GENERAL

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND LANDSCAPE DRAWINGS.
2. ALL SERVICES, MATERIALS, CONSTRUCTION METHODS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND REGULATIONS OF THE: CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS, ONTARIO PROVINCIAL SPECIFICATION STANDARD SPECIFICATION (OPSS) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD), UNLESS OTHERWISE SPECIFIED, TO THE SATISFACTION OF THE CITY AND THE CONSULTANT.
3. THE POSITION OF EXISTING POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES, STRUCTURES AND APPURTENANCES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SATISFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM DURING THE COURSE OF CONSTRUCTION. ANY RELOCATION OF EXISTING UTILITIES REQUIRED BY THE DEVELOPMENT OF SUBJECT LANDS IS TO BE UNDERTAKEN AT CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR MUST NOTIFY ALL EXISTING UTILITY COMPANY OFFICIALS FIVE (5) BUSINESS DAYS PRIOR TO START OF CONSTRUCTION AND HAVE ALL EXISTING UTILITIES AND SERVICES LOCATED IN THE FIELD OR EXPOSED PRIOR TO THE START OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO HYDRO, BELL, CABLE TV, AND CONSUMERS GAS LINES.
5. ALL TRENCHING AND EXCAVATIONS TO BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. ALL INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
6. REFER TO ARCHITECTS PLANS FOR BUILDING DIMENSIONS, ELEVATIONS, LAYOUT AND REMOVALS. REFER TO LANDSCAPE PLAN FOR LANDSCAPED DETAILS AND OTHER RELEVANT INFORMATION. ALL INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
7. TOPOGRAPHIC SURVEY COMPLETED AND PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. DATED FEB 14, 2023 . CONTRACTOR TO VERIFY IN THE FIELD PRIOR TO CONSTRUCTION OF ANY WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
8. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. VERIFY THAT JOB BENCHMARKS HAVE NOT BEEN ALTERED OR DISTURBED.
9. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR DRAIN OUTLETS ARE PROVIDED.
10. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT. PAVEMENT REINSTATEMENT SHALL BE WITH STEP JOINTS OF 500mm WIDTH MINIMUM.
11. ALL DISTURBED AREAS OUTSIDE PROPOSED GRADING LIMITS TO BE RESTORED TO ORIGINAL ELEVATIONS AND CONDITIONS UNLESS OTHERWISE SPECIFIED. EXISTING PARKING LOT SHALL BE RE-ASPHALTED AT EXISTING GRADES EXCEPT AS NOTED TO EVEN OUT GRADES. ALL RESTORATION SHALL BE COMPLETED WITH THE GEOTECHNICAL REQUIREMENTS FOR BACKFILL AND COMPACTION.
12. ABUTTING PROPERTY GRADES TO BE MATCHED.
13. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE MUNICIPAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION, INCLUDING WATER PERMIT AND ROAD CUT PERMIT.
14. MINIMIZE DISTURBANCE TO EXISTING VEGETATION DURING THE EXECUTION OF ALL WORKS.
15. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE DIRECTED FROM THE ENGINEER. EXCAVATE AND REMOVE ALL ORGANIC MATERIAL AND DEBRIS LOCATED WITHIN THE PROPOSED BUILDING, PARKING AND ROADWAY LOCATIONS.
16. AT PROPOSED UTILITY CONNECTION POINTS AND CROSSINGS (I.E. STORM SEWER, SANITARY SEWER, WATER, ETC.) THE CONTRACTOR SHALL DETERMINE THE PRECISE LOCATION AND DEPTH OF EXISTING UTILITIES AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
17. PRIOR TO CONSTRUCTION, A GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO IS TO INSPECT ALL SUB-SURFACES FOR FOOTINGS, SERVICES AND PAVEMENT STRUCTURES.
18. CONTRACTOR TO OBTAIN POST-CONSTRUCTION TOPOGRAPHIC SURVEY PERFORMED BY CERTIFIED OLS OR P.ENG. CONFIRMING COMPLIANCE WITH DESIGN GRADING AND SERVICING. SURVEY IS TO INCLUDE LOCATION AND INVERTS FOR BURIED UTILITIES.
19. PROVIDE CCTV INSPECTION REPORT FOR ALL SEWERS AND CATCHBASIN LEADS 200MM DIAMETER AND LARGER. REPEAT CCTV INSPECTION FOLLOWING RECTIFICATION OF ANY DEFICIENCIES.
20. REPORT REFERENCES
    - 20.1. SERVICING AND SWM REPORT FOR AVALON III ES, PREPARED BY WSP CANADA INC. PROJECT NO. 221-12984-00, JUNE 01, 2023.
    - 20.2. DESIGN BRIEF FOR SUMMERSIDE SOUTH - PHASE 1, 2464 TENTH LINE ROAD, PREPARED BY DAVID SCHAEFFER ENGINEERING LTD, PROJ. NO. 15-766, JUNE 24, 2019
    - 20.3. GEOTECHNICAL INVESTIGATION REPORT - PROPOSED AVALON III ELEMENTARY SCHOOL, PREPARED BY EXP SERVICES INC., PROJ. NO.OTT-22017859-A0, MARCH 7, 2023.
    - 20.4. STORMWATER MANAGEMENT REPORT FOR SUMMERSIDE SOUTH PHASE 1, PREPARED BY J.F. SABOURIN AND ASSOCIATES INC., PROJ. NO.1102-13, JUNE, 2019

PARKING LOT AND WORK IN PUBLIC RIGHTS OF WAY

1. CONTRACTOR TO REINSTATE ROAD CUTS AS PER CITY OF OTTAWA DETAIL R10.
2. REFER TO GEOTECHNICAL INVESTIGATION REPORT PREPARED BY EXP SERVICES INC., DATED MARCH 7, 2023 FOR GEOTECHNICAL RECOMMENDATIONS.
3. CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROOFROLLING, TO THE SATISFACTION OF THE GEOTECHNICAL CONSULTANT PRIOR TO THE COMMENCEMENT OF PLACEMENT OF GRANULAR B MATERIAL.
4. FILL TO BE PLACED AND COMPACTED PER THE GEOTECHNICAL REPORT REQUIREMENTS.
5. 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.
6. GRANULAR A MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR B PLACEMENT.
7. 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.
8. ASPHALT MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR A PLACEMENT.
9. 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.
10. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING LINE AND GRADE IN ACCORDANCE WITH THE PLANS, AND FOR PROVIDING THE CONSULTANT WITH VERIFICATION PRIOR TO PLACEMENT.
11. ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF AT AN APPROVED DUMP SITE. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIAL, CONTRACTOR IS TO NOTIFY CONSULTANT. CONSULTANT TO DETERMINE APPROPRIATE DISPOSAL METHOD/LOCATION.
12. PAVEMENT STRUCTURE (MATERIAL TYPES AND THICKNESS) TO BE AS SPECIFIED IN THE GEOTECHNICAL REPORT.

STORM SEWERS AND STRUCTURES

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 450mm DIAMETER AND SMALLER SHALL BE PVC SDR-35, WITH RUBBER GASKET PER CSA A-257.3.
3. STORM SEWER LARGER THAN 450mm SHALL BE REINFORCED CONCRETE CLASS 100D.
4. SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
5. ALL STORM MANHOLES TO BE AS PER STORM STRUCTURE TABLE.
6. ANY NEW OR EXISTING STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.
7. ALL CATCHBASIN LEADS TO BE MINIMUM 200mm DIAMETER AT MINIMUM 1.0% SLOPE UNLESS OTHERWISE SPECIFIED.
8. STORM CATCHBASINS AS PER OPSD 705.010 AND FRAME/COVER AS PER CITY STANDARD DRAWINGS S19. STORM CBMH'S AS INDICATED IN TABLE WITH SUMP, ADJUSTMENT SECTIONS SHALL BE AS PER OPSD 704.010.
9. INSTALLATION OF FLOW CONTROL ICD'S TO BE VERIFIED BY QUALITY VERIFICATION ENGINEER RETAINED BY CONTRACTOR.
10. PROVIDE BACKWATER VALVE ON FOUNDATION DRAIN, STORM DISCHARGE, AND OVERFLOW DISCHARGE PER S14

SANITARY SEWER AND STRUCTURES

1. ALL SANITARY SEWER, SANITARY SEWER APPURTENANCES AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CCTV INSPECTION REPORTS FOR ALL NEW SANITARY PIPING.
2. SANITARY SEWER PIPE SIZE 150mm DIAMETER AND GREATER TO BE PVC SDR-35 (UNLESS SPECIFIED OTHERWISE) WITH RUBBER GASKET TYPE JOINTS IN CONFORMANCE WITH CSA B-182.2,3,4.
3. SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
4. 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.
5. MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES AS PER THE OPSD 701.021
6. ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.
7. PROVIDE BACKWATER VALVE FOR BUILDING SANITARY SERVICES PER S14.1

WATERMAIN

1. ALL WATERMAIN AND WATERMAIN APPURTANANCES, 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 POLY VINYL CHLORIDE (PVC) CLASS 150 DR 18 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 DEPTH CANNOT BE ACHIEVED, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W22. WHERE A WATERMAIN IS IN CLOSE PROXIMITY TO AN OPEN STRUCTURE, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W23.
4. CONCRETE THRUST BLOCKS AND MECHANICAL RESTRAINTS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, REDUCERS, ENDS OF MAINS AND CONNECTIONS 100mm AND LARGER, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS W25.3 & W25.4.
5. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS AS PER CITY OF OTTAWA STANDARD W40 & W42.
6. ALL VALVES AND VALVE BOXES AND CHAMBERS, HYDRANTS, AND HYDRANT VALVES AND ASSEMBLES SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARD
7. FIRE HYDRANT LOCATION AND INSTALLATION AS PER CITY OF OTTAWA STANDARD W18 & W19. CONTRACTOR TO PROVIDE FLOW TEST AND PAINTING OF NEW HYDRANT IN ACCORDANCE WITH CITY STANDARDS.
8. IF WATER MAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.

EROSION AND SEDIMENT CONTROL

** 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.
   - 1.2. INSTALL FILTER FABRIC OR SILT SACK FILTERS IN ALL THE CATCHBASINS AND MANHOLES TO REMAIN DURING CONSTRUCTION WITHIN THE SITE.
   - 1.3. INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.
   - 1.4. INSTALL MUD MAT AT CONSTRUCTION ENTRANCES.
2. DURING CONSTRUCTION:
   - 2.1. MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE AND IMPACTS TO EXISTING GRADING.
   - 2.2. 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.
   - 2.3. PROTECT DISTURBED AREAS FROM OVERLAND FLOW BY PROVIDING TEMPORARY SWALES TO THE SATISFACTION OF THE FIELD ENGINEER. TIE-IN TEMPORARY SWALE TO EXISTING CB'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. CLEAN AND REPAIR WHEN NECESSARY.
   - 2.6. DOWNSTREAM STORM INFRASTRUCTURE SHALL BE PROTECTED FROM UNFILTERED RUNOFF DURING ON-SITE STORM INFRASTRUCTURE DEMOLITION.
   - 2.7. DRAWING TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.
   - 2.8. EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES.
   - 2.9. 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 SEEDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS).
   - 2.10. 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).
   - 2.11. NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE FIELD ENGINEER.
   - 2.12. CITY ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING AS REQUIRED.
   - 2.13. DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPED.
   - 2.14. ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.
   - 2.15. TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION DEBRIS OR WASTE BEING SPILLED OR TRACKED ONTO ABUTTING PROPERTIES OR PUBLIC STREETS DURING CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED.
   - 2.16. 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.
   - 2.17. 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.

Typical Siltsack® Construction - Type B

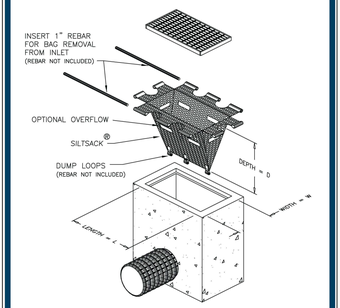
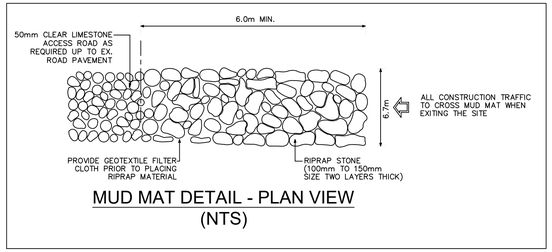


Table VIII: Recommended Pavement Structure Thicknesses

Pavement Layer	Compaction Requirements	Pathways and Walkways	Play Ground	Pavement Design to be used by light Duty Vehicles (Cars)	Heavy Duty Vehicles (Cars and Trucks, Buss Drop Off)
Surface Course Asphaltic Concrete HL-4 (OPSS 1150)	92 to 97% MRD*	50 mm HL3F	51 mm HL3	40 mm HL3/SP12.5 Category B 40 mm HL8/SP19.0 Category B	50 mm HL3/SP12.5 Category B 60 mm HL8/SP19.0 Category B
(OPSS 1010) Granular A Base	100% SPMDD**	150 mm	150 mm	150 mm	150 mm
(OPSS 1010) Granular B Sub-Base, Type II	100% SPMDD**	300 mm	300 mm	450 mm	600 mm

*Denotes maximum relative density.
**Denotes standard Proctor maximum dry density, ASTM-D698-12e2.



MUD MAT DETAIL - PLAN VIEW
(NTS)

EXISTING LEGEND:

- EXISTING BOUNDARY
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING CATCH BASIN
- EXISTING WATER VALVE BOX
- EXISTING FIRE HYDRANT
- EXISTING FLOW DIRECTION
- EXISTING ELEVATION (88.82)

PROPOSED LEGEND:

- PROPOSED CURB
- PROPOSED PROPERTY LINE
- PROPOSED PAINT LINE
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED 100YR POND LIMIT
- PROPOSED 100YR+20% DEPTH POND LIMIT
- PROPOSED HIGH POINT LINE
- PROPOSED TERRACING LINE
- PROPOSED STM./SAN MANHOLE
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED LANDSCAPE CATCHBASIN
- PROPOSED WATER VALVE BOX
- PROPOSED WATER TEE CONNECTION
- PROPOSED 45° ELBOW
- PROPOSED ELEVATION (88.83)
- PROPOSED SLOPE (???)
- PROPOSED FLOW DIRECTION
- PROPOSED SEWER STUB
- PROPOSED DRAINAGE FLOW DIRECTION
- PROPOSED SIAMESE CONNECTION
- PROPOSED TREE PROTECTION

ESC LEGEND:

- SILT FENCE
- MUD MAT
- SILT SACK
- CLAY SEAL

DRAINAGE AREA LEGEND:

- DRAINAGE BOUNDARY LINE
- DRAINAGE AREA SYMBOL (S-102 CONTROLLED / 0.088 / 0.63)

PRE-DEVELOPMENT DRAINAGE AREA LEGEND:

- PRE-DRAINAGE BOUNDARY LINE
- DRAINAGE AREA SYMBOL (P3 / 0.132 / 0.25)
- EXISTING FLOW DIRECTION

CLIENT:
Écoles catholiques Centre-Est
CLIENT REF. #:

ARCHITECT:
EDWARD J CUHACI & ASSOCIATES ARCHITECTS Inc.
171 Slater St, Suite 100, Ottawa, Ontario, K1P 5H7
Fax: (613) 236-1944 Telephone: (613) 236-7135 E-mail: info@cuhaci.com

wsp
300-2611 QUEENSVIEW DRIVE
OTTAWA ONTARIO CANADA K2B 8K2
TEL.: 1-613-829-2800 | FAX: 1-613-829-8299 | WWW.WSPGROUP.COM

PROJECT:
ÉCOLE ÉLÉMENTAIRE CATHOLIQUE AVALON III
TENTH LINE ROAD
OTTAWA, ON

CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST
4000, RUE LABELLE, OTTAWA, ON K1J 1A1

KEY PLAN:


SEAL:
LICENSED PROFESSIONAL ENGINEER
D. B. YANG
100230568
2024-06-12
PROVINCE OF ONTARIO
NOT VALID UNLESS SIGNED AND DATED

DISCLAIMER: COPYRIGHT:
THIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR REVISED WITHOUT WRITTEN PERMISSION BY WSP. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND UTILITY LOCATIONS AND REPORT ALL ERRORS AND OMISSIONS PRIOR TO COMMENCING WORK.
THIS DRAWING IS NOT TO BE SCALED.

BEARING NOTE:
BEARING ARE GRID, DERIVED FROM THE CAN-NET REAL TIME NETWORK GPS OBSERVATIONS, REFERENCED TO SPECIFIED CONTROL POINTS 01919680184 AND 01919843761, MTM ZONE 9 (76° 30' WEST LONGITUDE) NAD83 (ORIGINAL)
BENCHMARK #1 N:5033845.03 E:384791.31 Z:88.40
BENCHMARK #2 N:5033883.86 E:384886.06 Z:87.99

NORTHING: N

ISSUED FOR - REVISION:

IS	RE	DATE	DESCRIPTION
7		2024-06-12	REVISED AS PER CITY COMMENT
6		2024-04-18	REVISED AS PER CITY COMMENT
5		2024-03-14	ISSUED FOR TENDER
4		2024-02-16	REVISED AS PER CITY COMMENT
3		2023-12-18	ISSUED FOR BUILDING PERMIT
2		2023-07-21	ISSUED FOR BUILDING PERMIT
1		2023-06-02	ISSUED FOR SPA

PROJECT NO.: 221-12984-00
DATE: 2024-06-12
ORIGINAL SCALE: 1:300
DESIGNED BY: D.Y./M.S.
DRAWN BY: S.T-R.
CHECKED BY: D.Y.
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE. 25mm
DISCIPLINE: CIVIL
TITLE: NOTES AND DETAILS
SHEET NUMBER: C01
SHEET #: OF
ISSUE: REVISED AS PER CITY COMMENT
REV.#: 0
DATE OF: 2024-06-12

D07-12-23-0094
#19079

JOB BENCHMARK #1
FIRE HYDRANT
TOP OF SPINDLE
ELEVATION=88.40

JOB BENCHMARK #2
FIRE HYDRANT
TOP OF SPINDLE
ELEVATION=87.99

NEW TWO STOREY ELEMENTARY SCHOOL
GROUND FLOOR ELEVATION: 87.85m

FUTURE ADDITION

LAY-BY PARKING

MULTI-USE PATHWAY

SMDC

promenade SWEET VALLEY DRIVE

BLOCK 158

BLOCK 70

McKinnon's Creek

EXISTING TREE (TYP.) TO BE PROTECTED. REFER TO LANDSCAPE DRAWINGS FOR TREE PROTECTION DETAILS.

100 YR+20% PONDING LIMIT @ 87.25m

100 YR PONDING LIMIT @ 87.20m

TIE INTO EXISTING GROUND AT PROPERTY LINE WITH MAX 3:1 SLOPE

TIE INTO EXISTING DITCH ELEVATION (CONTRACTOR TO VERIFY ON SITE)

PROPOSED EMERGENCY SPILLWAY C/W RIP-RAP AS PER OPSD 810.010 USE R-50 RIP-RAP MATERIAL AS PER OPSS MUNI 1004

Line Between North 1/2 and South 1/2 of North 1/2 Lot 5

SCALE: 1:300

CLIENT:
Écoles catholiques Centre-Est

CLIENT REF. #:

ARCHITECT:
EDWARD J CUHACI & ASSOCIATES ARCHITECTS Inc.
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BENCHMARK #1 N 5033845.03 E 364791.31 Z 88.40
BENCHMARK #2 N 5033883.86 E 364855.06 Z 87.99

NORTHING:

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5		2024-03-14	ISSUED FOR TENDER
4		2024-02-16	REVISED AS PER CITY COMMENT
3		2023-12-18	ISSUED FOR BUILDING PERMIT
2		2023-07-21	ISSUED FOR BUILDING PERMIT
1		2023-06-02	ISSUED FOR SPA
IS	RE	DATE	DESCRIPTION

PROJECT NO.: 221-12984-00
DATE: 2024-06-12
ORIGINAL SCALE: 1:300
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE
DESIGNED BY: D.Y./M.S.
DRAWN BY: S.T-R.
CHECKED BY: D.Y.
25mm

DISCIPLINE: CIVIL

TITLE: GRADING PLAN

SHEET NUMBER: C02
SHEET #: OF

ISSUE: REVISED AS PER CITY COMMENT
REV #: 0
DATE OF: 2024-06-12

D07-12-23-0094

#19079

CTB: wsp_kingston_24x36.ctb
PLOTTED: 2024-06-12 - 11:47 AM
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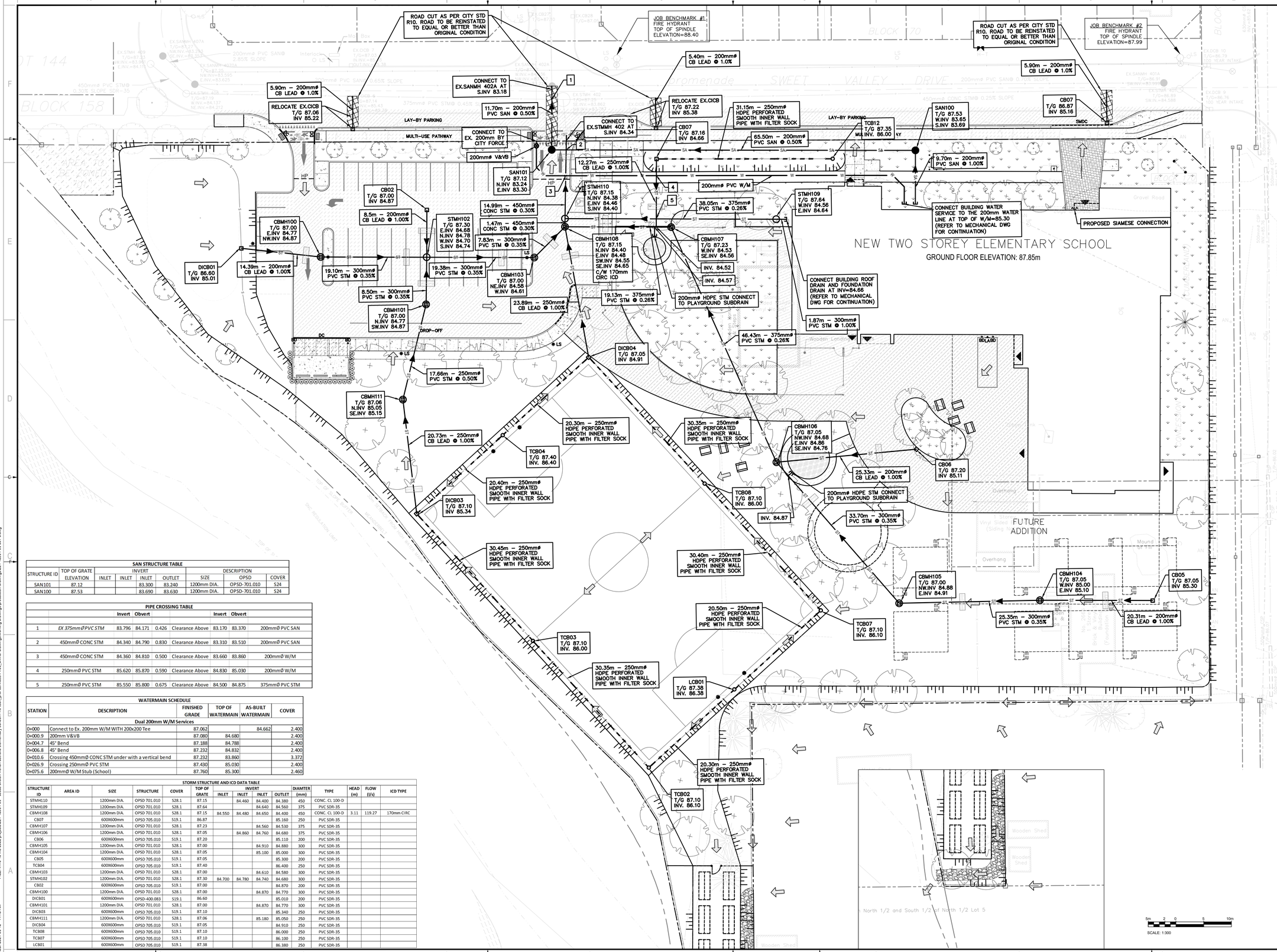

SAN STRUCTURE TABLE									
STRUCTURE ID	TOP OF GRATE ELEVATION	INVERT				DESCRIPTION			
		INLET	INLET	INLET	OUTLET	SIZE	OPSD	COVER	
SAN101	87.12			83.300	83.240	1200mm DIA.	OPSD-701.010	S24	
SAN100	87.53			83.690	83.630	1200mm DIA.	OPSD-701.010	S24	

PIPE CROSSING TABLE								
		Invert	Obvert			Invert	Obvert	
1	*EX 375mmØ PVC STM*	83.796	84.171	0.426	Clearance Above	83.170	83.370	200mmØ PVC SAN
2	450mmØ CONC STM	84.340	84.790	0.830	Clearance Above	83.310	83.510	200mmØ PVC SAN
3	450mmØ CONC STM	84.360	84.810	0.500	Clearance Above	83.660	83.860	200mmØ W/M
4	250mmØ PVC STM	85.620	85.870	0.590	Clearance Above	84.830	85.030	200mmØ W/M
5	250mmØ PVC STM	85.550	85.800	0.675	Clearance Above	84.500	84.875	375mmØ PVC STM

WATERMAIN SCHEDULE					
STATION	DESCRIPTION	FINISHED GRADE	TOP OF WATERMAIN	AS-BUILT WATERMAIN	COVER
Dual 200mm W/M Services					
0+000	Connect to Ex. 200mm W/M WITH 200x200 Tee	87.062		84.662	2.400
0+000.9	200mm V&VB	87.080	84.680		2.400
0+004.7	45° Bend	87.188	84.788		2.400
0+006.8	45° Bend	87.232	84.832		2.400
0+010.6	Crossing 450mmØ CONC STM under with a vertical bend	87.232	83.860		3.372
0+026.9	Crossing 250mmØ PVC STM	87.430	85.030		2.400
0+075.6	200mmØ W/M Stub (School)	87.760	85.300		2.460

STORM STRUCTURE AND ICD DATA TABLE													
STRUCTURE ID	AREA ID	SIZE	STRUCTURE	COVER	TOP OF GRATE	INVERT				DIAMTER (mm)	TYPE	HEAD (m)	FLOW (l/s)	ICD TYPE
						INLET	INLET	INLET	OUTLET					
STMH110		1200mm DIA.	OPSD 701.010	S28.1	87.15		84.460	84.400	84.380	450	CONC. CL 100-D			
STMH109		1200mm DIA.	OPSD 701.010	S28.1	87.64			84.640	84.560	375	PVC SDR-35			
CBMH108		1200mm DIA.	OPSD 701.010	S28.1	87.15	84.550	84.480	84.650	84.400	450	CONC. CL 100-D	3.11	119.27	170mm CIRC
CB07		600X600mm	OPSD 705.010	S19.1	86.87				85.160	250	PVC SDR-35			
CBMH107		1200mm DIA.	OPSD 701.010	S28.1	87.23			84.560	84.530	375	PVC SDR-35			
CBMH106		1200mm DIA.	OPSD 701.010	S28.1	87.05		84.860	84.760	84.680	375	PVC SDR-35			
CB06		600X600mm	OPSD 705.010	S19.1	87.20				85.110	200	PVC SDR-35			
CBMH105		1200mm DIA.	OPSD 701.010	S28.1	87.00			84.910	84.880	300	PVC SDR-35			
CBMH104		1200mm DIA.	OPSD 701.010	S28.1	87.05			85.100	85.000	300	PVC SDR-35			
CB05		600X600mm	OPSD 705.010	S19.1	87.05				85.300	200	PVC SDR-35			
TCB04		600X600mm	OPSD 705.010	S19.1	87.40				86.400	250	PVC SDR-35			
CBMH103		1200mm DIA.	OPSD 701.010	S28.1	87.00			84.610	84.580	300	PVC SDR-35			
STMH102		1200mm DIA.	OPSD 701.010	S28.1	87.30	84.700	84.780	84.740	84.680	300	PVC SDR-35			
CB02		600X600mm	OPSD 705.010	S19.1	87.00				84.870	200	PVC SDR-35			
CBMH100		1200mm DIA.	OPSD 701.010	S28.1	87.00			84.870	84.770	300	PVC SDR-35			
DICB01		600X600mm	OPSD-400.083	S19.1	86.60				85.010	200	PVC SDR-35			
CBMH101		1200mm DIA.	OPSD 701.010	S28.1	87.00			84.870	84.770	300	PVC SDR-35			
DICB03		600X600mm	OPSD 705.010	S19.1	87.10				85.340	250	PVC SDR-35			
CBMH111		1200mm DIA.	OPSD 701.010	S28.1	87.06			85.180	85.050	250	PVC SDR-35			
DICB04		600X600mm	OPSD 705.010	S19.1	87.05				84.910	250	PVC SDR-35			
TCB08		600X600mm	OPSD 705.010	S19.1	87.10				86.000	250	PVC SDR-35			
TCB07		600X600mm	OPSD 705.010	S19.1	87.10				86.100	250	PVC SDR-35			
LCB01		600X600mm	OPSD 705.010	S19.1	87.38				86.380	250	PVC SDR-35			

CLIENT:
Écoles catholiques Centre-Est

CLIENT REF. #:

ARCHITECT:
EDWARD J CUHACI & ASSOCIATES ARCHITECTS Inc.
171 Slater St, Suite 100, Ottawa, Ontario, K1P 5H7
Fax: (613) 236-1944 Telephone: (613) 236-7135 E-mail: info@cuhaci.com

wsp
300-2611 QUEENSVIEW DRIVE
OTTAWA ONTARIO CANADA K2B 8K2
TEL.: 1-613-829-2800 | FAX: 1-613-829-8299 | WWW.WSPGROUP.COM

PROJECT:
ÉCOLE ÉLÉMENTAIRE CATHOLIQUE AVALON III
TENTH LINE ROAD
OTTAWA, ON

CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST
4000, RUE LABELLE, OTTAWA, ON K1J 1A1

KEY PLAN:


SEAL:
LICENSED PROFESSIONAL ENGINEER
D. B. YANG
100230568
2024-06-12
PROVINCE OF ONTARIO

NOT VALID UNLESS SIGNED AND DATED

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BEARING NOTE:
BEARING ARE GRID, DERIVED FROM THE CAN-NET REAL TIME NETWORK GPS OBSERVATIONS, REFERENCED TO SPECIFIED CONTROL POINTS 01919680184 AND 01919843761. MTM ZONE 9 (76°30' WEST LONGITUDE) NAD83 (ORIGINAL)
BENCHMARK #1 N 5033845.03 E 364791.31 Z 88.40
BENCHMARK #2 N 5033885.86 E 364895.06 Z 87.99

NORTHING:
N

ISSUED FOR - REVISION:

IS	RS	DATE	DESCRIPTION
7		2024-06-12	REVISED AS PER CITY COMMENT
6		2024-04-18	REVISED AS PER CITY COMMENT
5		2024-03-14	ISSUED FOR TENDER
4		2024-02-16	REVISED AS PER CITY COMMENT
3		2023-12-18	ISSUED FOR BUILDING PERMIT
2		2023-07-21	ISSUED FOR BUILDING PERMIT
1		2023-06-02	ISSUED FOR SPA

PROJECT NO.: 221-12984-00
DATE: 2024-06-12
ORIGINAL SCALE: 1:300
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
DESIGNED BY: D.Y./M.S.
DRAWN BY: S.T-R.
CHECKED BY: D.Y.
25mm

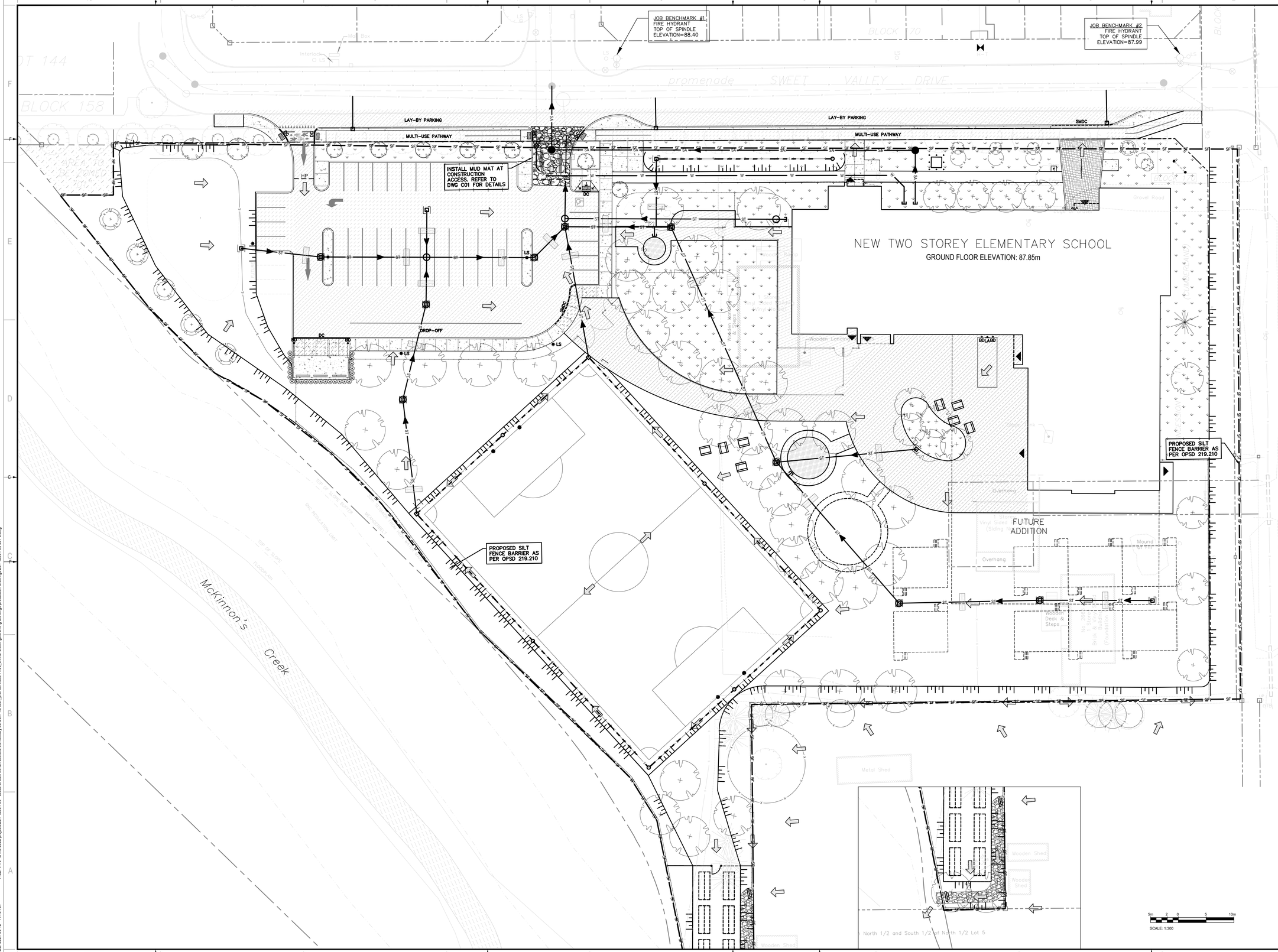
DISCIPLINE: CIVIL

TITLE: SERVICING PLAN

SHEET NUMBER: C03
SHEET #: OF

ISSUE: REVISED AS PER CITY COMMENT
REV #: 0
DATE OF: 2024-06-12

#19079
D07-12-23-0094



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CLIENT REF. #:

ARCHITECT:

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OTTAWA ONTARIO CANADA K2B 8K2
TEL.: 1-613-829-2800 | FAX: 1-613-829-8299 | WWW.WSPGROUP.COM

PROJECT:

ÉCOLE ÉLÉMENTAIRE CATHOLIQUE
AVALON III
TENTH LINE ROAD
OTTAWA, ON

CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST
4000, RUE LABELLE, OTTAWA, ON K1J 1A1

KEY PLAN:

SEAL:

LICENSED PROFESSIONAL ENGINEER
D. B. YANG
100230568
2024-06-12
PROVINCE OF ONTARIO

NOT VALID UNLESS SIGNED AND DATED

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BENCHMARK #1 N 5033845.03 E 364791.31 Z 88.40
BENCHMARK #2 N 5033885.86 E 364885.06 Z 87.99

NORTHING:

N

ISSUED FOR - REVISION:

7		2024-06-12	REVISED AS PER CITY COMMENT
6		2024-04-18	REVISED AS PER CITY COMMENT
5		2024-03-14	ISSUED FOR TENDER
4		2024-02-16	REVISED AS PER CITY COMMENT
3		2023-12-18	ISSUED FOR BUILDING PERMIT
2		2023-07-21	ISSUED FOR BUILDING PERMIT
1		2023-06-02	ISSUED FOR SPA
IS	RE	DATE	DESCRIPTION

PROJECT NO.: 221-12984-00
DATE: 2024-06-12
ORIGINAL SCALE: 1:300
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
DESIGNED BY: D.Y./M.S.
DRAWN BY: S.T-R.
CHECKED BY: D.Y.
25mm

DISCIPLINE: CIVIL

TITLE: EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER: C04

SHEET #: OF

ISSUE: REVISED AS PER CITY COMMENT
REV #: 0
DATE OF: 2024-06-12

D07-12-23-0094

#19079

CTB: wsp_kingston_24v36.ctb
PLOTTED: 2024-06-12 - 11:49 AM
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CLIENT:

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CLIENT REF. #:

ARCHITECT:

EDWARD J CUHACI
& ASSOCIATES ARCHITECTS Inc.
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Fax: (613) 236-1944 Telephone: (613) 236-7135 E-mail: info@cuhaci.com

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OTTAWA ONTARIO CANADA K2B 8K2
TEL.: 1-613-829-2800 | FAX: 1-613-829-8299 | WWW.WSPGROUP.COM

PROJECT:

ÉCOLE ÉLÉMENTAIRE CATHOLIQUE AVALON III
TENTH LINE ROAD
OTTAWA, ON

CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST
4000, RUE LABELLE, OTTAWA, ON K1J 1A1

KEY PLAN:

SEAL:

D. B. YANG
100230568
2024-06-12

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BENCHMARK #1 N:5033845.03 E:384791.31 Z:88.40
BENCHMARK #2 N:5033883.86 E:384885.06 Z:87.99

NORTHING:

N

ISSUED FOR - REVISION:

IS	RE	DATE	DESCRIPTION
7		2024-06-12	REVISED AS PER CITY COMMENT
6		2024-04-18	REVISED AS PER CITY COMMENT
5		2024-03-14	ISSUED FOR TENDER
4		2024-02-16	REVISED AS PER CITY COMMENT
3		2023-12-18	ISSUED FOR BUILDING PERMIT
2		2023-07-21	ISSUED FOR BUILDING PERMIT
1		2023-06-02	ISSUED FOR SPA

PROJECT NO: 221-12984-00
DATE: 2024-06-12
ORIGINAL SCALE: 1:300
DESIGNED BY: D.Y./M.S.
DRAWN BY: S.T-R.
CHECKED BY: D.Y.

IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: CIVIL

TITLE:

PRE-DEVELOPMENT DRAINAGE AREA PLAN

SHEET NUMBER: C05
SHEET #: OF

ISSUE: REVISED AS PER CITY COMMENT
DATE OF: 2024-06-12
REV #: 0

CTB: wsp_kingston_24x36.ctb
PLOTTED: 2024-06-12 - 11:49 AM
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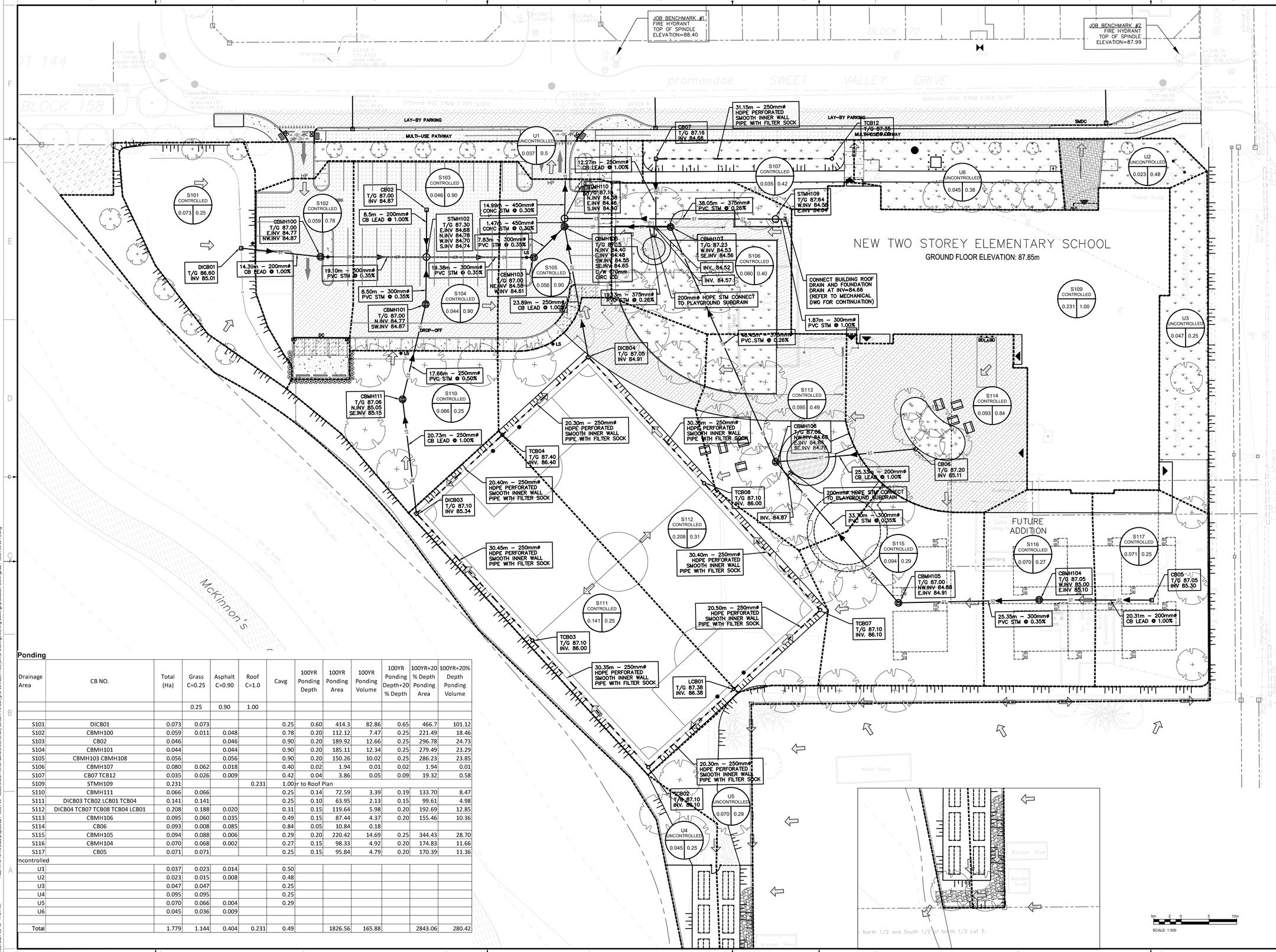
D07-12-23-0094

#19079



Ponding

Drainage Area	CB NO.	Total (Ha)	Grass C=0.25	Asphalt C=0.90	Roof C=1.0	Cavg	100YR Ponding Depth	100YR Ponding Area	100YR Ponding Volume	100YR Ponding Depth+20 % Depth	100YR+20 % Depth Ponding Area	100YR+20% Depth Ponding Volume
			0.25	0.90	1.00							
S101	DICB01	0.073	0.073			0.25	0.60	414.3	82.86	0.65	466.7	101.12
S102	CBMH100	0.059	0.011	0.048		0.78	0.20	112.12	7.47	0.25	221.49	18.46
S103	CB02	0.046		0.046		0.90	0.20	189.92	12.66	0.25	296.78	24.73
S104	CBMH101	0.044		0.044		0.90	0.20	185.11	12.34	0.25	279.49	23.29
S105	CBMH103 CBMH108	0.056		0.056		0.90	0.20	150.26	10.02	0.25	286.23	23.85
S106	CBMH107	0.080	0.062	0.018		0.40	0.02	1.94	0.01	0.02	1.94	0.01
S107	CB07 TCB12	0.035	0.026	0.009		0.42	0.04	3.86	0.05	0.09	19.32	0.58
S109	STMH109	0.231			0.231	1.00	or to Roof Plan					
S110	CBMH111	0.066	0.066			0.25	0.14	72.59	3.39	0.19	133.70	8.47
S111	DICB03 TCB02 LCB01 TCB04	0.141	0.141			0.25	0.10	63.95	2.13	0.15	99.61	4.98
S112	DICB04 TCB07 TCB08 TCB04 LCB01	0.208	0.188	0.020		0.31	0.15	119.64	5.98	0.20	192.69	12.85
S113	CBMH106	0.095	0.060	0.035		0.49	0.15	87.44	4.37	0.20	155.46	10.36
S114	CB06	0.093	0.008	0.085		0.84	0.05	10.84	0.18			
S115	CBMH105	0.094	0.088	0.006		0.29	0.20	220.42	14.69	0.25	344.43	28.70
S116	CBMH104	0.070	0.068	0.002		0.27	0.15	98.33	4.92	0.20	174.83	11.66
S117	CB05	0.071	0.071			0.25	0.15	95.84	4.79	0.20	170.39	11.36
ncontrolled												
U1		0.037	0.023	0.014		0.50						
U2		0.023	0.015	0.008		0.48						
U3		0.047	0.047			0.25						
U4		0.095	0.095			0.25						
U5		0.070	0.066	0.004		0.29						
U6		0.045	0.036	0.009								
Total		1.779	1.144	0.404	0.231	0.49		1826.56	165.88		2843.06	280.42

CLIENT:
Écoles catholiques Centre-Est

CLIENT REF. #:

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300-2611 QUEENSVIEW DRIVE
OTTAWA ONTARIO CANADA K2B 8K2
TEL.: 1-613-829-2800 | FAX: 1-613-829-8299 | WWW.WSPGROUP.COM

PROJECT:
ÉCOLE ÉLÉMENTAIRE CATHOLIQUE AVALON III
TENTH LINE ROAD
OTTAWA, ON

CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST
4000, RUE LABELLE, OTTAWA, ON K1J 1A1

KEY PLAN:

SEAL:
LICENSED PROFESSIONAL ENGINEER
D. B. YANG
100230568
2024-06-12
PROVINCE OF ONTARIO
NOT VALID UNLESS SIGNED AND DATED

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BENCHMARK #1 N 5033845.03 E 364791.31 Z 88.40
BENCHMARK #2 N 5033885.86 E 364855.06 Z 87.99

NORTHING:
N

ISSUED FOR - REVISION:

	RE.	DATE	DESCRIPTION
7		2024-06-12	REVISED AS PER CITY COMMENT
6		2024-04-18	REVISED AS PER CITY COMMENT
5		2024-03-14	ISSUED FOR TENDER
4		2024-02-16	REVISED AS PER CITY COMMENT
3		2023-12-18	ISSUED FOR BUILDING PERMIT
2		2023-07-21	ISSUED FOR BUILDING PERMIT
1		2023-06-02	ISSUED FOR SPA

PROJECT NO.: 221-12984-00
DATE: 2024-06-12
ORIGINAL SCALE: 1:300
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
DESIGNED BY: D.Y./M.S.
DRAWN BY: S.T-R.
CHECKED BY: D.Y.
25mm

DISCIPLINE: CIVIL

TITLE: STORM DRAINAGE AREA PLAN

SHEET NUMBER: C06
SHEET #: OF:

ISSUE: REVISED AS PER CITY COMMENT
REV #: 0
DATE OF: 2024-06-12

D07-12-23-0094

#19079

FILE: v10-13 ma 2022 projects\221-12984-00 - cocce avalon french catholic elementary school\14.0 tech_prof services\14.60_civil\3. drawings\working drawing\production drawing\221-12984-00-c01-6.dwg
CTB: wsp_kingston_24-06.ctb
PLOTTED: 2024-06-12 - 11:51 AM

WATTS	Adjustable Accutrol Weir Tag: ____________	Adjustable Flow Control for Roof Drains

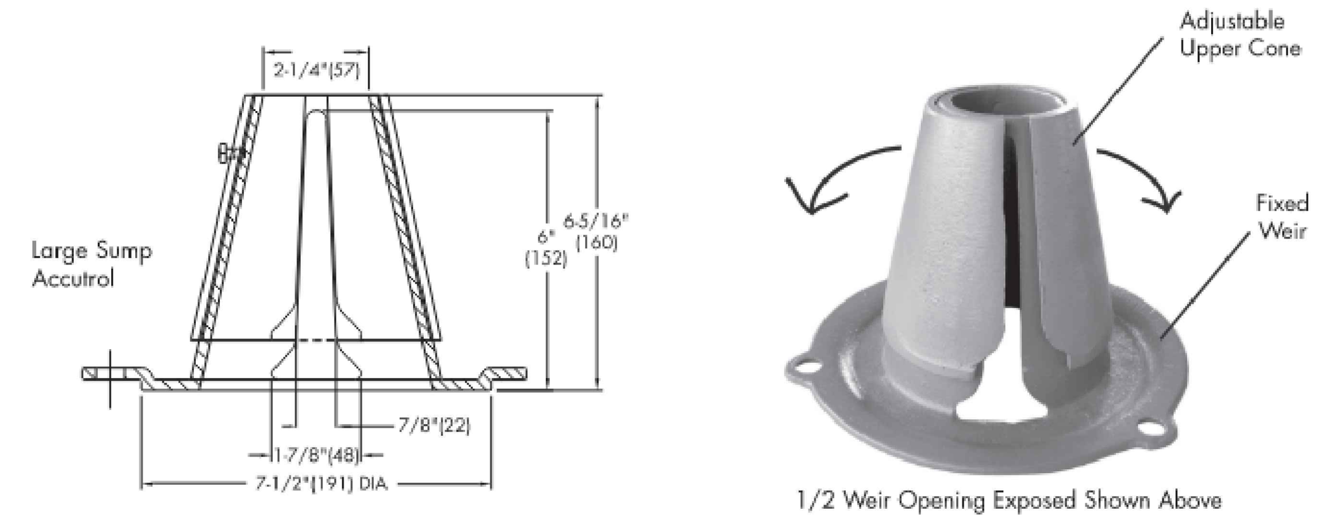
ADJUSTABLE ACCUTROL (for Large Sump Roof Drains only)

For more flexibility in controlling flow with heads deeper than 2", Watts Drainage offers the Adjustable Accutrol.
The Adjustable Accutrol Weir is designed with a single parabolic opening that can be covered to restrict flow above 2" of head to less than 5 gpm per inch, up to 6" of head. To adjust the flow rate for depths over 2" of head, set the slot in the adjustable upper cone according to the flow rate required. Refer to Table 1 below.
Note: Flow rates are directly proportional to the amount of weir opening that is exposed.

EXAMPLE:

For example, if the adjustable upper cone is set to cover 1/2 of the weir opening, flow rates above 2"of head will be restricted to 2-1/2 gpm per inch of head.

Therefore, at 3"of head, the flow rate through the Accutrol Weir that has 1/2 the slot exposed will be:
[5 gpm (per inch of head) x 2 inches of head] + 2-1/2 gpm (for the third inch of head) = 12-1/2 gpm.



1/2 Weir Opening Exposed Shown Above

TABLE 1. Adjustable Accutrol Flow Rate Settings

Weir Opening Exposed	1"	2"	3"	4"	5"	6"
	Flow Rate (gallons per minute)					
Fully Exposed	5	10	15	20	25	30
3/4	5	10	13.75	17.5	21.25	25
1/2	5	10	12.5	15	17.5	20
1/4	5	10	11.25	12.5	13.75	15
Closed	5	5	5	5	5	5

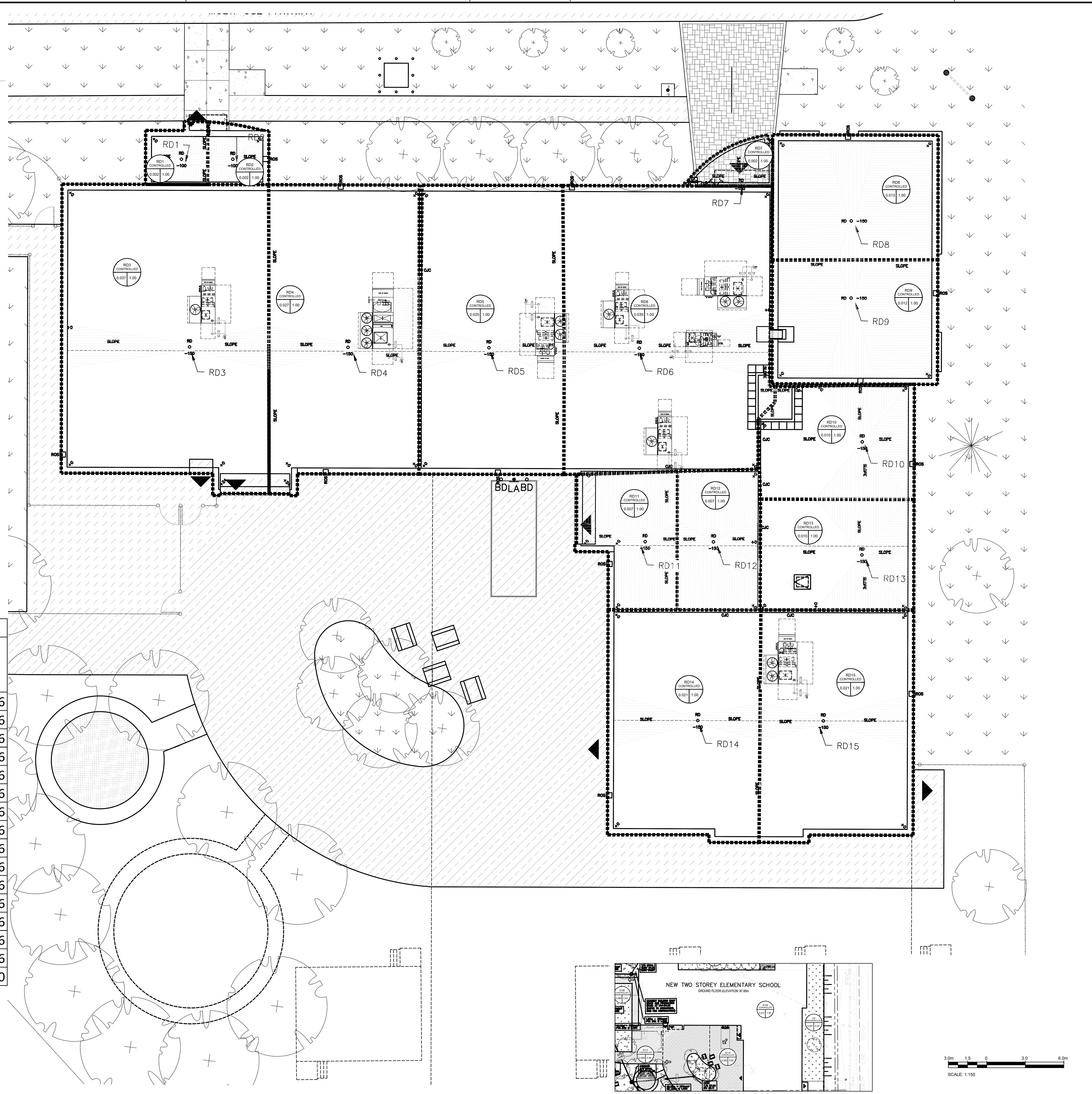
Job Name ____________ Contractor ____________
Job Location ____________ Contractor's P.O. No. ____________
Engineer ____________ Representative ____________

WATTS
A Watts Water Technologies Company

USA: Tel: (800) 338-2581 • Fax: (828) 248-3929 • Watts.com
Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • Watts.ca
Latin America: Tel: (52) 81-1001-8600 • Fax: (52) 81-8000-7091 • Watts.com

ES-WD-RD-ACCUTROLADJ-CAN 1615

Roof						
Roof Drainage #	Roof Area m²	Ponding Area m²	Ponding Depth m	Ponding Volume m³	Release Rate L/s	
RD1	20.00	15.00	0.15	0.75	1.26	
RD2	20.00	15.00	0.15	0.75	1.26	
RD3	370.00	277.50	0.15	13.88	1.26	
RD4	270.00	202.50	0.15	10.13	1.26	
RD5	250.00	187.50	0.15	9.38	1.26	
RD6	350.00	262.50	0.15	13.13	1.26	
RD7	20.00	15.00	0.15	0.75	1.26	
RD8	130.00	97.50	0.15	4.88	1.26	
RD9	120.00	90.00	0.15	4.50	1.26	
RD10	100.00	75.00	0.15	3.75	1.26	
RD11	70.00	52.50	0.15	2.63	1.26	
RD12	70.00	52.50	0.15	2.63	1.26	
RD13	100.00	75.00	0.15	3.75	1.26	
RD14	210.00	157.50	0.15	7.88	1.26	
RD15	210.00	157.50	0.15	7.88	1.26	
Total	2310.0	1732.5		86.63	18.90	



CLIENT:

Écoles catholiques Centre-Est

CLIENT REF. #:

ARCHITECT:

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wsp
300-2611 QUEENSVIEW DRIVE
OTTAWA ONTARIO CANADA K2B 8K2
TEL.: 1-613-829-2800 | FAX: 1-613-829-8299 | WWW.WSPGROUP.COM

PROJECT:

ÉCOLE ÉLÉMENTAIRE CATHOLIQUE AVALON III
TENTH LINE ROAD
OTTAWA, ON

CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST
4000, RUE LABELLE, OTTAWA, ON K1J 1A1

KEY PLAN:

MUDMINNOW CRES, SWEETVALLEY DR, CATLEAF ROW, HENSLOWS CIR, TENTH LINE RD, SITE

SEAL:

LICENSED PROFESSIONAL ENGINEER
D. B. YANG
100230568
2024-06-12
PROVINCE OF ONTARIO

NOT VALID UNLESS SIGNED AND DATED

DISCLAIMER: COPYRIGHT:

BEARING NOTE

BEARING ARE GRID, DERIVED FROM THE CAN-NET REAL TIME NETWORK GPS OBSERVATIONS, REFERENCED TO SPECIFIED CONTROL POINTS 01919680184 AND 019198434761, MTM ZONE 9 (76°30' WEST LONGITUDE) NAD83 (ORIGINAL)
BENCHMARK #1 N:5033845.03 E:384791.31 Z:88.40
BENCHMARK #2 N:5033883.86 E:384885.06 Z:87.99

NORTHING:

N

ISSUED FOR - REVISION:

IS	RE	DATE	DESCRIPTION
7		2024-06-12	REVISED AS PER CITY COMMENT
6		2024-04-18	REVISED AS PER CITY COMMENT
5		2024-03-14	ISSUED FOR TENDER
4		2024-02-16	REVISED AS PER CITY COMMENT
3		2023-12-18	ISSUED FOR BUILDING PERMIT
2		2023-07-21	ISSUED FOR BUILDING PERMIT
1		2023-06-02	ISSUED FOR SPA

PROJECT NO: 221-12984-00
DATE: 2024-06-12
ORIGINAL SCALE: 1:300
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm
DESIGNED BY: D.Y./M.S.
DRAWN BY: S.T-R.
CHECKED BY: D.Y.
DISCIPLINE: CIVIL

TITLE:

ROOF DRAINAGE AREA PLAN

SHEET NUMBER: C07
SHEET #: OF

ISSUE: REVISED AS PER CITY COMMENT
DATE OF: 2024-06-12
REV # 0

D07-12-23-0094

#19079