

REFER TO NOTES, DETAILS & SCHEDULES ON DRAWINGS C-8 & C-9

LEGEND

FFL	FIRST FLOOR ELEVATION
TOF	TOP OF FOUNDATION
USF	UNDERSIDE OF FOOTING
---	PROPERTY LINE
CB	CATCH BASIN
CB/MH	CATCH BASIN/MANHOLE
MH	SANITARY MANHOLE
SAN	SANITARY SEWER
ST	STORM SEWER
WL	WATER LINE
INV	INVERT OF PIPE
T.O.S.	TOP OF SLOPE
B.O.S.	BOTTOM OF SLOPE
---	CENTERLINE OF SWALE
---	150mm BARRIER CURB
D.C.	DEPRESSED CURB



No.	DATE	REVISION
10	NOV 20-25	RE-ISSUED FOR APPROVAL
9	SEP 29-25	RE-ISSUED FOR APPROVAL
8	JUL 30-25	RE-ISSUED FOR APPROVAL
7	JUN 30-25	ISSUED TO OSSO FOR SEPTIC PERMIT
6	MAR 28-25	RE-ISSUED TO O/S
5	MAR 24-25	RE-ISSUED FOR APPROVAL
4	MAR 6-25	RE-ISSUED FOR APPROVAL
3	JAN 13-25	ISSUED FOR APPROVAL
2	DEC 18-24	ISSUED FOR COORDINATION
1	SEP 20-24	PRELIMINARY

D. B. GRAY ENGINEERING INC.
 Professional Engineers & Planners
 700 Long Point Circle
 Ottawa, Ontario
 613-425-8044
 d.gray@dbgrayengineering.com

**PROPOSED
 1-STORY BUILDING
 1386-1394 GREELY LANE
 GREELY, ONTARIO**

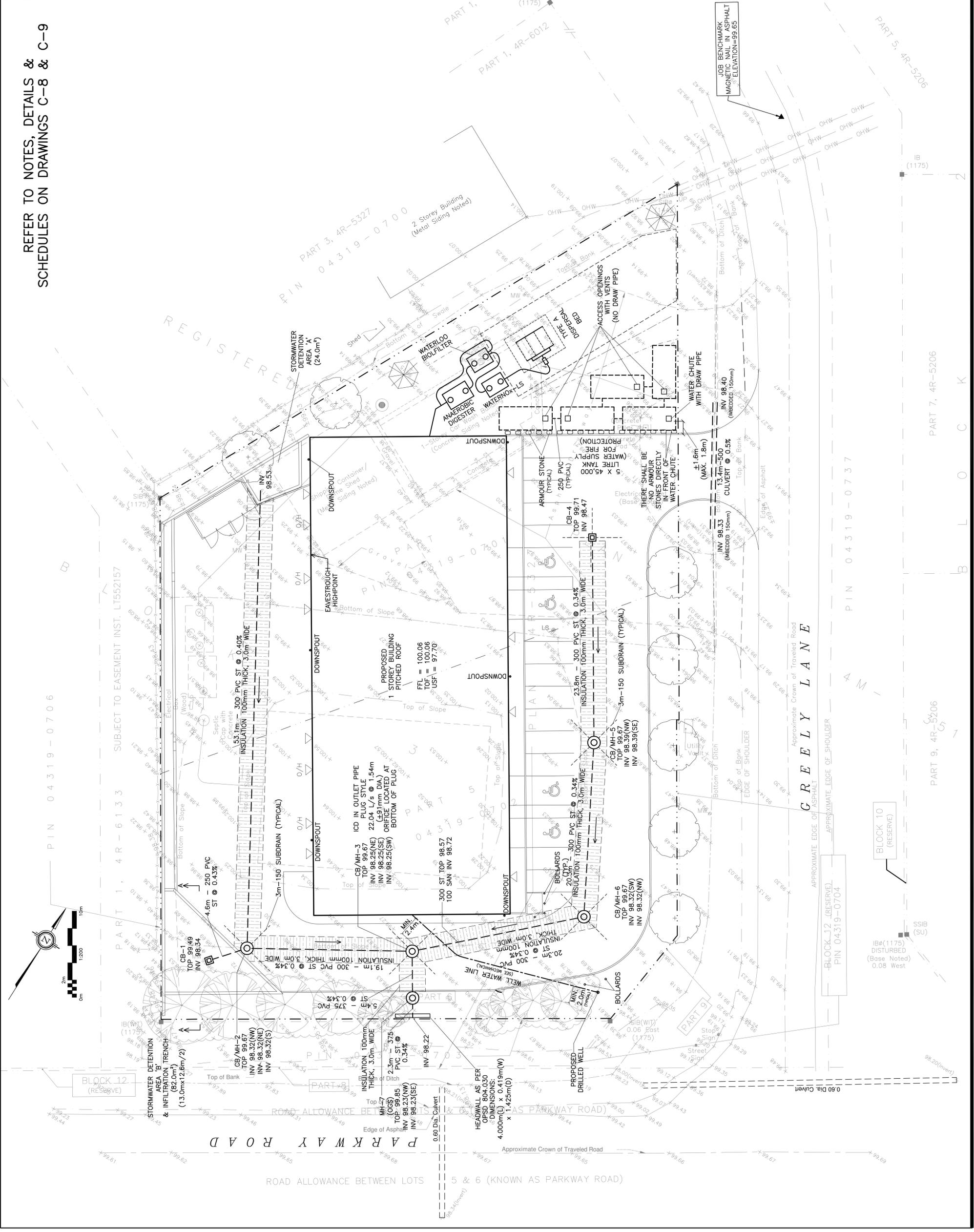
SITE SERVICING PLAN

Engineer's Seal
 D.B. GRAY
 NOV 20-25
 LICENSED PROFESSIONAL ENGINEER
 PROVINCE OF ONTARIO

NOT VALID UNLESS SIGNED & DATED

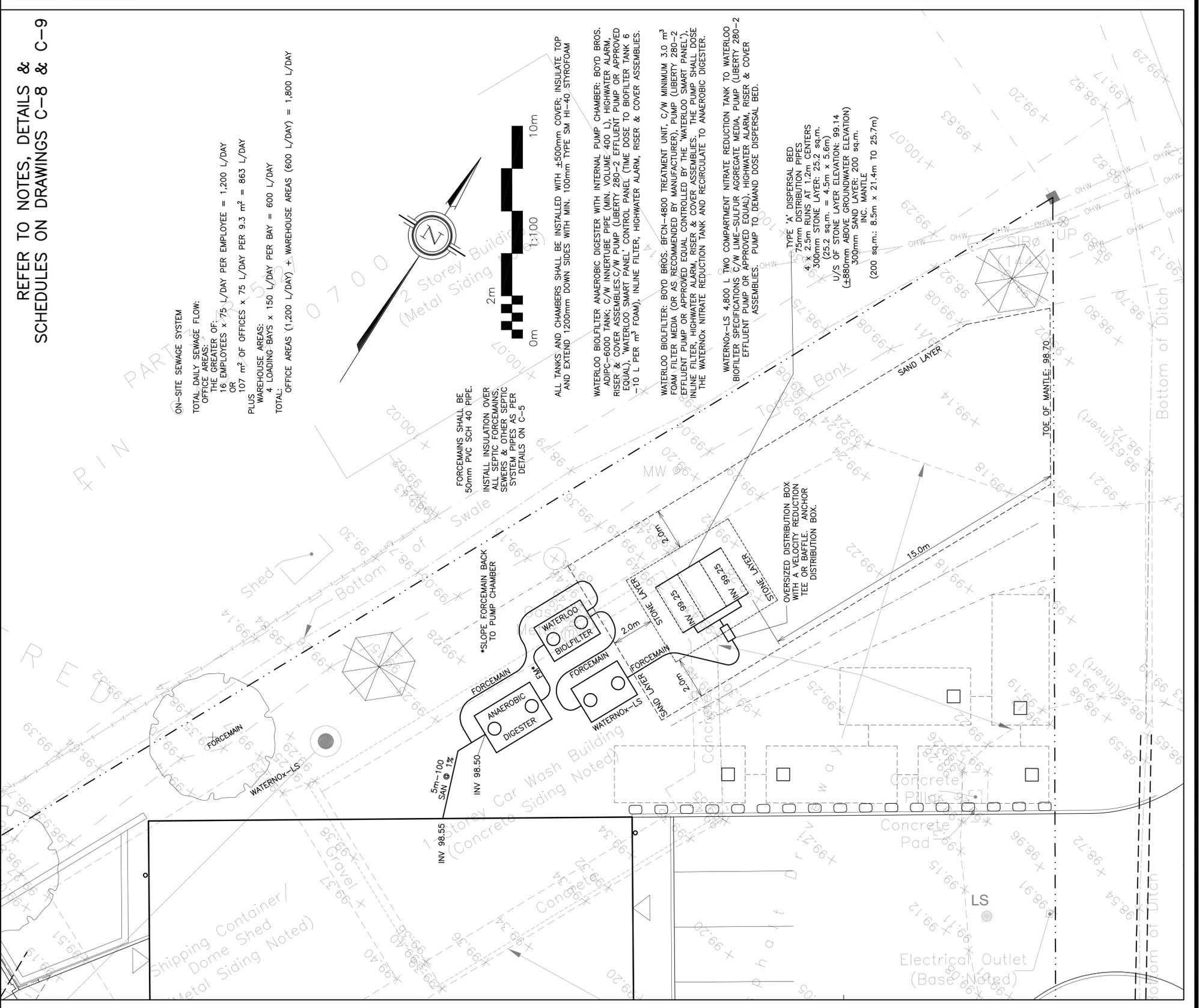
Drawn: D.B.G.
 H. Scale: 1:200
 V. Scale: 1:20
 Date: SEP 20-24
 Job No.: 24015

Drawing No. **C-1** of **9**



REFER TO NOTES, DETAILS & SCHEDULES ON DRAWINGS C-8 & C-9

ON-SITE SEWAGE SYSTEM
 TOTAL DAILY SEWAGE FLOW:
 OFFICE AREAS:
 16 EMPLOYEES x 75 L/DAY PER EMPLOYEE = 1,200 L/DAY
 OR
 107 m² OF OFFICES x 75 L/DAY PER 9.3 m² = 863 L/DAY
 PLUS
 WAREHOUSE AREAS:
 4 LOADING BAYS x 150 L/DAY PER BAY = 600 L/DAY
 TOTAL:
 OFFICE AREAS (1,200 L/DAY) + WAREHOUSE AREAS (600 L/DAY) = 1,800 L/DAY



FORCEMANS SHALL BE 50mm PVC SCH 40 PIPE. INSTALL INSULATION OVER ALL SEPTIC AND OTHER SEWER SYSTEM PIPES AS PER DETAILS ON C-5

ALL TANKS AND CHAMBERS SHALL BE INSTALLED WITH ±500mm COVER; INSULATE TOP AND EXTEND 1200mm DOWN SIDES WITH MIN. 100mm TYPE SM HI-40 STYROFOAM

WATERLOO BIOFILTER ANAEROBIC DIGESTER WITH INTERNAL PUMP CHAMBER: BOYD BROS. ADIPC-6000 TANK; C/W INNERTUBE PIPE (MIN. VOLUME 400 L), HIGHWATER ALARM, RISER & COVER ASSEMBLY; C/W PUMP (LIBERTY 280-2 EFFLUENT PUMP OR APPROVED EQUAL), 'WATERLOO SMART PANEL' CONTROL PANEL (TIME DOSE TO BIOFILTER TANK 6 EQUAL), INLINE FILTER, HIGHWATER ALARM, RISER & COVER ASSEMBLY. THE WATERNOX NITRATE REDUCTION TANK AND RECIRCULATE TO ANAEROBIC DIGESTER.

WATERLOO BIOFILTER: BOYD BROS. BFCN-4800 TREATMENT UNIT, C/W MINIMUM 3.0 m³ FOAM FILTER MEDIA (OR AS RECOMMENDED BY MANUFACTURER), PUMP (LIBERTY 280-2 EFFLUENT PUMP OR APPROVED EQUAL CONTROLLED BY THE 'WATERLOO SMART PANEL'), INLINE FILTER, HIGHWATER ALARM, RISER & COVER ASSEMBLY. THE PUMP SHALL DOSE THE WATERNOX NITRATE REDUCTION TANK AND RECIRCULATE TO ANAEROBIC DIGESTER.

WATERNOX-LS 4,800 L TWO COMPARTMENT NITRATE REDUCTION TANK TO WATERLOO BIOFILTER SPECIFICATIONS C/W LIME-SULFUR AGGREGATE MEDIA, PUMP (LIBERTY 280-2 EFFLUENT PUMP OR APPROVED EQUAL), HIGHWATER ALARM, RISER & COVER ASSEMBLY. PUMP TO DEMAND DOSE DISPERSAL BED.

TYPE 'A' DISPERSAL BED
 75mm DISTRIBUTION PIPES
 4 x 2.5m RUNS AT 1.2m CENTERS
 300mm STONE LAYER: 25.2 sq.m.
 (25.2 sq.m. = 4.5m x 5.6m)
 U/S OF STONE LAYER ELEVATION: 99.14
 (±880mm ABOVE GROUNDWATER ELEVATION)
 300mm SAND LAYER: 200 sq.m.
 INC. MANTLE
 (200 sq.m.: 8.5m x 21.4m TO 25.7m)



LEGEND

FFL	FIRST FLOOR ELEVATION
TOF	TOP OF FOUNDATION
USF	UNDERSIDE OF FOOTING
---	PROPERTY LINE
CB	CATCH BASIN
CB/MH	CATCH BASIN/MANHOLE
MH	SANITARY MANHOLE
SAN	SANITARY SEWER
ST	STORM SEWER
WL	WATER LINE
INV	INVERT OF PIPE
T.O.S.	TOP OF SLOPE
B.O.S.	BOTTOM OF SLOPE
---	CENTERLINE OF SWALE
---	150mm BARRIER CURB
D.C.	DEPRESSED CURB

No.	DATE	REVISION
7	SEP 29-25	RE-ISSUED FOR APPROVAL
6	JUL 30-25	RE-ISSUED FOR APPROVAL
5	JUN 30-25	ISSUED TO OCSO FOR SEPTIC PERMIT
4	MAR 24-25	RE-ISSUED FOR APPROVAL
3	MAR 6-25	RE-ISSUED FOR APPROVAL
2	JAN 13-25	ISSUED FOR APPROVAL
1	DEC 18-24	ISSUED FOR COORDINATION

D.B. GRAY ENGINEERING INC.
 Professional Engineer
 7100 Long Point Circle
 Ottawa, Ontario
 d.gray@dbgrayengineering.com
 613-425-8044

Project
PROPOSED 1-STORY BUILDING
1386-1394 GREELY LANE
 GREELY, ONTARIO

Drawing Title
SEPTIC SYSTEM

Engineer's Seal
 LICENSED PROFESSIONAL ENGINEER
 D.B. GRAY
 SEP 29-25
 PROVINCE OF ONTARIO
 NOT VALID UNLESS SIGNED & DATED

Drawn	D.B.G.
H. Scale	1:100
V. Scale	
Date	SEP 20-24
Job No.	24015

Drawing No.
C-2
 of 9

DRAINAGE PATTERN
↑



No.	DATE	REVISION
4	SEP 29-25	RE-ISSUED FOR APPROVAL
3	MAR 6-25	RE-ISSUED FOR APPROVAL
2	JAN 13-25	ISSUED FOR APPROVAL
1	DEC 18-24	ISSUED FOR COORDINATION

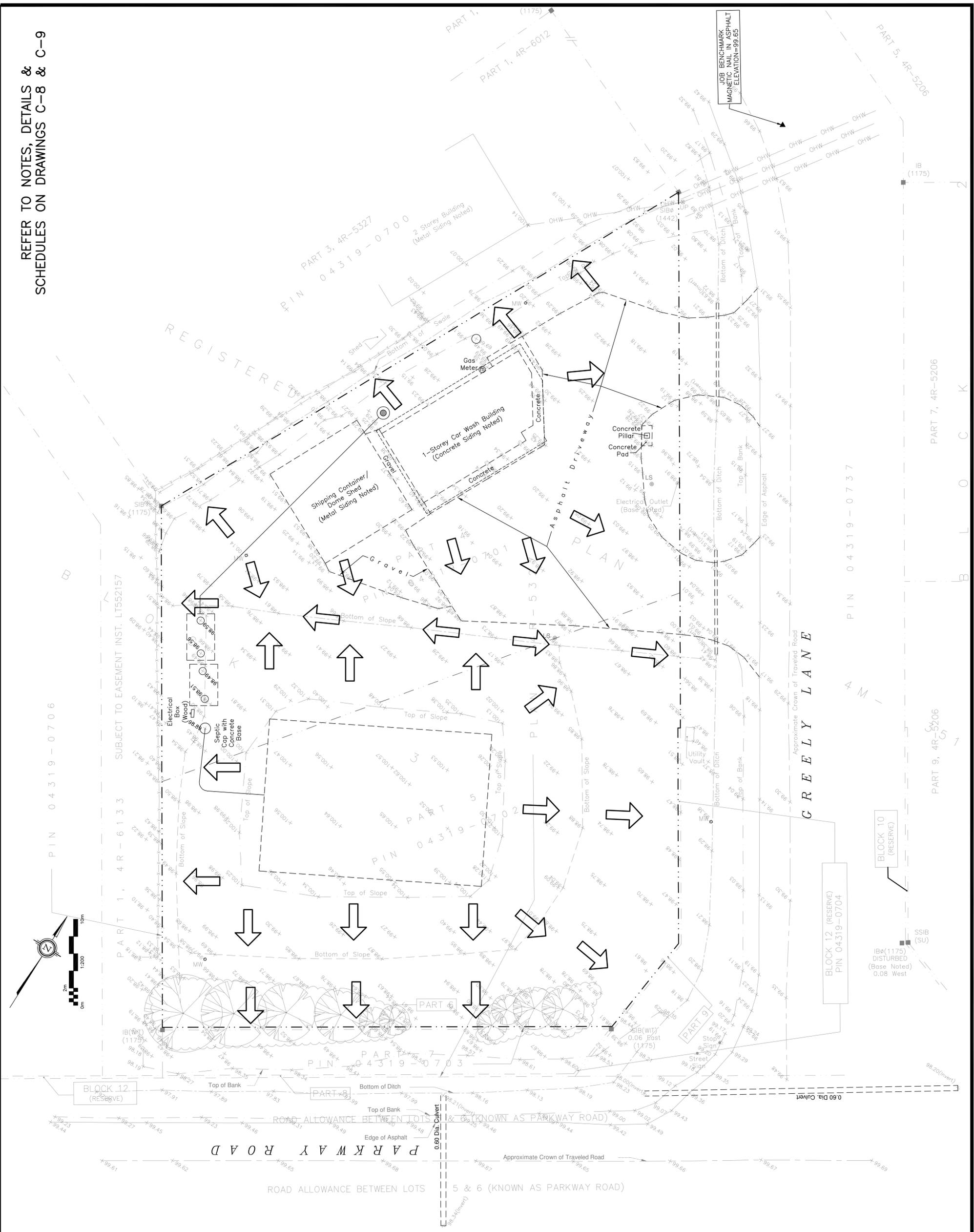
D. B. GRAY ENGINEERING INC.
 Professional Engineers & Planners - Ontario & Ontario Services - International
 700 Long Point Circle
 Ottawa, Ontario K1H 8L9
 Tel: 613-425-8044
 Fax: 613-425-8044
 Email: d.gray@dbgrayengineering.com

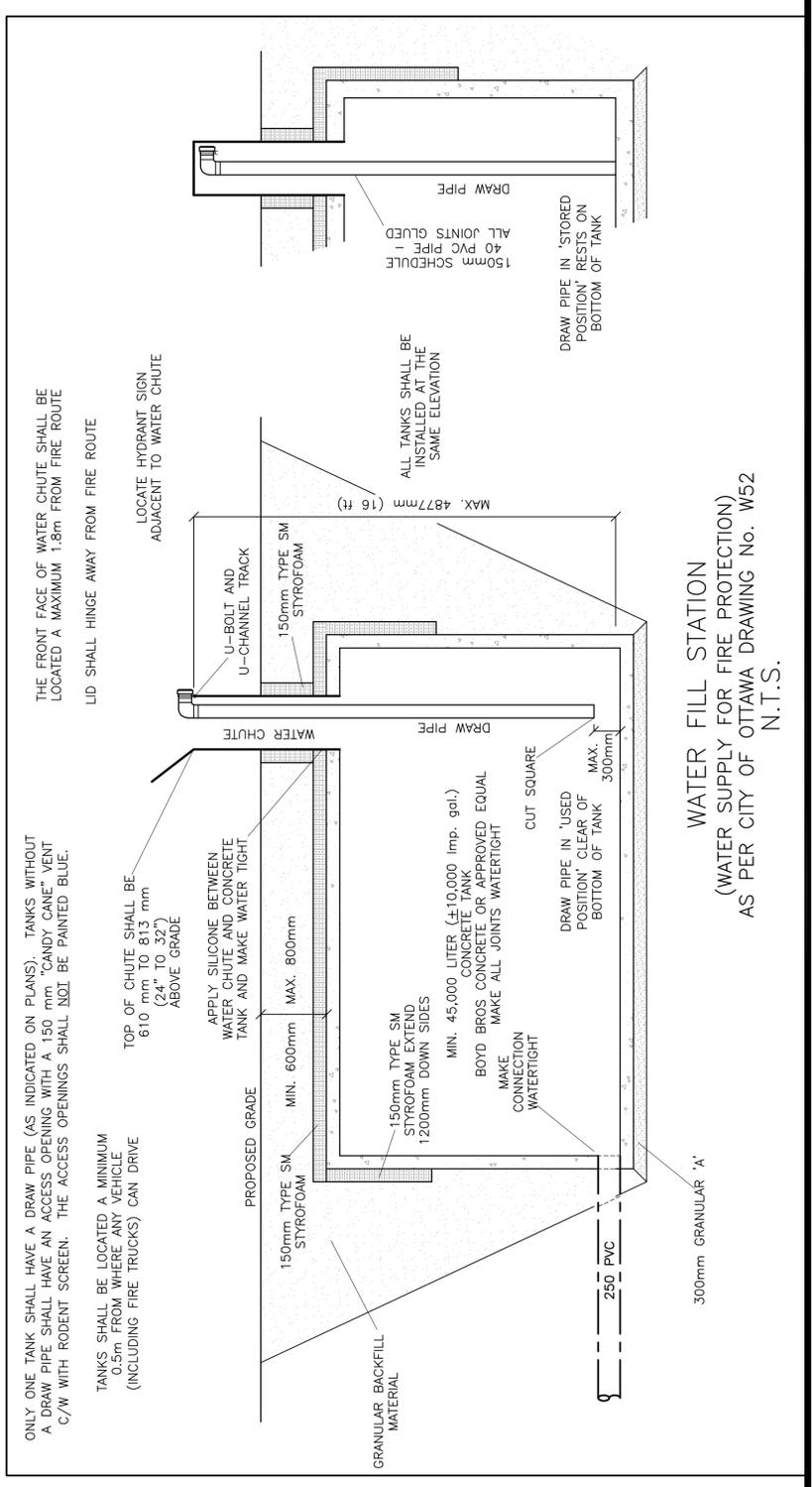
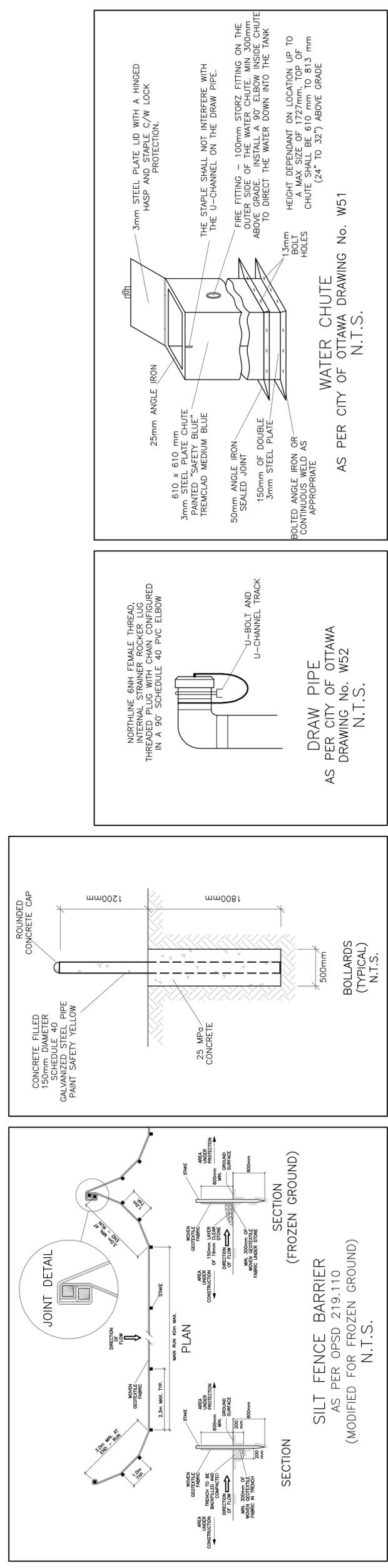
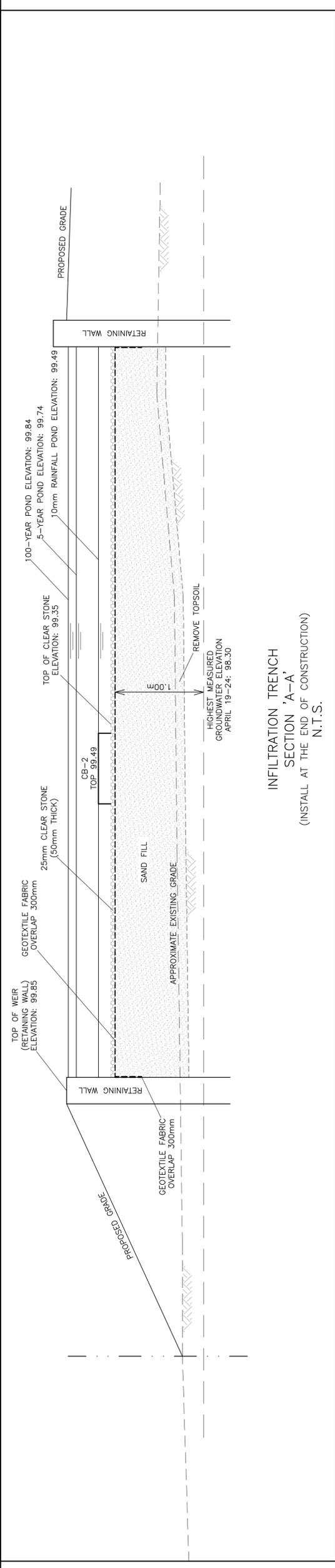
**PROPOSED
 1-STORY BUILDING
 1386-1394 GREELY LANE
 GREELY, ONTARIO**

**PRE-DEVELOPMENT
 DRAINAGE PLAN**

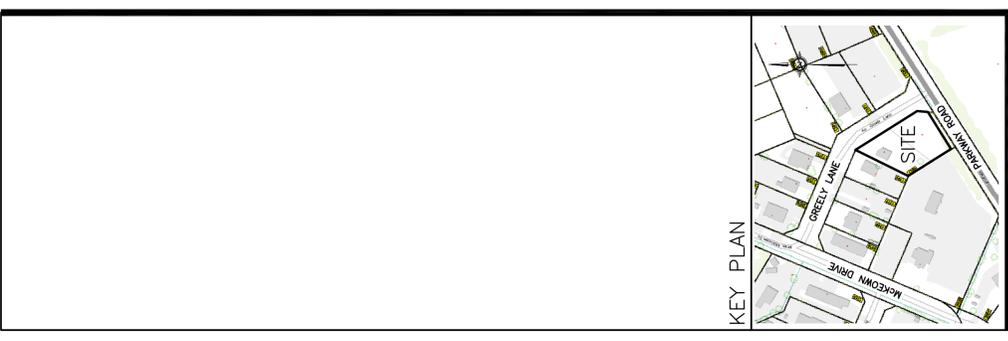
Engineer's Seal
 D.B.G.
 H. Scale 1:200
 V. Scale SEP 20-24
 Job No. 24015
 Drawing No. **C-7** of **9**
 NOT VALID UNLESS SIGNED & DATED

REFER TO NOTES, DETAILS & SCHEDULES ON DRAWINGS C-8 & C-9





REF	TOP	SIZE	TYPE	INVERT AT INLET	INVERT AT OUTLET	NOTES
STORM SEWER						
CB-1	99.49	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	-	98.34	TO OPSD 705.010 & CITY OF OTTAWA STANDARDS - FRAME & COVER TO CITY OF OTTAWA DRAWING No. S19
CB/MH-2	99.67	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	98.32(NW) 98.32(S)	98.32(NE)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS - FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
CB/MH-3	99.67	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	98.25(NE) 98.25(SW)	98.25(SE)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS - FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010 INSTALL ICD IN OUTLET PIPE
CB-4	99.71	600mm x 600mm	PRECAST CONCRETE CATCH-BASIN	-	98.47	TO OPSD 705.010 & CITY OF OTTAWA STANDARDS - FRAME & COVER TO CITY OF OTTAWA DRAWING No. S19
CB/MH-5	99.67	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	98.39(NW)	98.39(SE)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS - FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
CB/MH-6	99.67	1200mm	PRECAST CONCRETE CATCH-BASIN/MANHOLE	98.32(NW)	98.32(SW)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS - FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
MH-7	99.85	CDS PMSU2015-4	PRECAST CONCRETE MANHOLE	98.23(NW)	98.23(SE)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS EXCEPT WITH A DEEP SUMP AS REQUIRED BY CDS



No.	DATE	REVISION
7	NOV 20-25	RE-ISSUED FOR APPROVAL
6	SEP 29-25	RE-ISSUED FOR APPROVAL
5	MAR 28-25	RE-ISSUED TO OFS
4	MAR 24-25	RE-ISSUED FOR APPROVAL
3	MAR 6-25	RE-ISSUED FOR APPROVAL
2	JAN 13-25	ISSUED FOR APPROVAL
1	DEC 18-24	ISSUED FOR COORDINATION

D.B. GRAY ENGINEERING INC.
 Professional Management - Consulting & Engineering - Storm & Sanitary Services - Transportation
 700 Long Point Circle
 Ottawa, Ontario K1H 8P8
 Tel: 613-425-8044
 Fax: 613-425-8044
 Email: d.gray@dbgrayengineering.com

Project
**PROPOSED
 1-STORY BUILDING
 1386-1394 GREELY LANE
 GREELY, ONTARIO**

Drawing Title
DETAILS & SCHEDULE

Engineer's Seal

 Drawn: D.B.G.
 H. Scale: 1:1
 V. Scale: 1:1
 Date: SEP 20-24
 Job No.: 24015
 Drawing No.: **C-8**
 of **9**
 NOT VALID UNLESS SIGNED & DATED

