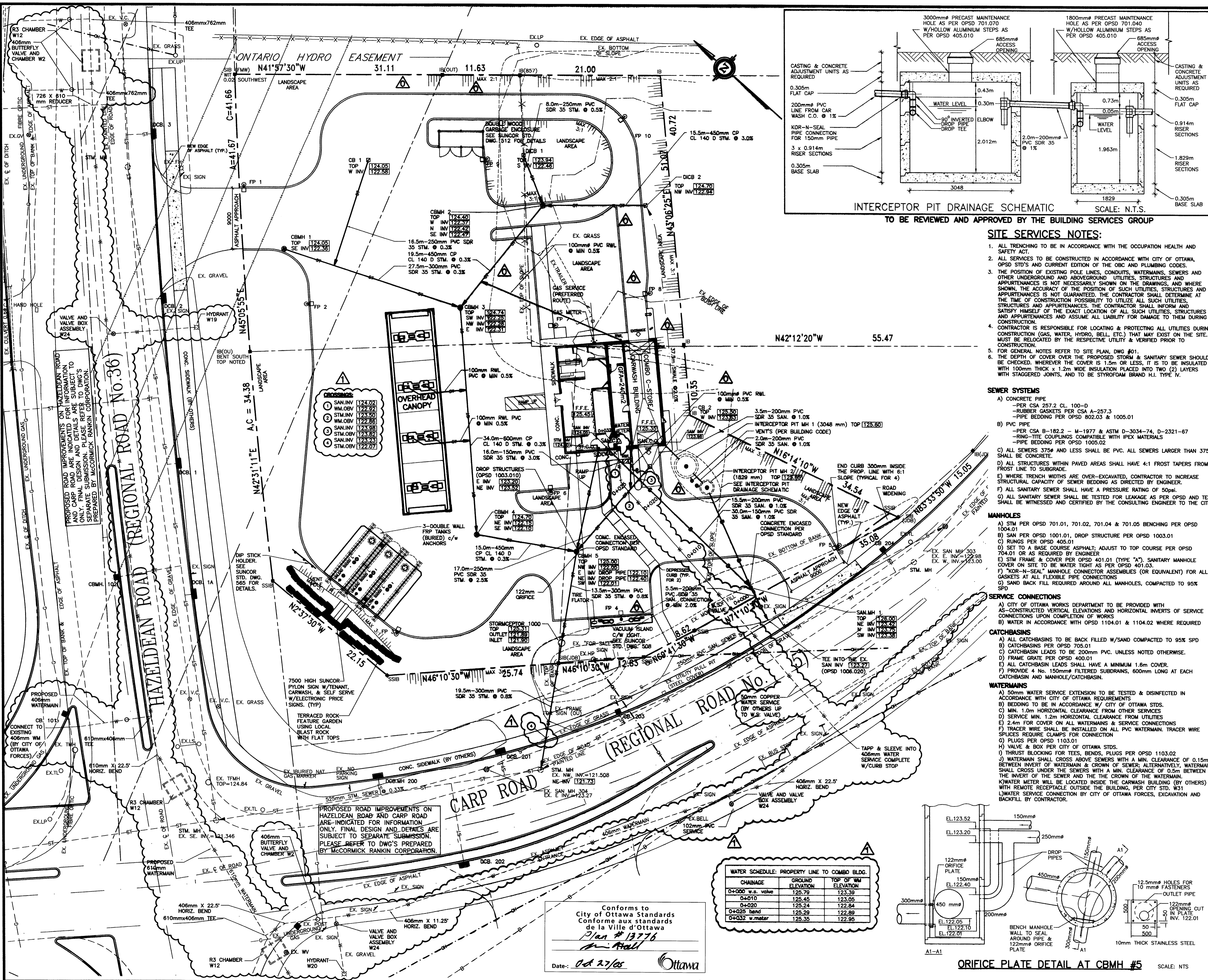
Appendix A EXISTING SITE GRADING PLAN



PETRO CANADA PRODUCTS
6250 HAZELDEAN ROAD
STITTSVILLE, ON

Stormwater Management Report

Appendix B EXISTING SITE SERVICING PLAN



SITE SERVICES NOTES:

- ALL TRENCHING TO BE IN ACCORDANCE WITH THE OCCUPATION HEALTH AND SAFETY ACT.
- ALL SERVICES TO BE CONSTRUCTED IN ACCORDANCE WITH CITY OF OTTAWA, OPSD'S AND CURRENT EDITION OF THE OBC AND PLUMBING CODES.
- THE POSITION OF EXISTING POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES, STRUCTURES AND APPURTENANCES IS NOT NECESSARILY SHOWN ON THE DRAWINGS AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES, STRUCTURES AND APPURTENANCES IS NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE AT THE TIME OF CONSTRUCTION POSSIBILITY TO UTILIZE AS SUCH UTILITIES, STRUCTURES AND APPURTENANCES. THE CONTRACTOR SHALL INFORM AND SATISFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES, STRUCTURES AND APPURTENANCES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING & PROTECTING ALL UTILITIES DURING CONSTRUCTION (GAS, WATER, HYDRO, BELL, ETC.) THAT MAY EXIST ON THE SITE. MUST BE RELOCATED BY THE RESPECTIVE UTILITY & VERIFIED PRIOR TO CONSTRUCTION.
- FOR CHECKED NOTES REFER TO SITE PLAN, DWG #01.
- THE DEPTH OF COVER OVER THE PROPOSED STORM & SANITARY SEWER SHOULD BE DETERMINED. WHERE THE COVER IS 1.5m OR LESS, IT IS TO BE INSULATED WITH 100mm THICK X 1.2m WIDE INSULATION PLACED INTO TWO (2) LAYERS WITH STAGGERED JOINTS, AND TO BE STYROFOAM BRAND H.I. TYPE IV.

SEWER SYSTEMS

- A) CONCRETE PIPE**
 - PER CSA 257.2 CL. 100-D
 - RUBBER GASKETS PER CSA A-257.3
 - PIPE BEDDING PER OPSD 802.03 & 1005.01
- B) PVC PIPE**
 - PER CSA B-182.2 - M-1977 & ASTM D-3034-74, D-2321-67
 - RING-JOINT COUPLING COMPATIBLE WITH IPEX MATERIALS
 - PIPE BEDDING PER OPSD 1005.02
- C) ALL SEWERS 375mm AND LESS SHALL BE PVC. ALL SEWERS LARGER THAN 375mm SHALL BE CONCRETE.**
- D) ALL STRUCTURES WITHIN PAVED AREAS SHALL HAVE 4:1 FROST TAPERS FROM FROST LINE TO SUBGRADE.**
- E) WHERE TRENCH WIDTHS ARE OVER-EXCAVATED, CONTRACTOR TO INCREASE STRUCTURAL CAPACITY OF SEWER BEDDING AS DIRECTED BY ENGINEER.**
- F) ALL SANITARY SEWER SHALL HAVE A PRESSURE RATING OF 50psi.**
- G) ALL SANITARY SEWER SHALL BE TESTED FOR LEAKAGE AS PER OPSD AND TEST SHALL BE WITNESSED AND CERTIFIED BY THE CONSULTING ENGINEER TO THE CITY.**

MANHOLES

- A) STM PER OPSD 701.01, 701.02, 701.04 & 701.05 BENCHING PER OPSD 1004.01**
- B) SAN PER OPSD 1001.01, DROP STRUCTURE PER OPSD 1003.01**
- C) RUNGS PER OPSD 405.01**
- D) SET AS BASE COURSE ASPHALT; ADJUST TO TOP COURSE PER OPSD 704.01 OR AS REQUIRED BY ENGINEER**
- E) STM FRAME & COVER PER OPSD 401.01 (TYPE "A"). SANITARY MANHOLE COVER ON SITE TO BE WATER TIGHT AS PER OPSD 401.03.**
- F) "KOR-SEAL" MANHOLE CONNECTOR ASSEMBLIES (OR EQUIVALENT) FOR ALL GASKETS AT ALL FLEXIBLE PIPE CONNECTIONS**
- G) SAND BACK FILL REQUIRED AROUND ALL MANHOLES, COMPACTED TO 95% SPD**

SERVICE CONNECTIONS

- A) CITY OF OTTAWA WORKS DEPARTMENT TO BE PROVIDED WITH AS-CONSTRUCTED ELEVATIONS AND HORIZONTAL INVERTS OF SERVICE CONNECTIONS UPON COMPLETION OF WORKS**
- B) WATER IN ACCORDANCE WITH OPSD 1104.01 & 1104.02 WHERE REQUIRED**

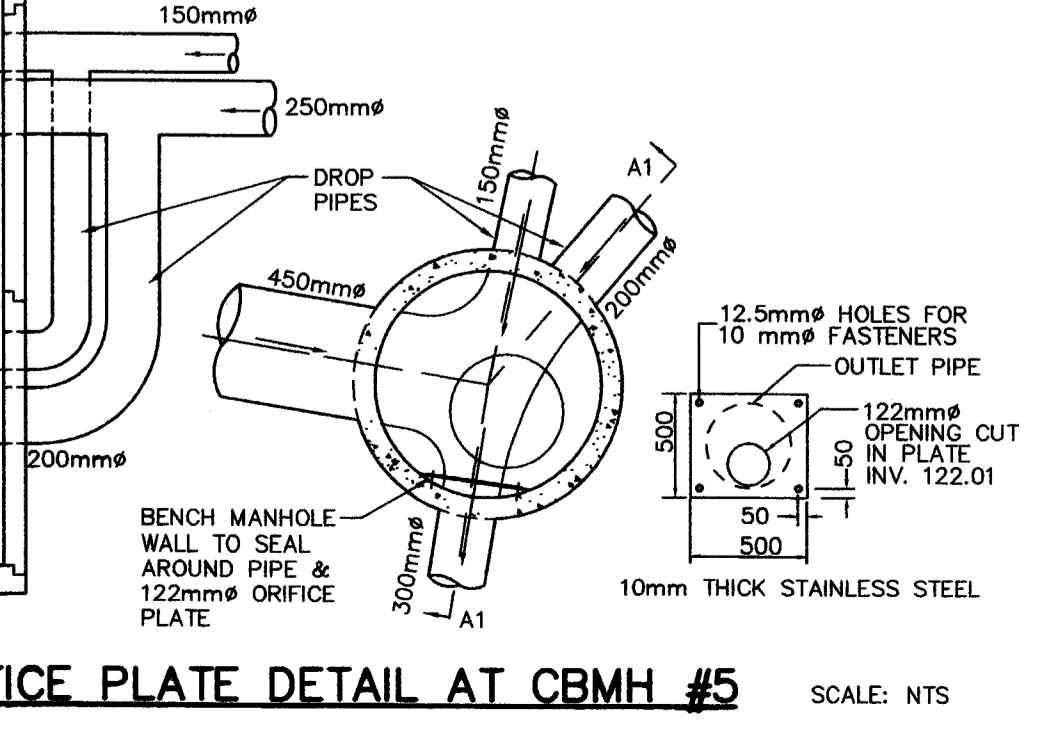
CATCHBASINS

- A) ALL CATCHBASINS TO BE BACK FILLED W/SAND COMPACTED TO 95% SPD**
- B) CATCHBASIN PER OPSD 705.01**
- C) CATCHBASIN LEADS TO BE 200mm PVC. UNLESS NOTED OTHERWISE.**
- D) FRAME GRATE PER OPSD 400.01**
- E) ALL CATCHBASIN LEADS SHALL HAVE A MINIMUM 1.6m COVER.**
- F) PROVIDE 4 No. 150mmØ FILTERED SUBDRAINS, 600mm LONG AT EACH CATCHBASIN AND MANHOLE/CATCHBASIN.**

WATERMANS

- A) 50mm WATER SERVICE EXTENSION TO BE TESTED & DISINFECTED IN ACCORDANCE WITH CITY OF OTTAWA REQUIREMENTS**
- B) BEDDING TO BE IN ACCORDANCE W/ CITY OF OTTAWA STDS.**
- C) MIN. 1.0m HORIZONTAL CLEARANCE FROM OTHER SERVICES**
- D) SERVICE MIN. 1.2m HORIZONTAL CLEARANCE FROM UTILITIES**
- E) 2.4m FOR COVER ON ALL WATERMANS & SERVICE CONNECTIONS**
- F) TRACER WIRE SHALL BE INSTALLED ON ALL PVC WATERMAIN. TRACER WIRE SPLICES REQUIRE CLAMPS FOR CONNECTION**
- G) PLUGS PER OPSD 1103.01**
- H) VALVE & BOX PER CITY OF OTTAWA STDS.**
- I) THRUST BLOCKING FOR TRENDS, BENDS, PLUGS PER OPSD 1103.02**
- J) WATERMAIN SHALL CROSS ABOVE SEWERS WITH A MIN. CLEARANCE OF 0.15m BETWEEN INVERT OF WATERMAIN & CROWN OF SEWER; ALTERNATIVELY, WATERMAIN SHALL CROSS UNDER THE SEWERS WITH A MIN. CLEARANCE OF 0.5m BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATERMAIN.**
- K) WATER METER WILL BE LOCATED INSIDE THE CARWASH BUILDING (BY OTHERS) WITH RETRIEVE RECEPTACLE OUTSIDE THE BUILDING, PER CITY STD. W51**
- L) WATER SERVICE CONNECTION BY CITY OF OTTAWA FORCES, EXCAVATION AND BACKFILL BY CONTRACTOR.**

ORIFICE PLATE DETAIL AT CBMH #5

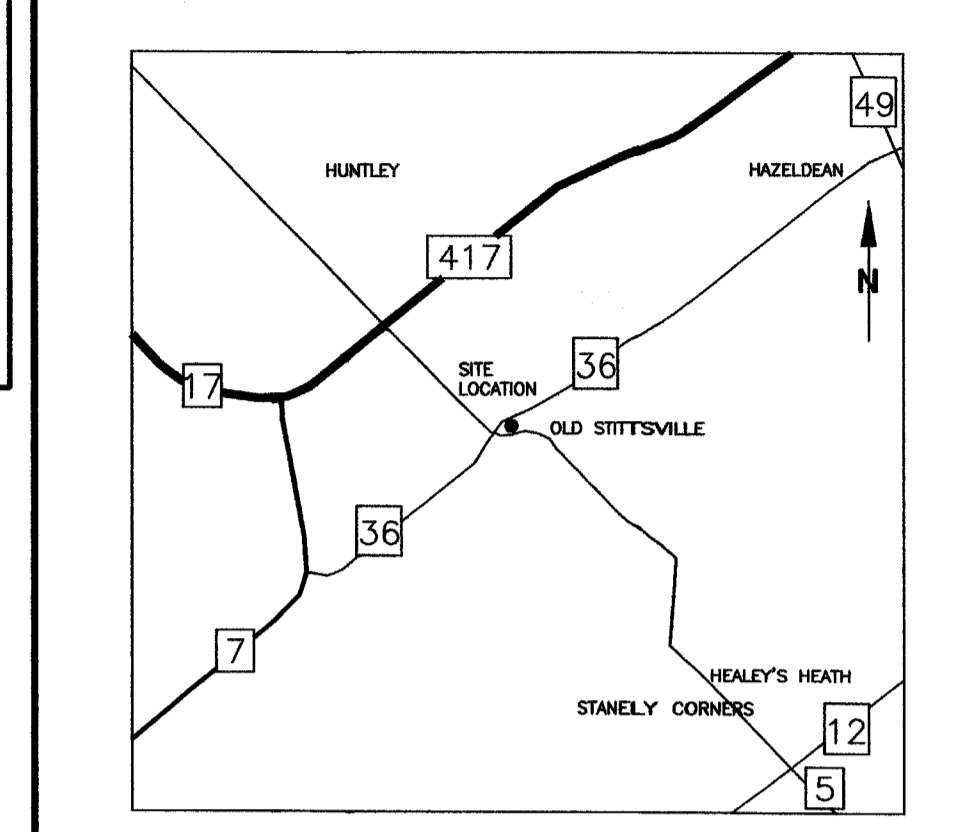


WATER SCHEDULE: PROPERTY LINE TO COMBO BLDG.

CHAMBER	GROUND ELEVATION	TOP OF WM ELEVATION
0+000 w.s. valve	125.79	123.39
0+010	125.45	123.05
0+020	125.24	122.84
0+025 bend	125.29	122.89
0+032 w.meter	125.35	122.95

REVISIONS

NO.	DESCRIPTION	DATE	BY	APP.
1	INFORMATION ON CARP ROAD AND HAZELDEAN ROAD UPDATED BASED ON LATEST DWG FROM MRC. WATER SERVICE & WATER SCHEDULE REVISED. CROSSINGS REVISED AND RENUMBERED.	OCT 13 2005	A.B.	
0	DWG UPDATED TO REFLECT SITE PLAN REV. "O". R.W. CONNECTIONS ADDED. ISSUED FOR CONSTRUCTION.	SEP 14 2005	A.B.	
G	DWG UPDATED TO REFLECT SITE PLAN REV. "J". ADJACENT LAND HATCHED AREA DELETED. INTERCEPTOR PIT DRAINAGE SCHEMATIC REVISED.	JULY 06 2005	A.B.	
F	DWG UPDATED TO REFLECT SITE PLAN REV. "I". STORM, SANITARY, WATER SERVICE, WATER SCHEDULE, ORIFICE PLATE DETAIL, CROSSINGS & LEGEND REVISED. INSULATION DETAILS DELETED.	JUN 23 2005	A.B.	



LEGEND:

- | | | | |
|--------|-------------------------------|-----------|--------------------------------|
| IB | EX. IRON BAR | ST | EX. STORM SEWER |
| LS | EX. STANDARD I.B. | S | EX. SANITARY SEWER |
| LP | EX. LIGHT POLE | W | EX. WATER MAINS |
| HP | EX. HYDRO POLE | G | EX. GAS MAINS |
| UP | EX. UTILITY POLE | OH | EX. OVERHEAD HYDRO |
| BL | EX. BELL PEDESTAL | BS | EX. BELL SERVICES |
| TP | EX. TRAFFIC PEDESTAL | U/C | EX. U/C HYDRO SERVICE |
| VP | EX. VALVE | SV | EX. STORM SEWER SERVICE |
| WC | EX. WATER VALVE CHAMBER | SS | EX. SANITARY SEWER |
| FL | EX. FIRE HYDRANT | W | EX. WATER SERVICE |
| C.O. | CLEAN OUT | G | EX. GAS SERVICE |
| RWL | RING-JOINT COUPLING | H | EX. HYDRO SERVICE |
| FP | EX. FLOOPOLE | B | EX. BELL SERVICE |
| SM | EX. STORM M.H. | CC | EX. CONC. CURB |
| SMH | EX. SANITARY M.H. | CC | EX. CONC. CURB CUT |
| EC | EX. CATCH BASIN | X (92.73) | EX. ELEVATION TO REMAIN |
| SB | SANITARY M.H. | X 92.53 | EX. ELEVATION TO REMAIN |
| CB | CATCH BASIN | X 92.53 | ELEVATION |
| CBM.H. | CATCH BASIN M.H. | + [92.53] | PROPOSED ELEVATION (BY OTHERS) |
| MC | MAJOR OVERLAND FLOW DIRECTION | - 2.0% | SLOPE |

SCALE 1:250 METRES

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

SITE BENCHMARKS

ELEVATION NOTE:
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO WEBSTER & SIMMONDS SURVEYING LTD. BENCHMARK, FIRE HYDRANT ON LOT 32 REGISTERED PLAN 4M-1192, BOLT ON FLANGE HAVING AN ELEVATION OF 124.370m.

SERVICE NOTE:
SERVICE LOCATIONS SHOWN HEREON ARE APPROXIMATE. SIZES ARE TAKEN FROM AS-BUILT DRAWINGS PREPARED BY THE CITY OF OTTAWA WORKS DEPT.

PROFESSIONAL ENGINEER
B.B. HUSIK
90484346
ADVANCE OF OTTAWA

PROFESSIONAL DESIGNER
J.T. MEDCALF
120905
ADVANCE OF OTTAWA

OWNER/CLIENT:

SUNCOR ENERGY

SUNCOR ENERGY PRODUCTS INC. 36 YORK MILLS RD., TORONTO, ON M2P 2Z5
TEL: (416) 733-7224, FAX: (416) 733-2113

Trow Associates Inc.
1595 Clark Boulevard
Brampton, Ontario L6T 4V1
TEL: (905) 793-9800 FAX: (905) 409-1479

LOCATION:
6250 HAZELDEAN ROAD & CARP ROAD OTTAWA (STITTSVILLE), ONTARIO

SITE SERVICES PLAN

DESIGNED: B.H./A.B.	DRAWN: A.B.	S/S NO.:	D. No.:
CHECKED: J.M./B.H.	DATE: SEP 2003		65044
SCALE: 1:250	PROJECT NO.:	DWG. NO.:	
CAD FILE: 68094A.dwg	0068094d		03

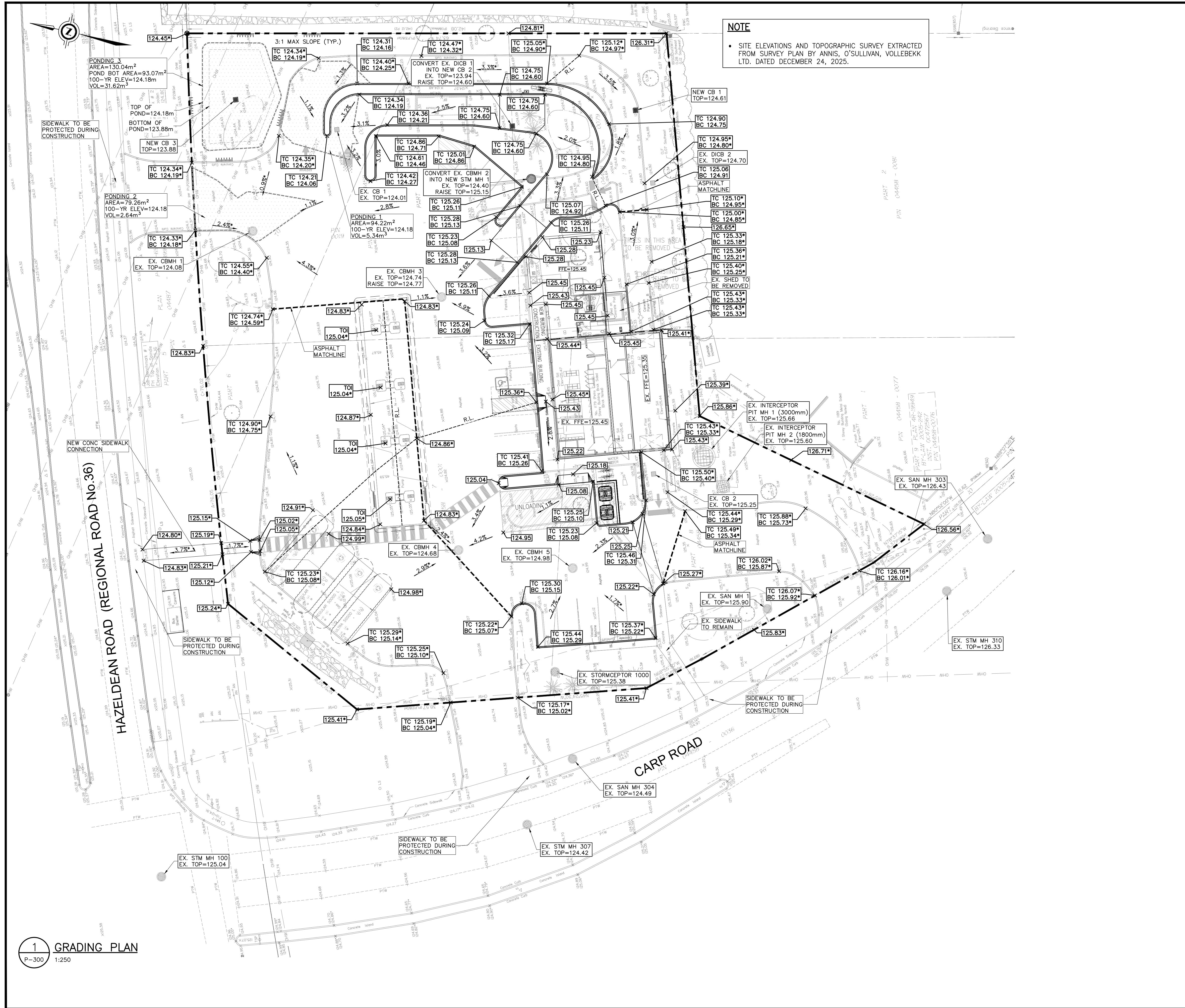
Conforms to
City of Ottawa Standards
Conforme aux standards
de la Ville d'Ottawa
Plan # 13776
Date: Oct 27/05



PETRO CANADA PRODUCTS
6250 HAZELDEAN ROAD
STITTSVILLE, ON

Stormwater Management Report

Appendix C PROPOSED SITE GRADING PLAN



NOTE

- SITE ELEVATIONS AND TOPOGRAPHIC SURVEY EXTRACTED FROM SURVEY PLAN BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. DATED DECEMBER 24, 2025.



KEY PLAN
NTS

GENERAL NOTES

- VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- DO NOT SCALE DRAWINGS.
- REPORT ALL DISCOVERIES OF ERRORS, OMISSIONS OR DISCREPANCIES TO THE DESIGN ENGINEER AS APPLICABLE.
- USE ONLY LATEST REVISED DRAWINGS OR THOSE THAT ARE MARKED "ISSUED FOR CONSTRUCTION".
- DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL COMPLY WITH THE PROVINCIAL AND LOCAL BUILDING CODES LATEST EDITION.
- ALL WORKS AND MATERIALS USED SHALL COMPLY AS REQUIRED BY THE BUILDING CODE LATEST EDITION.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS & SPECIFICATIONS.
- EVERYTHING IS TO BE CONSIDERED NEW UNLESS SPECIFIED OTHERWISE.

REVISION TABLE		
REV.	DESCRIPTION	DRAWN APP'D. DATE
1	REVISED AS PER COMMENTS	BL JS 10 MAR '26

TOPOGRAPHIC PLAN OF SURVEY OF PART OF LOT 23 CONCESSION 12 GEOGRAPHIC TOWNSHIP OF GOULBOURN CITY OF OTTAWA
Surveyed by Annis, O'Sullivan, Vollebakk Ltd.

Underground Utility Services Marked on Surface (Point) By a Third Party Located & Illustrated As Shown on this Plan

Bearings are grid, derived from Can-Net 2016 Real Time Network GPS observations, UTM Zone 18 (75° West Longitude) NAD-83 (CSRS) (2010).
For bearing comparisons, a rotation of 0°46'00" clockwise was applied to bearings on plan P1, P2 & P3.

ELEVATION NOTES

- Elevations shown are geodetic and are referred to the CGVD28 geodetic datum, derived from Benchmark No. 0011968U118 having an elevation of 126.180 metres.
- It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that its relative elevation and description agrees with the information shown on this drawing.

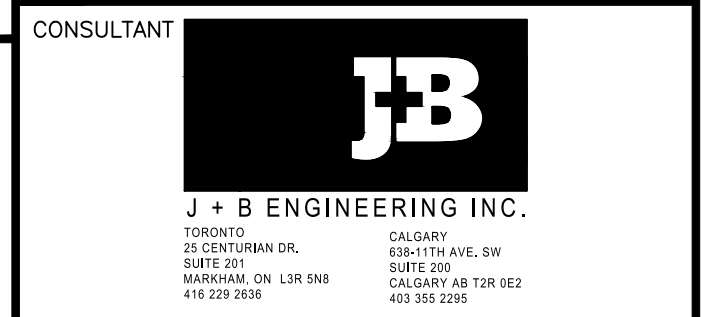
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SUNCOR	ISSUED FOR REVIEW	05 MAR '26
SUNCOR	ISSUED FOR REVIEW	10 MAR '26
SUNCOR	ISSUED FOR SPA	17 APR '26

METRIC
ALL DIMENSIONS ARE IN MILLIMETRES U.N.O. CONTRACTOR TO CHECK/VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE REPORTED TO THE PROJECT DESIGNER. DO NOT SCALE DRAWINGS.



LEGEND

- EXISTING ELEVATION
- EXISTING CATCHBASIN
- EXISTING MANHOLE
- EXISTING CATCHBASIN MANHOLE
- PROPOSED SLOPE
- EXISTING SLOPE
- PROPOSED ELEVATION
- EXISTING ELEVATION TO MATCH PROP. ELE. (CURB TOP)
- PROP. ELE. (CURB BOTTOM)
- NEW MANHOLE
- NEW CATCHBASIN
- PROPERTY LINE
- ASPHALT MATCHLINE
- RIDGE LINE
- OVERLAND FLOW
- SURFACE PONDING AREA



DRAWING TITLE:
SITE GRADING PLAN

PROJECT:
6250 HAZLEDEAN ROAD & CARP ROAD STITTVILLE, ON

DRAWN BY:	BL	CAD INFO.:	SHEET SIZE D (559 x 864)
DRAWING SCALE:	1:250	CONSULTANT	PETRO-CANADA
DATE DRAWN:	05 MAR '26	CONSULTANT	250358-P-300
CHECKED BY:	JS	PLOT SCALE	1:1
APPROVED BY:	JS	PLOT DATE	
		PLOT CONFIGURATION	

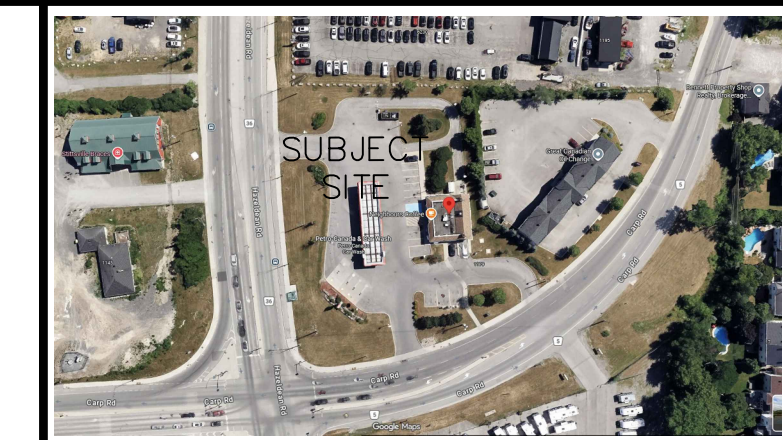
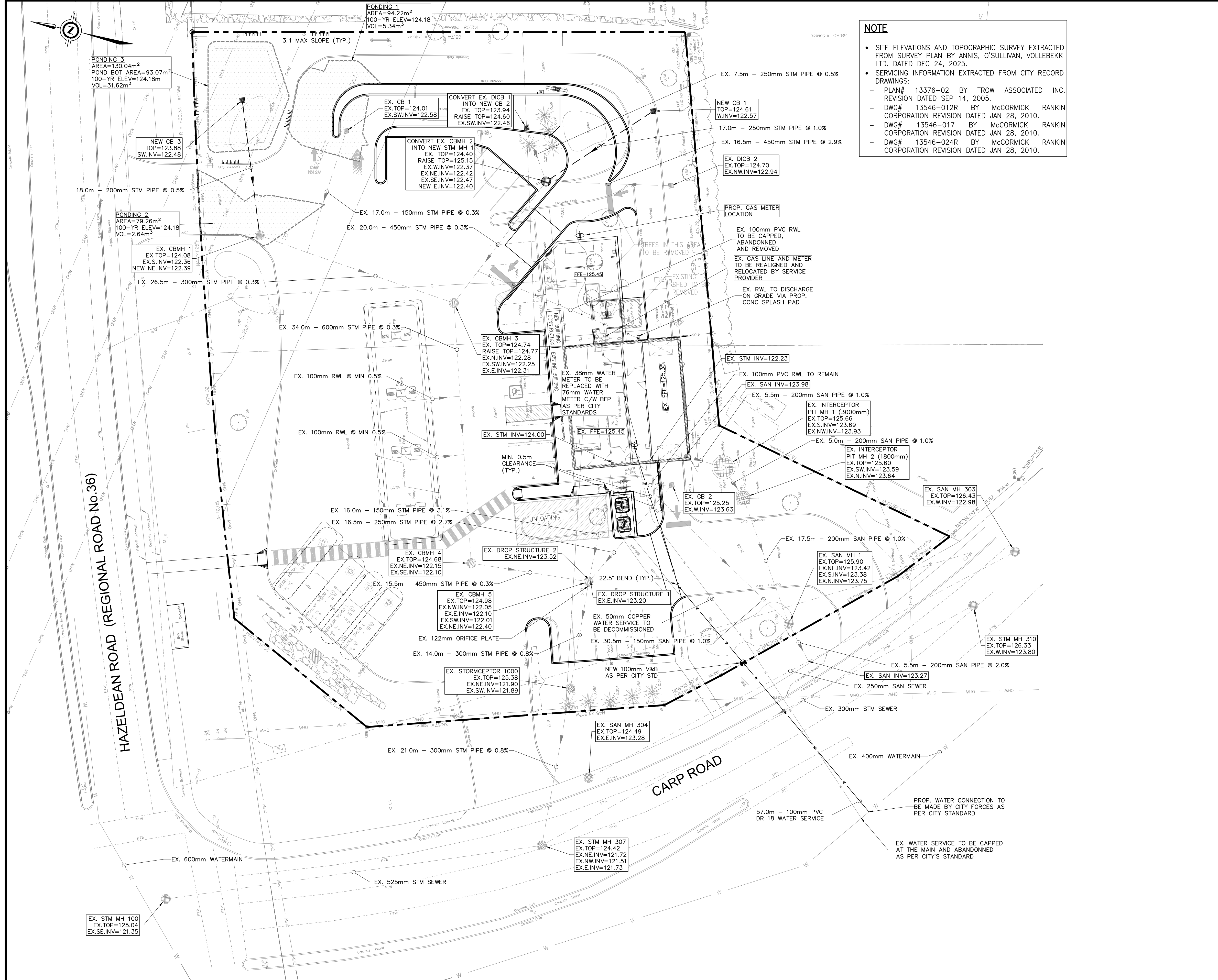
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PETRO CANADA PRODUCTS
6250 HAZELDEAN ROAD
STITTSVILLE, ON

Stormwater Management Report

Appendix D PROPOSED SITE SERVICING PLAN



KEY PLAN
NTS

GENERAL NOTES

- VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- DO NOT SCALE DRAWINGS.
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TOPOGRAPHIC PLAN OF SURVEY OF PART OF LOT 23 CONCESSION 12 GEOGRAPHIC TOWNSHIP OF GOULBOURN CITY OF OTTAWA
Surveyed by Annis, O'Sullivan, Vollebkk Ltd.

Underground Utility Services Marked on Surface (Paint) by a Third Party Located & Illustrated As Shown on This Plan

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LEGEND

- EXISTING CATCHBASIN
- EXISTING MANHOLE
- EXISTING CATCHBASIN MANHOLE
- NEW MANHOLE
- NEW CATCHBASIN
- EXISTING STORM LINE
- EXISTING SANITARY LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- PROPOSED STORM LINE
- PROPERTY LINE
- OVERLAND FLOW
- SURFACE PONDING AREA

REVISION TABLE

REV.	DESCRIPTION	DRAWN	APP'D.	DATE
1	REVISED AS PER COMMENTS	BL	JS	10 MAR '26

ISSUE TABLE

TO	FOR	DATE
SUNCOR	ISSUED FOR REVIEW	05 MAR '26
SUNCOR	ISSUED FOR REVIEW	10 MAR '26
SUNCOR	ISSUED FOR SPA	17 APR '26

METRIC
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CONSULTANT

J + B ENGINEERING INC.
TORONTO: 25 GERRARD ST. E. SUITE 200, MARKHAM, ON L3R 9H8, 416 229 2908
CALGARY: 8841 STEELES AVE. SW. SUITE 200, CALGARY, AB T2R 0E2, 403 505 2256

DRAWING TITLE:
SITE SERVICING PLAN

PROJECT:
6250 HAZELDEAN ROAD & CARP ROAD
STITTVILLE, ON

DRAWN BY:	BL	CAD INFO.:	BL
DRAWING SCALE:	1:250	SHEET SIZE	D (559 x 864)
DATE DRAWN:	05 MAR '26	CONSULTANT	PETRO-CANADA
CHECKED BY:	JS	PROJECT NO.	250358-P-301
APPROVED BY:	JS	PLOT SCALE	1:1
		PLOT CONFIGURATION	

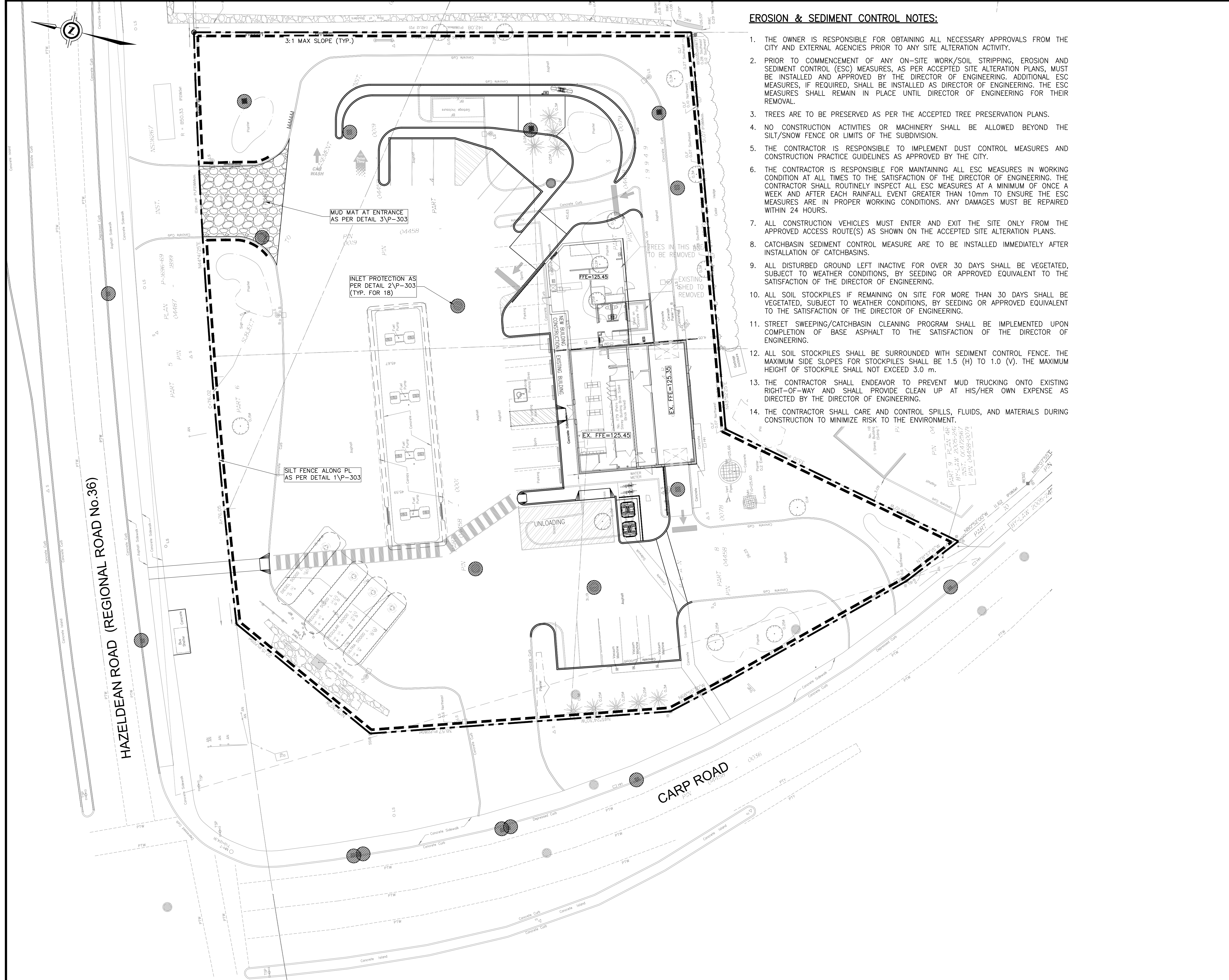
STD No./OUTLET No. **65044** SHEET No. **P301**



PETRO CANADA PRODUCTS
6250 HAZELDEAN ROAD
STITTSVILLE, ON

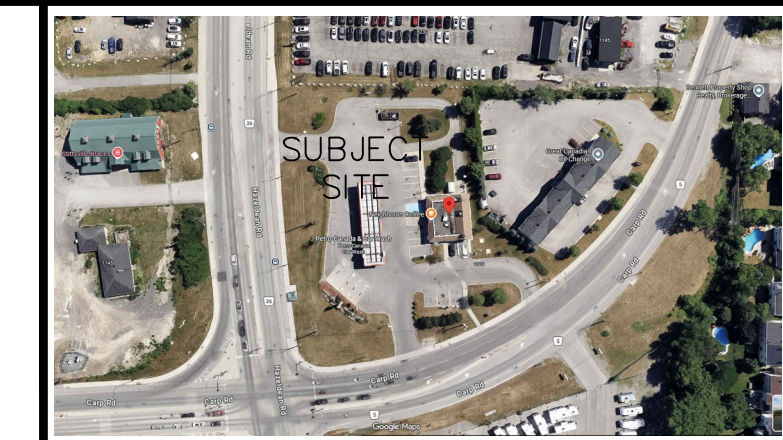
Stormwater Management Report

Appendix E PROPOSED EROSION AND SEDIMENT CONTROL PLAN



EROSION & SEDIMENT CONTROL NOTES:

1. THE OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS FROM THE CITY AND EXTERNAL AGENCIES PRIOR TO ANY SITE ALTERATION ACTIVITY.
2. PRIOR TO COMMENCEMENT OF ANY ON-SITE WORK/SOIL STRIPPING, EROSION AND SEDIMENT CONTROL (ESC) MEASURES, AS PER ACCEPTED SITE ALTERATION PLANS, MUST BE INSTALLED AND APPROVED BY THE DIRECTOR OF ENGINEERING. ADDITIONAL ESC MEASURES, IF REQUIRED, SHALL BE INSTALLED AS DIRECTOR OF ENGINEERING. THE ESC MEASURES SHALL REMAIN IN PLACE UNTIL DIRECTOR OF ENGINEERING FOR THEIR REMOVAL.
3. TREES ARE TO BE PRESERVED AS PER THE ACCEPTED TREE PRESERVATION PLANS.
4. NO CONSTRUCTION ACTIVITIES OR MACHINERY SHALL BE ALLOWED BEYOND THE SILT/SNOW FENCE OR LIMITS OF THE SUBDIVISION.
5. THE CONTRACTOR IS RESPONSIBLE TO IMPLEMENT DUST CONTROL MEASURES AND CONSTRUCTION PRACTICE GUIDELINES AS APPROVED BY THE CITY.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ESC MEASURES IN WORKING CONDITION AT ALL TIMES TO THE SATISFACTION OF THE DIRECTOR OF ENGINEERING. THE CONTRACTOR SHALL ROUTINELY INSPECT ALL ESC MEASURES AT A MINIMUM OF ONCE A WEEK AND AFTER EACH RAINFALL EVENT GREATER THAN 10mm TO ENSURE THE ESC MEASURES ARE IN PROPER WORKING CONDITIONS. ANY DAMAGES MUST BE REPAIRED WITHIN 24 HOURS.
7. ALL CONSTRUCTION VEHICLES MUST ENTER AND EXIT THE SITE ONLY FROM THE APPROVED ACCESS ROUTE(S) AS SHOWN ON THE ACCEPTED SITE ALTERATION PLANS.
8. CATCHBASIN SEDIMENT CONTROL MEASURE ARE TO BE INSTALLED IMMEDIATELY AFTER INSTALLATION OF CATCHBASINS.
9. ALL DISTURBED GROUND LEFT INACTIVE FOR OVER 30 DAYS SHALL BE VEGETATED, SUBJECT TO WEATHER CONDITIONS, BY SEEDING OR APPROVED EQUIVALENT TO THE SATISFACTION OF THE DIRECTOR OF ENGINEERING.
10. ALL SOIL STOCKPILES IF REMAINING ON SITE FOR MORE THAN 30 DAYS SHALL BE VEGETATED, SUBJECT TO WEATHER CONDITIONS, BY SEEDING OR APPROVED EQUIVALENT TO THE SATISFACTION OF THE DIRECTOR OF ENGINEERING.
11. STREET SWEEPING/CATCHBASIN CLEANING PROGRAM SHALL BE IMPLEMENTED UPON COMPLETION OF BASE ASPHALT TO THE SATISFACTION OF THE DIRECTOR OF ENGINEERING.
12. ALL SOIL STOCKPILES SHALL BE SURROUNDED WITH SEDIMENT CONTROL FENCE. THE MAXIMUM SIDE SLOPES FOR STOCKPILES SHALL BE 1.5 (H) TO 1.0 (V). THE MAXIMUM HEIGHT OF STOCKPILE SHALL NOT EXCEED 3.0 m.
13. THE CONTRACTOR SHALL ENDEAVOR TO PREVENT MUD TRUCKING ONTO EXISTING RIGHT-OF-WAY AND SHALL PROVIDE CLEAN UP AT HIS/HER OWN EXPENSE AS DIRECTED BY THE DIRECTOR OF ENGINEERING.
14. THE CONTRACTOR SHALL CARE AND CONTROL SPILLS, FLUIDS, AND MATERIALS DURING CONSTRUCTION TO MINIMIZE RISK TO THE ENVIRONMENT.



KEY PLAN
NTS

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- EXISTING MANHOLE
- EXISTING CATCHBASIN MANHOLE
- NEW MANHOLE
- NEW CATCHBASIN
- INLET PROTECTION
- - - SILT FENCE
- - - PROPERTY LINE
- OVERLAND FLOW
- ▭ MUD MAT

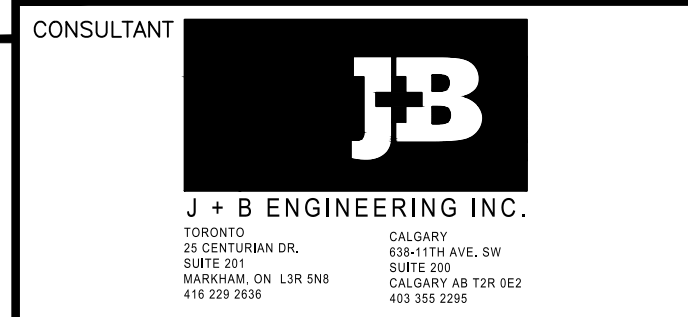
REVISION TABLE

REV.	DESCRIPTION	DRAWN	APP'D.	DATE
-	-	-	-	-

ISSUE TABLE

TO	FOR	DATE
SUNCOR	ISSUED FOR SPA	17 APR '26

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DRAWING TITLE:

EROSION AND SEDIMENT CONTROL PLAN

PROJECT:
6250 HAZLEDEAN ROAD & CARP ROAD
STITTSVILLE, ON

DRAWN BY:	BL	CAD INFO.:	D (559 x 864)
DRAWING SCALE:	1:250	CONSULTANT	PETRO-CANADA
DATE DRAWN:	17 APR '26	PLOT SCALE	1:1
CHECKED BY:		PLOT CONFIGURATION	

STD No./OUTLET No. **65044** SHEET No. **P302**