



The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

1. CITY OF GUELPH BENCHMARK 225
ELEVATION 338.665 LOCATION: 1221 GORDON STREET
2. EXISTING SURVEY COMPLETED BY BSR&D (NOVEMBER, 4 2014)
3. THE CONTRACTOR IS TO VERIFY ALL EXISTING ELEVATIONS AND EXISTING CONDITIONS AND TO REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER

	SITE LIMIT
	EX. STORM SEWER
	PROPOSED STORM SEWER
	EX. SANITARY SEWER
	PROPOSED SANITARY SEWER
	PROPOSED SANITARY MANHOLE
	PROPOSED STORM MANHOLE
	PROPOSED CATCHBASIN MANHOLE
	PROPOSED CATCHBASIN
	EX. MH
	EX. CB
	PROPOSED WATERMAIN
	EX. WATERMAIN
	PROPOSED 3-WAY FIRE HYDRANT C/W STORZ CONNECTION
	EX. FIRE HYDRANT
	PROPOSED WATER VALVE
	EX. WATER VALVE
	BULK WATER METER

[illegible]

TRICAR DEVELOPMENTS INC.

1242, 1250, 1260 GORDON STREET
& 9 VALLEY ROAD
GUELPH, ON

SERVICING PLAN

Project No.
161413684

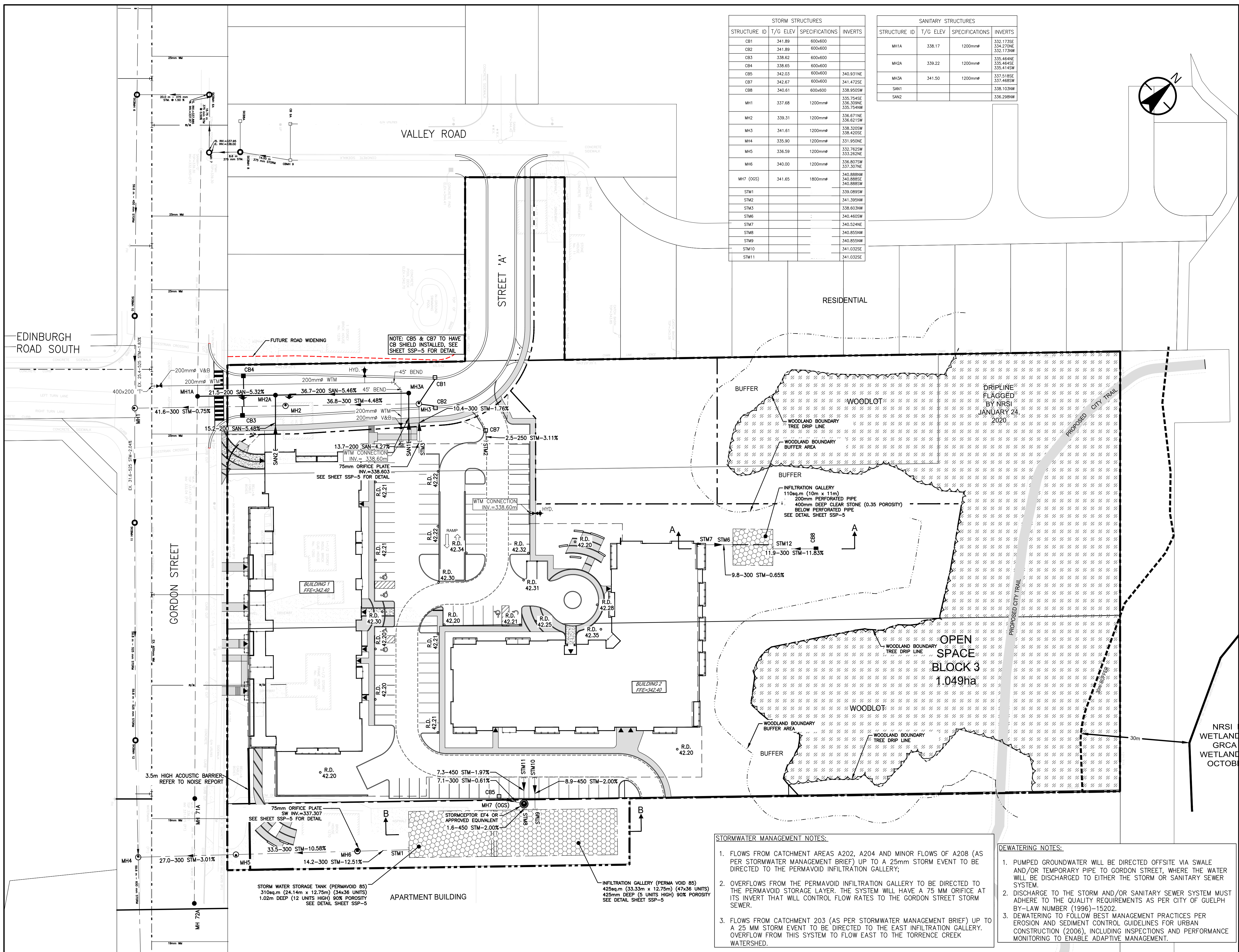
Scale 0 5 15 25m
1:500

Sheet Revision

SSP-1

1 of 7

)



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ORIGINAL SHEET - ANSI D

Notes

- CITY OF GUELPH BENCHMARK 225
ELEVATION 338.665 LOCATION: 1221 GORDON STREET
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Legend

- A1
A=0.23ha.
C=0.25
- AREA ID
CONTRIBUTING AREA (ha)
RUNOFF COEFFICIENT
- MAJOR OVERLAND FLOW ROUTE
- DRAINAGE BOUNDARY

Revision	By	Appd.	YY.MM.DD
1. ISSUED FOR DRAFT PLAN APPROVAL	JAC	CJH	21.08.24
Issued	By	Appd.	YY.MM.DD
File Name: 161413684_c-ud	JAC	CJH	JAC
	Dwn.	Chkd.	Dgn.
21.07.23			YY.MM.DD

Permit-Seal

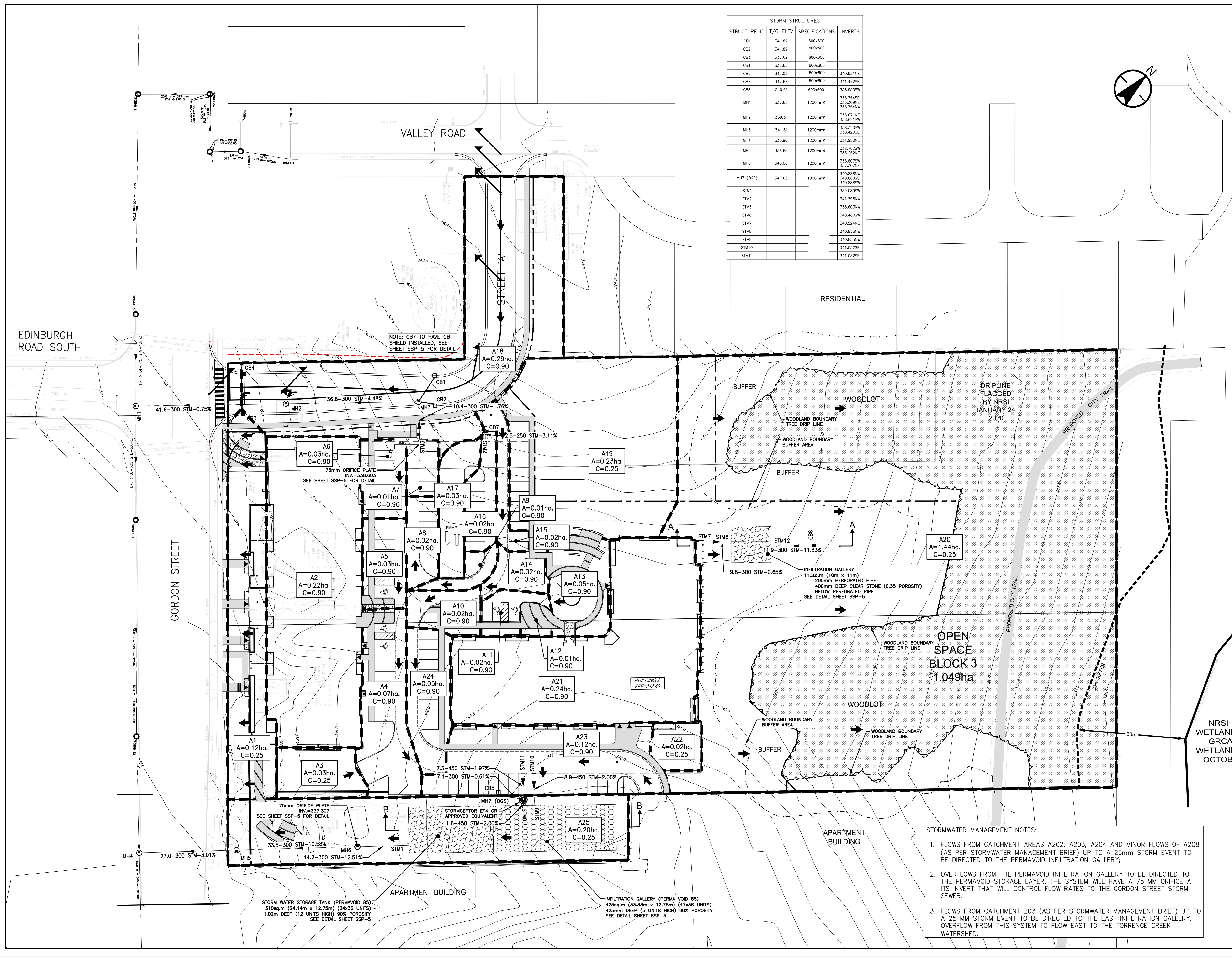


Client/Project
TRICAR DEVELOPMENTS INC.

1242, 1250, 1260 GORDON STREET
& 9 VALLEY ROAD
GUELPH, ON

Title
STORM DRAINAGE AREA PLAN

Project No. 161413684	Scale 1:400	Sheet 1 of 2	Revision 0
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STRUCTURE ID	T/G ELEV	SPECIFICATIONS	INVERTS
CB1	341.89	600x600	
CB2	341.89	600x600	
CB3	338.62	600x600	
CB4	338.65	600x600	
CB5	342.03	600x600	340.931NE
CB7	342.67	600x600	341.472SE
CB8	340.61	600x600	338.950SW
MH1	337.68	1200mm	335.754SE 336.300NE 335.754NW
MH2	339.31	1200mm	336.671NE 338.621SW
MH3	341.61	1200mm	338.320SW 338.420SE
MH4	335.90	1200mm	331.950NE
MH5	336.63	1200mm	332.762SW 333.262NE
MH6	340.00	1200mm	336.807SW 337.307NE
MH7 (OGS)	341.65	1800mm	340.888NW 340.888SE 340.888SW
STM1			339.089SW
STM2			341.399NW
STM3			338.603NW
STM6			340.460SW
STM7			340.524NE
STM8			340.855NW
STM9			340.855NW
STM10			341.032SE
STM11			341.032SE

- STORMWATER MANAGEMENT NOTES:
- Flows from catchment areas A202, A203, A204 and minor flows of A208 (AS PER STORMWATER MANAGEMENT BRIEF) UP TO A 25mm STORM EVENT TO BE DIRECTED TO THE PERMAVOID INFILTRATION GALLERY;
 - OVERFLOWS FROM THE PERMAVOID INFILTRATION GALLERY TO BE DIRECTED TO THE PERMAVOID STORAGE LAYER. THE SYSTEM WILL HAVE A 75 MM ORIFICE AT ITS INVERT THAT WILL CONTROL FLOW RATES TO THE GORDON STREET STORM SEWER.
 - Flows from catchment 203 (AS PER STORMWATER MANAGEMENT BRIEF) UP TO A 25 MM STORM EVENT TO BE DIRECTED TO THE EAST INFILTRATION GALLERY. OVERFLOW FROM THIS SYSTEM TO FLOW EAST TO THE TORRENCE CREEK WATERSHED.

Liability Note:
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Notes

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Legend

A1
A=0.92ha.
FLOW=6.44L/s

AREA ID
CONTRIBUTING AREA (ha)
FLOW RATE (7L/s/ha. APARTMENTS-1L/s/ha. RESIDENTIAL)

--- DRAINAGE BOUNDARY

Revision

1. ISSUED FOR DRAFT PLAN APPROVAL

File Name: 161413684_c.ss

Permit-Seal



Client/Project
TRICAR DEVELOPMENTS INC.

1242, 1250, 1260 GORDON STREET
& 9 VALLEY ROAD
GUELPH, ON

Title
SANITARY DRAINAGE AREA PLAN

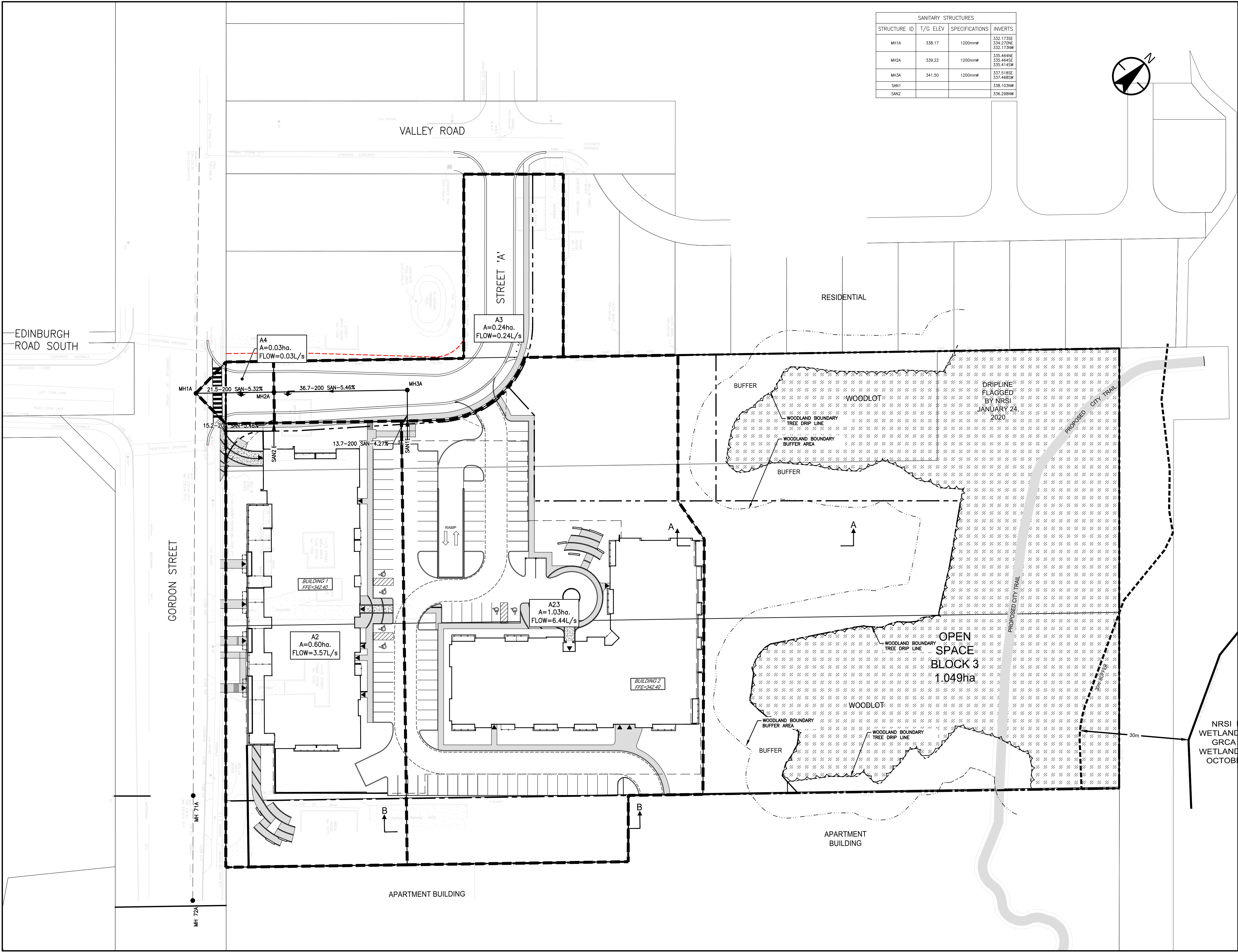
Project No.
161413684

Scale
1:500

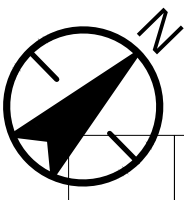
Drawing No.
Sheet

Revision

SSP-3 3 of 7 0



SANITARY STRUCTURES			
STRUCTURE ID	T/G ELEV	SPECIFICATIONS	INVERTS
MH1A	338.17	1200mm	332.173SE 334.273NE 332.173NW
MH2A	339.22	1200mm	335.464NE 335.464SE 335.414SW
MH3A	341.50	1200mm	337.518SE 337.468SW
SAN1			338.103NW
SAN2			336.298NW





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	SITE LIMIT
	EX. STORM SEWER
	PROPOSED STORM SEWER
	EX. SANITARY SEWER
	PROPOSED SANITARY SEWER
S2	PROPOSED SANITARY MANHOLE
R2	PROPOSED STORM MANHOLE
CBMH1	PROPOSED CATCHBASIN MANHOLE
CB or CICB	PROPOSED CATCHBASIN
EX. MH	EX. MANHOLE
EX. CB	EX. CATCHBASIN
	PROPOSED WATERMAIN
	EX. WATERMAIN
	PROPOSED 3-WAY FIRE HYDRANT C/W STORZ CONNECTION
	EX. FIRE HYDRANT
	PROPOSED WATER VALVE
	EX. WATER VALVE
	RESTORATION LIMITS WITH LAP JUNT PER 509.010

	JAC	CJH	JAC	21.07.23
	Dwn.	Chkd.	Sgn.	YY.MM.DD
File Name:	161413684_c-stf			

TRICAR DEVELOPMENTS INC.

1242, 1250, 1260 GORDON STREET
& 9 VALLEY ROAD
GUELPH, ON

STREET 'A'
PLAN & PROFILE

Project No.
161413684

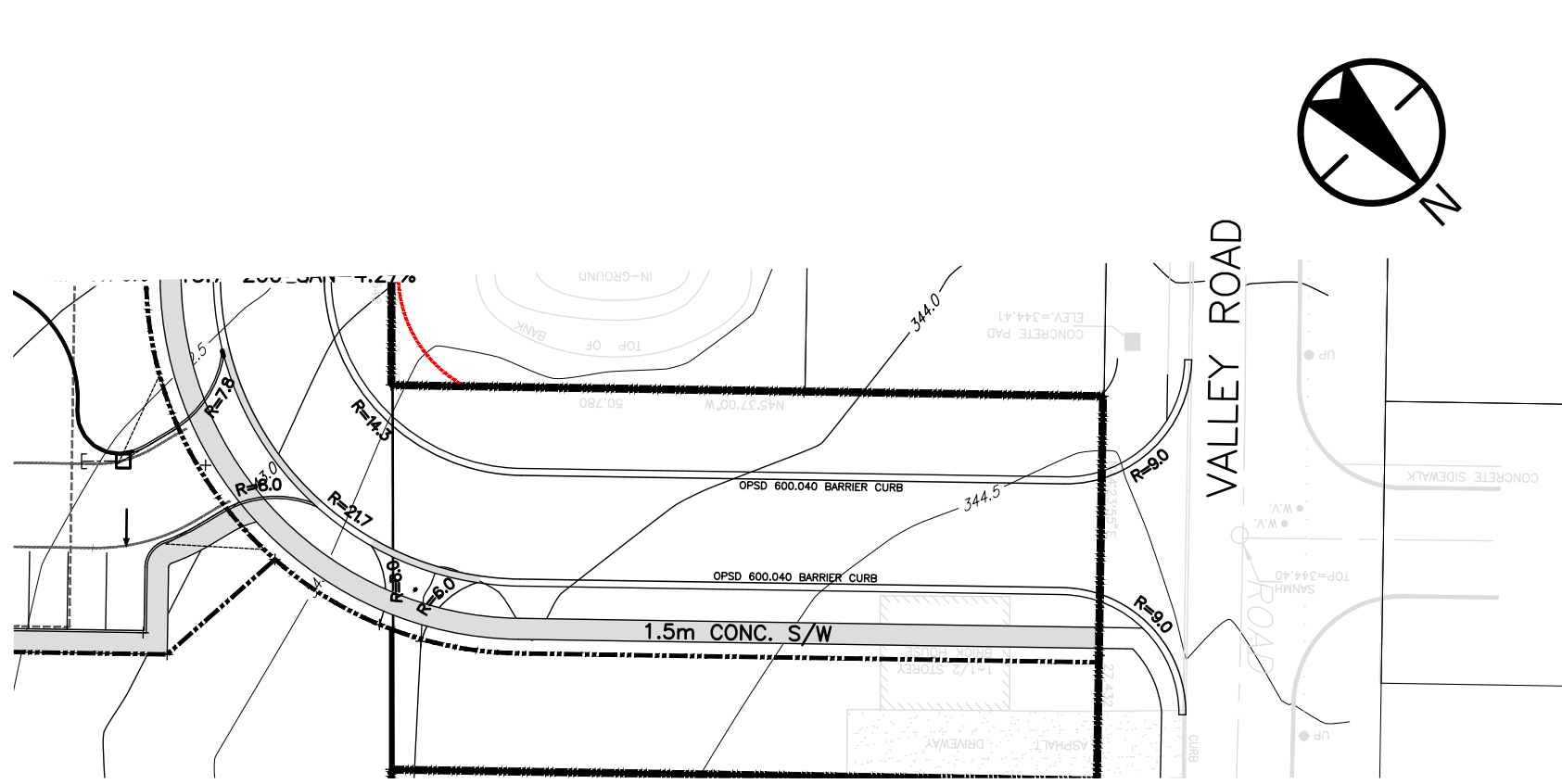
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Sheet Revision

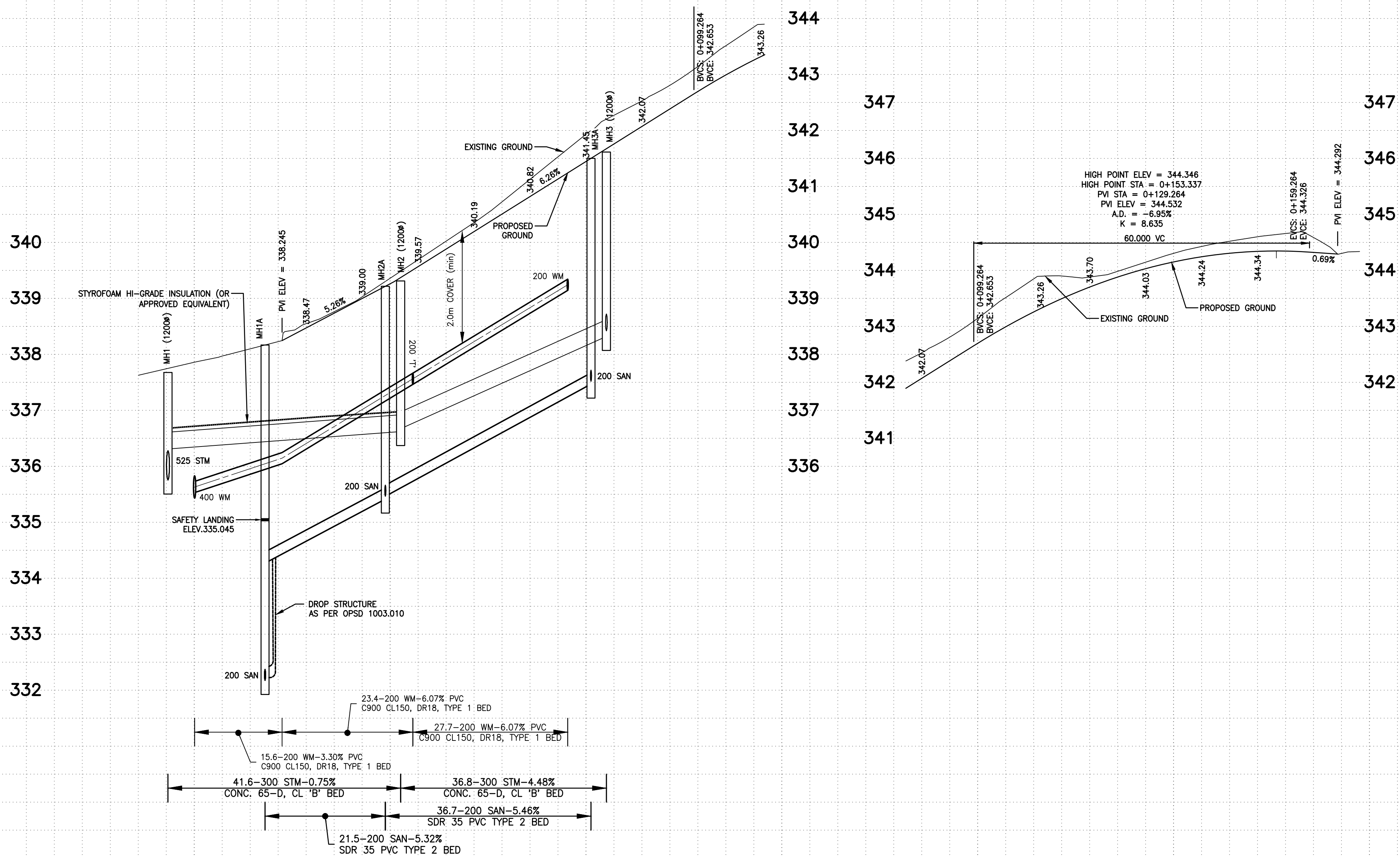
SSP-4

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OPSD 600.040 CONCRETE BARRIED CURB WITH STANDARD GUTTER



STATION	SANITARY SEWER INVERT	STORM SEWER INVERT	C/L WATERMAN ELEVATION
0+000		335.764E 335.809E 335.754W	335.630
0+005.3			
0+10.0			
0+020		332.173E 333.270E 333.270E	
0+022.6		332.173E 333.270E 333.270E	
0+025.7		332.173E 333.270E 333.270E	
0+041.1		333.646E 333.646E 333.646E	
0+046.8		333.646E 333.646E 333.646E	
0+049.0		335.671E 336.627W	337.563
0+060			
0+076.7		337.618E 337.685W	339.242
0+080.9			
0+083.6		338.302W 338.420E	
0+100			
0+120			
0+100			
0+140			
0+160			

Stantec
600-171 Queens Avenue
London ON N6A 5J7
Tel. 519-645-2007
www.stantec.com

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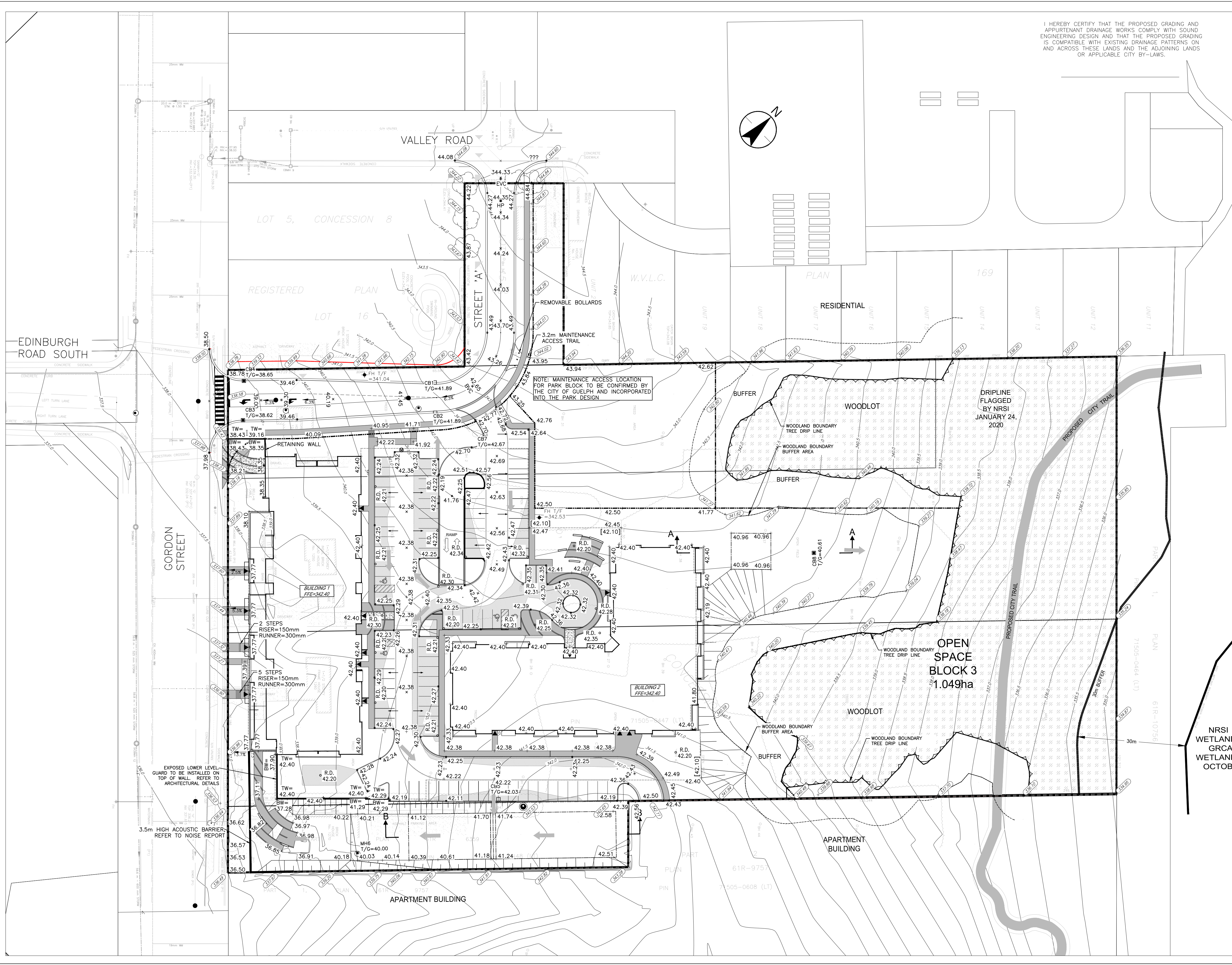
- Legend**
- PROPOSED SWALE
 - PROPOSED STORM MANHOLE
 - PROPOSED STORM CATCH BASIN MANHOLE
 - PROPOSED SANITARY MANHOLE
 - EX. STORM MANHOLE
 - EX. SANITARY MANHOLE
 - PROPOSED CATCH BASIN
 - EX. CATCH BASIN
 - PROPOSED GRADES
 - PROPOSED OVERLAND FLOW SPILL POINT
 - EXISTING GRADES
 - MAJOR OVERLAND FLOW ROUTE
 - SITE BOUNDARY
 - PROPOSED SWALE GRADE
 - EXISTING CONTOURS
 - FLOW DIRECTION
 - HYDRANTS



Client/Project
TRICAR DEVELOPMENTS INC.

1242, 1250, 1260 GORDON STREET
& 9 VALLEY ROAD
GUELPH, ON

Project No. 161413684	Scale 1:500	Sheet GP-1	Revision 5 of 7
Drawing No. GP-1	Sheet 5 of 7	Revision 0	



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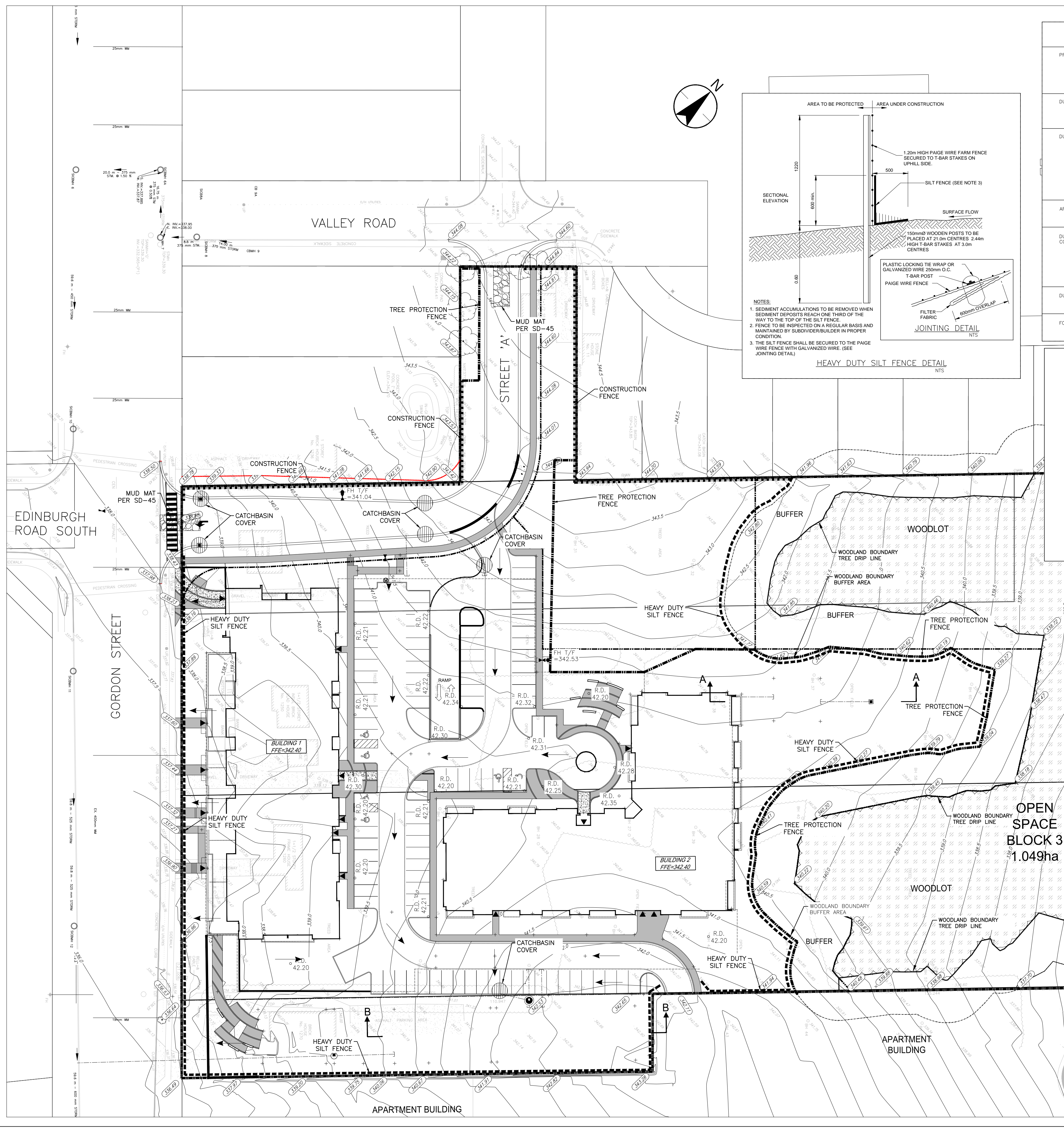
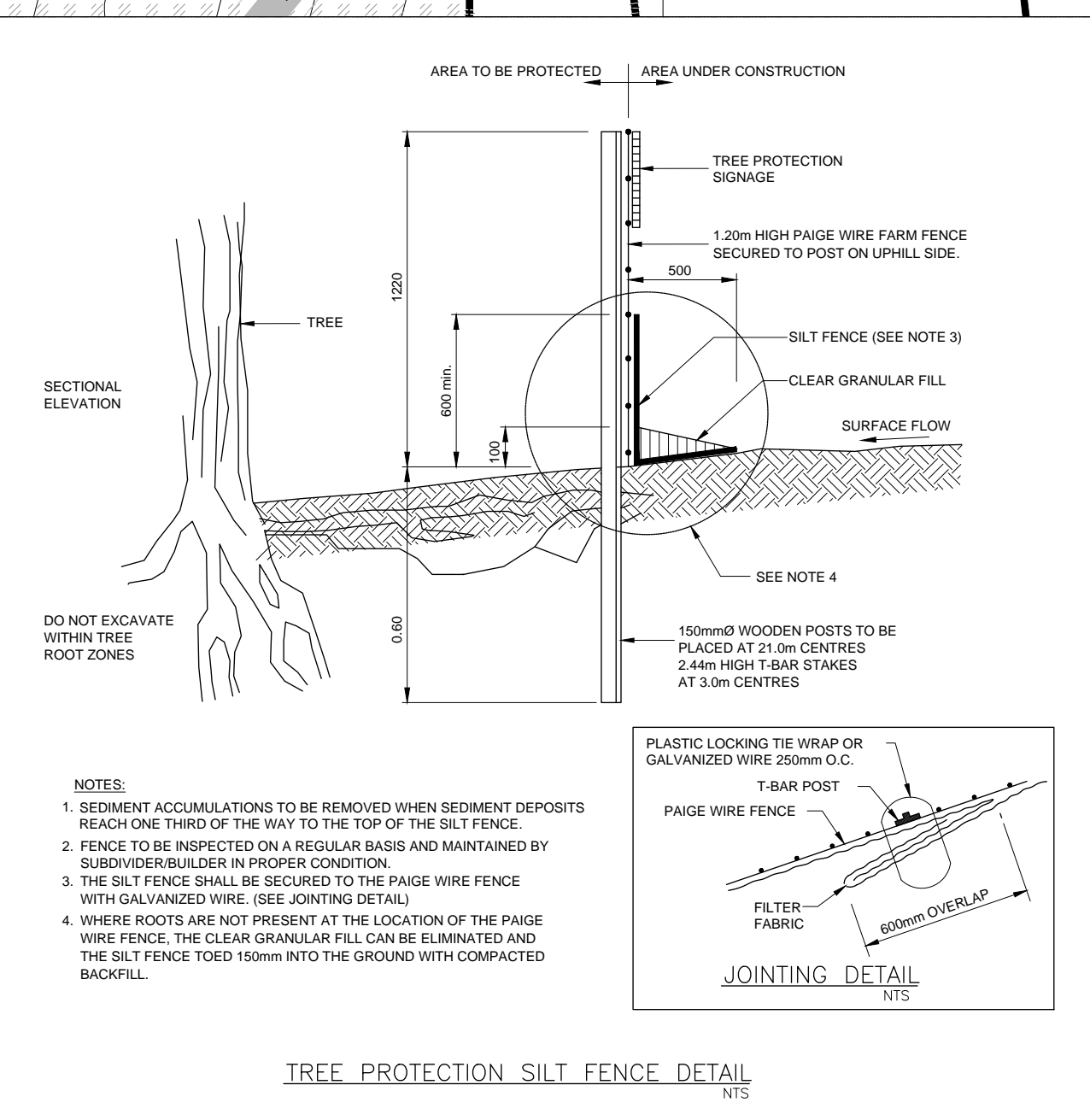
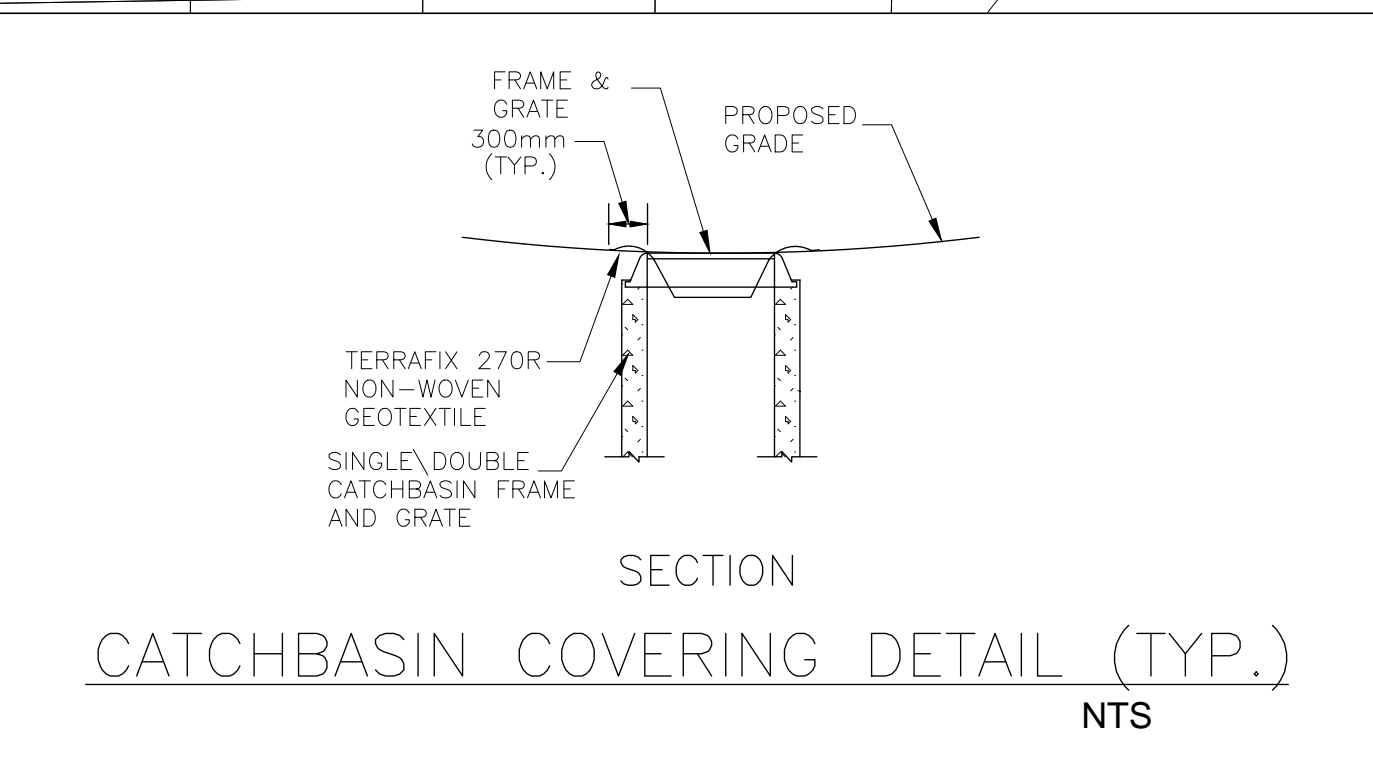
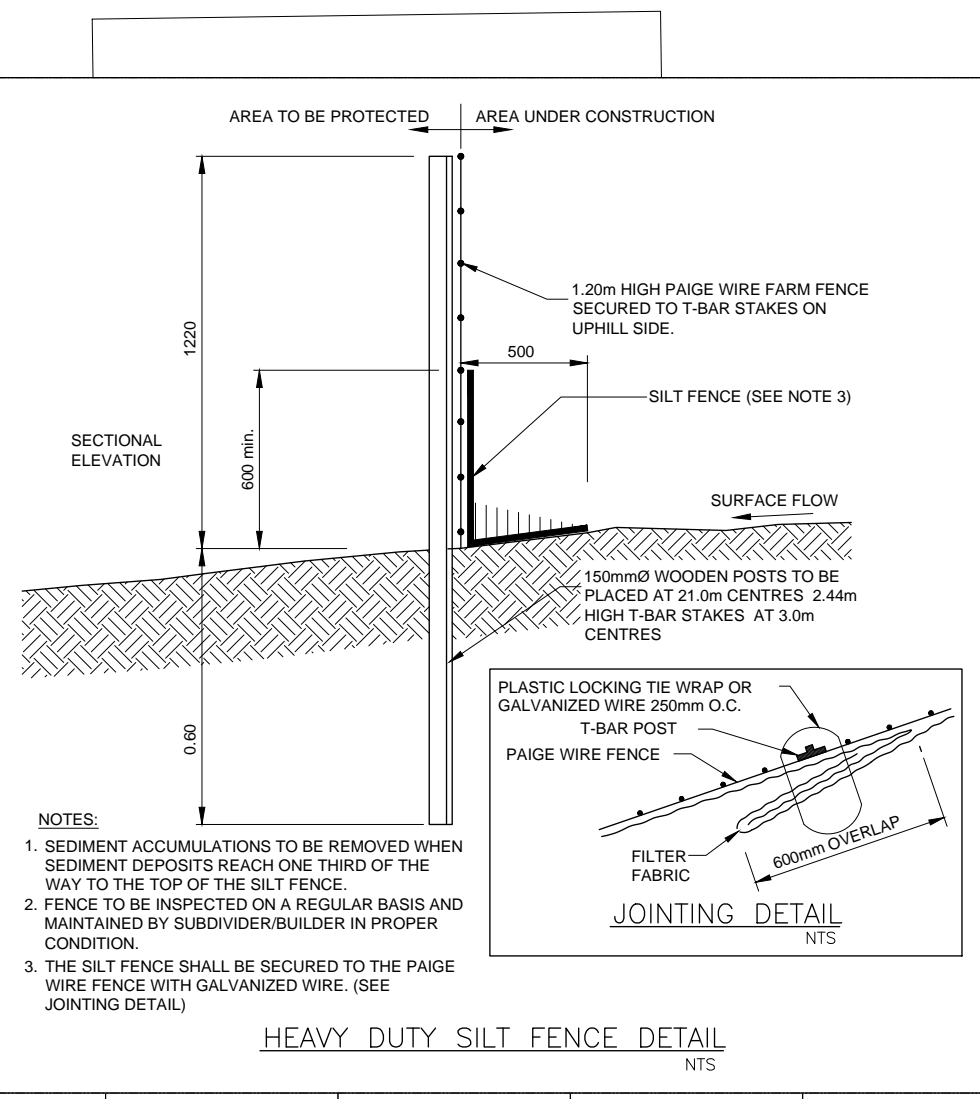
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Legend

- SILT FENCE (SD-74B)
- CONSTRUCTION FENCE
- TREE PROTECTION FENCE (SD-90A)
- ← SURFACE FLOW DIRECTION
- CATCHBASIN COVERING

IMPLEMENTATION SCHEDULE AND DETAILS FOR EROSION AND SEDIMENTATION CONTROL MEASURES	
PRIOR TO ANY SITE WORKS	- INSTALL ALL SILT FENCE AND PROTECTIVE FENCING AS SHOWN ON THE PLANS AND MAINTAIN DURING CONSTRUCTION. - MONTHLY EROSION AND SEDIMENT CONTROL REPORTS (QUARTERLY DURING PERIODS OF INACTIVITY OR HOUSE CONSTRUCTION) ARE TO BE SUBMITTED TO THE AUTHORITY UNTIL THE SITE HAS BEEN BUILT OUT (90%-100%) AND STABILIZED. REPORTS TO BE BASED ON FREQUENT INSPECTIONS PARTICULARLY AFTER SIGNIFICANT EVENTS.
DURING TOPSOIL STRIPPING	- CONSTRUCT TEMPORARY SEDIMENT CONTROL BASINS, DIVERSION SWALES & BERMS - CONSTRUCT TEMPORARY DIVERSION BERMS/SWALES/ROCK CHECK DAMS - SURPLUS TOPSOIL IS BE STOCKPILED IN LOCATIONS SHOWN
DURING AREA GRADING	- ALL DIVERSION BERMS/SWALES TO BE CHECKED REGULARLY AND AFTER EACH SIGNIFICANT RAINFALL AS GRADING PROCEEDS. DIVERSION BERMS/SWALES TO BE RECONSTRUCTED/RELOCATED AS NECESSARY TO ENSURE THAT THEY DIRECT FLOWS INTO BASINS. - SILT FENCE TO BE CHECKED REGULARLY AND AFTER EACH RAINFALL FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES ONE THIRD OF THE WAY TO THE TOP OF THE BARRIER. - SEDIMENT CONTROL BASINS TO BE CHECKED REGULARLY AND AFTER EACH RAINFALL AND CLEANED OUT WHEN THE LEVEL OF SEDIMENT BUILDUP HAS REDUCED THE VOLUME OF THE DEAD STORAGE BY ONE HALF.
AFTER AREA GRADING	- ALL AREAS (INCLUDING STOCKPILES) WHERE ACTIVE CONSTRUCTION IS NOT EXPECTED FOR 30 DAYS, SHALL BE REVEGETATED WITH 50mm OF TOPSOIL AND HYDROSEEDED IN ACCORDANCE WITH OPSS 572.
DURING SERVICING AND ROADWORKS CONSTRUCTION	- MAINTAIN FUNCTION OF SEDIMENT CONTROLS - ENSURE GRADED AREAS DRAIN TO SEDIMENT BASINS - INSTALL ROCK CHECK DAMS IN LOW POINT OF AREAS CUT OFF BY ROADS AS DIRECTED BY THE ENGINEER - INSTALL STORM SERVICE OUTLETS AT ALL LOW POINTS (SEE DETAILS) - CATCHBASINS TO BE SEALED UNTIL ROADS ARE PAVED. - INSTALL FILTER FABRIC UNDER CATCHBASIN GRATES
DURING HOUSE CONSTRUCTION	- SEDIMENTATION BASINS CONFLICTING WITH HOUSE CONSTRUCTION ARE TO BE FILLED AND STORM SERVICE OUTLETS ARE TO BE INSTALLED (SEE DETAIL). - STREETS TO BE KEPT CLEAN
FOLLOWING SITE STABILIZATION	- REMOVAL OF SEDIMENT CONTROL MEASURES AND COLLECTION OF ACCUMULATED SEDIMENT SHALL OCCUR FOLLOWING SUBSTANTIAL COMPLETION OF CONSTRUCTION (90%-100%) AND SITE STABILIZATION.



Revision	By	Appd.	YY.MM.DD
1. ISSUED FOR DRAFT PLAN APPROVAL	JAC	CJH	21.08.24
Issued	By	Appd.	YY.MM.DD
File Name: 161413684_c-esc	JAC	CJH	JAC
	Dwn.	Chkd.	Dign.
YY.MM.DD			

Permit-Seal



Client/Project

TRICAR DEVELOPMENTS INC.

1242, 1250, 1260 GORDON STREET
& 9 VALLEY ROAD
GUELPH, ON

Title

EROSION & SEDIMENT CONTROL PLAN

Project No.
161413684

Drawing No.
GP-2

Scale
1:400

Sheet
6 of 7

Revision
0

Liability Note:

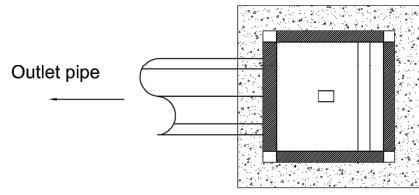
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Notes

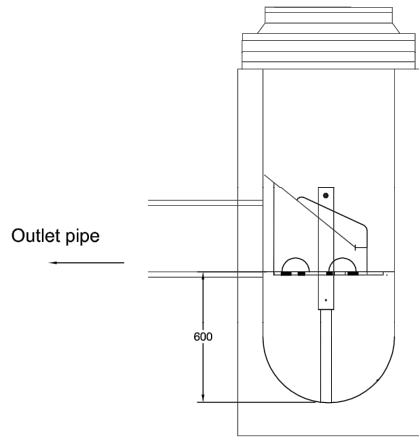
- CITY OF GUELPH BENCHMARK 225
ELEVATION 338.665 LOCATION: 11221 GORDON STREET
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Legend

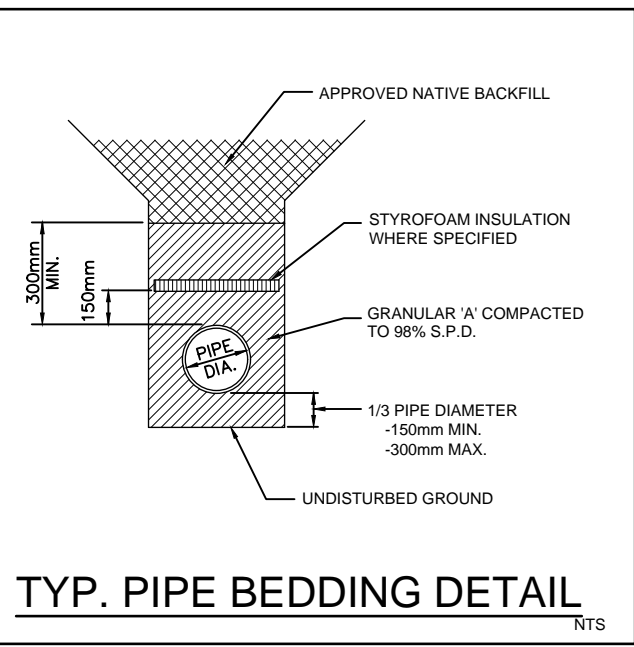
- Notes
- CB Shield can be installed at any time. In a non frozen condition.
 - The frame and cover should be well aligned with the catchbasin for proper installation
 - The catchbasin sump must be clean before installation
 - The grate should be at the same level as the standing water in the sump.



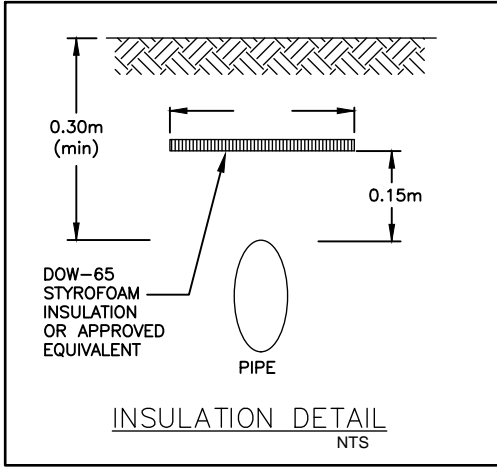
Top view



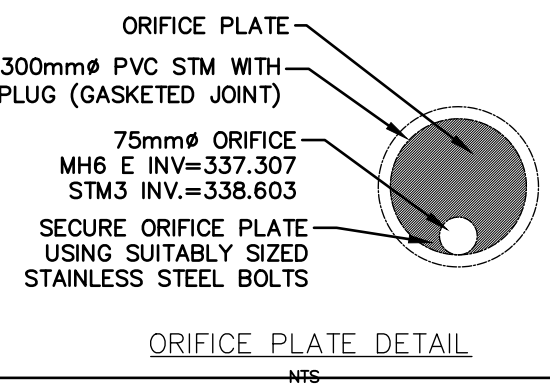
Profile view



TYP. PIPE BEDDING DETAIL



INSULATION DETAIL



ORIFICE PLATE DETAIL

CB Shield (600mm Sump)

UNDERGROUND STORAGE AND INFILTRATION TRENCHES

- PRIOR TO INSTALLATION
- EFFORTS SHOULD BE MADE TO AVOID COMPACTION BY NOT USING THE FACILITY LOCATION AS:

- LAYDOWN OR STOCKPILE LOCATIONS;
- EQUIPMENT STORAGE;
- TRAFFIC FLOW OR SITE ACCESS.

- MATERIAL TO BE USED IN THE CONSTRUCTION OF THE FACILITY SHOULD NOT BE BROUGHT ON SITE PRIOR TO IT BEING NEEDED. IF THIS MATERIAL IS ON SITE PRIOR TO FINAL PLACEMENT, IT SHALL BE STOCKPILED SEPARATELY FROM ANY OTHER CONSTRUCTION MATERIALS AND ADEQUATELY PROTECTED (AS DIRECTED BY THE LID INSPECTOR).

2. INSTALLATION

- TRENCH FLOOR TO BE SCARIFIED TO A DEPTH OF 0.15M UNLESS THE LID INSPECTOR DIRECTS GREATER DEPTHS OF SCARIFICATION.
- ONCE THE AREA IS SCARIFIED, AT LEAST 2 LOCATIONS IN EACH FACILITY ARE TO BE TESTED FOR IN-SITU INFILTRATION RATE. ADDITIONAL SCARIFICATION MAY BE REQUIRED FOLLOWING THESE TESTS, AFTER WHICH THE TESTS SHOULD BE COMPLETED AGAIN IN OTHER LOCATIONS.
- SHOULD THE TRENCH WORK BE COMPLETED IN ADVANCE ON THE INSTALLATION OF THE GEOTEXTILE AND STONE, THE TRENCH SHOULD BE PROTECTED IN THE EVENT OF RAIN.
- THE OVERLAP ON THE GEOTEXTILE SHALL BE A MINIMUM OF 0.3M. THE GEOTEXTILE SHALL BE WRAPPED OVERTOP OF THE STONE STORAGE AT THE MINIMUM OVERLAP.
- ALL STONE INSTALLED IS TO BE TRIPLE WASHED TO PREVENT DUST FROM CLOGGING THE FABRIC AND SOIL PORES. STONE IS TO BE INSTALLED IN LIFTS OF 0.3M MAXIMUM. THESE LIFTS SHOULD BE LIGHTLY WORKED TO SETTLE THE STONE BUT MECHANICAL COMPACTION IS NOT TO BE USED.
- ALL UNDERDRAIN PIPES ARE TO BE WRAPPED IN A SEDIMENT SOCK.
- IF THE FACILITY IS COMPLETED PRIOR TO SITE STABILIZATION, RUNOFF SHOULD BE DIRECTED AWAY FROM THE FACILITY TO PREVENT HEAVY SEDIMENTATION. EROSION CONTROLS SHOULD BE INSTALLED AS PER THE DIRECTION OF THE LID INSPECTOR.

3. MAINTENANCE

- REMOVE ANY DEBRIS, GARBAGE, LEAVES, STICKS, OR OTHER ITEMS FROM THE FACILITY INLETS. THIS SHOULD BE DONE BIANNIALLY WITH SPECIAL ATTENTION IN FALL TO REMOVE FALLEN LEAVES;
- REMOVE ACCUMULATED SEDIMENT FROM THE BOTTOM OF THE FACILITY AS NEEDED BY FLUSHING;
- MONITOR PERFORMANCE, OBSERVE WATER DEPTHS IN THE FACILITY DURING RAIN EVENTS BIANNIALLY.

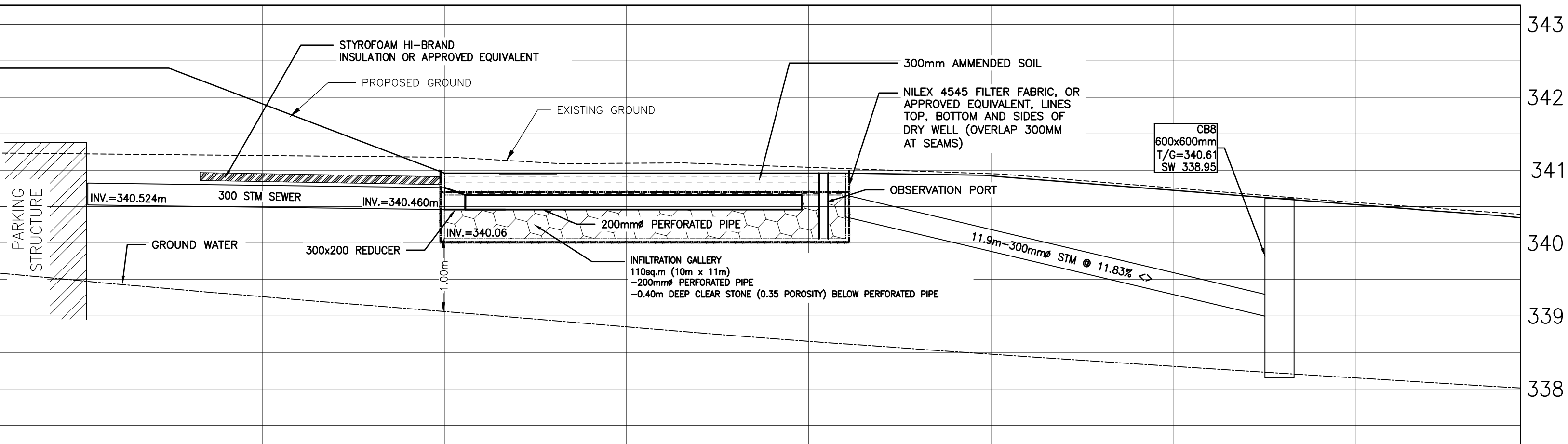
OIL GRIT SEPARATOR

1. INSTALLATION

- ONCE INSTALLED, THE INLET TO THE OGS SHOULD BE SURROUNDED BY A FILTER SOCK RING TO REMOVE THE HEAVIEST SEDIMENT LOADS. THE OGS SHOULD BE INSPECTED WEEKLY DURING CONSTRUCTION AND CLEANED BY VACUUM TRUCK WHEN THE SUMP IS 50% FULL OF SILT.
- WHEN CONSTRUCTION IS COMPLETE, THE OGS SHOULD BE CLEANED OF ANY SEDIMENT.

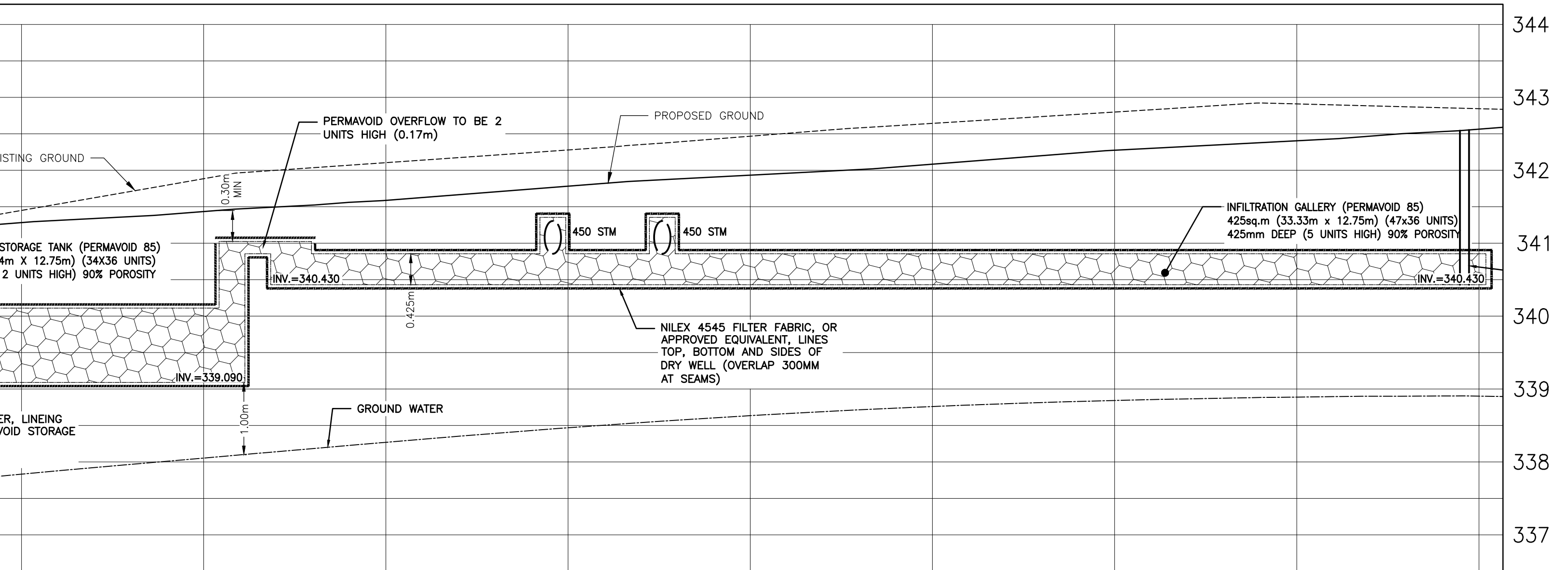
2. MAINTENANCE

- INSPECTION SHOULD BE DONE BIANNIALLY;
- REMOVE ACCUMULATED SEDIMENT FROM THE BOTTOM OF THE FACILITY WHEN 50% FULL BY VACUUM TRUCK;
- REMOVAL OF ANY OILS OR FLOATABLES AS NEEDED, WITH SPECIAL ATTENTION PAID IN THE EVENT OF A DELICTERIOUS SPILL.



EAST INFILTRATION TRENCH - SECTION A-A

VERT - 1:50 HORIZ - 1:100



SOUTH INFILTRATION TRENCH - SECTION B-B

VERT - 1:50 HORIZ - 1:100

A. GENERAL:

- BUILDINGS ARE NOT TO BE SITED WITH THIS DRAWING.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH THE SITE SERVICING PLANS (SSP SERIES) & THE GRADING PLAN (GP SERIES) PREPARED BY STANTEC CONSULTING.
- THESE PLANS FOR CONSTRUCTION ONLY WHEN APPROVED BY THE CITY OF GUELPH AND SEALED BY THE ENGINEER.
- THE CONTRACTOR MUST CHECK AND VERIFY DIMENSIONS, OBTAIN ALL UTILITY LOCATES AND OBTAIN ALL REQUIRED PERMITS/ACCESSES AND VERIFY ELEVATIONS OF EXISTING SERVICES BEFORE PROCEEDING WITH ANY WORK.
- ALL WORK WITHIN THE RIGHTS-OF-WAY OR CITY EASEMENTS ARE TO BE INSTALLED BY CITY OF GUELPH AT THE OWNERS EXPENSE UNLESS OTHERWISE NOTED.
- ANY PROPOSED CHANGES SHALL BE APPROVED BY THE ENGINEER AND CITY OF GUELPH.
- ALL UNDERGROUND SERVING TO BE INSPECTED BY STANTEC CONSULTING LTD. AND CERTIFIED FOR THE CITY OF GUELPH. CONTRACTOR SHALL COORDINATE WITH STANTEC AND SHALL CONTACT SAME AT LEAST 48 HOURS PRIOR TO INSTALLATION OF SERVICES.
- CONTRACTOR SHALL COORDINATE WITH STANTEC AND SHALL CONTACT SAME AT LEAST 48 HOURS PRIOR TO INSTALLATION OF SERVICES.
- ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (LATEST EDITION).
- THE PROPERTY OWNER IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY TO CITY OF GUELPH STANDARDS.
- IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENCROACH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE DEVELOPMENT & TECHNICAL SERVICES ENGINEERING DEVELOPMENT DIVISION, PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.

B. UNDERGROUND SERVICES:

- CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING SANITARY AND STORM SEWERS AND WATERMANS PRIOR TO COMMENCING SITE WORK AND SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN EXISTING AND PROPOSED SERVICES.
- THE CONTRACTOR TO MAKE CONNECTIONS TO SERVICES AT STUB LOCATION FOR SANITARY, STORM SEWERS, WATERMAIN AND TO RESTORE ALL OFF-SITE AFFECTED PROPERTY TO ORIGINAL CONDITION.
- ON-SITE SERVICING SHALL NOT BE UNDERTAKEN PRIOR TO COMPLETION OF SERVICE CONNECTIONS WITHIN THE ROAD R.O.W.'S.
- ALL UNDERGROUND SERVICES TO BE IN COMPLIANCE WITH THE LATEST REVISED BUILDING CODE, CITY OF GUELPHS ENGINEERING STANDARDS, ONTARIO PROVINCIAL STANDARDS (OPSS, OPSD) AND WITH THE LATEST REGULATIONS OF THE ONTARIO PLUMBING CODE AND SUPPLEMENT SPECIFICATION FOR MUNICIPAL SERVICES (DGSSMS) AND INSPECTED BY CITY STAFF/CONSULTANT PRIOR TO BACKFILLING.
- UNDERGROUND SERVICES TO TERMINATE 1.5m FROM BUILDING LINE, PLUGGED OR CAPPED C/W MARKER EXTENDING FROM INVERT TO 1.0m ABOVE FINISHED GRADE.
- ALL BEDDING TO BE AS NOTED BELOW. TRENCH BACKFILL TO BE APPROVED NATIVE MATERIAL COMPACTED IN 200mm MAX. LIFTS TO 95% STANDARD PROCTOR DENSITY.
- ALL SERVICES SHALL BE TESTED AS SPECIFIED IN THE APPLICABLE OPS (OPS 410 & 441).
- ALL SERVICES, UTILITIES AND CATCHBASIN LEADS ARE TO BE SUPPORTED AS PER OPSD 1007.01 DURING TRENCHING ACTIVITIES. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES PRIOR TO AND DURING CONSTRUCTION. LOCATION OF EXISTING UTILITIES TO BE VERIFIED IN THE FIELD.
- ANY UTILITY RELOCATION DUE TO THIS DEVELOPMENT TO BE UNDERTAKEN AT THE EXPENSE OF THE OWNER/DEVELOPER.

C. SEWERS/APPERTENANCES:

- STORM SEWERS:
 - LESS THAN 200mm - PVC DR-28
 - 200mm TO 375mm - PVC DR-35
 - PVC RIBBED PIPE (ULTRA-RIB OR EQUIVALENT)
 - CL-3 CONCRETE
 - 450mm TO 600mm - PVC RIBBED PIPE (ULTRA-RIB OR EQUIVALENT)
 - 650 CONCRETE
 - 650mm TO 800mm - 650 CONCRETE
- SANITARY SEWERS:
 - LESS THAN 200mm - PVC DR-28
 - 200mm OR LARGER - PVC DR-35
 - 2.5m MINIMUM COVER FOR SANITARY SEWERS.
- SEWER BEDDING:
 - CITY OF GUELPH SD-29
 - 150mm (MIN) GRAN 'A' TO 98% S.P.D.
- STORM MANHOLES:
 - OPSD 701.010 (1200mm)
 - OPSD 701.011 (1500mm)
 - OPSD 701.012 (1800mm)
 - OPSD 701.013 (2400mm)
 - OPSD 701.014 (3000mm)
- SANITARY MAINTENANCE HOLE:
 - OPSD 701.010 (1200mm)
- MAINTENANCE HOLE BENCHING:
 - CITY OF GUELPH SD-44
 - CBAH'S WITH AN OUTLET PIPE GREATER THAN 450mm SHOULD BE BENCHED. 450mm OR LESS SHALL BE PROVIDED WITH A 600mm SUMP.
- CATCHBASINS/CATCHBASIN LEADS:
 - OPSD 705.01 (SINGLE)
 - OPSD 705.02 (DOUBLE)
 - OPSD 705.03 (DITCH INLET - 3:1 SLOPE)
 - MINIMUM LEAD DIAMETER, 200mm FOR SINGLE, 300mm FOR DOUBLE CATCHBASINS.
- FRAMES AND GRATES/COVERS:
 - OPSD 400.10 (CPS & CBAH'S)
 - OPSD 401.01 TYPE 'A' (SANITARY AND STORM MH'S)
 - CITY OF GUELPH SD-15 (RCBS)
 - CITY OF GUELPH SD-16 (RCBS)
 - CITY OF GUELPH SD-9 (SAFETY GRATE FOR MH'S)
 - ALL FRAMES ON STRUCTURES TO BE SET USING PRECAST CONCRETE ADJUSTMENT UNITS

D. WATER SERVICES/APPERTENANCES:

- WATERMAIN:
 - 100mm TO 300mm - AWWA C-900 PVC SDR-18
 - 350mm TO 600mm - AWWA C905 PVC SDR-25
 - 2.0m MINIMUM COVER
 - FITTINGS TO AWWA C-907
 - WHERE CONFLICT ARISES AT WATERMAIN/SERVICE CROSSING OTHER UNDERGROUND SERVICES, WATERMAIN/SERVICES SHALL BE LOWERED TO MAINTAIN 0.50m VERTICAL SEPARATION.
- PIPE BEDDING:
 - CITY OF GUELPH SD-29
 - 150mm (MIN) GRANULAR 'A' 98% S.P.D.
- THRUST BLOCKING:
 - CITY OF GUELPH SD-27
- TRACER WIRE:
 - CITY OF GUELPH SD-54A
- HYDRANTS:
 - CITY OF GUELPH SD-25A (OPEN RIGHT)

- VALVES:
 - ALL VALVES TO OPEN COUNTER-CLOCKWISE AND COMPLY WITH A.W.W.A. SPEC.
 - CITY OF GUELPH SD-24
- WATER SERVICES:
 - 25mm TYPE K COPPER PIPING WET TAPPED TO PVC WATERMAIN WITH APPROVED SADDLE
 - CITY OF GUELPH SD-54B
- WATER METERS:
 - BUILDING UNITS TO HAVE INDIVIDUAL WATER METERS TO THE SATISFACTION OF CITY OF GUELPH WATERWORKS DEPARTMENT
- MAINTAIN SPATIAL SEPARATION FOR SITE SERVICES PER BUILDING CODE PART 7.3.5.6
- ALL NEW WATER PIPING INSTALLATIONS AS PER AWWA C651-05
- CATHODIC PROTECTED IN ACCORDANCE WITH CITY OF GUELPH STANDARDS
- A WATERMAIN COMMISSIONING PLAN IN ACCORDANCE WITH DGSSMS WILL BE REQUIRED.

E. GRADING:

- COMPLETE ALL EXCAVATION, GRADING, TRIMMING AND COMPACTION AS REQUIRED TO FACILITATE THE WORK. ALL SUBGRADE AREAS SHALL BE PROOF ROLLED TO 98% S.D.P. PRIOR TO GRANULAR SUBGRADE PLACEMENT.
- DISPOSE OF ALL SURPLUS AND UNSUITABLE MATERIAL OFFSITE.
- SAFELY CUT ASPHALT IN NEAR LINES AT ALL MATCH LINES.
- MATCH EXISTING GRADES AT ADJACENT PROPERTY LINES.
- TRANSITION SLOPES TO BE MAXIMUM 3:1 (HORIZONTAL TO VERTICAL) UNLESS OTHERWISE NOTED.

F. SURFACE WORKS:

- CURBS:
 - OPSD 600.040 (CONCRETE BARRIER CURB WITH STANDARD GUTTER)
 - OPSD 600.070 (CONCRETE BARRIER CURB WITH STANDARD GUTTER, TWO STAGE CONSTRUCTION)
 - OPSD 600.080 (CONCRETE BARRIER CURB WITH NARROW GUTTER)
 - OPSD 600.110 (CONCRETE BARRIER CURB)
- ASPHALT PAVEMENT: (PARKING AREA)
 - 40mm HL-3 (SURFACE ASPHALT) 97% MARSHALL
 - 50mm HL-4 (BASE ASPHALT) 97% S.P.D.
 - 150mm GRANULAR 'A' BASE 100% S.P.D.
 - 300mm GRANULAR 'B' SUB-BASE 100% S.P.D.
- ASPHALT PAVEMENT: (ABOVE PARKING GARAGE)
 - CONCRETE DECK
 - ROOFING MEMBRANE
 - PROTECTION BOARD
 - 40mm HL-3 (SURFACE ASPHALT) 97% MARSHALL
 - 50mm HL-4 (BASE ASPHALT) 97% S.P.D.
- PAVEMENT: (HEAVY DUTY/FIRE ROUTE)
 - 50mm HL-3 SURFACE ASPHALT 97% MARSHALL - (WHERE IN PLACE)
 - 60mm HL-4 BASE ASPHALT 97% MARSHALL
 - 150mm GRANULAR 'A' 100% S.P.D.
 - 400mm GRANULAR 'B' 100% S.P.D.
 - SAW CUT CLEAN EDGES AT ALL MATCH LINES AND APPLY TACK COAT.
- CONCRETE SIDEWALK:
 - CITY OF GUELPH SD-2, 1.5m WIDE (CONCRETE SIDEWALK)
 - CITY OF GUELPH SD-4 (SIDEWALK RAMPS)
- SITE AREAS DISTURBED BY CONSTRUCTION AND NOT INDICATED FOR REMOVAL TO BE RESTORED TO ORIGINAL CONDITIONS.

G. EROSION CONTROL:

- ALL SILT FENCING TO BE INSTALLED PRIOR TO COMMENCEMENT OF ANY AREA GRADING, EXCAVATION OR DEMOLITION.
- EROSION CONTROL FENCE TO BE PLACED AROUND THE BASE OF ALL STOCKPILES. ALL STOCKPILES TO BE KEPT A MINIMUM OF 2.5m FROM ALL PROPERTY LINES.
- 25-250 FILTER FABRIC UNDER CONSTRUCTION VEHICLE ENTRANCE TO CONSIST OF CLEANED OR REPLACED 200mm THICK, 50mm STONE. STONE TO BE TAKEN UP AND WHEN ACCUMULATED COVER 50% OF TOP OF STONE.
- EROSION PROTECTION TO BE PROVIDED AROUND ALL STORM AND SANITARY MANHOLES AND/OR CATCHBASINS.
- ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE DEVELOPMENT PROGRESSES. CONTRACTOR TO PROVIDE ALL ADDITIONAL EROSION CONTROL STRUCTURES.
- EROSION CONTROL STRUCTURES TO BE MONITORED REGULARLY BY STANTEC CONSULTING LTD. AND ANY DAMAGE REPAIRED IMMEDIATELY. SEDIMENTS TO BE REMOVED WHEN ACCUMULATIONS REACH A MAXIMUM OF ONE THIRD (1/2) THE HEIGHT OF THE SILT FENCE.
- ALL EROSION CONTROL STRUCTURES TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN RE-STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.
- NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY STANTEC CONSULTING LTD. AND THE CITY OF GUELPH'S WORKS DEPARTMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SEDIMENTS FROM THE MUNICIPAL ROAD AND SIDEWALKS AT THE END OF EACH WORK DAY.
- MUD MATS TO BE PROVIDED ON SITE AT ALL LOCATIONS WHERE CONSTRUCTION VEHICLES EXIT THE SITE. MUD MATS SHALL BE A MINIMUM OF 3.0m WIDE, 15.0m LONG (LENGTH MAY VARY DEPENDING ON SITE LAYOUT) AND 0.5m DEEP AND SHALL CONSIST OF 20mm CLEAR STONE MATERIAL OR APPROVED EQUIVALENT. CONTRACTOR TO ENSURE ALL VEHICLES LEAVE THE SITE VIA THE MUD MAT AND THAT THE MAT IS MAINTAINED IN A MANNER TO MAXIMIZE ITS EFFECTIVENESS AT ALL TIMES.
- STANTEC CONSULTING LTD. TO MONITOR THE SITE DEVELOPMENT TO ENSURE ALL EROSION CONTROLS ARE INSTALLED AND MAINTAINED TO CITY REQUIREMENTS. CONTRACTOR TO COMPLY WITH THE ENGINEER'S INSTRUCTIONS TO INSTALL, MODIFY, OR MAINTAIN EROSION CONTROL WORKS.

H. RETAINING WALLS:

- RETAINING WALL TO BE CONSTRUCTED AS DESIGNED BY OTHERS. APPROPRIATE CONSTRUCTION DETAILS SHALL BE PROVIDED FOR RETAINING WALLS HIGHER THAN 0.80m. DETAILS SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER UPON APPROVAL. GUARD RAIL IS REQUIRED WHEN HEIGHT EXCEEDS 0.80m.
- CONTRACTOR TO CONTACT GEOTECHNICAL ENGINEER 48 HOURS PRIOR TO CONSTRUCTION OF RETAINING WALL TO ALLOW FOR INSPECTION OF SOIL CONDITIONS.
- ANY CHANGES IN WALL HEIGHT MUST BE APPROVED BY THE ENGINEER.
- BUILDING PERMIT MUST BE OBTAINED FOR RETAINING WALL.

I. DEWATERING NOTES:

- PUMPED GROUNDWATER WILL BE DIRECTED OFFSITE VIA SWALE AND/OR TEMPORARY PIPE TO POPPY DRIVE EAST, WHERE THE WATER WILL BE DISCHARGED TO EITHER THE STORM OR SANITARY SEWER SYSTEM.
- DISCHARGE TO THE STORM AND/OR SANITARY SEWER SYSTEM MUST ADHERE TO THE QUALITY REQUIREMENTS AS PER CITY OF GUELPH BY-LAW NUMBER (1996)-15202.

J. MISCELLANEOUS:

- WHERE COVER OVER SEWERS IS LESS THAN 1.2m IN PAVED AREAS, OR LESS THAN 0.80m IN GRASSED AREAS, INSTALL INSULATION AS PER DETAIL. INSULATION TO BE 60mm THICK x 1800mm WIDE UNLESS OTHERWISE NOTED. INSTALL LONGITUUDINALLY OVER CENTERLINE OF PIPE WITH OVERLAPPING JOINTS.
- IT IS THE SITE OWNERS' RESPONSIBILITY TO ENSURE THAT ALL SEDIMENT CONTROLS ARE IMPLEMENTED AND MAINTAINED IN ACCORDANCE WITH THE ABOVE CRITERIA.

Client/Project

TRICAR DEVELOPMENTS INC.

1242, 1250, 1260 GORDON STREET
& 9 VALLEY ROAD
GUELPH, ON

Title

NOTES & DETAILS

Project No.

161413684

Drawing No.

SSP-5

Scale

0 1 3 5m
1:100

Sheet

7 of 7

Revision

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File Name:	161413684_c-df	JAC	CJH	JAC	21.07.23
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