

NOT VALID UNLESS SIGNED AND DATED

DISCLAIMER: THIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR REFERRED TO 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: BEARINGS ARE GRID DERIVED FROM THE CAN-NET REAL TIME NETWORK GPS OBSERVATIONS. REFERENCED TO SPECIFIED CONTROL POINTS D191680154 AND D1916845471, MTM ZONE 9 (79°30' WEST CONIC) (NAD83 ORIGINAL). BENCHMARK #1 N: 503345 D3 E: 344791 31 2.88 40 BENCHMARK #2 N: 352685 D3 E: 344875 28 2.87 89

ISSUED FOR - REVISION:

NO.	DATE	DESCRIPTION
1	2023-06-02	ISSUED FOR SPA

PROJECT NO:	221-12984-00	DATE:	2023-06-01
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.		
DISCIPLINE:	CIVIL		

TITLE:	GRADING PLAN		
SHEET NUMBER:	C02		
SHEET #:	OF	REV #	0
ISSUE:	ISSUED FOR SPA		
DATE OF:	2023-06-02		

C:\Users\hshah\OneDrive\Desktop\221-12984-00 - écoles avalon french catholic elementary school\1.0\Tech_and_services\14.60_0413_drawing\working drawings\production drawings\221-12984-00_01-6.dwg
 FILE: 2023-06-02 2:37 PM
 PLOTTED: 2023-06-02 2:37 PM



DISCLAIMER: THIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR REFINISHED 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: BEARINGS ARE GRID DERIVED FROM THE CAN-NET REAL TIME NETWORK GPS OBSERVATIONS. REFERENCED TO SPECIFIED CONTROL POINTS (1919800/54 AND 01919845/61), MTM ZONE 9 (N/30° WEST CONTOUR) (NAD83 ORIGINAL). BENCHMARK #1 N 5032945.03 E 3349791.31 Z 28.40 BENCHMARK #2 N 5032945.03 E 3349791.31 Z 27.89

ISSUED FOR: REVISION

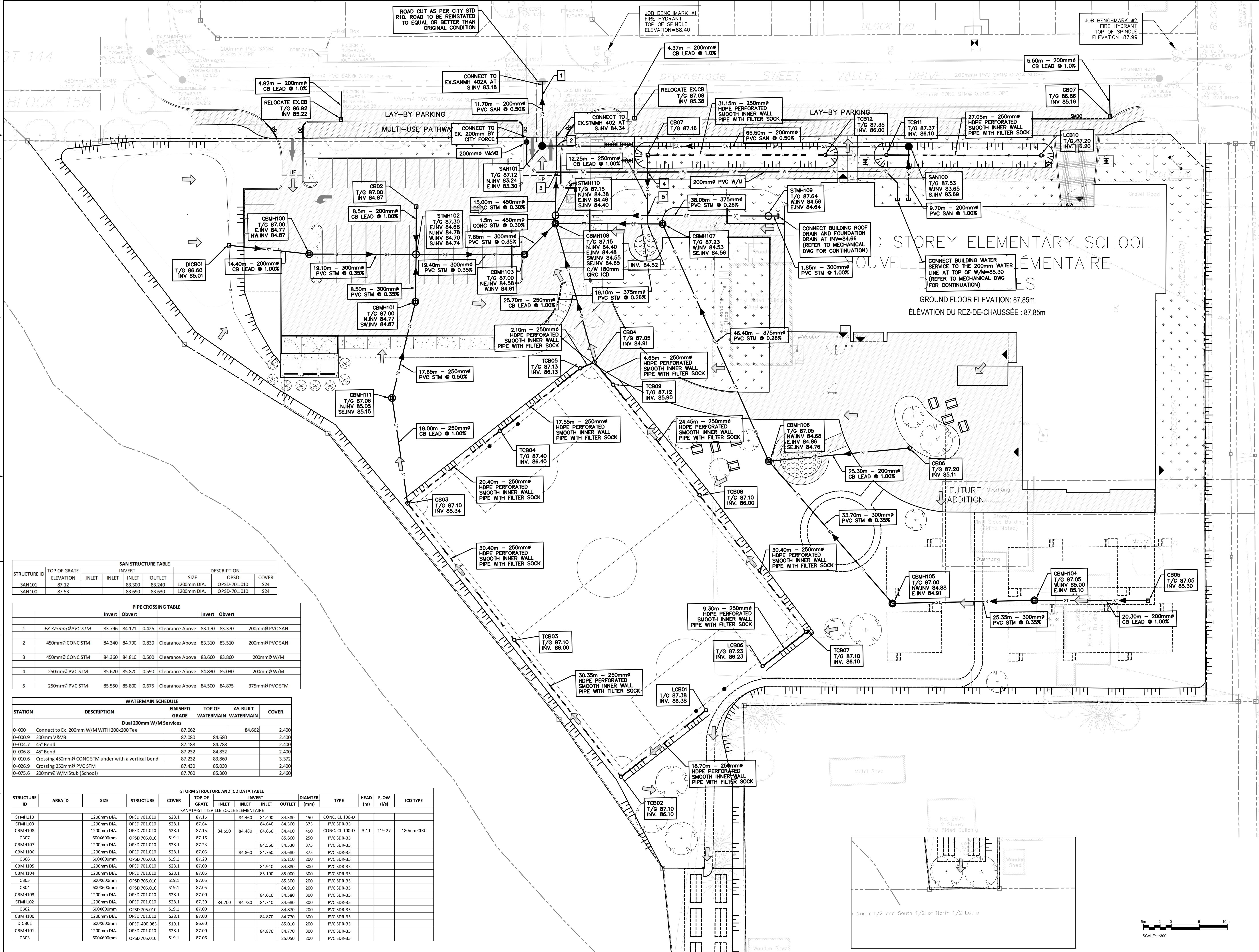
NO.	DATE	DESCRIPTION
1	2023-06-02	ISSUED FOR SPA

IS	RE	DATE	DESCRIPTION
221-12984-00		2023-06-01	

ORIGINAL SCALE: 1:300
DESIGNED BY: D.Y.M.S.
DRAWN BY: S.T.R.
CHECKED BY: D.Y.
DISCIPLINE: CIVIL

SHEET NUMBER:	OF	REV #
C03	03	0

ISSUED FOR SPA
DATE OF: 2023-06-02



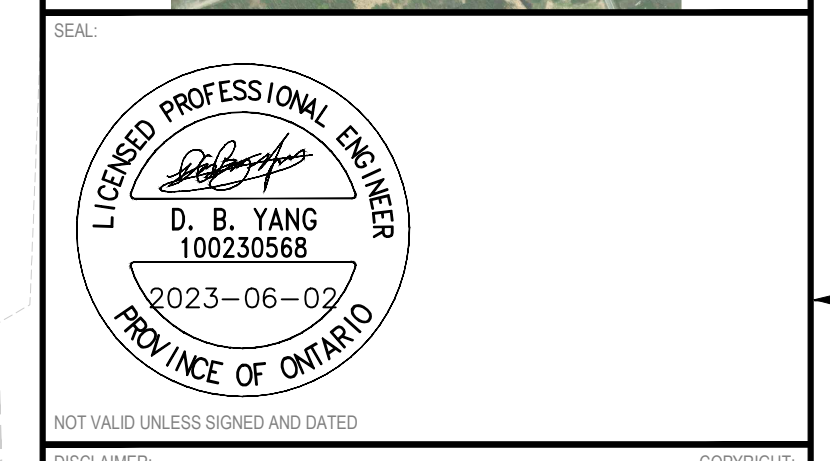
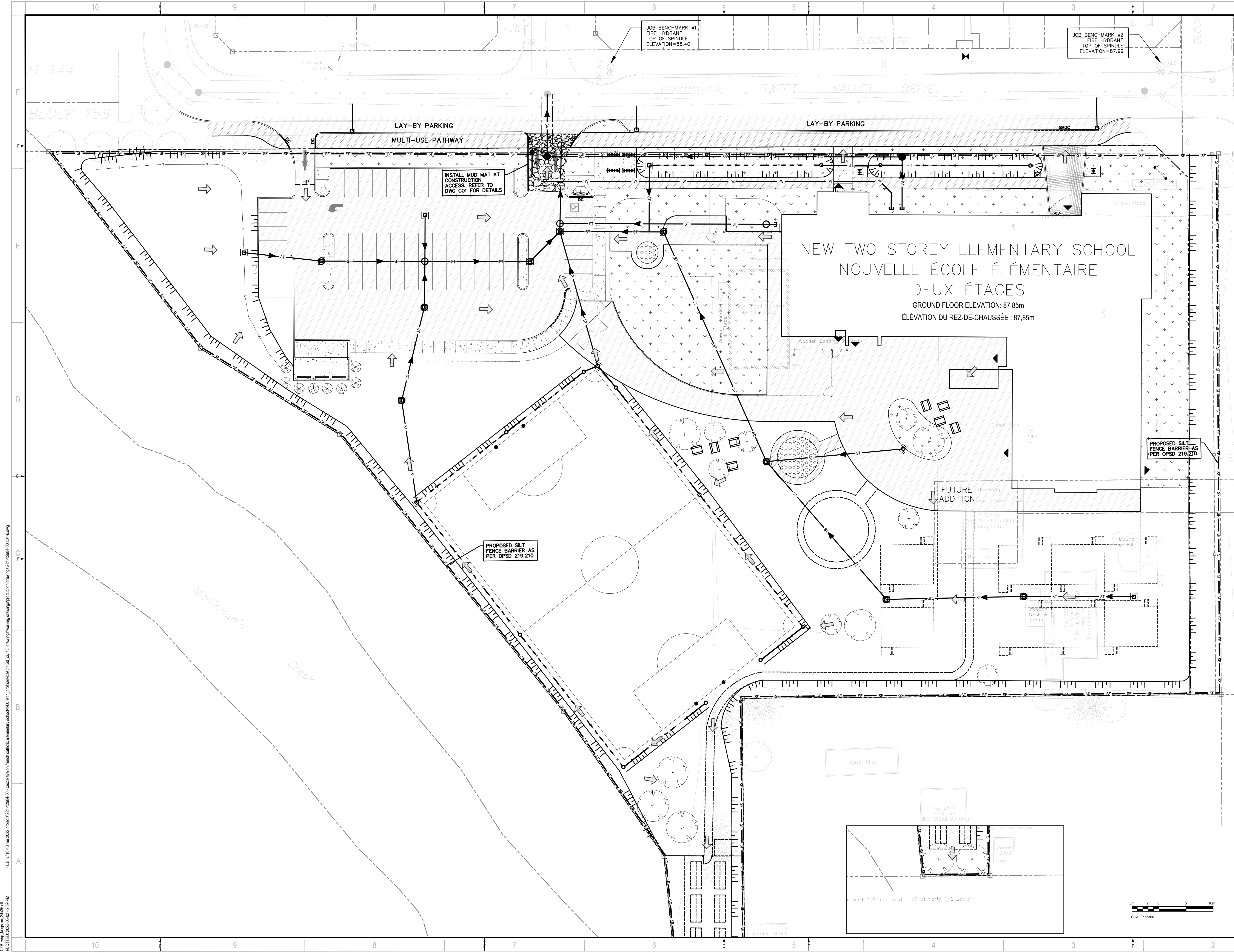
STRUCTURE ID	TOP OF GRATE ELEVATION	INLET INLET	INLET OUTLET	SIZE	OPSD	COVER
SAN101	87.12	83.300	83.240	1200mm DIA.	OPSD-701.010	S24
SAN100	87.53	83.690	83.630	1200mm DIA.	OPSD-701.010	S24

	Invert	Obvert		Invert	Obvert
1	EX 375mm PVC STM	83.796	84.171	0.426	Clearance Above
2	450mm CONC STM	84.340	84.790	0.830	Clearance Above
3	450mm CONC STM	84.360	84.810	0.500	Clearance Above
4	250mm PVC STM	85.620	85.870	0.590	Clearance Above
5	250mm PVC STM	85.550	85.800	0.675	Clearance Above

STATION	DESCRIPTION	FINISHED GRADE	TOP OF WATERMAIN	AS-BUILT WATERMAIN	COVER
0+000	Connect to Ex. 200mm W/M WITH 200x200 Tee	87.062		84.662	2.400
0+000.9	200mm V&V/B	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 450mm CONC STM under with a vertical bend	87.232	83.860		3.372
0+026.9	Crossing 250mm PVC STM	87.430	85.030		2.400
0+075.6	200mm W/M Stub (School)	87.760	85.300		2.460

STRUCTURE ID	AREA ID	SIZE	STRUCTURE	COVER	TOP OF GRATE	INLET INLET	INLET INLET	OUTLET	DIAMETER (mm)	TYPE	HEAD (m)	FLOW (l/s)	ICD TYPE
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		3.11	119.27	180mm CIRC
CBM108		1200mm DIA.	OPSD 701.010	S28.1	87.15	84.550	84.650	84.400	450	CONC. CL 100-D			
CB07		600x600mm	OPSD 705.010	S19.1	87.16			85.660	250	PVC SDR-35			
CBM107		1200mm DIA.	OPSD 701.010	S28.1	87.23			84.560	375	PVC SDR-35			
CBM106		1200mm DIA.	OPSD 701.010	S28.1	87.05	84.860	84.760	375	PVC SDR-35				
CB06		600x600mm	OPSD 705.010	S19.1	87.20			85.110	200	PVC SDR-35			
CBM105		1200mm DIA.	OPSD 701.010	S28.1	87.00	84.910	84.880	300	PVC SDR-35				
CBM104		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			
CB04		600x600mm	OPSD 705.010	S19.1	87.05			84.910	200	PVC SDR-35			
CBM103		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	84.740	450	PVC SDR-35				
CB02		600x600mm	OPSD 705.010	S19.1	87.00			84.870	200	PVC SDR-35			
CBM101		1200mm DIA.	OPSD 701.010	S28.1	87.00	84.770	84.770	300	PVC SDR-35				
CB01		600x600mm	OPSD-400.083	S19.1	86.60			85.010	200	PVC SDR-35			
CBM101		1200mm DIA.	OPSD 701.010	S28.1	87.00	84.870	84.770	300	PVC SDR-35				
CB03		600x600mm	OPSD 705.010	S19.1	87.06			85.050	200	PVC SDR-35			

FILE: \\10-13.mn.2022.projects\221-12984-00_civil\dwg\stormwater_servicing\production\dwg\221-12984-00_016.dwg
 CTR: wss, hsh, hsh, 24/06/23
 PLOTTED: 2023-06-02 2:38 PM



DISCLAIMER: THIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR RESEMBLED 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: BEARINGS ARE GRID DERIVED FROM THE CAN-NET REAL TIME NETWORK GPS OBSERVATIONS, REFERENCED TO SPECIFIED CONTROL POINTS 019198015M AND 0191984341M, MTM ZONE 9 (79°30' WEST CONTOUR HAZED ORIGINAL) BENCHMARK #1 N: 5032845.03 E: 384791.31 Z: 88.40 BENCHMARK #2 N: 5032885.03 E: 384895.02 Z: 87.99

ISSUED FOR - REVISION	DATE	DESCRIPTION
1	2023-06-02	ISSUED FOR SPA

PROJECT NO:	221-12984-00	DATE:	2023-06-01
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.		

DISCIPLINE:	CIVIL
TITLE:	EROSION AND SEDIMENT CONTROL PLAN
SHEET NUMBER:	C04
ISSUE:	ISSUED FOR SPA
DATE OF:	2023-06-02
REV #:	0

C:\Users\hshah\OneDrive\Desktop\221-12984-00 - écoles avalon french catholic elementary school\1.0\hshah_and_senecent\14.00_cuhaci_drawing\working drawings\production drawings\221-12984-00_01-6.dwg
 FILE: 2023-06-02 2:39 PM
 PLOTTED: 2023-06-02 2:39 PM



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



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



DISCLAIMER: THIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR PUBLISHED 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.

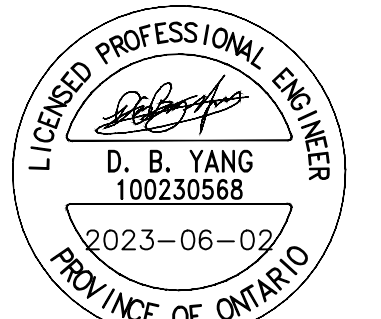
BEARING NOTE: BEARINGS ARE GRID, DERIVED FROM THE CAN-NET REAL TIME NETWORK GPS OBSERVATIONS, REFERENCED TO SPECIFIED CONTROL POINTS D191680154 AND D191684161, MTM ZONE 9 (P3) WEST (NAD83) (NAD83 ORIGINAL). BENCHMARK #1 N:5033945.03 E:344791.31 Z:88.40 BENCHMARK #2 N:5033983.96 E:344895.28 Z:87.89

IS	RE	DATE	DESCRIPTION
1		2023-06-02	ISSUED FOR SPA

PROJECT NO: 221-12984-00	DATE: 2023-06-01
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.	

DISCIPLINE: CIVIL	
TITLE: PRE-DEVELOPMENT DRAINAGE AREA PLAN	
SHEET NUMBER: C05	
SHEET #: OF	
ISSUE: ISSUED FOR SPA	REV #: 0
DATE OF: 2023-06-02	

C:\Users\hshen\OneDrive\Desktop\221-12984-00 - écoles avalon french catholic elementary school\1.0_tech_and_services\14.60_civil3_drawing\working drawings\production drawings\221-12984-00_01.dwg
 FILE: \\10-13.mt.2022.projects\221-12984-00 - écoles avalon french catholic elementary school\1.0_tech_and_services\14.60_civil3_drawing\working drawings\production drawings\221-12984-00_01.dwg
 PLOTTED: 2023-06-02 2:39 PM



NOT VALID UNLESS SIGNED AND DATED

DISCLAIMER: THIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR ASSIGNED 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: BEARINGS ARE GRID DERIVED FROM THE CAN-NET REAL TIME NETWORK GPS OBSERVATIONS. REFERENCED TO SPECIFIED CONTROL POINTS (191980554 AND 019198454761, MTM ZONE 9 (P) 30 WEST (CONTOUR HAZED ORIGINAL). BENCHMARK #1 N: 5032945 03 E: 344791 31 Z: 28.40 BENCHMARK #2 N: 5032945 03 E: 344791 31 Z: 27.89

ISSUED FOR: REVISION

NO.	DATE	DESCRIPTION
1	2023-06-02	ISSUED FOR SPA

PROJECT NO:
221-12984-00

DATE:
2023-06-01

ORIGINAL SCALE:
1:300

DESIGNED BY:
D.Y./M.S.

DRAWN BY:
S.T.R.

CHECKED BY:
D.Y.

DISCIPLINE:
CIVIL

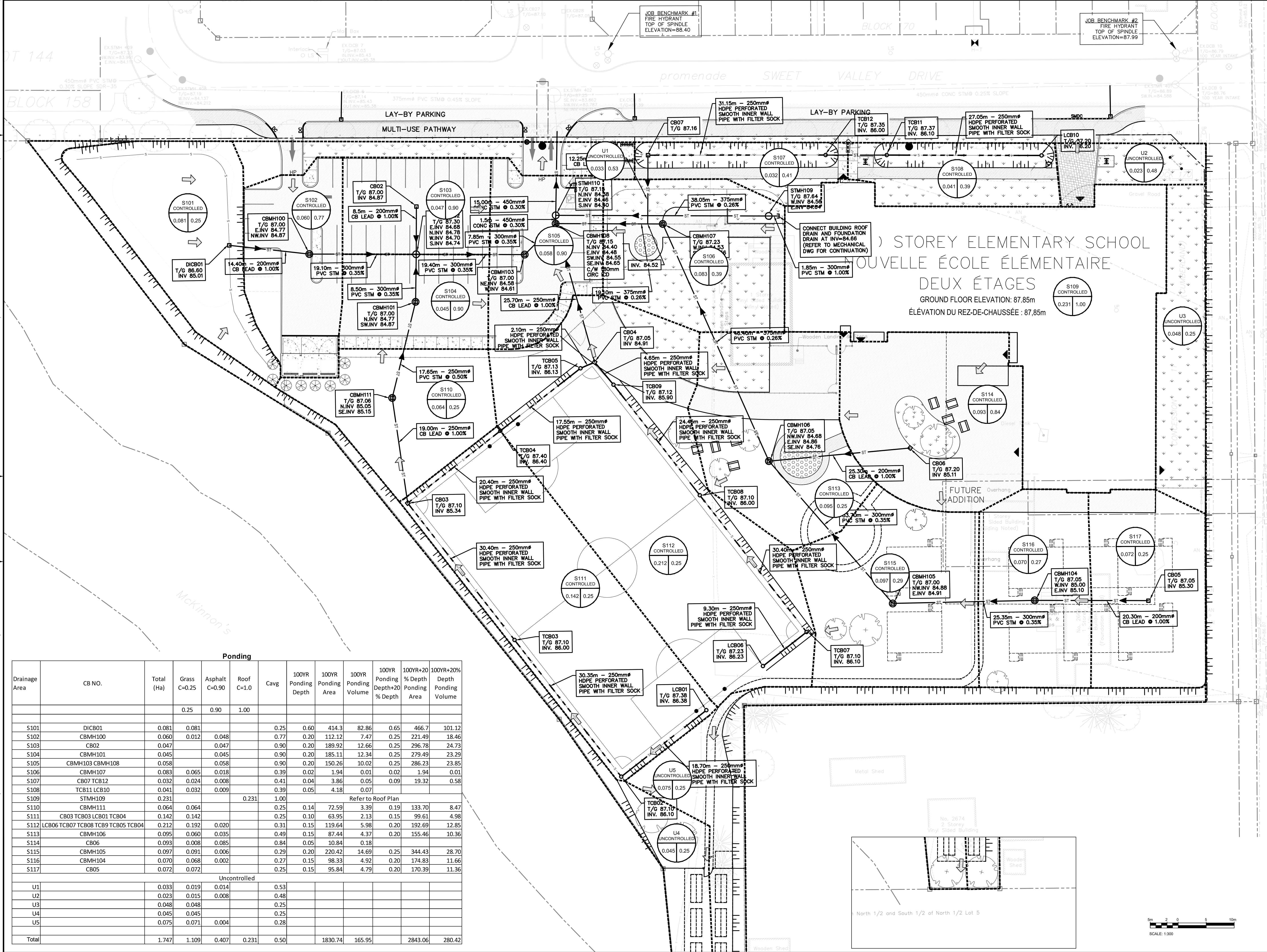
TITLE:
STORM DRAINAGE AREA PLAN

SHEET NUMBER:
C06

ISSUE:
ISSUED FOR SPA

DATE OF: **2023-06-02**

REV #:
0



Ponding

Drainage Area	CB NO.	Total (Ha)	Grass C=0.25	Asphalt C=0.90	Roof C=1.00	Cavg	100YR			100YR+20%		
							Ponding Depth	Ponding Area	Ponding Volume	Ponding Depth+20% % Depth	Ponding Area	Ponding Volume
		0.25	0.90	1.00								
S101	DICB01	0.081	0.081			0.25	0.60	414.3	82.86	0.65	466.7	101.12
S102	CBMH100	0.060	0.012	0.048		0.77	0.20	112.12	7.47	0.25	221.49	18.46
S103	CB02	0.047		0.047		0.90	0.20	189.92	12.66	0.25	296.78	24.73
S104	CBMH101	0.045		0.045		0.90	0.20	185.11	12.34	0.25	279.49	23.29
S105	CBMH103 CBMH108	0.058		0.058		0.90	0.20	150.26	10.02	0.25	286.23	23.85
S106	CBMH107	0.083	0.065	0.018		0.39	0.02	1.94	0.01	0.02	1.94	0.01
S107	CB07 TCB12	0.032	0.024	0.008		0.41	0.04	3.86	0.05	0.09	19.32	0.58
S108	TCB11 LCB10	0.041	0.032	0.009		0.39	0.05	4.18	0.07			
S109	STMH109	0.231			0.231	1.00						
S110	CBMH111	0.064	0.064			0.25	0.14	72.59	3.39	0.19	133.70	8.47
S111	CB03 TCB03 LCB01 TCB04	0.142	0.142			0.25	0.10	63.95	2.13	0.15	99.61	4.98
S112	LCB06 TCB07 TCB08 TCB9 TCB05 TCB04	0.212	0.192	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	0.097	0.091	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	0.072	0.072			0.25	0.15	95.84	4.79	0.20	170.39	11.36
Uncontrolled												
U1		0.033	0.019	0.014		0.53						
U2		0.023	0.015	0.008		0.48						
U3		0.048	0.048			0.25						
U4		0.045	0.045			0.25						
U5		0.075	0.071	0.004		0.28						
Total		1.747	1.109	0.407	0.231	0.50		1830.74	165.95		2843.06	280.42