

TOWNSHIP OF CENTRE WELLINGTON (FERGUS)  
N.T.S.

- NOTES:**
1. TOPOGRAPHIC AND EXISTING FEATURES SURVEY ON-SITE COMPLETED BY VAN HARTEN SURVEYING INC., RECEIVED 2022-08-29 AND 2024-03-18.
  2. SITE PLAN PREPARED BY GSP GROUP, DATED 2024-08-09
  3. BEARINGS ARE GRID BEARINGS AND ARE DERIVED FROM GPS OBSERVATIONS AND ARE REFERRED TO THE UTM PROJECTION, ZONE 17, NAD 83 (CSRS-2010) ADJUSTMENT (PROVIDED BY VAN HARTEN SURVEYING INC.)
  4. DISTANCES SHOWN ON THIS PLAN ARE ADJUSTED GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY AN AVERAGED COMBINED SCALE FACTOR OF 0.99976. (PROVIDED BY VAN HARTEN SURVEYING INC.)
  5. COORDINATES ON THIS PLAN ARE UTM, ZONE 17, NAD83 (CSRS-2010) ADJUSTMENT AND ARE BASED ON GPS OBSERVATIONS FROM A NETWORK OF PERMANENT GPS REFERENCE STATIONS. (PROVIDED BY VAN HARTEN SURVEYING INC.)

- LIST OF DRAWINGS**
- 01 - EXISTING CONDITIONS AND REMOVALS PLAN
  - 02 - CONCEPTUAL SITE SERVICING PLAN
  - 03 - CONCEPTUAL GRADING PLAN
  - 04 - STORMWATER MANAGEMENT PLAN AND DETAILS
  - 05 - EROSION AND SEDIMENT CONTROL PLAN

SITE PLAN INFORMATION	SURVEYOR INFORMATION
GSP GROUP 72 VICTORIA STREET SOUTH, SUITE 20 KITCHENER, ON N2G 4Y9 PHONE: (519) 569-8883 WEBSITE: www.gspgroup.ca	VAN HARTEN SURVEYING INC. 2106 GORDON STREET QUELPH, ON, N1L 1G6 PHONE: (519) 821-2783 WEBSITE: www.vanharten.com

**BENCHMARKS** (PROVIDED BY VAN HARTEN SURVEYING INC.)

BENCHMARK #	DESCRIPTION	ELEVATION
1	CUT CROSS ON SIDEWALK NEAR NORTHWEST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF	419.60m
2	CUT CROSS ON SIDEWALK NEAR NORTHEAST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF	419.10m

No.	DATE	ISSUE/REVISION	INITIAL
2	2024-10-01	ISSUED FOR APPROVAL	A.E.K.
1	2024-09-05	ISSUED FOR REVIEW	A.E.K.



TOWNSHIP OF CENTRE WELLINGTON  
WRICHTHAVEN HOMES  
079 SIDEROAD 19 RESIDENTIAL DEVELOPMENT  
FERGUS, ONTARIO

EXISTING CONDITIONS AND REMOVALS



DESIGNED BY: BL/PL	DATE: JUNE 2024	CHECKED BY: A.E.K.
DRAWN BY: BL	PROJECT No. 2401073	DRAWING No. 1
SCALE: 1:300	5.0m 10.0m 15.0m 20.0m	

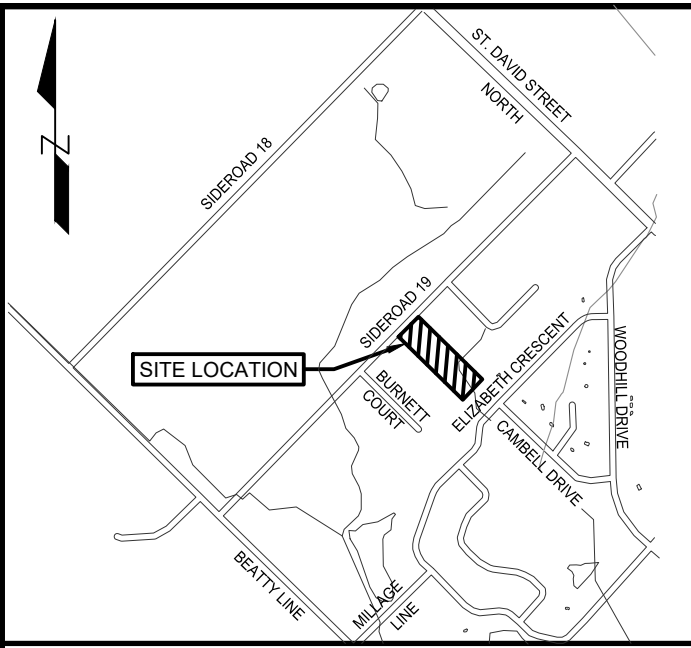
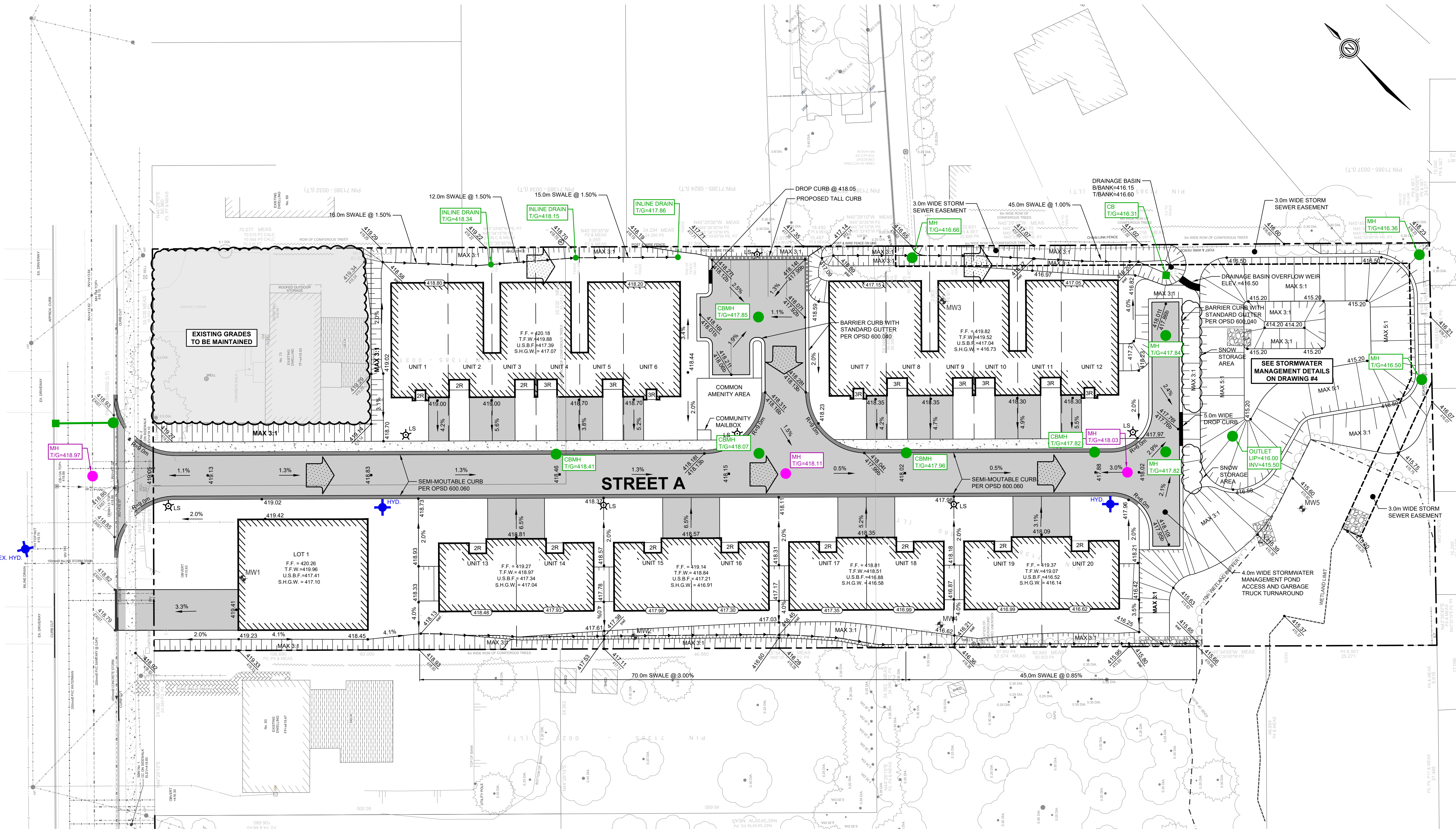
**GENERAL NOTES**

1. DRAWINGS ARE NOT TO BE SCALED.
2. ALL DIMENSIONS TO BE CHECKED AND VERIFIED ON THE SITE PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER BEFORE PROCEEDING.
3. UNLESS OTHERWISE NOTED ON THE DRAWINGS THE STANDARD TOWN, REGION (OR COUNTY), MTO AND OPSD DRAWINGS AND OPSS ARE TO CONSTITUTE PART OF THIS CONTRACT AND DRAWINGS.
4. REFER TO O.B.C. - 2012 STANDARDS AND SPECIFICATIONS AND TOWN SPECIFICATIONS AND STANDARD DRAWINGS FOR LIST OF APPROVED MANUFACTURERS AND MATERIALS.
5. EXISTING STRUCTURES ARE NOT TO BE DISTURBED, NOR ENCROACH ON ADJACENT PROPERTIES UNLESS INSTRUCTED BY THE ENGINEER.
6. THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNERS CONTRACTOR FROM OBTAINING, BUT NOT LIMITED TO THE FOLLOWING PERMITS, ROAD CUTS, SEWER PERMITS, RELOCATION OF SERVICES, ENCROACHMENT AGREEMENTS, APPROACH APPROVAL PERMITS, ETC.
7. PRIOR TO CONSTRUCTION, THE ENGINEER IS TO BE NOTIFIED BY THE OWNER AND THE CONTRACTOR AS TO THE EXTENT OF THE CONSTRUCTION LIMITS THEY PROPOSE. THE TOWN, BUILDING AND PLUMBING OFFICIALS ARE TO BE NOTIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
8. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE SERVICING PLANS, LANDSCAPE PLAN, SITE ELECTRICAL PLANS, AND ANY OTHER PLANS OR DRAWINGS WHICH DEPICT WORKS THAT ARE PROPOSED FOR THIS SITE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS. ALL SIGNS, ETC. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS FOR THE TOWN AND THE MTO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR ONTARIO.
10. THE CONTRACTOR SHALL ENDEAVOUR TO PREVENT MUD TRACKING ONTO EXISTING RIGHT-OF-WAYS AND SHALL PROVIDE FOR CLEANUP AT HIS OWN EXPENSE AS DIRECTED BY THE TOWN. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO CONTROL DUST ON THE PROJECT AND HE SHALL PROVIDE CONTROLLING MEASURES AS DIRECTED BY THE TOWN.
11. 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.
12. ALL SERVICES AND/OR UTILITIES LOCATED ON CONCRETE SIDEWALKS OR CURBS TO BE ISOLATED FROM THE SIDEWALK OR CURB AS PER OPSD 310.040.
13. ALL UTILITIES SHALL BE LOCATED, SUPPORTED AND PROTECTED TO THE SATISFACTION OF THE UTILITY COMPANY DURING THE CONSTRUCTION PERIOD.
14. THE CONTRACTOR SHALL RECTIFY ALL DISTURBED AREAS TO ORIGINAL CONDITION OR BETTER AND TO THE SATISFACTION OF THE TOWN.
15. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ANY NECESSARY PERMITS FOR ANY MUNICIPAL ROAD CUTS FOR THE INSTALLATION OF SANITARY, STORM, AND WATER SERVICE CONNECTIONS, ROAD CUTS TO BE RESTORED AS PER TOWN SATISFACTION.

16. BLASTING WILL NOT BE ALLOWED UNLESS AUTHORIZED BY THE TOWN.
17. ANY UTILITY RELOCATIONS DUE TO THIS DEVELOPMENT TO BE UNDERTAKEN AT THE EXPENSE OF THE OWNER/DEVELOPER.
18. ALL DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE AND THE PROPERTY OF THE ENGINEER WHICH MUST BE RETURNED AT THE COMPLETION OF WORK.
19. DRIVEWAYS SHALL BE SETBACK A MINIMUM CLEARANCE OF 1.0m FROM ALL ABOVEGROUND SERVICES OR OTHER OBSTRUCTIONS.
20. ALL CONSTRUCTION WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
21. ANY CONFLICTS WITH EXISTING SERVICES SHALL BE RECTIFIED AT THE OWNER'S EXPENSE.

**LEGEND**

	PROPERTY LINE		EX. CONIFEROUS AND DECIDUOUS TREES
	EX. SANITARY SEWER		EX. HYDRO POLE AND GUY WIRE
	EX. STORM SEWER		EX. HYDRO LIGHT POLE
	EX. CATCH BASIN		EX. FLAG POLE
	EX. WATERMAIN		EX. BOREHOLE & BOREHOLE / MONITORING WELL
	EX. FIRE HYDRANT		
	EX. DITCH		
	EX. FENCE LINE		
	EX. CONTOURS		
	EX. HEDGE		



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WRIGHTHAVEN HOMES  
079 SIDEROAD 19 RESIDENTIAL DEVELOPMENT  
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**CONCEPTUAL GRADING PLAN**

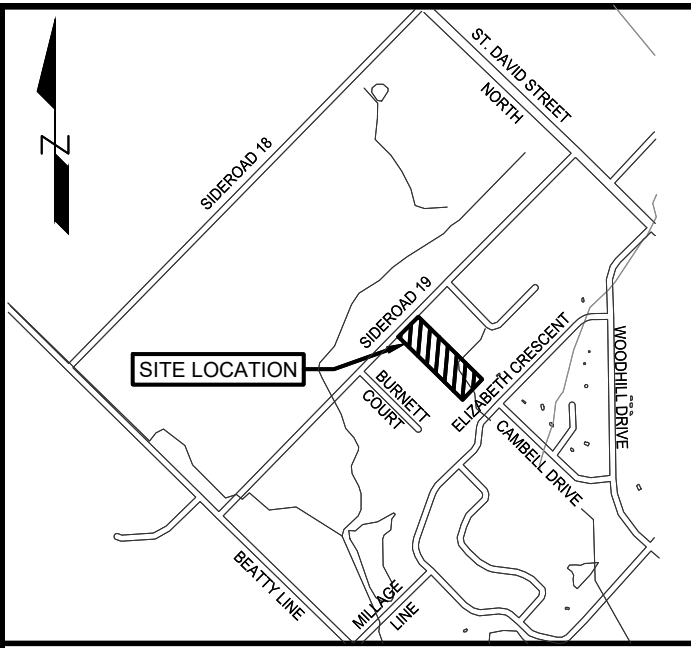
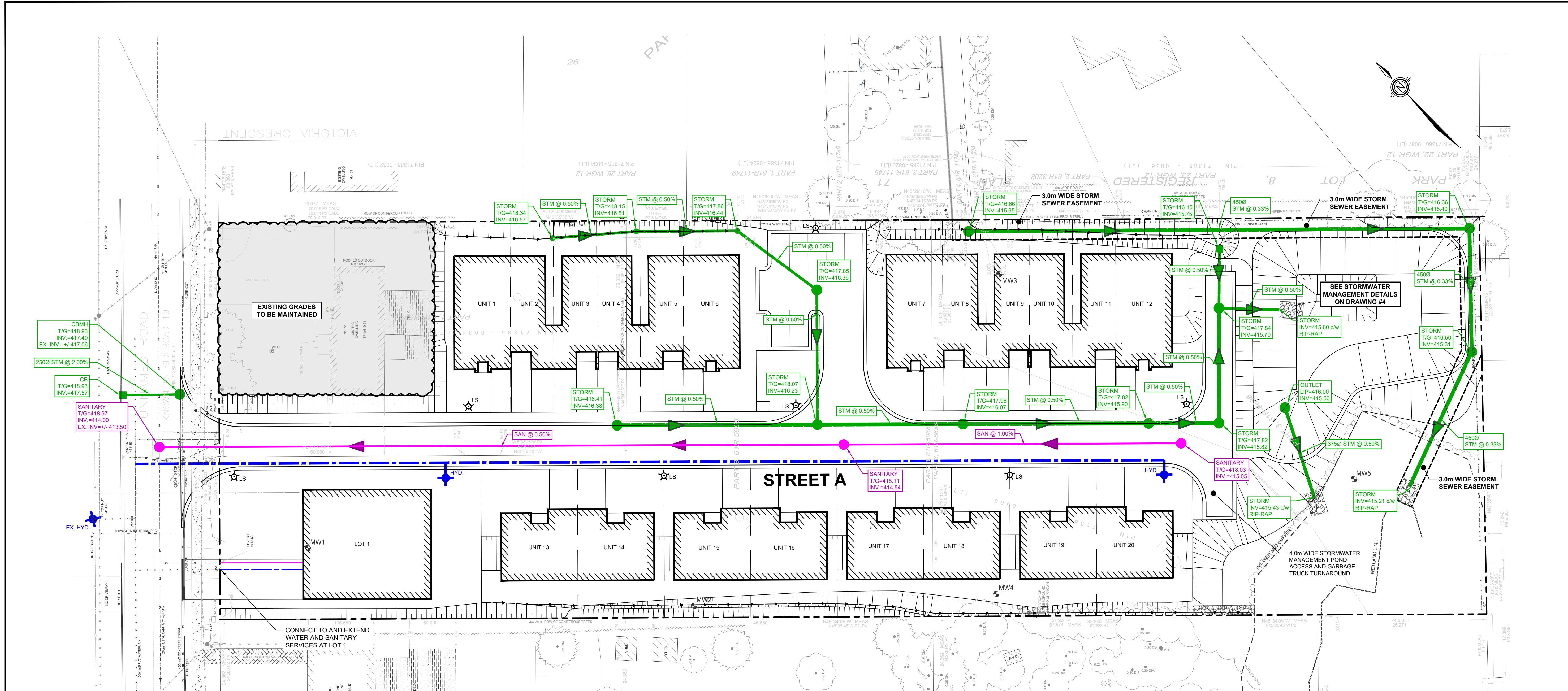


DESIGNED BY: BL/PL	DATE: JUNE 2024	CHECKED BY: AEK
DRAWN BY: BL	PROJECT No: 2401073	DRAWING No: 2
SCALE: 1:300		

- GRADING**
- THE GRADING PLAN IS TO BE READ WITH THE SITE SERVICES DRAWINGS.
  - CONTRACTOR TO RESTORE AREAS ON PUBLIC R.O.W. OR ADJACENT LANDS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.
  - ALL DRIVEWAY AND GRADING MATERIAL AND CONSTRUCTION METHODS MUST CONFORM TO CURRENT TOWNSHIP STANDARDS AND SPECIFICATIONS.
  - ALL FILL WITHIN THE SITE TO BE COMPACTED TO A MIN. OF 98% SMI PROCTOR DRY DENSITY. ALL FILL WITHIN THE SITE PARKING AREA TO BE COMPACTED TO A MIN. OF 95% SPD. THE SUITABILITY OF ALL FILL MATERIALS ARE TO BE CONFIRMED BY A RECOGNIZED SOILS CONSULTANT TO THE DIRECTOR OF PUBLIC WORKS PRIOR TO INSTALLATION OF ANY ROAD BASE MATERIALS.
  - LANDSCAPING SHALL NOT ENCRoACH ON BOULEVARD NOR SHALL BOULEVARD GRADES BE ALTERED.
  - SILT FENCE(S) TO BE INSTALLED AND MAINTAINED TO PREVENT SILT FLOWING ONTO ADJACENT LANDS. SILTATION CONTROL SHALL BE ERECTED PRIOR TO ANY GRADING OR CONSTRUCTION AND SHALL BE IN GOOD REPAIR THROUGHOUT THE CONSTRUCTION AND GRADING PHASES.
  - ANY CHANGES IN GRADES, CATCH BASINS, SERVICES LATERALS, STORM AND SANITARY SEWERS REQUIRE THE APPROVAL OF GM BLUEPLAN ENGINEERING LIMITED.
  - THE CONTRACTOR SHALL RECTIFY ALL DISTURBED AREAS TO ORIGINAL CONDITION OR BETTER AND TO THE SATISFACTION OF GM BLUEPLAN ENGINEERING LIMITED.
  - ALL LANDSCAPING TO BE INSTALLED AS SOON AS POSSIBLE OR PRIOR TO THE END OF THE FIRST GROWING SEASON. LANDSCAPING TO BE MAINTAINED UNTIL IT IS ESTABLISHED.
  - ALL COMPACTION TO BE CERTIFIED BY A GEOTECHNICAL CONSULTANT.
  - ALL CURBS ARE TO BE 150mm ABOVE THE PROPOSED GUTTER LINE (GL) UNLESS NOTED OTHERWISE.
  - PAVEMENT GRADE SHALL BE MIN. 0.5% MAX. 8%.
  - DRAINAGE SWALE GRADE SHALL BE MIN. 2% MAX. 6%.
  - SLOPES IN LANDSCAPE AREAS AND ON BERMS SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS NOTED OTHERWISE.

**NOTE: THE SITE LIGHTING SHOWN ON THIS PLAN IS PRELIMINARY AND WILL BE CONFIRMED AS PART OF THE DETAILED SITE LIGHTING / PHOTOMETRIC DESIGN FOR THIS SITE.**

<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>PROPERTY LINE</li> <li>EX. SANITARY SEWER</li> <li>EX. STORM SEWER</li> <li>EX. CATCH BASIN</li> <li>EX. WATERMAIN</li> <li>EX. FIRE HYDRANT</li> <li>EX. DITCH</li> <li>EX. FENCE LINE</li> <li>EX. CONTOURS</li> <li>EX. HEDGE</li> </ul>	<ul style="list-style-type: none"> <li>EX. CONIFEROUS AND DECIDUOUS TREES</li> <li>EX. HYDRO POLE AND GUY WIRE</li> <li>EX. HYDRO LIGHT POLE</li> <li>EX. FLAG POLE</li> <li>EX. BOREHOLE &amp; BOREHOLE / MONITORING WELL</li> <li>PROP. STORM SEWER STRUCTURE</li> <li>PROP. SANITARY SEWER STRUCTURE</li> <li>PROP. FIRE HYDRANT</li> <li>PROP. WATER VALVE</li> </ul>	<ul style="list-style-type: none"> <li>PROP. SWALE</li> <li>WETLAND LIMIT</li> <li>10.0m WETLAND BUFFER</li> <li>DRAINAGE FLOW</li> <li>PROPOSED GRADE</li> <li>CONCEPTUAL LIGHT STANDARD LOCATION</li> <li>MAJOR OVERLAND FLOW ARROW</li> </ul>
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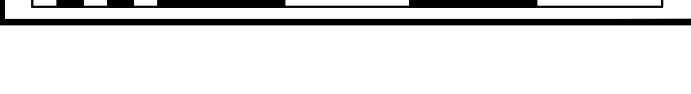
TOWNSHIP OF CENTRE WELLINGTON

WRIGHTHAVEN HOMES  
079 SIDEROAD 19 RESIDENTIAL DEVELOPMENT  
FERGUS, ONTARIO

**CONCEPTUAL SERVICING PLAN**



DESIGNED BY: BL/PL	DATE: JUNE 2024	CHECKED BY: AEK
DRAWN BY: BL	PROJECT No: 2401073	DRAWING No: 3
SCALE: 1:300		



**SERVICING NOTES - STORM**

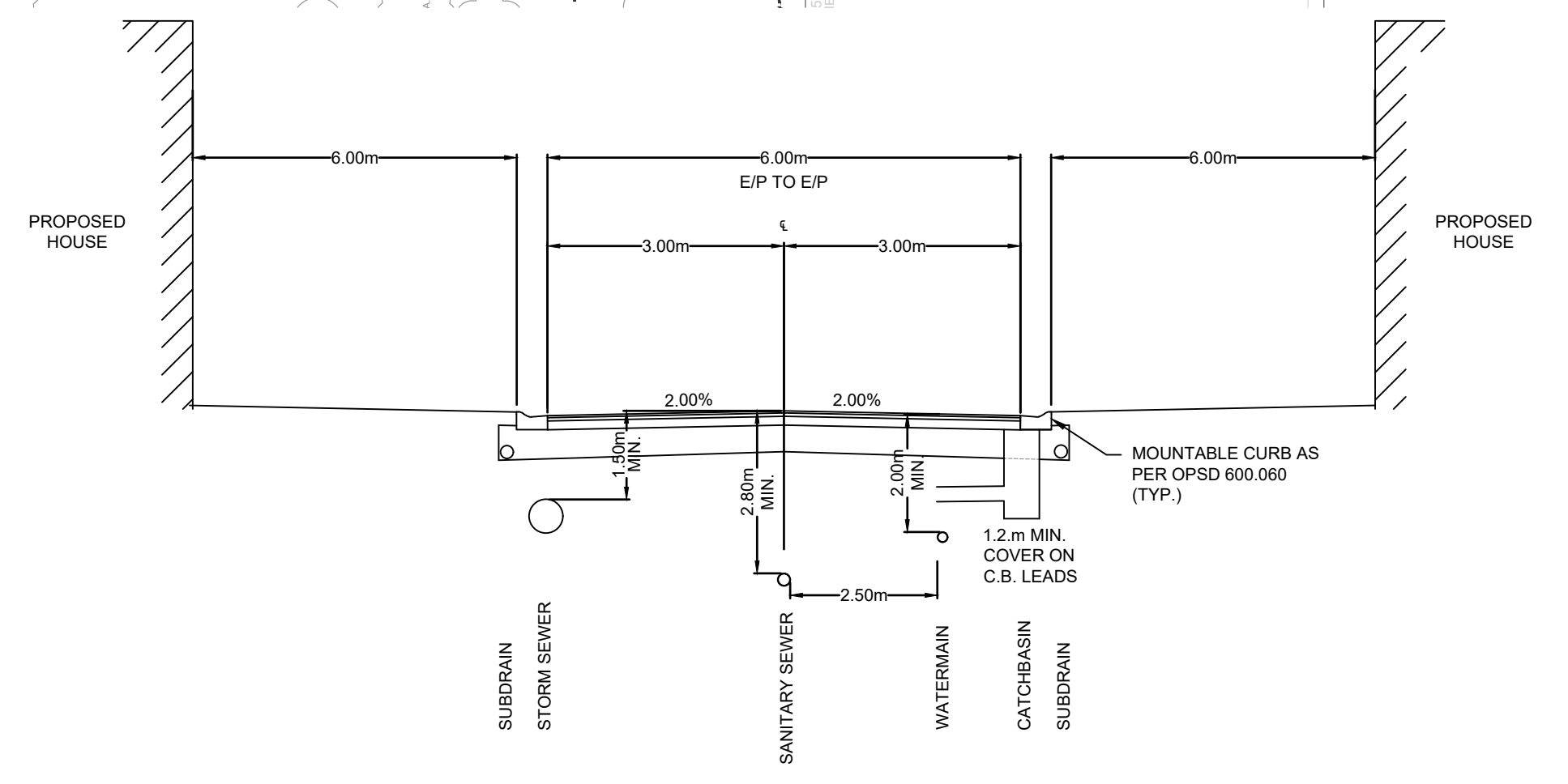
- ALL STORM SEWERS 375mmØ AND SMALLER TO BE PVC SDR 35 IN ACCORDANCE WITH CSA-B182.2 ASTM D-2779 AND ASTM D-3034 OR LATEST REVISIONS. 450mmØ AND LARGER TO BE CONCRETE IN ACCORDANCE WITH CSA-A257.2, CLASS 650 OR LATEST REVISIONS, UNLESS OTHERWISE NOTED.
- BEDDING FOR PVC STORM SEWERS AS PER OPSD 802.010, GRANULAR 'A', COMPACTED TO 98% SPMD.
- BEDDING FOR CONCRETE PIPE AS PER OPSD-802.030, CLASS B, GRANULAR 'A', COMPACTED TO 98% SPMD.
- EXISTING SEWER INVERTS, MATERIAL TYPE, AND SIZE TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL CATCHBASINS SHALL BE INSTALLED IN ACCORDANCE WITH OPSD 705.010 OR OPSD 705.020. ALL CATCHBASIN FRAMES AND COVERS IN THE ROADWAY AS PER OPSD 400.110. ALL CATCHBASIN FRAMES AND COVERS IN WALKWAY AREAS AS PER OPSD 400.100.
- ALL EXISTING SEWERS ARE TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION.
- ALL CATCHBASIN LEADS TO BE MINIMUM 250mmØ PVC SDR 35 IN ACCORDANCE WITH CSA-B182.2 ASTM D-2779 AND ASTM D-3034, OR NON-REINFORCED CONCRETE PIPE, OR BOSS 2000 HDPE IN ACCORDANCE WITH CSA-B182.8, ASTM D-3350, UNLESS NOTED OTHERWISE.
- ALL MAINTENANCE HOLES AND CATCHBASIN MAINTENANCE HOLES SHALL BE BENCHED UP TO 34 HEIGHT REGARDLESS OF PIPE SIZE. ALL BENCHING SHALL SLOPE UP AND AWAY FROM THE PIPE AT 8% SLOPE. STORM SEWER MAINTENANCE HOLES SHALL NOT BE PRE-BENCHED BY THE MANUFACTURER EXCEPT IN NEW DEVELOPMENT. BENCHING MAINTENANCE HOLES MUST BE COMPLETED DURING CONSTRUCTION ON SITE.

**SANITARY**

- ALL SANITARY SEWERS ARE TO BE PVC-DR 35 IN ACCORDANCE WITH CSA-B182.2, ASTM D-2779 AND ASTM D-3034 OR LATEST REVISIONS, RUBBER GASKET, SERVICES TO BE PVC-DR 28.
- EXISTING SEWER INVERTS, MATERIAL TYPE, AND SIZE TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL RELOCATION, RECONSTRUCTION AND RESTORATION TO BE PERFORMED TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
- PROVIDE WATER TIGHT COVERS FOR SANITARY MANHOLES LOCATED IN PONDING AREAS.
- PRECAST MANHOLES TO BE MANUFACTURED TO REQUIREMENTS OF CSA A267.4 AND A.S.T.M. DESIGNATION CA78M. 1200MM MANHOLES AS PER OPSD 701.010, 1500MM MANHOLES AS PER OPSD 701.011 MANHOLE FRAMES AND COVERS AS PER OPSD 401.010 TYPE 'A'.
- ALL PRECAST MAINTENANCE HOLES SHALL HAVE ALL PRECAST JOINTS EXTERNALLY WRAPPED WITH A WATERPROOF MEMBRANE (MIN. 0.30m WIDE STRIP). THIS INCLUDES ALL JOINTS BELOW THE MAINTENANCE HOLE FRAME AND COVER.
- BENCHING AS PER OPSD 701.021, TO SPRING LINE OF PIPE.
- BEDDING FOR PVC SANITARY SEWERS AS PER OPSD 802.010, GRANULAR 'A' COMPACTED TO 95% SPMD.
- ALL CONNECTIONS WITH PAVED PORTIONS OF EXISTING ROADS TO BE BACKFILLED WITH GRANULAR MATERIAL OR LATEST TOWNSHIP SPECIFICATIONS AND COMPACTED TO 98% SPMD.
- ALL TESTING OF SANITARY SERVICES TO BE IN ACCORDANCE WITH O.B.C. - 2012 AND TOWNSHIP SPECIFICATIONS.
- ALL CONNECTIONS TO SANITARY MANHOLES TO BE MADE WITH A KOR-N-SEAL ADAPTOR.

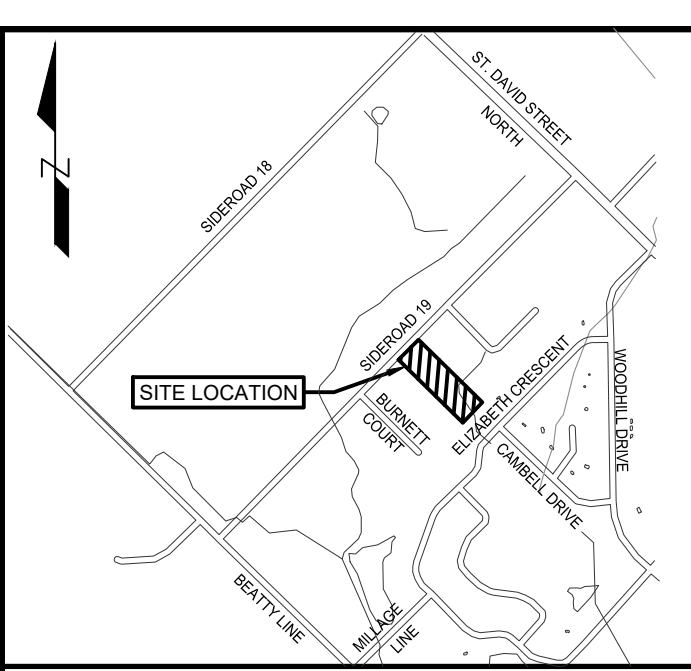
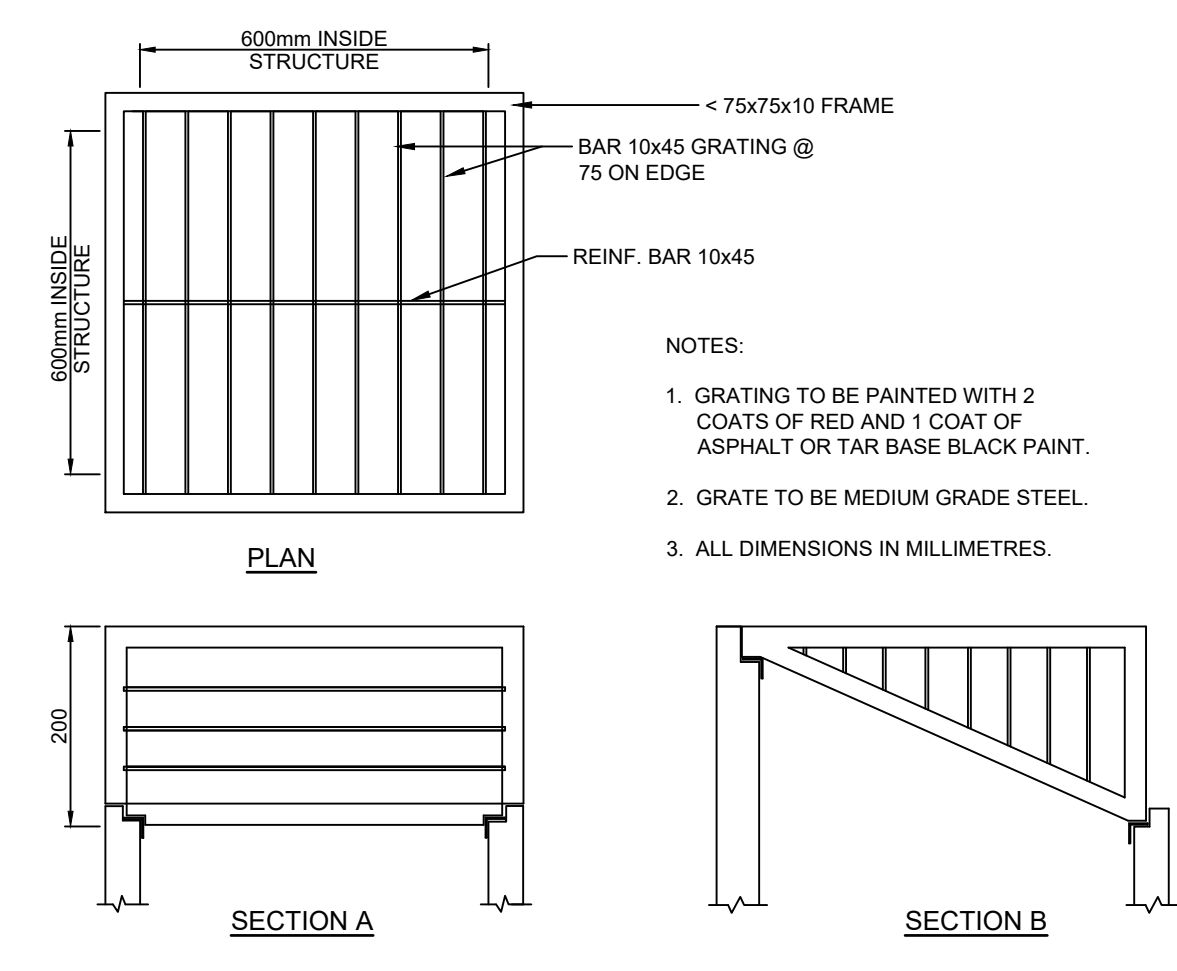
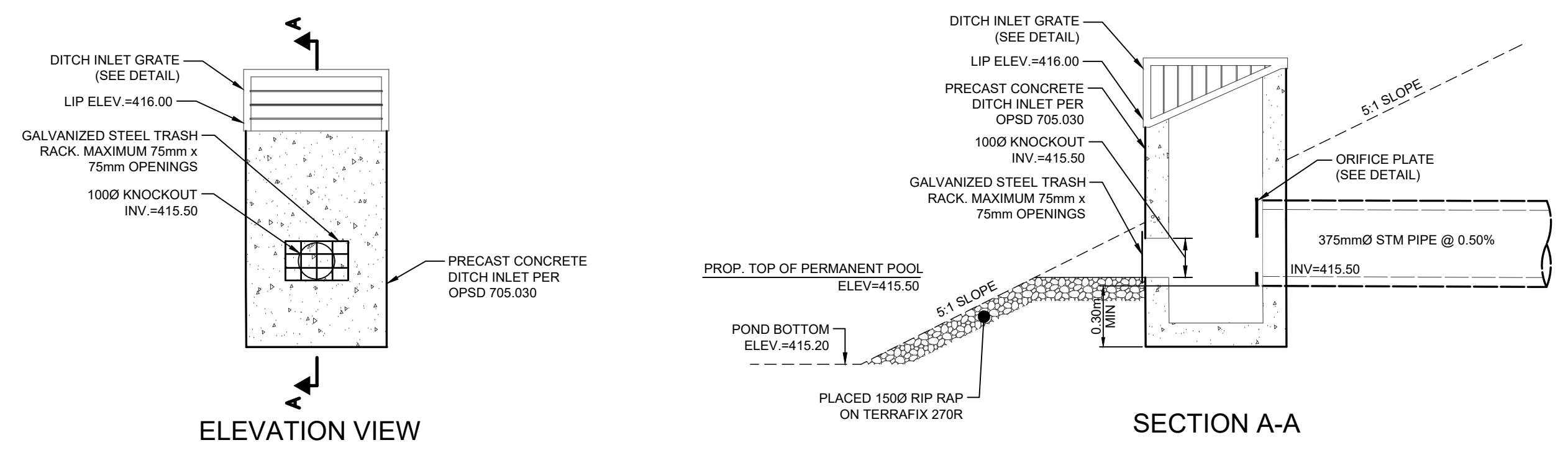
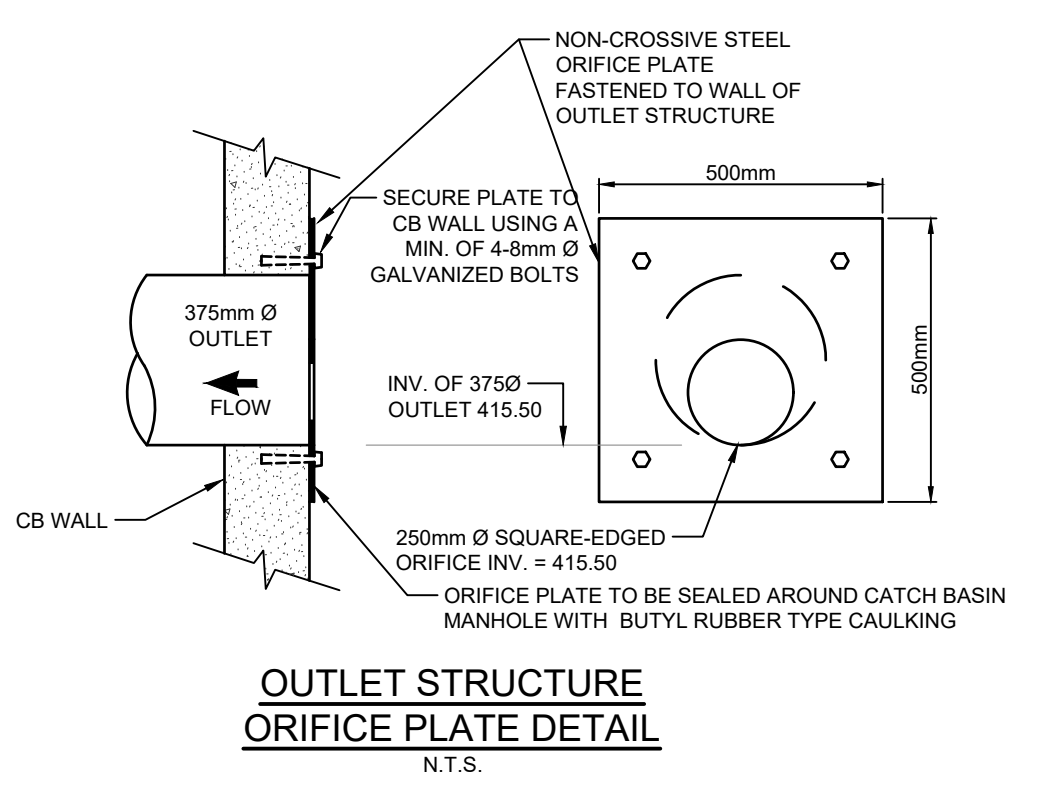
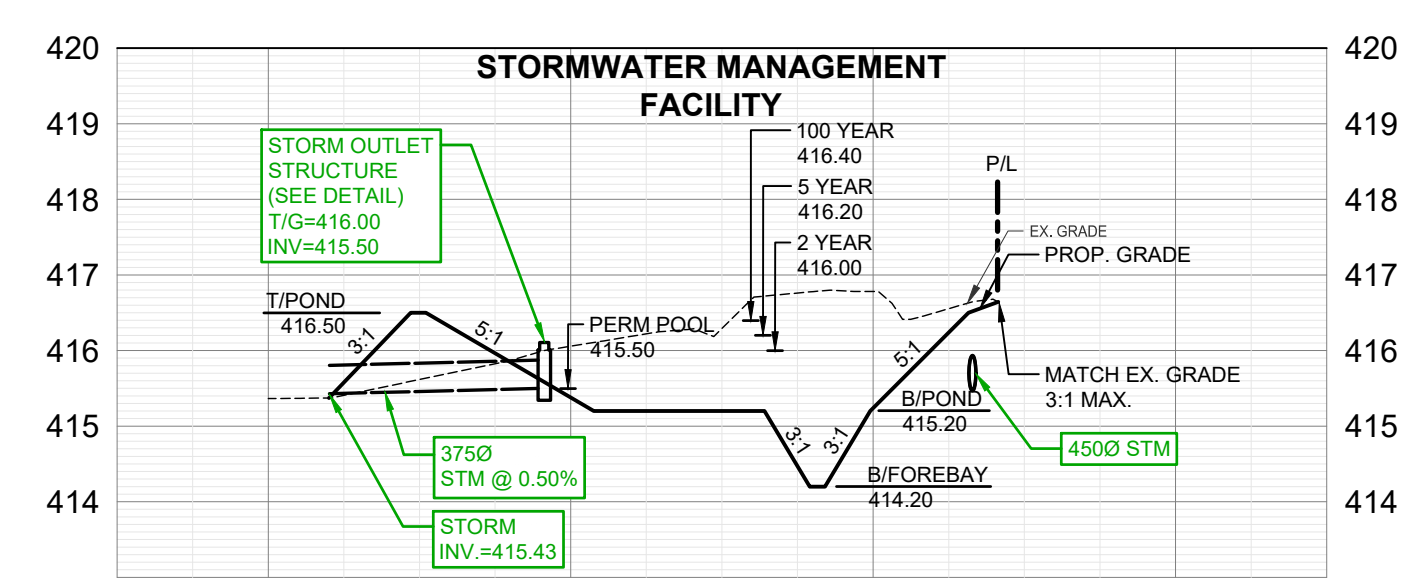
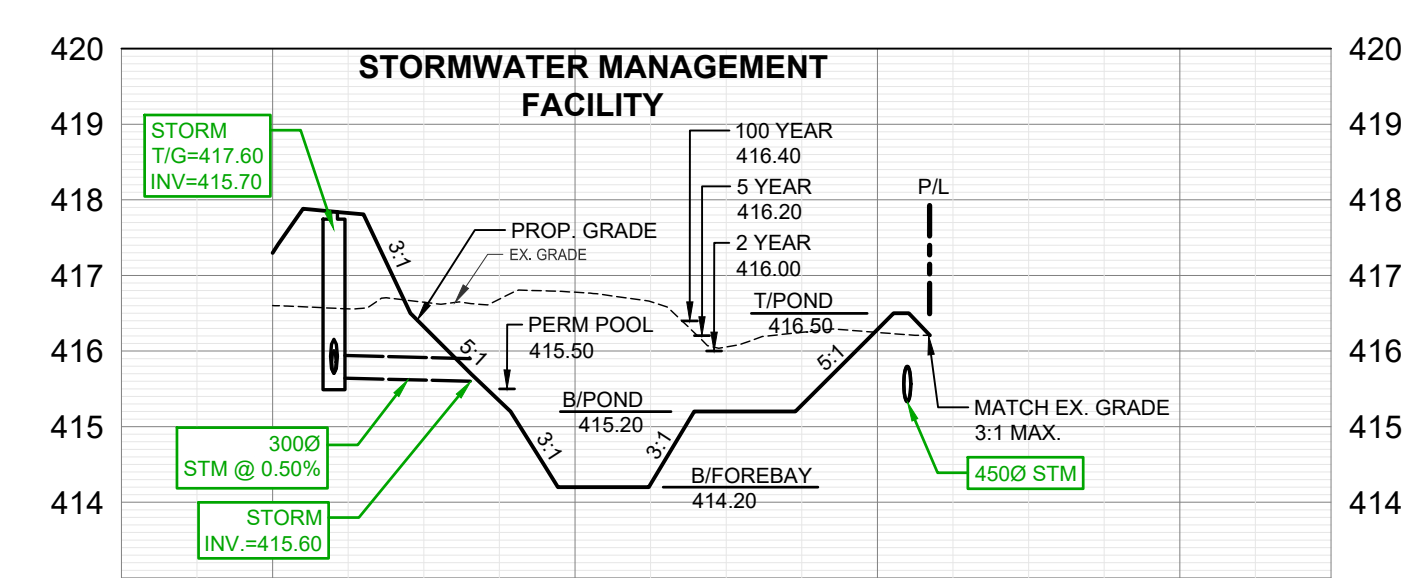
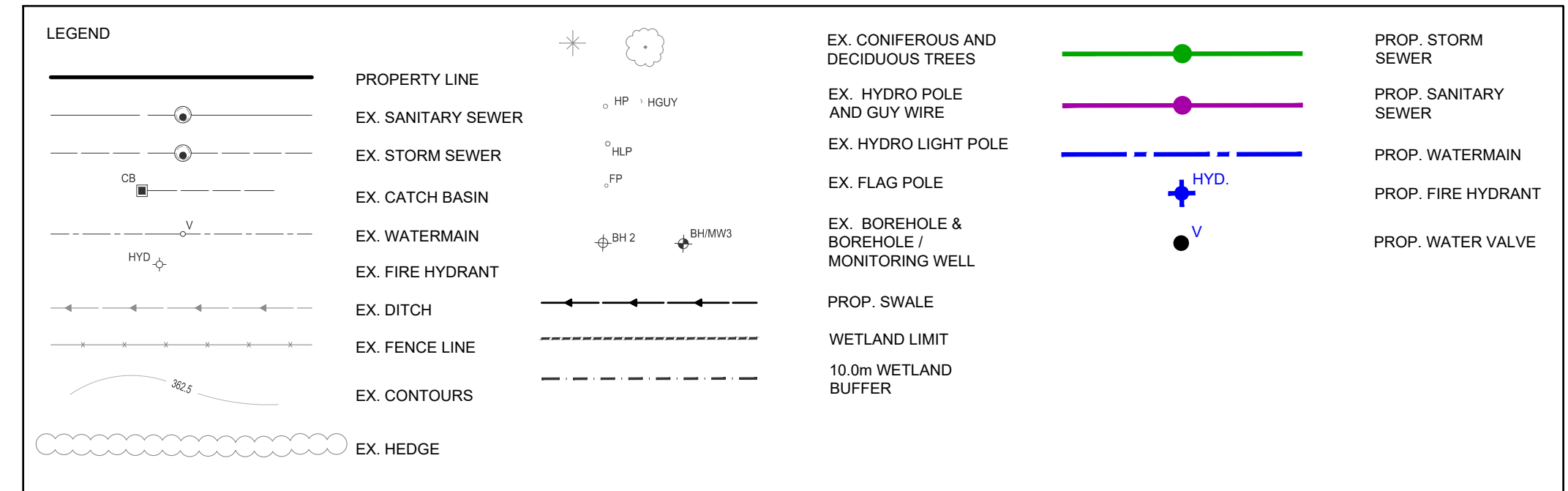
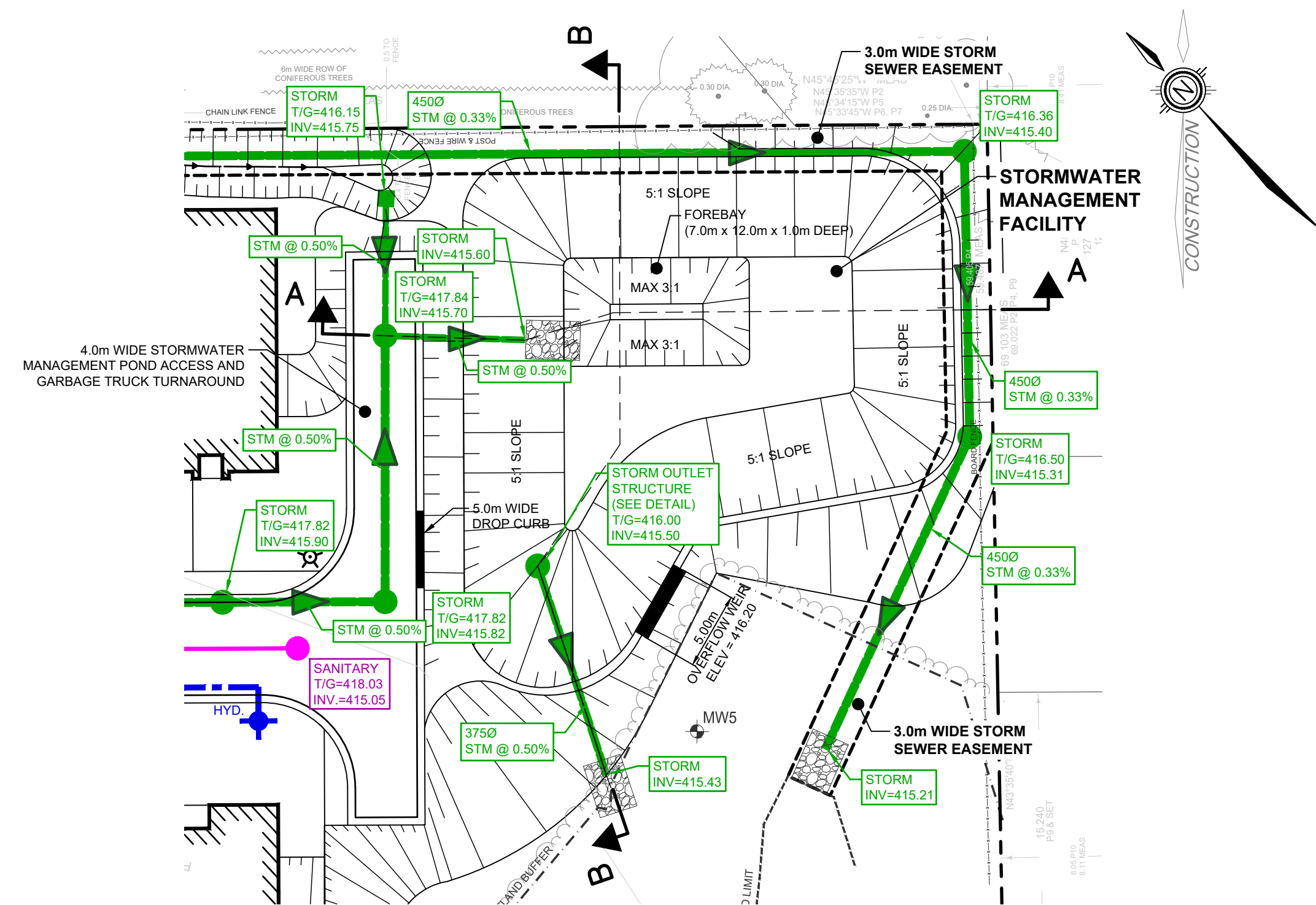
**WATER**

- WATER SERVICE PIPE TO BE PVC-DR 18 CL 150 CONFORMING TO CSA B137.3, INCLUDING 12 GAUGE 7 STRAND TRACER WIRE BETWEEN HYDRANTS OR OTHER CONDUCTING APPURTENANCES. PIPE SHALL HAVE A MINIMUM COVER OF 2.0m. ALL WATERMAIN JOINTS TO BE APPROVED PUSH-ON, MECHANICAL OR FLANGE TYPE JOINTS AS REQUIRED FOR 1000 KPA RATED PRESSURE, CORROSION PROTECTION FOR ALL FITTINGS, VALVES AND HYDRANTS (HYPROTEC OR EQUAL).
- BEDDING AS PER OPSD 802.010, TYPE 1 & 2, GRANULAR 'A' COMPACTED TO 98% SPMD.
- ALL WATERMAIN FITTINGS AND APPURTENANCES TO BE SELECTED FROM THE TOWNSHIP'S APPROVED MATERIAL LIST FOR WATERMANS.
- WATERMANS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 0.5m AND HORIZONTAL SEPARATION OF 2.4m BETWEEN ANY SEWER OR MANHOLE.
- ALL WORKS WITHIN TOWNSHIP RIGHT-OF-WAY TO BE PERFORMED BY TOWNSHIP FORCES UPON APPLICATION.
- CONTRACTOR TO CONFIRM THE SIZE, LOCATION AND MATERIAL TYPE OF EXISTING WATER SERVICE AND WATERMAIN PRIOR TO COMMENCING ANY WORK.
- EXISTING WATERMAIN OBVERTS TO BE CONFIRMED ON SITE AT THE TIME OF CONSTRUCTION.
- ALL RELOCATION, RECONSTRUCTION AND RESTORATION TO BE PERFORMED TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
- ALL CONNECTIONS WITH PAVED PORTIONS OF EXISTING ROADS TO BE BACKFILLED WITH GRANULAR 'A' MATERIAL OR AS PER LATEST TOWNSHIP SPECIFICATIONS.
- FLUSHING, SWABBING, AND TESTING OF WATERMAIN AS PER ONTARIO PROVINCIAL STANDARD SPECIFICATIONS.
- VALVE AND BOX TO BE INSTALLED AS PER OPSD 1101.020.
- HYDRANTS SHALL CONFORM TO STD-W3 AND SHALL BE DARLING CENTURY STYLE BY CANADA VALVE COMPANY LIMITED OR McAVITY STYLE M-67 BY CRANE (CANADA) LIMITED AND SHALL BE INSTALLED AS PER OPSD 1105.010.
- HYDRANTS SHALL OPEN COUNTER CLOCKWISE AND BE YELLOW WITH GREEN BONNETS AND HOSE CAPS.
- ALL WATERMAIN MATERIALS, INSTALLATION METHODS AND TESTING SHALL CONFORM TO OBC-2012 AND TOWNSHIP SPECIFICATIONS.



**NOTE: THE SITE LIGHTING SHOWN ON THIS PLAN IS PRELIMINARY AND WILL BE CONFIRMED AS PART OF THE DETAILED SITE LIGHTING / PHOTOMETRIC DESIGN FOR THIS SITE.**

LEGEND		EX. CONIFEROUS AND DECIDUOUS TREES		EX. HYDRO POLE AND GUY WIRE		EX. HYDRO LIGHT POLE		EX. FLAG POLE		EX. BOREHOLE & BOREHOLE / MONITORING WELL		PROP. STORM SEWER		PROP. SANITARY SEWER		PROP. WATERMAIN		PROP. FIRE HYDRANT		PROP. WATER VALVE		CONCEPTUAL LIGHT STANDARD LOCATION	
—	PROPERTY LINE	HP	HOLLY	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	EX. SANITARY SEWER	HLP	HARDY PINE	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	EX. STORM SEWER	FP	FUR	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	EX. CATCH BASIN	BH1	BH1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	EX. WATERMAIN	BH2	BH2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	EX. FIRE HYDRANT	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	EX. DITCH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	EX. FENCE LINE	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	EX. CONTOURS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	EX. HEDGE	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	



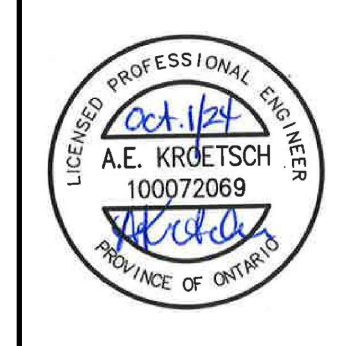
- NOTES:**
- TOPOGRAPHIC AND EXISTING FEATURES SURVEY ON-SITE COMPLETED BY VAN HARTEN SURVEYING INC., RECEIVED 2022-08-29 AND 2024-03-18.
  - SITE PLAN PREPARED BY GSP GROUP, DATED 2024-08-09
  - BEARINGS ARE GRID BEARINGS AND ARE DERIVED FROM GPS OBSERVATIONS AND ARE REFERRED TO THE UTM PROJECTION, ZONE 17, NAD 83 (CSRS-2010) ADJUSTMENT (PROVIDED BY VAN HARTEN SURVEYING INC.)
  - DISTANCES SHOWN ON THIS PLAN ARE ADJUSTED GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY AN AVERAGED COMBINED SCALE FACTOR OF 0.999575, (PROVIDED BY VAN HARTEN SURVEYING INC.)
  - COORDINATES ON THIS PLAN ARE UTM, ZONE 17, NAD83 (CSRS-2010) ADJUSTMENT AND ARE BASED ON GPS OBSERVATIONS FROM A NETWORK OF PERMANENT GPS REFERENCE STATIONS. (PROVIDED BY VAN HARTEN SURVEYING INC.)

- LIST OF DRAWINGS**
- 01 - EXISTING CONDITIONS AND REMOVALS PLAN
  - 02 - CONCEPTUAL SITE SERVICING PLAN
  - 03 - CONCEPTUAL GRADING PLAN
  - 04 - STORMWATER MANAGEMENT PLAN AND DETAILS
  - 05 - EROSION AND SEDIMENT CONTROL PLAN

SITE PLAN INFORMATION		SURVEYOR INFORMATION	
GSP GROUP 72 VICTORIA STREET SOUTH, SUITE 201 KITCHENER, ON N2G 4Y9 PHONE: (519) 569-8883 WEBSITE: www.gspgroup.ca	VAN HARTEN SURVEYING INC. 2106 GORDON STREET QUELPH, ON, N1L 1G6 PHONE: (519) 821-2783 WEBSITE: www.vanharten.com		

- BENCHMARKS** (PROVIDED BY VAN HARTEN SURVEYING INC.)
- SITE BENCHMARK #1**  
CUT CROSS ON SIDEWALK NEAR NORTHWEST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF 418.60m.
  - SITE BENCHMARK #2**  
CUT CROSS ON SIDEWALK NEAR NORTHEAST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF 419.10m.

No.	DATE	ISSUE/REVISION	INITIAL
2	2024-10-01	ISSUED FOR APPROVAL	A.E.K.
1	2024-09-05	ISSUED FOR REVIEW	A.E.K.

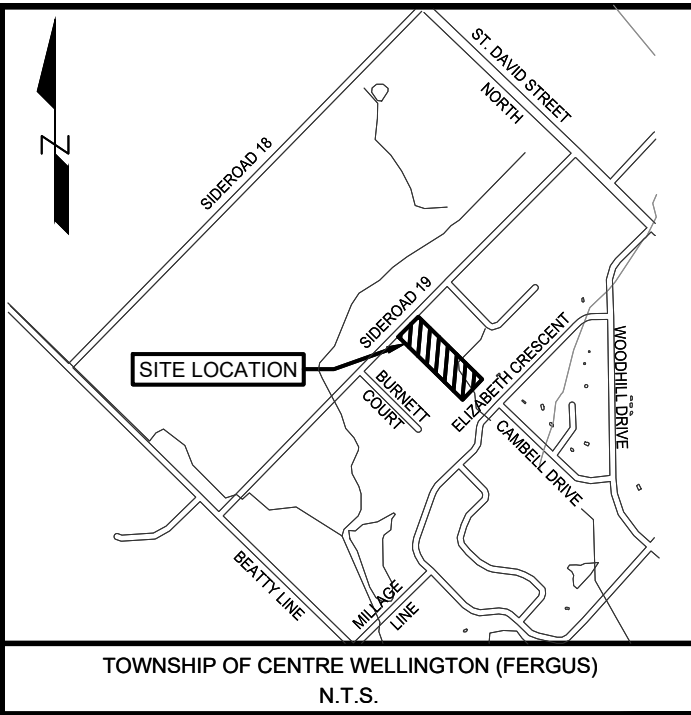
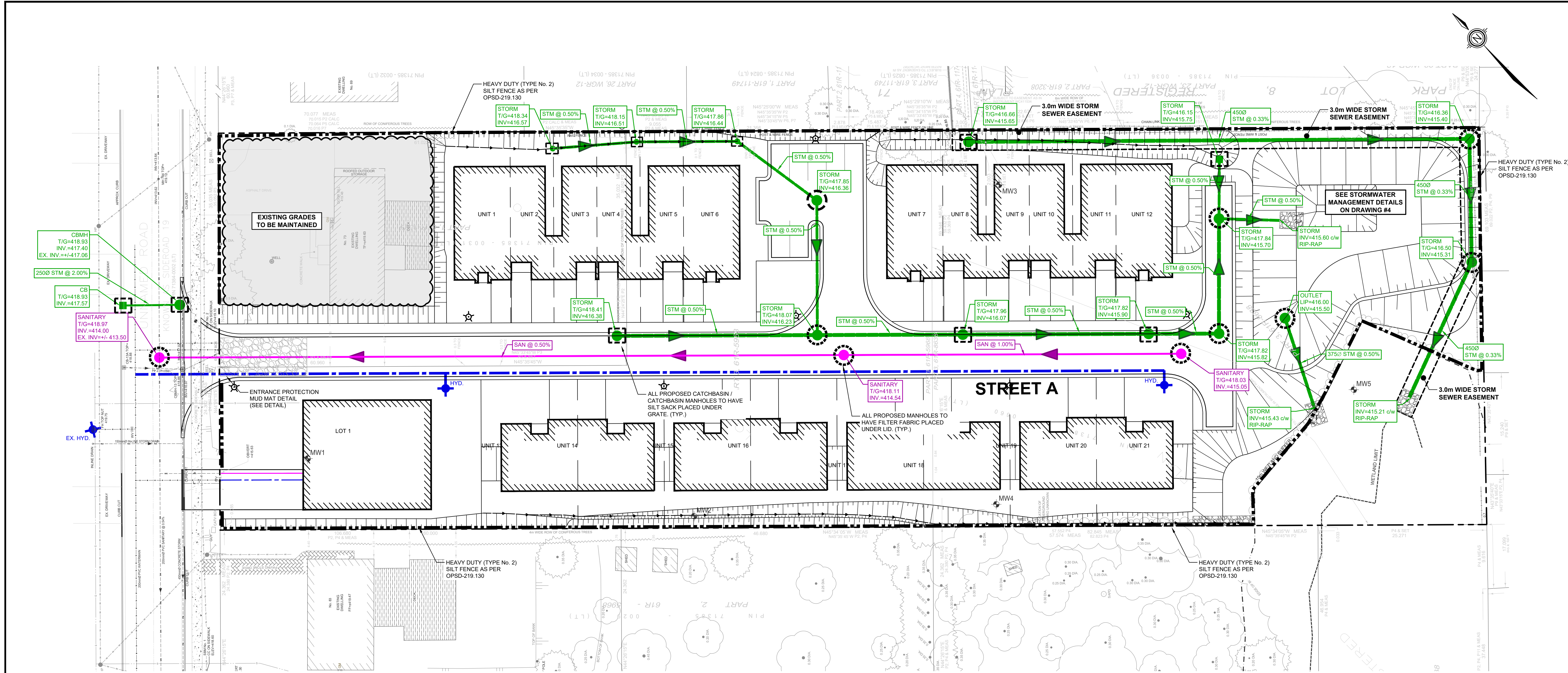


TOWNSHIP OF CENTRE WELLINGTON  
WRICHTHAVEN HOMES  
079 SIDEROAD 19 RESIDENTIAL DEVELOPMENT  
FERGUS, ONTARIO

STORMWATER MANAGEMENT POND DETAILS



DESIGNED BY: BL/PL	DATE: JUNE 2024	CHECKED BY: AEK
DRAWN BY: BL	PROJECT No: 2401073	DRAWING No: 4
SCALE: 1:500		



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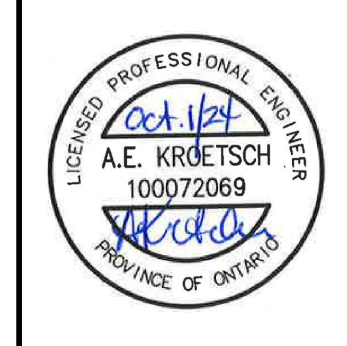
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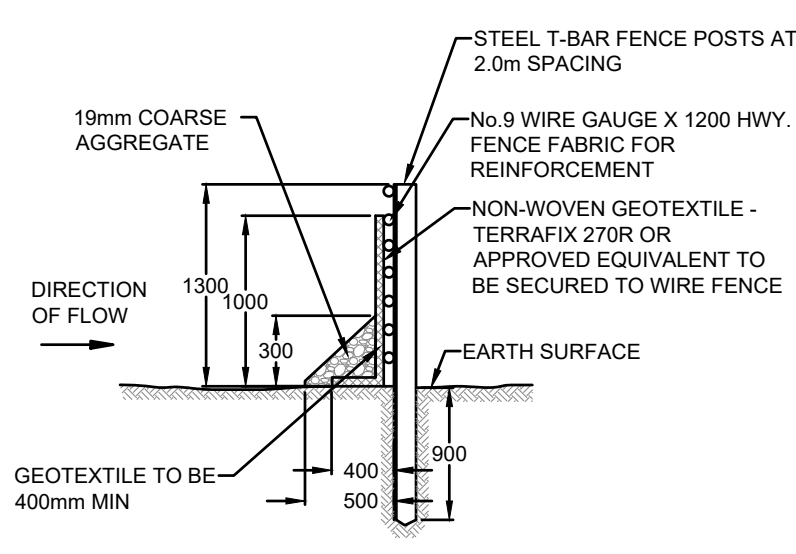
**BENCHMARKS** (PROVIDED BY VAN HARTEN SURVEYING INC.):

BENCHMARK #	DESCRIPTION	ELEVATION
#1	CUT CROSS ON SIDEWALK NEAR NORTHWEST CORNER OF SUBJECT PROPERTY	418.60m
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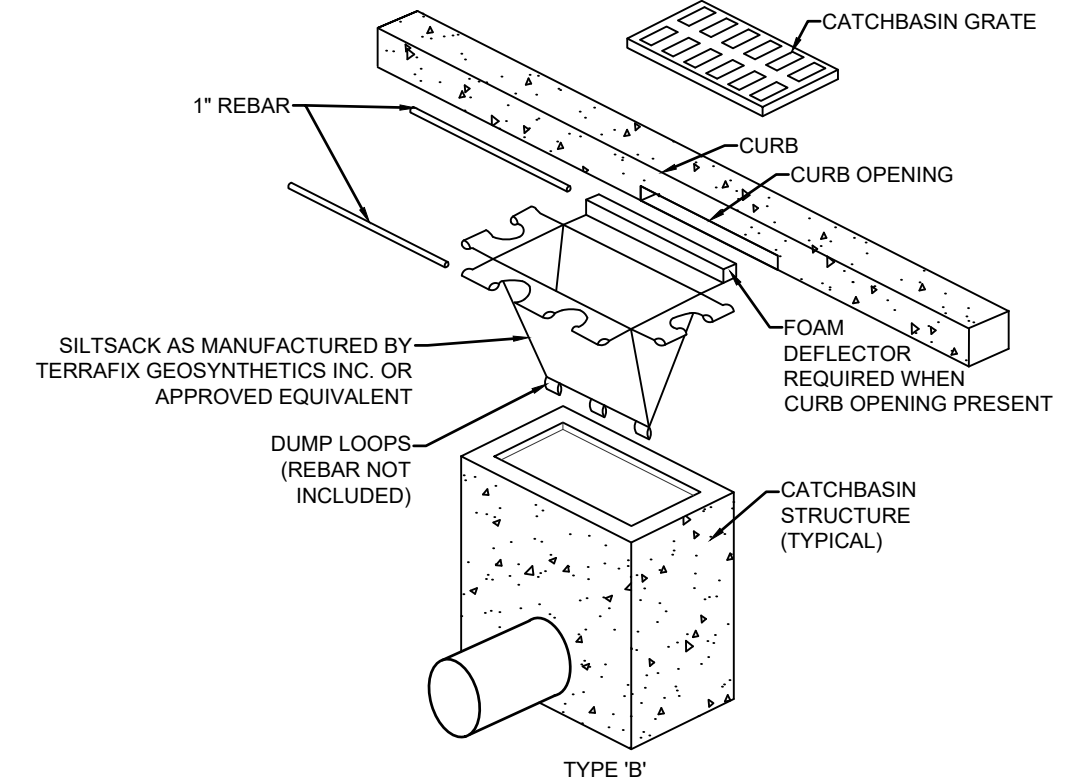
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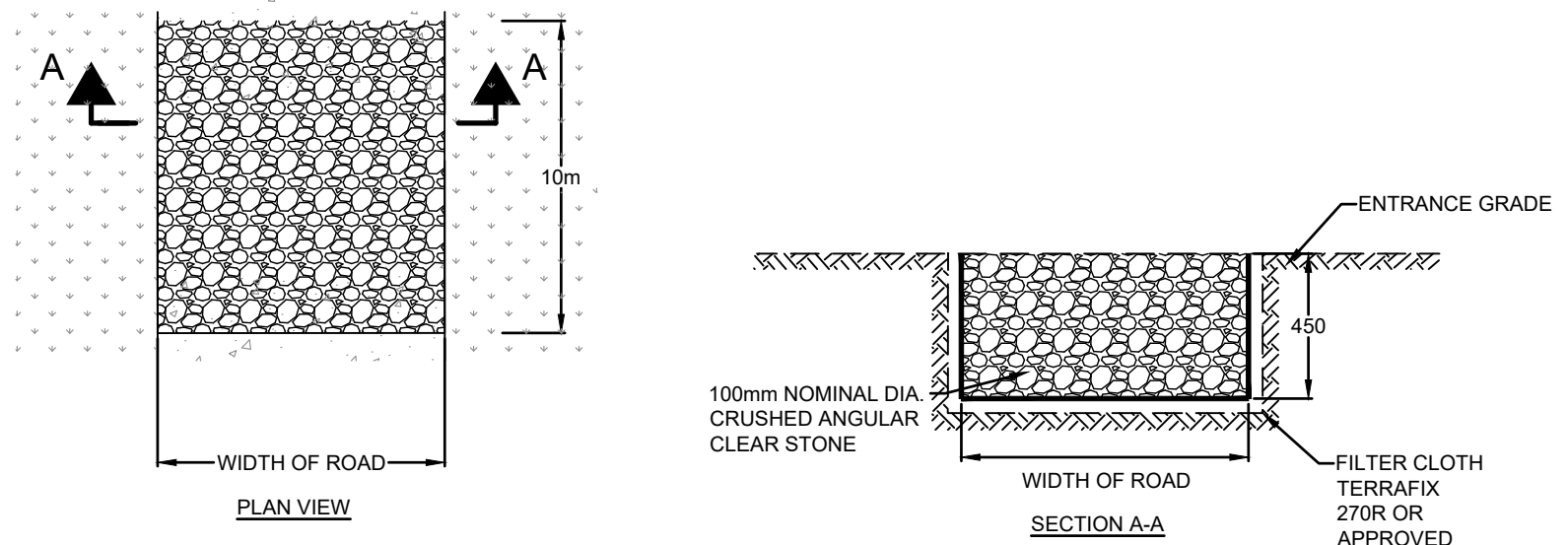
- SEDIMENT AND EROSION CONTROL NOTES**
- SITE WORKS ARE TO BE STAGED IN SUCH A MANNER THAT EROSION WILL BE MINIMIZED AND THAT BARRIERS AND SEDIMENTATION FACILITIES WITHIN THE SITE ARE PROVIDED TO CONTROL ANY EROSION THAT DOES OCCUR.
  - PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, A SEDIMENT POND OR STORAGE AREA MUST BE ESTABLISHED TO COLLECT SURFACE DRAINAGE FROM ALL AREAS THAT WILL BE DISTURBED. WATER PUMPED FROM EXCAVATION OR DEWATERING OPERATIONS MUST BE DIRECTED TO THE SEDIMENT POND.
  - ALL SILT FENCING TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY GRADING EXCAVATION OR DEMOLITION.
  - CLEARING AND GRUBBING OF THE SITE SHOULD BE KEPT TO A MINIMUM AND VEGETATION REMOVED ONLY IN ADVANCED OF IMMEDIATE CONSTRUCTION.
  - STOCKPILES OF EARTH OR TOPSOIL ARE TO BE LOCATED AND PROTECTED TO MINIMIZE ENVIRONMENTAL INTERFERENCE. STOCKPILES SHOULD NOT BE LOCATED IMMEDIATELY ADJACENT TO DITCHES OR ROAD ALLOWANCES. EROSION CONTROL FENCING IS TO BE INSTALLED AROUND THE BASE OF ALL STOCKPILES. A PERMETER DITCH LEADING TO A SETTLING AREA OR SEDIMENTATION TRAP SHOULD BE INSTALLED AROUND THE STOCKPILE.
  - EROSION PROTECTION TO BE PROVIDED AROUND ALL STORM AND SANITARY MANHOLES CATCH BASINS, DITCHES SWALES AND WATERCOURSES.
  - ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE DEVELOPMENT PROGRESSES. THE CONTRACTOR IS TO PROVIDE ALL ADDITIONAL EROSION CONTROL STRUCTURES.
  - THE DESIGN CONSULTANT IS TO MONITOR EROSION CONTROL STRUCTURES TO ENSURE FENCING IS INSTALLED AND MAINTENANCE IS PERFORMED TO TOWN REQUIREMENTS.
  - EROSION CONTROL STRUCTURES ARE TO BE MONITORED REGULARLY AND ANY DAMAGE TO STRUCTURES REPAIRED IMMEDIATELY. SEDIMENTS ARE TO BE REMOVED WHEN ACCUMULATIONS REACH A MAXIMUM OF 50% OF THE FENCE. CLOGGED FILTER MATERIALS SUCH AS CRUSHED STONE, STRAW BALES OR FILTER CLOTH MUST BE REPLACED AS REQUIRED.
  - ALL EROSION CONTROL STRUCTURES ARE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.
  - NO ALTERNATIVE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE DESIGN CONSULTANT AND THE TOWN.
  - THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MUNICIPAL ROADWAYS AND SIDEWALKS AREA CLEANED OF ALL SEDIMENTS FROM VEHICULAR TRACKING ETC. TO AND FROM THE SITE AT THE END OF EACH WORK DAY.
  - ALL DISTURBED AREAS NOT INCLUDED IN CONSTRUCTION TO BE RE-TOPSOILED AND RE-SEEDED IMMEDIATELY AFTER COMPLETION OF AREA GRADING.



**SEDIMENT FENCE  
HEAVY DUTY - NO TRENCH**  
N.T.S.



**SILTSACK DETAIL (TOP INLET CATCHBASIN LIDS)**  
N.T.S.



**ENTRANCE PROTECTION  
MUD MAT DETAIL**  
N.T.S.

**LEGEND**

Symbol	Description
—	PROPERTY LINE
—●—	EX. SANITARY SEWER
—●—	EX. STORM SEWER
—○—	EX. CATCH BASIN
—○—	EX. WATERMAIN
—○—	EX. FIRE HYDRANT
—○—	EX. DITCH
—○—	EX. FENCE LINE
—○—	EX. CONTOURS
—○—	EX. HEDGE
—○—	EX. CONIFEROUS AND DECIDUOUS TREES
—○—	EX. HYDRO POLE AND GUY WIRE
—○—	EX. HYDRO LIGHT POLE
—○—	EX. FLAG POLE
—○—	EX. BOREHOLE & BOREHOLE / MONITORING WELL
—○—	PROP. SWALE
—○—	WETLAND LIMIT
—○—	10.0m WETLAND BUFFER
—○—	PROP. STORM SEWER
—○—	PROP. SANITARY SEWER
—○—	PROP. WATERMAIN
—○—	PROP. FIRE HYDRANT
—○—	PROP. WATER VALVE
—○—	SILT SACK PLACED UNDER CATCHBASIN GRATE
—○—	FILTER FABRIC PLACED UNDER ACCESS LID