

LEGEND

- PROPERTY BOUNDARY
- LIMIT OF HAZARD LANDS
- 15.0m TOP OF SLOPE SETBACK
- TURTLE HABITAT SETBACK (AS PER EIS)
- EXISTING HYDRANT
- EXISTING CATCH BASIN
- EXISTING WATERMAIN
- EXISTING VALVE & VALVE BOX
- EXISTING SANITARY SEWER & MANHOLE
- EXISTING STORM SEWER & MANHOLE
- EXISTING LIGHT STANDARD
- PROPOSED HYDRANT
- WATERMAIN
- VALVE & VALVE BOX
- PRESSURE REDUCING VALVE
- SIAMESE CONNECTION
- CATCH BASIN
- SANITARY SEWER & MANHOLE (WATERTIGHT COVER)
- STORM SEWER & MANHOLE
- CLAY SEAL (CITY STD. S8)
- ROOF SCUPPER
- BUILDING ENTRANCE
- CROSSING NUMBER
- INSULATION (AS PER CITY STD. W22/S35)
- BOREHOLE (REFER TO GEOTECHNICAL REPORT)

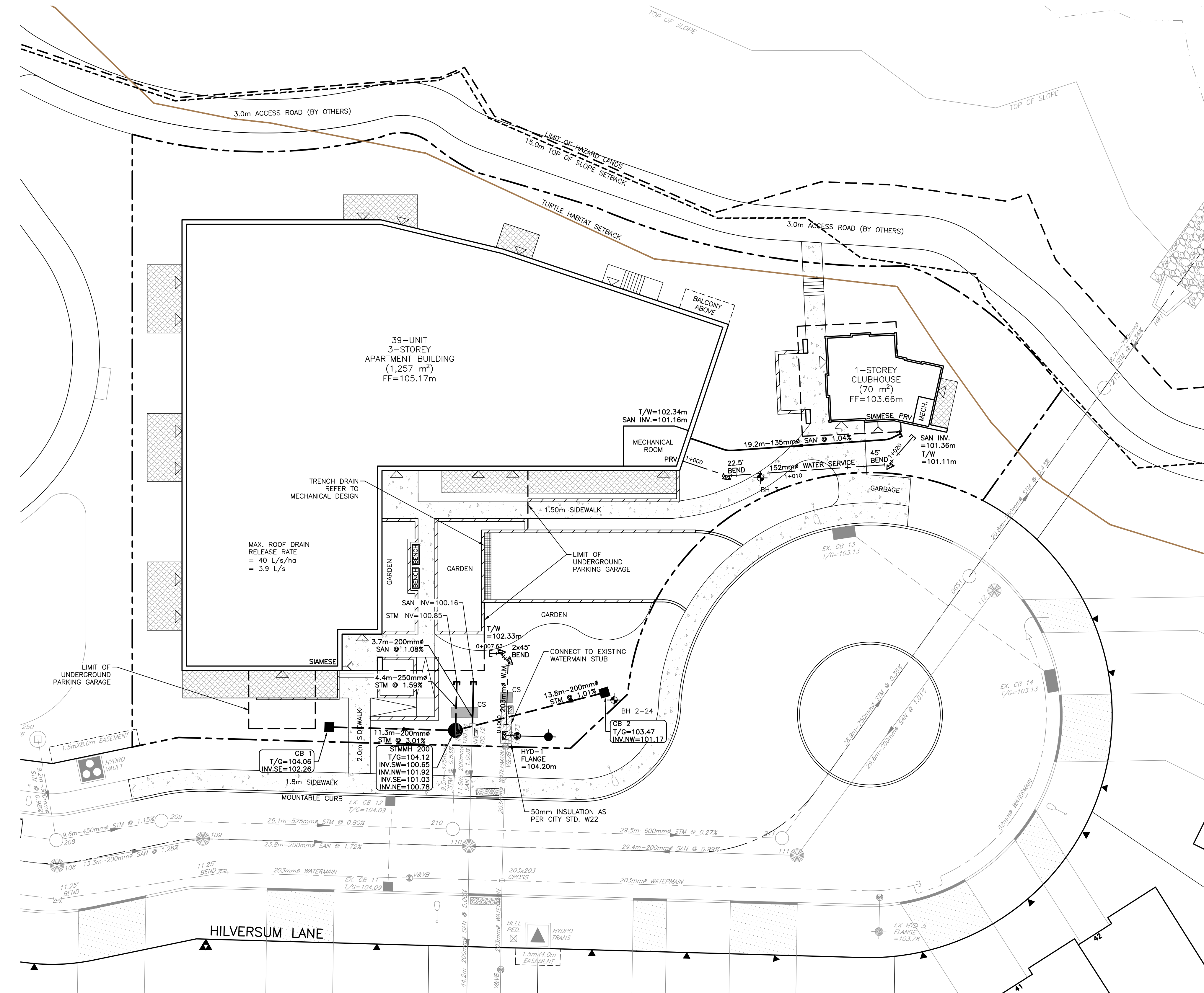
CROSSING TABLE			
CROSSING No.	SERVICE	INVERT/OBVERT	SEPARATION (m)
1	STORM	101.05	0.73
	SANITARY	100.32	
2	WATER	101.53	0.25
	STORM	101.28	

INLET CONTROL DEVICE (ICD) TABLE			
STRUCTURE	2-YR HEAD (m)	2-YR PEAK FLOW (L/s)	ORIFICE TYPE
CB 1	1.7	7.4	TEMPEST LMF 80, SLIDE
CB 2	2.2	10.8	TEMPEST LMF 90, SLIDE

203mm WATERMAIN GRADE TABLE - BUILDING SERVICE				
STATION	FINISHED GRADE (m)	TOP OF WATER (m)	COVER DEPTH (m)	COMMENTS
0+000	103.93	101.73	2.20	CONNECT TO EXISTING STUB
0+000.6	104.09	101.73	2.36	STORM CROSSING
0+005.6	104.59	102.19	2.40	45° HORZ. BEND
0+006.6	104.73	102.33	2.40	45° HORZ. BEND
0+007.6	104.94	102.33	2.61	CAP

152mm WATERMAIN GRADE TABLE - CLUB HOUSE SERVICE				
STATION	FINISHED GRADE (m)	TOP OF WATER (m)	COVER DEPTH (m)	COMMENTS
1+000	104.74	102.34	2.40	MECHANICAL ROOM
1+004.2	104.14	101.74	2.40	22.5° HORZ. BEND
1+010	103.68	101.28	2.40	TOP OF WATERMAIN
1+018.7	103.39	100.99	2.40	45° HORZ. BEND
1+022.1	103.51	101.11	2.40	CAP

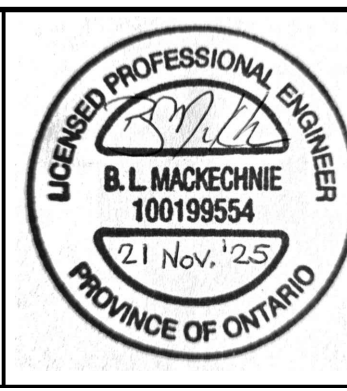
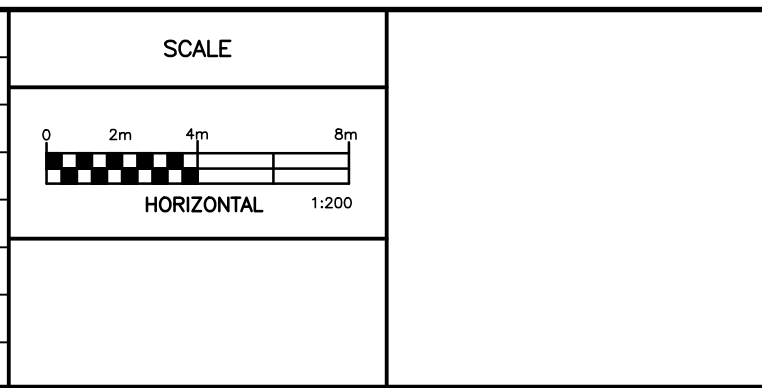
NOTES:
 1. CONNECTIONS TO LIVE WATERMANS TO BE COMPLETED BY CITY FORCES. CONTRACTOR TO PROVIDE EXCAVATION, MATERIAL, BACKFILL AND ASSISTANCE AS REQUIRED.



NOT FOR CONSTRUCTION

NOTES
 THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
 GEODETIC SURVEY DERIVED FROM COSINE STATION 0011968U054. LOCATION DESCRIPTION: OLD HIGHWAY 17 BRIDGE OVER CARP RIVER ON CARP-STITTSVILLE ROAD, 0.2 KM SOUTH OF C.N.R. CROSSING IN VILLAGE OF CARP. TABLE IN TOP OF WEST WALL, 30 CM FROM NORTH END, 24 CM FROM WEST EDGE. VERTICAL CONTROL DATA, DATUM: CGVD28:78, FIRST ORDER, ELEVATION: 93.861. COORDINATE SYSTEM: MTM ZONE 9; NAD 83 DATUM (CAN83-9)

NO.	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	21/11/25	BLM



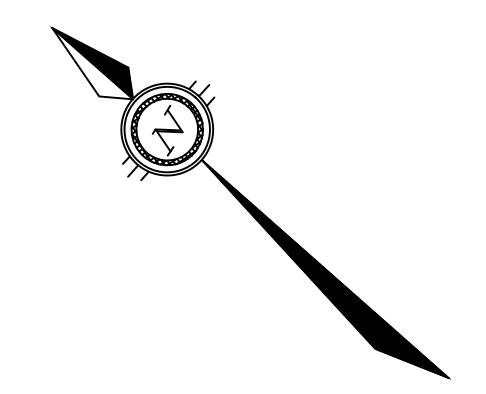
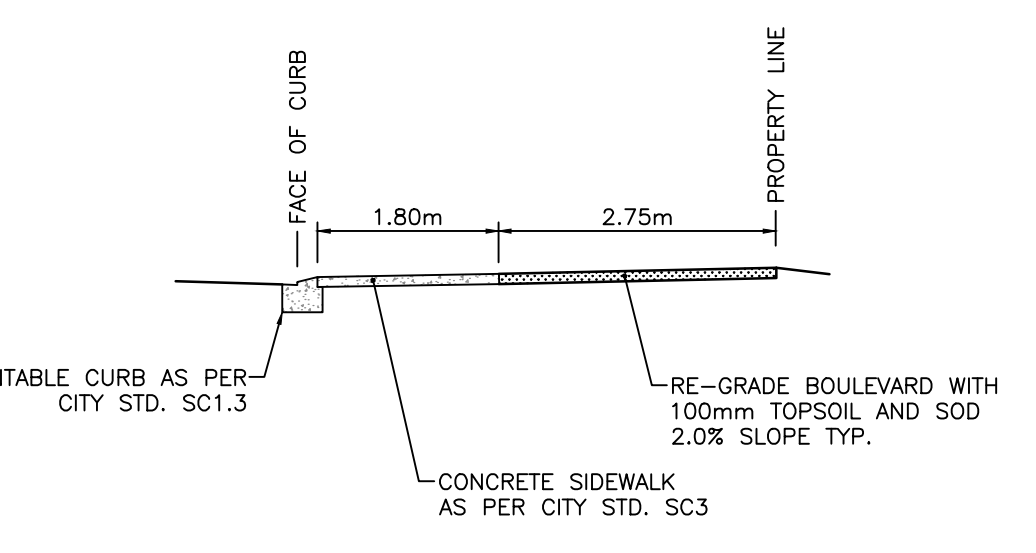
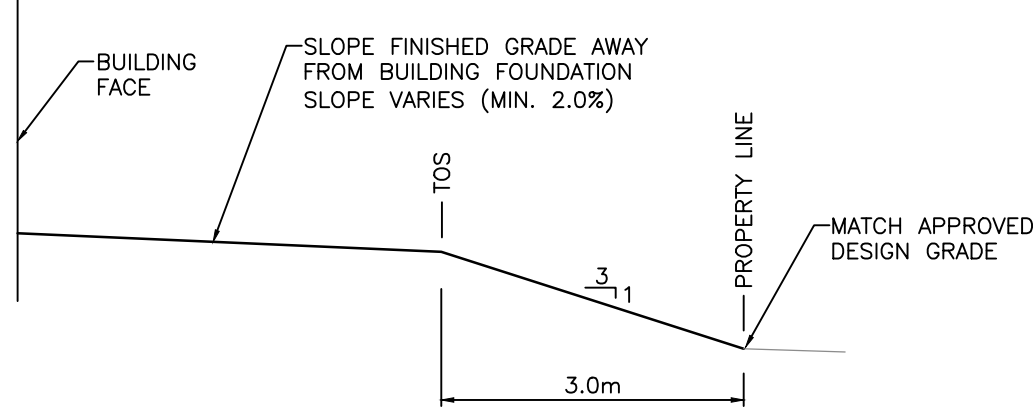
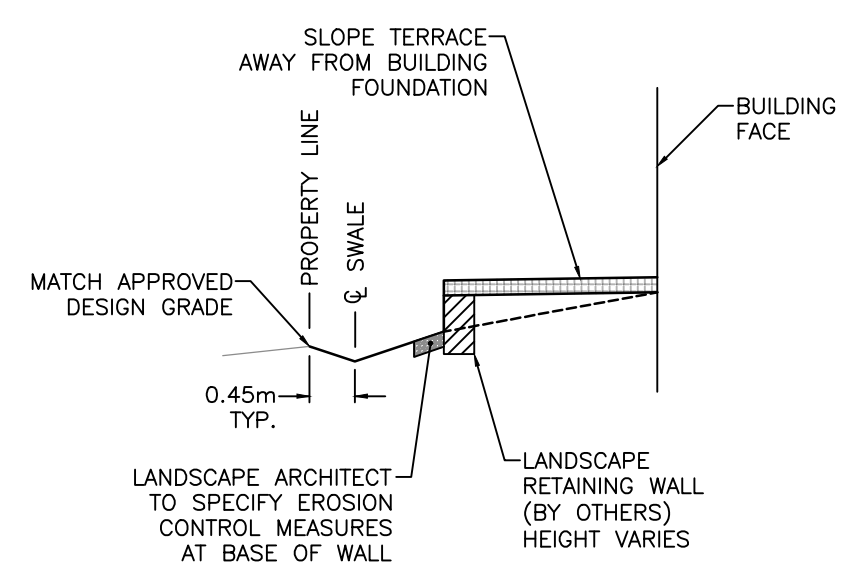
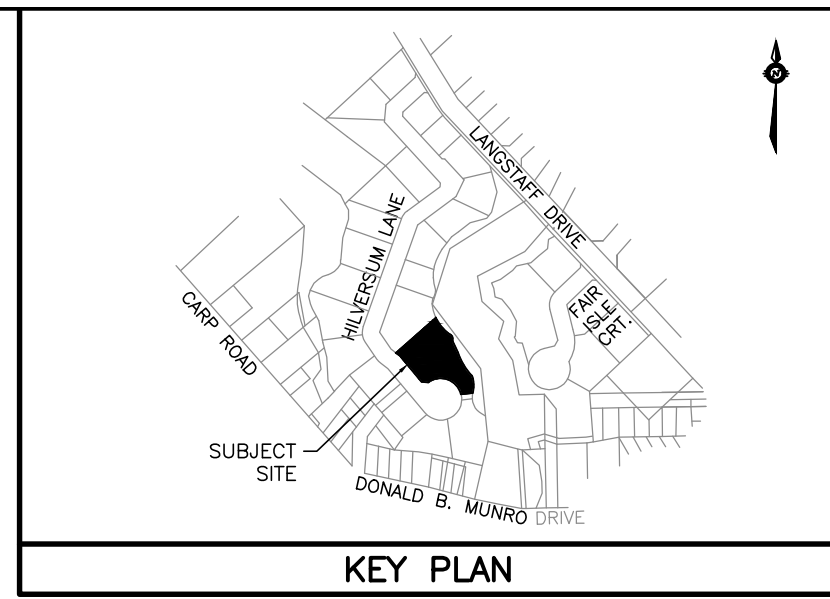
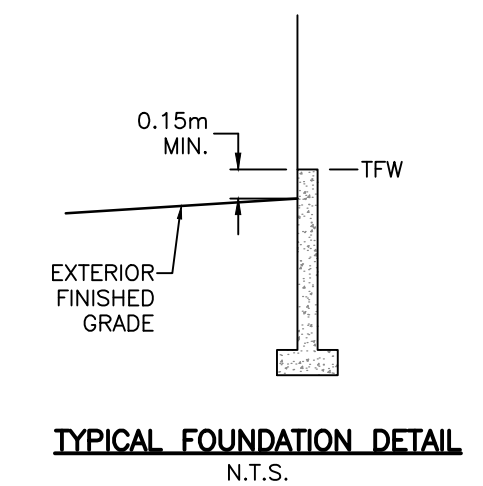
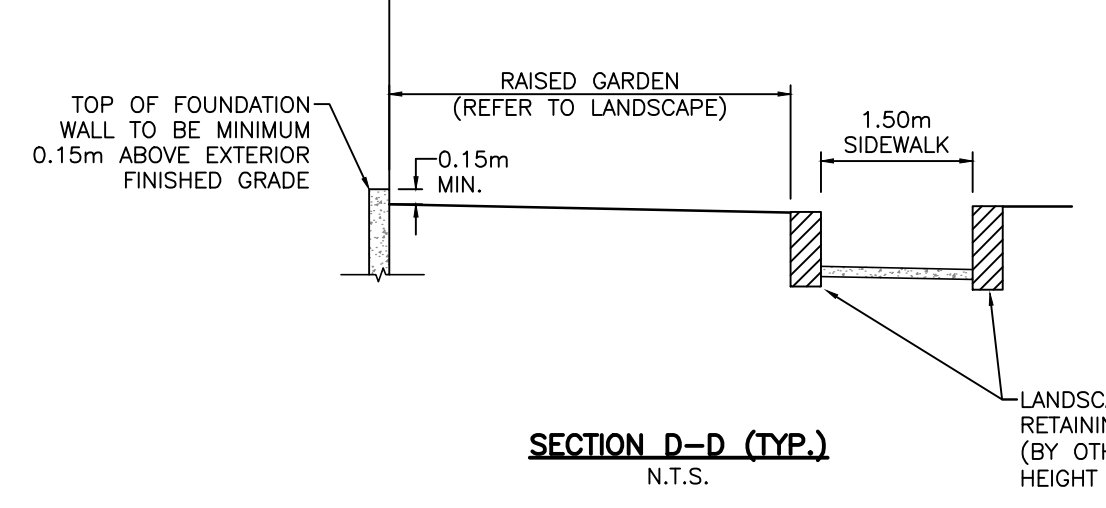
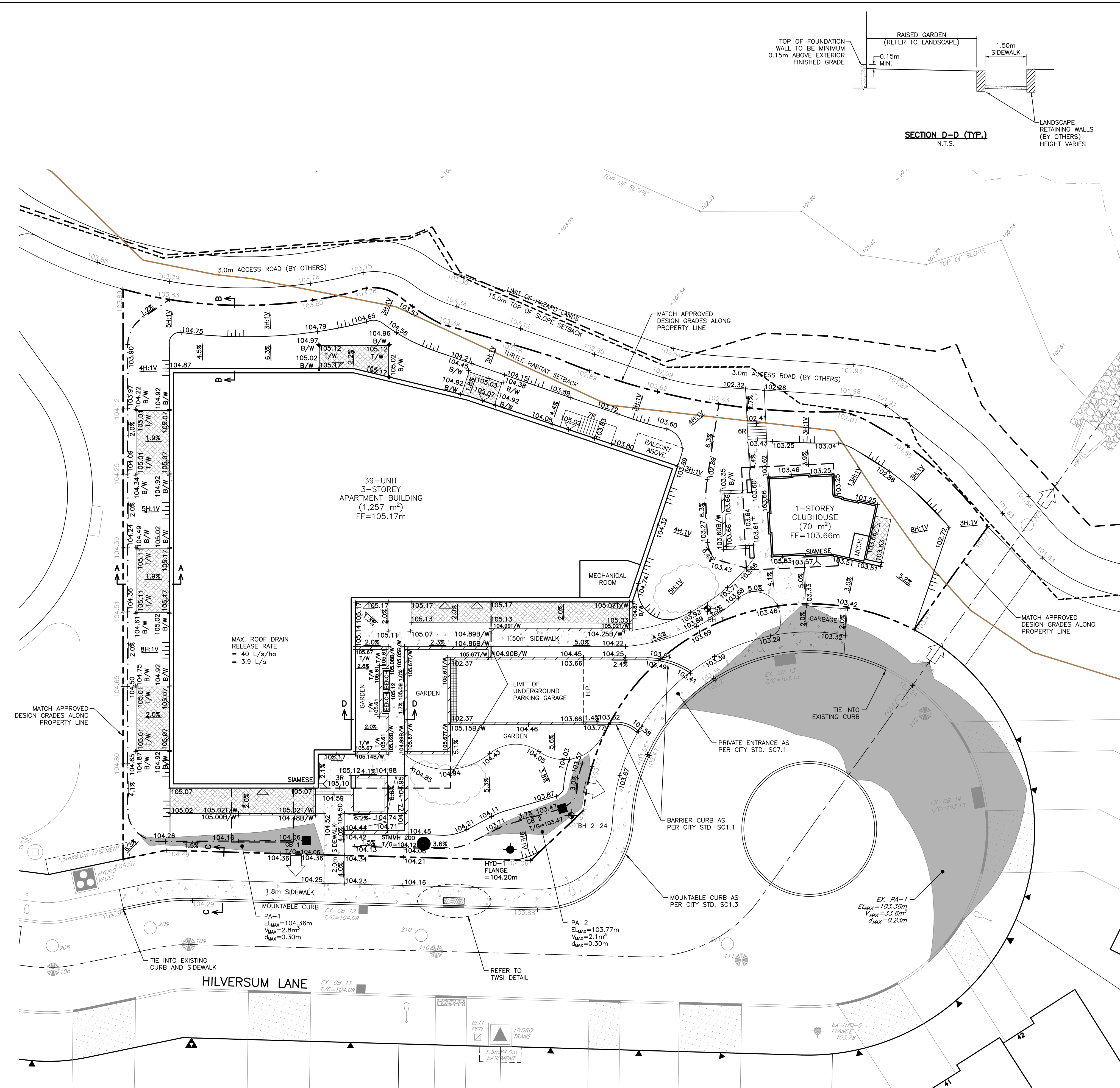
Robinson Land Development
 350 Palladium Drive
 Ottawa, ON K2V 1A8
 (613) 592-6060 rcii.com

DESIGN	BLM
CHECKED	SG
DRAWN	BLM
CHECKED	SG
APPROVED	BLM

INVERNESS HOMES
 38 AURIGA DRIVE, SUITE 200
 OTTAWA, ON K2E 8A6
 391 HILVERSUM LANE
 CARP, ON

SERVICING PLAN

PROJECT No.	25094
SURVEY	---
DATED	NOV. 2025
DWG. No.	25094-S1



- LEGEND**
- PROPERTY BOUNDARY
 - LIMIT OF HAZARD LANDS
 - 15.0m TOP OF SLOPE SETBACK
 - TURTLE HABITAT SETBACK (AS PER EIS)
 - +103.00 EXISTING ELEVATION
 - x104.00 PROPOSED GRADE
 - x104.00 APPROVED DESIGN GRADE
 - 2.0% PROPOSED DRAINAGE SLOPE & DIRECTION
 - 3R PROPOSED NUMBER OF RISERS
 - EXISTING HYDRANT
 - EXISTING CATCH BASIN
 - EXISTING SANITARY MANHOLE
 - EXISTING STORM MANHOLE
 - EXISTING LIGHT STANDARD
 - PROPOSED HYDRANT
 - CATCH BASIN
 - SANITARY MANHOLE (WATERTIGHT COVER)
 - STORM MANHOLE
 - BUILDING ENTRANCE
 - BOREHOLE (REFER TO GEOTECHNICAL REPORT)
 - TERRACING (3H:1V MAX.)
 - SWALE
 - RETAINING WALL
 - H.P. HIGH POINT
 - DC DEPRESSED CURB WITH TWSI
 - MAJOR OVERLAND FLOW ROUTE
 - MAX. STATIC PONDING LIMIT
 - PA-1 PONDING AREA ID
 - E_{max} MAXIMUM STATIC PONDING ELEVATION
 - V_{max} MAXIMUM AVAILABLE SURFACE STORAGE
 - d_{max} MAXIMUM STATIC PONDING DEPTH
 - SNOW STORAGE (REFER TO SITE PLAN)

NOTE: NO SURFACE PONDING OCCURS DURING THE 2-YEAR THROUGH 100-YEAR DESIGN EVENTS.

NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

GEODETIC SURVEY DERIVED FROM COSINE STATION 001196BU054. LOCATION DESCRIPTION: OLD HIGHWAY 17 BRIDGE OVER CARP RIVER ON CARP-STITTSVILLE ROAD, 0.2 KM SOUTH OF C.N.R. CROSSING IN VILLAGE OF CARP. TABLE IN TOP OF WEST WALL, 30 CM FROM NORTH END, 24 CM FROM WEST EDGE. VERTICAL CONTROL DATA, DATUM: CGVD2878, FIRST ORDER, ELEVATION: 93.861. COORDINATE SYSTEM: MTM ZONE 9; NAD 83 DATUM (CAN83-9)

NO.	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	21/11/25	BLM



Robinson
Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

DESIGN	BLM
CHECKED	SG
DRAWN	BLM
CHECKED	SG
APPROVED	BLM

INVERNESS HOMES
38 AURIGA DRIVE, SUITE 200
OTTAWA, ON K2E 8A6

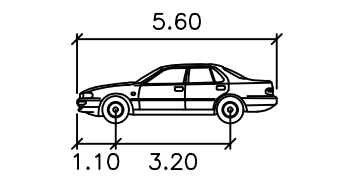
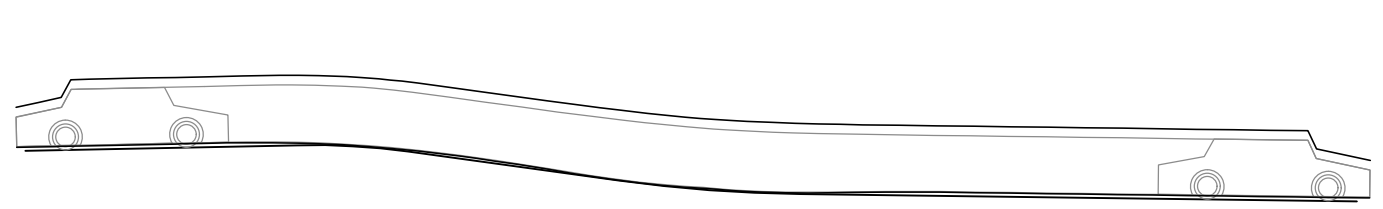
391 HILVERSUM LANE
CARP, ON

GRADING AND DRAINAGE PLAN

PROJECT No.	25094
SURVEY	---
DATED	NOV. 2025
DWG. No.	25094-GR1

NOT FOR CONSTRUCTION

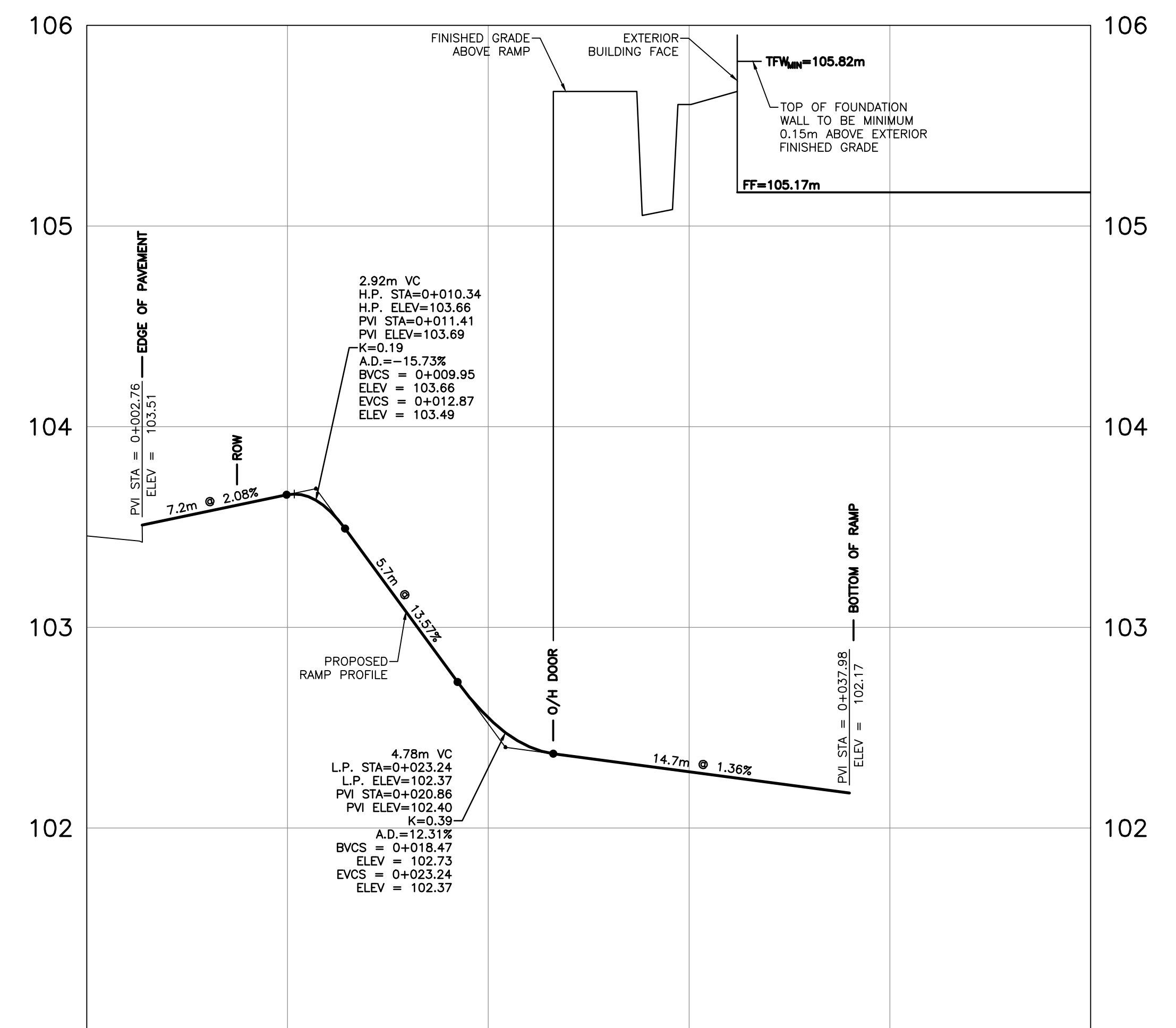
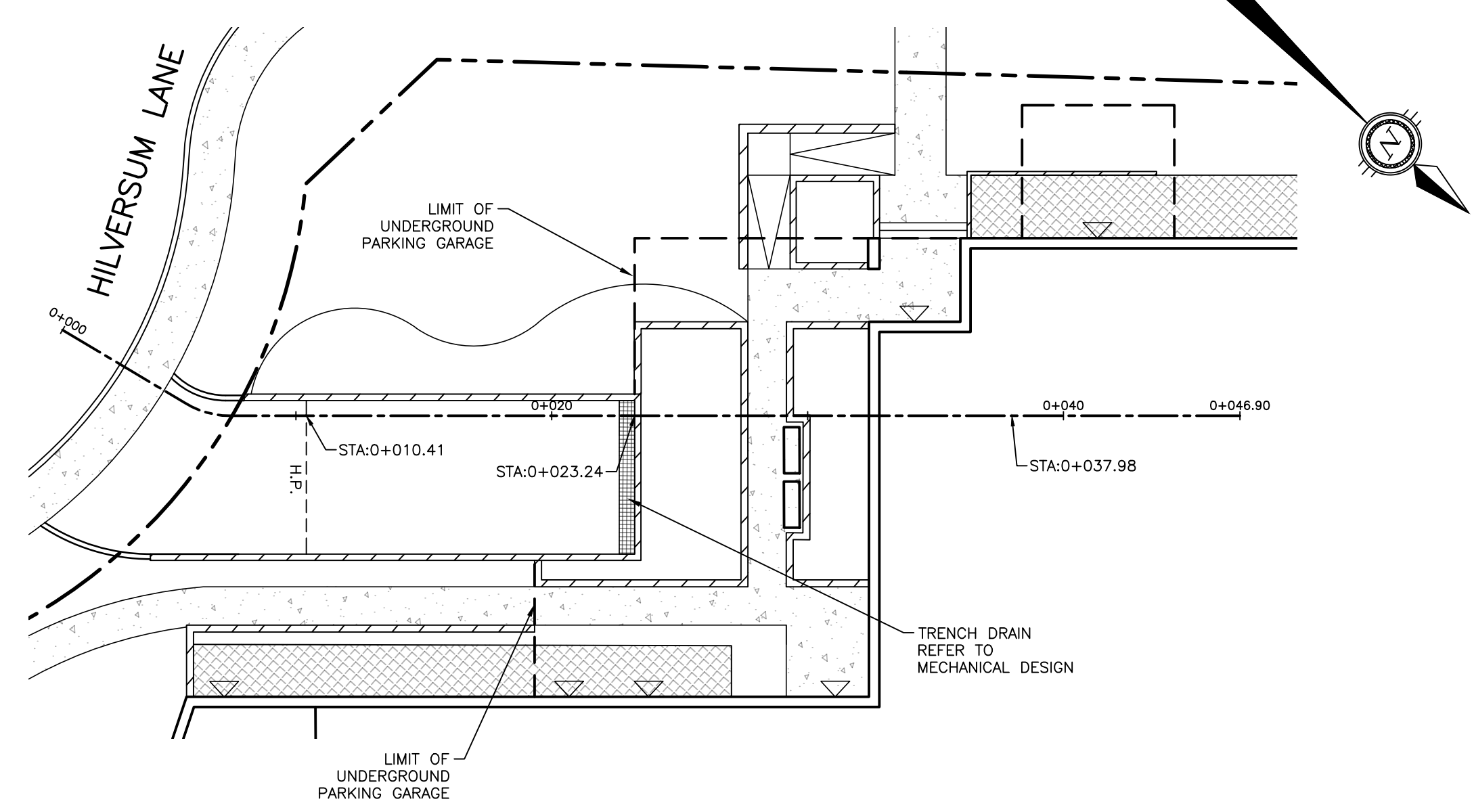
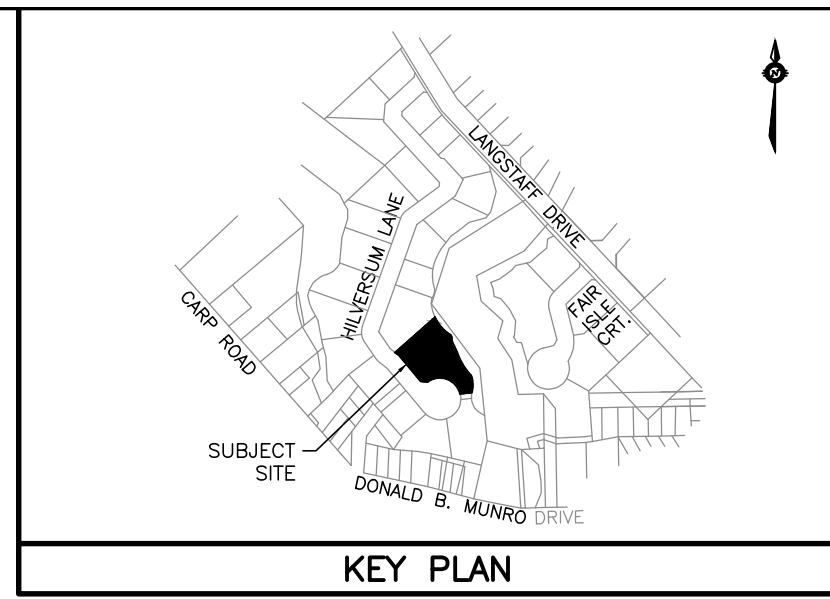
NOT FOR CONSTRUCTION



SCALE:
HORZ: 1:200
VERT: 1:200

Ground Clearance (units: m)
Part # Front Wheelbase Rear
#1 0.12 0.12 0.12

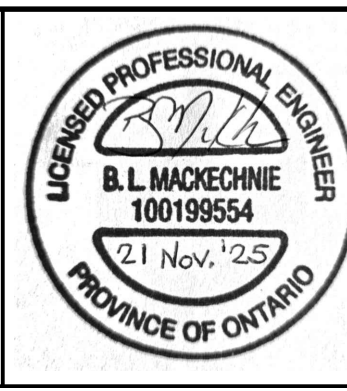
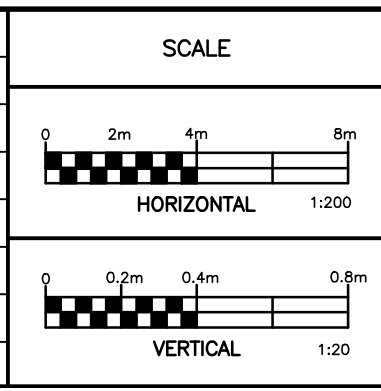
Width : 2.00
Track : 2.00
Lock to Lock Time : 6.0
Steering Angle : 35.9



PROPOSED RAMP ELEVATION	103.51	103.66	103.63	102.55	102.48	102.28	102.17	PROPOSED RAMP ELEVATION
CHAINAGE	0+000	0+010	0+020	0+030	0+040	0+050		CHAINAGE

NOTES
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
GEODETIC SURVEY DERIVED FROM COSINE STATION 0011968U054. LOCATION DESCRIPTION: OLD HIGHWAY 17 BRIDGE OVER CARP RIVER ON CARP-STITTSVILLE ROAD, 0.2 KM SOUTH OF C.N.R. CROSSING IN VILLAGE OF CARP, TABLET IN TOP OF WEST WALL, 30 CM FROM NORTH END, 24 CM FROM WEST EDGE. VERTICAL CONTROL DATA, DATUM: CGVD28-78, FIRST ORDER, ELEVATION: 93.861. COORDINATE SYSTEM: MTM ZONE 9; NAD 83 DATUM (CAN83-9)

NO.	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	21/11/25	BLM



Robinson
Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

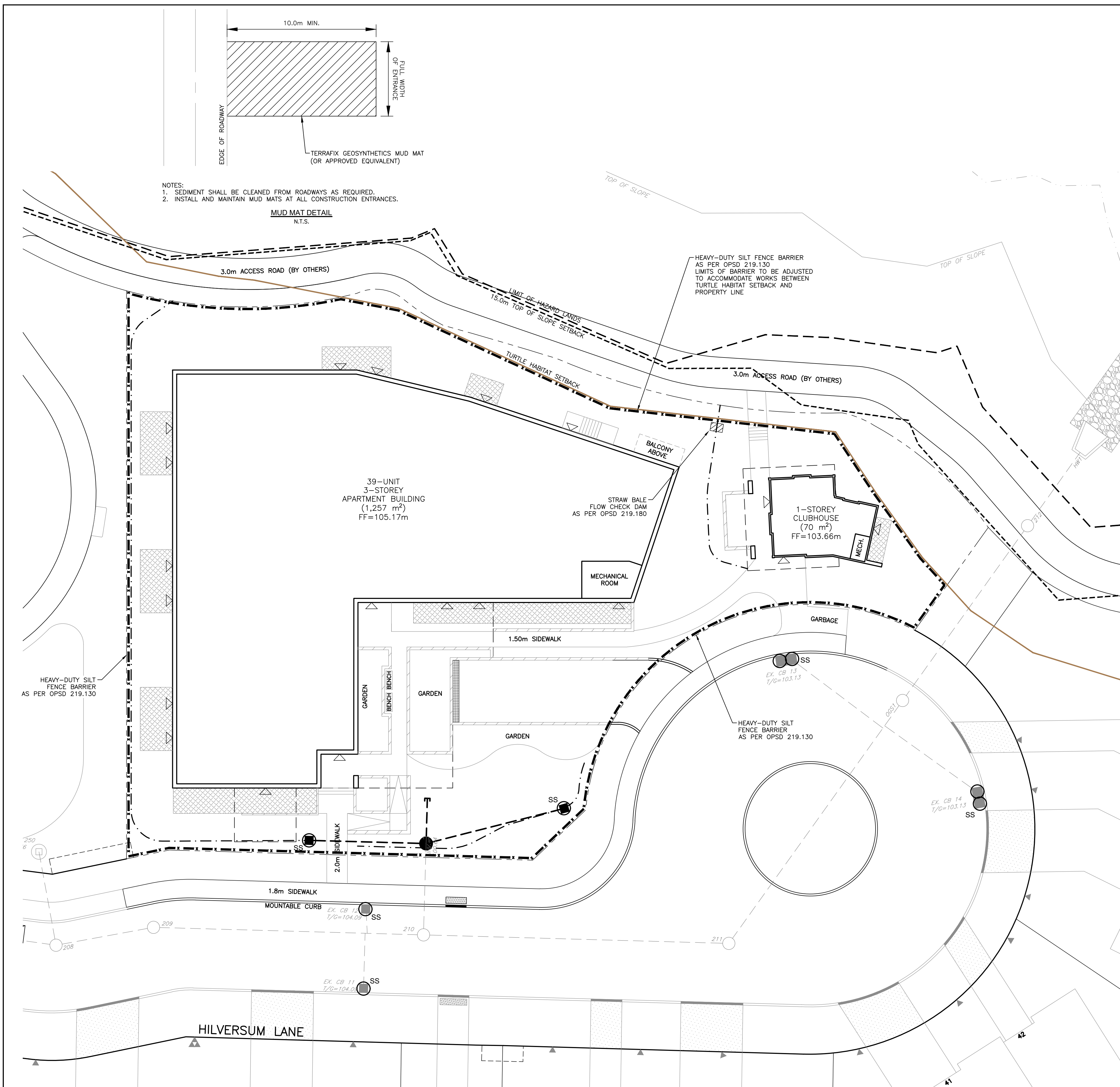
DESIGN	BLM
CHECKED	SG
DRAWN	BLM
CHECKED	SG
APPROVED	BLM

INVERNESS HOMES
38 AURIGA DRIVE, SUITE 200
OTTAWA, ON K2E 8A6

391 HILVERSUM LANE
CARP, ON

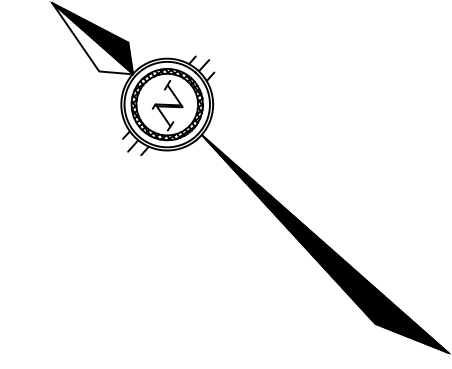
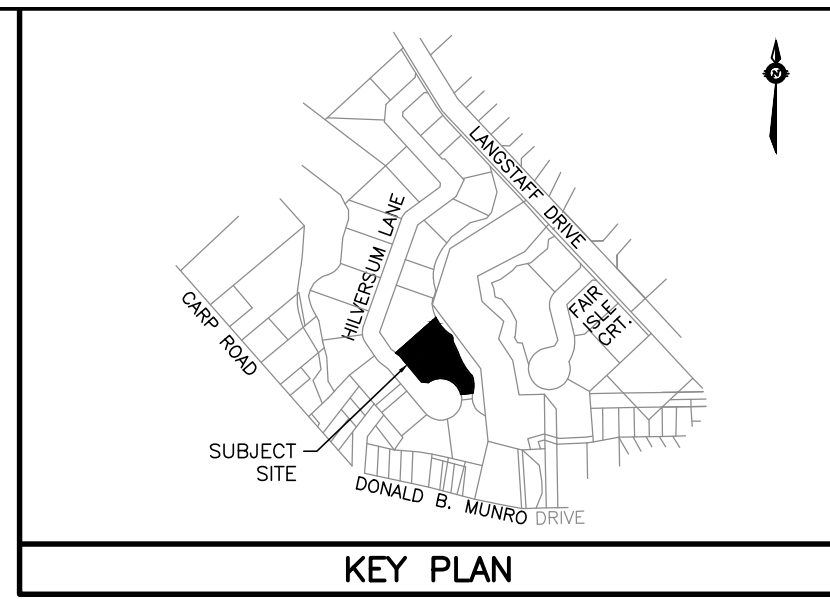
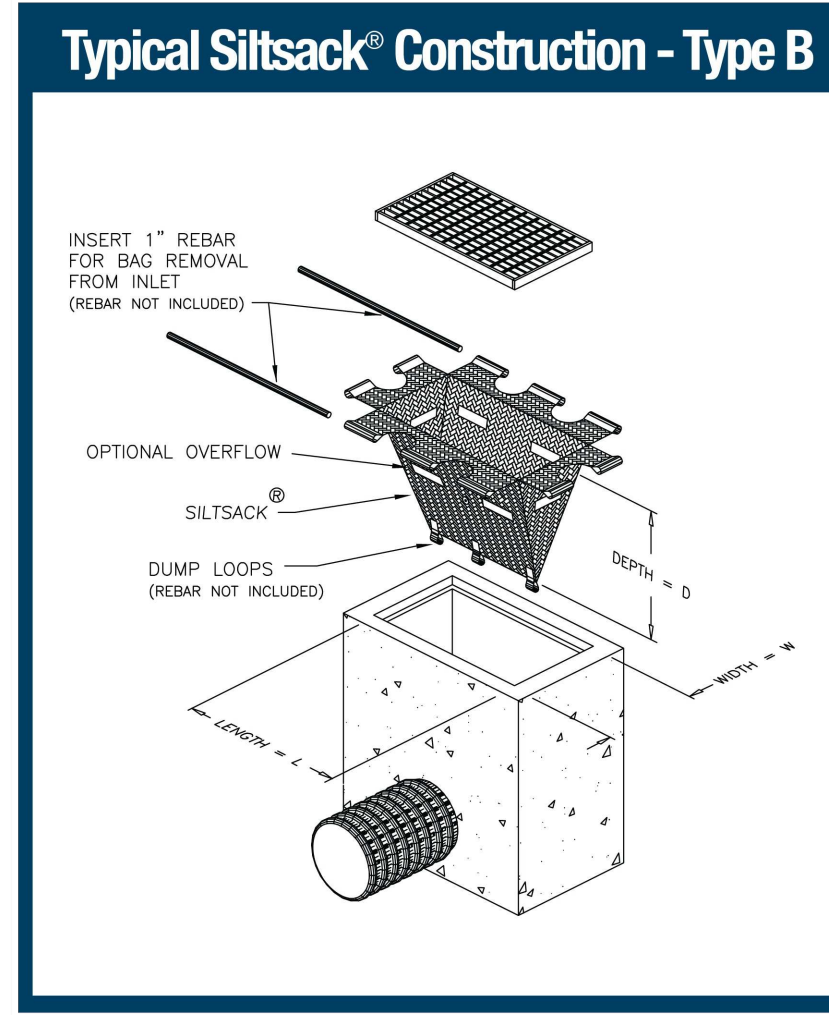
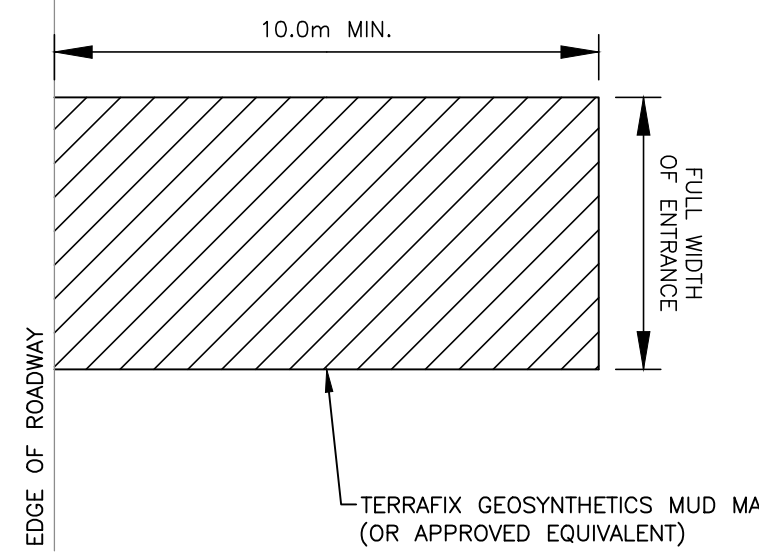
**PARKING GARAGE RAMP
PLAN & PROFILE**

PROJECT No.	25094
SURVEY	----
DATED	NOV. 2025
DWG. No.	25094-P1

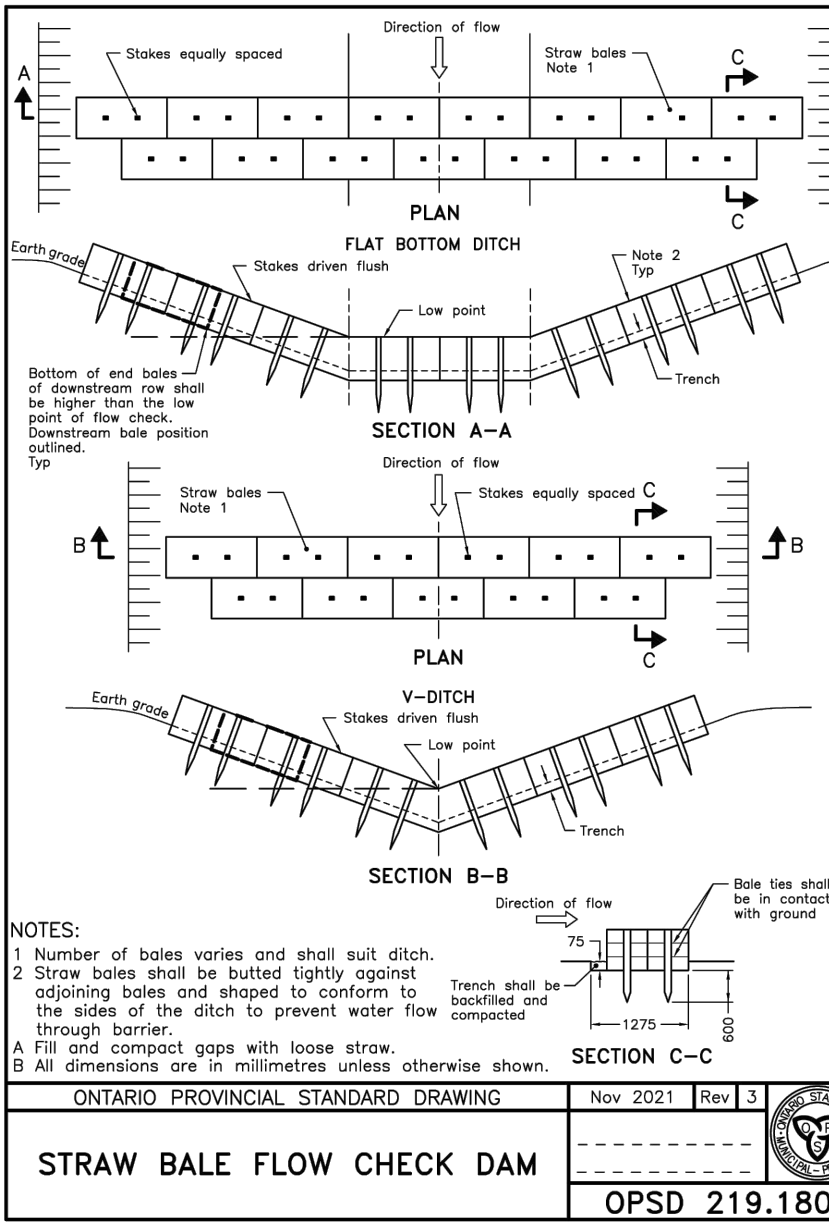
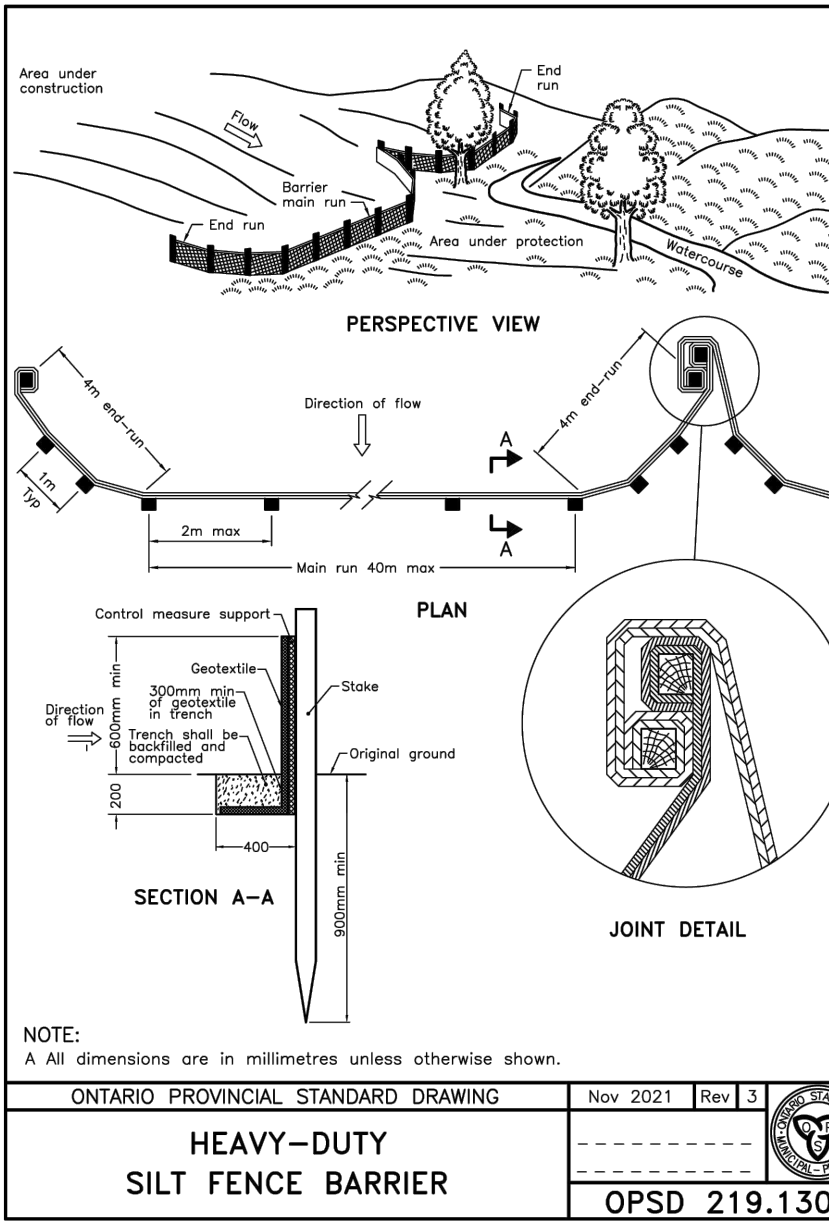


NOTES:
 1. SEDIMENT SHALL BE CLEANED FROM ROADWAYS AS REQUIRED.
 2. INSTALL AND MAINTAIN MUD MATS AT ALL CONSTRUCTION ENTRANCES.

MUD MAT DETAIL
 N.T.S.



- LEGEND**
- PROPERTY BOUNDARY
 - - - - - LIMIT OF HAZARD LANDS
 - - - - - 15.0m TOP OF SLOPE SETBACK
 - TURTLE HABITAT SETBACK (AS PER EIS)
 - EXISTING CATCH BASIN
 - EXISTING STORM SEWER & MANHOLE
 - CATCH BASIN
 - STORM SEWER & MANHOLE
 - - - - - SWALE
 - - - - - HEAVY-DUTY SILT FENCE BARRIER
 - SS SILT SACK (OR APPROVED EQUIVALENT)
 - ▨ STRAW BALE FLOW CHECK DAM



- NOTES:**
1. THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE ULTIMATE 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.
 2. LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME.
 3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION HAS BEEN RE-ESTABLISHED IN ALL DISTURBED AREAS. RE-VEGETATE DISTURBED AREAS AS SOON AS POSSIBLE.
 4. CONTRACTOR SHALL MINIMIZE THE AMOUNT OF STOCKPILED MATERIAL. ALL STOCKPILED SOIL SHALL BE AWAY (15 METRES OR GREATER) FROM WATERCOURSES, DRAINAGE FEATURES AND TOP OF STEEP SLOPES. THE DOWNSTREAM SIDE OF ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCE, FIBRE ROLLS OR EQUIVALENT MEASURES PRIOR TO A RAINFALL EVENT.
 5. SILT SACKS ARE TO BE PLACED UNDERNEATH THE FRAME AND COVER OF ALL PROPOSED AND EXISTING CATCH BASIN AND OPEN COVER STORM MANHOLES UNTIL CONSTRUCTION IS COMPLETED.
 6. HEAVY-DUTY SILT FENCE BARRIERS SHALL BE INSTALLED AS PER OPSD 219.130 WHERE INDICATED AND MAINTAINED AS REQUIRED.
 7. DURING ACTIVE CONSTRUCTION PERIODS, VISUAL INSPECTIONS SHALL BE UNDERTAKEN ON A WEEKLY BASIS AND AFTER MAJOR STORM EVENTS (>25mm RAIN IN 24 HOUR PERIOD) ON SEDIMENT CONTROL BARRIERS AND ANY DAMAGE REPAIRED IMMEDIATELY.
 8. EROSION AND SEDIMENT CONTROL BARRIERS SHALL ALSO BE ASSESSED (AND REPAIRED AS REQUIRED) FOLLOWING SIGNIFICANT SNOWMELT EVENTS.
 9. VISUAL INSPECTIONS SHALL ALSO BE UNDERTAKEN IN ANTICIPATION OF LARGE STORM EVENTS (OR A SERIES OF RAINFALL AND/OR SNOWMELT DAYS) THAT COULD POTENTIALLY YIELD SIGNIFICANT RUNOFF VOLUMES.
 10. CARE SHALL BE TAKEN TO PREVENT DAMAGE TO EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION OPERATIONS.
 11. IN SOME CASES, BARRIERS MAY BE REMOVED TEMPORARILY TO ACCOMMODATE THE CONSTRUCTION OPERATIONS. THE AFFECTED BARRIERS SHALL BE REINSTATED IMMEDIATELY AFTER CONSTRUCTION OPERATIONS ARE COMPLETED.
 12. SEDIMENT CONTROL DEVICES SHALL BE CLEANED OF ACCUMULATED SEDIMENTATION AS REQUIRED AND REPLACED AS NECESSARY.
 13. DURING THE COURSE OF CONSTRUCTION, IF THE ENGINEER BELIEVES THAT ADDITIONAL PREVENTION METHODS ARE REQUIRED TO CONTROL EROSION AND SEDIMENTATION, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES, AS REQUIRED, TO THE SATISFACTION OF THE ENGINEER.
 14. CONSTRUCTION AND MAINTENANCE REQUIREMENTS FOR EROSION AND SEDIMENT CONTROLS ARE TO COMPLY WITH OPSD 805.
 15. MUD MATS SHALL BE INSTALLED AT ALL CONSTRUCTION ENTRANCES.
 16. INSPECTION AND MAINTENANCE OF TEMPORARY ESC MEASURES SHALL CONTINUE UNTIL THEY ARE NO LONGER REQUIRED.
 17. THE CONTRACTOR SHALL ENSURE THAT RECORDS OF INSPECTION ARE TAKEN, INCLUDING INSPECTOR'S NAME, DATE OF INSPECTION, VISUAL OBSERVATIONS, AND ANY NECESSARY REMEDIAL MEASURES TAKEN TO MAINTAIN INTERIM ESC MEASURES.

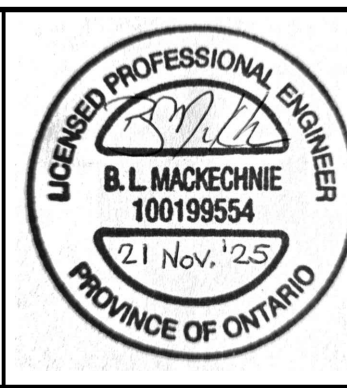
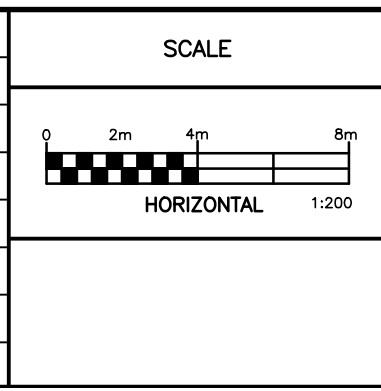
NOT FOR CONSTRUCTION

NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

GEODETIC SURVEY DERIVED FROM COSINE STATION 0011968U054. LOCATION DESCRIPTION: OLD HIGHWAY 17 BRIDGE OVER CARP RIVER ON CARP-STITTSVILLE ROAD, 0.2 KM SOUTH OF C.N.R. CROSSING IN VILLAGE OF CARP. TABLE IN TOP OF WEST WALL, 30 CM FROM NORTH END, 24 CM FROM WEST EDGE. VERTICAL CONTROL DATA, DATUM: CGVD2878, FIRST ORDER, ELEVATION: 93.861. COORDINATE SYSTEM: MTM ZONE 9; NAD 83 DATUM (CAN83-9)

NO.	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	21/11/25	BLM



Robinson
 Land Development

350 Palladium Drive
 Ottawa, ON K2V 1A8
 (613) 592-6060 rcii.com

DESIGN	BLM
CHECKED	SG
DRAWN	BLM
CHECKED	SG
APPROVED	BLM

INVERNESS HOMES
 38 AURIGA DRIVE, SUITE 200
 OTTAWA, ON K2E 8A6

391 HILVERSUM LANE
 CARP, ON

EROSION AND SEDIMENT CONTROL PLAN

PROJECT No.	25094
SURVEY	----
DATED	NOV. 2025
DWG. No.	25094-ESC1

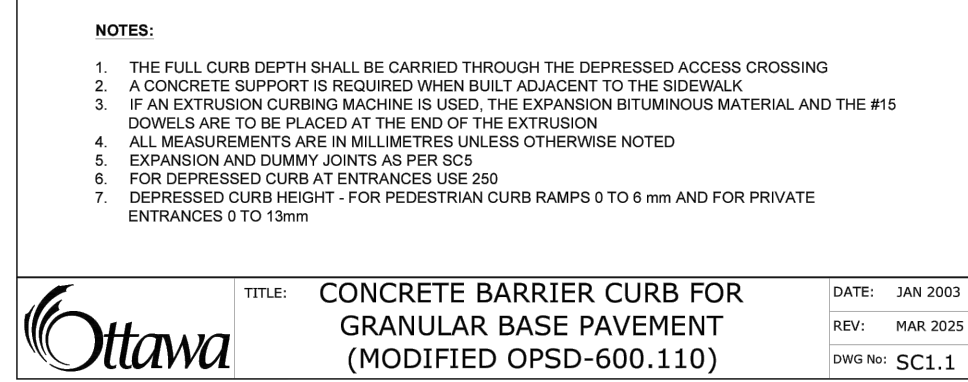
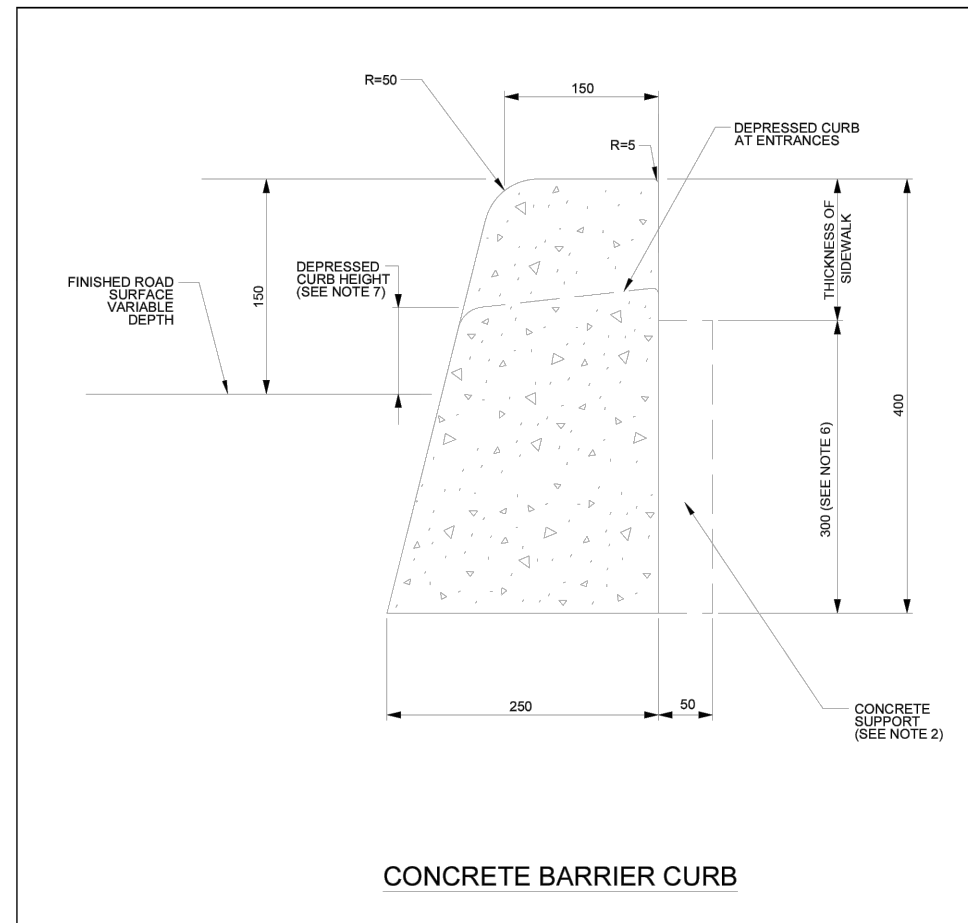
- GENERAL NOTES:**
- ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS), AS AMENDED BY THE CITY OF OTTAWA.
 - THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
 - ALL DIMENSIONS AND ELEVATIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
 - DESIGN ELEVATIONS OVER ARE TO BE ADHERED TO WITH NO CHANGES WITHOUT PRIOR WRITTEN APPROVAL BY ROBINSON LAND DEVELOPMENT.
 - ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.
 - ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
 - ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST AMENDMENT).
 - ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
 - THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH, AS SPECIFIED BY OPSD, IS EXCEEDED.
 - ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR. REVIEW WITH THE CITY OF OTTAWA PRIOR TO AND TREE CUTTING.
 - REFER TO GEOTECHNICAL MEMORANDUM PREPARED BY PATERSON GROUP, DATED NOVEMBER 5, 2025.
 - THE CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE FOR DEWATERING, SUPPORT AND PROTECTION OF EXCAVATIONS AND TRENCHING AS WELL AS RELEASE OF ANY PUMPED GROUNDWATER IN A CONTROLLED AND APPROVED MANNER.
 - DO NOT CONSTRUCT UNLESS DRAWINGS THAT ARE NOT MARKED "ISSUED FOR CONSTRUCTION".
 - CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.
 - CLAY SEALS SHALL BE INSTALLED WITHIN SEWER TRENCHES IN ACCORDANCE WITH CITY STANDARD SB.
 - MOVEMENT OF MATERIAL ON AND/OR OFF SITE SHALL BE IN ACCORDANCE WITH ONTARIO EXCESS SOIL REGULATION O.REG. 406/19.
 - THE CONTRACTOR SHALL COMPLETE A CCTV INSPECTION OF ALL NEW SANITARY AND STORM SEWERS. A COPY OF THE VIDEO INSPECTION SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW.

- STORM SEWERS:**
- ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.2 (LATEST AMENDMENT). ALL NON-REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.1 (LATEST AMENDMENT). PIPE SHALL BE JOINTED WITH STD. RUBBER GASKETS AS PER CSA A257.3 (LATEST AMENDMENT).
 - ALL STORM SEWER TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. S6 AND S7 CLASS 'B' UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
 - ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER C.S.A. B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
 - STORM MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24.1.
 - CATCH BASIN MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S28.1.
 - STORM SEWER SEWERS LESS THAN 600mm SHALL BE CONSTRUCTED WITH A 300mm SLUMP. FOR STORM SEWERS 900mm AND OVER USE BENCHING IN ACCORDANCE WITH OPSD 701.021.
 - THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED ABOVE. WHERE THE SLOPE IS EXCEEDED, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADDITIONAL BEDDING, A DIFFERENT TYPE OF BEDDING OR A HIGHER PIPE STRENGTH AT HIS OWN EXPENSE AND SHALL ALSO BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT REPAIRS MADE NECESSARY BY THE WIDENED TRENCH.
 - ALL STORM MANHOLES SHALL BE 1200mm DIAMETER AS PER OPSD 701.010 UNLESS OTHERWISE NOTED.
 - ALL CATCH BASINS SHALL BE 600mm X 600mm AS PER OPSD 705.010 UNLESS OTHERWISE NOTED.

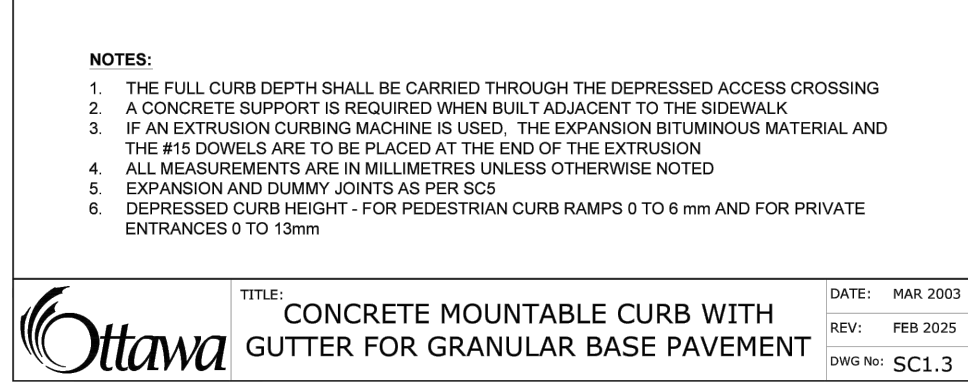
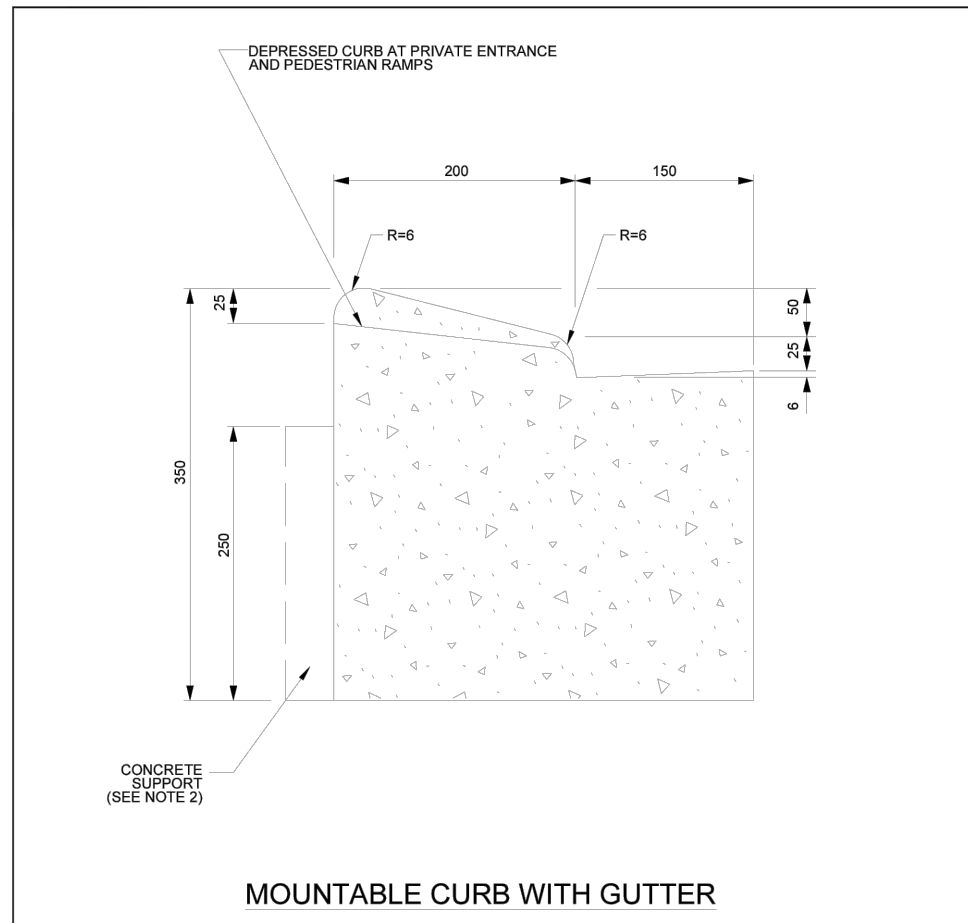
- SANITARY SEWERS:**
- ALL SANITARY SEWERS 200mm IN DIAMETER (OR GREATER) SHALL BE PVC SDR 35, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
 - ALL SANITARY SERVICES 135mm IN DIAMETER SHALL BE PVC SDR 38, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
 - ALL SANITARY SEWERS/SERVICES WITH LESS THAN 2.5m HORIZONTAL SEPARATION TO WATERMANS SHALL BE CONSTRUCTED USING SERVICE PIPE IN ACCORDANCE WITH OPSD 144.1, WITH JOINTS CAPABLE OF 345 KPa MINIMUM, CONFORMING TO PSM PVC, CSA B182.2/CSA B182.7 OR CSA B137.3 OR AWWA 302.
 - SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS 'B' BEDDING UNLESS OTHERWISE NOTED.
 - ALL SANITARY SERVICES ARE TO BE EQUIPPED WITH APPROVED BACKWATER VALVES.
 - SANITARY MANHOLE FRAME AND COVERS SHALL BE WATER TIGHT AS PER CITY OF OTTAWA STD. S24.
 - SANITARY SEWER MANHOLES SHALL BE BENCHED AS PER OPSD 701.021.
 - SANITARY PRE-CAST MANHOLE SHALL BE CONSTRUCTED WITH A HIGHER PERCENTAGE OF SILICA FUME IN THE CONCRETE TO MAKE IT MORE DENSE AND LESS SUSCEPTIBLE TO CORROSION OR PINHOLE LEAKS.
 - FOR SANITARY MANHOLES, DEPENDING ON THE ELEVATION OF THE GROUNDWATER TABLE, AND BASED ON THE RECOMMENDATION OF THE PROJECT GEOTECHNICAL CONSULTANT, CREEK SEALS, OR A SIMILAR PRODUCT, SHALL BE INSTALLED IN THE PRE-CAST MANHOLE SECTION TO JUST BELOW THE MANHOLE FRAME TO PREVENT INFILTRATION.
 - CONTRACTOR SHALL PERFORM EXFILTRATION TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR ALL SANITARY SEWERS IN ACCORDANCE WITH OPSD 410.

- WATER SUPPLY:**
- ALL PVC WATERMANS SHALL BE EQUAL TO AWWA C-900 CLASS 150, SDR 18, OR APPROVED EQUAL.
 - WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17, UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
 - ALL PVC WATERMANS SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWO OR RWJ TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W36.
 - CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY OF OTTAWA STD. W40 AND W42.
 - CONTRACTOR TO SUPPLY HYDRANT EXTENSION TO ADJUST THE LENGTH OF HYDRANT BARREL IF REQUIRED.
 - FIRE HYDRANTS SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W19, AND LOCATED AS PER CITY STD. W18.
 - VALVE IN BOXES SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W24.
 - WATERMAIN IN FILL AREAS TO BE INSTALLED WITH RESTRAINED JOINTS AS PER CITY OF OTTAWA STD. W25.5 AND W25.6.
 - THRUST BLOCKING OF WATERMAIN TO BE INSTALLED AS PER CITY OF OTTAWA STD. W25.3 AND W25.4. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS AND BLOW-OFFS AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF THE WATERMAIN.
 - INSULATION FOR WATERMAIN CROSSING OVER AND BELOW SEWER SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25, RESPECTIVELY, WHERE WATERMAIN COVER IS LESS THAN 2.4m.
 - THE MINIMUM VERTICAL SEPARATION BETWEEN WATERMANS AND SEWERS SHALL BE 0.25m FOR WATERMANS CROSSING OVER THE SEWER AS PER CITY STD. W25.2.
 - FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATERMAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER AS PER CITY STD. W25. MINIMUM VERTICAL SEPARATION IS 0.50m.
 - CONNECTION TO EXISTING WATERMAIN TO BE PERFORMED BY CITY FORCES. CONTRACTOR TO PROVIDE EXCAVATION, MATERIAL, BACKFILL, AND ASSISTANCE AS REQUIRED.
 - SWABBING, DISINFECTION, AND HYDROSTATIC TESTING TO BE CONDUCTED AS PER CITY OF OTTAWA STANDARDS IN THE PRESENCE OF A CITY INSPECTOR AND/OR CONSULTANT.

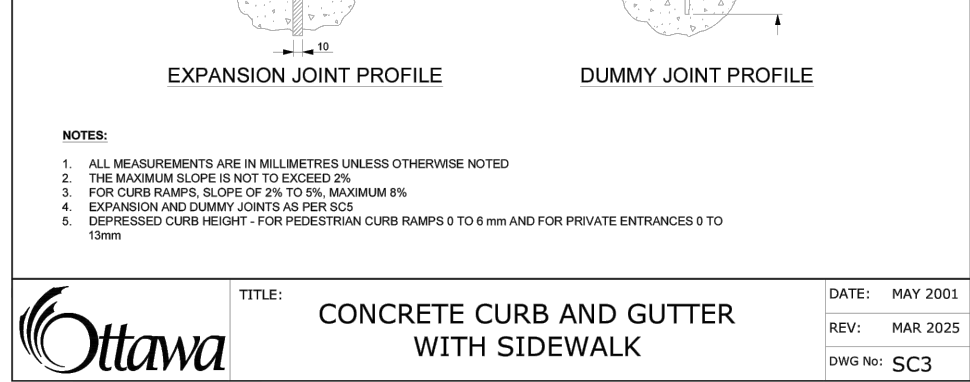
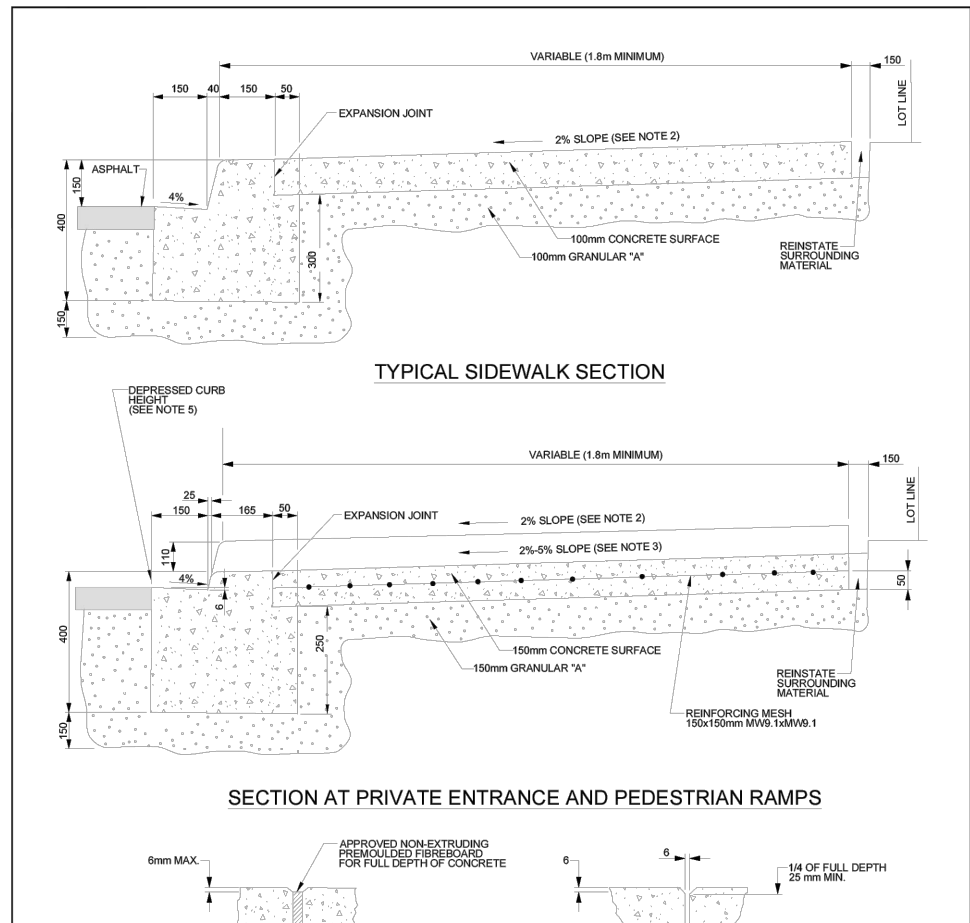
- ROADWORK SPECIFICATIONS:**
- CONCRETE BARRIER CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.1.
 - CONCRETE MOUNTABLE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.3.
 - ALL BARRIER CURBS TO BE 150mm ABOVE FINISHED ASPHALT GRADE UNLESS OTHERWISE NOTED.
 - CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC3.
 - TWSIS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF OTTAWA STD. SC7.3.
 - ANY PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. R10.
 - GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
 - ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
 - SUB-EXCAVATE SOFT AREAS AND FILL WITH GRANULAR "B" COMPACTED IN MAXIMUM 300mm LIFTS.
 - ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW-CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW ASPHALT.



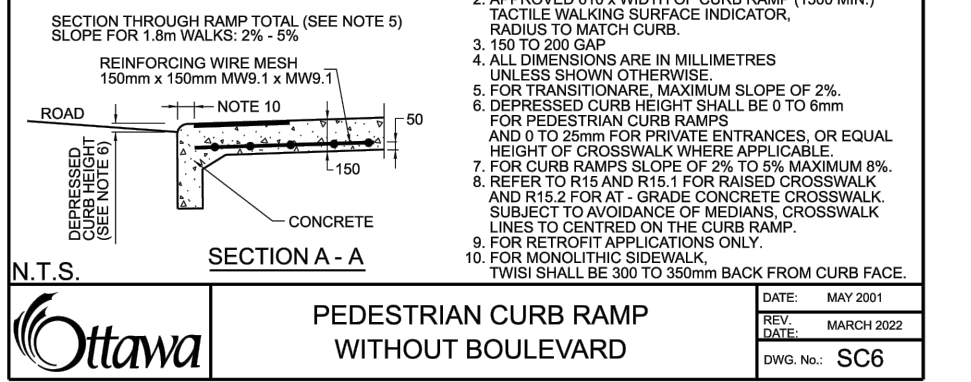
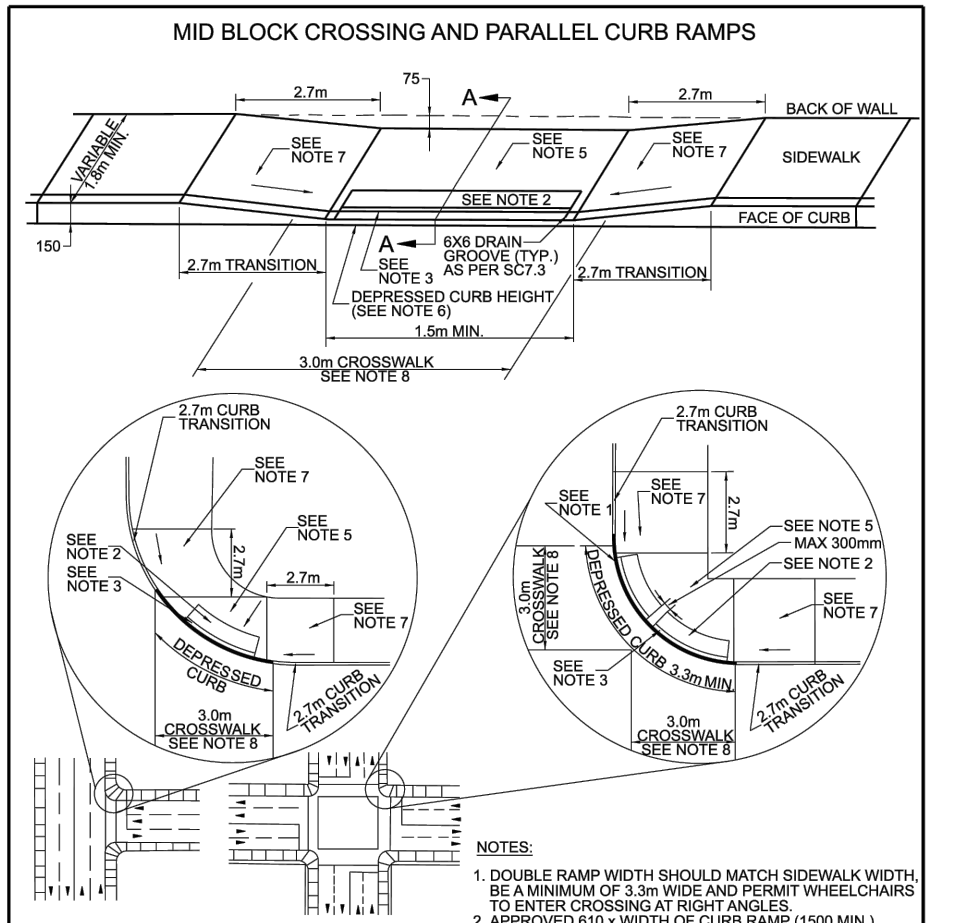
CONCRETE BARRIER CURB
 TITLE: CONCRETE BARRIER CURB FOR GRANULAR BASE PAVEMENT (MODIFIED OPSD-600.110)
 DATE: MAR 2003
 REV: MAR 2025
 DWG No.: SC1.1



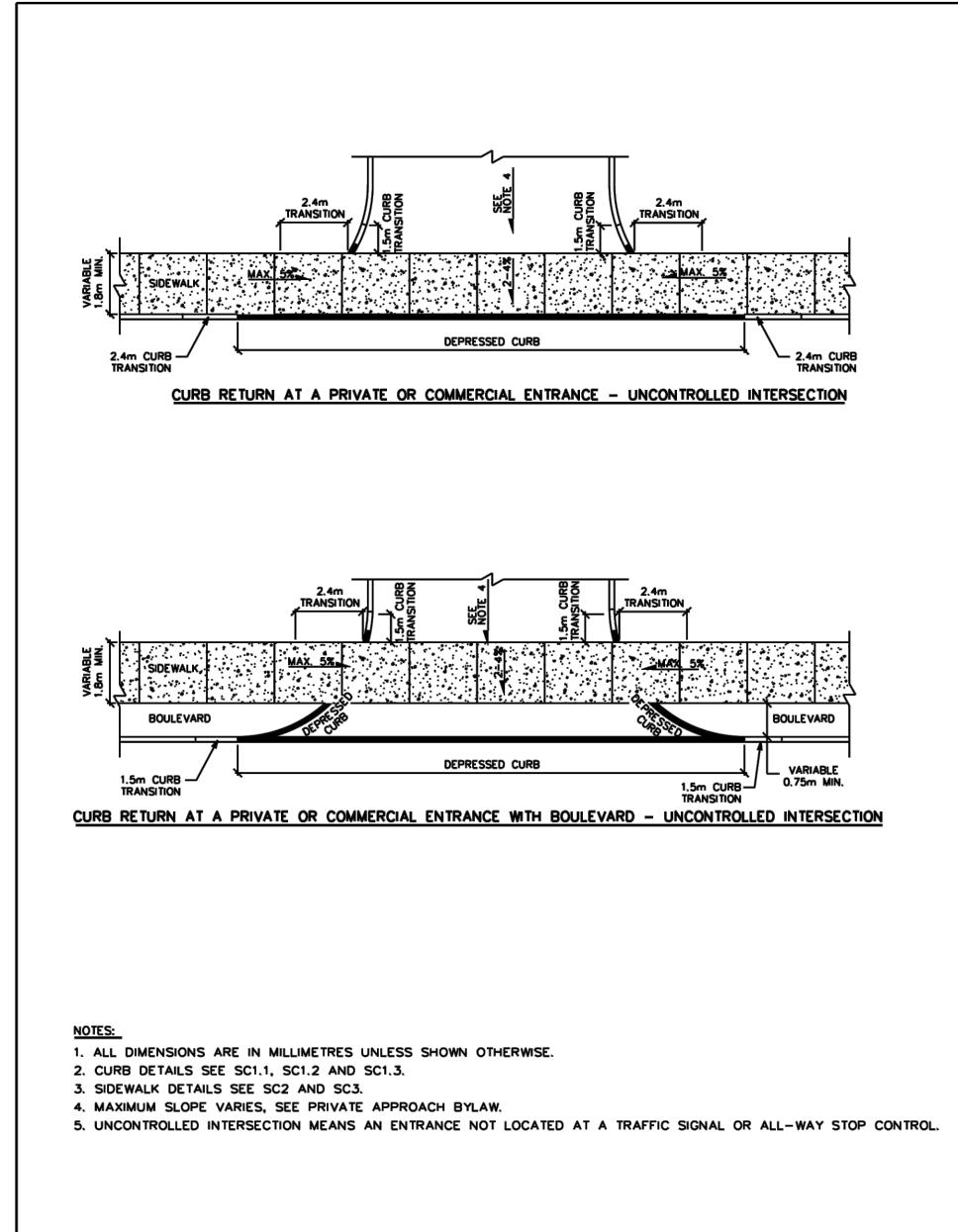
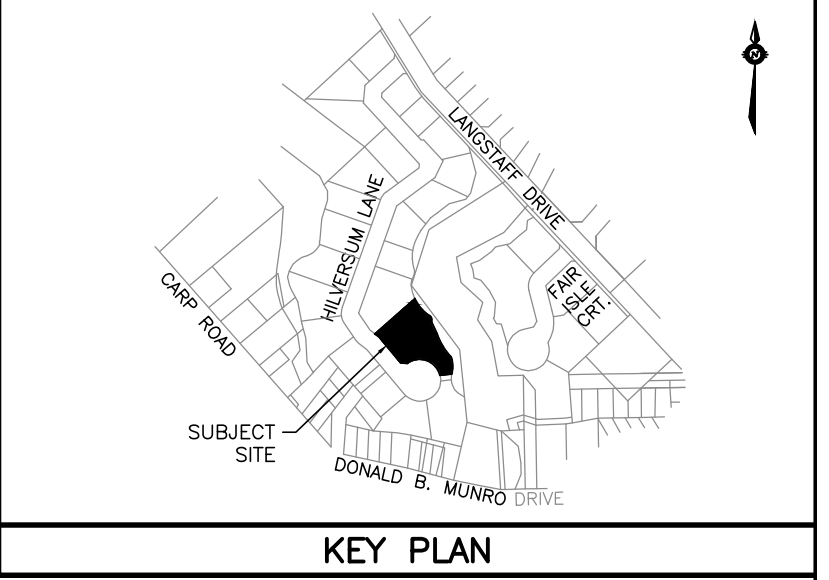
CONCRETE MOUNTABLE CURB WITH GUTTER FOR GRANULAR BASE PAVEMENT
 TITLE: CONCRETE MOUNTABLE CURB WITH GUTTER FOR GRANULAR BASE PAVEMENT
 DATE: MAR 2003
 REV: FEB 2025
 DWG No.: SC1.3



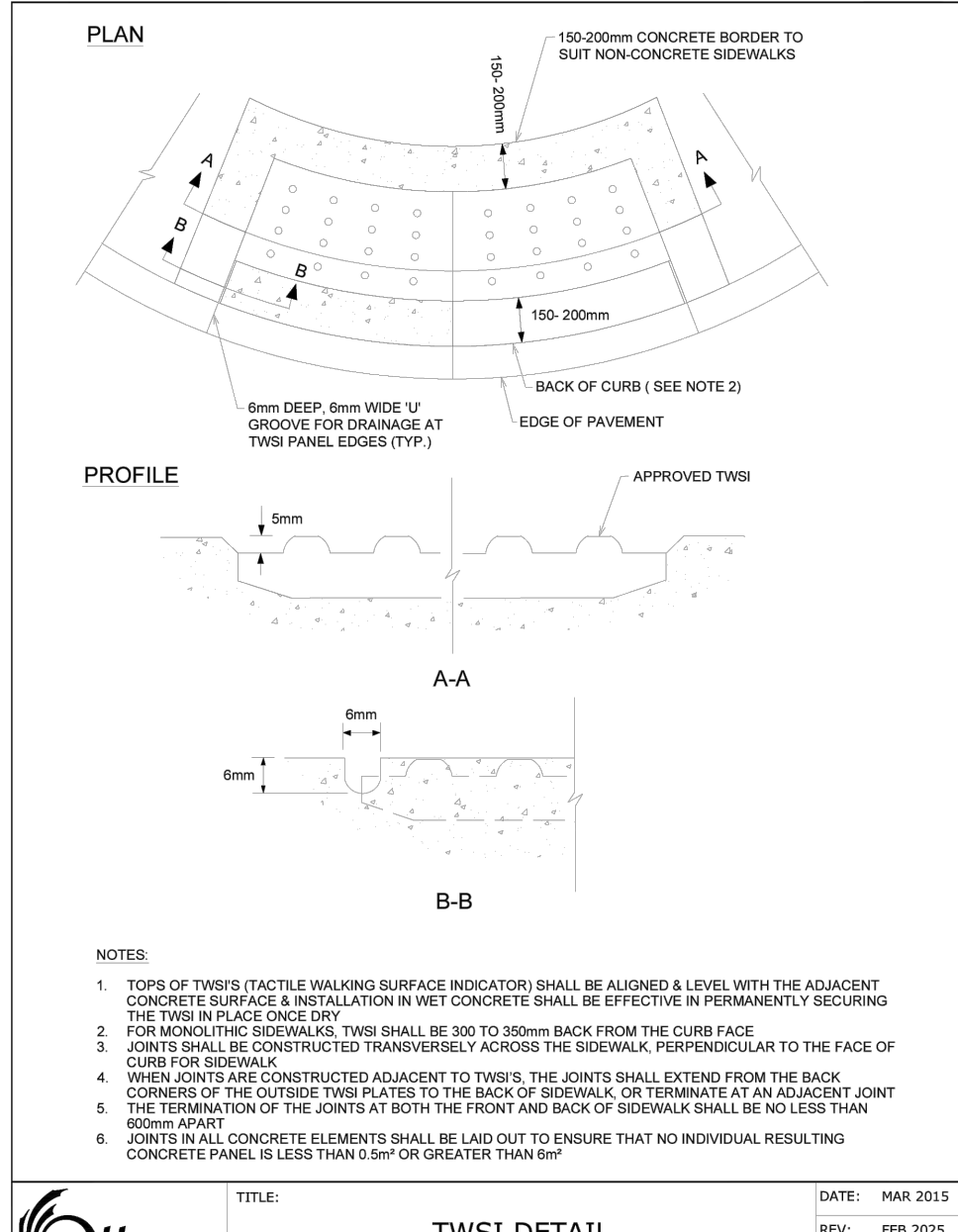
CONCRETE CURB AND GUTTER WITH SIDEWALK
 TITLE: CONCRETE CURB AND GUTTER WITH SIDEWALK
 DATE: MAR 2003
 REV: MAR 2025
 DWG No.: SC3



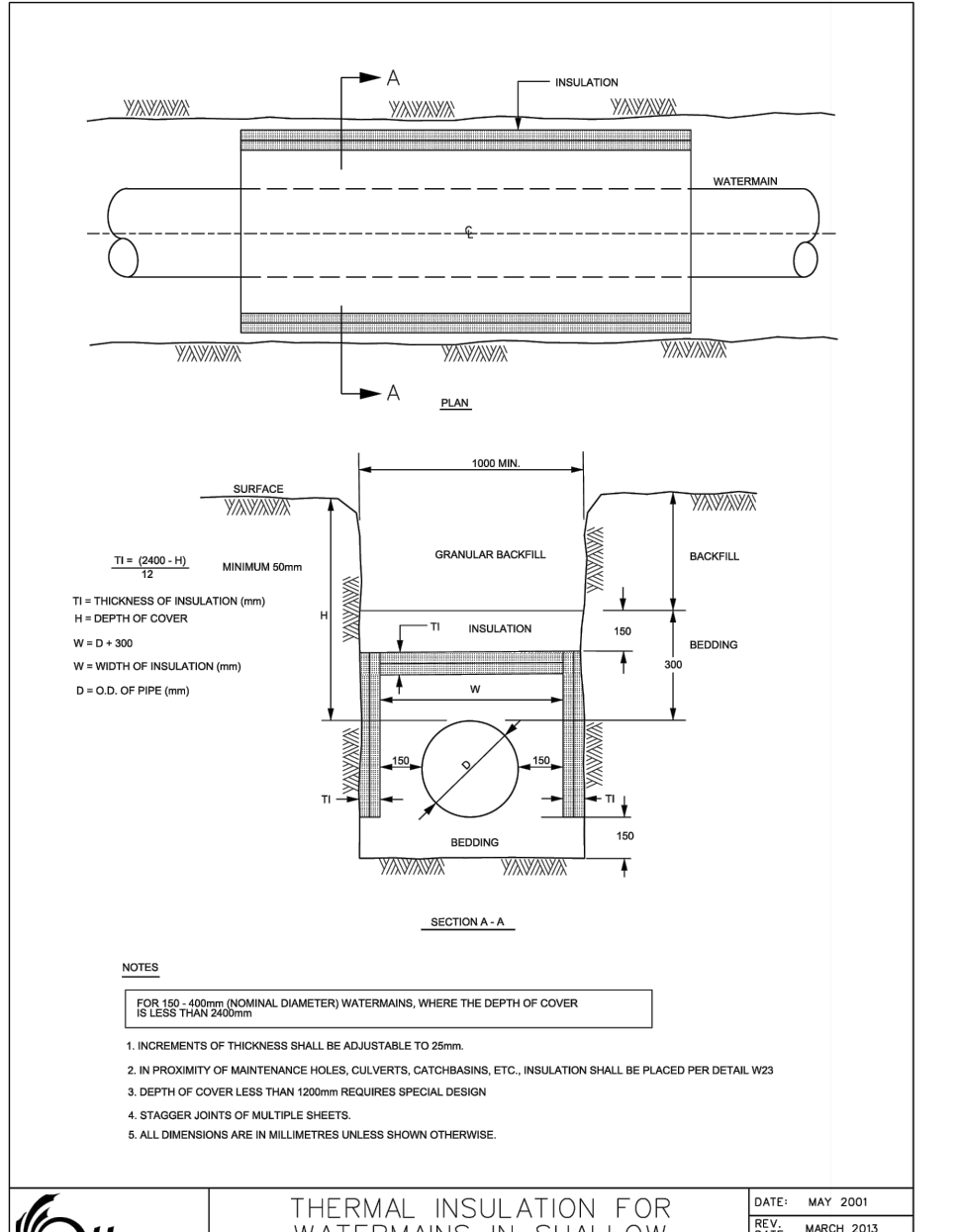
PEDESTRIAN CURB RAMP WITHOUT BOULEVARD
 TITLE: PEDESTRIAN CURB RAMP WITHOUT BOULEVARD
 DATE: MAR 2003
 REV: MAR 2025
 DWG No.: SC6



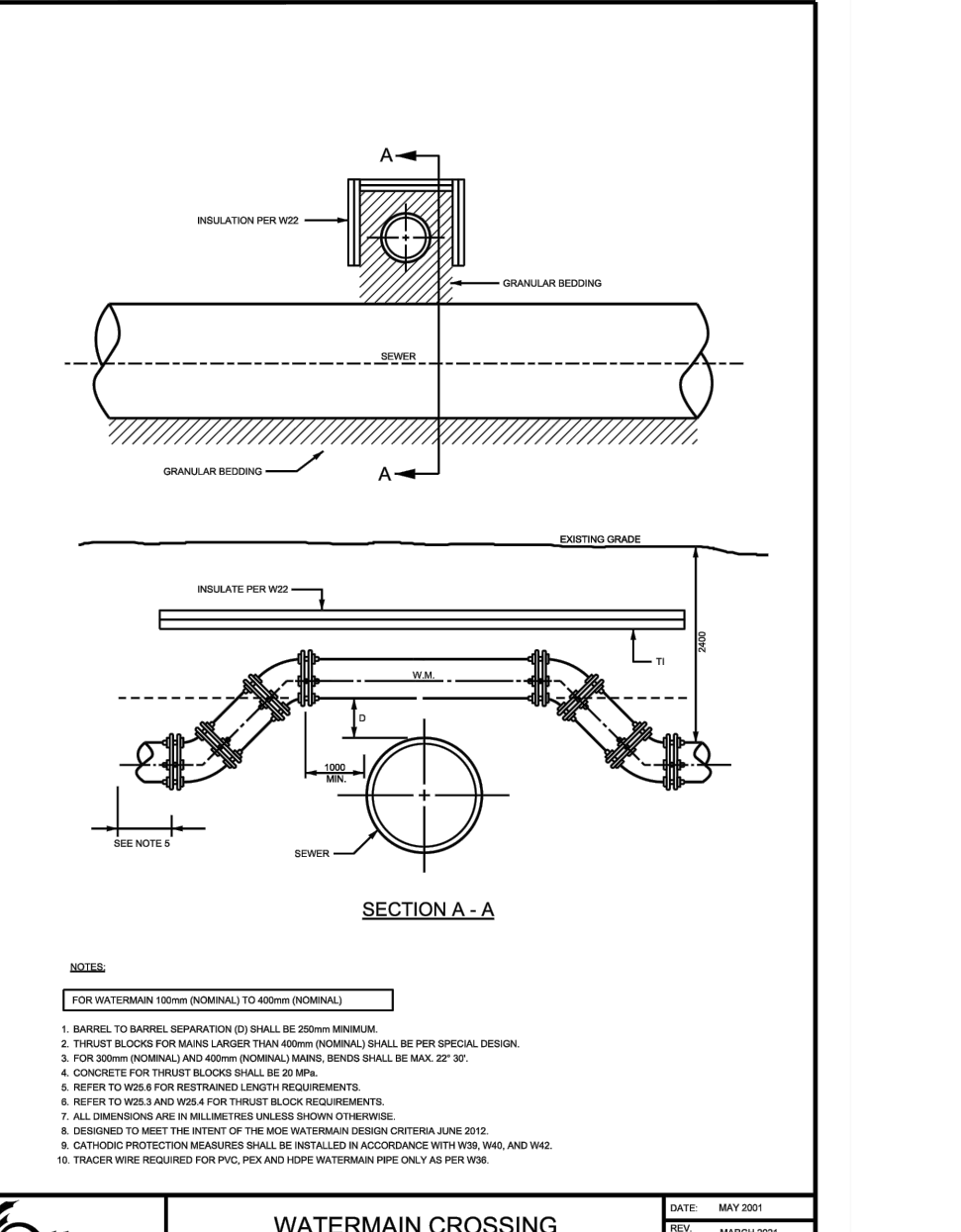
CURB RETURN ENTRANCES - UNCONTROLLED INTERSECTIONS
 TITLE: CURB RETURN ENTRANCES - UNCONTROLLED INTERSECTIONS
 DATE: MARCH 2007
 REV: MARCH 2021
 DWG No.: SC7.1



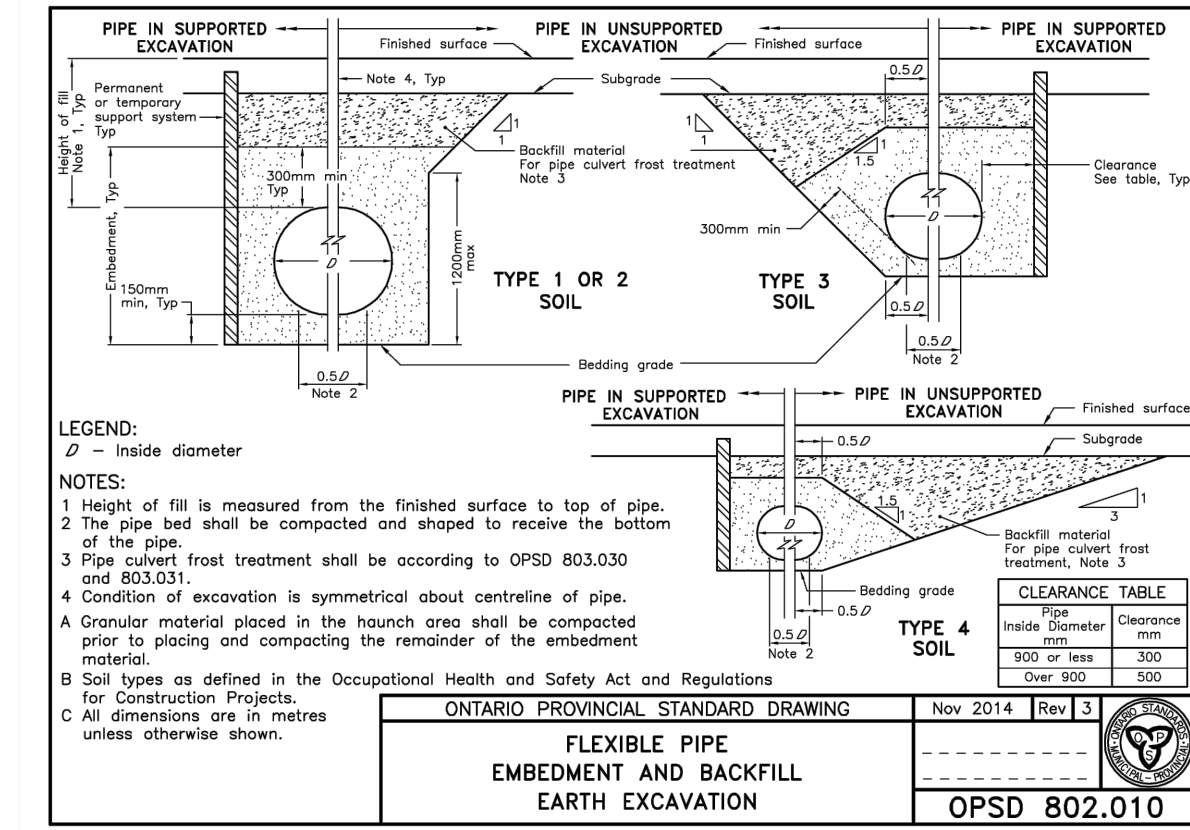
TWSI DETAIL
 TITLE: TWSI DETAIL
 DATE: MAR 2003
 REV: FEB 2025
 DWG No.: SC7.3



THERMAL INSULATION FOR WATERMANS IN SHALLOW TRENCHES
 TITLE: THERMAL INSULATION FOR WATERMANS IN SHALLOW TRENCHES
 DATE: MAY 2001
 REV: MARCH 2013
 DWG No.: W22



WATERMAIN CROSSING OVER SEWER
 TITLE: WATERMAIN CROSSING OVER SEWER
 DATE: MAY 2001
 REV: MARCH 2013
 DWG No.: W25.2



FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION
 TITLE: FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION
 DATE: NOV 2014
 REV: 1
 DWG No.: OPSD 802.010

NOTES

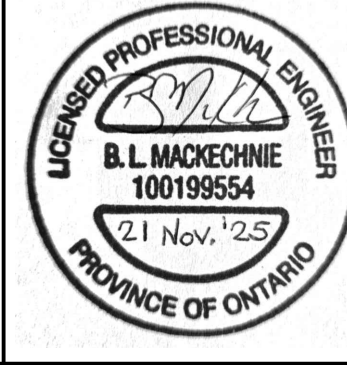
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

GEODETIC SURVEY DERIVED FROM COSINE STATION 0011968U054. LOCATION DESCRIPTION: OLD HIGHWAY 17 BRIDGE OVER CARP RIVER ON CARP-STITTSVILLE ROAD, 0.2 KM SOUTH OF C.N.R. CROSSING IN VILLAGE OF CARP. TABLE IN TOP OF WEST WALL, 30 CM FROM NORTH END, 24 CM FROM WEST EDGE. VERTICAL CONTROL DATA, DATUM: CGVD28/78, FIRST ORDER, ELEVATION: 93.861. COORDINATE SYSTEM: MTM ZONE 9; NAD 83 DATUM (CAN83-9)

NO.	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	21/11/25	BLM

SCALE	

SCALE	



Robinson Land Development

350 Palladium Drive
 Ottawa, ON K2V 1A8
 (613) 592-6060 rcii.com

DESIGN	BLM
CHECKED	SG
DRAWN	BLM
CHECKED	SG
APPROVED	BLM

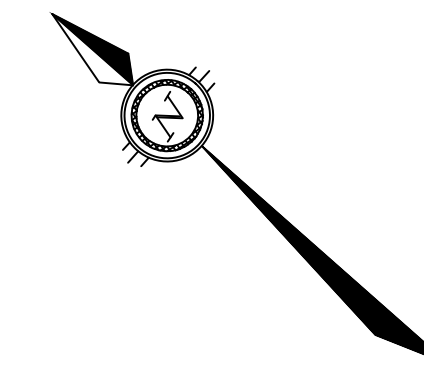
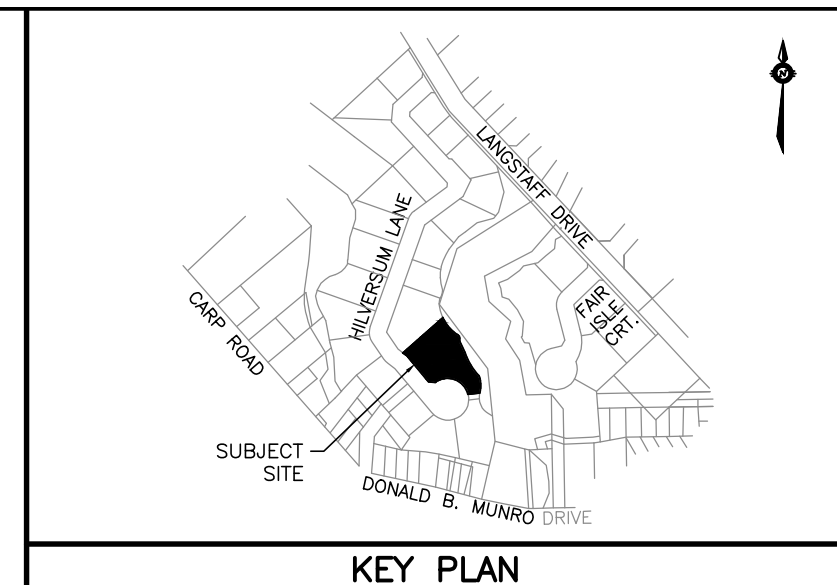
INVERNESS HOMES
 38 AURIGA DRIVE, SUITE 200
 OTTAWA, ON K2E 8A6

391 HILVERSUM LANE
 CARP, ON

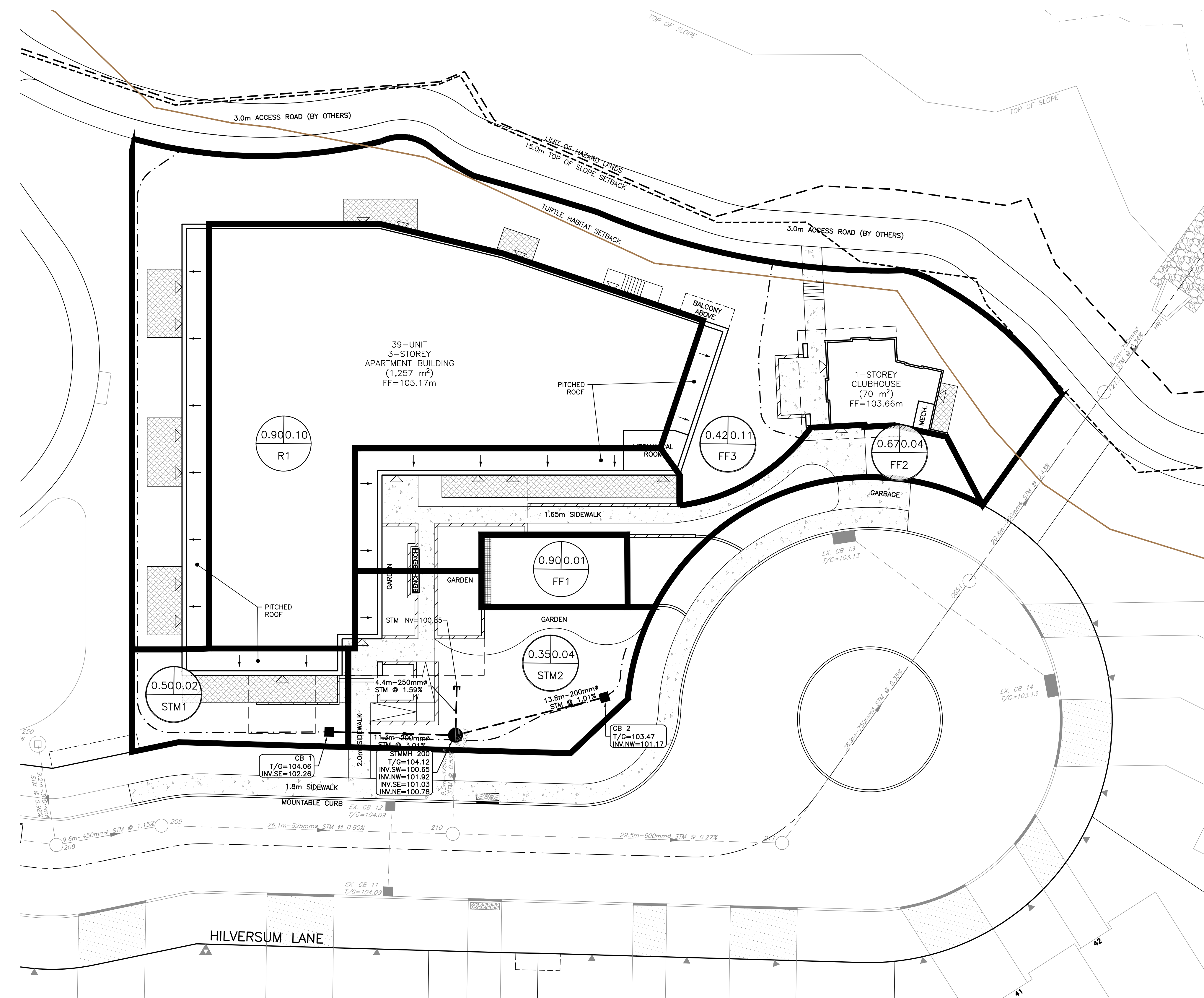
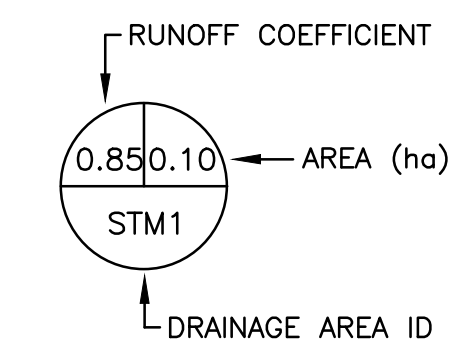
NOTES & DETAILS

PROJECT No.	25094
SURVEY	----
DATED	NOV. 2025
DWG. No.	25094-N1

NOT FOR CONSTRUCTION



- LEGEND**
- PROPERTY BOUNDARY
 - LIMIT OF HAZARD LANDS
 - 15.0m TOP OF SLOPE SETBACK
 - TURTLE HABITAT SETBACK (AS PER EIS)
 - EXISTING CATCH BASIN
 - EXISTING STORM SEWER & MANHOLE
 - CATCH BASIN
 - STORM SEWER & MANHOLE
 - ▽ BUILDING ENTRANCE
 - STORM DRAINAGE AREA BOUNDARY



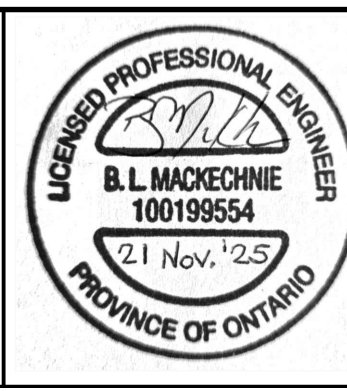
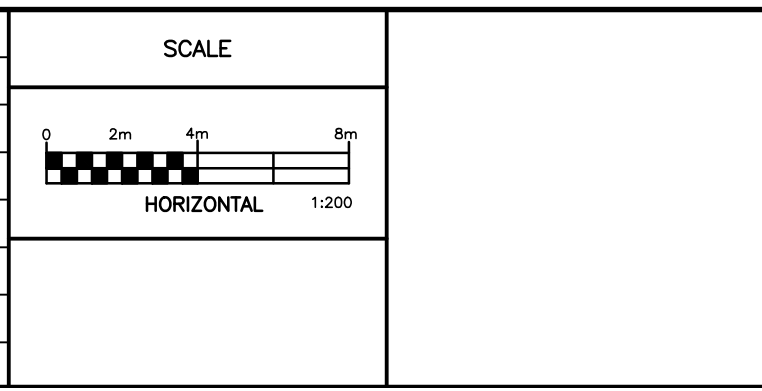
NOT FOR CONSTRUCTION

NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

GEODETIC SURVEY DERIVED FROM COSINE STATION 0011968U054. LOCATION DESCRIPTION: OLD HIGHWAY 17 BRIDGE OVER CARP RIVER ON CARP-STITTSVILLE ROAD, 0.2 KM SOUTH OF C.N.R. CROSSING IN VILLAGE OF CARP. TABLET IN TOP OF WEST WALL, 30 CM FROM NORTH END, 24 CM FROM WEST EDGE. VERTICAL CONTROL DATA, DATUM: CGVD2878, FIRST ORDER, ELEVATION: 93.861. COORDINATE SYSTEM: MTM ZONE 9; NAD 83 DATUM (CAN83-9)

NO.	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	21/11/25	BLM



Robinson
Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

DESIGN	BLM
CHECKED	SG
DRAWN	BLM
CHECKED	SG
APPROVED	BLM

INVERNESS HOMES
38 AURIGA DRIVE, SUITE 200
OTTAWA, ON K2E 8A6

391 HILVERSUM LANE
CARP, ON

STORM DRAINAGE AREA PLAN

PROJECT No.	25094
SURVEY	---
DATED	NOV. 2025
DWG. No.	25094-STM1