

# REVISION 01



KEY PLAN (N.T.S.)

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NOUVELLE ECOLE ESP ORLEANS SUD

2405 / 2419 MER-BRIELLE ROAD OTTAWA

REV.01 - ISSUED FOR SPC & FP - JAN 31. 2025

REV.01 - ISSUED FOR SFC &  
LRL PROJECT no: 240462-01



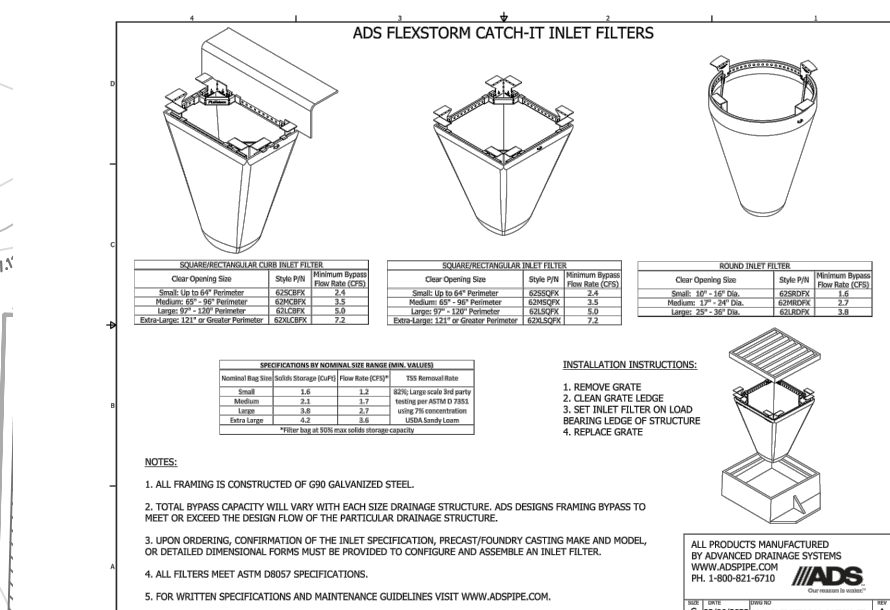
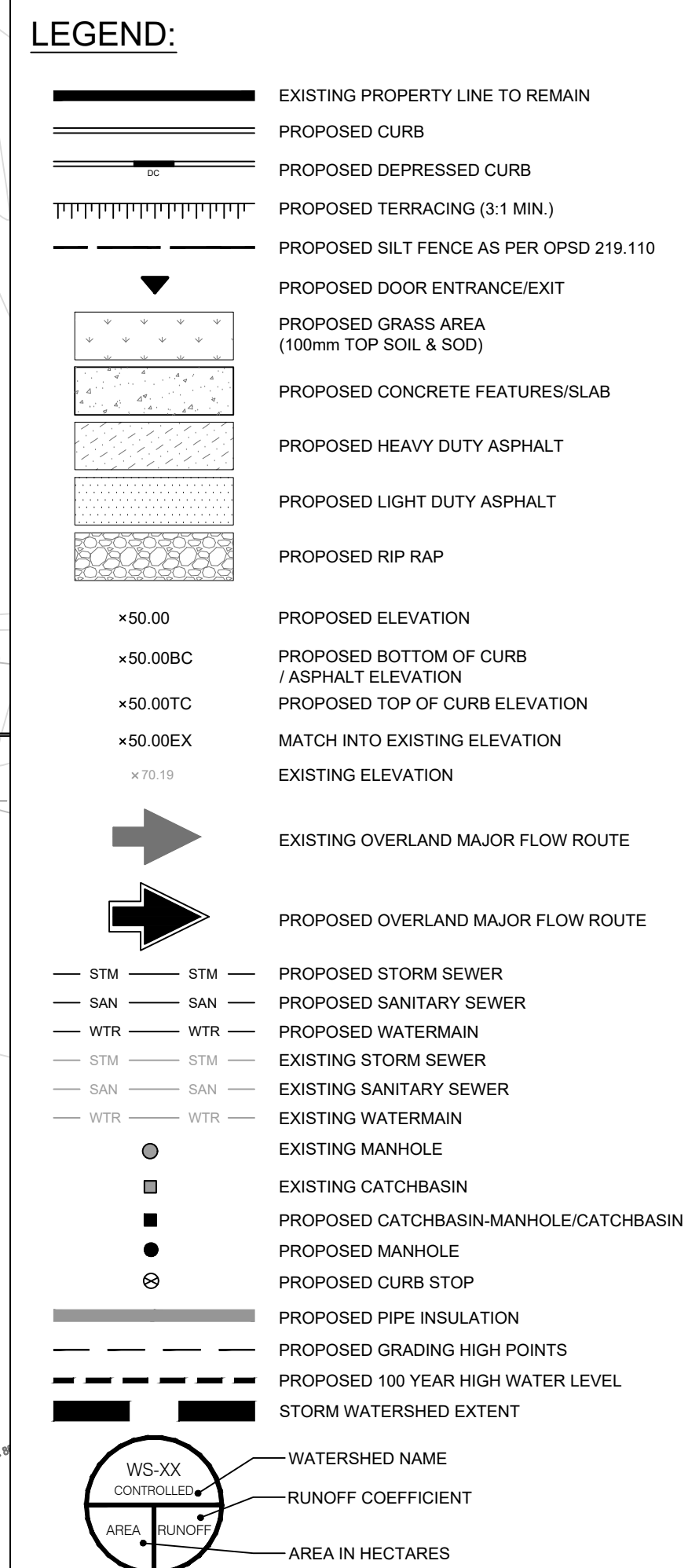
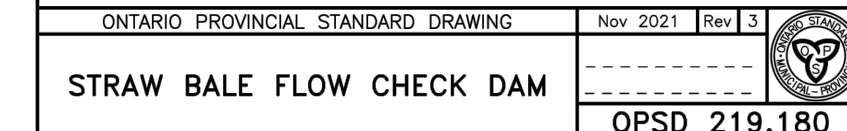
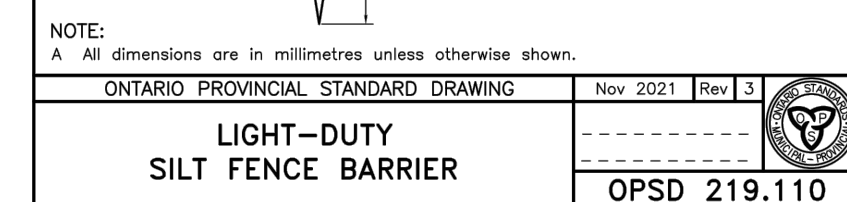
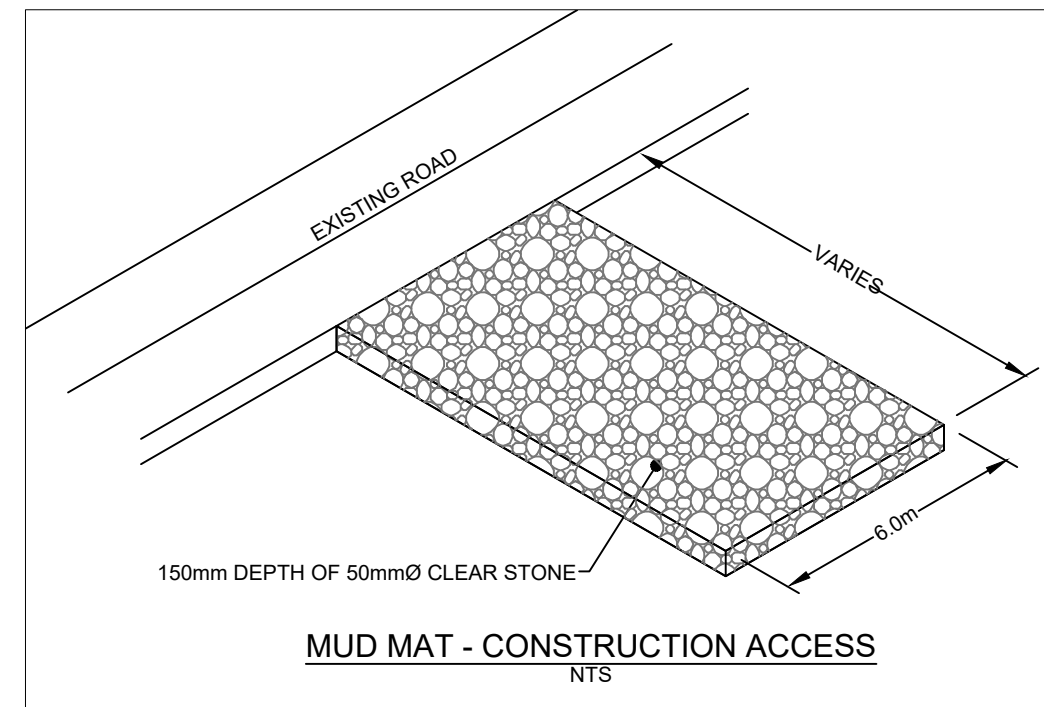
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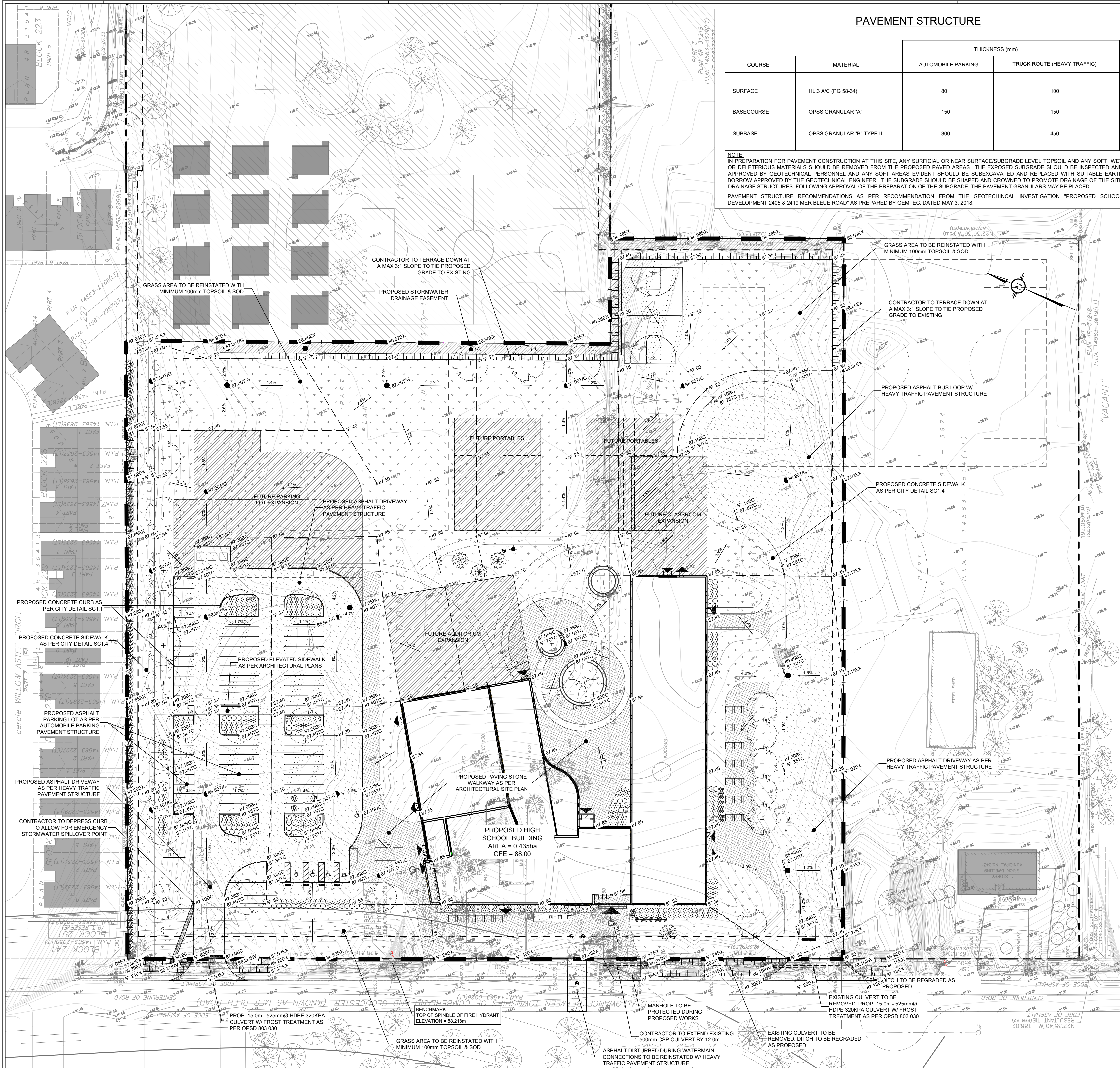
1. ALL WORKS MATERIALS SHALL CONFIRM TO THE LATEST REVISION OF THE STANDARDS AND SPECIFICATIONS FOR THE CITY OF OTTAWA, ANNUAL PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS), WHERE APPLICABLE. LOCAL UTILITY STANDARDS AND MINISTRY OF TRANSPORTATION STANDARDS WILL APPLY WHERE REQUIRED.
2. THE CONTRACTORS SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
3. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION, ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER. LOST TIME DUE TO FAILURE OF THE CONTRACTORS TO CONFIRM UTILITY LOCATIONS AND NOTIFY ENGINEER OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT CONTRACTORS EXPENSE.
4. ANY AREA BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTORS EXPENSE.
5. RELOCATED EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR DETECTED BY THE ENGINEER AT THE EXPENSE OF DEVELOPERS.
6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. THE GENERAL CONTRACTORS SHALL BE DEEMED TO BE THE "CONTRACTOR" AS DEFINED IN THE ACT.
7. THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THE CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES TO PREVENT CONFLICTS.
8. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
9. THERE WILL BE NO SUBSTITUTION OF MATERIALS WITHOUT PRIOR WRITTEN APPROVAL IS RECEIVED FROM THE ENGINEER.
10. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT.
11. FOR DETAILS RELATING TO STORMWATER MANAGEMENT AND ROOF DRAINAGE REFER TO THE SITE SERVING AND STORMWATER MANAGEMENT REPORT.
12. ALL SEWERS CONSTRUCTED WITH GRADES LESS THAN 1.0% SHALL BE INSTALLED USING LASER ALIGNMENT AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.
13. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAR THE COST OF THE SAME.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL BEDDING, OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH AS SPECIFIED BY OPSD IS EXCEEDED.
15. ALL PIPE/CULVERT SECTION SIZES REFER TO INSIDE DIMENSIONS.
16. SHOULD BEYOND BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATELY.
17. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR. REVIEW WITH CONTRACT ADMINISTRATOR AND THE CITY OF OTTAWA PRIOR TO ANY TREE CUTTING OR REMOVAL.
18. DRAWINGS SHALL BE READ ON CONJUNCTION WITH ARCHITECTURAL SITE PLAN.
19. THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER ON SET OF AS CONSTRUCTED SITE SERVING AND GRADING DRAWINGS.
20. BENCHMARKS: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO AGREE WITH THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SPECIFIED ON THIS PLAN.

**NOT FOR  
CONSTRUCTION  
TENDER OR  
PERMIT**









PAVEMENT STRUCTURE


COURSE	MATERIAL	THICKNESS (mm)	
		AUTOMOBILE PARKING	TRUCK ROUTE (HEAVY TRAFFIC)
SURFACE	HL.3 A/C (PG 58-34)	80	100
BASECOURSE	OPSS GRANULAR "A"	150	150
SUBBASE	OPSS GRANULAR "B" TYPE II	300	450

NOTE:  
IN PREPARATION FOR PAVEMENT CONSTRUCTION AT THIS SITE, ANY SURFICIAL OR NEAR SURFACE/SUBGRADE LEVEL TOPSOIL AND ANY SOFT, WET OR DELETERIOUS MATERIALS SHOULD BE REMOVED FROM THE EXPOSED PAVED AREAS. THE EXPOSED SUBGRADE SHOULD BE INSPECTED AND APPROVED BY GEOTECHNICAL PERSONNEL AND ANY SOFT AREAS EVIDENT SHOULD BE SUBCAVATED AND REPLACED WITH SUITABLE EARTH BORROW APPROVED BY THE GEOTECHNICAL ENGINEER. THE SUBGRADE SHOULD BE SHAPED AND CROWNED TO PROMOTE DRAINAGE OF THE SITE DRAINAGE STRUCTURES, FOLLOWING APPROVAL OF THE PREPARATION OF THE SUBGRADE, THE PAVEMENT GRANULARS MAY BE PLACED.

PAVEMENT STRUCTURE RECOMMENDATIONS AS PER RECOMMENDATION FROM THE GEOTECHNICAL INVESTIGATION "PROPOSED SCHOOL DEVELOPMENT 2405 & 2419 MER BLEUE ROAD" AS PREPARED BY GEMTEC, DATED MAY 3, 2018.

LEGEND:

- EXISTING PROPERTY LINE TO REMAIN
- PROPOSED CURB
- PROPOSED TERRACING (3:1 MIN.)
- PROPOSED SILT FENCE AS PER OPSD 219.110
- PROPOSED DOOR ENTRANCE/EXIT
- PROPOSED GRASS AREA (100mm TOP SOIL & SOD)
- PROPOSED CONCRETE FEATURES/SLAB
- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED LIGHT DUTY ASPHALT
- PROPOSED RIP RAP
- PROPOSED ELEVATION
- PROPOSED BOTTOM OF CURB / ASPHALT ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- MATCH INTO EXISTING ELEVATION
- EXISTING ELEVATION
- EXISTING OVERLAND MAJOR FLOW ROUTE
- PROPOSED OVERLAND MAJOR FLOW ROUTE
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING MANHOLE
- EXISTING CATCHBASIN
- PROPOSED CATCHBASIN-MANHOLE/CATCHBASIN
- PROPOSED MANHOLE
- PROPOSED CURB STOP
- PROPOSED PIPE INSULATION
- PROPOSED GRADING HIGH POINTS
- PROPOSED 100 YEAR HIGH WATER LEVEL
- STORM WATERSHED EXTENT
- WATERSHED NAME
- RUNOFF COEFFICIENT
- AREA IN HECTARES



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USE AND INTERPRETATION OF DRAWINGS

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION ARE PART OF THE CONTRACT DOCUMENTS AND SHALL BE READ IN CONJUNCTION WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

IN THE EVENT OF A DISCREPANCY BETWEEN THE DRAWINGS AND THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

NOT FOR CONSTRUCTION TENDER OR PERMIT

1	JAN 31, 2025	ISSUED FOR SITE PLAN CONTROL & FOUNDATION PERMIT	KH
no.	date	revision / issue	by

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professional stamp



project title

**NOUVELLE ÉCOLE  
ESP ORLÉANS-SUD  
2405 / 2419 RUE MER-BLEUE**

Ottawa Ontario

drawing title

**GRADING & DRAINAGE  
PLAN**

date	2025-01-31	job no.	<b>240462</b>
scale	1:500	drawing	KH
approved	MB	drawing no.	<b>C301</b>
plot date	2025-01-31		

1. DO NOT SCALE FROM THIS DRAWING  
2. CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES  
FOLLOWING DRAWINGS: STRUCTURAL, MECHANICAL, ELECTRICAL

TOPOGRAPHIC INFORMATION

TOPOGRAPHIC INFORMATION AS PROVIDED BY CALLON DIETZ INCORPORATED LAND SURVEYORS PLAN NO. X-3811 DATED AUGUST 15, 2024.

BEARING NOTE

BEARINGS ARE MTM GRID, DERIVED FROM THE NORTHERLY LIMIT OF PART 1 PLAN 4R-30706, HAVING A GRID BEARING OF N67°18'30"E.

ELEVATION NOTE

ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928/1978) AND ARE DERIVED FROM THE CANMET VRS NETWORK STATION OTTAWA ELEVATION=95.230.

CONTOURS ARE TO 0.5 METRES

METRIC

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





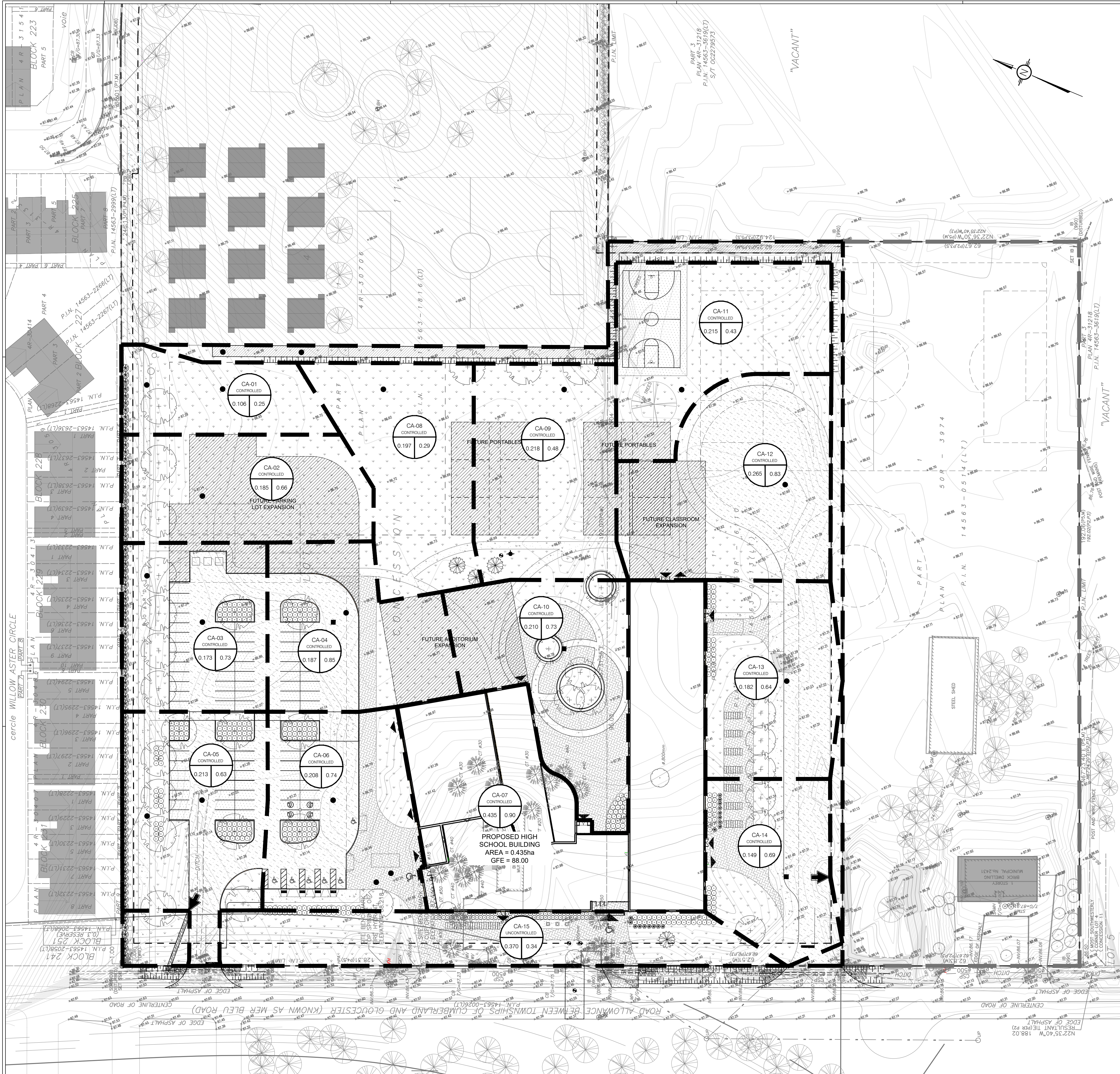












**LEGEND:**

- EXISTING PROPERTY LINE TO REMAIN
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- PROPOSED TERRACING (3:1 MIN.)
- PROPOSED SILT FENCE AS PER OPSD 219.110
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IN THE EVENT THE CLIENT, THE CLIENT'S CONTRACTORS OR SUBCONTRACTORS, OR ANYONE FOR WHOM THE CLIENT IS LEGALLY LIABLE MAKES OR PERMITS TO BE MADE ANY CHANGES TO ANY REPORT, PLAN, SPECIFICATION OR OTHER CONSTRUCTION DOCUMENTS PREPARED BY OR FOR THE ENGINEER, WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER, THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, PROVINCIAL, AND FEDERAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, PROVINCIAL, AND FEDERAL AUTHORITIES.

IN ADDITION, THE CLIENT AGREES TO INCLUDE IN ANY CONTRACTS FOR CONSTRUCTION APPROPRIATE LANGUAGE THAT PROHIBITS THE CONTRACTOR OR ANY SUBCONTRACTORS OF ANY KIND FROM MAKING ANY CHANGES TO THE DRAWINGS WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, PROVINCIAL, AND FEDERAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, PROVINCIAL, AND FEDERAL AUTHORITIES.

EXISTING SERVICES AND UTILITIES SHOWN ON THESE DRAWINGS ARE TAKEN FROM THE BEST AVAILABLE RECORDS, BUT MAY NOT BE COMPLETE OR UP TO DATE. CONTRACTOR SHALL VERIFY ALL UTILITIES BEFORE CONSTRUCTION. THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT WHEN CONSTRUCTION OF THE PROJECT, WITHOUT ANY OTHER CHANGES, FAILS TO OBTAIN AND/OR FOLLOW THE PROJECT'S ASSUMPTIONS WITH REGARD TO ANY EXISTING, CONCEALED, UNRECORDED, UNIDENTIFIED, OR UNKNOWN UTILITIES WHICH ARE ALLEGED.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.

1 JAN 31, 2025 ISSUED FOR SITE PLAN CONTROL & FOUNDATION PERMIT KH

no. date revision / issue by

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northpoint

professional stamp

NOUVELLE ÉCOLE  
ESP ORLEANS-SUD  
2405 / 2419 RUE MER-BLEUE

project title

Ottawa Ontario

drawing title

**POST-DEVELOPMENT  
WATERSHED PLAN**

date 2025-01-31 job no. **240462**

scale 1:500

drawn KH

approved MB

plot date 2025-01-31

drawing no. **C702**

1. DO NOT SCALE FROM THIS DRAWING  
2. CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES  
3. THIS DRAWING IS TO BE USED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS: STRUCTURAL, MECHANICAL, ELECTRICAL



**Technical Drawing Details:**

- Side Elevation:** Shows a manhole with riser sections of 300mm. Labels include "Riser sections as required", "300mm min", "300mm, Typ", "Grout bedding", and a diameter of "Ø1200".
- SUMP DETAIL:** A cross-section showing a "Bottom riser section with feet and square openings to suit" and "Grout bedding".
- ALTERNATIVES:**
  - A PRECAST SLAB BASE:** Shows a cross-section with a "Riser section" (Ø1200), "Bench or frame as specified", "Grout bedding", and a "300mm, Typ" dimension.
  - B CAST-IN-PLACE BASE:** Shows a cross-section with a "Riser section" (Ø1200), "Bench or frame as specified", "Grout bedding", and a "300mm, Typ" dimension.
  - C PRECAST FLAT CAP:** Shows a cross-section with a "Riser section" (Ø1200) and a "Flat cap".

**NOTES:**

- The sump is measured from the lowest invert.
- A granular backfill shall be placed to a minimum thickness of 300mm at around the maintenance hole.
- Precast concrete components shall be according to OPSD 701.030, 701.031, or 701.032.
- Structure exceeding 5.0m in depth shall include safety platform according to OPSD 404.002.
- Pipe support according to OPSD 708.020.
- For banding and pipe opening details, see OPSD 701.021.
- For additional joint and frame installation, see OPSD 704.014.
- All dimensions are in millimetres.
- All dimensions are as indicated unless otherwise shown.

**TABLE OF DIMENSIONS:**

MANHOLE DEPTH (m)	MINIMUM MAINTENANCE HOLE DIAMETER (mm)	MINIMUM MAINTENANCE HOLE AREA (m²)
0.0 - 0.5	750	0.44
0.5 - 1.0	900	0.64
1.0 - 1.5	1050	0.86
1.5 - 2.0	1200	1.10
2.0 - 2.5	1350	1.36
2.5 - 3.0	1500	1.77
3.0 - 3.5	1650	2.15
3.5 - 4.0	1800	2.54
4.0 - 4.5	1950	2.99
4.5 - 5.0	2100	3.46
5.0 - 5.5	2250	3.99
5.5 - 6.0	2400	4.52
6.0 - 6.5	2550	5.09
6.5 - 7.0	2700	5.72
7.0 - 7.5	2850	6.36
7.5 - 8.0	3000	7.07
8.0 - 8.5	3150	7.79
8.5 - 9.0	3300	8.55
9.0 - 9.5	3450	9.36
9.5 - 10.0	3600	10.18

[illegible]

Technical drawing of the Ottawa Standard Circular Sanitary & Combined Manhole Cover. The drawing includes a top view, a section A-A view, and a bottom view. Dimensions are provided in millimeters.

**Top View:** Shows the circular cover with the 'Ottawa' logo and 'DANGER' text. The cover is surrounded by a grid of raised letters. The diameter is 450 mm. The cover is 25 mm thick. The cover is made of cast iron.

**Section A-A:** Shows the cross-section of the cover. The cover is 25 mm thick. The cover is made of cast iron. The cover is surrounded by a grid of raised letters. The cover is 450 mm in diameter. The cover is 25 mm thick. The cover is made of cast iron.

**Bottom View:** Shows the underside of the cover. The cover is 25 mm thick. The cover is made of cast iron. The cover is surrounded by a grid of raised letters. The cover is 450 mm in diameter. The cover is 25 mm thick. The cover is made of cast iron.

**Notes:**

1. FRY TO BE SET.
2. COVER FRAME DETAIL, SEE CHG. NO. 10.
3. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.

**Legend:**

DATE	REVISION
05/11	000000-0017

**Standard Circular Sanitary & Combined Manhole Cover**

**N.T.S.**

**S24**

**OPTION A**

**OPTION B**

**TYPICAL PIPE INSULATION DETAIL.**

**NOTES:**

1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYETHYLENE ACCORDING TO MS&IS 1576 WITH A MINIMUM COMPRESSIVE STRENGTH OF 2.0 MPa.
2. MINIMUM INSULATION THICKNESS SHALL BE 20MM.
3. JOINTS SHALL BE STITCHED FOR MULTIPLE INSULATION SHEETS.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

The drawing consists of several parts:

- Top Section:** A plan view of a sidewalk showing a transition from a 2 to 4% slope to a 2 to 10% slope. It includes a 1.5m min. note 2, a 0.5m min. note 3, and labels for 'Slope as specified', 'Shoulder', 'Concrete sidewalk', and 'Subgrade or granular base as specified'.
- TYPICAL SECTION:** A cross-section showing a 150mm concrete sidewalk on a subgrade or granular base. It includes a 50mm layer of material and a 150mm layer of material.
- DUMMY JOINT (OPTIONAL):** A cross-section showing a 5m wide sidewalk with a 0.25% slope. It includes a 50mm layer of material and a 150mm layer of material.
- CONTRACTION JOINT (Note 4):** A cross-section showing a 5m wide sidewalk with a 0.25% slope. It includes a 50mm layer of material and a 150mm layer of material.
- JOINT LAYOUT:** A plan view showing the layout of various joints: Expansion joint material, Expansion joint, Typ; Expansion joints, Typ; Expansion joints, Typ (optional); Contraction joints, Typ; and a 90.0m Typ dimension.

**NOTES:**

- 1 Sidewalk thickness at residential driveways and adjacent to curb shall be 150mm.
- 2 At commercial and industrial driveways, the thickness shall be 200mm.
- 3 This OPSD shall be used in conjunction with OPSD 310.030, 310.031, 310.033, and 310.039.
- 4 Contraction joint may be teed or sawcut.

**ALL dimensions are in millimetres unless otherwise shown.**

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2019	Rev 3	
<b>CONCRETE SIDEWALK</b>			
<b>OPSD 310.010</b>			

[illegible]

1. THICKNESS OF INSULATION (mm)  
 2. DEPTH OF COVER (mm)  
 3. W = 2 - 800  
 4. W = WIDTH OF INSULATION (mm)  
 5. D = O.D. OF PIPE (mm)

SECTION A-A

NOTES

1. INSULATION SHALL BE 100MM THICK. COVER THE WATERMAIN, WHERE THE DEPTH OF COVER IS 100MM OR MORE.

2. INDEPENDENT OF THICKNESS SHALL BE ACCORDING TO SPEC.

3. IN PRESENCE OF HARMFUL SOILS, SOLARIES, CARBORANE ETC., INSULATION SHALL BE REPLACED PER DETAIL (V).

4. DEPTH OF COVER LESS THAN COVER REQUIRED SPECIAL DESIGN.

5. CIRCULAR JACOBS OF HOLLOW BASKETS.

6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SHOWN OTHERWISE.

DATE: 10/10/2018  
 DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]  
 APPROVED BY: [Signature]

[illegible][illegible]

**PIPE IN SUPPORTED EXCAVATION**

**PIPE IN UNSUPPORTED EXCAVATION**

**PIPE IN SUPPORTED EXCAVATION**

**TYPE 1 OR 2 SOIL**

**TYPE 3 SOIL**

**TYPE 4 SOIL**

**LEGEND:**  
 $\phi$  = inside diameter

**NOTES:**

- Height of fill is measured from the finished surface to top of pipe.
- The pipe bed shall be compacted and shaped to receive the bottom of the pipe.
- Frost treatment shall be according to OPSD 802.030 and 802.031.
- Condition of excavation is symmetrical about centreline of pipe.
- A granular material placed in the haunch area shall be compacted prior to placing and compacting the remainder of the embedment material.
- Soil types as defined in the Occupational Health and Safety Act and Regulations for Construction Projects.
- All dimensions are in metres unless otherwise shown.

**CLEARANCE TABLE**

Inside Diameter	Clearance	Backfill material
500	300	300
600	300	300

**ONTARIO PROFESSIONAL STANDARD DRAWING**

**Nov 2014**

**Rev 1**

**OFSD 802.010**

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