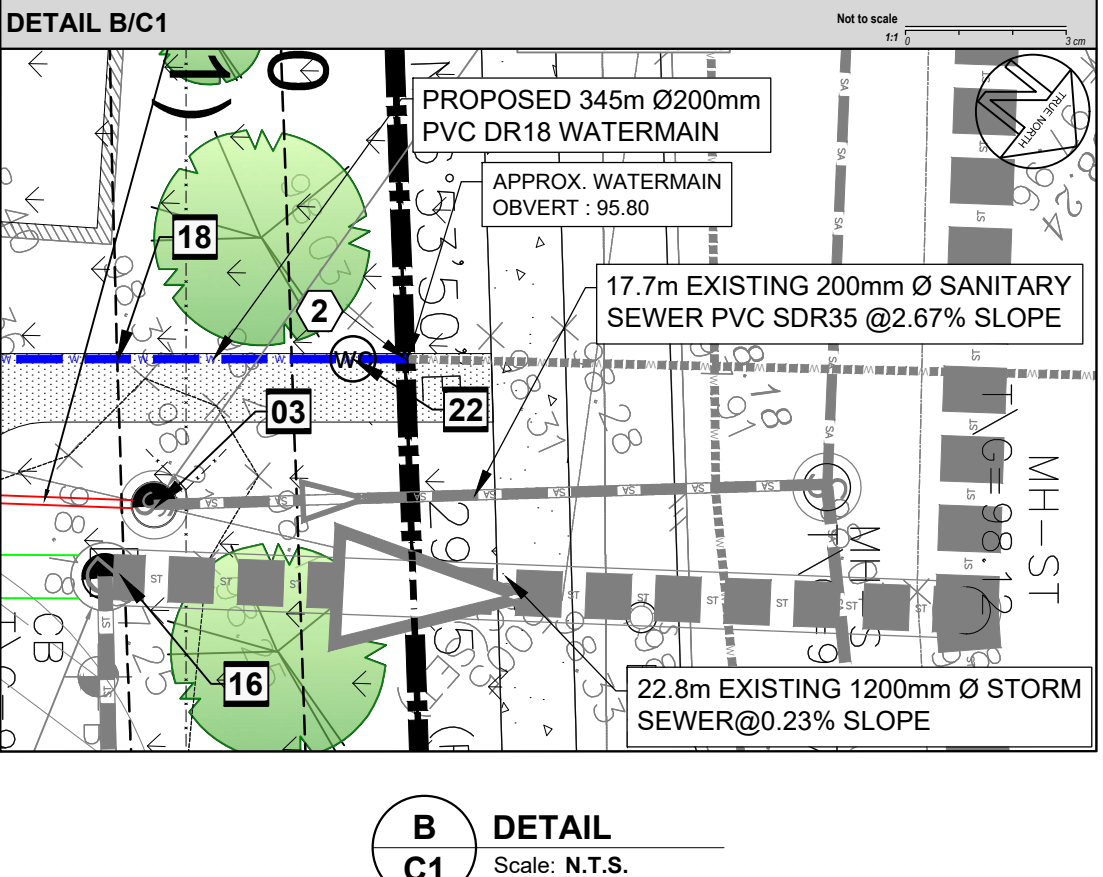
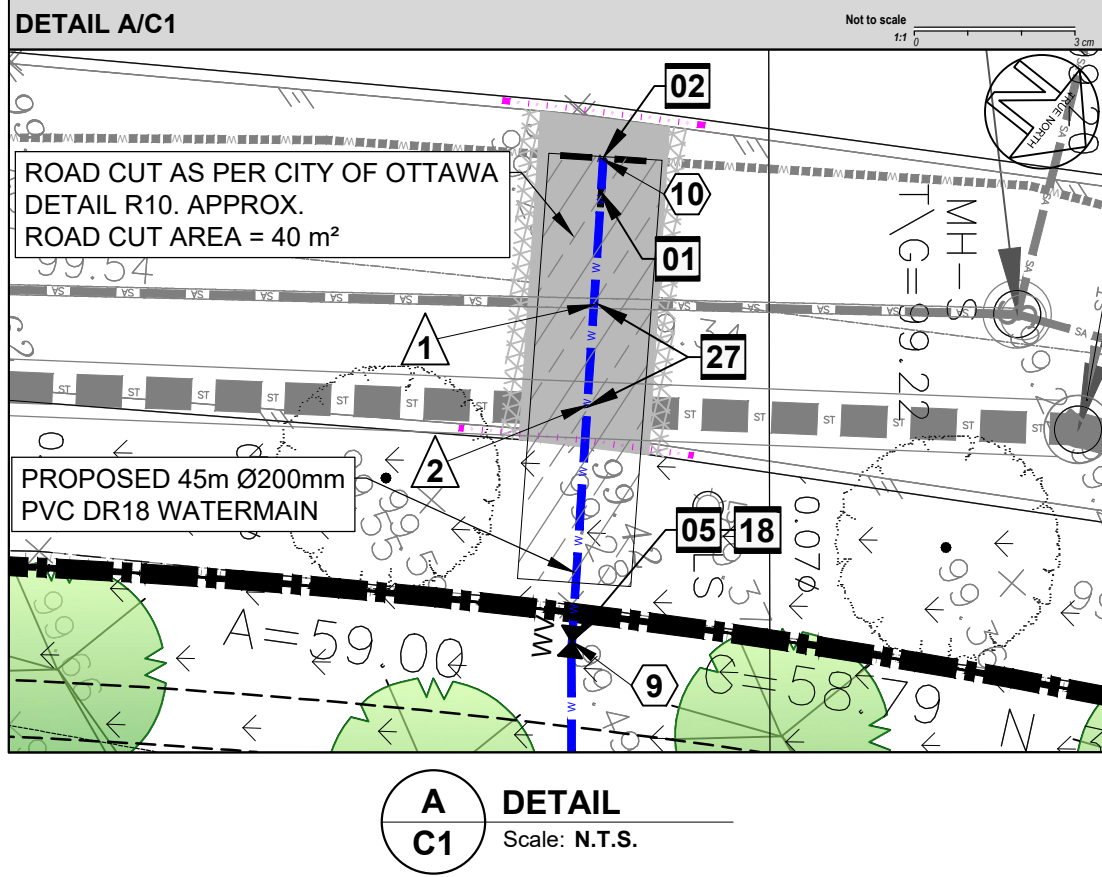


LEGEND	
	PROPERTY LINE
	NEW BUILDING
	DEPRESSED CURB
	BREAK OF SLOPE - NEW
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATERMAIN
	NEW SANITARY SEWER
	NEW STORM SEWER
	NEW WATERMAIN
	NEW PERFORATED DRAIN PIPE
	NEW PERIMETER FOUNDATION DRAINAGE
	NEW DITCH
	EXISTING STORM CULVERT
	NEW STORM CULVERT
	NEW LIGHT DUTY ASPHALT AS PER DETAIL 1/C3
	NEW HEAVY DUTY ASPHALT AS PER DETAIL 2/C3
	NEW CONCRETE SIDEWALK
	NEW GRASS
	MILLING & OVERLAY 50mm THICK HEAVY DUTY ASPHALT AS PER DETAIL 3/C3
	NEW PRECAST PAVERS
	NEW EWF / MULCH
	NEW CLEAR STONE SUBDRAIN TRENCH
	NEW RUBBERIZED ASPHALT TRACK
	NEW STONE DUST PATH
	HIGH LOAD RIGID INSULATION AS PER CITY DETAIL W22
	EXISTING SIDEWALK

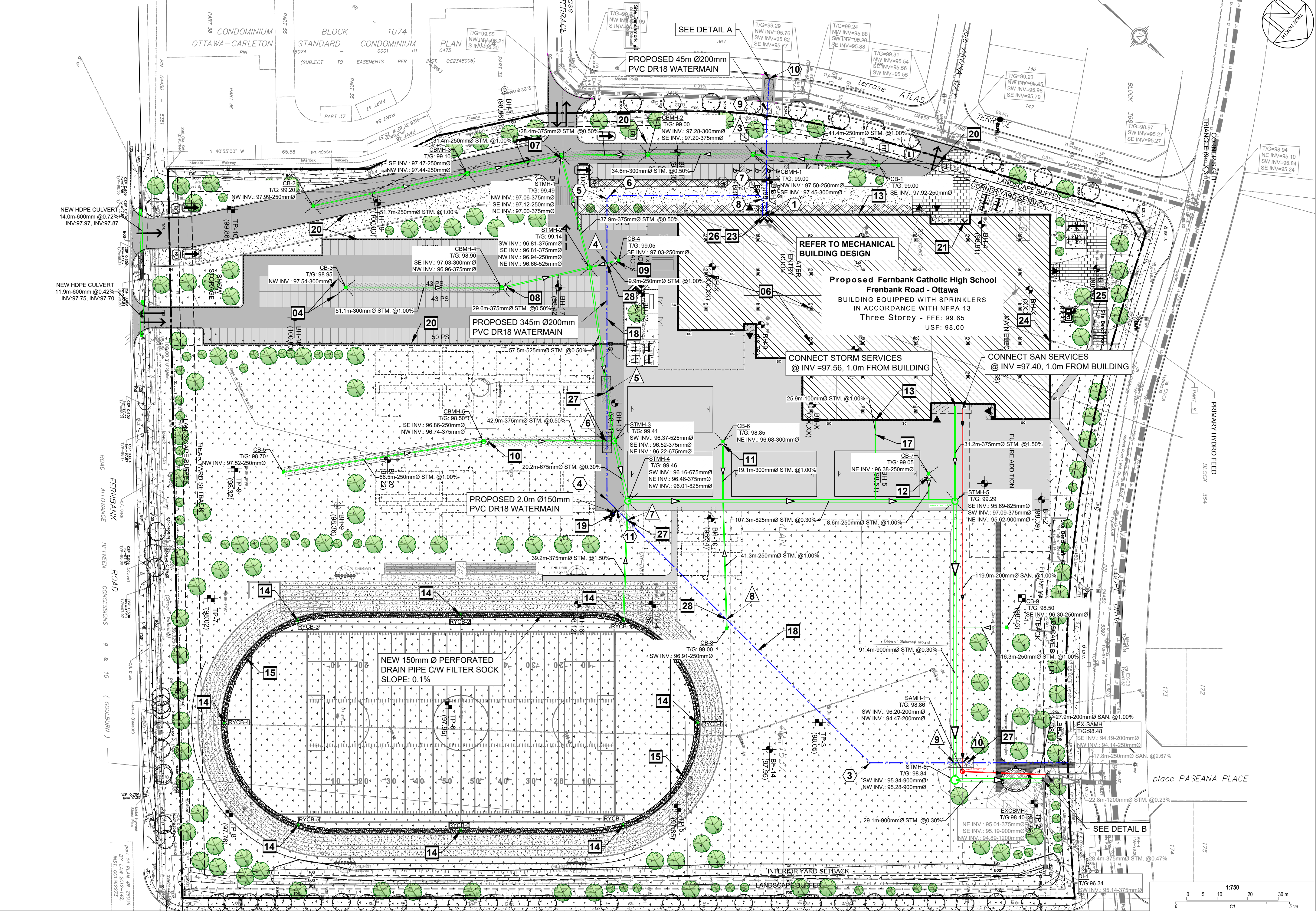
LEGEND CONTINUED	
	EXISTING CONCRETE CURB
	NEW CONCRETE CURB
	EXISTING CATCHBASIN
	EXISTING DITCH INLET
	EXISTING STORM MANHOLE
	EXISTING SANITARY MANHOLE
	EXISTING STORM/SANITARY MANHOLE TO BE ADJUSTED
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	NEW CATCHBASIN
	NEW STORM MANHOLE / CATCHBASIN MANHOLE
	NEW SANITARY MANHOLE
	NEW REAR YARD CATCH BASIN
	NEW FIRE HYDRANT
	NEW WATER VALVE
	NEW INLET CONTROL DEVICE
	NEW ROOF DRAIN
	NEW SCUPPER AT 150mm ABOVE ROOF DRAIN LEVEL
	NEW TRANSFORMER PAD
	SEWER FLOW DIRECTION
	BUILDING ENTRANCE
	PROPOSED TWSI
	NEW SIAMESE CONNECTION
	WATER CHAMBER
	SEE SHEET NUMBER "C3"
	SEE SHEET NUMBER "C3"

- ### GENERAL NOTES
- DESIGN AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH MOST RECENT ONTARIO BUILDING CODE
 - THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND VERIFYING ALL DIMENSIONS WITH RESPECT TO SITE CONDITIONS AND ALL MATERIALS TO THE PROJECT. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL MATERIAL RELEVANT TO THE PROJECT.
 - ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH THE CONTRACT DOCUMENTS.
 - CONTRACTOR MUST COMPLY WITH LOCAL BY-LAWS, ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT AND ALL REGULATIONS SET BY AUTHORITIES HAVING JURISDICTION. IN CASE OF CONFLICT OR DISCREPANCY, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
 - CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED UTILITY LOCATES, DAYLIGHTING, INSPECTIONS, PERMITS AND APPROVALS INCLUDING ALL ASSOCIATED COSTS. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE ONLY AND BASED ON BEST AVAILABLE INFORMATION.
 - FOR EXACT LOCATIONS AND NUMBERS OF ROOF DRAINS AND SCUPPERS, REFER TO MECHANICAL, STRUCTURE AND ARCHITECTURAL DRAWINGS.



DRAWING NOTES

- SUPPLY AND INSTALL NEW 200mm Ø PVC DR18 WATER MAIN SERVICE, MINIMUM 2.4m COVER, OTHERWISE PROVIDE H40 THERMAL INSULATION IN ACCORDANCE WITH OPSD 1103.030. COORDINATE NEW WATER SERVICE CONNECTION WITH MECHANICAL PLANS. THRUST BLOCKS SHALL BE AS PER OPSD 1103.010 AS 1103.020.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COMMUNICATING, COORDINATING, OBTAINING AND PAYING FOR ALL REQUIRED PERMITS NOT LIMITED TO THE FOLLOWING:
 - WITH CITY OF OTTAWA FOR A WATER PERMIT, NEW WATER SERVICE CONNECTION, FIRE HYDRANT ON SITE, CONNECTION TO PROPOSED BUILDING, INSPECTION, DISINFECTION, CHLORINATION, TESTING, WATER METERING AND ALL REQUIREMENTS FOR A COMPLETE SYSTEM COMMISSIONING AS PER MUNICIPAL REQUIREMENTS.
 - WITH CITY OF OTTAWA FOR A ROAD CUT PERMIT.
 - WITH CITY OF OTTAWA FOR UTILITY LOCATES, EXCAVATION, SUPPORTING UTILITIES DURING CONSTRUCTION IF REQUIRED, INSPECTION AND BACKFILLING.
- INSTALLATION OF NEW SERVICE CONNECTION TEE 200mmX200mm Ø PVC TO EXISTING MUNICIPAL WATERMAIN TO BE COMPLETED BY CITY OF OTTAWA FORCES. EXCAVATION, BACKFILL AND RE-INSTATEMENT BY CONTRACTOR.
- EXISTING 1200mm DIAMETER SANITARY MANHOLE. EXISTING 250mm INVERT S = 94.19. EXISTING 250mm INVERT N = 94.14. CONTRACTOR TO CONFIRM INVERTS PRIOR TO CONSTRUCTION. REMOVE EXISTING 250mm SOUTH SANITARY SEWER. CONNECT NEW 250mm SANITARY SEWER TO EXISTING MANHOLE AT INVERT 94.19. PARGE AND PROVIDE WATER TIGHT CONNECTION.
- INSTALL FOUR WAY 3.0m LONG 150mm Ø PERFORATED SUBDRAIN WRAPPED IN GEOTEXTILE SOCK EXTENDING FROM CATCHBASIN AT PAVEMENT SUBGRADE LEVEL. PROVIDE WATER TIGHT CONNECTION (TYP).
- SUPPLY AND INSTALL NEW 200mm WATER VALVE AT PROPERTY LINE. VALVE BOX ASSEMBLY AS PER CITY OF OTTAWA STANDARD DETAIL DRAWING W24 AND W50.
- SUPPLY AND INSTALL WATTS ROOF DRAIN CONTROLS TO BE INSTALLED ON ROOF DRAINS. SPECIFIC WIR SETTINGS IN CLOSED POSITION. MAXIMUM DISCHARGE 15.80 l/s TOTAL. MAXIMUM ROOF PONDING DEPTH 150mm. 100 YEAR PONDING VOLUME = 349.4 m³.
- SUPPLY AND INSTALL NEW INLET CONTROL DEVICE FLOW REGULATOR AT MANHOLE. STM#1 OUTLET. MAXIMUM DISCHARGE 81.3 l/s AT 2.01m HEAD AND ORIFICE DIAMETER AT 164mm.
- SUPPLY AND INSTALL NEW INLET CONTROL DEVICE FLOW REGULATOR AT CATCHBASIN. CB#4 OUTLET. MAXIMUM DISCHARGE 88.30 l/s AT 1.97m HEAD AND ORIFICE DIAMETER AT 172mm.
- SUPPLY AND INSTALL NEW INLET CONTROL DEVICE FLOW REGULATOR AT CATCHBASIN. CB#4 OUTLET. MAXIMUM DISCHARGE 40.10 l/s AT 2.08m HEAD AND ORIFICE DIAMETER AT 159mm.
- SUPPLY AND INSTALL NEW INLET CONTROL DEVICE FLOW REGULATOR AT CATCHBASIN. CB#5 OUTLET. MAXIMUM DISCHARGE 30.00 l/s AT 1.89m HEAD AND ORIFICE DIAMETER AT 101mm.
- SUPPLY AND INSTALL NEW INLET CONTROL DEVICE FLOW REGULATOR AT CATCHBASIN. CB#6 OUTLET. MAXIMUM DISCHARGE 82.40 l/s AT 2.31m HEAD AND ORIFICE DIAMETER AT 160mm.
- SUPPLY AND INSTALL NEW INLET CONTROL DEVICE FLOW REGULATOR AT CATCHBASIN. CB#7 OUTLET. MAXIMUM DISCHARGE 46.40 l/s AT 2.77m HEAD AND ORIFICE DIAMETER AT 115mm.
- CONNECT NEW 100mm PERIMETER FOUNDATION DRAINAGE WITH FILTER SOCK TO 100mm STORM SERVICE AT INVERT 98.00 @ USF LEVEL.
- INSTALL NEW REAR YARD CATCH BASIN AS PER CITY OF OTTAWA DETAIL S30.
- NEW 150mm PERFORATED SUBDRAIN WITH FILTER SOCK. SUBDRAIN TO BE CONSTRUCTED IN CLEAR STONE EXTENDING 300mm X 300mm FROM EDGE OF PIPE.
- EXISTING 2400 DIAMETER STORM MANHOLE. EXISTING 1200mm INVERT N = 94.89. EXISTING 375mm INVERT EAST = 95.01. CONTRACTOR TO CONFIRM INVERTS PRIOR TO CONSTRUCTION AND ADVISE OF ANY DISCREPANCY. BREAK INTO EXISTING MANHOLE TO PROVIDE CONNECTION OF NEW 800mm STORM SEWER AT INVERT 95.19. PARGE AND PROVIDE WATER TIGHT CONNECTION.
- SUPPLY AND INSTALL PROLINE FITTINGS INSPECTION CHAMBER AND BACKWATER VALVE. TOP OF INSPECTION CHAMBER LID TO BE FLUSH WITH FINISHED GRADE.
- ALL WATERMAIN SHALL BE PROVIDED WITH TRACER WIRE AS PER CITY OF OTTAWA STANDARD DETAILS AND SPECIFICATIONS.
- NEW FIRE HYDRANT AS PER CITY OF OTTAWA W19. CONTRACTOR IS RESPONSIBLE TO PROVIDE FIRE HYDRANT TESTING AND PAINTING OF CAP AS PER MUNICIPAL STANDARD. INSTALL VALVE ON HYDRANT LEAD PER CITY DETAIL W24 & W50.
- SUBDRAINS SHOULD BE INSTALLED UNDER CURBS ON THE SIDES OF THE ACCESS ROAD AND PARKING AREA AND TO CONNECT TO STORM WATER NETWORK. SEE GEOTECHNICAL NOTES AND REFER TO GEOTECHNICAL REPORT.
- NEW SIAMESE CONNECTION. REFER TO MECHANICAL & ARCHITECTURAL DRAWINGS FOR EXACT LOCATION.
- INSTALL NEW DISTRICT METER AREA (DMA) CHAMBER AND VALVE AS PER CITY OF OTTAWA STANDARD DETAIL DRAWING W3 AND W3.3.
- WATER SERVICE ENTRY. TOP OF WATERMAIN AT 97.30 TO BE 0.70m UNDERNEATH USF ELEVATION. INVERT LEVELS TO BE COORDINATED AND MATCHING WITH STRUCTURAL AND MECHANICAL DRAWINGS. INSULATE PER CITY OF OTTAWA W22 WHERE LESS THAN 2.4m COVER IS PROVIDED.
- ROOF TOP SCUPPERS TO BE PROVIDED AT 150mm ABOVE LEVEL OF ROOF DRAINS.
- NEW TRANSFORMER AND BOLLARDS.
- PRESSURE REDUCING VALVE TO BE INSTALLED AS PER ONTARIO PLUMBING CODE. COORDINATE WITH MECHANICAL CONTRACTOR.
- CONSTRUCT WATERMAIN CROSSING OVER SEWER AS PER CITY OF OTTAWA DETAIL W25.2 WITH MINIMUM 0.30m BARREL TO BARREL SEPARATION. PROVIDE THERMAL INSULATION AS PER DETAIL W22.
- CONSTRUCT WATERMAIN CROSSING BENEATH SEWER AS PER CITY OF OTTAWA DETAIL W25 WITH MINIMUM 0.50m BARREL TO BARREL SEPARATION.



[illegible]

*** CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES.***

1. PRIOR TO START OF CONSTRUCTION:

1.1. INSTALL SILT FENCE IN LOCATION SHOWN ON DWG C4.

1.2. INSTALL FILTER FABRIC OR SILT SACK FILTERS IN ALL THE CATCHBASINS AND MANHOLES TO REMAIN DURING CONSTRUCTION WITHIN THE SITE (SEE SPECIAL DETAIL).

1.3. INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.

2. DURING CONSTRUCTION:

2.1. MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE AND IMPACTS TO EXISTING GRADING.

2.2. PERMITTER VEGETATION TO REMAIN IN PLACE UNTIL PERMANENT STORM WATER MANAGEMENT IS IN PLACE. OTHERWISE, REMOVE AND REINSTATE VEGETATION WHEN THE EXISTING SITE IS DISTURBED AT THE PERMITTER.

2.3. PROTECT DISTURBED AREAS FROM OVERLAND FLOW BY PROVIDING TEMPORARY SWALES TO THE SATISFACTION OF THE FILES ENGINEER. TIE-IN TEMPORARY SWALE TO EXISTING C/S AS REQUIRED.

2.4. PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED WITHIN 30 DAYS.

2.5. INSPECT SILT FENCES, FILTER FABRIC FILTERS AND CATCH BASIN SUMPS WEEKLY AND WITHIN 24 HOURS AFTER A STORM EVENT CLEAR AND REPAIR WHEN NECESSARY.

2.6. DRAWING TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.

2.7. EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES.

2.8. DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 25M FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS).

2.9. CONTROL WIND-BLOWN DUST OFF SITE, BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY PROVIDE WATERINGS AS REQUIRED AND TO THE SATISFACTION (OF THE ENGINEER).

2.10. NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE FIELD ENGINEER.

2.11. CITY OF OTTAWA ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING AS REQUIRED.

2.12. DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPED.

2.13. ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.

2.14. TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION DEBRIS OR WASTE BEING SPILLED OR TRACKED ONTO ADJACENT PROPERTIES OR PUBLIC AREAS DURING CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED.

2.15. ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.

2.16. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.

1. ALL WATERMAIN AND WATERMAIN APPURTENANCES, MATERIALS, CONSTRUCTION AND TESTING METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA AND MINISTRY OF ENVIRONMENT STANDARDS AND SPECIFICATIONS.
2. ALL WATERMAIN 300mm DIAMETER AND SMALLER TO BE OF VIBRATED OR HDPE CLASS 150 RD 16 MEETING AWWA SPECIFICATION C900.
3. ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m BELOW FINISHED GRADE. WHERE WATERMAINS CROSS OVER OTHER UTILITIES, A MINIMUM 0.30m CLEARANCE SHALL BE MAINTAINED. WHERE WATERMAINS CROSS UNDER OTHER UTILITIES, A MINIMUM 0.50m CLEARANCE SHALL BE MAINTAINED. WHERE THE MINIMUM SEPARATION CANNOT BE ACHIEVED, THE WATERMAIN SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25 AND W25.2. WHERE 2.4m MINIMUM

4. ALL SANITARY SEWER, SANITARY SEWER APPURTENANCES AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CITY INSPECTION REPORTS FOR ALL NEW SANITARY PIPING. PROVIDE DYE TESTING FOR NEW SERVICES.
5. SANITARY SEWER PIPE SIZE 150mm DIAMETER AND GREATER TO BE PVC SDR 35 (UNLESS SPECIFIED OTHERWISE) WITH RUBBER GASKET TYPE JOINTS IN CONFORMANCE WITH THE CITY OF OTTAWA STANDARD.
6. SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
7. ALL SANITARY MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSD 701.01. FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.
8. MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES AS PER DETAIL S24 AND S25.

ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD S35, OR APPROVED BY THE ENGINEER.

1. ALL STORM SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CCTV INSPECTION REPORTS FOR ALL NEW STORM SEWERS, SERVICES AND CB LEADS.
2. STORM SEWERS 375mm DIAMETER AND SMALLER SHALL BE PVC SDR-35, WITH RUBBER GASKET PER CSA A-257.3.
3. STORM SEWERS 450mm DIAMETER AND LARGER SHALL BE REINFORCED CONCRETE CLASS 100.
4. SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S46.
5. ALL STORM MANHOLES TO BE AS PER MANHOLE AND ENHANCEMENT DETAIL S47.
6. ANY NEW OR EXISTING STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD S35, OR APPROVED BY THE ENGINEER.
7. CB IN LANDSCAPE AREAS SHALL BE AS PER CITY OF OTTAWA STANDARD S29, S30 AND S31.
8. ALL CATCHBASIN LEADS TO BE MINIMUM 700.0mm DIAMETER WITH MINIMUM 1.0% SLOPE TO THE SEWER. PROVIDE SPECIFIED STORM CATCHBASINS AS PER OPSD 05.010 AND FRAME/COVER AS PER CITY STANDARD DRAWINGS S19.
9. ALL STORM SEWER AND SERVICE ADJUSTMENT SECTIONS SHALL BE AS PER OPSD 04.010.
10. INSTALLATION OF FLOW CONTROL ICDS TO BE VERIFIED BY CITY VERIFICATION ENGINEER RETAINED BY CONTRACTOR.

1. CONTRACTOR TO REINSTATE ROAD CUTS AS PER CITY OF OTTAWA DETAIL R10
2. CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROFFROOLING, TO THE SATISFACTION OF THE GEOTECHNICAL CONSULTANT PRIOR TO THE COMMENCEMENT OF PLACEMENT OF GRANULAR B MATERIAL
3. FILL TO BE PLACED AND COMPACTED PER THE GEOTECHNICAL REPORT REQUIREMENTS
4. CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR B MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF GRANULAR B MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT
5. GRANULAR A MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR B PLACEMENT
6. CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR A MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF GRANULAR A MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT
7. ASPHALT MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR A PLACEMENT
8. CONTRACTOR TO SUPPLY, PLACE AND COMPACT ASPHALT MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF ASPHALT MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT
9. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING LINE AND GRADE IN ACCORDANCE WITH THE PLANS, AND FOR PROVIDING THE CONSULTANT WITH VERIFICATION PRIOR TO PLACEMENT
10. ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF AT AN APPROVED DUMP SITE. IF THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, CONTRACTOR IS TO NOTIFY CONSULTANT. CONTRACTOR TO DETERMINE APPROPRIATE DISPOSAL METHOD/REGULATION
11. PAVEMENT STRUCTURE (MATERIAL TYPES AND THICKNESS) FOR HEAVY DUTY AND LIGHT DUTY AREAS TO BE AS SPECIFIED IN THE GEOTECHNICAL REPORT AND SHOWN ON THE PLANS

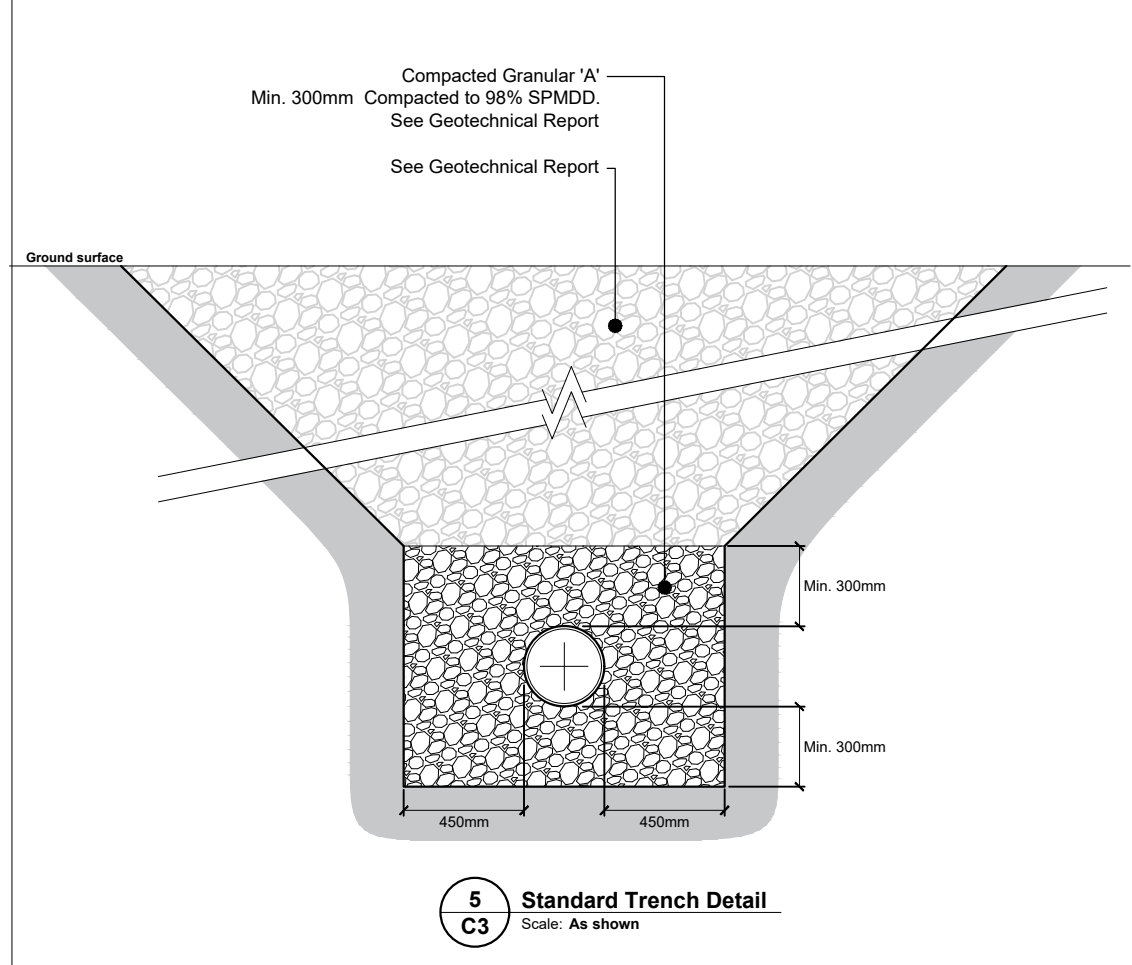
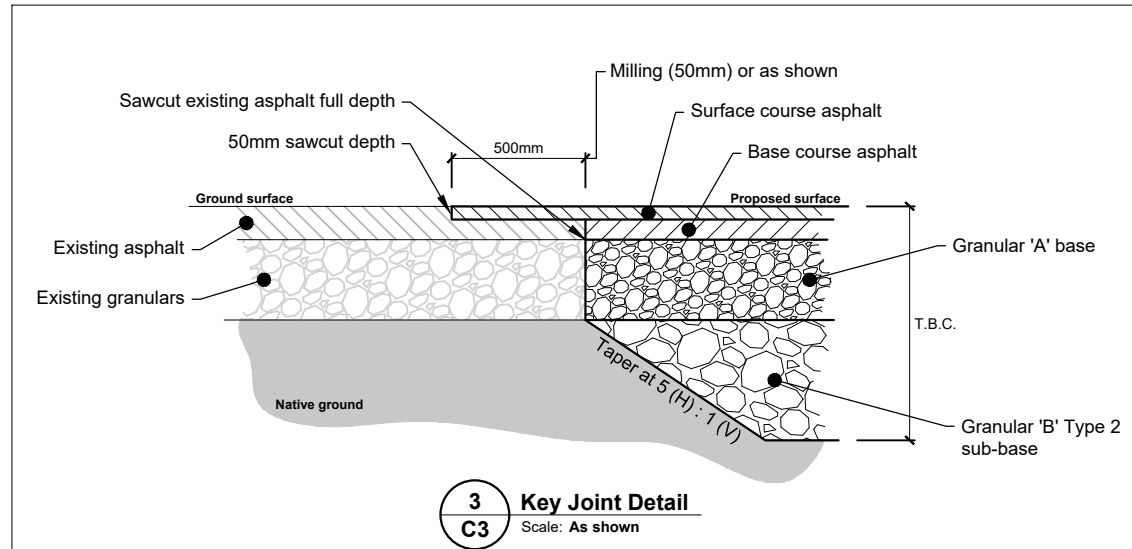
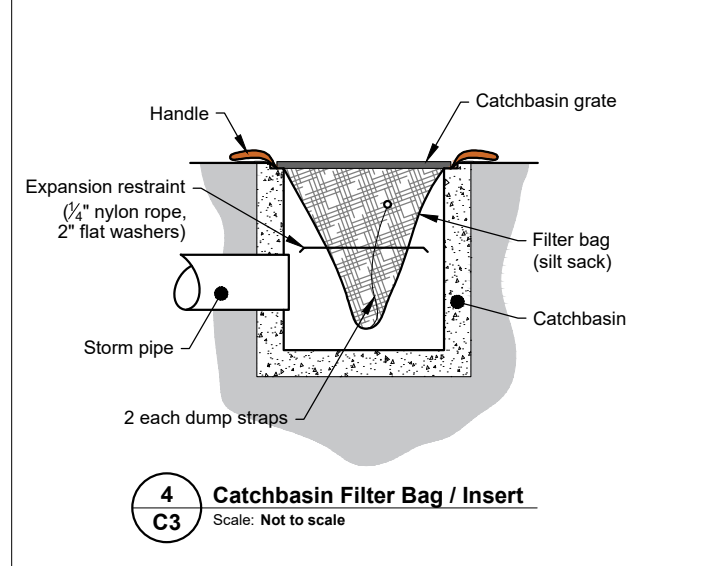
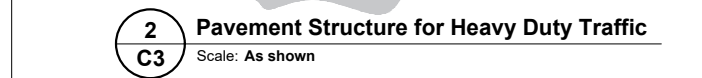
ION	OVER / UNDER	TIG	OBVERT	INVERT	CLEARANCE (m)
	NEW WATERMAIN - EXISTING SANITARY SEWER	99.34	96.06 (SAN)	97.27 (WM)	1.21
	NEW WATERMAIN - EXISTING STORM SEWER	99.31	97.28 (STM)	97.68 (WM)	0.40
	NEW STORM SEWER - NEW WATERMAIN	99.05	96.60 (WM)	97.54 (STM)	0.94
	NEW STORM SEWER - NEW WATERMAIN	99.10	96.49 (WM)	96.99 (STM)	0.50
	NEW WATERMAIN - NEW STORM SEWER	99.35	96.99 (STM)	97.39 (WM)	0.40
	NEW WATERMAIN - NEW STORM SEWER	99.45	96.92 (STM)	97.32 (WM)	0.40
	NEW WATERMAIN - NEW STORM SEWER	99.50	96.94 (STM)	97.34 (WM)	0.40
	NEW STORM SEWER - NEW WATERMAIN	99.02	96.37 (WM)	96.87 (STM)	0.50
	NEW WATERMAIN - NEW STORM SEWER	98.96	96.38 (STM)	96.83 (WM)	0.45
	NEW WATERMAIN - NEW SANITARY SEWER	98.92	96.43 (SAN)	96.83 (WM)	0.40

	DESCRIPTION	FINISHED GRADE (m)	T/O WATERMAIN (m)
	BUILDING CONNECTION	99.65	97.25
	EXISTING WATERMAIN STUB CONNECTION	98.15	95.75
	45° HORIZONTAL BEND	99.25	96.50
	45° HORIZONTAL BEND	99.53	96.70
	45° HORIZONTAL BEND	99.48	96.70
	45° HORIZONTAL BEND	99.45	96.70
	45° HORIZONTAL BEND	99.35	96.60
	45° HORIZONTAL BEND	99.40	96.60
	11.25° HORIZONTAL BEND	99.45	96.60
	SERVICE TEE 200mmX203mm	99.30	96.90
	CONNECTION TEE 200mmX150mm	99.54	96.70

NOTE: PROVIDE MINIMUM 2.4m COVER OVER T/O WATERMAIN TO FINISHED GRADE,
OTHERWISE PROVIDE THERMAL INSULATION HL40 AS PER DETAIL A/C1.



1. CONTRACTOR RESPONSIBLE TO:
 - 1.1. OBTAIN A VIDEO INSPECTION OF THE CITY SEWER SYSTEM WITHIN ATLAS TERRACE AND COPE DRIVE PRIOR TO ANY CONSTRUCTION TO DETERMINE THE LOCATION OF ANY EXISTING CITY SEWER SYSTEM PRIOR TO CONSTRUCTION OF THE LANDS AND TO PROVIDE SAID VIDEO INSPECTION TO GENERAL MANAGER, PLANNING, DEVELOPMENT AND BUILDING SERVICES.
 2. UPON COMPLETION OF CONSTRUCTION ON THE LANDS, THE CONTRACTOR SHALL, AT ITS EXPENSE AND TO THE SATISFACTION OF THE GENERAL MANAGER, PLANNING, DEVELOPMENT AND BUILDING SERVICES:
 - 2.1. OBTAIN A VIDEO INSPECTION OF THE EXISTING CITY SEWER SYSTEM WITHIN ATLAS TERRACE AND COPE DRIVE TO DETERMINE IF THE CITY SEWER SYSTEM SUSTAINED ANY DAMAGES AS A RESULT OF CONSTRUCTION ON THE LANDS.
 - 2.2. ASSUME ALL LIABILITY FOR ANY DAMAGES CAUSED TO THE SEWER SYSTEM WITHIN ATLAS TERRACE AND COPE DRIVE PRIOR TO THE COMPLETION OF CONSTRUCTION.



NEW STORM SEWER STRUCTURE SCHEDULE					
MANHOLE NO.	DESCRIPTION	T/GRATE ELEVATION	INVERT ELEVATION / PIPE DIAMETER	OPSD No.	FRAME (CITY OF OTTAWA)
CB-1	600x600mm Catchbasin	99.00	SE INV.: 97.92 - 250mmØ	705.010	S19
CB-2	600x600mm Catchbasin	99.20	NW INV.: 97.99 - 250mmØ	705.010	S19
CB-3	600x600mm Catchbasin	98.95	NW INV.: 97.54 - 300mmØ	705.010	S19
CB-4	600x600mm Catchbasin	99.05	SE INV.: 97.03 - 250mmØ	705.010	S19
CB-5	600x600mm Catchbasin	98.70	NW INV.: 97.52 - 250mmØ	705.010	S19
CB-6	600x600mm Catchbasin	98.85	NE INV.: 96.68 - 300mmØ	705.010	S19
CB-7	600x600mm Catchbasin	99.05	NE INV.: 96.38 - 250mmØ	705.010	S19
CB-8	600x600mm Catchbasin	99.00	SW INV.: 96.91 - 250mmØ	705.010	S19
CB-9	600x600mm Catchbasin	98.50	SE INV.: 96.30 - 250mmØ	705.010	S19
CBMH-1	1,200mmØ Manhole	99.00	NW INV.: 97.50 - 250mmØ SE INV.: 97.45 - 300mmØ	701.010	S25 / S28.1
CBMH-2	1,200mmØ Manhole	99.00	NW INV.: 97.28 - 300mmØ SE INV.: 97.20 - 375mmØ	701.010	S25 / S28.1
CBMH-3	1,200mmØ Manhole	99.10	SE INV.: 97.47 - 250mmØ NW INV.: 97.44 - 250mmØ	701.010	S25 / S28.1
CBMH-4	1,200mmØ Manhole	98.90	SE INV.: 97.03 - 300mmØ NW INV.: 96.96 - 375mmØ	701.010	S25 / S28.1
CBMH-5	1,200mmØ Manhole	98.50	SE INV.: 96.86 - 250mmØ NW INV.: 96.74 - 375mmØ	701.010	S25 / S28.1
STMH-1	1,200mmØ Manhole	99.49	NW INV.: 97.06 - 375mmØ SE INV.: 97.12 - 250mmØ NE INV.: 97.00 - 375mmØ	701.010	S25 / S24.1
STMH-2	1,200mmØ Manhole	99.14	SW INV.: 96.81 - 375mmØ SE INV.: 96.81 - 375mmØ NW INV.: 96.94 - 250mmØ NE INV.: 96.66 - 525mmØ	701.010	S25 / S24.1
STMH-3	1,500mmØ Manhole	99.41	SW INV.: 96.37 - 525mmØ SE INV.: 96.52 - 375mmØ NE INV.: 96.22 - 675mmØ	701.011	S25 / S24.1
STMH-4	1,800mmØ Manhole	99.46	SW INV.: 96.16 - 675mmØ NE INV.: 96.46 - 375mmØ NW INV.: 96.01 - 825mmØ	701.012	S25 / S24.1
STMH-5	1,800mmØ Manhole	99.29	SE INV.: 95.69 - 825mmØ SW INV.: 97.09 - 375mmØ NE INV.: 95.62 - 900mmØ	701.012 / 1003.010 DROP STRUCTURE TEE	S25 / S24.1
STMH-6	2,400mmØ Manhole	98.84	SW INV.: 95.34 - 900mmØ NW INV.: 95.28 - 900mmØ	701.013	S25 / S24.1

MANHOLE NO.	DESCRIPTION	T/GRATE ELEVATION	INVERT ELEVATION / PIPE DIAMETER	OPSD No.	FRAME (CITY OF OTTAWA)
SAMH-1	1,200mmØ Manhole	98.86	SW INV.: 96.20 - 200mmØ NW INV.: 94.47 - 200mmØ	701.010 / 1003.010 DROP STRUCTURE TEE	S25 / S24



12 INTERNATIONAL DR. PEMBROKE, ON, K8A 6W5 T: 613-735-2507 PEMBROKE@JP2G.COM	1150 MORRISON DR., #410 OTTAWA, ON, K2H 8S9 T: 613-828-7800 OTTAWA@JP2G.COM	16 EDWARD ST. S., #211 ARNPRIOR, ON, K7S 3W4 T: 613-626-0780 ARNPRIOR@JP2G.COM
---------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------

Jp2g PROJECT No.: 24-5050A



NOT FOR
CONSTRUCTION

2	ISSUED FOR SITE PLAN CONTROL	2025-10-23
1	ISSUED FOR PHASE 2 PRE-CONSULTATION APPLICATION	2025-09-05
No.	DESCRIPTION	YYYY-MM-DD



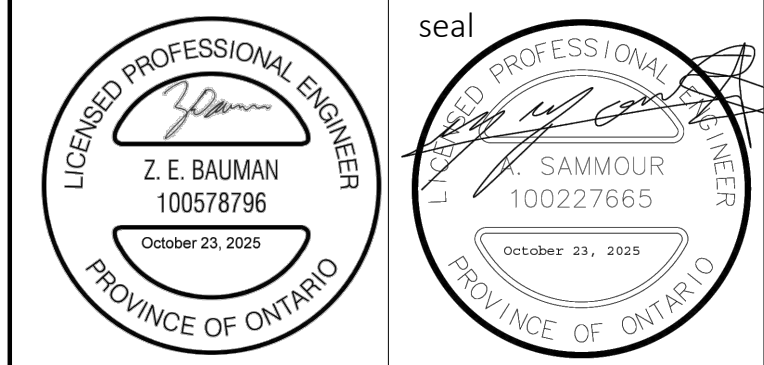
N45 ARCHITECTURE INC.

71 Bank Street, 7th Floor - Ottawa, Ontario K1P 5N2
tel. 613.224.0095 fax 613.224.9811

project

Fernbank Catholic High School

5431 Fernbank Road, Ottawa, ON
K2S 0T7



drawing title

Details, Notes and Schedules

scale
As Shown
date

June 2025 Z.Bauman / A.Sammour

project
number

24-835 **C3**

CONTRACTOR TO VERIFY ALL DIMENSIONS AND
NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
BEFORE WORK COMMENCES.

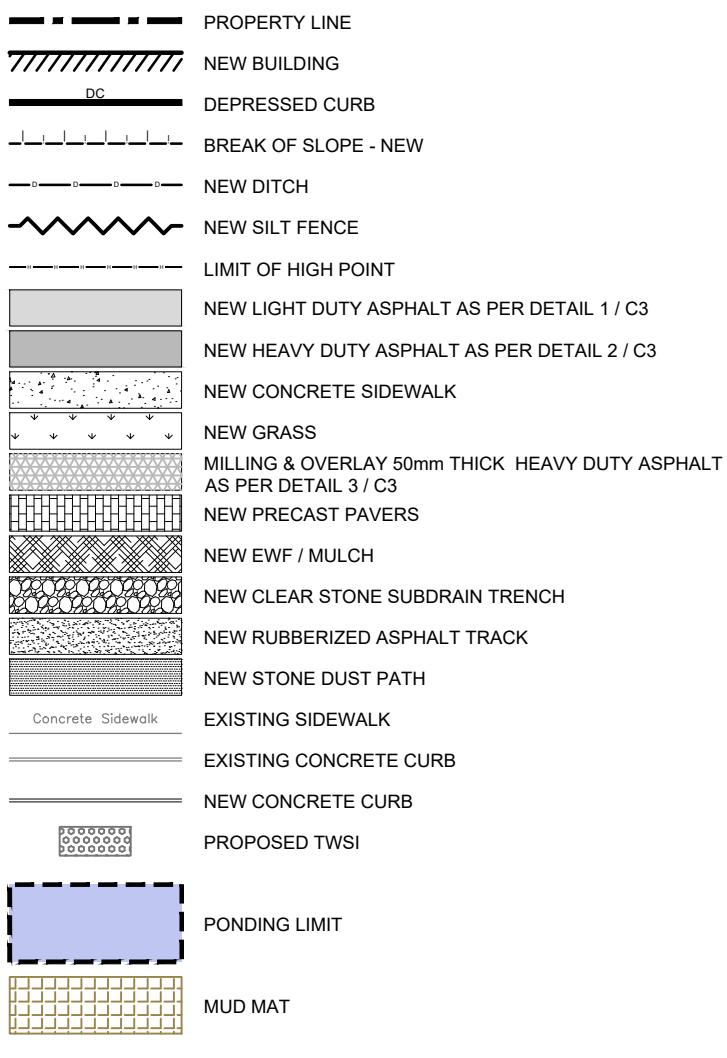
DO NOT SCALE DRAWINGS.

PLAN #XXXX

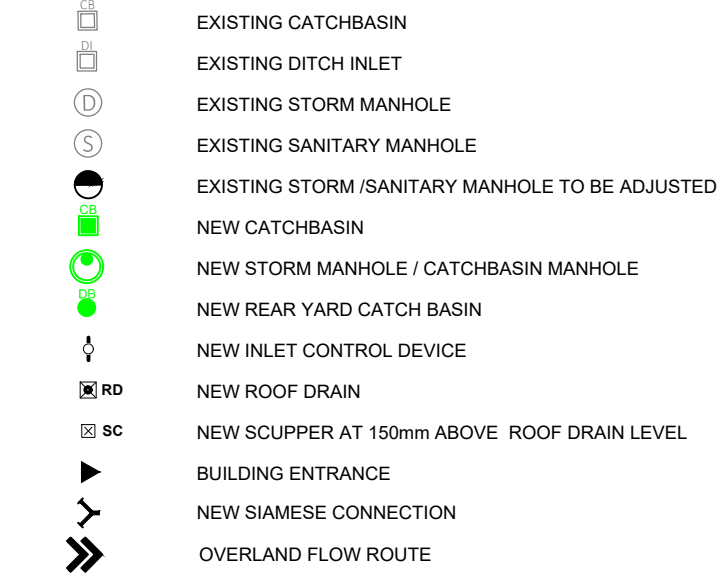
EROSION AND SEDIMENT CONTROL NOTES

- ** CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES.****
- PRIOR TO START OF CONSTRUCTION:
 - INSTALL SILT FENCE IN LOCATION SHOWN ON DRAWINGS.
 - INSTALL FILTER FABRIC OR SILT SACK FILTERS IN ALL THE CATCHBASINS AND MANHOLES TO REMAIN DURING CONSTRUCTION WITHIN THE SITE (SEE TYPICAL DETAIL).
 - INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.
 - DURING CONSTRUCTION:
 - MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE AND IMPACTS TO EXISTING GRADING.
 - PERIMETER VEGETATION TO REMAIN IN PLACE UNTIL PERMANENT STORM WATER MANAGEMENT IS IN PLACE. OTHERWISE, IMMEDIATELY INSTALL SILT FENCE WHEN THE EXISTING SITE IS DISTURBED AT THE PERIMETER.
 - PROTECT DISTURBED AREAS FROM OVERLAND FLOW BY PROVIDING TEMPORARY SWALES TO THE SATISFACTION OF THE FIELD ENGINEER. TIE-IN TEMPORARY SWALE TO EXISTING GPS AS REQUIRED.
 - PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED WITHIN 30 DAYS.
 - INSPECT SILT FENCES, FILTER FABRIC FILTERS AND CATCH BASIN SUMPS WEEKLY AND WITHIN 24 HOURS AFTER A STORM EVENT. CLEAN AND REPAIR WHEN NECESSARY.
 - DRAWING TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.
 - EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES.
 - DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS).
 - CONTROL WIND-BLOWN DUST OFF SITE BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED AND TO THE SATISFACTION OF THE ENGINEER).
 - NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE FIELD ENGINEER.
 - CITY OF OTTAWA ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING AS REQUIRED.
 - DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPPED.
 - ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.
 - TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION DEBRIS OR WASTE BEING SPILLED OR TRACKED ONTO ADJUTING PROPERTIES OR PUBLIC STREETS DURING CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED.
 - ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.
 - THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.

LEGEND



LEGEND CONTINUED



ICD SCHEDULE

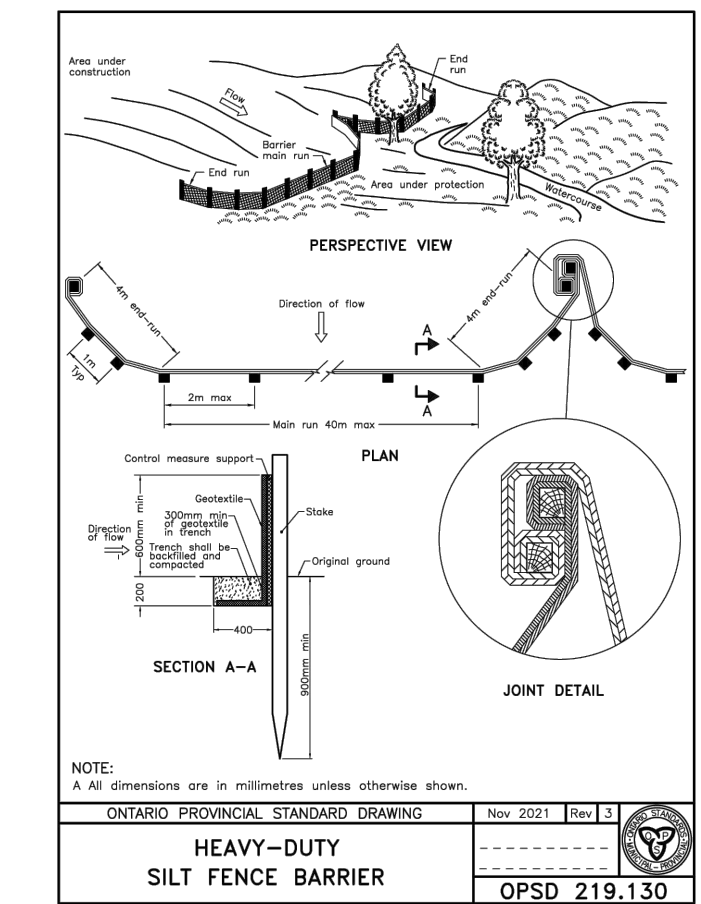
ICD	LOCATION	PIPE SIZE (mm)	ICD SIZE (mm)	100 YEAR HEAD (m)	100 YEAR FLOW RATE (l/s)
ICD-1	STMH-1	375	164	2.01	81.3
ICD-2	CBMH-4	375	172	1.97	88.3
ICD-3	CB-4	250	115	2.08	40.1
ICD-4	CBMH-5	375	101	1.89	30.0
ICD-5	CB-6	250	160	2.31	82.4
ICD-6	CB-7	250	115	2.77	46.4

DRAWING NOTES

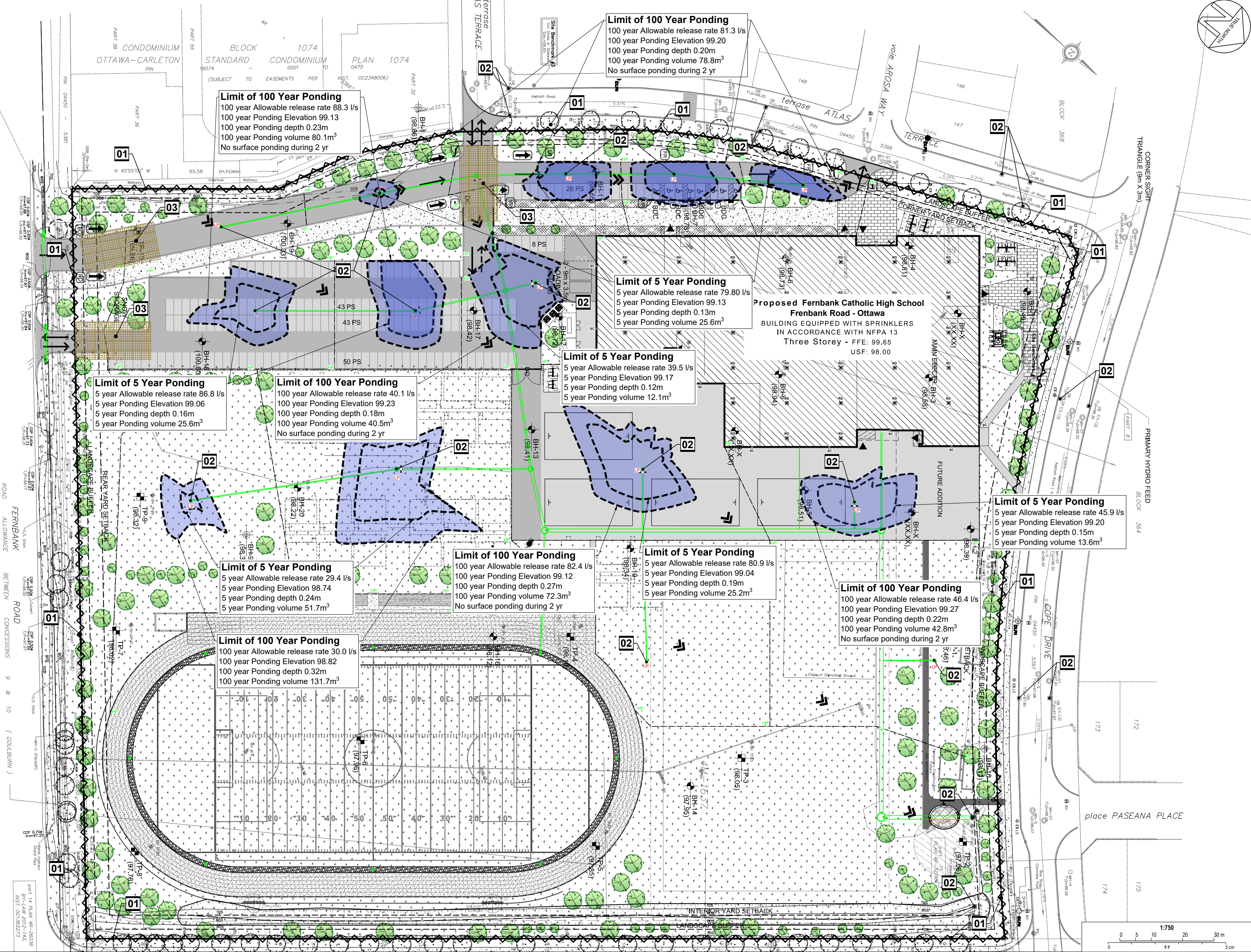
- INSTALL SILT FENCE IN ACCORDANCE WITH OPSD 219.130.
- INSTALL FILTER BAG (SILT SACK) TO PROTECT EXISTING CATCHBASINS & CATCHBASIN MANHOLES AS PER DETAIL 4/C3.
- PROPOSE MUD MAT DURING CONSTRUCTION.

EROSION AND SEDIMENT CONTROL NOTES

- THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATER COURSE, DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, INSTALLING SILT FENCES AND OTHER EFFECTIVE SEDIMENT TRAPS, AND INSTALLING AND MAINTAINING MUD MATS FOR OUTGOING CONSTRUCTION TRAFFIC DURING CONSTRUCTION ACTIVITIES.
- PREVENT SOIL LOSS DURING CONSTRUCTION (BY STORM WATER RUNOFF OR WIND EROSION).
- PROTECT TOPSOIL BY STOCKPILING FOR REUSE.
- PREVENT SEDIMENTATION OF STORM SEWERS AND RECEIVING STREAMS.
- PREVENT AIR POLLUTION FROM DUST AND PARTICULATE MATTER.
- ALL STORM MANHOLES AND CATCHBASIN MANHOLES TO HAVE 300mm SUMPS. ALL CATCHBASINS TO HAVE 600mm SUMPS.
- INSTALL FILTER BAG INSERT IN ALL STORM MANHOLES AND CATCH BASINS IMPACTED DURING CONSTRUCTION, INCLUDING CATCH BASINS IN THE RIGHT OF WAY.
- SEDIMENT AND EROSION CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY OF OTTAWA INSPECTOR OR CONSERVATION AUTHORITY.
- STORM WATER PUMPED INTO MUNICIPALITY OF CITY OF OTTAWA SERVICE SHALL FLOW THROUGH A FILTER SOCK.
- THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.



1 C4 Heavy Duty Silt Fence Barrier
Scale: Not to scale



Jp2g Consultants Inc.
ENGINEERS • PLANNERS • PROJECT MANAGERS

12 INTERNATIONAL DR. PEMBROKE, ON, K6A 6W5
T: 613-735-2007
PEMBROKE@JP2G.COM

1150 MORRISON DR. #410 OTTAWA, ON, K2H 6S9
T: 613-829-7600
OTTAWA@JP2G.COM

16 EDWARD ST. S. #211 AARNPRIOR, ON, K7S 3W4
T: 613-600-0780
AARNPRIOR@JP2G.COM

Jp2g PROJECT No: 24-5050A

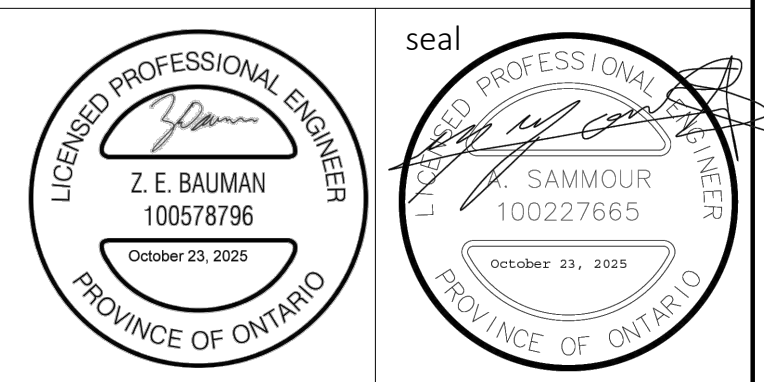


NOT FOR CONSTRUCTION

No.	DESCRIPTION	DATE
2	ISSUED FOR SITE PLAN CONTROL	2025-10-23
1	ISSUED FOR PHASE 2 PRE-CONSULTATION APPLICATION	2025-09-05
		YYYY-MM-DD

N45 ARCHITECTURE INC.
71 Bank Street, 7th Floor - Ottawa, Ontario K1P 5N2
tel. 613.224.0095 fax 613.224.9811

project
Fernbank Catholic High School
5431 Fernbank Road, Ottawa, ON K2S 0T7



drawing title
Storm Water Management and Erosion Sediment Control Plan

scale As Shown	drawn by R.Ismail
date Sept.2025	checked by Z.Bauman / A.Sammour
project number 24-835	drawing number C4

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

revision

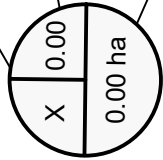
LEGEND

DRAINAGE AREA ID

WEIGHTED RUNOFF
COEFFICIENT

DRAINAGE AREA
HECTARES

DRAINAGE AREA LIMIT



* ALLOWABLE RELEASE RATE = 1499.0 l/s.
REFER TO PRE-CONSULTING MEETING NOTES : PC2025-0021 .

No.	YYYY-MM-DD	BY	DESCRIPTION
2	2025-10-23	R.I. / Z.B.	ISSUED FOR SITE PLAN CONTROL
1	2025-09-05	R.I. / Z.B.	ISSUED FOR PHASE 2 PRE-CONSULTATION APPLICATION



Jp2g PROJECT No.: 24-5050A

PROJECT	FERNBANK CATHOLIC HIGH SCHOOL
DRAWING	5431 FERNBANK ROAD, OTTAWA, ON K2S 0T7
FIGURE-1 PRE-DEVELOPMENT DRAINAGE AREAS	

CLIENT No.:

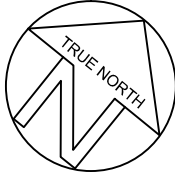
DRAFTED: R.ISMAIL

DESIGNED: R.ISMAIL / Z.BAUMAN

REVIEWED: Z.BAUMAN

APPROVED: A.SAMMOUR

NORTH



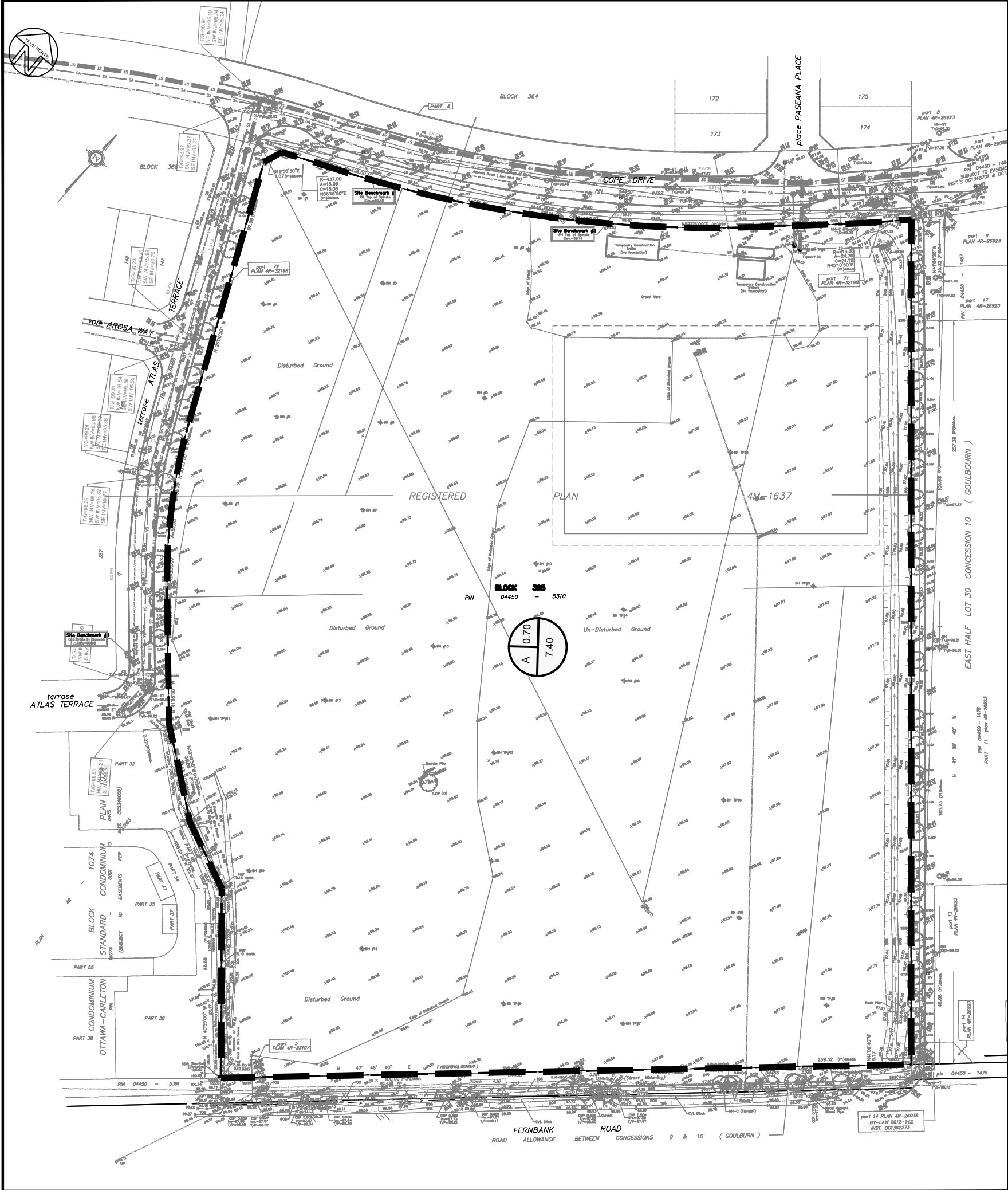
SCALE

1:1,500



SHEET#

FIG.1



LEGEND

DRAINAGE AREA ID

WEIGHTED RUNOFF COEFFICIENT

DRAINAGE AREA HECTARES

X

0.00

0.00 ha

DRAINAGE AREA LIMIT

OVERLAND FLOW ROUTE

NEW BUILDING

NEW LIGHT DUTY ASPHALT

NEW HEAVY DUTY ASPHALT

NEW CONCRETE SIDEWALK

NEW PRECAST PAVERS

NEW EWF / MULCH

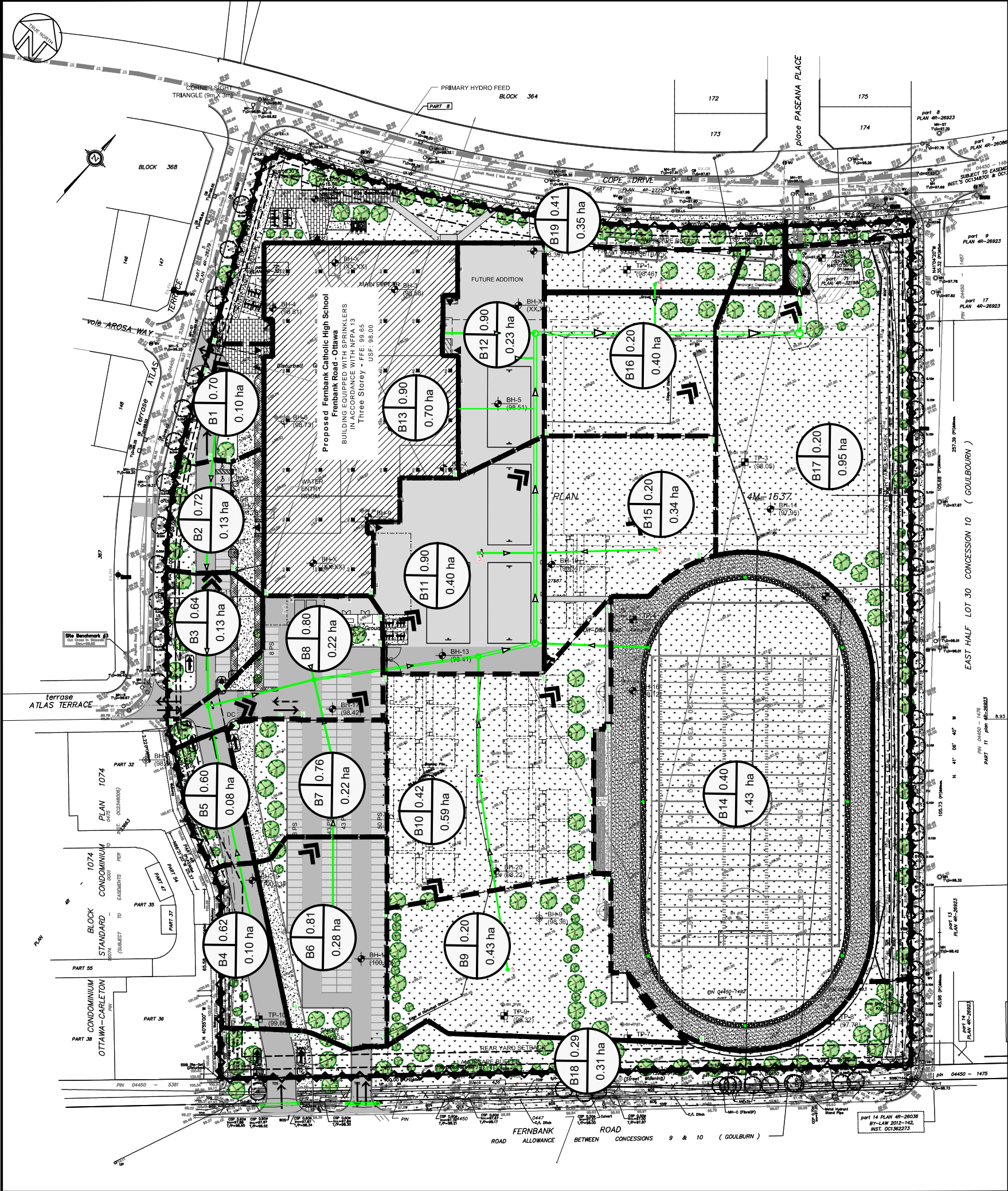
NEW CLEAR STONE SUBDRAIN TRENCH



NEW RUBBERIZED ASPHALT TRACK

NEW STONE DUST PATH

NEW GRASS

NEW ROOF DRAIN



						Jp2g PROJECT No.: 24-5050A	PROJECT FERNBANK CATHOLIC HIGH SCHOOL 5431 FERNBANK ROAD OTTAWA, ON K2S 0T7 DRAWING FIGURE-2 POST-DEVELOPMENT DRAINAGE AREAS	CLIENT No.:		SCALE 1:1,500 0 m 25 50 75 m	SHEET#	FIG.2
				DRAFTED: R.ISMAIL								
2	2025-10-23	R.I. / Z.B.	ISSUED FOR SITE PLAN CONTROL	DESIGNED: R.ISMAIL / Z.BAUMAN								
1	2025-09-05	R.I. / Z.B.	ISSUED FOR PHASE 2 PRE-CONSULTATION APPLICATION	REVIEWED: Z.BAUMAN								
No.	YYYY-MM-DD	BY	DESCRIPTION	APPROVED: A.SAMMOUR								

LEGEND

45m RADIUS - FIRE HYDRANT COVERAGE

EXISTING FIRE HYDRANT

EXISTING WATER VALVE

EXISTING WATER VALVE

NEW FIRE HYDRANT

NEW WATER VALVE

NEW WATERMAIN

NEW SIAMESE CONNECTION

NEW WATER CHAMBER

2	2025-10-23	R.I. / Z.B.	ISSUED FOR SITE PLAN CONTROL		
1	2025-09-05	R.I. / Z.B.	ISSUED FOR PHASE 2 PRE-CONSULTATION APPLICATION		
No.	YYYY-MM-DD	BY	DESCRIPTION		



Jp2g PROJECT No.: 24-5050A

PROJECT

FERNBANK CATHOLIC HIGH SCHOOL

5431 FERNBANK ROAD OTTAWA, ON K2S 0T7

FIGURE-3

FIRE HYDRANT COVERAGE AREAS

CLIENT No.:

DRAFTED: R.ISMAIL

DESIGNED: R.ISMAIL / Z.BAUMAN

REVIEWED: Z.BAUMAN

APPROVED: A.SAMMOUR

NORTH



SCALE

1:1,500

75 m

25 m

SHEET#

FIG. 3

