

APPLEWOOD

MANORWOOD HOMES

TOWN OF THE BLUE MOUNTAINS



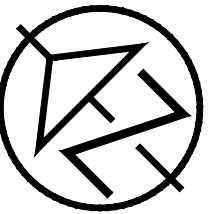
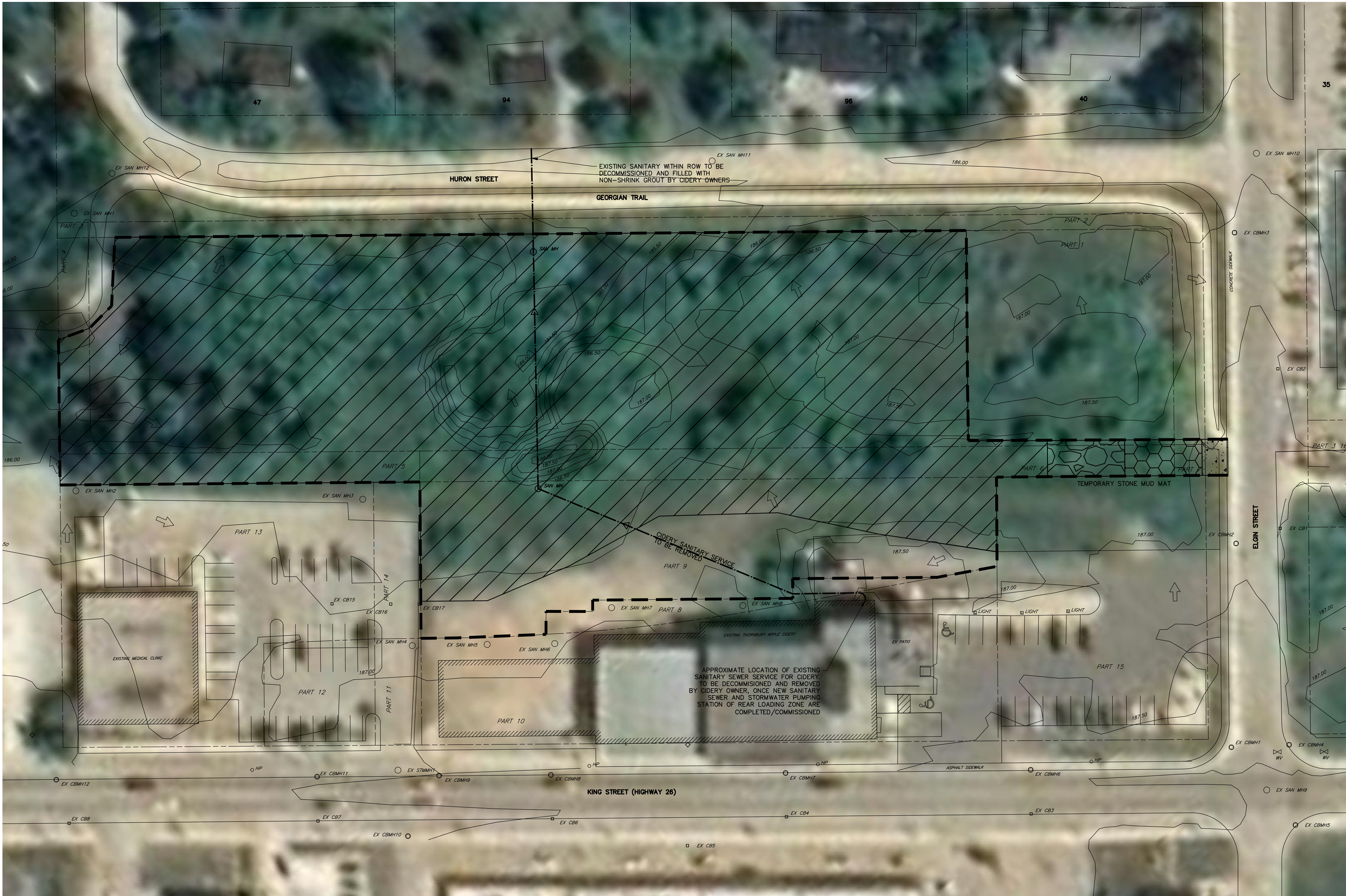
INDEX

Sheet Number	Drawing	Description
1	120164--TP--1	TITLE PAGE
2	120164--IN--1	DRAWING INDEX AND LEGEND
3	120164--SC--1	SEDIMENT CONTROL AND REMOVALS PLAN
4	120164--SS--1	SITE SERVICING PLAN
5	120164--SG--1	SITE GRADING PLAN
6	120164--WM--1	WATER DISTRIBUTION PLAN
7	120164--SAN--1	SANITARY DRAINAGE PLAN
8	120164--DP--1	PRE--DEVELOPMENT DRAINAGE PLAN
9	120164--DP--2	POST--DEVELOPMENT DRAINAGE PLAN
10	120164--DE--1	DETAILS AND NOTES SHEET 1

LEGEND

PROPERTY LINE	----
EXISTING CENTERLINE	----
PROPOSED CENTERLINE	----
EXISTING EDGE OF ASPHALT	----
EXISTING CURB	----
PROPOSED EDGE OF ASPHALT	----
PROPOSED CURB	----
EXISTING DITCH/DIRECTION OF FLOW	----->
PROPOSED DITCH/DIRECTION OF FLOW	----->
EXISTING SANITARY SEWER/SIZE/DIRECTION OF FLOW	-----> 200# SAN
PROPOSED SANITARY SEWER/SIZE/DIRECTION OF FLOW	-----> 200# SAN
EXISTING SANITARY SERVICE	-----
PROPOSED SANITARY SERVICE	-----
EXISTING WATERMAIN/SIZE	----- 150# W/M
PROPOSED WATERMAIN/SIZE	----- 150# W/M
EXISTING WATER SERVICE	-----
PROPOSED WATER SERVICE	-----
EXISTING STORM SEWER/SIZE/DIRECTION OF FLOW	-----> 375# STM
PROPOSED STORM SEWER/SIZE/DIRECTION OF FLOW	-----> 375# STM
EXISTING CULVERT	=====
PROPOSED CULVERT	=====
PROPOSED SWALE LOCATION	----->
EXISTING GAS MAIN	----- GAS
EXISTING GAS SERVICE	----- GAS
EXISTING FENCELINE	-----
PROPOSED FENCELINE	-----
EXISTING BUSHLINE	-----
EXISTING CONTOUR	----- 179.00
EXISTING SPOT ELEVATION	x 179.00
PROPOSED SPOT ELEVATION	x 179.00
EXISTING GRADING DIRECTION	----->
PROPOSED GRADING DIRECTION	----->
EXISTING TEMPORARY BENCHMARK	SB
EXISTING STANDARD IRON BAR	SB
EXISTING BOREHOLE	BH9
EXISTING GAS VALVE	GAS
EXISTING HYDRO TRANSFORMER	HT
EXISTING CABLE PEDESTAL	CP
EXISTING BELL PEDESTAL	BP
EXISTING BELL MAINTENANCE HOLE	BELL MH
EXISTING HYDRO POLE	HP
EXISTING HYDRO GUY WIRE	HW
EXISTING TRAFFIC SIGN	TS
PROPOSED TRAFFIC SIGN (MISCELLANEOUS)	TS
EXISTING DECIDUOUS TREE	DT
EXISTING CONIFEROUS TREE	CT
EXISTING BUSH	B
EXISTING SANITARY MAINTENANCE HOLE	SAN MH20
PROPOSED SANITARY MAINTENANCE HOLE	SAN MH17
EXISTING HYDRANT	HYD
PROPOSED HYDRANT	HYD
EXISTING WATER VALVE	WV
PROPOSED WATER VALVE	WV
PROPOSED CURB STOP VALVE	CSV
EXISTING WATERMAIN PLUG	WP
PROPOSED WATERMAIN PLUG	WP
PROPOSED WATERMAIN REDUCER	WR
EXISTING STORM MAINTENANCE HOLE	STM MH20
PROPOSED STORM MAINTENANCE HOLE	STM MH9
EXISTING CATCH BASIN	CBMH 18
PROPOSED CATCH BASIN	CB8
PROPOSED CATCH BASIN MAINTENANCE HOLE	CBMH12
PROPOSED DOUBLE CATCH BASIN MAINTENANCE HOLE	DCBMH4
PROPOSED DOUBLE CATCH BASIN	DCB12
PROPOSED DITCH INLET CATCH BASIN	DICB2
PROPOSED TACTILE WALKING SURFACE INDICATOR	TWSI
PROPOSED CURB DEPRESSION	CD

DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED. TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.	BENCHMARKS TBM1 – ELEVATION 269.81 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT NORTH--WEST CORNER OF MILL STREET AND OLD PENETANGUSHIENE ROAD TBM2 – ELEVATION 265.47 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT INTERSECTION OF MILL STREET AND MURPHY STREET. POLE IS ON NORTH SIDE OF MILL STREET BETWEEN HOUSE 30 AND 28 TBM3 – ELEVATION 253.71 RAIL ROAD SPIKE AT NORTHWEST CORNER OF INTERSECTION OF MILL STREET AND COUNTY ROAD 93	NOTES ALL DIMENSIONS, ELEVATIONS AND SIZES ARE IN METRIC UNITS UNLESS INDICATED. PIPE SIZES ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED. ELEVATIONS ARE IN METRES UNLESS INDICATED. SURVEY AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013. SERVICING AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.	<table><tr><th>No.</th><th>REVISION DESCRIPTION</th><th>DATE</th></tr><tr><td>1.</td><td>FIRST SUBMISSION</td><td>APR 2021</td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></table>	No.	REVISION DESCRIPTION	DATE	1.	FIRST SUBMISSION	APR 2021										ENGINEER STAMP 	APPLEWOOD TOWN OF THE BLUE MOUNTAINS		<table><tr><td>DESIGN: CMM</td><td>FILE: 120164</td><td rowspan="3">DWG:</td></tr><tr><td>DRAWN: CMM</td><td>DATE: SEPT 2020</td></tr><tr><td>CHECK: KRS</td><td>SCALE: NTS</td></tr></table>	DESIGN: CMM	FILE: 120164	DWG:	DRAWN: CMM	DATE: SEPT 2020	CHECK: KRS	SCALE: NTS
			No.	REVISION DESCRIPTION	DATE																								
			1.	FIRST SUBMISSION	APR 2021																								
DESIGN: CMM	FILE: 120164	DWG:																											
DRAWN: CMM	DATE: SEPT 2020																												
CHECK: KRS	SCALE: NTS																												



- NOTES**
- A. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED. SEDIMENT AND EROSION CONTROL MEASURES THAT ARE DESIGNED TO CONTROL RUNOFF FROM SPECIFIC AREAS MUST BE INSTALLED PRIOR TO ANY DISTURBANCE OF THAT PART OF THE SITE. THE LOCATION OF ALL SILTATION AND EROSION CONTROL WORKS TO BE REVIEWED ON SITE AND MAY BE REVISED AS DIRECTED BY THE ENGINEER.
 - B. THE CONTRACTOR MAY CONSIDER ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES. SUCH MEASURES MUST BE PRESENTED IN WRITING TO THE ENGINEER FOR APPROVAL OF THE TOWN.
 - C. THE CONTRACTOR SHALL HAVE MATERIALS AVAILABLE ON-SITE TO REPAIR SEDIMENT AND EROSION CONTROL MEASURES IN THE EVENT OF UNFORESEEN CONDITIONS: HIGH WATER, EXTREME RAINFALL EVENTS, ETC.
 - D. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED, CLEANED AND MAINTAINED BY THE CONTRACTOR AFTER EACH STORM EVENT. ALL WORKS WILL BE REVIEWED BY THE ENGINEER BI-WEEKLY AND AFTER EACH MAJOR STORM EVENT.
 - E. ALL CONSTRUCTION VEHICLES TO ACCESS SITE USING THE DESIGNED CONSTRUCTION ACCESS

LEGEND

- AREA OF TREE REMOVAL
- HEAVY DUTY SILT FENCE
- AS PER OPSD 219.130
- EXISTING OVERLAND FLOW DIRECTION

DISCLAIMER AND COPYRIGHT

CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.

TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.

BENCHMARKS

TBM1 – ELEVATION 269.81
RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT NORTH-WEST CORNER OF MILL STREET AND OLD PENETANGUSHIENE ROAD

TBM2 – ELEVATION 265.47
RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT INTERSECTION OF MILL STREET AND MURPHY STREET. POLE IS ON NORTH SIDE OF MILL STREET BETWEEN HOUSE 30 AND 28

TBM3 – ELEVATION 253.71
RAIL ROAD SPIKE AT NORTHWEST CORNER OF INTERSECTION OF MILL STREET AND COUNTY ROAD 93

NOTES

ALL DIMENSIONS, ELEVATIONS AND SIZES ARE IN METRIC UNITS UNLESS INDICATED. PIPE SIZES ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED. ELEVATIONS ARE IN METRES UNLESS INDICATED.

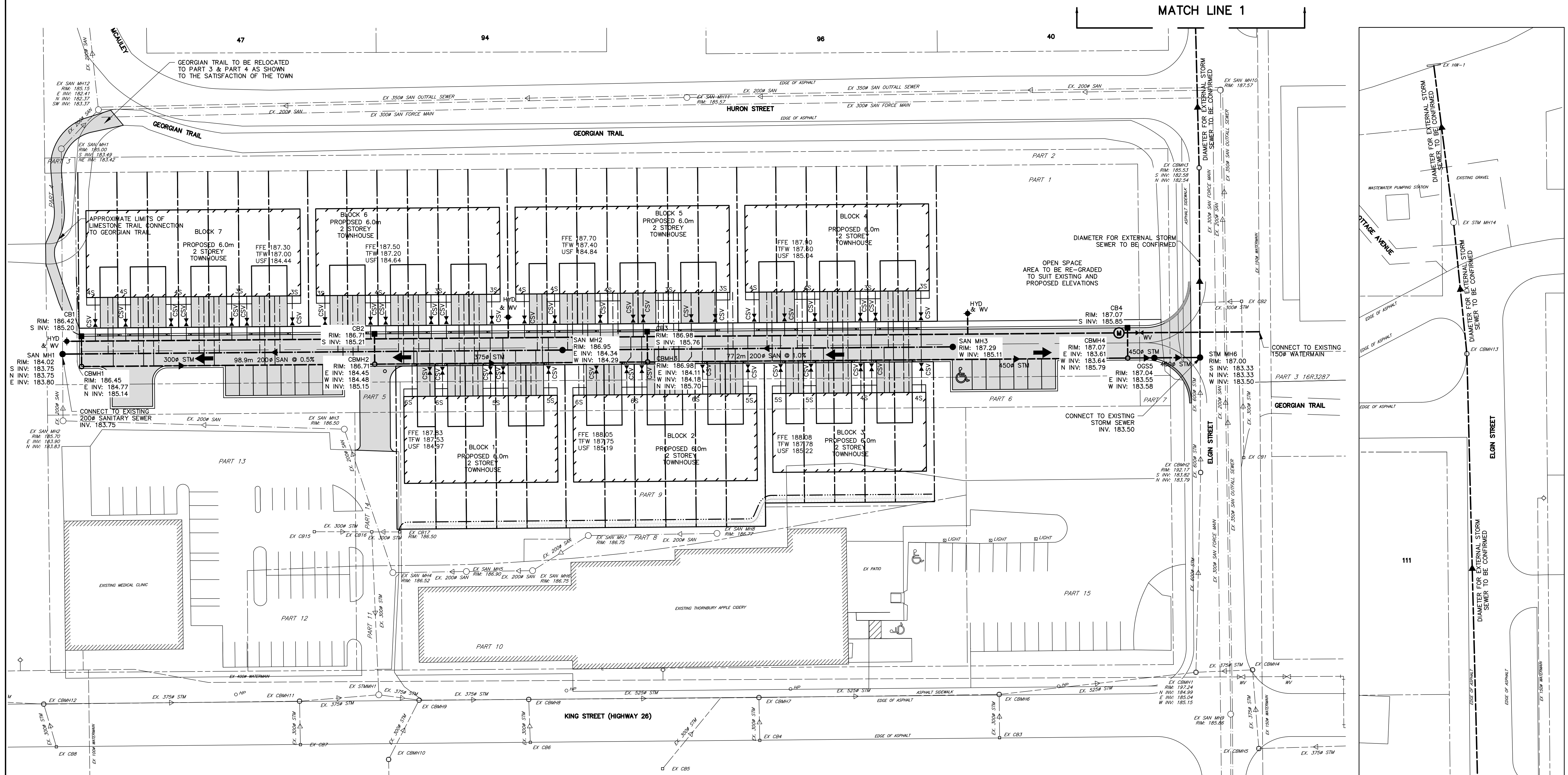
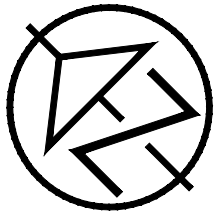
SURVEY AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.

SERVICING AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.

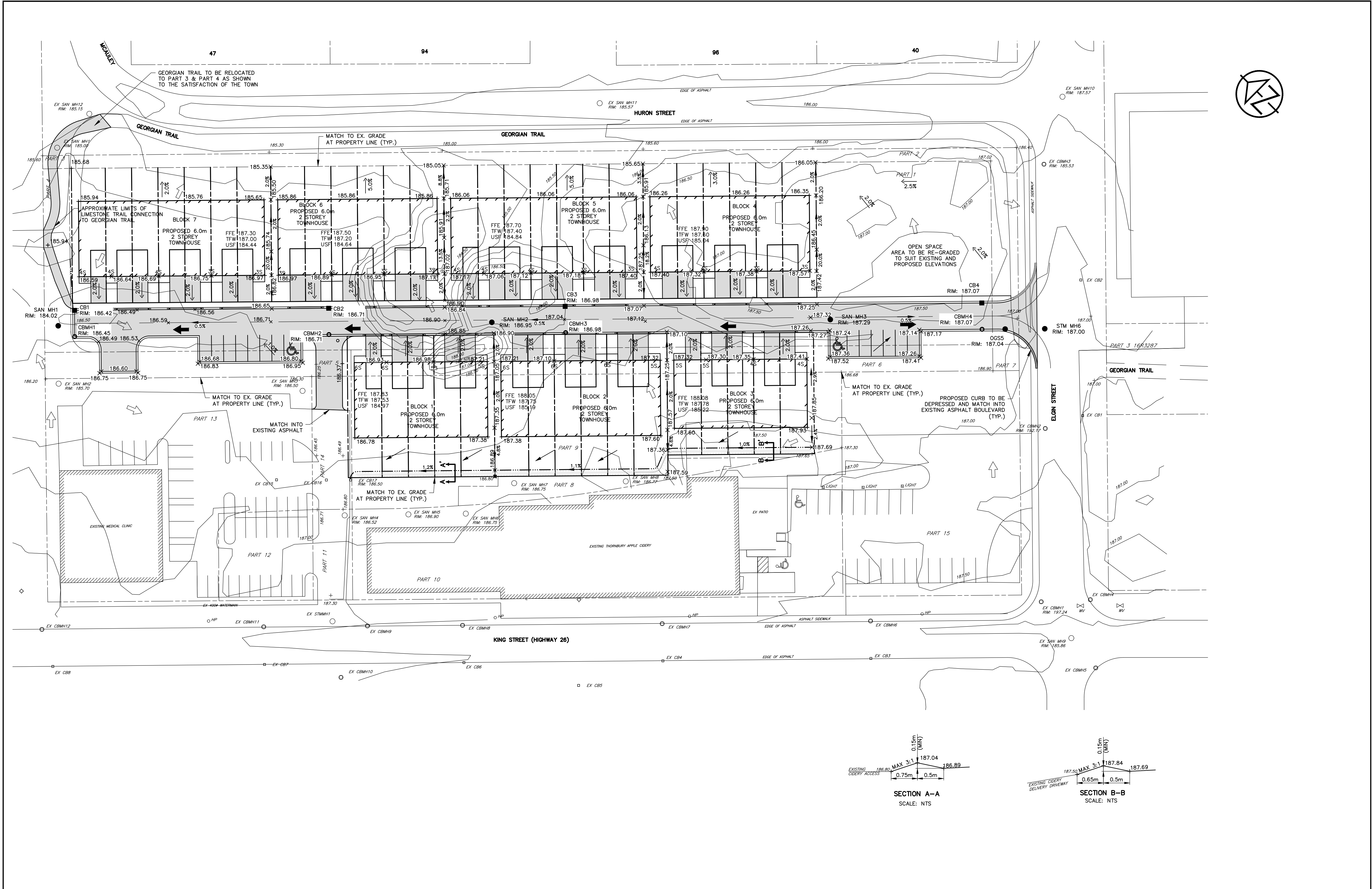
No.	REVISION DESCRIPTION	DATE
1.	FIRST SUBMISSION	APR 2021

ENGINEER STAMP

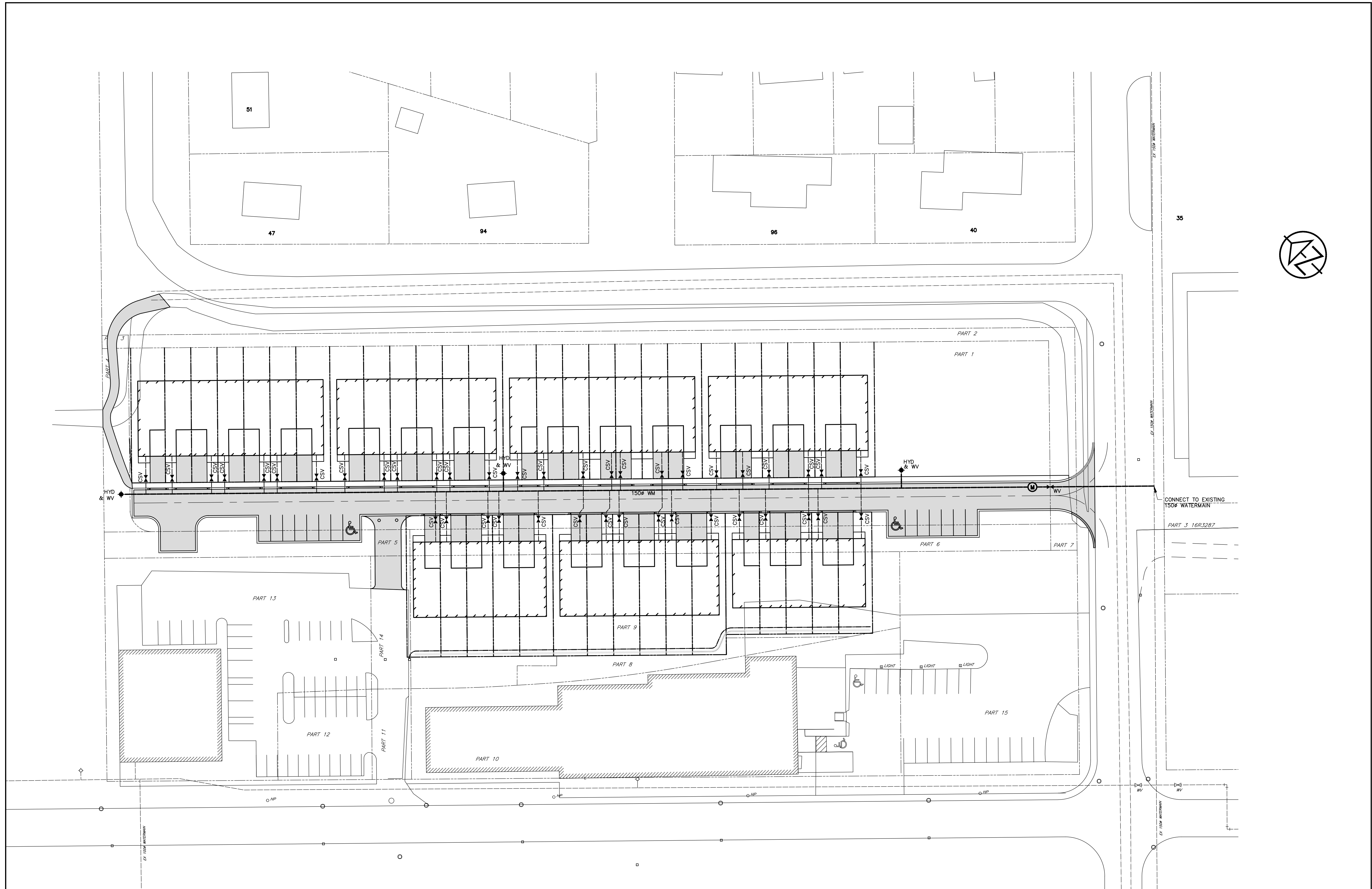
APPLEWOOD TOWN OF THE BLUE MOUNTAINS		
SEDIMENT CONTROL AND REMOVALS PLAN		
DESIGN: CMM	FILE: 120164	DWG:
DRAWN: CMM	DATE: SEPT 2020	
CHECK: KRS	SCALE: 1:400	



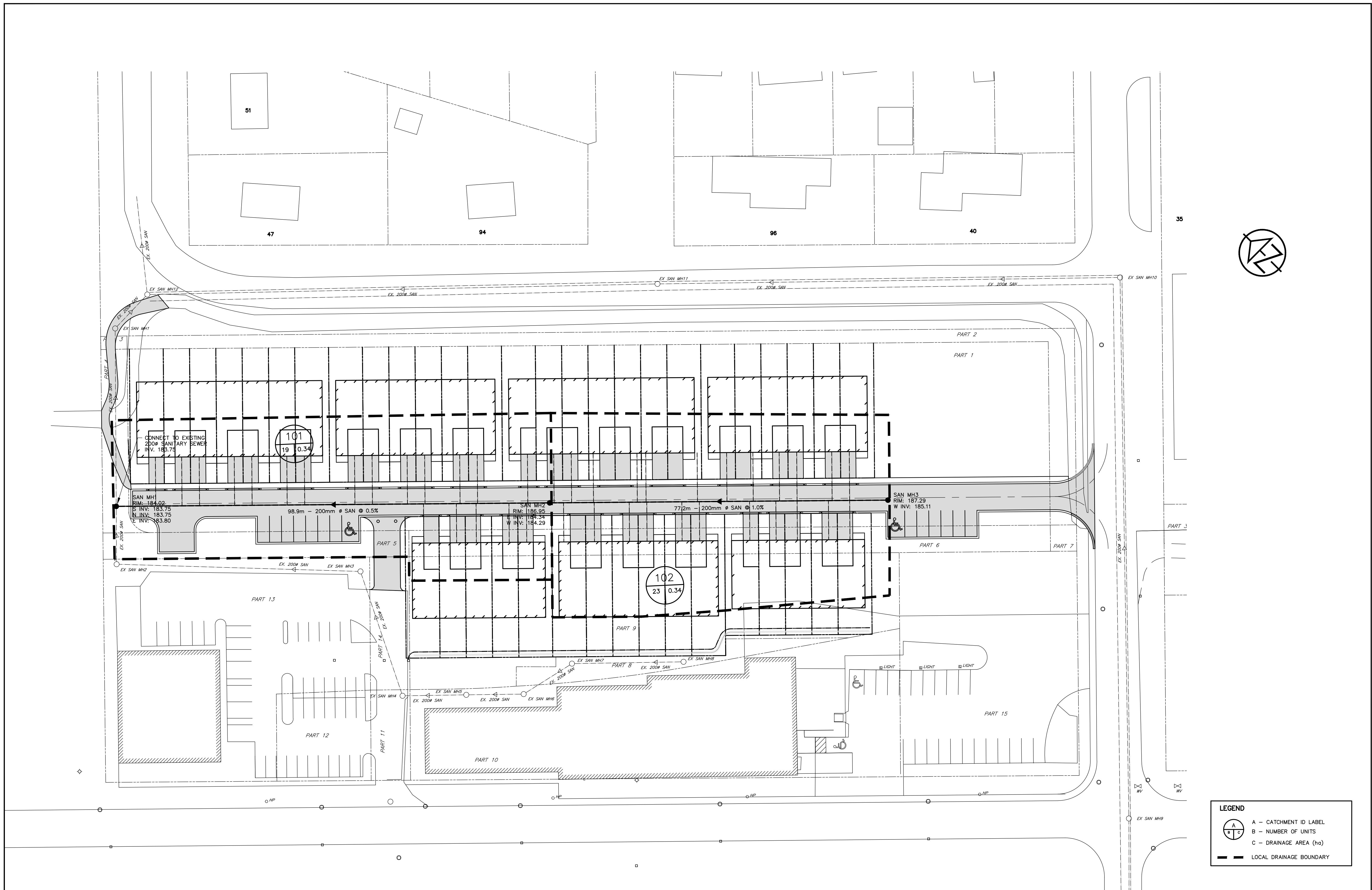
DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED. TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.		BENCHMARKS TBM1 – ELEVATION 269.81 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT NORTH–WEST CORNER OF MILL STREET AND OLD PENETANGUSHIENE ROAD TBM2 – ELEVATION 265.47 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED. TBM3 – ELEVATION 253.71 RAIL ROAD SPIKE AT NORTHWEST CORNER OF INTERSECTION OF MILL STREET AND COUNTY ROAD 93		NOTES ALL DIMENSIONS, ELEVATIONS AND SIZES ARE IN METRIC UNITS UNLESS INDICATED. PIPE SIZES ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED. ELEVATIONS ARE IN METRES UNLESS INDICATED. SURVEY AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013. SERVICING AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.		<table><tr><th>No.</th><th>REVISION DESCRIPTION</th><th>DATE</th><th>ENGINEER STAMP</th></tr><tr><td>1.</td><td>FIRST SUBMISSION</td><td>APR 2021</td><td></td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>	No.	REVISION DESCRIPTION	DATE	ENGINEER STAMP	1.	FIRST SUBMISSION	APR 2021										APPLEWOOD TOWN OF THE BLUE MOUNTAINS SITE SERVICING PLAN		<table><tr><td>DESIGN: CMM</td><td>FILE: 120164</td><td>DWG:</td></tr><tr><td>DRAWN: CMM</td><td>DATE: SEPT 2020</td><td></td></tr><tr><td>CHECK: KRS</td><td>SCALE: 1:400</td><td></td></tr></table>		DESIGN: CMM	FILE: 120164	DWG:	DRAWN: CMM	DATE: SEPT 2020		CHECK: KRS	SCALE: 1:400	
No.	REVISION DESCRIPTION	DATE	ENGINEER STAMP																																
1.	FIRST SUBMISSION	APR 2021																																	
DESIGN: CMM	FILE: 120164	DWG:																																	
DRAWN: CMM	DATE: SEPT 2020																																		
CHECK: KRS	SCALE: 1:400																																		



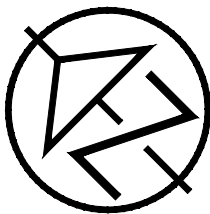
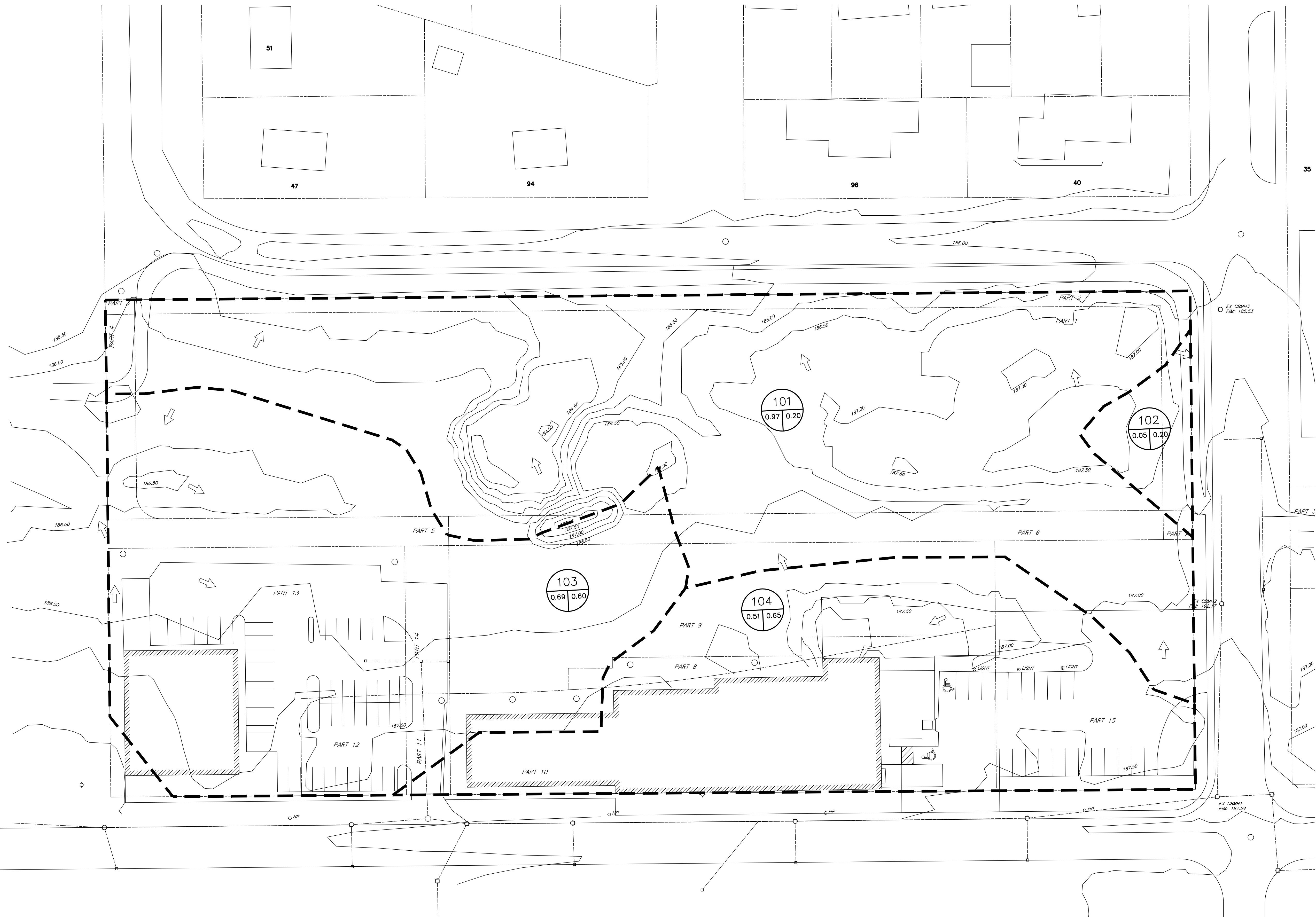
DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED. TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.	BENCHMARKS TBM1 – ELEVATION 269.81 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT NORTH–WEST CORNER OF MILL STREET AND OLD PENETANGUSHIENE ROAD TBM2 – ELEVATION 265.47 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT INTERSECTION OF MILL STREET AND MURPHY STREET. POLE IS ON NORTH SIDE OF MILL STREET BETWEEN HOUSE 30 AND 28 TBM3 – ELEVATION 253.71 RAIL ROAD SPIKE AT NORTHWEST CORNER OF INTERSECTION OF MILL STREET AND COUNTY ROAD 93	NOTES ALL DIMENSIONS, ELEVATIONS AND SIZES ARE IN METRIC UNITS UNLESS INDICATED. PIPE SIZES ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED. ELEVATIONS ARE IN METRES UNLESS INDICATED. SURVEY AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013. SERVICING AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.	<table><tr><th>No.</th><th>REVISION DESCRIPTION</th><th>DATE</th></tr><tr><td>1.</td><td>FIRST SUBMISSION</td><td>APR 2021</td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></table>	No.	REVISION DESCRIPTION	DATE	1.	FIRST SUBMISSION	APR 2021										
			No.	REVISION DESCRIPTION	DATE														
			1.	FIRST SUBMISSION	APR 2021														



DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED. TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.	BENCHMARKS TBM1 – ELEVATION 269.81 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT NORTH-WEST CORNER OF MILL STREET AND OLD PENETANGUSHIENE ROAD TBM2 – ELEVATION 265.47 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT INTERSECTION OF MILL STREET AND MURPHY STREET. POLE IS ON NORTH SIDE OF MILL STREET BETWEEN HOUSE 30 AND 28 TBM3 – ELEVATION 253.71 RAIL ROAD SPIKE AT NORTHWEST CORNER OF INTERSECTION OF MILL STREET AND COUNTY ROAD 93	NOTES ALL DIMENSIONS, ELEVATIONS AND SIZES ARE IN METRIC UNITS UNLESS INDICATED. PIPE SIZES ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED. ELEVATIONS ARE IN METRES UNLESS INDICATED. SURVEY AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013. SERVICING AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.	No. 1.	REVISION DESCRIPTION FIRST SUBMISSION	DATE APR 2021	ENGINEER STAMP 	APPLEWOOD TOWN OF THE BLUE MOUNTAINS			 WATER DISTRIBUTION PLAN		
			DESIGN: CMM			FILE: 120164	DWG:					
			DRAWN: CMM			DATE: SEPT 2020						
			CHECK: KRS			SCALE: 1:400						



DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED. TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.	BENCHMARKS TBM1 - ELEVATION 269.81 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT NORTH-WEST CORNER OF MILL STREET AND OLD PENETANGUSHENE ROAD TBM2 - ELEVATION 265.47 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT INTERSECTION OF MILL STREET AND MURPHY STREET. POLE IS ON NORTH SIDE OF MILL STREET BETWEEN HOUSE 30 AND 28 TBM3 - ELEVATION 253.71 RAIL ROAD SPIKE AT NORTHWEST CORNER OF INTERSECTION OF MILL STREET AND COUNTY ROAD 93	NOTES ALL DIMENSIONS, ELEVATIONS AND SIZES ARE IN METRIC UNITS UNLESS INDICATED. PIPE SIZES ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED. ELEVATIONS ARE IN METRES UNLESS INDICATED. SURVEY AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013. SERVICING AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.	<table><tr><th>No.</th><th>REVISION DESCRIPTION</th><th>DATE</th></tr><tr><td>1.</td><td>FIRST SUBMISSION</td><td>APR 2021</td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></table>	No.	REVISION DESCRIPTION	DATE	1.	FIRST SUBMISSION	APR 2021										ENGINEER STAMP 	APPLEWOOD TOWN OF THE BLUE MOUNTAINS			
No.	REVISION DESCRIPTION	DATE																					
1.	FIRST SUBMISSION	APR 2021																					
SANITARY DRAINAGE PLAN						DESIGN: CMM	FILE: 120164	DWG:															
						DRAWN: CMM	DATE: SEPT 2020																
						CHECK: KRS	SCALE: 1:400																



LEGEND

EXISTING OVERLAND FLOW DIRECTION

A

B

C

A - CATCHMENT ID LABEL
B - DRAINAGE AREA (ha)
C - RUNOFF COEFFICIENT

LOCAL DRAINAGE BOUNDARY

DISCLAIMER AND COPYRIGHT
CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.

TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.

BENCHMARKS

TBM1 - ELEVATION 269.81
RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT NORTH-WEST CORNER OF MILL STREET AND OLD PENETANGUSHIENE ROAD

TBM2 - ELEVATION 265.47
RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT INTERSECTION OF MILL STREET AND MURPHY STREET. POLE IS ON NORTH SIDE OF MILL STREET BETWEEN HOUSE 30 AND 28

TBM3 - ELEVATION 253.71
RAIL ROAD SPIKE AT NORTHWEST CORNER OF INTERSECTION OF MILL STREET AND COUNTY ROAD 93

NOTES

ALL DIMENSIONS, ELEVATIONS AND SIZES ARE IN METRIC UNITS UNLESS INDICATED. PIPE SIZES ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED. ELEVATIONS ARE IN METRES UNLESS INDICATED.

SURVEY AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.

SERVICING AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.

No.	REVISION DESCRIPTION	DATE
1.	FIRST SUBMISSION	APR 2021

ENGINEER STAMP

APPLEWOOD
TOWN OF THE BLUE MOUNTAINS

PRE-DEVELOPMENT DRAINAGE PLAN

DESIGN: CMM

DRAWN: CMM

CHECK: KRS

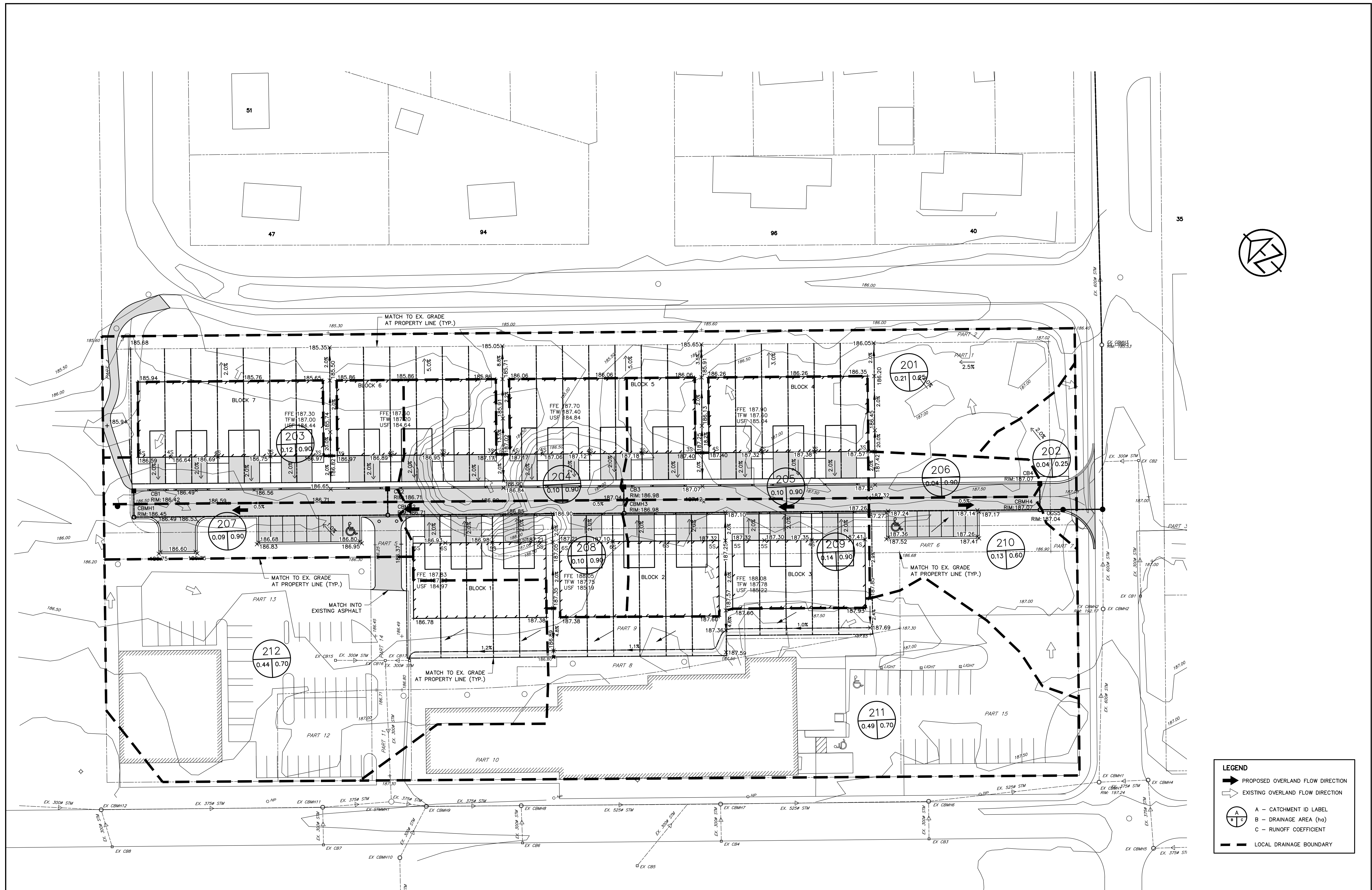
FILE: 120164

DATE: SEPT 2020

SCALE: 1:400

DWG:





DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED. TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.	BENCHMARKS TBM1 – ELEVATION 269.81 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT NORTH–WEST CORNER OF MILL STREET AND OLD PENETANGISHENE ROAD TBM2 – ELEVATION 265.47 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT INTERSECTION OF MILL STREET AND MURPHY STREET. POLE IS ON NORTH SIDE OF MILL STREET BETWEEN HOUSE 30 AND 28 TBM3 – ELEVATION 253.71 RAIL ROAD SPIKE AT NORTHWEST CORNER OF INTERSECTION OF MILL STREET AND COUNTY ROAD 93	NOTES ALL DIMENSIONS, ELEVATIONS AND SIZES ARE IN METRIC UNITS UNLESS INDICATED. PIPE SIZES ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED. ELEVATIONS ARE IN METRES UNLESS INDICATED. SURVEY AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013. SERVICING AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.	No.	REVISION DESCRIPTION	DATE	ENGINEER STAMP	APPLEWOOD TOWN OF THE BLUE MOUNTAINS POST–DEVELOPMENT DRAINAGE PLAN	 <table><tr><td>DESIGN: CMM</td><td>FILE: 120164</td><td>DWG:</td></tr><tr><td>DRAWN: CMM</td><td>DATE: SEPT 2020</td><td></td></tr><tr><td>CHECK: KRS</td><td>SCALE: 1:400</td><td></td></tr></table>			DESIGN: CMM	FILE: 120164	DWG:	DRAWN: CMM	DATE: SEPT 2020		CHECK: KRS	SCALE: 1:400	
			DESIGN: CMM	FILE: 120164	DWG:														
			DRAWN: CMM	DATE: SEPT 2020															
CHECK: KRS	SCALE: 1:400																		
1.	FIRST SUBMISSION	APR 2021																	

GENERAL A. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH TOWN OF THE BLUE MOUNTAINS STANDARDS AND OPS STANDARDS. WHERE CONFLICT OCCURS, TOWN STANDARDS TO GOVERN. B. THE OWNER'S ENGINEER SHALL PROVIDE BENCHMARK ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DETAILED LAYOUT OF THE WORK. C. ALL PROPERTY BARS TO BE PRESERVED AND REPLACED BY OLS AT CONTRACTOR'S EXPENSE IF REMOVED DURING CONSTRUCTION. D. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE SUPPLY OF TEMPORARY WATER AND POWER. E. DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS 517 AND OPSS 518. MAINTAIN ALL TRENCHES IN A DRY CONDITION. F. ALL ENGINE DRIVEN PUMPS TO BE ADEQUATELY SILENCED, SUITABLE FOR OPERATION IN A RESIDENTIAL DISTRICT. G. GENERAL INSTALLATION AND TESTING OF SEWERS, WATERMAIN AND APPURTENANCES TO BE IN ACCORDANCE WITH OPSS 407, 408, 409, 410, 421, AND 441 AND ALL SPECIFICATIONS REFERENCED WITHIN THESE SECTIONS. H. ALL MAINTENANCE HOLES ARE 1200 mm DIAMETER UNLESS OTHERWISE SPECIFIED. I. ALL STRUCTURES TO BE INSTALLED WITH FROST STRAPS TO OPSD 701.100. J. PIPE SUPPORT AT ALL STRUCTURES TO OPSD 708.020. K. ALL MAINTENANCE HOLE AND CATCH BASIN FRAME AND GRATES TO BE SET TO BASE COURSE ASPHALT ELEVATION IN ACCORDANCE WITH OPSD 704.010. FRAME AND GRATES TO BE RAISED TO FINISHED GRADE PRIOR TO THE PLACEMENT OF SURFACE COURSE ASPHALT USING CONCRETE ADJUSTMENT UNITS. MAXIMUM COMBINED HEIGHT OF ADJUSTMENT UNITS SHALL BE 450 mm. L. TRENCH BACKFILL TO BE SELECT NATIVE MATERIAL OR IMPORTED SELECT SUBGRADE MATERIAL TO OPSS:MUNI 1010. BACKFILL TO BE PLACED IN MINIMUM 200 mm THICK LIFTS (OR AS OTHERWISE DIRECTED BY THE GEOTECHNICAL CONSULTANT) AND COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). M. PIPE EMBEDMENT TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S SPMDD. BACKFILL AND EMBEDMENT TO OPSD 802.010 (FLEXIBLE PIPE), GRANULAR A EMBEDMENT OR OPSD 802.031 (RIGID PIPE) CLASS B. GRANULAR A BEDDING, GRANULAR B COVER (MAX. AGGREGATE SIZE 25 mm). MINIMUM BEDDING DEPTH 150 mm, MINIMUM COVER DEPTH 300 mm ON ALL PIPES. WHERE EXCESSIVELY WET OR POOR SUBGRADE IS ENCOUNTERED AT THE INVERT LEVEL, IT MAY BE NECESSARY TO INCREASE THE BEDDING THICKNESS. N. CLEAR STONE COMPLETELY WRAPPED IN FILTER FABRIC MAY BE SUBSTITUTED FOR EMBEDMENT MATERIAL IF APPROVED BY THE ENGINEER. O. THE CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION OF ALL EXISTING INFRASTRUCTURE/FACILITIES AS WELL AS NOTIFYING ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK AND CO-ORDINATE CONSTRUCTION ACCORDINGLY. P. ALL ON-SITE MATERIAL SHALL BE PROPERLY STORED, SECURED, MONITORED AND COVERED AS REQUIRED. SPECIFICALLY, ALL PVC PIPE SHALL BE COVERED WHILE STORED ON-SITE. Q. ALL SIGNAGE TO COMPLY WITH THE TOWN OF THE BLUE MOUNTAINS SIGN BY-LAW. R. REFER TO LANDSCAPE PLANS FOR TREE CLEARING AND TREE PROTECTION. ROADS A. SUBGRADE AND BOULEVARD MATERIAL TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S SPMDD. SUBGRADE TO BE PROOF ROLLED AND CERTIFIED PRIOR TO PLACING GRANULAR B. B. GRANULAR A AND B TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 100% OF THE MATERIAL'S RESPECTIVE SPMDD. C. ASPHALT TO BE COMPACTED TO A MINIMUM OF 97% OF THE MARSHALL BULK DENSITY. D. ROADWAYS TO BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE ROAD CROSS-SECTIONS. E. TEMPORARY FIRE ROUTE TO BE CONSTRUCTED WITH MINIMUM 300 mm GRANULAR B AND 150 mm GRANULAR A. F. ALL ASPHALT AND GRANULAR MATERIAL TO BE PLACED IN ACCORDANCE WITH OPSS:MUNI 310 AND OPSS:MUNI 314. G. STOP SIGNS AND STREET SIGNS TO BE SUPPLIED AND INSTALLED PER TOWN STANDARDS. H. BASE ASPHALT TO BE CLEANED AND TACK COAT TO BE APPLIED PRIOR TO PLACEMENT OF SURFACE COURSE ASPHALT. I. CONCRETE CURB AND GUTTER TO OPSD 600.040 AND OPSD 600.110 – AS SPECIFIED, AND OPSS:MUNI 353. CURB DEPRESSIONS AT SIDEWALK CROSSINGS IN ACCORDANCE WITH OPSD 310.033. J. CONCRETE CURB TERMINATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 608.010. K. CONCRETE SIDEWALK TO OPSD 310.010, 310.033 AND OPSS 351. SUBBASE TO CONSIST OF 150 mm DEPTH GRANULAR A. L. UNPAINTED CAST IRON TACTILE WALKING SURFACE INDICATOR COMPONENTS TO BE IN ACCORDANCE WITH OPSD 310.039. M. 100 mm DIAMETER PIPE SUBDRAINS SHALL BE PROVIDED ON BOTH SIDES OF THE ROAD IN ACCORDANCE WITH OPSS:MUNI 405 AND OPSD 216.021, UNWRAPPED TRENCH, GRANULAR A EMBEDMENT. STORM SEWER A. MAINTENANCE HOLES AND CATCH BASIN MAINTENANCE HOLES TO OPSD 701.010, 701.012 AND 701.013. B. MAINTENANCE HOLES TO BE BENCHMARKED TO OPSD 701.021. CATCH BASIN MAINTENANCE HOLES TO HAVE A SUMP PER OPSD 701.010. C. MAINTENANCE HOLE AND CATCH BASIN MAINTENANCE HOLE STEPS TO OPSD 405.010. D. MAINTENANCE HOLE FRAMES AND GRATES TO OPSD 401.010 TYPE A CLOSED COVER. E. CATCH BASINS TO OPSD 705.010 AND 705.020 COMPLETE WITH SUMP. F. CATCH BASIN AND CATCH BASIN MAINTENANCE HOLE FRAMES AND GRATES TO OPSD 400.020. G. CATCH BASIN LEADS – 300 mm DIAMETER SINGLE AND 375 mm DIAMETER DOUBLE. CATCH BASIN CONNECTIONS TO OPSD 708.010 AND 708.030. UTILITIES A. ALL EXISTING SERVICES AND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE TO ARRANGE FOR THE LOCATIONS OF ALL EXISTING SERVICES AND UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR ANY DAMAGES CAUSED BY CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING, SUPPORTING AND PROTECTING ALL UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES EXISTING AT THE TIME OF CONSTRUCTION IN THE AREA OF THE CONTRACTORS WORK, WHETHER SHOWN ON THE PLANS OR NOT, AND FOR ALL REPAIRS AND CONSEQUENCES RESULTING FROM DAMAGE TO SAME. B. ANY AREA OF POSSIBLE CONFLICTS WITH EXISTING UTILITIES SHALL BE EXCAVATED BY HAND PRIOR TO CONSTRUCTION.			REINSTATEMENT A. ALL DISTURBED AREAS TO BE REINSTATED EQUAL TO OR BETTER THAN PRE-CONSTRUCTION CONDITIONS. B. AS A MINIMUM USE THE FOLLOWING REINSTATEMENT: ASPHALT SURFACE: 40 mm HL4 SURFACE COURSE ASPHALT 50 mm HL8 BASE COURSE ASPHALT GRAVEL DRIVEWAY: 150 mm GRANULAR A 200 mm GRANULAR B CSP REMOVAL AND REPLACEMENT: EMBEDMENT TO OPSD 802.010 GRANULAR A BACKFILL TO OPSD 803.030 AND 803.031 CSP PROTECTION DURING CONSTRUCTION TO OPSD 808.010 ANY CSP DAMAGED DURING CONSTRUCTION TO BE REMOVED AND NEW CSP SUPPLIED AND INSTALLED BY CONTRACTOR. RIP RAP TREATMENT FOR OUTLETS TO OPSD 810.010. GRASSSED AREA: 150 mm CLEAN TOPSOIL AND SOD. C. STOP SIGNS AND STREET SIGNS TO BE REMOVED, SALVAGED AND REINSTATED TO TOWN STANDARDS. ANY SIGNS DAMAGED BY CONTRACTOR DURING REMOVAL SHALL BE REPLACED AT NO ADDITIONAL COST. D. ALL CONSTRUCTION MATERIALS SHALL BE REMOVED FROM THE SITE PRIOR TO RESTORATION OF DISTURBED AREAS. E. CONTRACTOR SHALL RESTORE THE LANDS DISTURBED BY CONSTRUCTION AS WORK PROGRESSES. SANITARY SEWER A. MAINTENANCE HOLES TO OPSD 701.010. B. MAINTENANCE HOLES TO BE BENCHMARKED TO OPSD 701.021. ALL CONNECTIONS TO MAINTENANCE HOLES TO INCLUDE KOR-N-SEAL RUBBER BOOT PIPE CONNECTION. C. MAINTENANCE HOLE STEPS TO OPSD 405.010. D. ADJUST MAINTENANCE HOLES WITH PRECAST RISERS TO OPSD 701.031 C/W ADJUSTMENT UNITS AS REQUIRED. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO BE APPROVED BY THE ENGINEER. E. MAINTENANCE HOLE FRAME AND COVER TO OPSD 401.010 TYPE 'A' CLOSED COVER. F. EXTERNAL DROP STRUCTURES AT MAINTENANCE HOLES TO OPSD 1003.020. G. SERVICE CONNECTIONS TO BE TERMINATED AT THE LOCATION SHOWN ON THE DRAWINGS WITH A CAP SUITABLY BRACED TO WITHSTAND TEST PRESSURES AND AN 89 mm x 38 mm MARKER PLACED FROM THE INVERT OF THE CONNECTION TO 600 mm ABOVE FINISHED GRADE PAINTED GREEN. MINIMUM GRADE OF SERVICE TO BE 2%. H. RESIDENTIAL SERVICE CONNECTIONS TO OPSD 1006.020, 125 mm DIAMETER, GRANULAR A EMBEDMENT (MINIMUM 150 mm BEDDING AND 300 mm COVER). RADIUS BENDS TO BE USED ON ALL SEWER CONNECTIONS WHERE THE ANGLE OF CONNECTION BETWEEN THE SERVICE AND SEWER EXCEEDS 90°. WATERMAIN A. ALL WORK ON EXISTING WATERMAIN TO BE COORDINATED WITH THE TOWN. B. MINIMUM GROUND COVER OVER WATERMAIN, SERVICE LATERALS AND HYDRANT LEADS TO BE 1.7 m AT ALL POINTS, MAXIMUM GROUND COVER OVER WATERMAIN TO 2.5 m. C. WHERE SPECIFIED OR APPROVED, INSULATION TO BE INSTALLED OVER WATERMAIN WITH LESS THAN 1.7 m DEPTH OF COVER AS FOLLOWS: DEPTH OF COVER BETWEEN 1.4 m to 1.7 m REQUIRES 50 mm INSULATION. DEPTH OF COVER BETWEEN 1.2 m to 1.4 m REQUIRES 100 mm INSULATION. WATER MAIN NOT TO BE INSTALLED WITH LESS THAN 1.2 m DEPTH OF COVER. D. THRUST BLOCKS OR PIPE RESTRAINTS TO BE PROVIDED AT ALL CHANGES IN PIPE DIRECTION, TERMINATIONS AND ANY LOCATION WHERE THRUST PRESSURES MAY OCCUR. WATER VALVES SHALL BE RESTRAINED ON EITHER SIDE TO THE SAME STANDARD THAT A DEAD END WOULD BE. WHERE SOIL CONDITIONS ARE SUSPECT, SUCH AS IN DISTURBED SOILS OR SOILS WITH BEARING STRENGTH OF LESS THAN 200 kPa, PIPE RESTRAINTERS SHALL BE USED. IN LIEU OF THRUST BLOCKS PIPE RESTRAINTS FOR PVC SHALL BE PER TOWN STANDARDS, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS (SEE CHART). THREADED ROD IN JOINT RESTRAINT IS NOT PERMISSIBLE. THRUST BLOCKS TO OPSD 1103.010 AND 1103.020. E. CATHODIC PROTECTION OF ALL WATERMAIN FITTINGS AND APPURTENANCES TO BE PROVIDED AS PER TOWN STANDARD (SEE CHART). F. ALL RESIDENTIAL SERVICE CONNECTIONS TO BE TERMINATED AT THE LOCATION AND ELEVATION SHOWN ON THE DRAWINGS WITH A CURB STOP VALVE, TESTING TAIL TO SURFACE CAPPED OR CRIMPED AND AN 89 mm x 38 mm MARKER FROM THE INVERT OF THE SERVICE TO 600 mm ABOVE GRADE PAINTED BLUE. G. HYDRANTS TO BE INSTALLED TO OPSD 1105.010. H. HYDRANTS TO BE PAINTED CHROME YELLOW AND INCLUDE A FLEXSTAKE HYDRANT MARKER MODEL FHV804, 1.2 m LONG, COLOUR YELLOW WITH REFLECTIVE GRAPHIC ON BOTH SIDES AT THE TOP OF THE MARKER. MARKER TO BE POSITIONED ON THE RIGHT PORT AS VIEWED FROM THE STREET. A FIRE HYDRANT MARKER POST AND SIGN SHALL BE INSTALLED 0.3 m BEHIND EACH HYDRANT. THE SIGN SHALL BE REFLECTIVE WITH A RED HYDRANT ON A WHITE BACKGROUND AND MEASURE 0.3 m x 0.3 m AND BE MOUNTED 1.5 m ABOVE GRADE. I. ALL PVC WATERMAIN AND RESIDENTIAL SERVICE LINES TO HAVE TRACER WIRE BETWEEN HYDRANTS AND OTHER CONDUCTING APPURTENANCES. CONTRACTOR SHALL TEST ALL TRACER WIRE TO CONFIRM CONNECTIVITY. J. TRACER WIRE TO BE 10 GAUGE, MULTI-STRAND SHALL BE PLACED ON TOP AND ATTACHED IN TWO PLACES ON EACH LENGTH OF PVC OR PE PIPE. ALL CONNECTIONS SHALL BE MADE WITH "DRYCONN WATERPROOF CONNECTORS" OR APPROVED EQUAL. K. VERTICAL CLEARANCE BETWEEN WATERMANS AND SEWERS TO BE A MINIMUM OF 0.5 m, HORIZONTAL CLEARANCE BETWEEN WATERMANS AND SEWERS TO BE A MINIMUM OF 2.5 m. CLEARANCES ARE MEASURED FROM THE OUTSIDE OF THE PIPE. L. THE COMPLETE WATER SYSTEM, INCLUDING FIRE LINE AND SERVICE LINE CONNECTIONS TO THE TERMINATION POINT AND HYDRANTS SHALL BE TESTED IN ACCORDANCE WITH THE TOWN'S WATERMAIN COMMISSIONING PROTOCOL. CONTRACTOR TO PROVIDE DETAILED WRITTEN WATERMAIN COMMISSIONING PROTOCOL FOR APPROVAL PRIOR TO COMMENCING TESTING OPERATIONS. CONNECTIONS TO EXISTING MAINS SHALL NOT BE MADE UNTIL WRITTEN AUTHORIZATION IS PROVIDED BY THE ENGINEER AND THE TOWN. M. DURING CHLORINATION OR DECHLORINATION, THE CONTRACTOR SHALL ARRANGE FOR OPERATION OF EACH SERVICE TO VERIFY FULL FLOW AND PRESSURE AT CURB STOP TO SATISFACTION OF THE ENGINEER. N. WATER VALVES TO BE OPERATED BY TOWN STAFF ONLY. O. ALL WATER USED IN COMMISSIONING AND TESTING TO BE POTABLE AND SUPPLIED FROM THE TOWN OF THE BLUE MOUNTAINS, TOWN OF COLLINGWOOD OR MUNICIPALITY OF MEAFORD. P. RESIDENTIAL SERVICE CONNECTIONS TO OPSD 1104.010, 25 mm DIAMETER, 300 mm DEPTH GRANULAR A EMBEDMENT.	MATERIALS A. ALL MATERIAL TO COMPLY WITH CSA, OPSS AND TOWN STANDARDS. B. SANITARY SEWER – PVC DR 35 (GREEN). C. SANITARY SERVICE CONNECTIONS – PVC SDR 28. D. STORM SEWER – PVC SDR 35 OR CONCRETE 100–D. ALL SEWER TO BE JOINED WITH A GASKETED BALL AND SPIGOT SYSTEM. NON-REINFORCED CONCRETE PIPE MAY BE USED FOR SIZES UP TO AND INCLUDING 375 mm DIA. REINFORCED CONCRETE PIPE MAY BE USED FOR ALL SIZES OF SEWER. E. PERFORATED SUBDRAIN – BIG 'O' WITH GEOTEXTILE FILTER SOCK OR APPROVED EQUAL. F. WATERMAIN – PVC DR 18. G. WATER SERVICE CONNECTIONS TO BE TYPE 'K' COPPER PIPE OR REHAU'S MUNICIPLEX (BLUE). H. WATER SERVICE FITTINGS SHALL BE: MAIN STOP – CAMBRIDGE BRASS 301NL-A4H4 OR MUELLER B-25008, BALL STYLE C/W S/S STEM, AWWA THREAD BY COMPRESSION CURB STOP – CAMBRIDGE BRASS 202NL-H4H4 OR MUELLER B-25209N, BALL STYLE WITH DRAIN C/W S/S STEM, COMPRESSION JOINT SERVICE SADDLE – CAMBRIDGE BRASS 8403 OR ROBAR 2626 DOUBLE STRAP TAPPING SADDLE – SMITH-BLAIR 663 OR ROBAR 6606 TAPPING VALVE – MUELLER H-687, CLOW F-6114 OR AVK 45/65 SERVICE BOXES – CLOW D1 OR MUELLER A-726 c/w CLOW T4-36 OR MUELLER 88036 RODS I. PIPE RESTRAINTERS – SIGMA C-900. J. HYDRANTS – MUELLER CENTURY OR AVK 2780, OPEN LEFT, WITH STORTZ CONNECTIONS ON ALL STEAMER PORTS. HYDRANT SETS SHALL BE INSTALLED NOT LESS THAN 0.9 m FROM THE CENTER OF THE VALVE TO THE CENTER OF THE HYDRANT. TRACER WIRE SHALL BE ATTACHED TO THE OUTSIDE OF THE VALVE BOX AND WIRE BROUGHT INTO VALVE BOX UNDER CAP. K. LIVE TAP SADDLES TO BE EPOXY COATED COMPLETE WITH STAINLESS STEEL BOLTS. L. MECHANICAL JOINT DUCTILE FITTINGS TO AWWA/ANSI C153/A21.53. INCLUDING PROTECTO-CAPS, CAT NO. 175P190 OR APPROVED EQUAL. M. ISOLATION VALVES TO BE RESILIENT SEAT GATE VALVES WITH MECHANICAL JOINTS, OPEN LEFT, MUELLER A-2360/A-2361, CLOW F-6100 OR AVK 45/65. VALVE BOXES TO BE BIBBY OR STAR VB666A. CAPS TO BE PAINTED BLUE. N. ALL SPECIFIED AGGREGATES TO OPSS:MUNI 1010. O. FILTER FABRIC – TERRAFIX 270R OR APPROVED EQUAL. P. INSULATION – STYROFOAM HIGHLOAD 40, 50mm THICK SHEETS. Q. BACK FLOW PREVENTOR – WATTS SERIES LF709-DNRS6, RESILIENT SEATED GATE VALVES EPOXY COATED CAST IRON BODY. R. FLOW METER – ABB ELECTROMAGNETIC WATER MASTER FEV 125 DN200 S. ALL WATERMAIN FASTENERS (STAINLESS BOLTS) TO BE COMPLETE WITH ZINC CAPS. T. ALL CHEMICALS AND MATERIALS USED IN THE ALTERATION OR OPERATION OF THE DRINKING WATER SYSTEM THAT COMES IN CONTACT WITH WATER WITHIN THE SYSTEM SHALL MEET ALL APPLICABLE STANDARDS SET BY BOTH THE AMERICAN WATER WORKS ASSOCIATION (AWWA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) SAFETY CRITERIA STANDARDS NSF/60, NSF/61 AND NSF372. U. METER CHAMBER ENCLOSURE TO BE SPECIFIED BY TOWN.						
DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED. TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.	BENCHMARKS TBM1 – ELEVATION 269.81 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT NORTH-WEST CORNER OF MILL STREET AND OLD PENETANGUSHIENE ROAD TBM2 ELEVATION 265.47 RAIL ROAD SPIKE IN SOUTH FACE OF HYDRO POLE AT INTERSECTION OF MILL STREET AND MURPHY STREET. POLE IS ON NORTH SIDE OF MILL STREET BETWEEN HOUSE 30 AND 28 TBM3 – ELEVATION 253.71 RAIL ROAD SPIKE AT NORTHWEST CORNER OF INTERSECTION OF MILL STREET AND COUNTY ROAD 93	NOTES ALL DIMENSIONS, ELEVATIONS AND SIZES ARE IN METRIC UNITS UNLESS INDICATED. PIPE SIZES ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED. ELEVATIONS ARE IN METRES UNLESS INDICATED. SURVEY AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013. SERVICING AS PER CROZIER AND ASSOCIATES FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT DATED JULY 2013.	No. 1.	REVISION DESCRIPTION FIRST SUBMISSION	DATE APR 2021	ENGINEER STAMP UNITED PROFESSIONAL ENGINEERS K. R. SANSON April 1/21 PROVINCE OF ONTARIO	APPLEWOOD TOWN OF THE BLUE MOUNTAINS	TATHAM ENGINEERING	DESIGN: CMM FILE: 120164 DWG:	DETAILS AND NOTES DRAWN: CMM CHECK: KRS DATE: SEPT 2020 SCALE: AS SHOWN