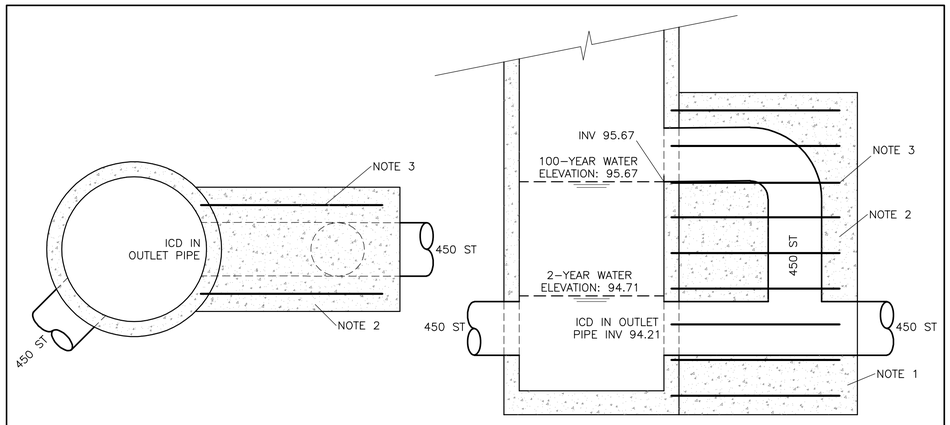
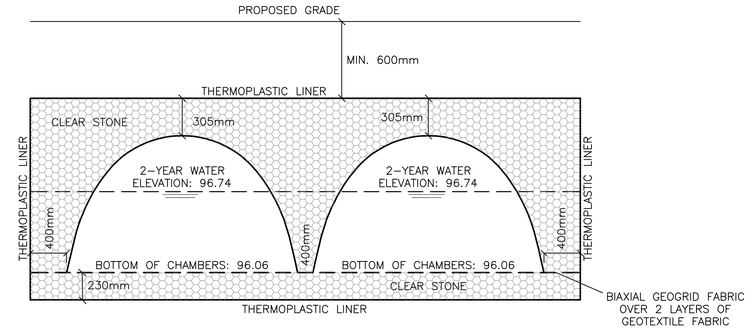


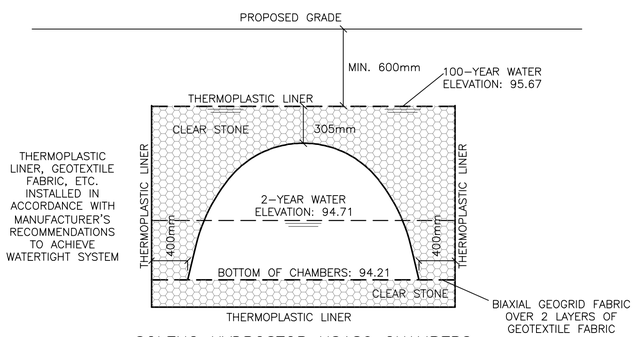
OVERFLOW DROP PIPE:
1. CONCRETE SHALL BE PLACED TO UNDISTURBED GROUND AND OUTSIDE FACE OF MANHOLE.
2. THERE SHALL BE A MINIMUM OF 300mm 15MPa CONCRETE AROUND DROP PIPE.
3. CONCRETE SHALL BE SECURED TO THE MANHOLE WITH MINIMUM 1.5m LONG 25mm DIAMETER THREADED RODS AND DRILLED EXPANSION ANCHORS DOWN EITHER SIDE OF OVERFLOW PIPE AT 300mm CENTERS.

OVERFLOW DROP PIPE
AT MANHOLE CB/MH-14
N.T.S



THERMOPLASTIC LINER, GEOTEXTILE FABRIC, ETC. INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO ACHIEVE WATERTIGHT SYSTEM

SOLENO HYDROSTOR HS180 CHAMBERS
N.T.S



THERMOPLASTIC LINER, GEOTEXTILE FABRIC, ETC. INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO ACHIEVE WATERTIGHT SYSTEM

SOLENO HYDROSTOR HS180 CHAMBERS
N.T.S

SEWER NOTES
(REFER TO DRAWINGS C-2 TO C-4)

A	INV 95.03	F	600 ST INV ±94.62 200 SAN TOP 93.98
B	375 ST INV 94.28 200 SAN TOP 94.13	G	67.5° VERTICAL LONG RADIUS BEND INV 93.69
C	INV 94.07	H	200 SAN INV 89.16 375 SAN SPL 89.16
D	200 SAN SPL 93.98 200 SAN SPL 93.98	I	250 ST SPL 95.96 250 ST SPL 95.96
E	250 ST INV 94.38 200 SAN TOP 94.08	J	250 ST SPL 94.43 375 ST SPL 94.43

SANITARY SEWERS

FROM	TO	SEWER DATA
A	MH-SA.1	3.9m – 200 PVC @ 2%
MH-SA.1	MH-SA.2	48.8m – 200 PVC @ 0.32%
C	D	9.5m – 200 PVC @ 2%
MH-SA.2	MH-SA.3	28.3m – 200 PVC @ 0.32%
MH-SA.3	H	50.1m – 200 PVC @ 0.32%

STORM SEWERS

FROM	TO	SEWER DATA
CB-1	I	6.9m – 250 PVC @ 2.5%
CB/MH-2	MH-3	33.2m – 250 PVC @ 0.432%
MH-3	CB/MH-4	9.6m – 250 PVC @ 0.432%
CB/MH-4	MH-7	8.5m – 300 PVC @ 0.34%
CB/MH-5	CB/MH-6	22.2m – 300 PVC @ 0.34%
CB/MH-6	MH-7	23.1m – 375 PVC @ 0.34%
MH-7	MH-12	21m – 300 PVC @ 0.34%
CB-8	CB/MH-9	17.8m – 250 PVC @ 0.432%
CB/MH-9	MH-12	69.6m – 250 PVC @ 0.432%
CB-10	CB/MH-11	6.1m – 250 PVC @ 0.432%
CB/MH-11	J	15.2m – 250 PVC @ 1%
MH-12	CB-12A	4.7m – 250 PVC @ 1%
MH-12	MH-13	47.2m – 375 PVC @ 0.25%
CB/MH-14	MH-15	19.7m – 450 CONC @ 2.39%
MH-15	CB/MH-16	7.1m – 450 CONC @ 0.195%

SANITARY MANHOLES

REF	TOP	SIZE	TYPE	INVERT AT INLET	INVERT AT OUTLET	NOTES
MH-SA.1	98.38	1200mm	PRECAST CONCRETE MANHOLE	94.95(SW)	94.89(SE)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24 INSTALL WITH A WATERTIGHT FRAME & COVER
MH-SA.2	97.97	1200mm	PRECAST CONCRETE MANHOLE	94.73(NW) 94.00(NW)	93.94(SW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24 DROP STRUCTURE WYE IN ACCORDANCE WITH 1003.020
MH-SA.3	97.43	1200mm	PRECAST CONCRETE MANHOLE	93.85(NE)	93.84(SW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24

CATCH-BASIN AND STORM MANHOLES

REF	TOP	SIZE	TYPE	INVERT AT INLET	INVERT AT OUTLET	NOTES
CB-1	98.27	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	96.02	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB/MH-2	98.17	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	–	95.92	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S28.1
MH-3	98.32	1200mm	PRECAST CONCRETE MANHOLE	95.77(NW)	95.77(NE)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24.1
CB/MH-4	98.17	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	95.72(W)	95.72(NE)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S28.1
CB/MH-5	98.22	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	–	95.92	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S28.1
CB/MH-6	98.17	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	95.84(NW)	95.84(SE)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S28.1
MH-7	98.29	1200mm	PRECAST CONCRETE MANHOLE	96.06(NE) 95.76(NW) 95.69(SW)	95.69(SE)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24.1 ICD IN OUTLET PIPE
MH-7A	98.35	1200mm	PRECAST CONCRETE MANHOLE	96.06(NW)	96.06(SW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24.1
MH-7B	98.32	1200mm	PRECAST CONCRETE MANHOLE	96.06(NW) 96.06(NE)	96.06(SW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24.1
CB-8	96.58	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	94.71	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB/MH-9	97.14	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	94.63(S)	94.63(NW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S28.1
CB-10	96.77	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	94.52	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB/MH-11	97.42	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	94.49(S)	94.49(NW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S28
MH-12	98.15	1200mm	PRECAST CONCRETE MANHOLE	95.61(NW) 95.51(NE) 94.33(SE)	94.33(SW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24.1
CB-12A	97.81	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	95.56	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
MH-13	96.35	1200mm	PRECAST CONCRETE MANHOLE	94.21(NE)	94.21(NW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24.1
CB/MH-14	96.10	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	94.21(SE)	95.67(N) 94.21(N)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S28.1 ICD IN OUTLET PIPE
MH-15	96.63	CDS PMSU2025-5	PRECAST CONCRETE MANHOLE	93.74(S)	93.68(W)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & WATERTIGHT COVER TO OPSD 401.030
CB/MH-16	96.04	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	93.66(E)	±93.48(NW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S28.1

KEY PLAN



No.	DATE	REVISION
5	OCT 21–26	RE-ISSUED FOR APPROVAL
4	JUL 10–26	RE-ISSUED FOR APPROVAL
3	JAN 26–26	RE-ISSUED FOR APPROVAL
2	OCT 28–25	RE-ISSUED FOR APPROVAL
1	JUL 11–25	ISSUED FOR APPROVAL

D. B. GRAY ENGINEERING INC.
Stormwater Management - Grading & Drainage - Storm & Sanitary Sewers - Watermains
700 Long Point Circle 613-425-8044
Ottawa, Ontario d.gray@dbgrayengineering.com

Project
PROPOSED 6-STOREY APARTMENT BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Drawing Title
DETAILS

Engineer's Seal
LICENSED PROFESSIONAL ENGINEER
D.B. GRAY
17016502
OCT 21-26
PROVINCE OF ONTARIO
NOT VALID UNLESS SIGNED & DATED

Drawn	D.B.G
H. Scale	1:200
V. Scale	
Date	JUL 11-25
Job No.	24103

Drawing No.
C-13
of 22

Plan #19347 File No. D07-12-25-0104