REFER TO NOTES, DETAILS & SCHEDULES ON DRAWINGS C-4 & C-5

LADY PELLATT STREET

NOELLA LECLAIR WAY

5m
0m
25m

EXIST. ST MH
TOP ±88.64
INV ±83.48(SE)
INV ±83.23(NE)
INV ±83.17(NW)

EXISTING 1200 CONC ST @ ±0.30%
EXISTING 375 PVC SAN @ ±0.18%
EXISTING 300 PVC WM

EXIST. CB
TOP 88.33
INV ±86.95

EXISTING 1050 CONC ST @ ±0.16%
EXISTING 375 PVC SAN @ ±0.19%

EXIST. ST MH
TOP ±88.41
INV ±83.39(NE)
INV ±83.35(SW)

EXIST. SAN MH
TOP ±88.46
INV ±84.41(SW)
INV ±84.39(NE)

APPROXIMATE EXTENT OF ROAD CUT REINSTATEMENT IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. R10

EXIST. CB
TOP 88.16
INV ±86.78

22.5° VERTICAL BEND
45° VERTICAL BEND
EXISTING 300 PVC WM

EXISTING 1050 CONC ST @ ±0.15%
EXISTING 375 PVC SAN @ ±0.21%

EXIST. SAN MH
TOP ±88.72
INV ±84.62(NW)
INV ±84.55(NE)

EXISTING 300 PVC WM
EXISTING 200 PVC WM
EXISTING 825 CONC ST @ ±0.31%

EXIST. CB
TOP 88.33
INV ±86.95

FH-A
FH-C
FH-D

PUMP OUTLET TO BE 0.30m ABOVE GRADE TURN END OF PIPE DOWN ON TO SPLASH PAD

MH-23
TOP 88.52
INV 87.20(SW)
INV 86.29(SE)
INV 86.29(NE)
ICD IN OUTLET PIPE

REMOVE EXISTING COVER, FRAME AND ADJUSTMENT RINGS. RELOCATE CATCH-BASIN. MAKE WATERTIGHT CONNECTION. INSTALL NEW ADJUSTMENT RINGS, FRAME AND COVER. FRAME AND COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19.

CB/MH-21
TOP 88.58
INV 87.53

OGS MH-24
TOP 88.51
INV 86.04(SW)
INV 85.80(NW)

MH-SA.2
TOP 88.73
INV 86.57(SE)
INV 86.56(NW)

A+00.0
150 PVC WS
VB
A+15.0

APPROXIMATE EXTENT OF ROAD CUT REINSTATEMENT IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. R10

±1m
FDC
CB/MH-22
TOP 88.58
INV 87.30(SW)
INV 87.30(NE)

FOUNDATION & TRENCH DRAIN SUMP & PUMP
(REFER TO MECHANICAL)

FH-A TO FDC ±20m UNOBSTRUCTED DISTANCE

BASEMENT PLUMBING FIXTURES SUMP & PUMP DISCHARGE TO SANITARY BUILDING DRAIN AT HIGH LEVEL IN BASEMENT
(REFER TO MECHANICAL)

22.5° VERTICAL LONG RADIUS BEND

PROPOSED 6-STOREY APARTMENT BUILDING A
FFL = 89.56
BFL = 86.41
USF = 86.11

EXHAUST
TRANSFORMER

22.5° VERTICAL BEND
CB-19
TOP 88.39
INV 87.34

CB/MH-18
TOP 88.58
INV 87.40(SE)
INV 87.40(NE)

CB/MH-20
TOP 88.66
INV 87.22(SW)
INV 86.37(SE)
INV 86.37(NW)

CB-14
TOP 88.39
INV 87.34

22.5° VERTICAL BEND

54 - HYDROSTOR HS180 CHAMBERS C/W 525 HDPE ACCESS PIPES
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54

CB/MH-15
TOP 88.64
INV 86.81(SW)
INV 86.42(SE)
INV 86.42(NW)

CB/MH-17
TOP 88.58
INV 87.46(S)
INV 87.46(NW)

CB/MH-13
TOP 88.70
INV 87.17(SE)
INV 86.81(SW)
INV 86.43(NW)

EXIST. CB
TOP 88.31
INV ±86.93

EXIST. CB
TOP 88.31
INV ±86.93

REMOVE EXISTING COVER, FRAME AND ADJUSTMENT RINGS. RELOCATE CATCH-BASIN. MAKE WATERTIGHT CONNECTION. INSTALL NEW ADJUSTMENT RINGS, FRAME AND COVER. FRAME AND COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19.

FH-B

CB-16
TOP 88.58
INV 87.53

FDC
FH-B TO FDC ±35m UNOBSTRUCTED DISTANCE

PROPOSED 6-STOREY APARTMENT BUILDING B
FFL = 89.56
BFL = 86.41
USF = 86.11

FOUNDATION & TRENCH DRAIN SUMP & PUMP
(REFER TO MECHANICAL)

BASEMENT PLUMBING FIXTURES SUMP & PUMP DISCHARGE TO SANITARY BUILDING DRAIN AT HIGH LEVEL IN BASEMENT
(REFER TO MECHANICAL)

EXHAUST

CB-11
TOP 88.39
INV 87.34

PUMP OUTLET TO BE 0.30m ABOVE GRADE TURN END OF PIPE DOWN ON TO SPLASH PAD

B+00.0
150 PVC WS
VB
B+16.6

APPROXIMATE EXTENT OF ROAD CUT REINSTATEMENT IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. R10

CB-1
TOP 88.58
INV 87.53

CB-2 TOP 88.82 INV 87.77
CB-3 TOP 88.78 INV 87.73
CB-4 TOP 88.76 INV 87.71
CB-5 TOP 88.73 INV 87.68
CB-6 TOP 88.70 INV 87.65
CB-7 TOP 88.69 INV 87.64

MH-SA.1
TOP 88.73
INV 86.87

22.5° VERTICAL BEND

CB-10
TOP 88.58
INV 87.53

EXIST. ST MH
TOP ±88.78
INV ±83.84

MH-9
TOP 88.99
INV 87.47

22.5° VERTICAL BEND
CB-8
TOP 88.58
INV 87.53

MH-12
TOP 88.76
INV 87.48(NE)
INV 87.27(SW)
INV 87.27(NW)

A	250 ST SPL 87.65 375 ST SPL 87.65	L	INV 87.03
B	250 ST INV 87.63 375 ST SPL 87.63	M	375 ST INV 87.25 150 SAN OBV 87.10
C	250 ST INV 87.60 375 ST SPL 87.60	N	150 SAN SPL 86.96 200 SAN SPL 86.96
D	250 ST INV 87.58 375 ST SPL 87.58	O	INV 87.63
E	250 ST INV 87.55 375 ST SPL 87.55	P	150 SAN INV 87.54 450 ST TOP 86.84
F	250 ST INV 87.52 375 ST SPL 87.52	Q	150 SAN INV 86.67 200 SAN SPL 86.67
G	250 ST INV 87.51 375 ST SPL 87.51	R	300 WM INV ±85.66 250 ST OBV 85.41
H	250 ST INV 87.48 375 ST SPL 87.48	S	250 ST INV 84.97 375 SAN OBV ±84.72
I	250 ST SPL 87.41 375 ST SPL 87.41	T	250 ST OBV 84.50 1050 ST OBV ±84.50
J	250 ST INV 86.59 375 ST SPL 86.59	U	200 SAN INV 86.46 300 WM OBV ±85.96
K	250 ST INV 86.56 450 ST SPL 86.56	V	200 SAN INV 84.53 375 SAN SPL ±84.53

CB-1	TO	A	2.1m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB-2	TO	B	2.1m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB-3	TO	C	2.1m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB-4	TO	D	2.1m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB-5	TO	E	2.1m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB-6	TO	F	2.1m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB-7	TO	G	2.1m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB-8	TO	H	2.1m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
MH-9	TO	MH-12	78.4m – 375 PVC ST @ 0.25% C/W INSULATION 100mm THICK
CB-10	TO	MH-12	10.4m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB-11	TO	I	3.9m – 250 PVC ST @ 1.6% C/W INSULATION 100mm THICK
MH-12	TO	CB/MH-13	39.4m – 375 PVC ST @ 0.25% C/W INSULATION 100mm THICK
CB/MH-13	TO	CB/MH-15	2.3m – 375 PVC ST @ 0.25%
CB-14	TO	J	3.5m – 250 PVC ST @ 0.45% C/W INSULATION 100mm THICK
CB/MH-15	TO	CB/MH-20	17.8m – 375 PVC ST @ 0.25%
CB-16	TO	CB/MH-17	16.1m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB/MH-17	TO	CB/MH-18	17.8m – 300 PVC ST @ 0.34% C/W INSULATION 100mm THICK
CB/MH-18	TO	CB/MH-20	72.1m – 375 PVC ST @ 0.25% C/W INSULATION 100mm THICK
CB-19	TO	K	4m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB/MH-20	TO	CB/MH-23	38.6m – 450 CONC ST @ 0.195% C/W INSULATION 50mm THICK
CB/MH-21	TO	CB/MH-22	53.3m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB/MH-22	TO	CB/MH-23	22.7m – 250 PVC ST @ 0.432% C/W INSULATION 100mm THICK
CB/MH-23	TO	MH-24	4.2m – 250 PVC ST @ 6.15%
MH-24	TO	R	15.5m – 250 PVC ST @ 6.15%
L	TO	N	14.1m – 150 PVC SAN @ 1% C/W INSULATION 50mm THICK
O	TO	Q	15.2m – 150 PVC SAN @ 1% C/W INSULATION 100mm THICK
MH-SA.1	TO	MH-SA.2	93m – 200 PVC SAN @ 0.32% C/W INSULATION 50mm THICK
MH-SA.2	TO	V	15.2m – 200 PVC SAN @ 0.82% C/W INSULATION 50mm THICK

LEGEND

FFL	FINISHED FLOOR ELEVATION
BFL	BASEMENT FLOOR ELEVATION
USF	UNDERSIDE OF FOOTING
	PROPERTY LINE
CB	CATCH-BASIN
MH	STORM MANHOLE
CB/MH	CATCH-BASIN/MANHOLE
MH	SANITARY MANHOLE
FH	FIRE HYDRANT
FDC	FIRE DEPARTMENT CONNECTION
VB	VALVE & VALVE BOX
M	WATER METER
R	REMOTE WATER METER
SAN	SANITARY SEWER
ST	STORM SEWER
WS/WM	WATER SERVICE/WATERMAIN
OBV	OBVERT OF PIPE
SPL	SPRINGLINE OF PIPE
INV	INVERT OF PIPE
x99.99	EXISTING GRADE ELEVATION
	150mm BARRIER CURB

No.	DATE	REVISION
2	JUN 28-23	ISSUED FOR APPROVAL
1	JUN 26-23	ISSUED FOR COORDINATION

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
1001 NOELLA LECLAIR WAY
OTTAWA, ONTARIO

Drawing Title
SITE SERVICING PLAN

Engineer's Seal
LICENSED PROFESSIONAL ENGINEER
D.B. GRAY
17016502
JUN 28-23
PROVINCE OF ONTARIO
NOT VALID UNLESS SIGNED & DATED

Drawn	D.B.G
H. Scale	1:250
V. Scale	
Date	JUN 12-23
Job No.	22068

Drawing No.
C-1
of 6

REFER TO NOTES, DETAILS & SCHEDULES ON DRAWINGS C-4 & C-5

LADY PELLATT STREET

NOELLA LECLAIR WAY

5m
0m
25m

EXIST. ST MH TOP ±88.64
EXIST. SAN MH TOP ±88.72
EXIST. CB TOP 88.33
EXIST. ST MH TOP ±88.41
EXIST. SAN MH TOP ±88.46
EXIST. CB TOP 88.16
EXIST. CB TOP 88.33
EXIST. CB TOP 88.31
EXIST. CB TOP 88.31
EXIST. ST MH TOP ±88.78

REMOVE EXISTING 150mm CURB & SIDEWALK AND CONSTRUCT NEW CURB RETURN ENTRANCE IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. SC7.1

REMOVE EXISTING 150mm CURB & SIDEWALK AND CONSTRUCT NEW CURB RETURN ENTRANCE IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. SC7.1

PUMP OUTLET TO BE 0.30m ABOVE GRADE TURN END OF PIPE DOWN ON TO SPLASH PAD

PUMP OUTLET TO BE 0.30m ABOVE GRADE TURN END OF PIPE DOWN ON TO SPLASH PAD

MH-23 TOP 88.52
CB/MH-21 TOP 88.58
CB/MH-22 TOP 88.58
OGS MH-24 TOP 88.51
MH-SA.2 TOP 88.73
CB-19 TOP 88.39
CB/MH-20 TOP 88.66
CB-14 TOP 88.39
CB/MH-15 TOP 88.64
CB/MH-13 TOP 88.70
CB-11 TOP 88.39
MH-SA.1 TOP 88.73
CB-10 TOP 88.58
MH-12 TOP 88.76
CB-8 TOP 88.58
MH-9 TOP 88.99
CB-1 TOP 88.58
CB-2 TOP 88.82
CB-3 TOP 88.78
CB-4 TOP 88.76
CB-5 TOP 88.73
CB-6 TOP 88.70
CB-7 TOP 88.69
CB-16 TOP 88.58
CB/MH-17 TOP 88.58
CB/MH-18 TOP 88.58

FH-A
FH-B
FH-C
FH-D

FDC
FDC

REFER TO DRAWING C-5

FH-A TO FDC ±20m UNOBSTRUCTED DISTANCE

FH-B TO FDC ±35m UNOBSTRUCTED DISTANCE

FOUNDATION & TRENCH DRAIN SUMP & PUMP (REFER TO MECHANICAL)

FOUNDATION & TRENCH DRAIN SUMP & PUMP (REFER TO MECHANICAL)

PROPOSED 6-STOREY APARTMENT BUILDING A

FFL = 89.56
BFL = 86.41
USF = 86.11

PROPOSED 6-STOREY APARTMENT BUILDING B

FFL = 89.56
BFL = 86.41
USF = 86.11

TOP OF FOUNDATION SHALL BE A MINIMUM 0.15m ABOVE ADJACENT PROPOSED GRADES

TOP OF FOUNDATION SHALL BE A MINIMUM 0.15m ABOVE ADJACENT PROPOSED GRADES

100-YEAR POND ELEVATION: 88.57

100-YEAR POND ELEVATION: 88.57

100-YEAR POND ELEVATION: 88.57

REFER TO ARCHITECTURAL

REFER TO ARCHITECTURAL

EXHAUST
EXHAUST
TRANSFORMER

LEGEND

FFL	FINISHED FLOOR ELEVATION
BFL	BASEMENT FLOOR ELEVATION
USF	UNDERSIDE OF FOOTING
	PROPERTY LINE
CB	CATCH-BASIN
MH	STORM MANHOLE
CB/MH	CATCH-BASIN/MANHOLE
MH	SANITARY MANHOLE
FH	FIRE HYDRANT
FDC	FIRE DEPARTMENT CONNECTION
x99.99	EXISTING GRADE ELEVATION
+99.99	PROPOSED GRADE ELEVATION
2%	PROPOSED SLOPE OF GRADE
	EMERGENCY OVERLAND FLOW
	CENTERLINE OF SWALE
	150mm BARRIER CURB
D.C	DEPRESSED CURB
	LIGHT-DUTY PAVEMENT
	HEAVY-DUTY PAVEMENT
	CONCRETE
	LANDSCAPE

No.	DATE	REVISION
2	JUN 28-23	ISSUED FOR APPROVAL
1	JUN 26-23	ISSUED FOR COORDINATION

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
1001 NOELLA LECLAIR WAY
OTTAWA, ONTARIO

Drawing Title

GRADING PLAN

Engineer's Seal

LICENSED PROFESSIONAL ENGINEER
D.B. GRAY
17016502
JUN 28-23
PROVINCE OF ONTARIO

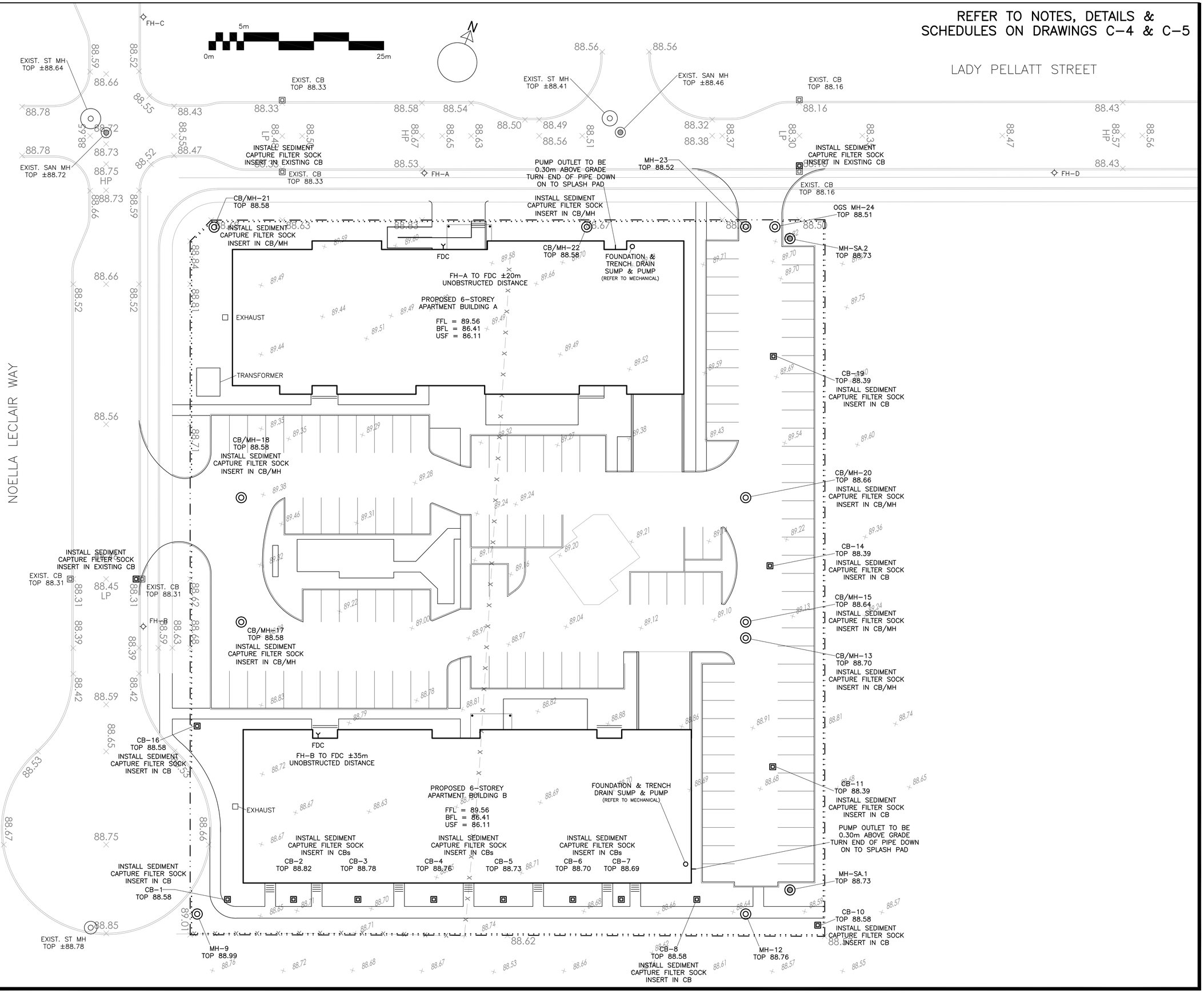
NOT VALID UNLESS SIGNED & DATED

Drawn	D.B.G
H. Scale	1:250
V. Scale	
Date	JUN 12-23
Job No.	22068

Drawing No.

C-2
of 6

REFER TO NOTES, DETAILS & SCHEDULES ON DRAWINGS C–4 & C–5



LEGEND

FFL	FINISHED FLOOR ELEVATION
BFL	BASEMENT FLOOR ELEVATION
USF	UNDERSIDE OF FOOTING
	PROPERTY LINE
CB	CATCH–BASIN
MH	STORM MANHOLE
CB/MH	CATCH–BASIN/MANHOLE
MH	SANITARY MANHOLE
FH	FIRE HYDRANT
FDC	FIRE DEPARTMENT CONNECTION
x99.99	EXISTING GRADE ELEVATION
	150mm BARRIER CURB
	SILT FENCE BARRIER

No.	DATE	REVISION
2	JUN 28–23	ISSUED FOR APPROVAL
1	JUN 26–23	ISSUED FOR COORDINATION

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
1001 NOELLA LECLAIR WAY
OTTAWA, ONTARIO

Drawing Title

EROSION & SEDIMENT CONTROL PLAN

Engineer's Seal

LICENSED PROFESSIONAL ENGINEER
D.B. GRAY
1701650Z
JUN 28–23
PROVINCE OF ONTARIO

NOT VALID UNLESS SIGNED & DATED

Drawn	D.B.G
H. Scale	1:250
V. Scale	
Date	JUN 12–23
Job No.	22068

Drawing No.

C–3
of 6

1.0 GENERAL

1.1 USE BAR SCALE TO CONFIRM ACTUAL PLOT SCALE.
1.2 EXISTING AND NEW ELEVATIONS ARE GEODETIC IN METERS. PIPE DIMENSIONS ARE NOMINAL IN MILLIMETERS UNLESS OTHERWISE NOTED.
1.3 "ENGINEER" REFERS TO D.B. GRAY ENGINEERING INC. UNLESS OTHERWISE NOTED.
1.4 SITE BOUNDARIES, EXISTING GRADE ELEVATIONS AND OTHER EXISTING FEATURES ARE DERIVED FROM GRADING PLAN PREPARED BY STANTEC CONSULTING LTD. PROJECT No. 160401419.
1.5 REFER TO ARCHITECTURAL SITE PLANS AND LANDSCAPE PLANS FOR EXACT LOCATIONS OF PROPOSED BUILDINGS, DRIVEWAYS, PARKING AREAS, CURBS, SIDEWALKS, WALKWAYS, ETC. LAYOUT SHALL BE COMPLETED BY THE CONTRACTOR AND REVIEWED BY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCING CONSTRUCTION.
1.6 DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SITE SERVICING & STORMWATER MANAGEMENT REPORT No. 22068 PREPARED BY D.B. GRAY ENGINEERING INC.
1.7 REFERENCE THE LATEST REVISION OF THE GEOTECHNICAL INVESTIGATION PREPARED BY PATERSON GROUP INC. REPORT: PG6282–1. CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
1.8 CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND CURRENT CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS. ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS SHALL APPLY WHERE NO CITY OF OTTAWA STANDARD SPECIFICATIONS OR DRAWINGS ARE AVAILABLE.
1.9 PRIOR TO COMMENCING CONSTRUCTION:
- A. OBTAIN AND BEAR THE COST OF ALL NECESSARY PERMITS AND APPROVALS FROM AUTHORITIES HAVING JURISDICTION.
- B. LOCATIONS, DEPTHS AND SIZES OF EXISTING INFRASTRUCTURE INDICATED ON DRAWINGS ARE FOR GUIDANCE ONLY. COMPLETENESS AND ACCURACY ARE NOT GUARANTEED. ALL EXISTING INFRASTRUCTURE IS NOT NECESSARILY INDICATED ON DRAWINGS. THOSE SHOWN ARE DERIVED FROM AVAILABLE INFORMATION AND MUST BE CONFIRMED ON SITE.
- C. NOTIFY AUTHORITIES HAVING JURISDICTION.
- D. UNDERGROUND LOCATES INCLUDING BUT NOT LIMITED TO ONTARIO ONE CALL 1–800–400–2255 SHALL BE PERFORMED. CONFIRM LOCATIONS, DEPTHS AND SIZES OF EXISTING INFRASTRUCTURE BY CAREFUL TEST EXCAVATIONS AND REPORT ANY DIFFERENCES TO THE ENGINEER. FAILURE TO DO SO WILL BE AT THE CONTRACTOR'S EXPENSE.
- E. COORDINATE AND SCHEDULE CONSTRUCTION TO PROVIDE MINIMUM DISRUPTION TO SERVICES.

1.10 PROVIDE TRAFFIC CONTROL AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
1.11 EXCAVATION AND BACKFILL:
- A. PROTECT EXISTING BUILDINGS, INFRASTRUCTURE, ETC. FROM DAMAGE.
- B. SAWCUT PAVEMENT, CURBS AND SIDEWALKS NEATLY ALONG LIMITS OF PROPOSED EXCAVATIONS.
- C. EXCAVATIONS SHALL NOT INTERFERE WITH BEARING CAPACITIES OF ADJACENT FOUNDATIONS.
- D. SUBGRADE, BEDDING, SURROUND MATERIAL AND BACKFILL SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
- E. COORDINATE AND PAY FOR GEOTECHNICAL INSPECTIONS AND COMPACTION TESTS OF SUBGRADE AND EACH LIFT OF BEDDING, SURROUND MATERIAL AND BACKFILL. SUBMIT GEOTECHNICAL INSPECTIONS AND COMPACTION REPORTS TO THE ENGINEER.

1.12 MAINTAIN AS–BUILT DRAWINGS AND RECORD DEVIATIONS INCLUDING BUT NOT LIMITED TO CHANGES OF LOCATIONS, ELEVATIONS AND SIZES FROM ORIGINAL CONTRACT DOCUMENTS. UPDATE DAILY AND MAKE AVAILABLE THROUGHOUT CONSTRUCTION. SUBMIT AS–BUILT DRAWINGS TO THE ENGINEER WHEN CONSTRUCTION IS COMPLETE.
1.13 REINSTATE AREAS DISTURBED BY CONSTRUCTION TO PRE–CONSTRUCTION CONDITIONS.

2.0 SITE SERVICING PLAN

2.1 WATER SERVICES, APPURTENANCES AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CURRENT CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS. ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS SHALL APPLY WHERE NO CITY OF OTTAWA STANDARD SPECIFICATIONS OR DRAWINGS ARE AVAILABLE.
2.2 WATER SERVICE MATERIAL SHALL BE PVC PRESSURE CLASS 235 DR18 IN ACCORDANCE WITH CURRENT CITY OF OTTAWA STANDARD SPECIFICATIONS.
2.3 CONNECTIONS TO MUNICIPAL WATERMAIN SHALL BE PERFORMED BY CITY OF OTTAWA FORCES. CONTRACTOR SHALL PERFORM EXCAVATION, BACKFILL AND REINSTATEMENT.
2.4 PROVIDE A MINIMUM 2.4m COVER OVER WATER SERVICES. WHERE THE MINIMUM COVER IS NOT POSSIBLE NOTIFY THE ENGINEER AND INSULATE IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. W22.
2.5 WATER METERS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. W32.
2.6 SEWERS, SEWER SERVICES, APPURTENANCES AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CURRENT CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS. ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS SHALL APPLY WHERE NO CITY OF OTTAWA STANDARD SPECIFICATIONS OR DRAWINGS ARE AVAILABLE.
2.7 SEWER MATERIALS SHALL BE REINFORCED CONCRETE FOR DIAMETERS GREATER THAN OR EQUAL TO 450mm AND PVC DR35 FOR DIAMETERS LESS THAN 450mm. SEWER AND SEWER SERVICE MATERIALS SHALL BE PVC DR35 FOR DIAMETERS GREATER THAN 150mm AND DR28 FOR DIAMETERS LESS THAN OR EQUAL TO 150mm.
2.8 CONNECT PROPOSED SANITARY SEWER TO EXISTING MUNICIPAL SANITARY SEWER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S11.1.
2.9 CONNECT PROPOSED STORM SEWER TO EXISTING MUNICIPAL STORM SEWER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S11.2.
2.10 PROVIDE A MINIMUM 2m COVER OVER SEWERS AND SEWER SERVICES. WHERE THE MINIMUM COVER IS NOT POSSIBLE NOTIFY THE ENGINEER AND INSULATE AS PER DETAIL.
2.11 SANITARY SEWER SHALL CROSS ABOVE WATERMAIN WITH A MINIMUM 500mm BARREL TO BARREL VERTICAL SEPARATION IN ACCORDANCE WITH MOE PROCEDURE F–6–1. SEWER PIPE SEGMENT SHALL BE CENTERED AT THE POINT OF CROSSING SO JOINTS ARE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATERMAIN.
2.12 STORM SEWER SHALL CROSS BELOW WATERMAIN WITH A MINIMUM 250mm BARREL TO BARREL VERTICAL SEPARATION IN ACCORDANCE WITH MOE PROCEDURE F–6–1. SEWER PIPE SEGMENT SHALL BE CENTERED AT THE POINT OF CROSSING SO JOINTS ARE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATERMAIN.
2.13 SANITARY BUILDING DRAINS SHALL BE INSTALLED WITH NORMALLY OPEN BACKWATER VALVES IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S14.1 OR S14.2.
2.14 CATCH–BASINS AND MANHOLES:
- A. PRECAST CONCRETE CATCH–BASINS SHALL BE IN ACCORDANCE WITH OPSD 705.010.
- B. PRECAST CONCRETE MANHOLES SHALL BE IN ACCORDANCE WITH OPSD 701.010.
- C. MANHOLE STEPS SHALL BE HOLLOW CIRCULAR ALUMINUM IN ACCORDANCE WITH OPSD 405.010.
- D. PRECAST CONCRETE ADJUSTMENT UNITS SHALL BE IN ACCORDANCE WITH OPSD 704.010.
- E. ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL HAVE POLYETHYLENE ANCHOR INSULATING SLEEVES.
- F. FRAMES AND COVERS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DRAWINGS OR ONTARIO PROVINCIAL STANDARD DRAWINGS. REFER TO CATCH–BASIN & MANHOLE SCHEDULE.
- G. PRIOR TO INSTALLATION SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

2.15 PIPES AND FITTINGS:
- A. HANDLE, CUT AND ASSEMBLE PIPES AND FITTINGS IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION GUIDE.
- B. WHETHER A RESULT OF POOR WORKMANSHIP OR DAMAGE DEFECTIVE PIPES AND FITTINGS SHALL BE REPAIRED OR REPLACED.

2.16 COORDINATE AND PERFORM LEAKAGE TESTS ON SANITARY MANHOLES, SEWERS AND SEWER SERVICES IN ACCORDANCE WITH OPSS 407 AND OPSS 410 WITH THE PRESENCE OF THE ENGINEER.
2.17 COORDINATE AND PERFORM DYE TESTS ON SANITARY SEWERS AND SEWER SERVICES WITH THE PRESENCE OF THE ENGINEER.
2.18 PERFORM TWO CCTV INSPECTIONS ON SEWERS AND SEWER SERVICES. FIRST INSPECTION SHALL BE WHEN CONSTRUCTION IS COMPLETE. SECOND INSPECTION SHALL BE IMMEDIATELY PRIOR TO THE END OF THE WARRANTY PERIOD. SUBMIT REPORTS AND VIDEOS TO THE ENGINEER FOR APPROVAL. DEFECTIVE SEWERS AND SEWER SERVICES SHALL BE REPAIRED OR REPLACED.
2.19 PRIOR TO INSTALLATION OF HYDROSTOR CHAMBERS SUBMIT SHOP DRAWING TO THE ENGINEER FOR APPROVAL.
2.20 INLET CONTROL DEVICE LOCATED IN THE OUTLET PIPE OF MH–23 SHALL BE A PLUG STYLE WITH A ROUND ORIFICE LOCATED AT THE BOTTOM OF THE PLUG MANUFACTURED BY PEDRO PLASTICS OR APPROVED EQUIVALENT SIZED BY THE MANUFACTURER FOR A RELEASE RATE OF 37.78L/s AT 2.23m. PRIOR TO INSTALLATION SUBMIT SHOP DRAWING TO THE ENGINEER FOR APPROVAL.

3.0 GRADING PLAN

3.1 NEW GRADES SHALL MATCH EXISTING GRADES ON PROPERTY LINES. NO EXCESS DRAINAGE SHALL BE DIRECTED TOWARDS ADJACENT PROPERTIES DURING OR AFTER CONSTRUCTION. THERE SHALL BE NO ALTERATION TO EXISTING GRADES OR DRAINAGE PATTERNS ON PROPERTY LINES.
3.2 ENSURE ADEQUATE DRAINAGE AWAY FROM BUILDINGS TO RIGHT–OF–WAY, CATCH–BASINS AND SWALES. GRADING SHALL BE GRADUAL BETWEEN PROPOSED GRADE ELEVATIONS INDICATED ON DRAWINGS.
3.3 WHETHER A RESULT OF POOR WORKMANSHIP OR DAMAGE DEFECTIVE GRADING SHALL BE CORRECTED.
3.4 CURBS AND SIDEWALKS:
- A. CONCRETE CURBS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. SC1.1.
- B. CONCRETE CURB & SIDEWALKS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. SC1.4. DEPRESSED CONCRETE PEDESTRIAN CURBS SHALL BE 0mm.
- C. WHETHER A RESULT OF POOR WORKMANSHIP OR DAMAGE DEFECTIVE CURBS AND SIDEWALKS SHALL BE REPAIRED OR REPLACED.

3.5 PAVEMENT STRUCTURE:
- A. LIGHT DUTY PAVEMENT STRUCTURE
  - 50mm HL–3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE WEAR COURSE
  - 150mm OPSS GRANULAR A BASE
  - 300mm OPSS GRANULAR B TYPE II SUBBASE
- B. HEAVY DUTY PAVEMENT STRUCTURE
  - 40mm HL–3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE WEAR COURSE
  - 50mm HL–8 OR SUPERPAVE 19.0 ASPHALTIC CONCRETE BINDER COURSE
  - 150mm OPSS GRANULAR A BASE
  - 450mm OPSS GRANULAR B TYPE II SUBBASE
- C. SUBDRAINS SHALL BE INSTALLED 300mm BELOW SUBGRADE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
- D. COORDINATE AND PAY FOR GEOTECHNICAL INSPECTIONS AND COMPACTION TESTS OF EACH LIFT OF SUBBASE, BASE, BINDER AND WEAR COURSES. SUBMIT GEOTECHNICAL INSPECTIONS AND COMPACTION REPORTS TO THE ENGINEER.
- E. WHETHER A RESULT OF POOR WORKMANSHIP OR DAMAGE DEFECTIVE PAVEMENT STRUCTURE SHALL BE REPAIRED OR REPLACED.

3.6 RETAINING WALLS:
- A. RETAINING WALLS GREATER THAN 600mm IN HEIGHT REQUIRE A GUARD. REFER TO ARCHITECTURAL SITE PLANS AND/OR LANDSCAPE PLANS FOR EXACT LOCATIONS AND DETAILS.
- B. RETAINING WALLS GREATER THAN 1000mm IN HEIGHT SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
- C. WHETHER A RESULT OF POOR WORKMANSHIP OR DAMAGE DEFECTIVE RETAINING WALLS SHALL BE REPAIRED OR REPLACED.

4.0 EROSION & SEDIMENT CONTROL PLAN

4.1 THE EROSION & SEDIMENT CONTROL PLAN IS A "LIVING DOCUMENT" AND SHALL BE REVISED IN THE EVENT THE SPECIFIED CONTROL MEASURES ARE NOT SUFFICIENT. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION OF THE AREA DRAINAGE SYSTEM DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO LIMITING THE AMOUNT OF EXPOSED SOIL, USING SEDIMENT CAPTURE FILTER SOCK INSERTS IN CATCH–BASINS AND CATCH–BASIN/MANHOLES AND INSTALLING SILT FENCES AND OTHER EFFECTIVE SEDIMENT TRAPS. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY. AT MINIMUM THE CONTRACTOR SHALL INSTALL, MAINTAIN AND REMOVE THE FOLLOWING CONTROL MEASURES IN ACCORDANCE WITH NOTES 4.2 TO 4.10.
4.2 PRIOR TO COMMENCING CONSTRUCTION INSTALL TERRAFIX GEOSYNTHETICS INC. SILTSACK OR APPROVED EQUIVALENT SEDIMENT CAPTURE FILTER SOCK INSERTS IN ALL EXISTING CATCH–BASINS AND CATCH–BASIN/MANHOLES ADJACENT TO AND WITHIN THE SITE.
4.3 INSTALL TERRAFIX GEOSYNTHETICS INC. SILTSACK OR APPROVED EQUIVALENT SEDIMENT CAPTURE FILTER SOCK INSERTS IN ALL NEW CATCH–BASINS AND CATCH–BASIN/MANHOLES AS THEY ARE INSTALLED.
4.4 INSPECT SEDIMENT CAPTURE FILTER SOCK INSERTS AT THE END OF EACH DAY AND AFTER EACH RAINFALL. REMOVE SEDIMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. REPAIR OR REPLACE DAMAGED SEDIMENT CAPTURE FILTER SOCK INSERTS.
4.5 PRIOR TO COMMENCING CONSTRUCTION INSTALL SILT FENCE BARRIERS AS INDICATED ON DRAWINGS.
4.6 INSTALL SILT FENCE BARRIERS AROUND STOCKPILED SEDIMENT OR SOIL.
4.7 INSPECT SILT FENCE BARRIERS AT THE END OF EACH DAY AND AFTER EACH RAINFALL. REMOVE SEDIMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. REPAIR OR REPLACE DAMAGED SILT FENCE BARRIERS.
4.8 REMOVE ANY MATERIAL DEPOSITED ON THE PUBLIC ROAD BY SHOVELING AND SWEEPING OR VACUUMING AND DISPOSING IN A CONTROLLED AREA. DO NOT SHOVEL, SWEEP OR DISPOSE ANY MATERIAL INTO ANY STORMWATER CONVEYANCE SYSTEM.
4.9 REMOVE EROSION AND SEDIMENT CONTROL MEASURES WHEN CONSTRUCTION IS COMPLETE.
4.10 CONSTRUCTION IS CONSIDERED TO BE COMPLETE WHEN THE FOLLOWING CONDITIONS HAVE BEEN MET:
- A. ALL STRUCTURES AND HARD SURFACES HAVE BEEN CONSTRUCTED.
- B. ALL STOCKPILED MATERIALS HAVE BEEN REMOVED.
- C. ALL PROPOSED GRASSED AREAS ARE EITHER SODDED OR HAVE FULL COVERAGE OF WELL ESTABLISHED TURF AND HAVE HAD A MINIMUM OF ONE FULL GROWING SEASON (MAY 15 TO SEPTEMBER 15).
- D. THERE ARE NO AREAS OF EXPOSED EARTH.

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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

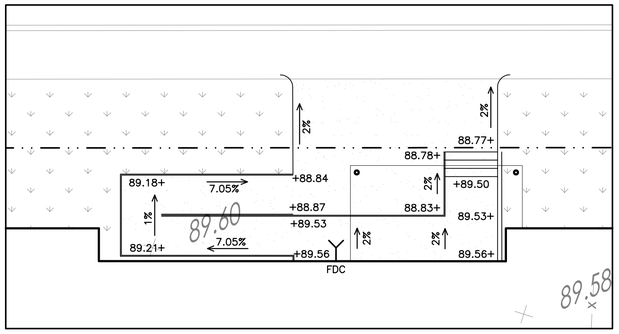
Project
PROPOSED 6–STOREY APARTMENT BUILDINGS
1001 NOELLA LECLAIR WAY
OTTAWA, ONTARIO

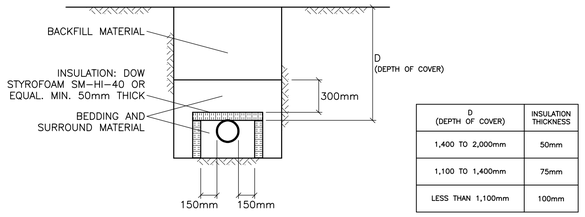
Drawing Title
NOTES

Engineer's Seal
LICENSED PROFESSIONAL ENGINEER
D.B. GRAY
17016502
JUN 28–23
PROVINCE OF ONTARIO
NOT VALID UNLESS SIGNED & DATED

Drawn	D.B.G
H. Scale	
V. Scale	
Date	JUN 12–23
Job No.	22068

Drawing No.
C–4
of 6





D (DEPTH OF COVER)	INSULATION THICKNESS
1,400 TO 2,000mm	50mm
1,100 TO 1,400mm	75mm
LESS THAN 1,100mm	100mm

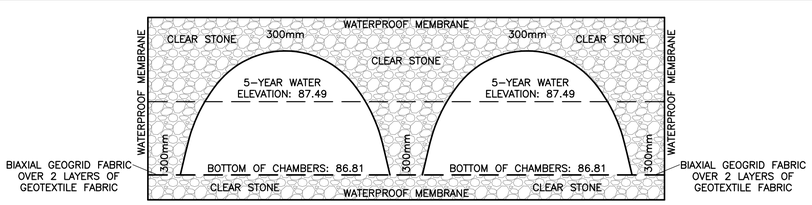
INSULATE SEWERS AND SEWER SERVICES AS INDICATED AND WHERE DEPTH OF COVER IS LESS THAN 2,000mm.
CENTER INSULATION OVER PIPE.
STAGGER JOINTS BETWEEN SHEETS OF INSULATION.

INSULATION OF SEWERS & SEWER SERVICES IN SHALLOW TRENCHES
N.T.S

WATER SERVICE PROFILE TABLE

150mm PVC PRESSURE CLASS 235 DR18

STATION	DESCRIPTION	GRADE ELEVATION	TOP OF PIPE	DEPTH OF COVER	NOTES
A+00.0	300mm x 150mm TEE IN 300mm MUNICIPAL WATERMAIN	±88.71	±86.21	±2.50	CONNECTION BY CITY. EXCAVATION, BACKFILL & REINSTATEMENT BY CONTRACTOR.
A+09.0	150mm VALVE BOX	88.85	86.21	2.64	ON PROPERTY LINE
A+15.0	–	89.41	86.21	3.20	ENTRY TO BUILDING
B+00.0	200mm x 150mm TEE IN 200mm MUNICIPAL WATERMAIN	±88.83	±86.29	±2.54	CONNECTION BY CITY. EXCAVATION, BACKFILL & REINSTATEMENT BY CONTRACTOR.
B+09.0	150mm VALVE BOX	88.69	86.29	2.40	ON PROPERTY LINE
B+16.6	–	89.41	86.29	3.12	ENTRY TO BUILDING



HYDROSTOR HS180 CHAMBERS
N.T.S

CATCH-BASIN & MANHOLE SCHEDULE

REF	TOP	SIZE	TYPE	INVERT AT INLET	INVERT AT OUTLET	NOTES
STORM SEWER						
CB-1	88.58	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.53	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB-2	88.82	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.77	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB-3	88.78	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.73	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB-4	88.76	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.71	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB-5	88.73	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.68	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB-6	88.70	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.65	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB-7	88.69	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.64	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB-8	88.58	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.53	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
MH-9	88.99	1200mm	PRECAST CONCRETE MANHOLE	–	87.47	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24.1
CB-10	88.58	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.53	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB-11	88.39	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.34	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
MH-12	88.76	1200mm	PRECAST CONCRETE MANHOLE	87.48(NE) 87.27(SW)	87.27(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-13	88.70	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	87.17(SE) 86.81(SW)	86.43(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-14	88.39	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.34	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB/MH-15	88.64	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	86.81(SW) 86.42(SE)	86.42(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-16	88.58	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.53	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB/MH-17	88.58	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	87.46(S)	87.46(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/MH-18	88.58	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	87.40(SE)	87.40(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-19	88.39	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	–	87.34	IN ACCORDANCE WITH OPSD 705.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S19
CB/MH-20	88.66	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	87.22(SW) 86.37(SE)	86.37(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/MH-21	88.58	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	–	87.53	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-22	88.58	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	87.30(SW)	87.30(NE)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S28.1
MH-23	88.52	1200mm	PRECAST CONCRETE MANHOLE	87.20(SW) 86.29(SE)	86.29(NE)	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-24	88.51	CDS PMSU2015-4	PRECAST CONCRETE MANHOLE	86.04(SW)	85.80(NW)	–
SANITARY SEWER						
MH-SA.1	88.73	1200mm	PRECAST CONCRETE MANHOLE	–	86.87	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24
MH-SA.2	88.73	1200mm	PRECAST CONCRETE MANHOLE	86.57(SE)	86.56(NW)	IN ACCORDANCE WITH OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER IN ACCORDANCE WITH CITY OF OTTAWA DRAWING No. S25 & S24

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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

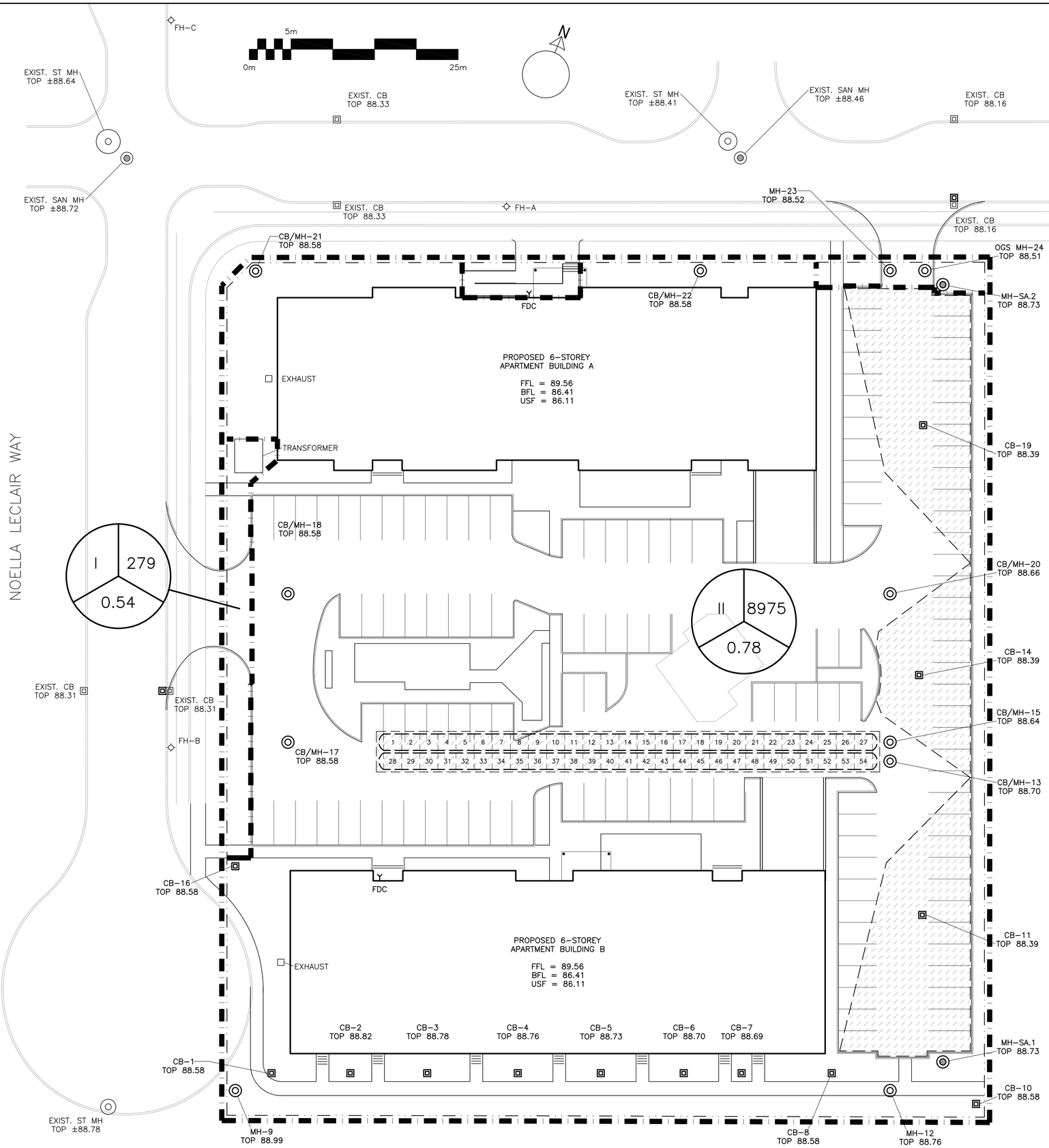
Project
PROPOSED 6-STOREY APARTMENT BUILDINGS
1001 NOELLA LECLAIR WAY
OTTAWA, ONTARIO

Drawing Title
DETAILS & SCHEDULES

Engineer's Seal
LICENSED PROFESSIONAL ENGINEER
D.B. GRAY
17016502
JUN 28-23
PROVINCE OF ONTARIO
NOT VALID UNLESS SIGNED & DATED

Drawn	D.B.G
H. Scale	
V. Scale	
Date	JUN 12-23
Job No.	22068

Drawing No.
C-5
of 6



LEGEND

DRAINAGE AREA — AREA (sq.m)

X — XXX

0.XX

5-YEAR RUNOFF COEFFICIENT

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Project

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1001 NOELLA LECLAIR WAY
OTTAWA, ONTARIO

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DRAINAGE PLAN

Engineer's Seal

LICENSED PROFESSIONAL ENGINEER
D.B. GRAY
17016502
JUN 28-23
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Drawn	D.B.G
H. Scale	1:250
V. Scale	
Date	JUN 12-23
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Drawing No.

C-6
of 6