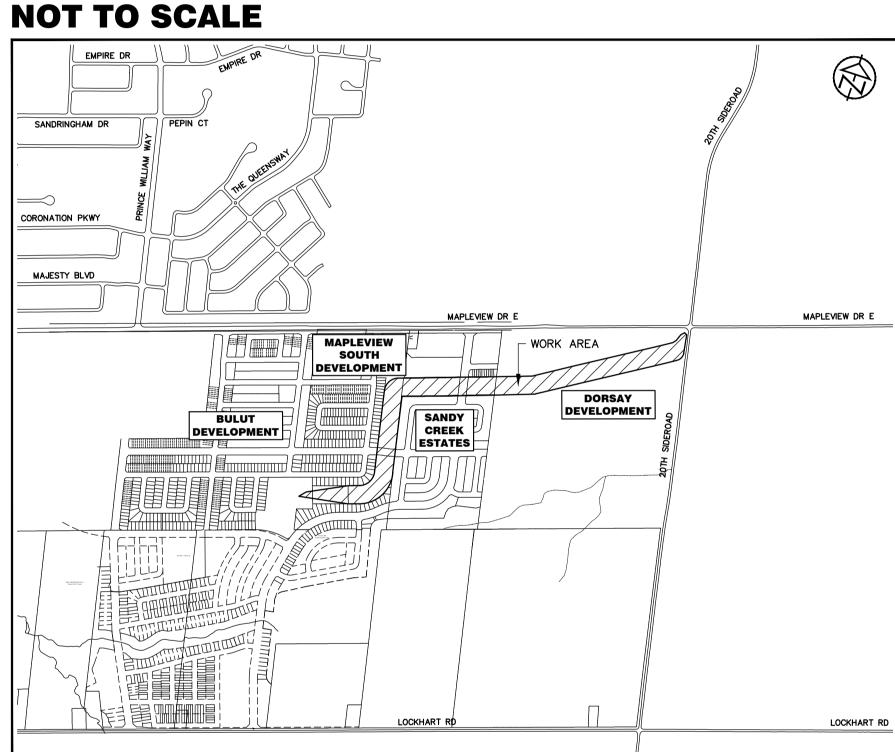
SANDY COVE CREEK REALIGNMENT SANDY COVE CREEK LANDOWNERS GROUP CITY OF BARRIE

KEY PLAN



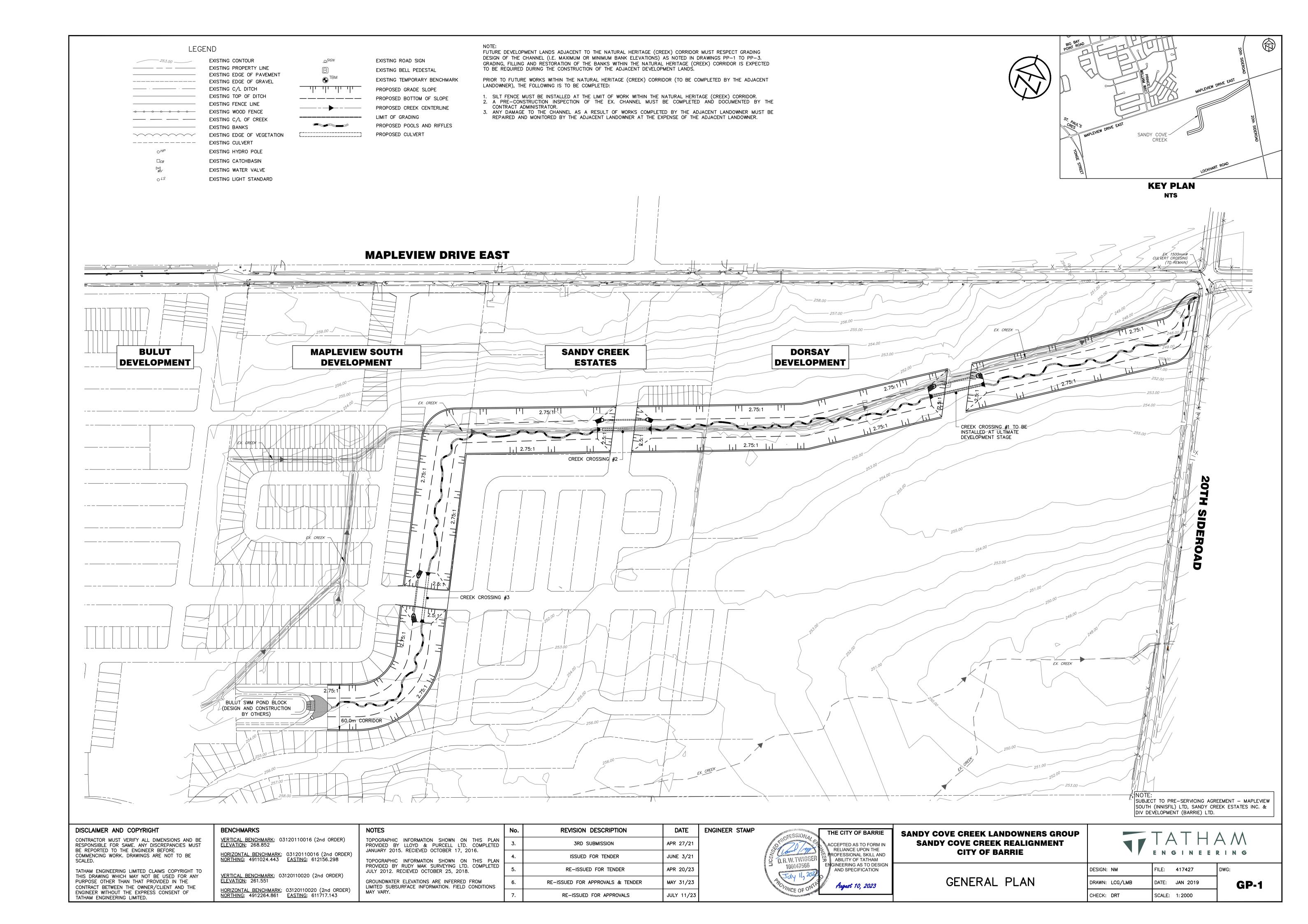


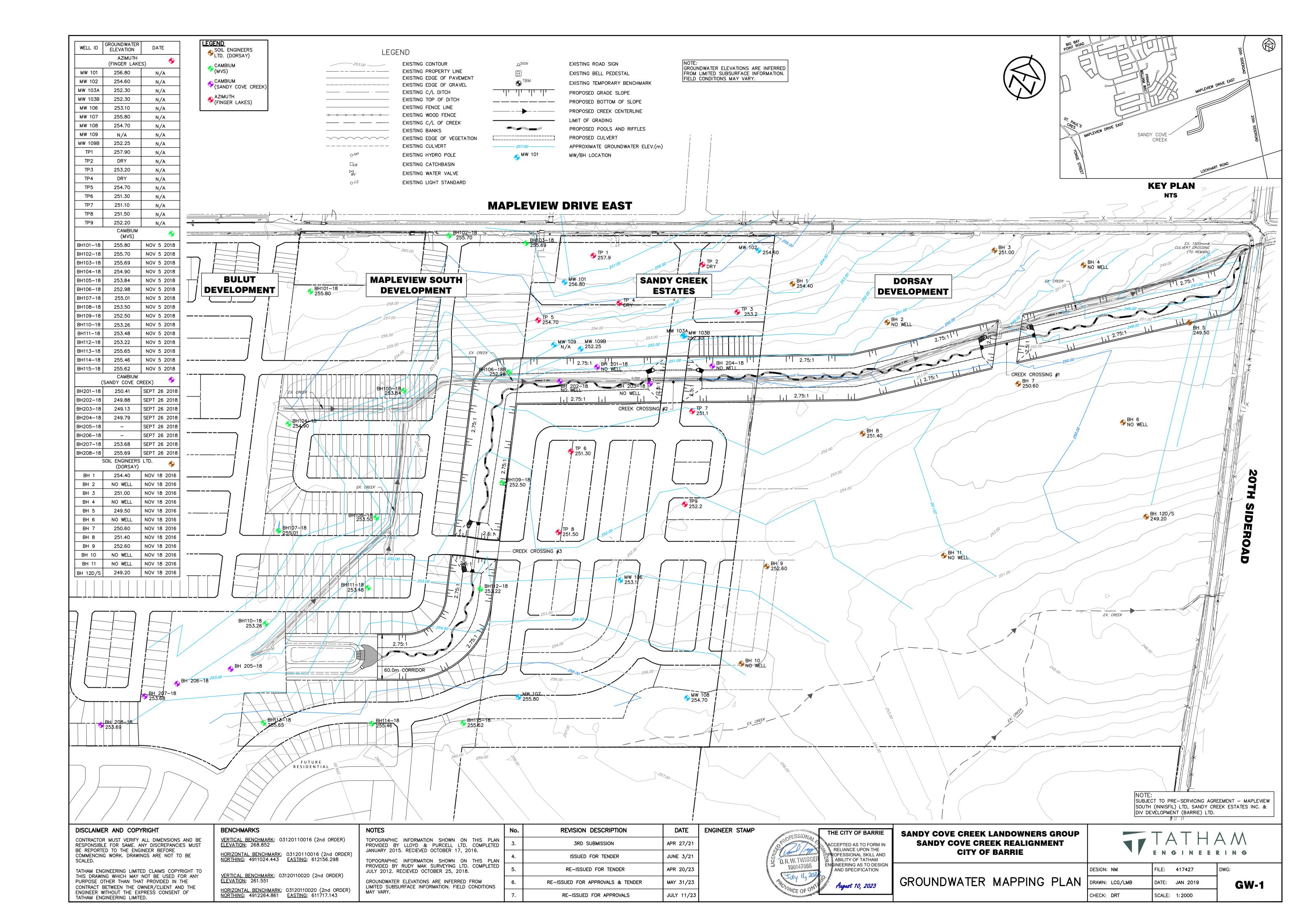
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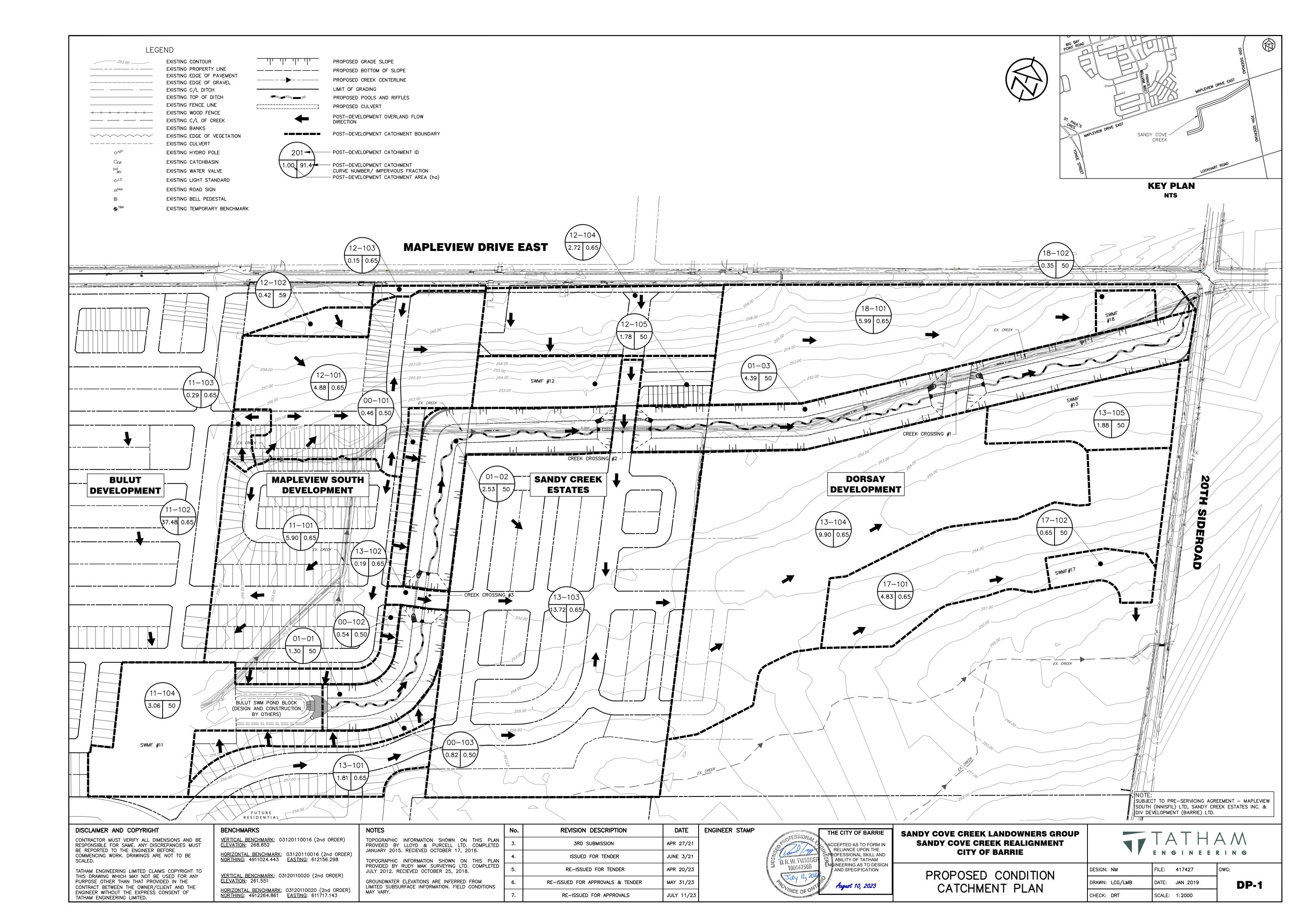
Dwg.	Description
417427-TP-1	TITLE SHEET
417427-GP-1	GENERAL PLAN
417427-GW-1	GROUNDWATER MAPPING PLAN
417427-DP-1	PROPOSED CONDITION CATCHMENT PLAN
417427-FLD-1	EXISTING CONDITION REGIONAL FLOODPLAIN MAPPING PLAN
417427-FLD-2	PROPOSED ULTIMATE CONDITION REGIONAL FLOODPLAIN MAPPING PLAN
417427-FLD-3	PROPOSED INTERIM (PHASE 2) CONDITION REGIONAL FLOODPLAIN MAPPING PLAN
417427-FLD-4	PROPOSED INTERIM (PHASE 1) CONDITION REGIONAL FLOODPLAIN MAPPING PLAN
417427-PP-1	PLAN & PROFILE STA. 0+180 TO 0+740
417427-PP-2	PLAN & PROFILE STA. 0+740 TO 1+280
417427-PP-3	PLAN & PROFILE STA. 1+280 TO 1+768
417427-SC-1	SECTIONS - INTERIM & ULTIMATE CONDITION
417427-SC-2	SECTIONS & DETAILS - INTERIM & ULTIMATE CONDITION
417427-SC-3	CULVERT CROSSING SECTIONS & DETAILS
417427-SA-1	SITE ALTERATION PLAN - INTERIM (PHASE 1) CONDITION
417427-SA-2	SITE ALTERATION PLAN - INTERIM (PHASE 2) CONDITION
417427-SA-3	SITE ALTERATION DETAILS & NOTES
417427-CP-1	CONSTRUCTION PHASING PLAN
417427-TS-1	TOPSOIL STRIPPING PLAN - INTERIM (PHASE 1) CONDITION
417427-TS-2	TOPSOIL STRIPPING PLAN - INTERIM (PHASE 2) CONDITION
417427-EA-1	EARTHWORKS CUT/FILL GRADATION - INTERIM (PHASE 1) CONDITION
417427-EA-2	EARTHWORKS CUT/FILL GRADATION - INTERIM (PHASE 2) CONDITION
SANDY COVE CREEK F	RESTORATION PLANS (PREPARED BY ADESSO DESIGN INC.)
22-107-L-1	LANDSCAPE KEY PLAN
22-107-L-2	LANDSCAPE PLAN ENLARGEMENT — INTERIM PHASE 1
22-107-L-3a 22-107-L-3b	LANDSCAPE PLAN ENLARGEMENT — INTERIM PHASE 1 LANDSCAPE PLAN ENLARGEMENT — INTERIM PHASE 2
22-107-L-4a 22-107-L-4b	LANDSCAPE PLAN ENLARGEMENT — INTERIM PHASE 1 LANDSCAPE PLAN ENLARGEMENT — INTERIM PHASE 2
22-107-L-5	LANDSCAPE PLAN ENLARGEMENT — INTERIM PHASE 2
22-107-L-6	LANDSCAPE PLAN ENLARGEMENT — ULTIMATE
22-107-L-7	LANDSCAPE PLAN ENLARGEMENT — ULTIMATE
22-107-L-8	LANDSCAPE PLAN ENLARGEMENT — ULTIMATE
22-107-L-9	LANDSCAPE PLAN ENLARGEMENT — ULTIMATE
22-107-L-10	DETAILS
22-107-L-11	HABITAT DETAILS
22-107-L-12	HABITAT DETAILS

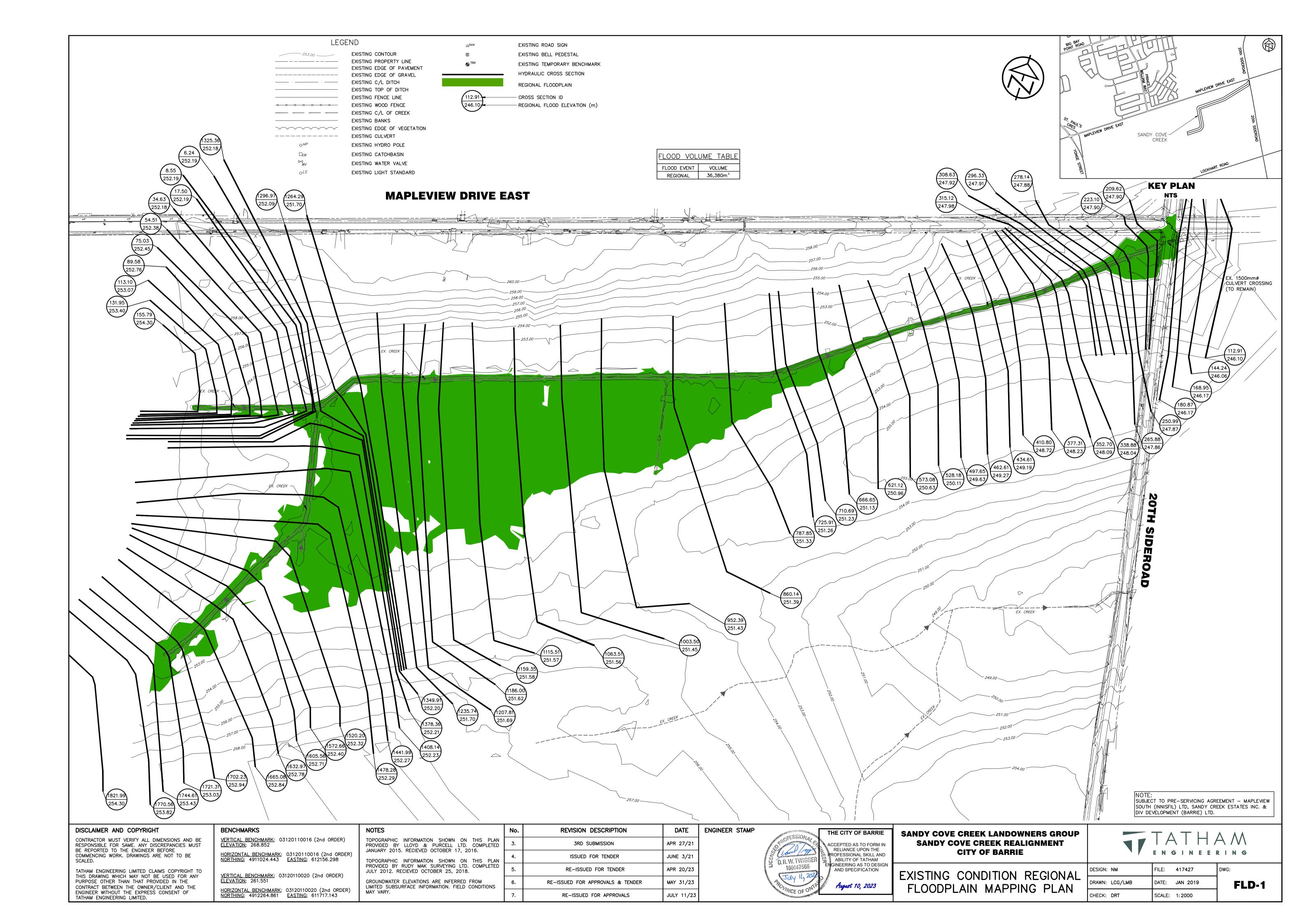


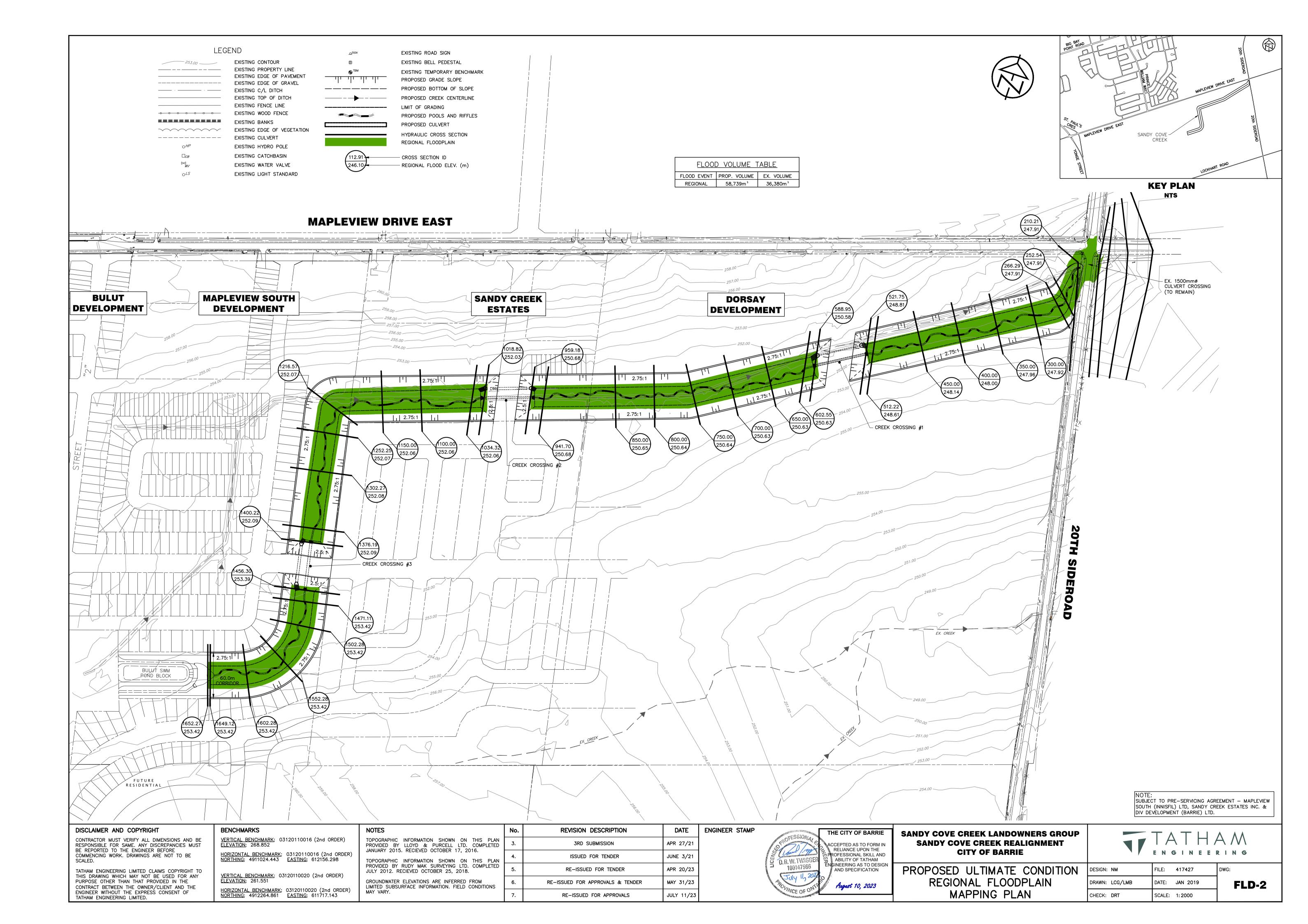
RE-ISSUED FOR APPROVALS
JULY 2023
TATHAM FILE NO. 417427

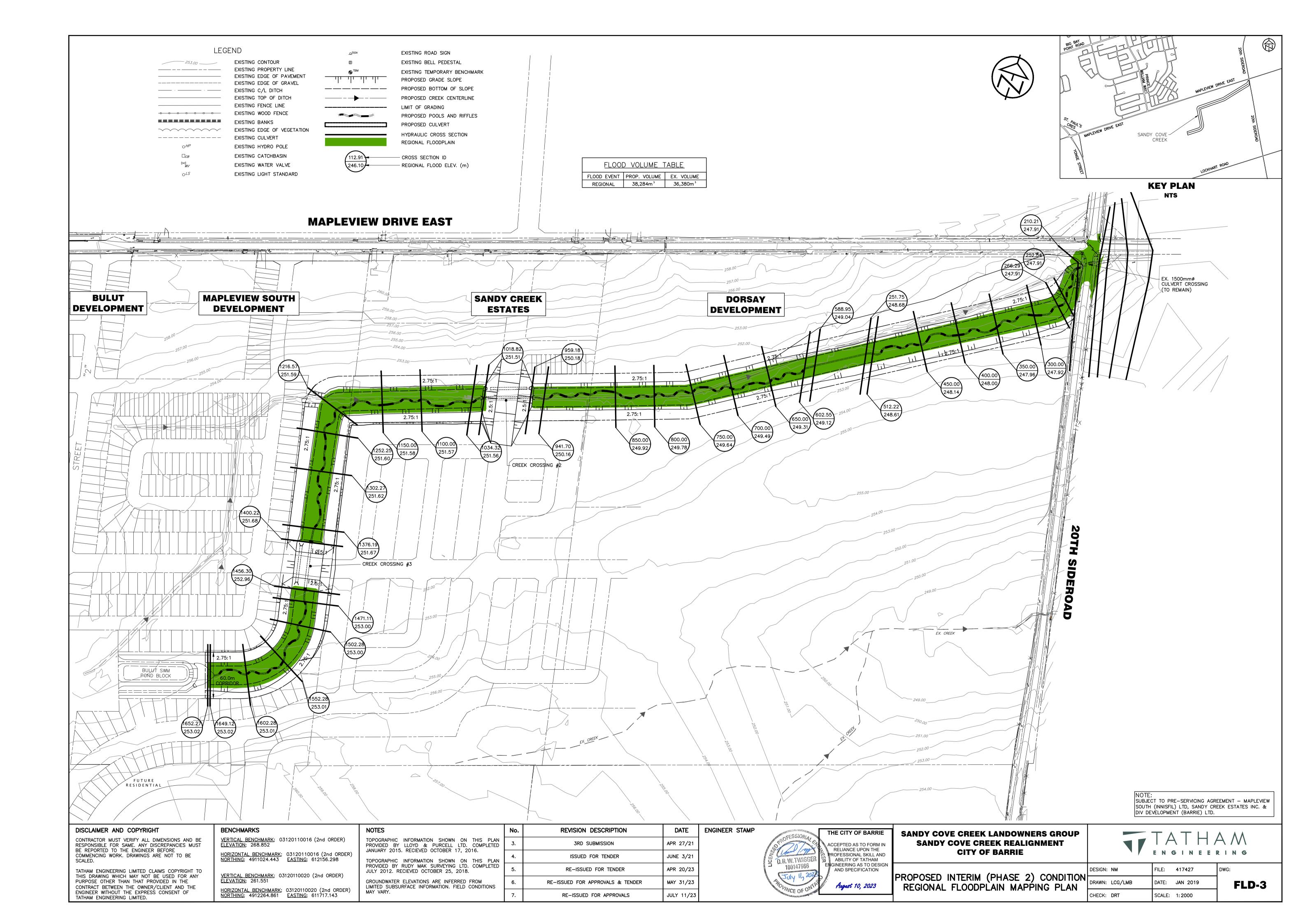


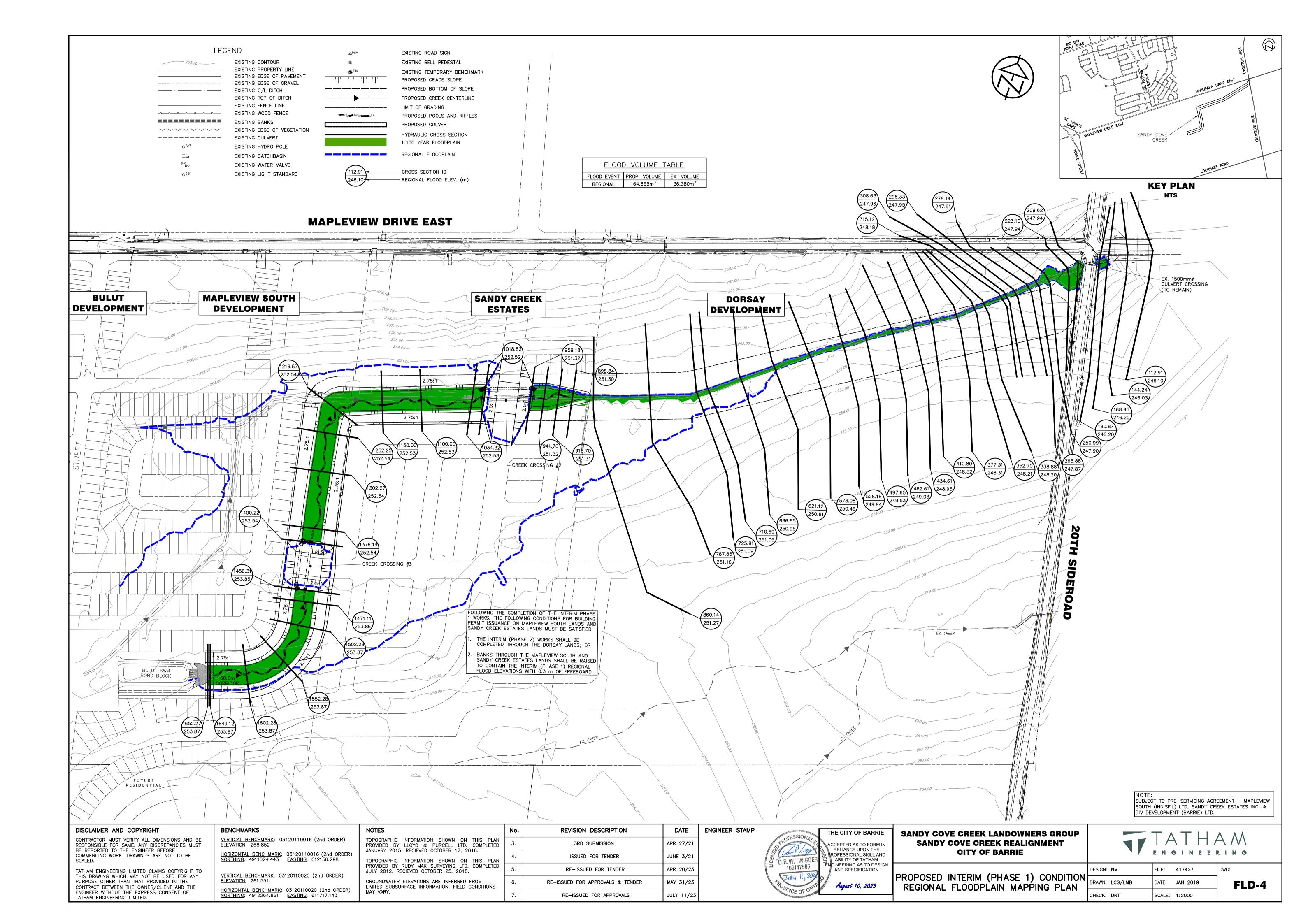


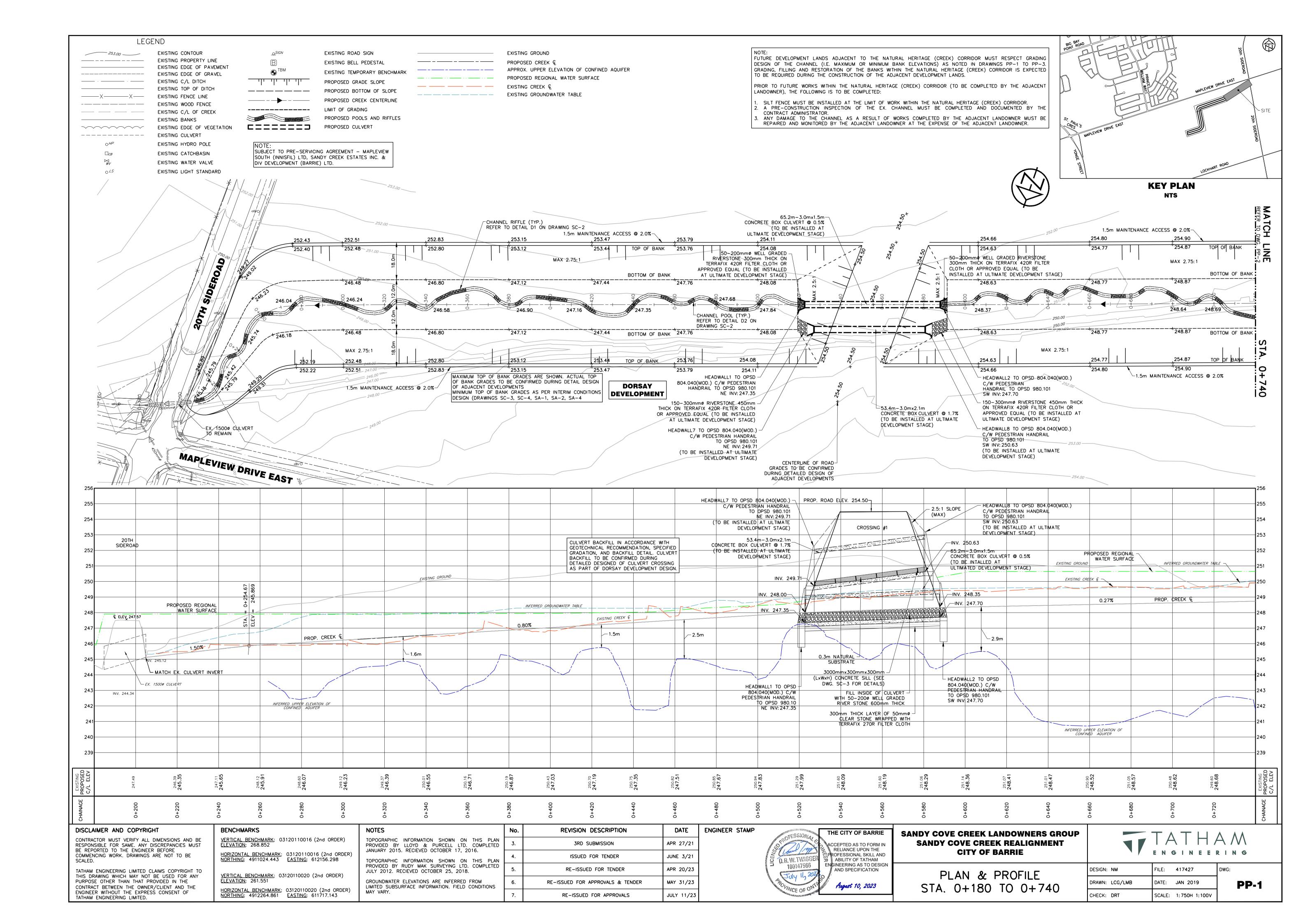


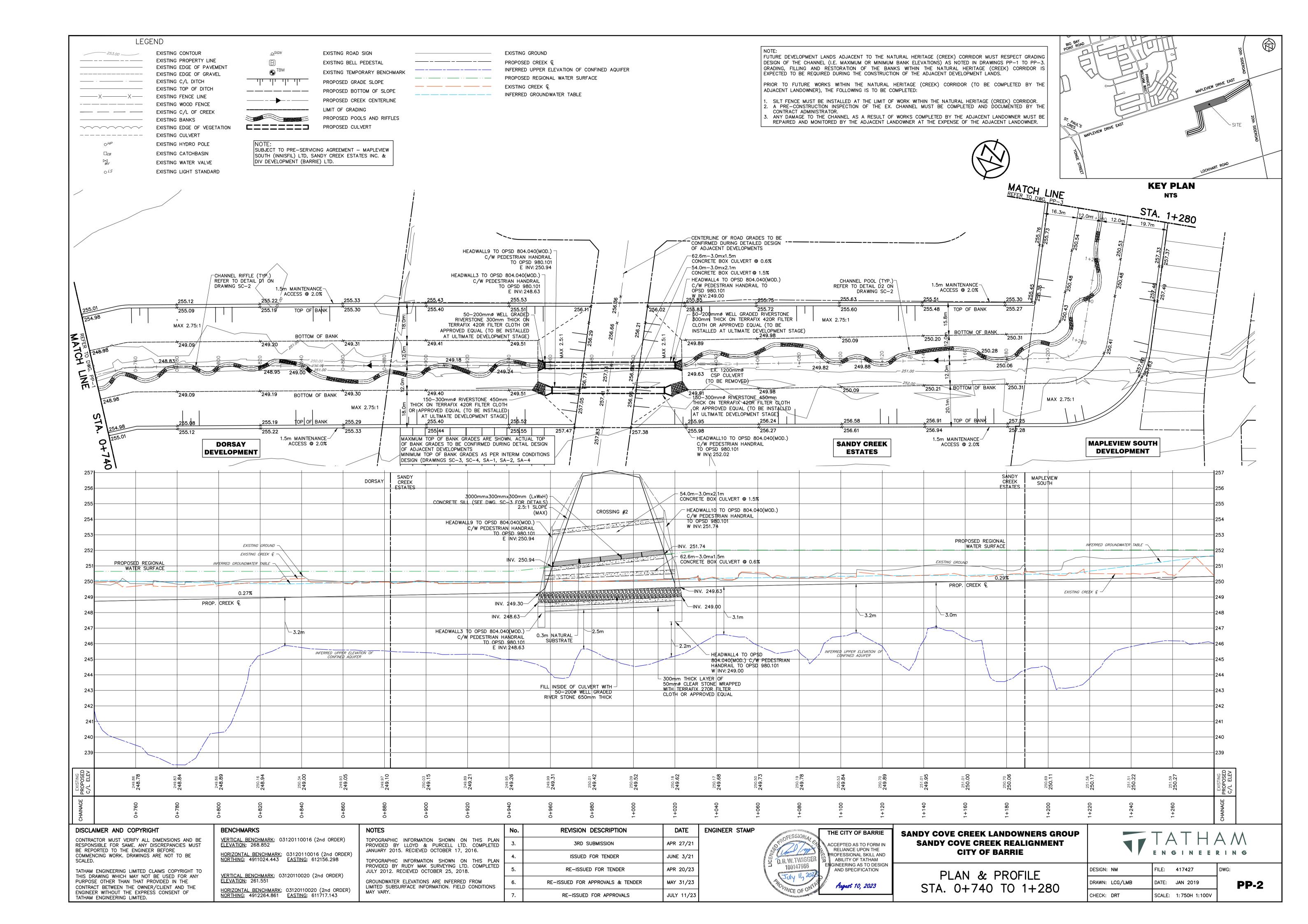


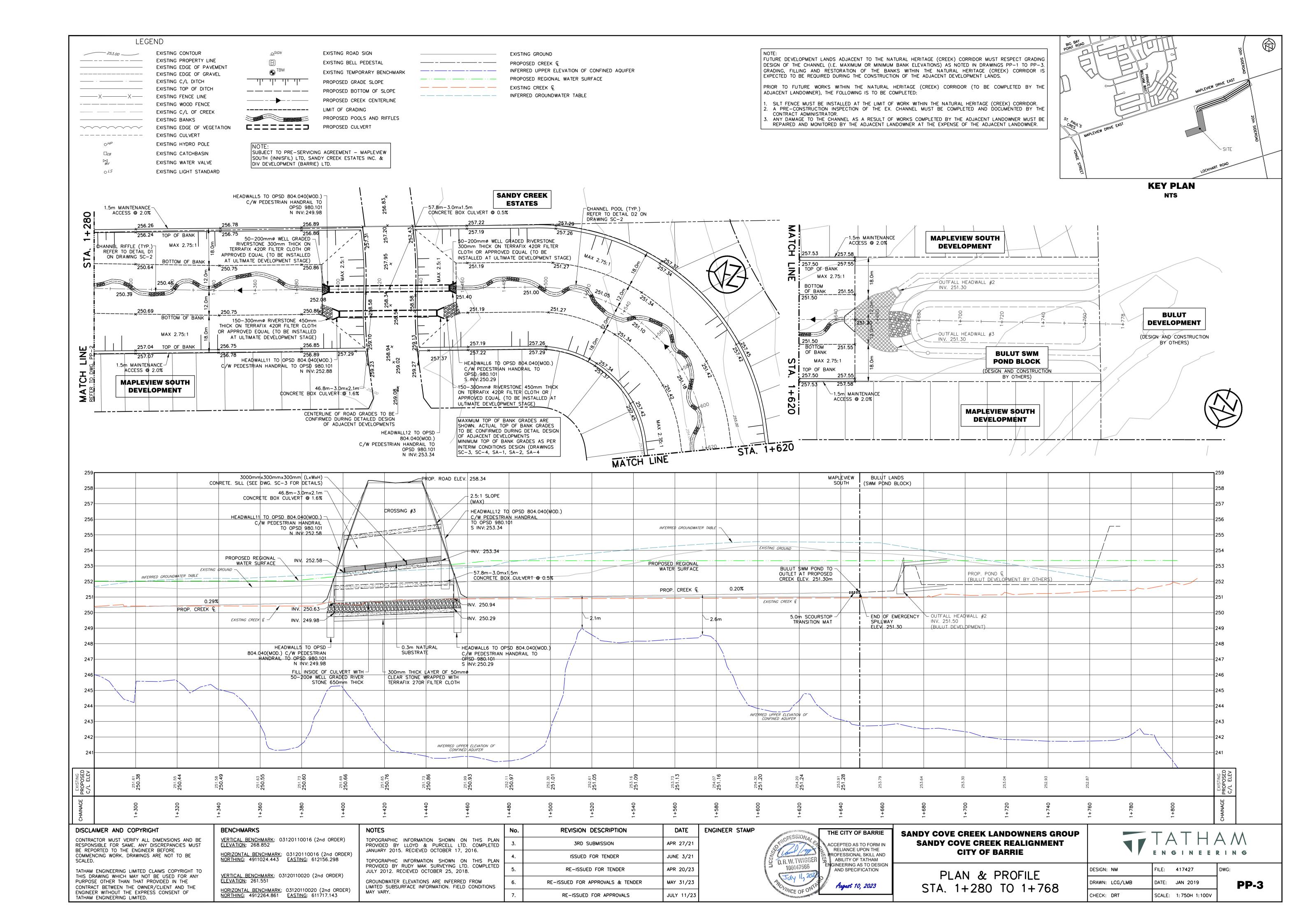


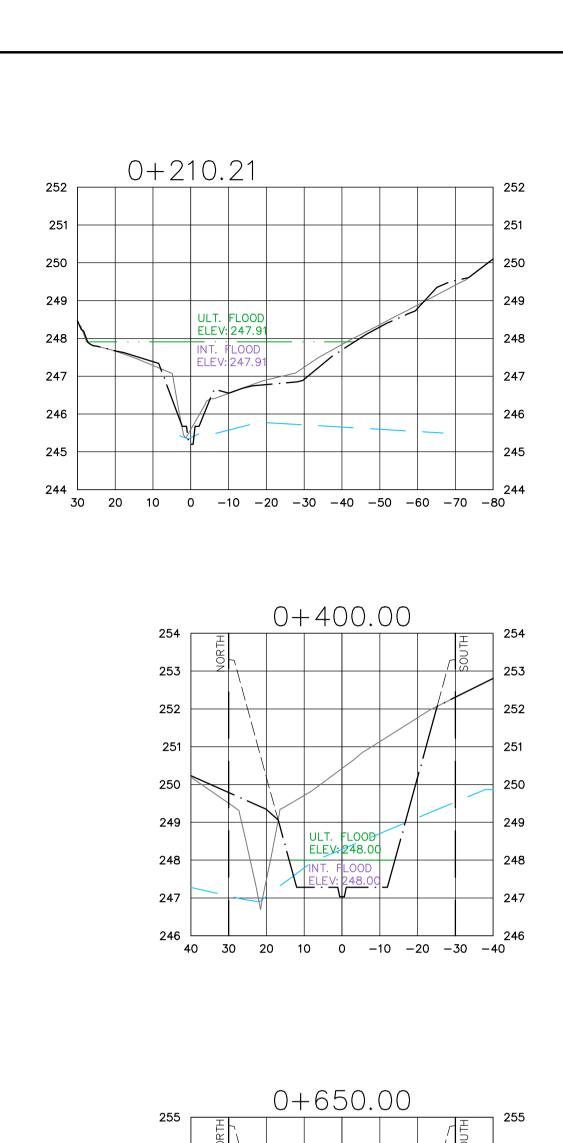






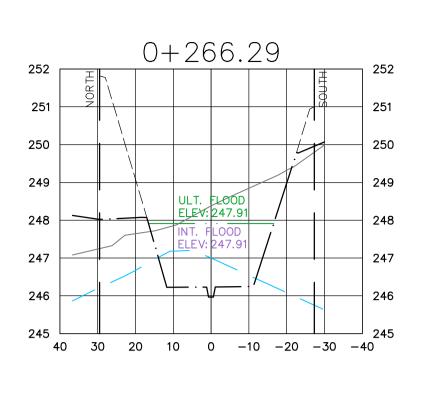


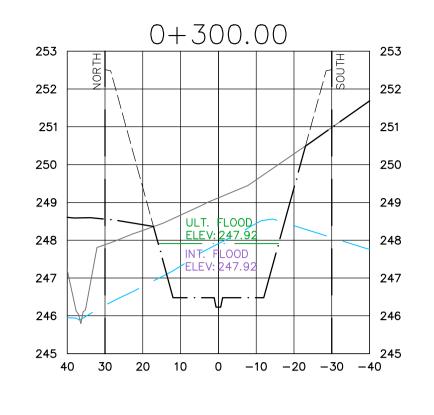




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ULT. FLOOD

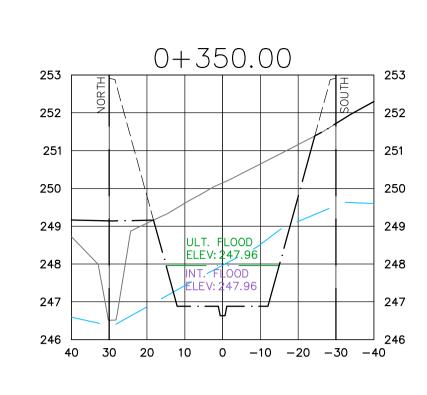
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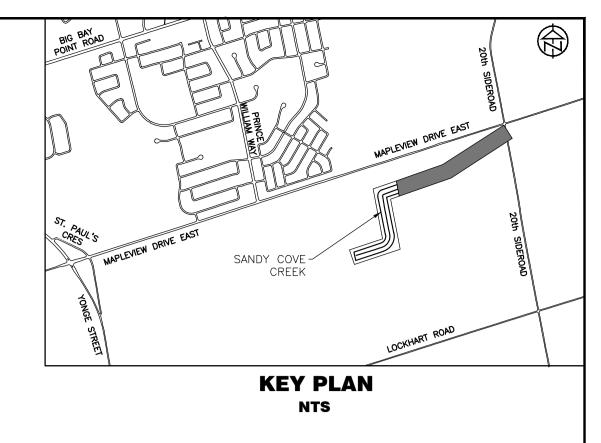
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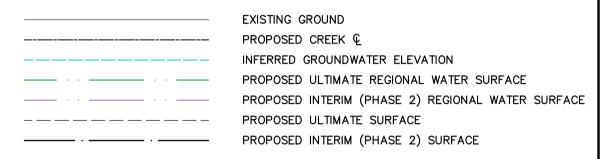
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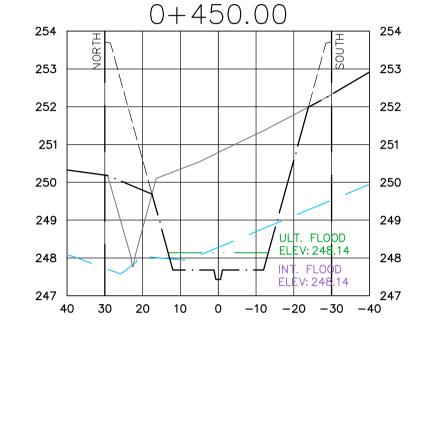




FUTURE DEVELOPMENT LANDS ADJACENT TO THE NATURAL HERITAGE (CREEK) CORRIDOR MUST RESPECT GRADING DESIGN OF THE CHANNEL (I.E. MAXIMUM OR MINIMUM BANK ELEVATIONS) AS NOTED IN DRAWINGS PP-1 TO PP-3. GRADING, FILLING AND RESTORATION OF THE BANKS WITHIN THE NATURAL HERITAGE (CREEK) CORRIDOR IS EXPECTED TO BE REQUIRED DURING THE CONSTRUCTION OF THE ADJACENT DEVELOPMENT LANDS.

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- AND DOCUMENTED BY THE CONTRACT ADMINISTRATOR. 3. ANY DAMAGE TO THE CHANNEL AS A RESULT OF WORKS COMPLETED BY THE
- ADJACENT LANDOWNER MUST BE REPAIRED AND MONITORED BY THE ADJACENT LANDOWNER AT THE EXPENSE OF THE ADJACENT LANDOWNER.

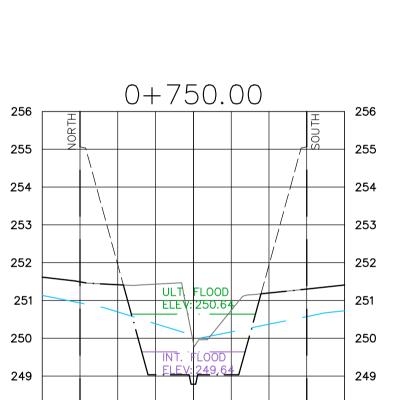


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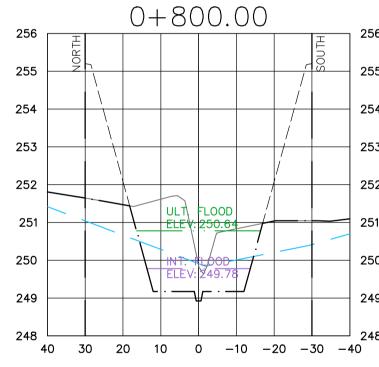
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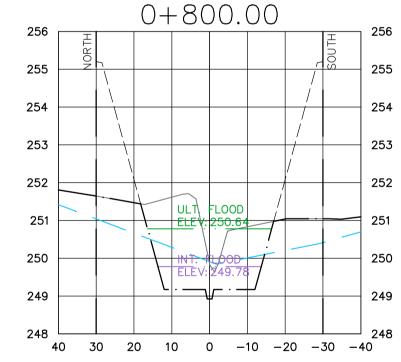
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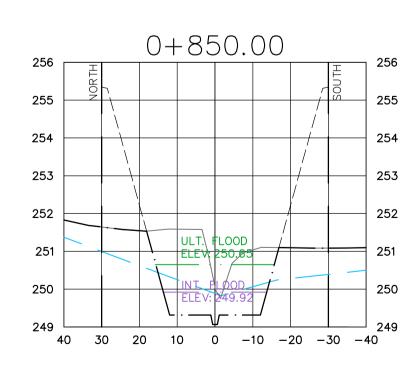
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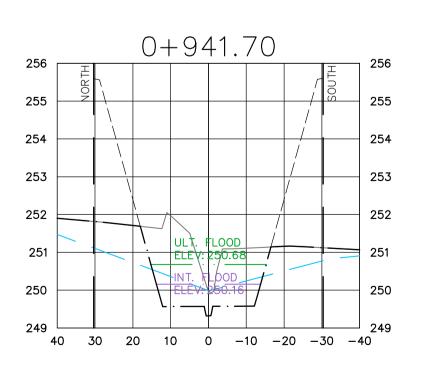
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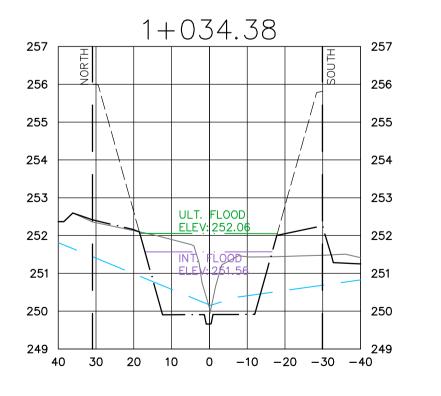


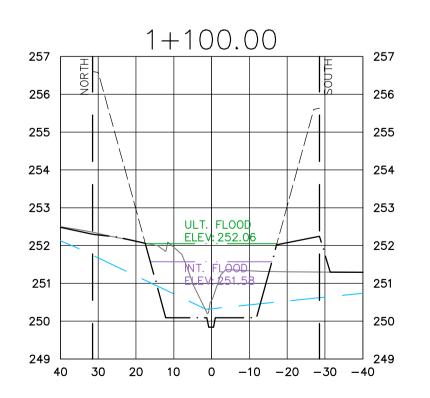
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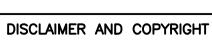


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CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE

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

VERTICAL BENCHMARK: 03120110016 (2nd ORDER) ELEVATION: 268.852 <u>HORIZONTAL BENCHMARK:</u> 03120110016 (2nd ORDER) <u>NORTHING:</u> 4911024.443 <u>EASTING:</u> 612156.298

<u>VERTICAL BENCHMARK</u>: 03120110020 (2nd ORDER) <u>ELEVATION</u>: 261.551

<u>HORIZONTAL BENCHMARK:</u> 03120110020 (2nd ORDER) <u>NORTHING:</u> 4912264.861 <u>EASTING:</u> 611717.143

TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN PROVIDED BY LLOYD & PURCELL LTD. COMPLETED JANUARY 2015. RECIEVED OCTOBER 17, 2016. TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN PROVIDED BY RUDY MAK SURVEYING LTD. COMPLETED JULY 2012. RECIEVED OCTOBER 25, 2018. GROUNDWATER ELEVATIONS ARE INFERRED FROM LIMITED SUBSURFACE INFORMATION. FIELD CONDITIONS

	No.	REVISION DESCRIPTION	DATE
AN ED	3.	3RD SUBMISSION	APR 27/21
۸N	4.	ISSUED FOR TENDER	JUNE 3/21
ΞD	5.	RE-ISSUED FOR TENDER	APR 20/23
;	6.	RE-ISSUED FOR APPROVALS & TENDER	MAY 31/23
	7.	RE-ISSUED FOR APPROVALS	JULY 11/23

DATE ENGINEER STAMP THE CITY OF BARRIE ACCEPTED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND D.R.W.TWIGGE ABILITY OF TATHAM ENGINEERING AS TO DESIGN 100147566 AND SPECIFICATION

August 10, 2023

SANDY COVE CREEK LANDOWNERS GROUP SANDY COVE CREEK REALIGNMENT CITY OF BARRIE

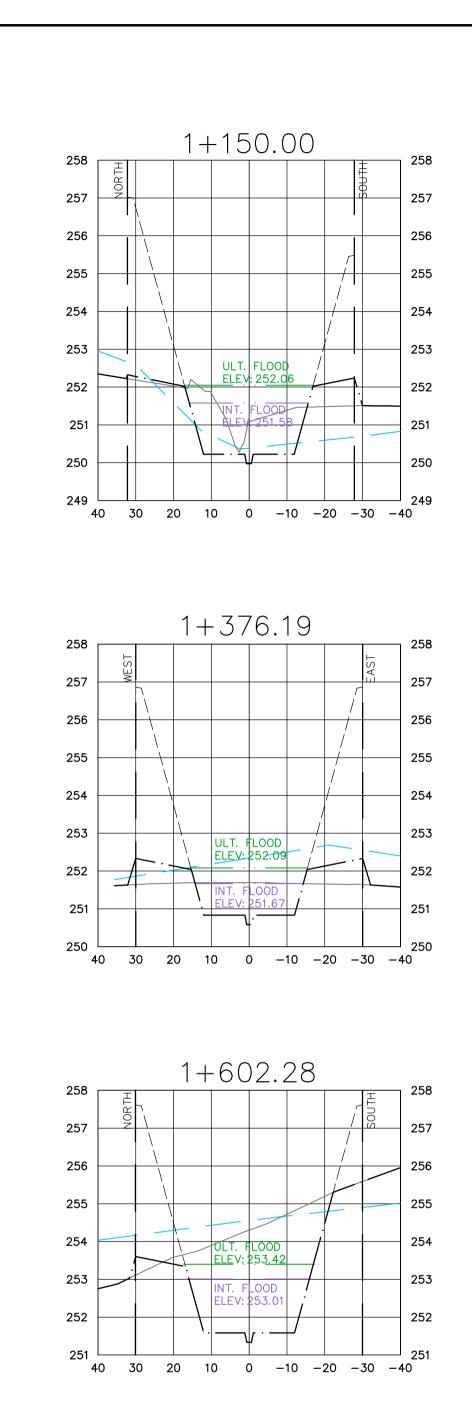
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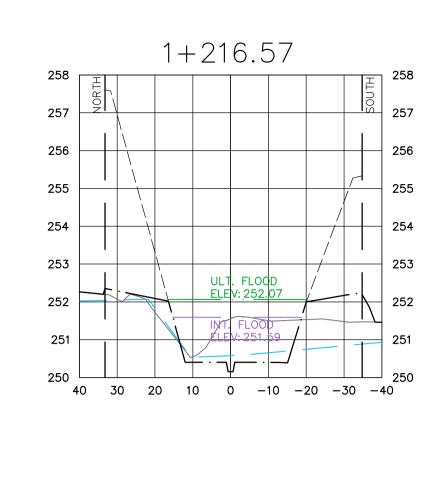
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SUBJECT TO PRE-SERVICING AGREEMENT - MAPLEVIEW SOUTH (INNISFIL) LTD, SANDY CREEK ESTATES INC. & DIV DEVELOPMENT (BARRIE) LTD.

DESIGN: NM	FILE:	417427	ים
DRAWN: LCG/LMB	DATE:	JAN 2019	
CHECK: DRT	SCALE:	HORZ: 1:1000 VERT: 1:100	

SC-1





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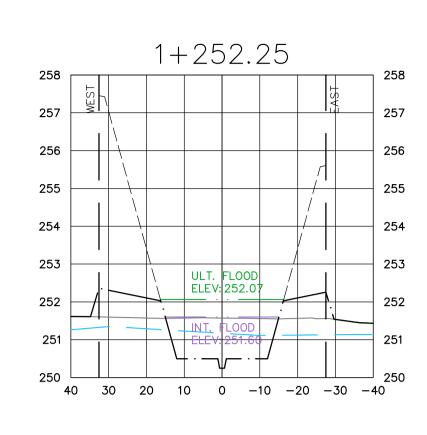
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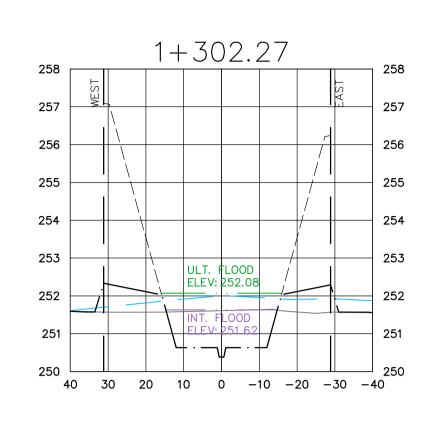
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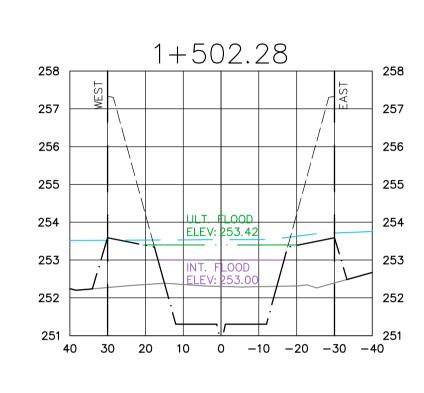
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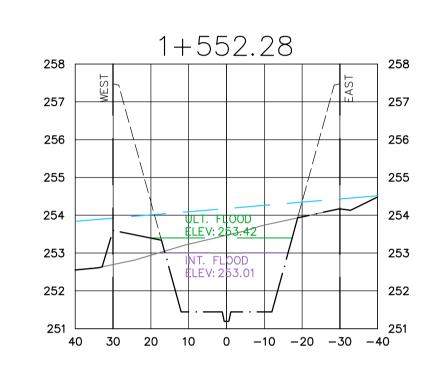
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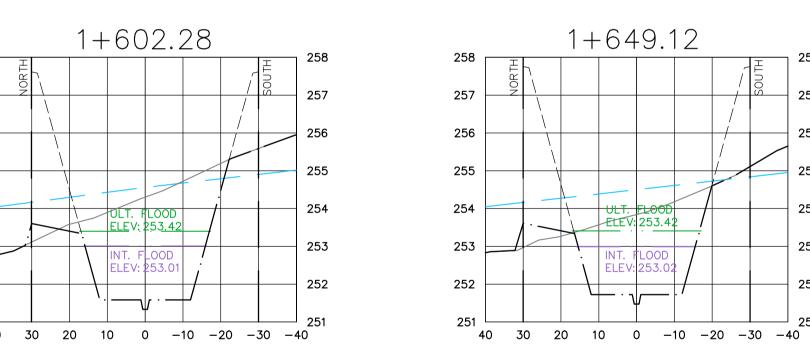
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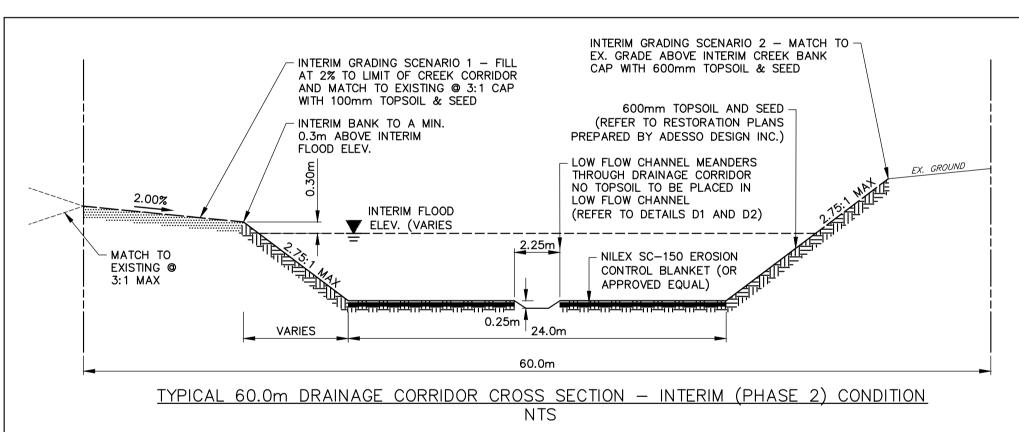




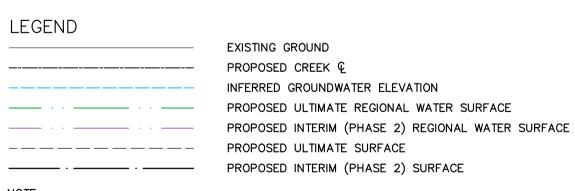








MAX HEIGHT ±6.0m



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SUBJECT TO PRE-SERVICING AGREEMENT - MAPLEVIEW

SOUTH (INNISFIL) LTD,	SANDY	CREEK	ESTATES	INC.	&
DIV DEVELOPMENT (BA	RRIE) L	TD.			

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

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NORTHING: 4912264.861 <u>EASTING</u>: 611717.143

HORIZONTAL BENCHMARK: 03120110020 (2nd ORDER)

252

NOTES	No.	REVISION DESCRIPTION	DATE
TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN PROVIDED BY LLOYD & PURCELL LTD. COMPLETED		3RD SUBMISSION	APR 27/21
JANUARY 2015. RECIEVED OCTOBER 17, 2016. TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN	4.	ISSUED FOR TENDER	JUNE 3/21
PROVIDED BY RUDY MAK SURVEYING LTD. COMPLETED JULY 2012. RECIEVED OCTOBER 25, 2018.		RE-ISSUED FOR TENDER	APR 20/23
GROUNDWATER ELEVATIONS ARE INFERRED FROM LIMITED SUBSURFACE INFORMATION, FIELD CONDITIONS	6.	RE-ISSUED FOR APPROVALS & TENDER	MAY 31/23
MAY VARY.		RE-ISSUED FOR APPROVALS	JULY 11/23

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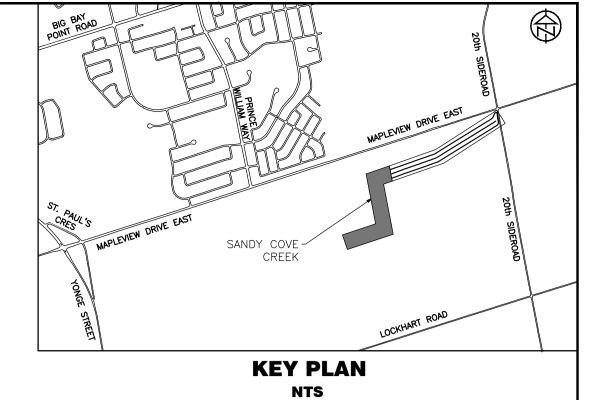
600mm TOPSOIL AND SEED -

MAINTENANCE!

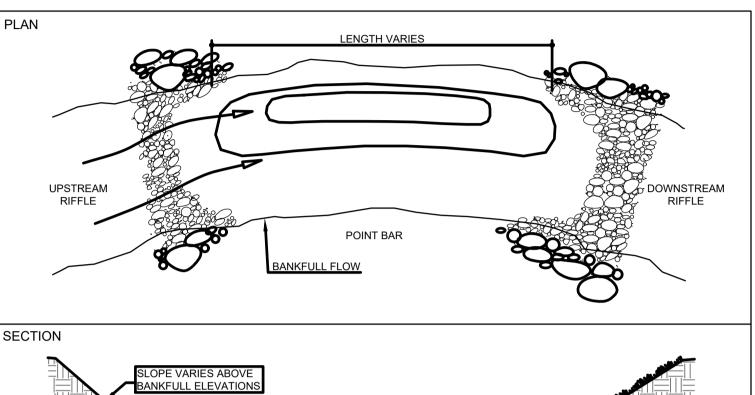
(REFER TO RESTORATION PLANS

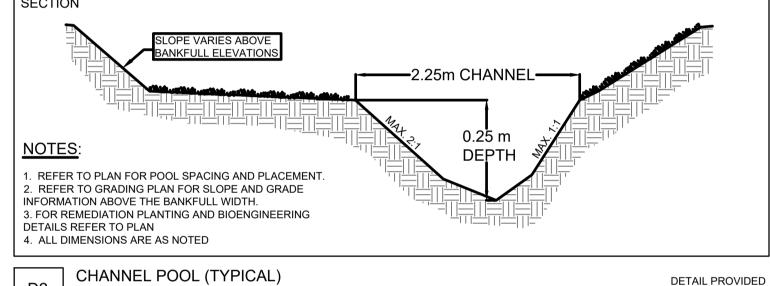


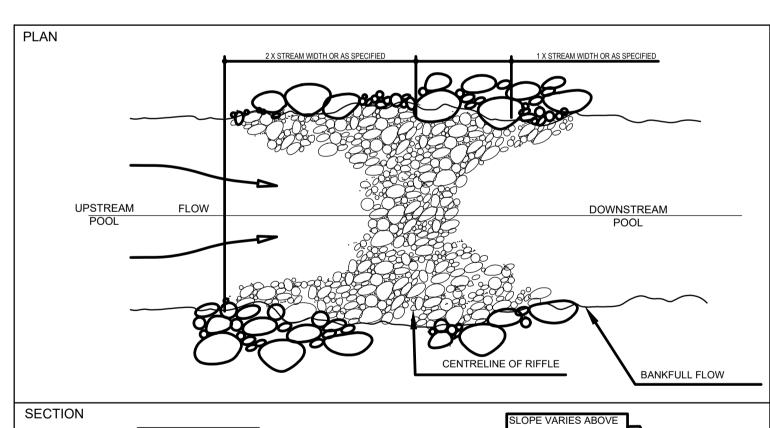
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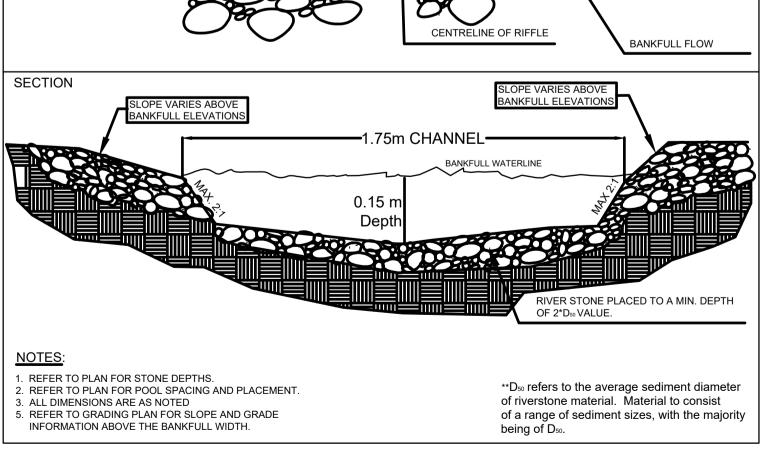


BY WATER'S EDGE









SANDY COVE CREEK LANDOWNERS GROUP SANDY COVE CREEK REALIGNMENT CITY OF BARRIE

CHANNEL RIFFLE (TYPICAL)

D1

SECTIONS AND DETAILS STA. 1+150 TO STA. 1+800 INTERIM & ULTIMATE CONDITIONS

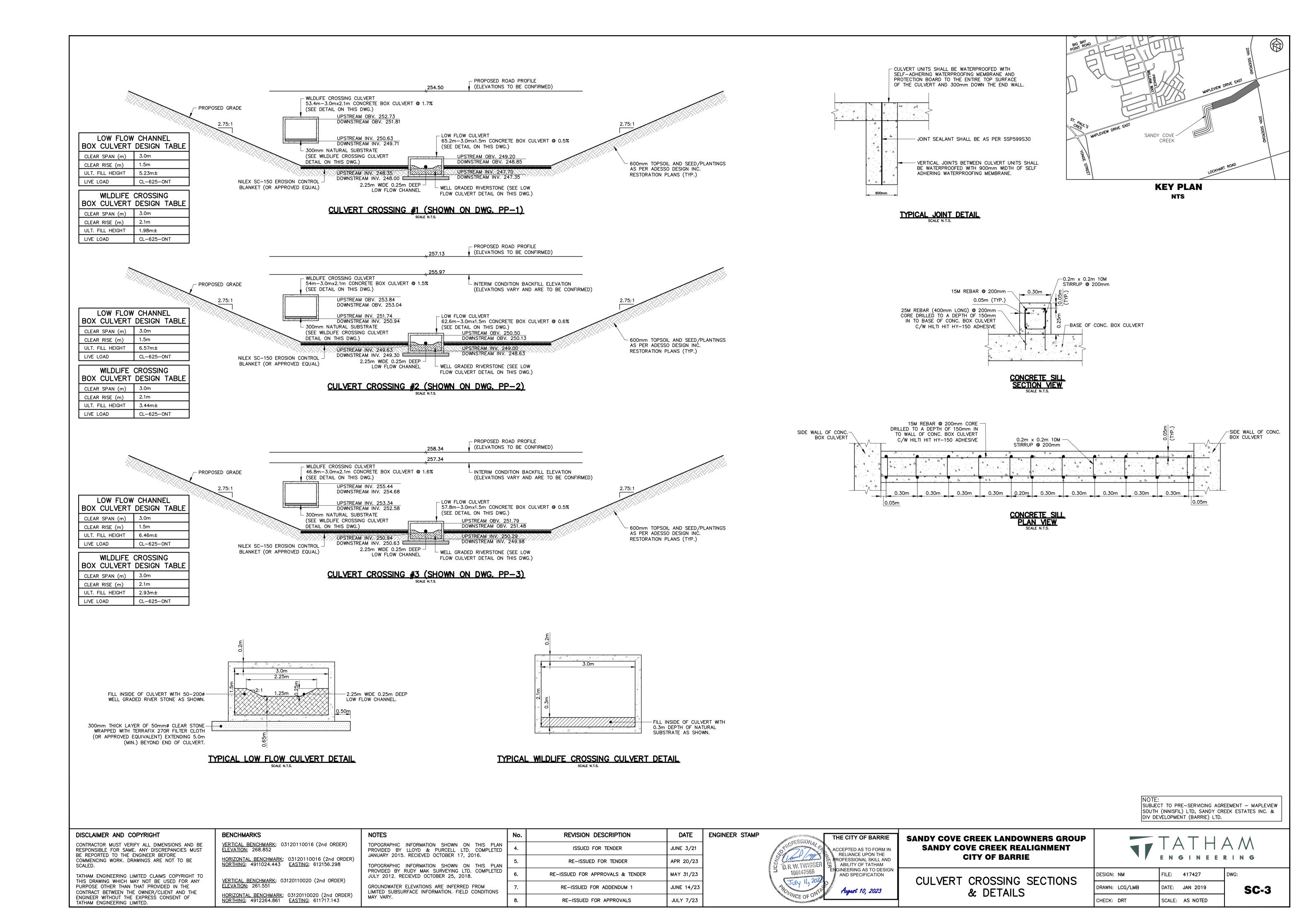
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		DWG:
N. 100 /LMD	DATE: JAN 2010]

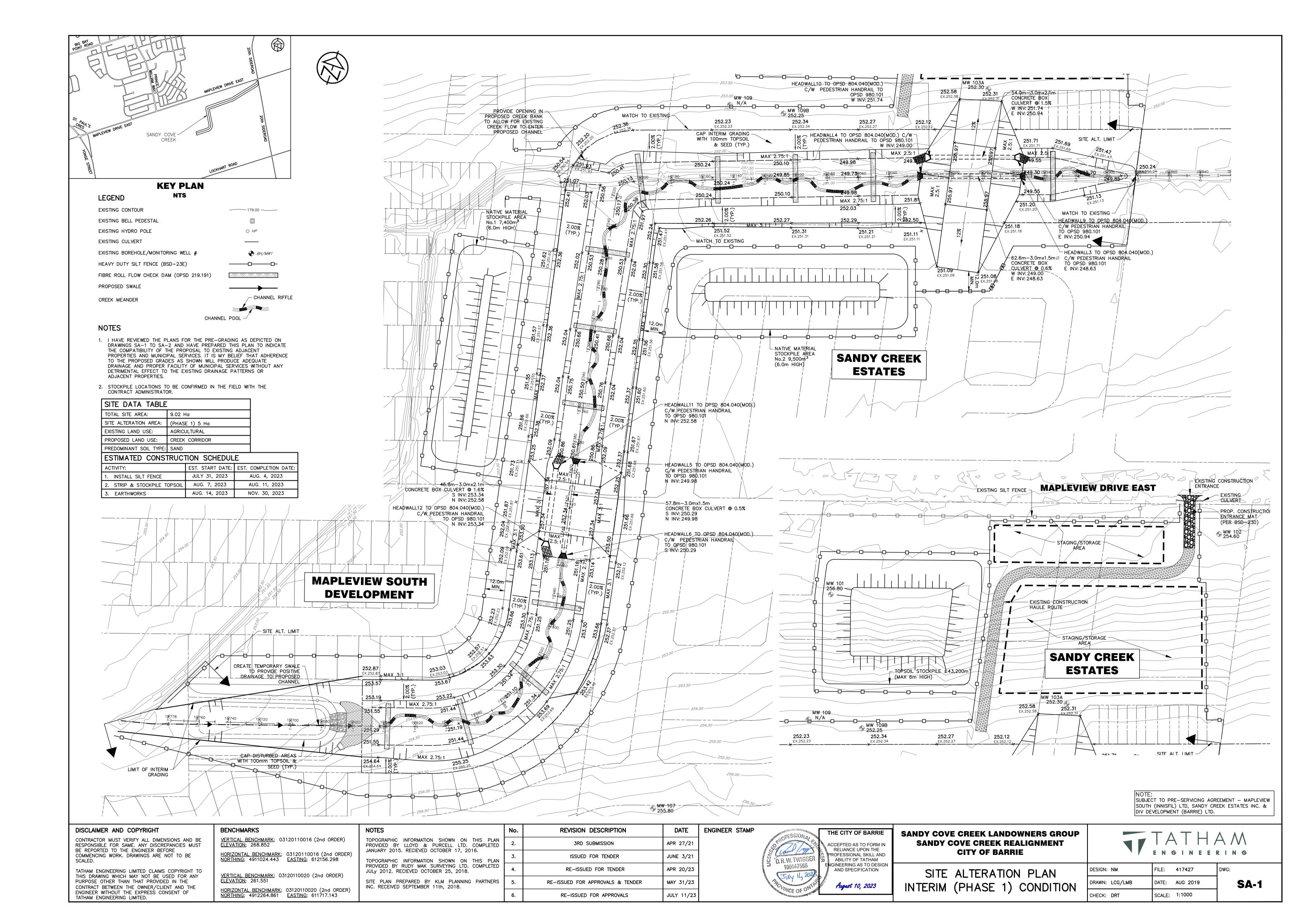
DRAWN: LCG/LMB SC-2 | DATE: JAN 2019 SCALE: HORZ: 1:1000 VERT: 1:100

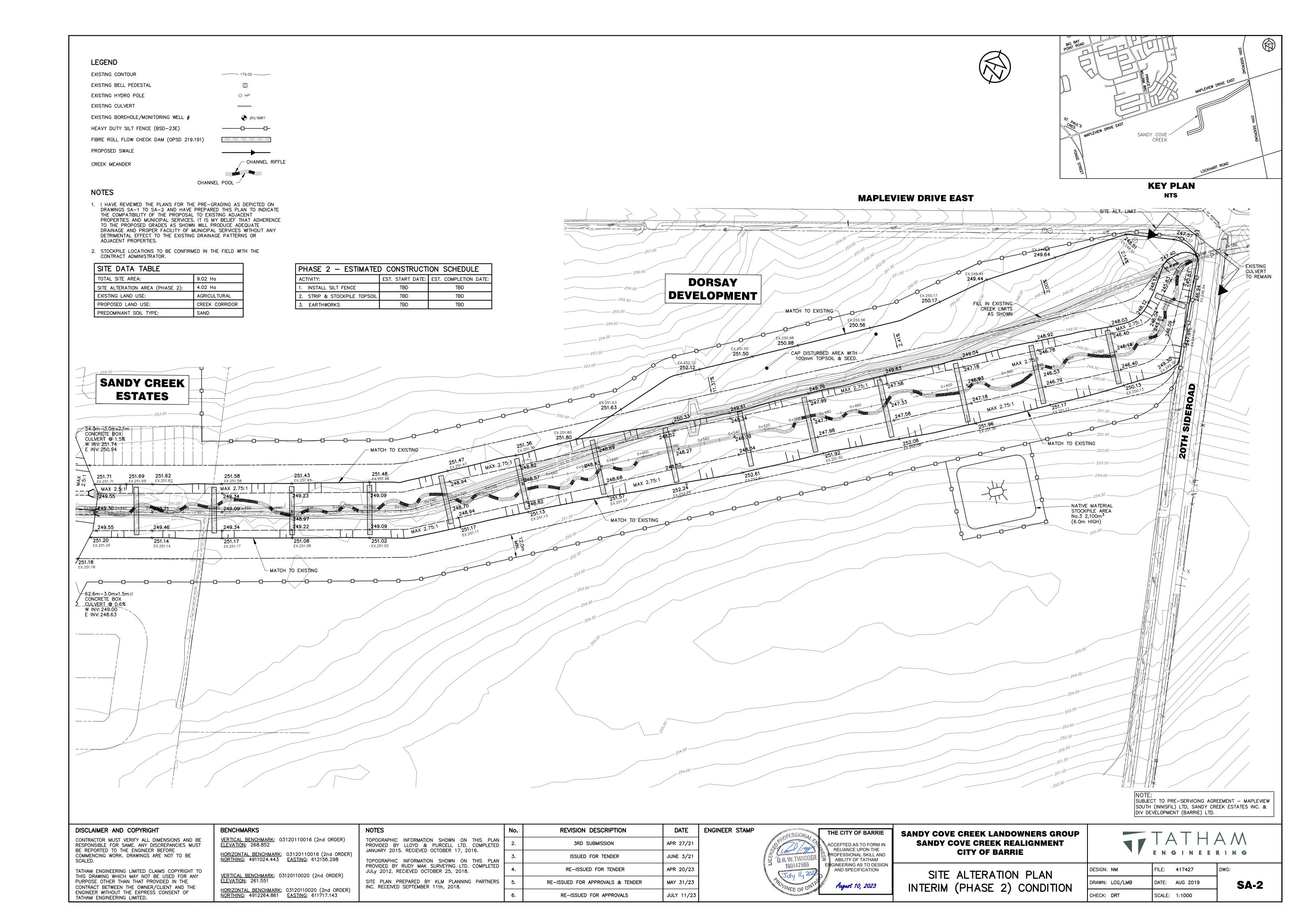
PREPARED BY ADESSO DESIGN INC.) - LOW FLOW CHANNEL MEANDERS THROUGH DRAINAGE CORRIDOR MAINTENANCE ACCESS NO TOPSOIL TO BE PLACED IN LOW FLOW CHANNEL (REFER TO DETAILS D1 AND D2) - NILEX SC-150 EROSION CONTROL BLANKET (OR APPROVED EQUAL) 0.25m 16.5m 60.0m

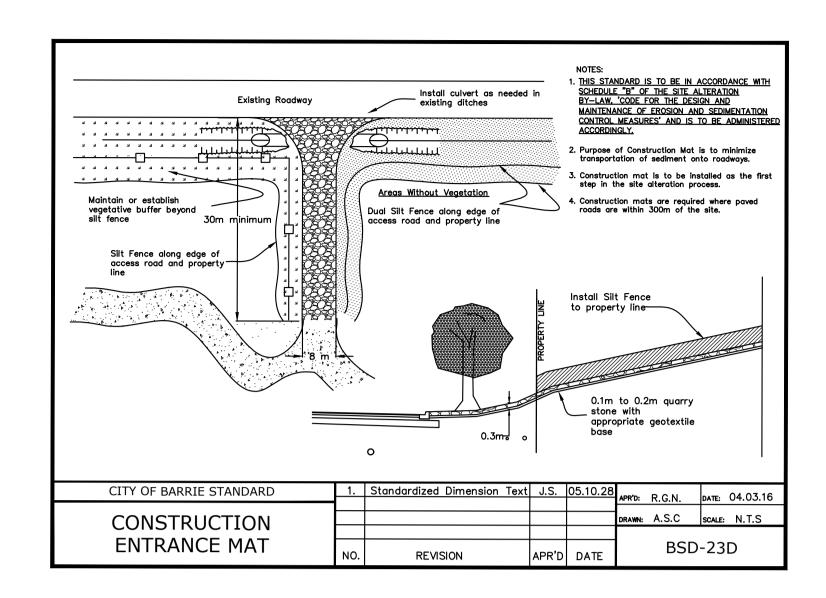
> TYPICAL 60.0m DRAINAGE CORRIDOR CROSS SECTION **ULTIMATE CONDITION**

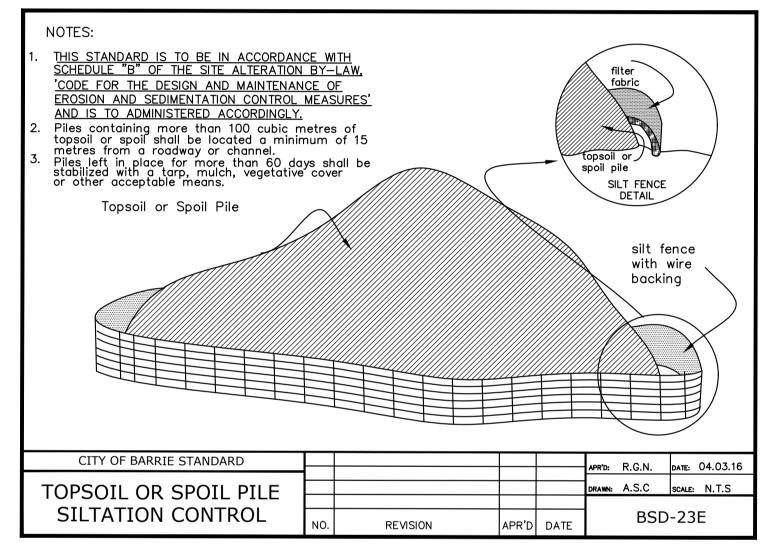
> > **ENGINEER STAMP**

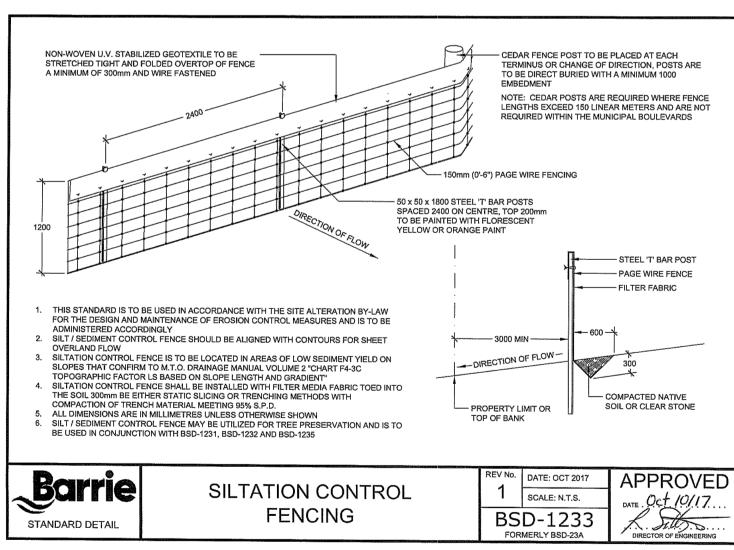


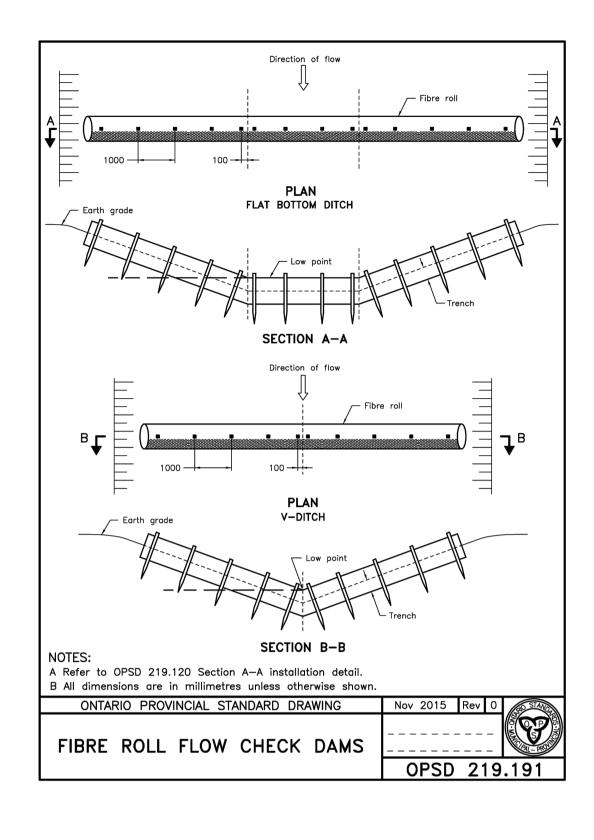












EROSION & SEDIMENT CONTROL

- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED. EROSION AND SEDIMENT 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 EROSION AND SEDIMENT CONTROL WORKS TO BE REVIEWED ON SITE AND MAY BE REVISED AS DIRECTED BY THE ENGINEER.
- 2. THE CONTRACTOR MAY CONSIDER ALTERNATIVE EROSION AND SEDIMENT CONTROL MEASURES. SUCH MEASURES MUST BE PRESENTED IN WRITING TO THE ENGINEER FOR APPROVAL BY THE CITY OF BARRIE.
- 3. 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.
- 4. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED, CLEANED AND MAINTAINED BY THE CONTRACTOR AFTER EACH STORM EVENT. ALL WORKS WILL BE INSPECTED BY THE ENGINEER BI-WEEKLY AND AFTER EACH MAJOR STORM
- 5. CONSTRUCTION OF ALL EROSION AND SEDIMENT CONTROL WORKS ARE TO BE IN ACCORDANCE WITH THE FOLLOWING STEPS:
 - -INSTALL STONE MUD MAT AS PER BSD-23E. -INSTALL SILT FENCE AS PER BSD-1233.
 - -INSTALL FIBRE ROLL FLOW CHECK DAMS AS PER OPSD 219.191. -INSTALL ROCK FLOW CHECK DAM AS PER OPSD 219.210.
- 6. ALL CONSTRUCTION VEHICLES TO ACCESS SITE USING THE DESIGNATED CONSTRUCTION ENTRANCES OR AS DIRECTED BY THE CONTRACT ADMINISTRATOR.
- 7. EROSION AND SEDIMENT CONTROL MEASURES TO BE REMOVED BY THE CONTRACTOR ONCE GROUND COVER IS ESTABLISHED AND LANDSCAPING IS COMPLETE AND AS APPROVED BY THE ENGINEER.
- 8. ALL STOCKPILE LOCATIONS ARE TO BE APPROVED BY THE ENGINEER.
- 9. PROVIDE SNOW FENCE OR APPROVED EQUAL ACROSS ALL CONSTRUCTION ENTRANCES DURING PERIODS OF INACTIVITY.
- 10. CONSTRUCTION AREAS THAT EXCEED 30 DAYS OF INACTIVITY SHALL BE STABILIZED BY SEEDING. THIS SHALL INCLUDE STOCKPILES OF FILL AND TOPSOIL.

CULVERT NOTES

- 1. ALL DESIGN LOADS NOTED ON DRAWINGS ARE WORKING LOADS.
- 2. THE CONC. BOX CULVERT INSTALLATION SHALL INCLUDE ALL REMOVALS, DISPOSAL REINSTATEMENT, EXCAVATION, DEWATERING, SUPPLY, PLACEMENT AND COMPACTION OF BEDDING, EMBEDMENT WITHIN THE PIPE, COVER AND BACKFILL, RIP-RAP AND RIVER STONE NECESSARY TO COMPLETE THE WORK.
- 3. PIPE EMBEDMENT SHALL BE IN ACCORDANCE WITH OPSD 802.020, 802.024, 803.031, WHERE "f" IS EQUAL TO 1.6m.
- 4. THE CONC. BOX CULVERT WORKS SHALL BE CONSTRUCTED UNDER DRY CONDITIONS. THE CONTRACTOR SHALL MAKE ALL PROVISIONS NECESSARY TO PREVENT FLOW OF WATER INTO THE EXCAVATION AND SHALL PROVIDE AND KEEP IN OPERATION ON EACH SECTION OF THE WORK WHEN AND WHERE NECESSARY, DEWATERING SYSTEMS OF SUFFICIENT CAPACITY TO KEEP THE BOTTOM OF THE EXCAVATION TRENCH DRY AND FREE FROM WATER AT ALL TIMES UNTIL THE SECTION OF WORK HAS BEEN COMPLETED.
- 5. THE CONC. BOX CULVERTS SHALL BE SUPPORTED ON NATIVE SOIL OR ENGINEERED FILL HAVING THE FOLLOWING MINIMUM ALLOWABLE BEARING CAPACITY:
 - CROSSING #1: 200KPa CROSSING #2: 100KPa CROSSING #3: 85KPa
- BEARING CAPACITY SHALL BE CONFIRMED IN FIELD BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION OF CULVERT.
- 6. BACKFILL TO BE PLACED SIMULTANEOUSLY ON BOTH SIDES OF THE CULVERT KEEPING THE HEIGHT OF THE BACKFILL APPROXIMATELY THE SAME. AT NO TIME SHALL THE DIFFERENCE IN ELEVATION BE GREATER THAN 500mm.

GENERAL NOTES

- 1. ALL STANDARDS, MANUALS, AND CODES REFERENCED IN THIS SET OF DRAWINGS REFER TO THE MOST RECENTLY IMPLEMENTED VERSION/EDITION.
- ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY CITY OF BARRIE ENGINEERING DESIGN STANDARDS, AND SECONDLY ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) AND DRAWINGS (OPSD).
- 3. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH OPSS MUNI 401, MUNI 421, 490, 491, 492, 501, 517, 539, 805, 821, 902, 1005 AND 1801.
- 4. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT OF ONTARIO.
- 5. THE CONTRACTOR SHALL EXAMINE ALL DRAWINGS. CHECK ALL DIMENSIONS AND REPORT ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.
- 6. CONTRACTOR TO CONFIRM RELATED DIMENSIONS IN THE FIELD BEFORE PROCEEDING
- 7. ALL ELEVATIONS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- 8. ALL FILL USED IN SLOPES, BERMS, AND/OR EMBANKMENTS IS TO BE COMPACTED TO A MINIMUM OF 98% SPMDD

ENVIRONMENTAL MITIGATION

- 1. PRIOR TO DEWATERING THE ACTIVE WORK AREA, FISH REMOVAL AND RELOCATION WILL BE REQUIRED USING A BACKPACK ELECTROFISHING UNIT, TO BE COMPLETED BY A QUALIFIED BIOLOGIST AFTER A LICENCE TO COLLECT FISH FOR SCIENTIFIC PURPOSES HAS BEEN ACQUIRED FROM THE MINISTRY OF NATURAL RESOURCES AND FORESTRY, FISH CAPTURED ARE TO BE SAFELY RELOCATED DOWNSTREAM FROM THE ACTIVE
- 2. THE CONTRACTOR IS REQUIRED TO MAINTAIN EXISTING QUANTITY AND QUALITY OF STREAM FLOWS DURING CONSTRUCTION. ALL WORK IS TO BE DONE DURING LOW/BASE FLOW PERIODS. ALL WORK IS TO BE COMPLETED IN THE DRY. IF A DAM AND PUMP SYSTEM IS UTILIZED WHERE FISH HABITAT IS PRESENT, A FISH SCREEN SHOULD BE
- 3. NO WORK SHALL BE CONDUCTED PRIOR TO THE INSTALLATION OF ALL SEDIMENT AND EROSION CONTROL MEASURES.
- 4. SEDIMENT CONTROL MEASURES SHALL BE INSPECTED REGULARLY DURING THE COURSE OF THE WORK AND ALL NECESSARY REPAIRS SHALL BE MADE IF DAMAGE IS
- 5. SILT FENCE TO BE CONSTRUCTED AS REQUIRED, TO PROVIDE ADEQUATE WORK SPACE TO ALLOW FOR CONSTRUCTION OF NEW CULVERT SLOPE WITHOUT ALLOWING CONTAMINANTS TO ENTER THE STREAM.
- 6. ANY MACHINERY REQUIRED FOR CONSTRUCTION SHALL BE OPERATED IN A MANNER THAT MINIMIZES DISTURBANCE TO THE BANKS OR BED OF THE WATER BODY. MACHINERY IS TO ARRIVE ON SITE IN A CLEAN CONDITION AND IS TO BE MAINTAINED FREE OF FLUID LEAKS.
- 7. ALL EXCAVATED AND REMOVED MATERIAL SHALL BE DISPOSED OF IN A LOCATION ABOVE THE ORDINARY HIGH WATER MARK OF ANY WATER BODY AND STABILIZED TO PREVENT MATERIAL FROM ENTERING THE WATER BODY.
- 8. ALL DISTURBED AREAS SHALL BE STABILIZED AND/OR RE-VEGETATED WITH THE DEEP ROOTED NATIVE PLANTS UPON COMPLETION OF THE WORK AND RESTORED TO A PRE-DISTURBED STATE OR BETTER.
- 9. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS WHICH MAY BE STIPULATED IN THE PERMIT FROM LAKE SIMCOE REGION CONSERVATION AUTHORITY.
- 10. WORK MAY PROCEED WITH LSRCA WORK PERMIT AND DFO APPROVAL (FOR IN WATER WORKS). BOTH ARE TO BE KEPT ON SITE FOR DURATION OF CONSTRUCTION.
- 11. ALL MATERIAL PLACED IN-WATER FOR FLOW CONTROLS (I.E. COFFERDAMS AND STONE SILT TRAPS) MUST BE REMOVED FOLLOWING COMPLETION OF CONSTRUCTION.
- 12. IN ACCORDANCE WITH THE NDMNRF, IN-WATER WORK IS PERMITTED BETWEEN JULY 15 AND SEPTEMBER 30.

SUBJECT TO PRE-SERVICING AGREEMENT - MAPLEVIEW SOUTH (INNISFIL) LTD, SANDY CREEK ESTATES INC. & DIV DEVELOPMENT (BARRIE) LTD.

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

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

VERTICAL BENCHMARK: 03120110016 (2nd ORDER) ELEVATION: 268.852 HORIZONTAL BENCHMARK: 03120110016 (2nd ORDER) NORTHING: 4911024.443 <u>EASTING</u>: 612156.298

VERTICAL BENCHMARK: 03120110020 (2nd ORDER) ELEVATION: 261.551

NORTHING: 4912264.861 <u>EASTING</u>: 611717.143

HORIZONTAL BENCHMARK: 03120110020 (2nd ORDER)

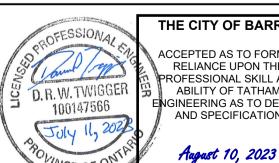
NOTES TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN PROVIDED BY LLOYD & PURCELL LTD. COMPLETED JANUARY 2015. RECIEVED OCTOBER 17, 2016. TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN PROVIDED BY RUDY MAK SURVEYING LTD. COMPLETED JULy 2012. RECIEVED OCTOBER 25, 2018.

SITE PLAN PREPARED BY KLM PLANNING PARTNERS

INC. RECEIVED SEPTEMBER 11th, 2018.

REVISION DESCRIPTION DATE APR 27/21 3RD SUBMISSION JUNE 3/21 ISSUED FOR TENDER RE-ISSUED FOR TENDER APR 20/23 RE-ISSUED FOR APPROVALS & TENDER MAY 31/23 RE-ISSUED FOR APPROVALS JULY 11/23





THE CITY OF BARRIE ACCEPTED AS TO FORM IN RELIANCE UPON THE

PROFESSIONAL SKILL AND ABILITY OF TATHAM FINGINEERING AS TO DESIGN AND SPECIFICATION

SANDY COVE CREEK REALIGNMENT CITY OF BARRIE

SITE ALTERATION PLAN

DETAILS & NOTES

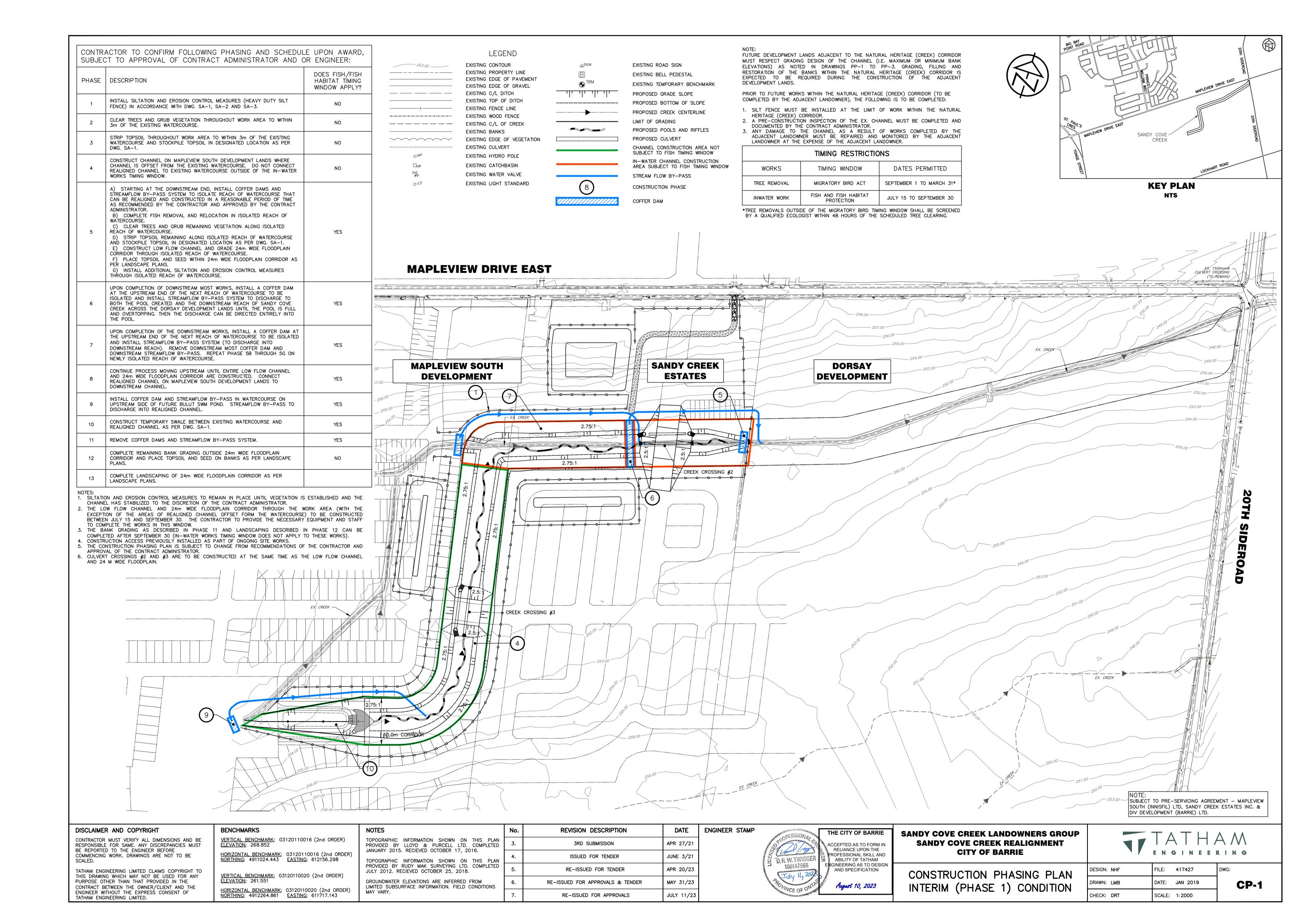


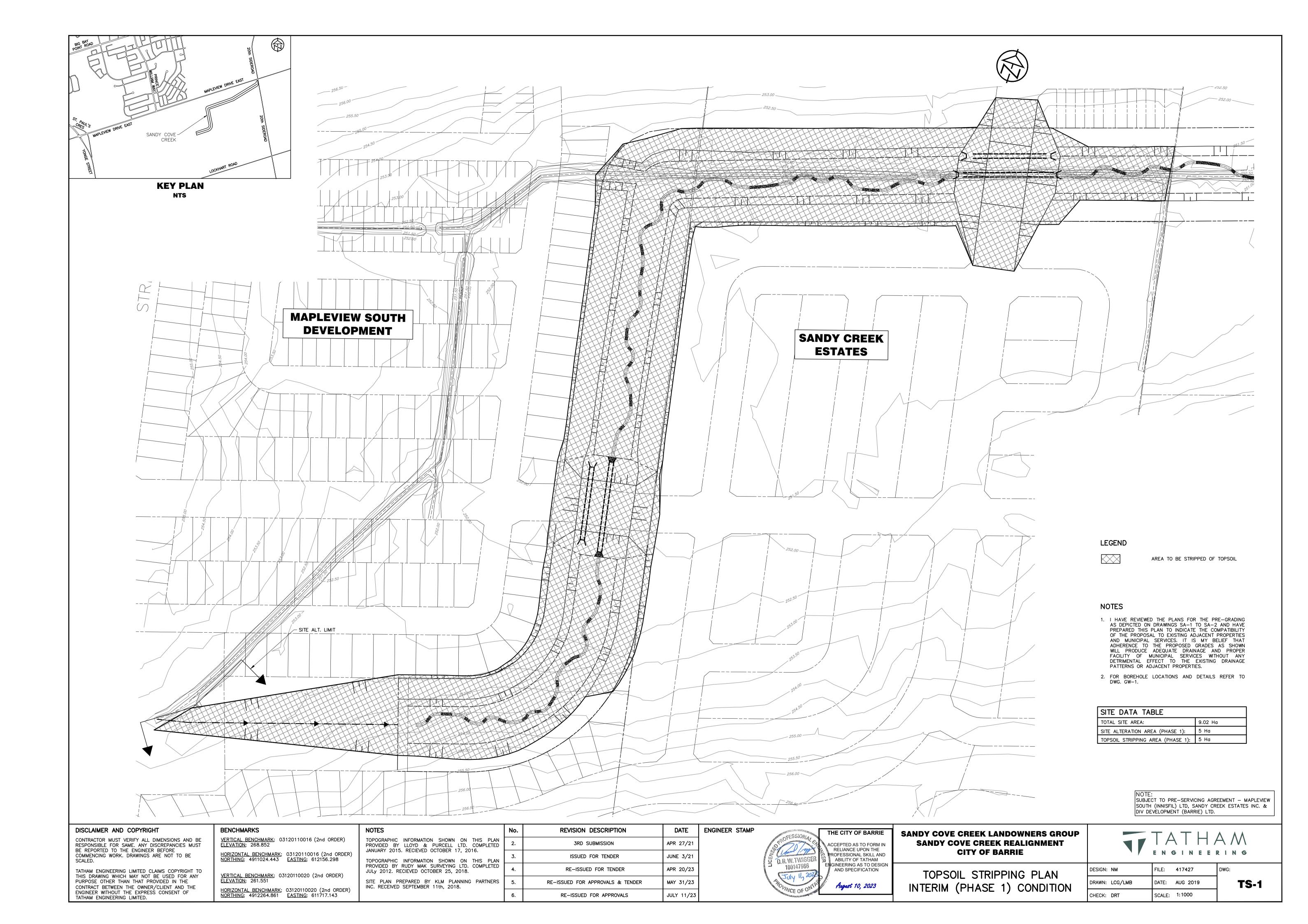
FILE: 417427

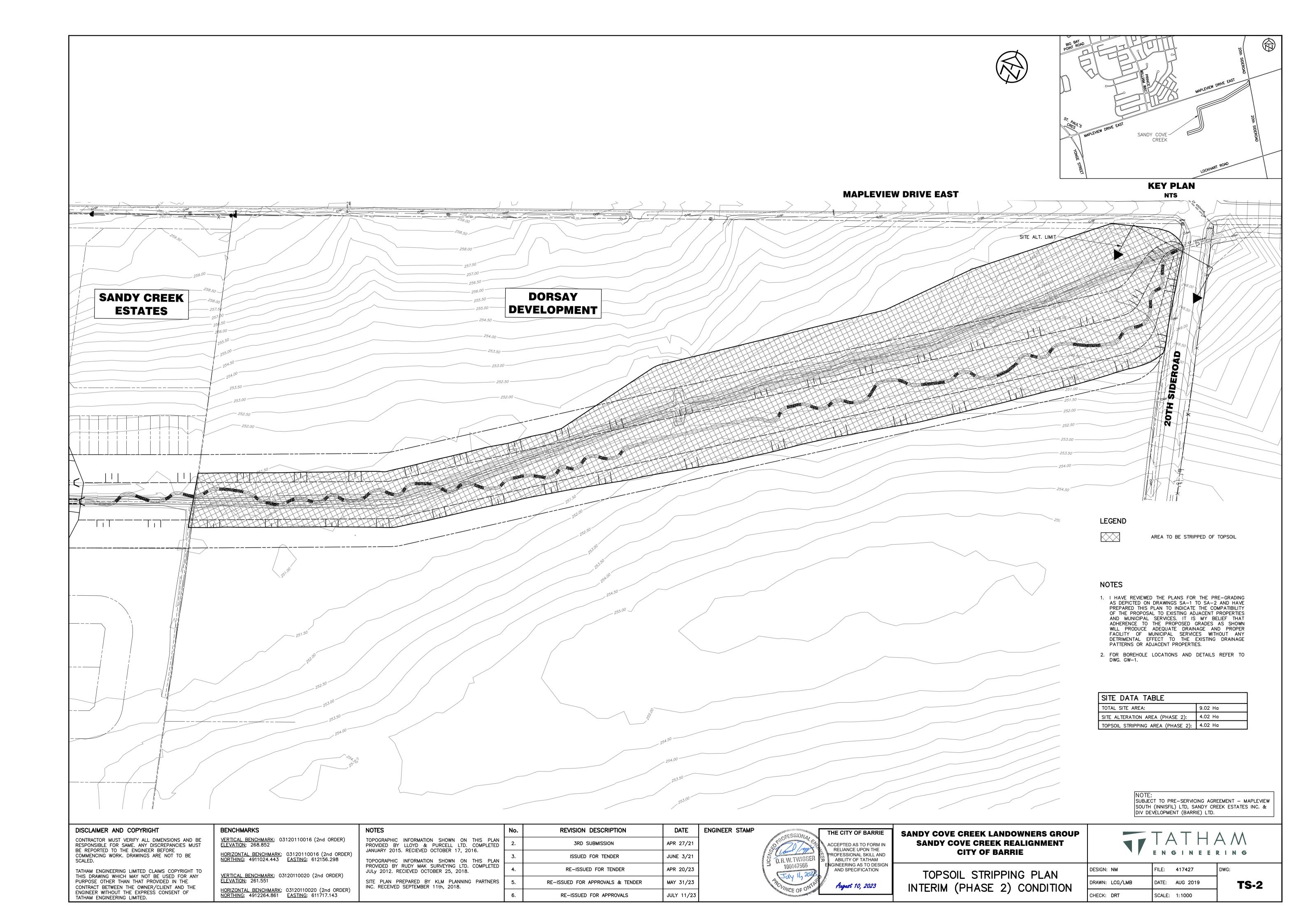
DESIGN: NM DRAWN: LCG/LMB DATE: AUG 2019 CHECK: DRT SCALE: N.T.S.

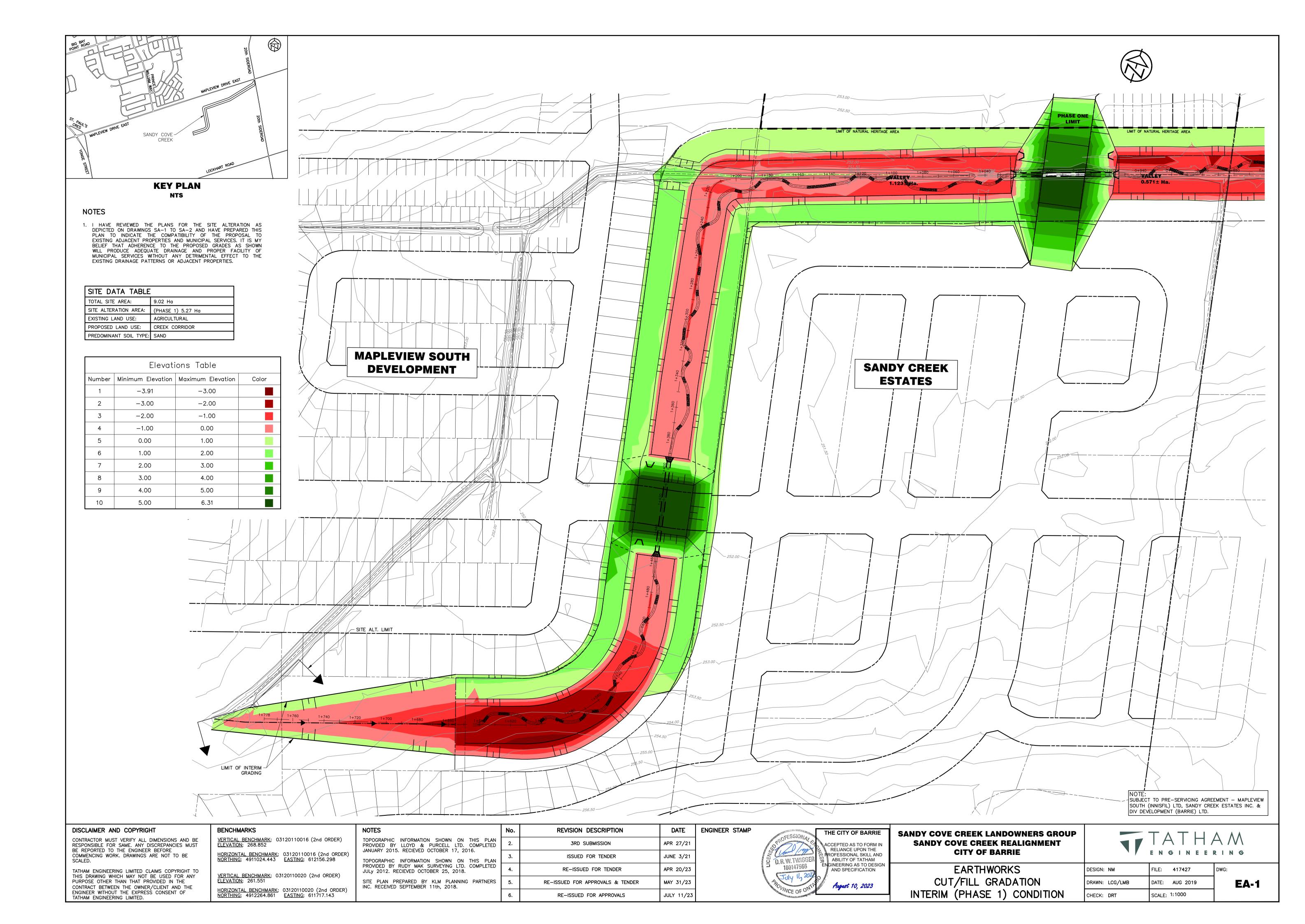
SA-3

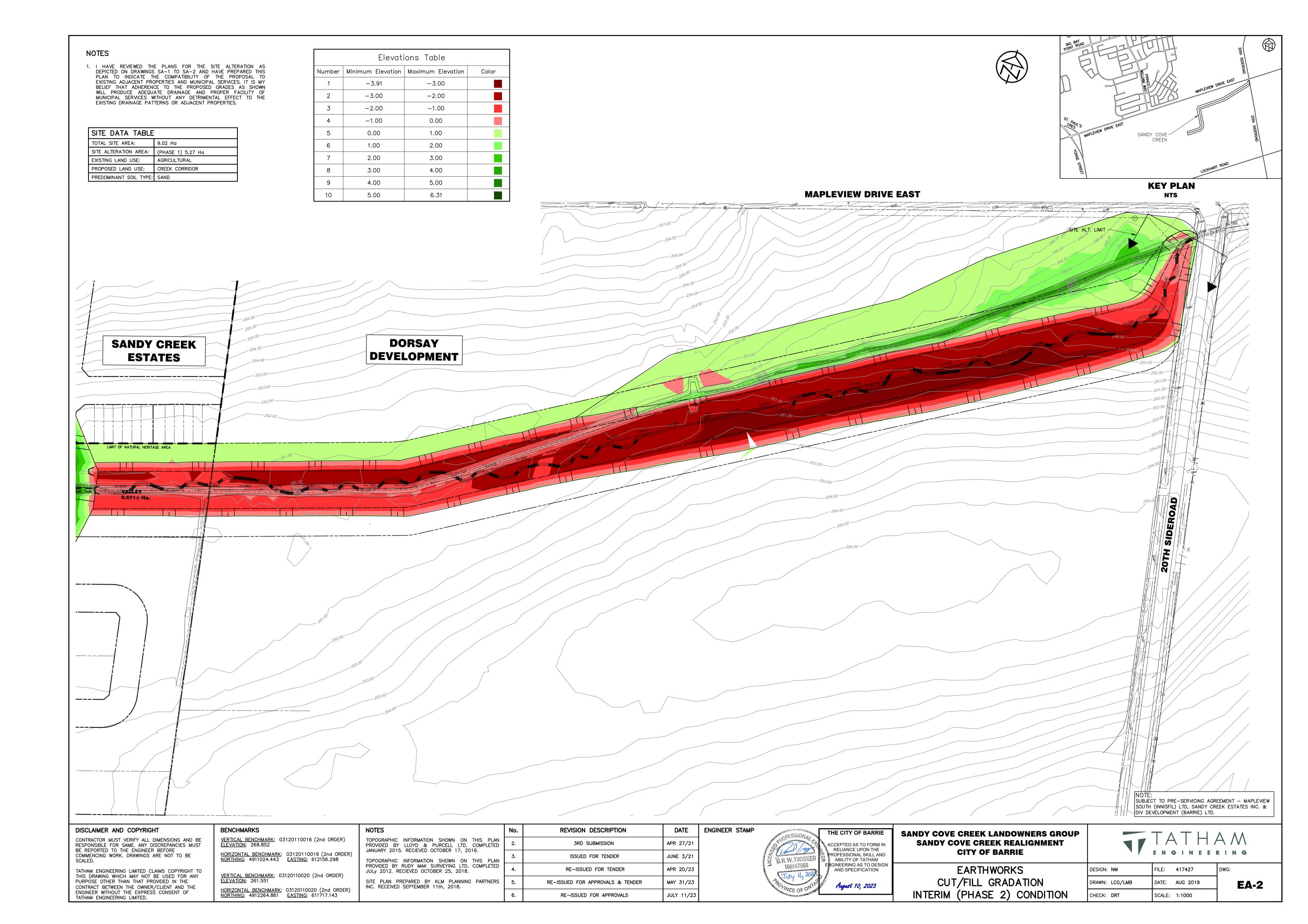
KEY PLAN











City of Barrie Parks Planning.

3. Report any changes, discrepancies or substitutions to the Landscape Architect for review. Obtain approval from the Landscape Architect

and City of Barrie Parks Planning before proceeding. 4. It is the contractor's responsibility to determine existing service

5. Exact locations of plant material will be determined by placement of

6. All plant material locations to be staked or marked out and approved by Landscape Architect and City of Barrie prior to

7. Supply all plant material in accordance with the Canadian Standards for Nursery Stock (8th ed.). 8. Install plant material according to details shown.

9. Supply and place mulch in accordance with Canadian Landscape Standard (Section 10, Mulching). Disturbed soil areas around trees and shrubs are to be covered with shredded conifer bark mulch such as 'Canada Red' or 'Gro-Bark' mulch, or approved equivalent.

Alternative mulches must be approved by the Landscape Architect. 10. Contractor to utilize layout dimensions where provided 11. Provide planting bed area as noted on the drawing or to

accommodate mature size of plant material. 12. All support systems must be removed by the contractor at time of final acceptance. No extras will be paid to complete this work

13. An effort should be made to salvage topsoil present on site, especially where native wetland plants are growing, and reuse to provide a local seed bank. Please ensure that only topsoil with NATIVE, non-invasive plants is considered for salvaging to avoid the introduction and spread of invasive species. All topsoil must be tested in accordance with the City of Barrie topsoil standards at a rate of one (1) test per 4,000 cubic meters. Soil amendment if required must be completed prior to placement. Refer to acceptable topsoil parameter table provided by the City of Barrie.

14. Supply and place topsoil in accordance with Canadian Landscape Standard (Section 4, Grading & Drainage and Section 6, Growing Medium) to a minimum depth of 600mm unless otherwise specified.

15. *Native topsoil salvaged to be re-used on site to be unscreened in order to retain the local seed bank. An effort should be made to remove roots and wood debris. Refer to the Canadian Landscape Standard section 6 - Growing Medium for other applicable standards.

16. Supply and place sod in accordance with Canadian Landscape Standard (Section 7, Lawns & Grass and Section 8, Turfgrass Sod)unless otherwise specified.

17. Supply and place seed in accordance with Canadian Landscape Standard (Section 4, Grading & Drainage and Section 6, Growing Medium) unless otherwise specified. All 5:1 or greater slopes to be seeded with tacifier. Contractor to provide necessary erosion control protection as required to ensure soil stabilization and proper seed

18. All dimensions in millimeters unless otherwise noted. 19. If discrepancies arise between plant material count shown on

20. Contractor to provide minimum two (2) years warranty (including trees on municipal property) from date accepted on all work unless otherwise specified. At the end of this period, minimum survivability of 80% must be documented. Failed stock should be replaced to meet this requirement.

drawing and plant list, the drawing shall be considered correct.

21. Any site plan or grading and servicing shown is for information only.

Refer to approved drawings. 22. Not for construction unless stamped, signed and dated by Landscape Architect.

23. Drawings not to be reproduced without written consent from Landscape Architect. 24. Approval of landscape plan to be obtained from municipality.

25. All plant material to be planted a minimum of 1.0m from any swales 26. For grading and servicing information refer to the consulting

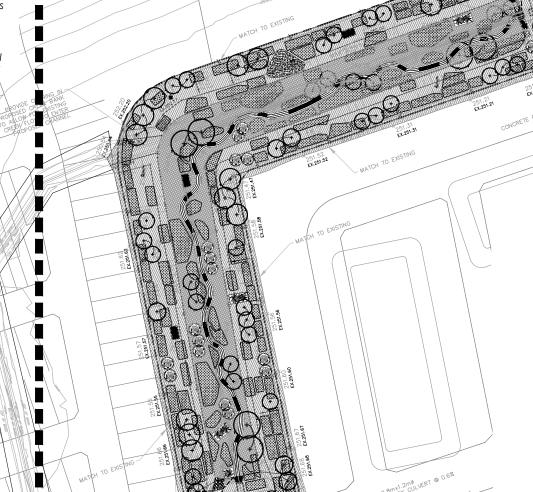
27. For lighting information and power distribution refer to the electrical consultant's drawings.

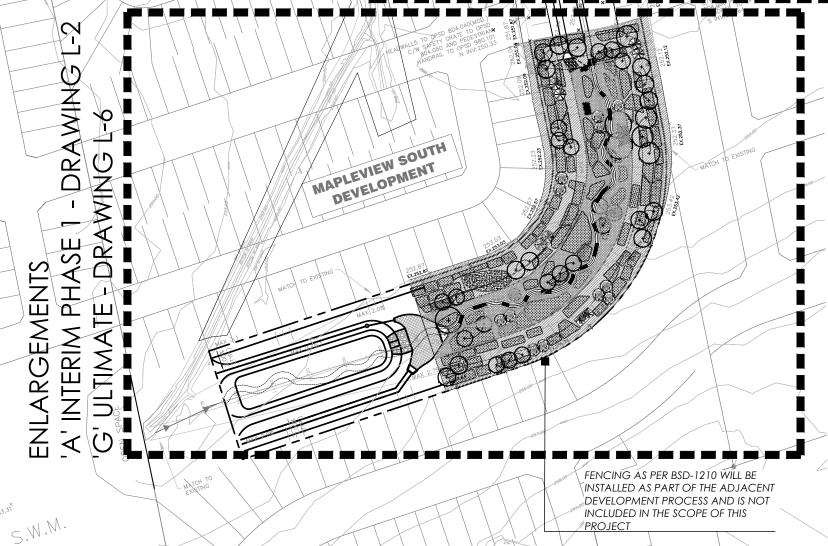
> DECOMMISSIONED EXISTING CHANNEL TO BE FILLED AND SEEDED WITH SIMCOE

COUNTY NATIVE SEED MIX

*Table provided by the City of Barrie

ENLARGEMENTS 'B' INTERIM PHASE 1 - DRAWING L-3a 'C' INTERIM PHASE 2 - DRAWING L-3b 'H' ULTIMATE - DRAWING L-7





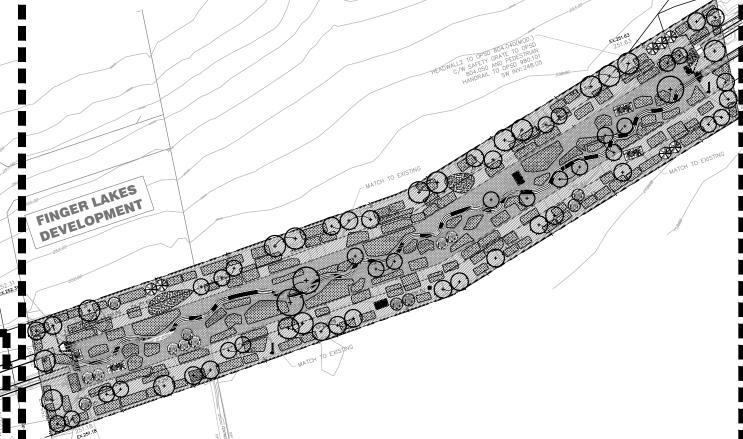
ACCEPTABLE TOPSOIL PARAMETERS

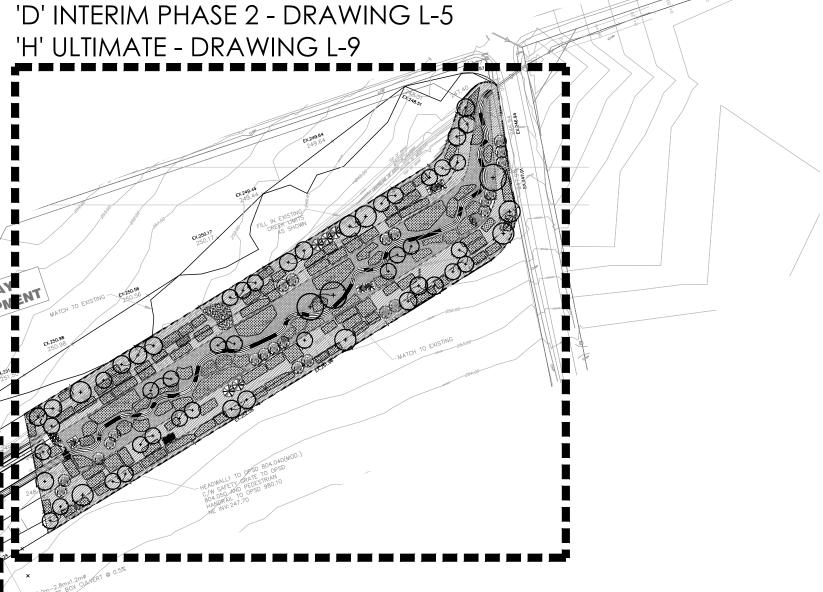
UNIT OF REQUIREMENT

	MEASURE	
рН	-	5.5 - 7.5
Organic Matter	%	4 - 15
Total Salts	mmhos/cm	<1.5
Phosphorous	ppm	10 - 60
Potassium	ppm	80 - 250
Calcium	ppm	1000 - 4000
Magnesium	ppm	100 - 300
Chloride	ppm	<100
Sodium	ppm	<200
Sodium Absorption	ratio	<15
Sand Fraction	%	20 - 75
Silt Fraction	%	5 - 50
Clay Fraction	%	5 - 30
Atrazine	ppm	<0.05

'D' INTERIM PHASE 1 - DRAWING L-4a 'E' INTERIM PHASE 2 - DRAWING L-46 'F' ULTIMATE - DRAWING L-8

ENLARGEMENTS





AREA CALCULATION

	AREA	Watercourse Spillway	Habitat Structures	Plantable Area	% coverage	SHRUBS ≥60cm	TREES ≥60mm cal.	SEEDED AREA
FLOODPLAIN	29,595m ²	4,346m ²	464m²	24,785m ²	C=x*0.35 8,675m ²	T=(C*0.75) 6,506	T=((C*0.25)/25) 87	14,688.93m ²
UPLAND *excluding 1.5m maintenance strip	47,083m ²		1,278m ²	45,805m ²	C=x*0.5 22,788m ²	T=(C*0.75) 17,177	T=((C*0.25)/25) 229	34,467.44m ² *includes 1.5m maintenance strip
DECOMMISSIONED EXISTING CHANNEL								11,077.17m ²

PROVIDED

ENLARGEMENTS

	SHRUBS ≥60cm	TREES ≥60mm cal.	SEEDED AREA
FLOODPLAIN at 35% density	6,535	87	14,688.93m ²
UPLAND at 50% density	17,175	232	34,467.44m ² *includes 1.5m maintenance strip
DECOMMISSIONED EXISTING CHANNEL			11,077.17m ²

TERRASEED NOTES:

1. Areas to be seeded with naturalization mix shall receive an application of naturalization seed at the rate of 25kg/hectare or 2 kg/100m² for

spot applications, in the following mixture:	
Simcoe County Native Seed Mix*(UPLAND)	
Black Eyed Susan (Rudbeckia hirta)	12%
Canada Wild Rye (Elymus canadensis)	20%
Indiangrass (Sorghastrum nutans)	20%
Little Bluestem (Schizachyrium scoparuim)	15%
New England Aster (Aster novae-angliae	2%
Wild Bergamot (Monarda fistulosa)	1%
Canada Goldenrod (Solidago canadensis)	4%
Common Milkweed (Aeclepiasw syriaca)	5%
Sand Dropseed (Sporobulus cryptandrus)	20%

Smooth Blue Aster (Aster laevis)

<u>Seasonally Flooded Mix (OSC Seed Mix 8240)</u>* (FLOODPLAIN) Dear Tongue (Panicum clandestinum) Fowl Bluegrass (Poa palustris) Fox Sedge (Carex vulpinoidea) Nodding Bur Marigold (Bidens ceruna) Ox Eye Sunflower (Helianthus helianthoides) 2% Switchgrass (Panicum virgatum)

25% Virginia Wild Rye (Elymus virginicus) *apply with Annual Rye (Ryegrass) nursecrop at 12kg/hectare.

Supplied by: OSC Seeds (or approved equal) P: 1-519-886-0557

Email: seeds@oscseeds.com

2. Contractor responsible for soil test to determine fertilizer rates. Results

of soil test shall be provided to the Landscape Architect for review and 3. Hydraulic mulch to be approved by the Landscape Architect shall be

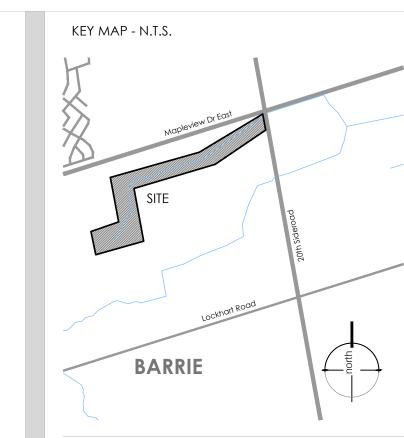
applied at the rate of 2100kg per hectare. 4. The contractor shall not carry out the work under adverse weather

conditions such as high wind, frozen ground or ground covered with snow, ice or standing water. 5. Grade sub-grade, eliminate uneven areas and low spots, ensure positive drainage. Remove debris, roots, branches, stones in excess of 50mm diameter and other deleterious materials. Remove subsoil that

has been contaminated with oil, gasoline or calcium chloride, dispose of removed material as directed by Landscape Architect. 6. Grade seed bed for terraseeding to a uniform surface and remove vegetation which may interfere with seeding operations. Loosen soil to depth of 25mm minimum and remove stones and foreign material

which protrude more than 75mm above the surface. 7. All areas to be terraseeded to receive 450mm of topsoil. 8. Seeded areas to be maintained by contractor ensuring adequate water, fertilizer, maintenance and repair until seeded areas are properly established. Areas seeded in fall will be accepted in following spring, one month after start of growing season provided acceptance

conditions are fulfilled. 9. All disturbed areas to be terraseeded with seed mixes as shown above in floodplain and upland areas as part of the proposed interim condition (phase 1 and phase 2) works.



REVISIONS/ SUBMISSIONS

DESCRIPTION 2022-05-27 Issued for submission 2023-04-18 Issued for submission

Issued for submission

Issued for tender



2023-06-02

4 2023-07-12

RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF ADESSO DESIGN INC. AS TO DESIGN AND SPECIFICATION August 10, 2023

THE CITY OF BARRIE

ACCEPTED AS TO FORM IN

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

MUNICIPAL FILE NUMBER DO8-HE 417427

Landscape Key Plan

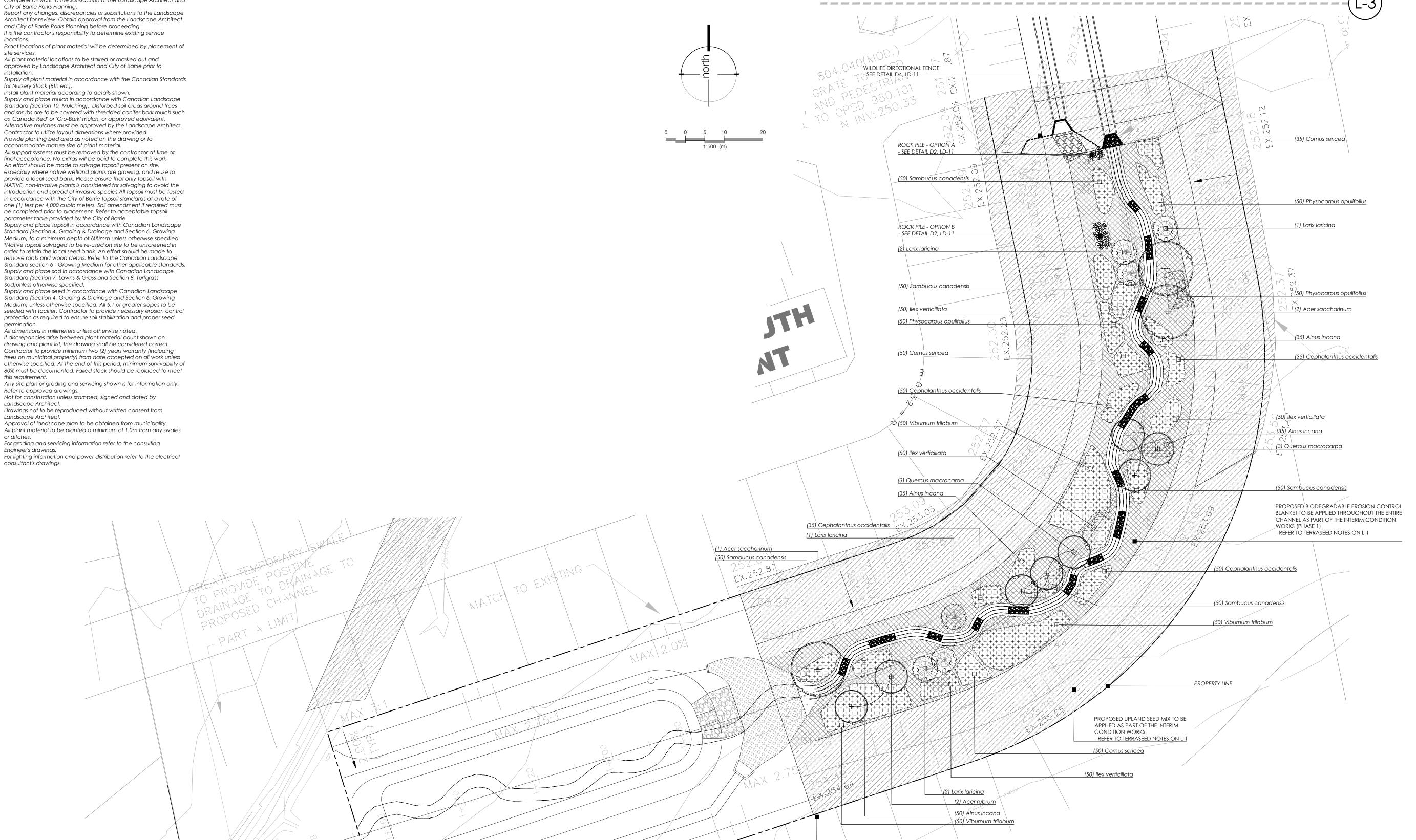
adesso design inc. landscape architecture



City of Barrie Parks Planning.

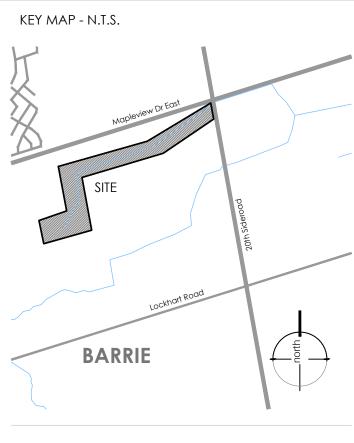
for Nursery Stock (8th ed.).

- 1. All work to be carried out in accordance with by-laws and codes
- having jurisdiction over site location. 2. Complete all work to the satisfaction of the Landscape Architect and
- 3. Report any changes, discrepancies or substitutions to the Landscape Architect for review. Obtain approval from the Landscape Architect
- and City of Barrie Parks Planning before proceeding. 4. It is the contractor's responsibility to determine existing service
- 5. Exact locations of plant material will be determined by placement of site services.
- 6. All plant material locations to be staked or marked out and approved by Landscape Architect and City of Barrie prior to installation. 7. Supply all plant material in accordance with the Canadian Standards
- 8. Install plant material according to details shown. 9. Supply and place mulch in accordance with Canadian Landscape Standard (Section 10, Mulching). Disturbed soil areas around trees and shrubs are to be covered with shredded conifer bark mulch such as 'Canada Red' or 'Gro-Bark' mulch, or approved equivalent.
- 10. Contractor to utilize layout dimensions where provided 11. Provide planting bed area as noted on the drawing or to accommodate mature size of plant material.
- 12. All support systems must be removed by the contractor at time of final acceptance. No extras will be paid to complete this work
- 13. An effort should be made to salvage topsoil present on site, especially where native wetland plants are growing, and reuse to provide a local seed bank. Please ensure that only topsoil with NATIVE, non-invasive plants is considered for salvaging to avoid the introduction and spread of invasive species. All topsoil must be tested in accordance with the City of Barrie topsoil standards at a rate of one (1) test per 4,000 cubic meters. Soil amendment if required must be completed prior to placement. Refer to acceptable topsoil parameter table provided by the City of Barrie.
- 14. Supply and place topsoil in accordance with Canadian Landscape Standard (Section 4, Grading & Drainage and Section 6, Growing Medium) to a minimum depth of 600mm unless otherwise specified.
- 15. *Native topsoil salvaged to be re-used on site to be unscreened in order to retain the local seed bank. An effort should be made to remove roots and wood debris. Refer to the Canadian Landscape
- Standard section 6 Growing Medium for other applicable standards. 16. Supply and place sod in accordance with Canadian Landscape Standard (Section 7, Lawns & Grass and Section 8, Turfgrass
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- 18. All dimensions in millimeters unless otherwise noted. 19. If discrepancies arise between plant material count shown on
- drawing and plant list, the drawing shall be considered correct. 20. Contractor to provide minimum two (2) years warranty (including trees on municipal property) from date accepted on all work unless otherwise specified. At the end of this period, minimum survivability of 80% must be documented. Failed stock should be replaced to meet this requirement.
- 21. Any site plan or grading and servicing shown is for information only. Refer to approved drawings.
- 22. Not for construction unless stamped, signed and dated by Landscape Architect.
- 23. Drawings not to be reproduced without written consent from Landscape Architect.
- 24. Approval of landscape plan to be obtained from municipality. 25. All plant material to be planted a minimum of 1.0m from any swales
- 26. For grading and servicing information refer to the consulting Engineer's drawings.
- 27. For lighting information and power distribution refer to the electrical consultant's drawings.



FENCING AS PER BSD-1210 WILL BE INSTALLED AS PART OF THE ADJACENT DEVELOPMENT PROCESS AND IS NOT INCLUDED IN THE SCOPE OF THIS



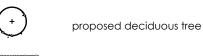


LEGEND

property line



proposed coniferous tree



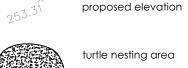
proposed shrub



min. 600mm topsoil, fine grade & seed - seasonally flooded (OSC Seed Mix 8240)



min. 600mm topsoil, fine grade & seed - Simcoe County Native seed mix



existing elevation



rock pile/hibernacula



brush pile



wildlife directional fence

REVISIONS/ SUBMISSIONS

2022-05-27 Issued for submission 2023-06-02 Issued for submission

4 2023-07-12 Issued for tender



THE CITY OF BARRIE ACCEPTED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF ADESSO DESIGN INC. AS TO DESIGN AND **SPECIFICATION**

August 10, 2023

Sandy Cove Creek Landowners Group MUNICIPALITY

City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

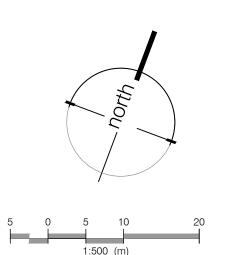
MUNICIPAL FILE NUMBER DO8-HE 417427

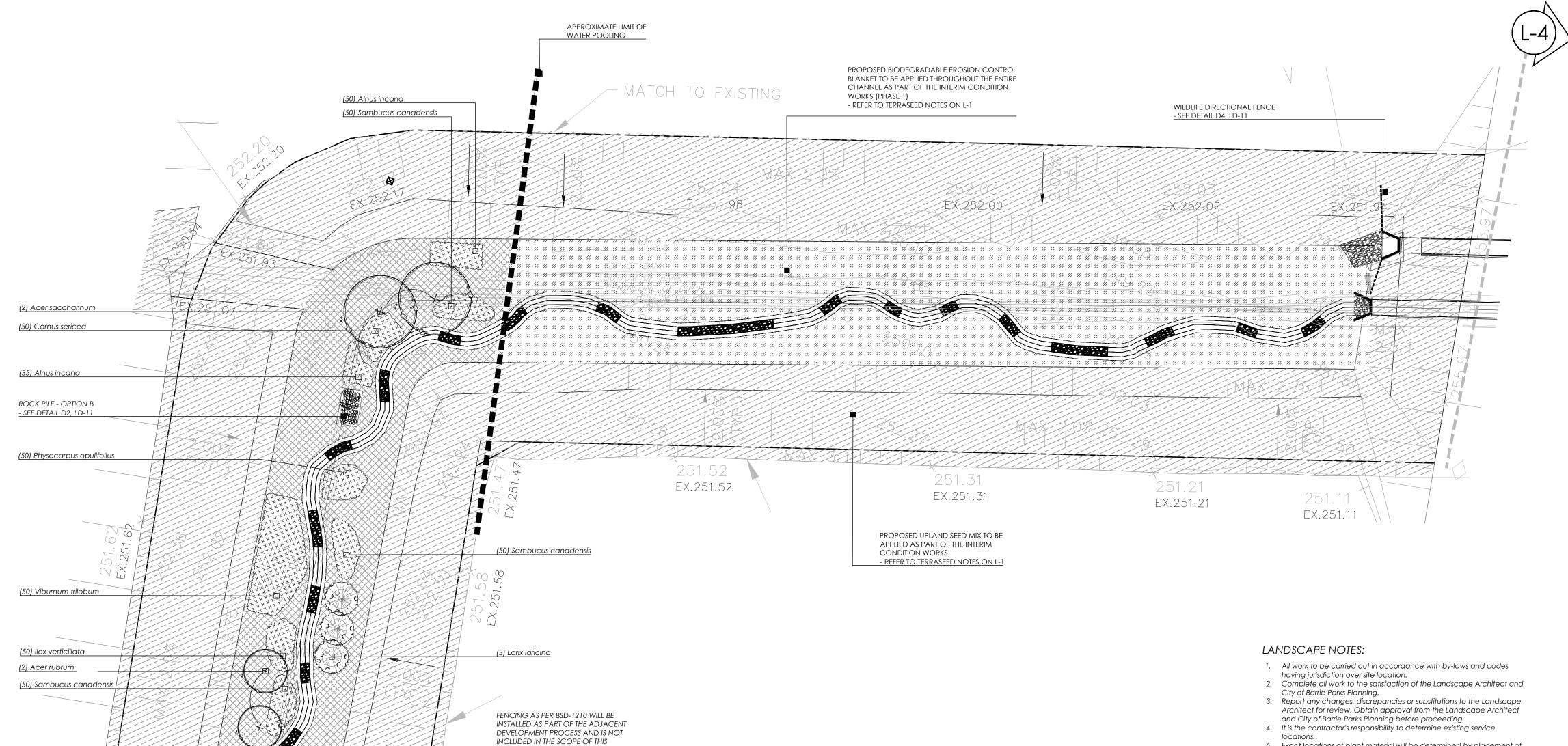
Landscape Plan Enlargement

L-2

adesso design inc. landscape architecture







(50) Cephalanthus occidentalis

PROPOSED BIODEGRADABLE EROSION CONTROL

BLANKET TO BE APPLIED THROUGHOUT THE ENTIRE

CHANNEL AS PART OF THE INTERIM CONDITION

- REFER TO TERRASEED NOTES ON L-1

PROPOSED UPLAND SEED MIX TO BE

- REFER TO TERRASEED NOTES ON L-1

APPLIED AS PART OF THE INTERIM

(50) Alnus incana

WORKS (PHASE 1)

(2) Quercus macrocarpa

CONDITION WORKS

(2) Acer saccharinum

(35) Cornus sericea

(35) Alnus incana

- 5. Exact locations of plant material will be determined by placement of
- site services. 6. All plant material locations to be staked or marked out and
- approved by Landscape Architect and City of Barrie prior to
- 7. Supply all plant material in accordance with the Canadian Standards for Nursery Stock (8th ed.).
- 8. Install plant material according to details shown.
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- and shrubs are to be covered with shredded conifer bark mulch such as 'Canada Red' or 'Gro-Bark' mulch, or approved equivalent. Alternative mulches must be approved by the Landscape Architect.
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- parameter table provided by the City of Barrie. 14. Supply and place topsoil in accordance with Canadian Landscape Standard (Section 4, Grading & Drainage and Section 6, Growing

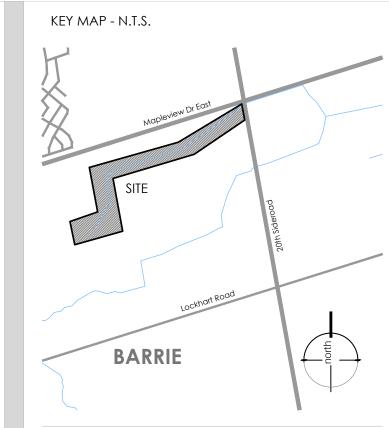
Medium) to a minimum depth of 600mm unless otherwise specified.

be completed prior to placement. Refer to acceptable topsoil

- 15. *Native topsoil salvaged to be re-used on site to be unscreened in order to retain the local seed bank. An effort should be made to remove roots and wood debris. Refer to the Canadian Landscape
- Standard section 6 Growing Medium for other applicable standards. 16. Supply and place sod in accordance with Canadian Landscape Standard (Section 7, Lawns & Grass and Section 8, Turfgrass Sod)unless otherwise specified.
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80% must be documented. Failed stock should be replaced to meet

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- Landscape Architect. 24. Approval of landscape plan to be obtained from municipality.
- 25. All plant material to be planted a minimum of 1.0m from any swales 26. For grading and servicing information refer to the consulting
- Engineer's drawings. 27. For lighting information and power distribution refer to the electrical consultant's drawings.



LEGEND

property line

proposed coniferous tree

proposed deciduous tree

min. 600mm topsoil, fine grade & seed - seasonally flooded (OSC Seed Mix 8240) min. 600mm topsoil, fine grade & seed

proposed shrub

min. 600mm topsoil, fine grade with erosion control blanket & seed 1/1 1/1 1/1 - seasonally flooded (OSC Seed Mix 8240) 11. 11. 11.

- Simcoe County Native seed mix

existing elevation

proposed elevation

rock pile/hibernacula

turtle nesting area

brush pile

wildlife directional fence

REVISIONS/ SUBMISSIONS

2023-06-02

4 2023-07-12

DATE DESCRIPTION 2022-05-27 Issued for submission 2023-04-18 Issued for submission

Issued for submission

Issued for tender



ACCEPTED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF ADESSO DESIGN INC. AS TO DESIGN AND SPECIFICATION August 10, 2023

THE CITY OF BARRIE

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration

MUNICIPAL FILE NUMBER DO8-HE 417427

Barrie

Landscape Plan Enlargement

Hamilton, ON L8N 2B9

t. 905.526.8876

adesso design inc. landscape architecture

69 John Street South, Suite 250

www.adessodesigninc.ca

WILDLIFE DIRECTIONAL FENCE - SEE DETAIL D4, LD-11 WILDLIFE CROSSING - REFER TO ENGINEERING DRAWINGS ENLARGEMENT 'B' - INTERIM PHASE 1 SCALE 1:500

(3) Larix Iaricina

(50) Viburnum trilobum

(2) Larix Iaricina

(50) Ilex verticillata

BRUSH PILE - OPTION B

- SEE DETAIL D1, LD-11

(50) Ilex verticillata

BRUSH PILE - OPTION A

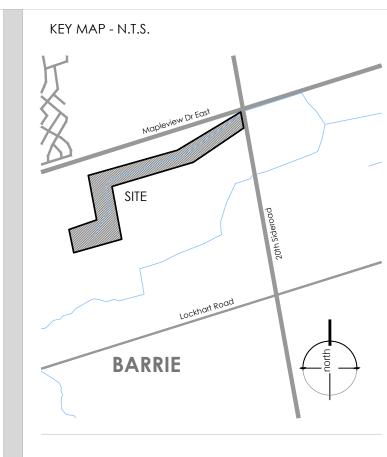
- SEE DETAIL D1, LD-11

(50) Cephalanthus occidentalis

(35) Cephalanthus occidentalis

ENLARGEMENT 'C' - INTERIM PHASE 2

SCALE 1:500



LEGEND

WILDLIFE DIRECTIONAL FENCE - SEE DETAIL D4, LD-11 WILDLIFE CROSSING - REFER TO ENGINEERING

(2) Quercus macrocarpa

ROCK PILE - OPTION A - SEE DETAIL D2, LD-11

(35) Cephalanthus <u>occidentalis</u>

DRAWINGS

(35) Cephalanthus occidentalis

BRUSH PILE - OPTION B

- SEE DETAIL D1, LD-11

(50) Cornus sericea

(50) Ilex verticillata

(50) Alnus incana

(2) Acer saccharinum

(50) Physocarpus opulifolius

_____ property line

proposed coniferous tree proposed deciduous tree

proposed shrub

min. 600mm topsoil, fine grade & seed

- seasonally flooded (OSC Seed Mix 8240) min. 600mm topsoil, fine grade & seed - Simcoe County Native seed mix

existing elevation

proposed elevation



rock pile/hibernacula

turtle nesting area

brush pile

wildlife directional fence

REVISIONS/ SUBMISSIONS

DESCRIPTION 2022-05-27 Issued for submission 2023-04-18

2023-06-02

Issued for submission Issued for submission 4 2023-07-12 Issued for tender



August 10, 2023 Sandy Cove Creek Landowners Group

MUNICIPALITY

City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

MUNICIPAL FILE NUMBER DO8-HE 417427

Landscape Plan Enlargement

THE CITY OF BARRIE

ACCEPTED AS TO FORM IN RELIANCE UPON THE

PROFESSIONAL SKILL AND

ABILITY OF ADESSO DESIGN

INC. AS TO DESIGN AND

SPECIFICATION

adesso design inc. landscape architecture



ENLARGEMENT 'D' - INTERIM PHASE 1

KEY MAP - N.T.S. **BARRIE**

LEGEND

property line

min. 600mm topsoil, fine grade with erosion 1/1 1/1 1/1 1/1 control blanket & seed - seasonally flooded (OSC Seed Mix 8240)

> min. 600mm topsoil, fine grade & seed - Simcoe County Native seed mix

proposed elevation

wildlife directional fence

REVISIONS/ SUBMISSIONS

DATE DESCRIPTION 2022-05-27 Issued for submission 2023-04-18 Issued for submission

Issued for submission

4 2023-07-12 Issued for tender



ACCEPTED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF ADESSO DESIGN INC. AS TO DESIGN AND SPECIFICATION August 10, 2023

THE CITY OF BARRIE

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

Sandy Cove Creek Restoration

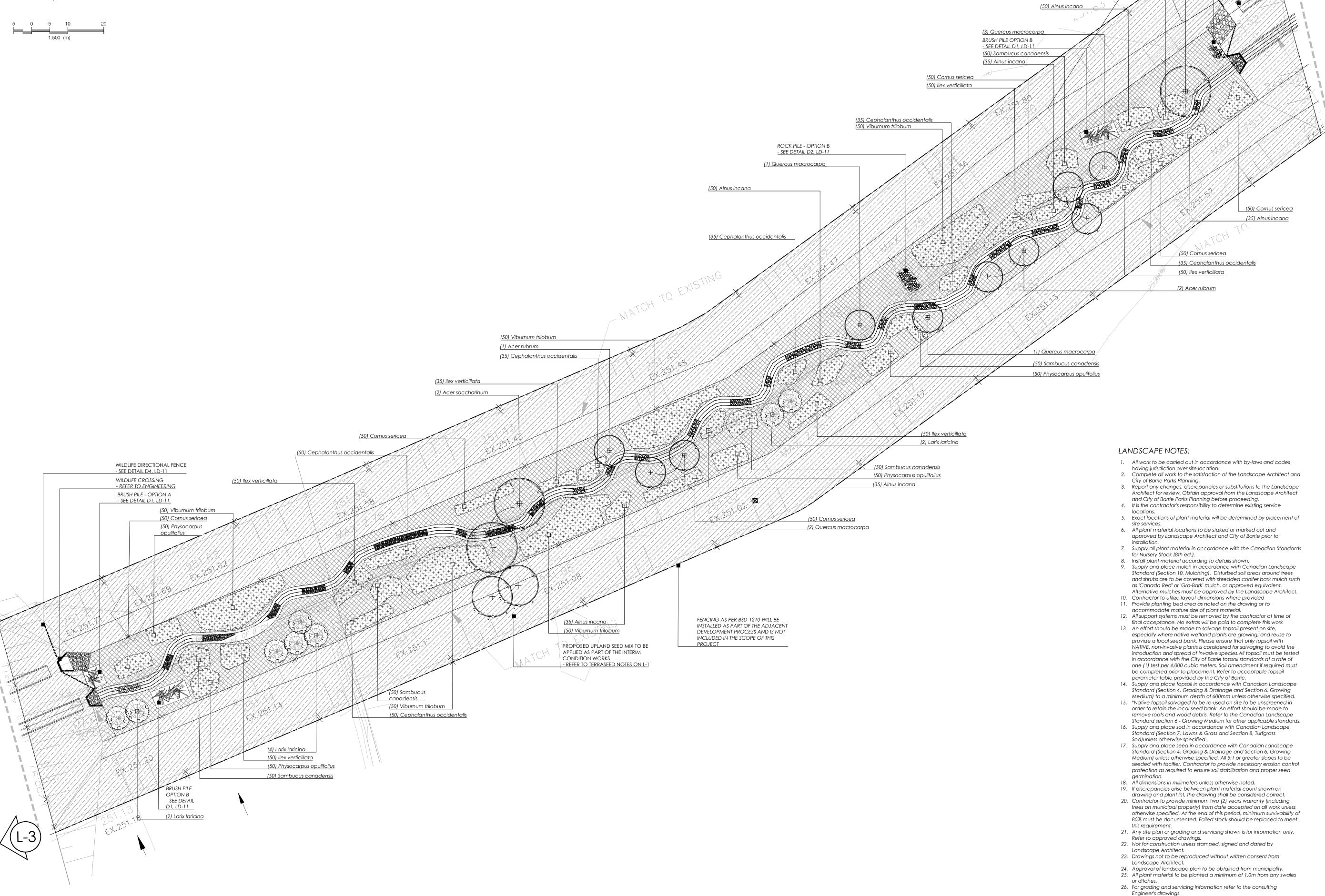
DO8-HE 417427

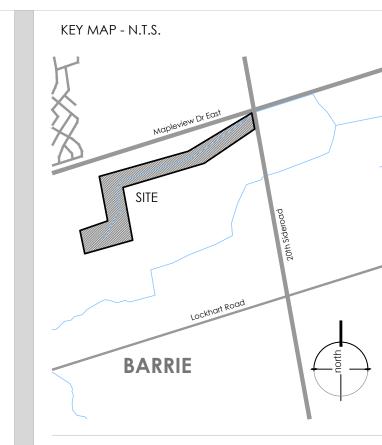
Landscape Plan Enlargement

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ENLARGEMENT 'E' - INTERIM PHASE 2





LEGEND

WILDLIFE CROSSING

ROCK PILE - OPTION A - SEE DETAIL D2, LD-11 (1) Acer saccharinum

(50) Physocarpus opulifolius

- REFER TO ENGINEERING DRAWINGS

_____ property line

proposed coniferous tree

proposed deciduous tree

proposed shrub

min. 600mm topsoil, fine grade & seed - seasonally flooded (OSC Seed Mix 8240) min. 600mm topsoil, fine grade & seed - Simcoe County Native seed mix

existing elevation

proposed elevation

rock pile/hibernacula

turtle nesting area

wildlife directional fence

REVISIONS/ SUBMISSIONS DATE DESCRIPTION 2022-05-27 Issued for submission

2023-04-18 Issued for submission 2023-06-02 Issued for submission 4 2023-07-12 Issued for tender

STAMP



INC. AS TO DESIGN AND SPECIFICATION August 10, 2023

THE CITY OF BARRIE

ACCEPTED AS TO FORM IN RELIANCE UPON THE

PROFESSIONAL SKILL AND

ABILITY OF ADESSO DESIGN

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

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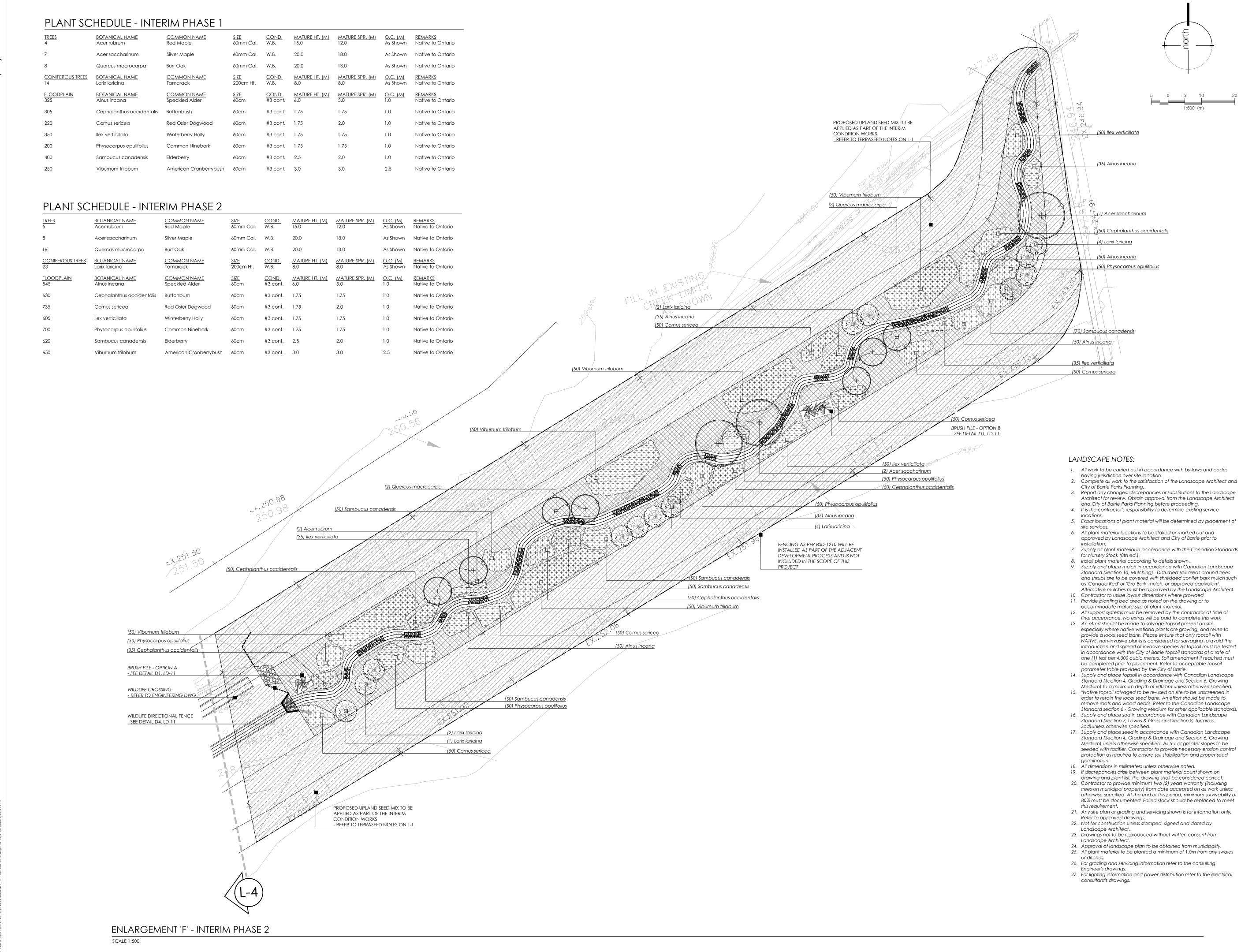
Landscape Plan Enlargement

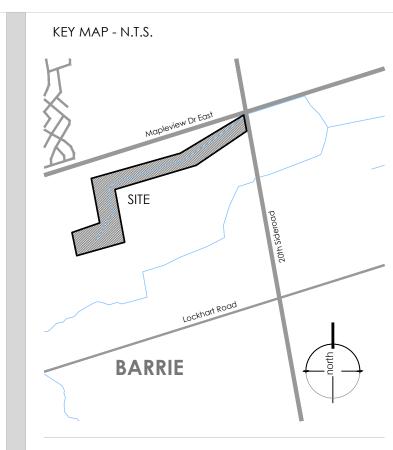
adesso design inc. landscape architecture



27. For lighting information and power distribution refer to the electrical

consultant's drawings.





LEGEND

(50) Ilex verticillata

(35) Alnus incana

(4) Larix Iaricina

(50) Alnus incana

(50) Cephalanthus occidentalis

(50) Physocarpus opulifolius

property line

proposed deciduous tree

proposed coniferous tree

proposed shrub

min. 600mm topsoil, fine grade & seed

- seasonally flooded (OSC Seed Mix 8240) min. 600mm topsoil, fine grade & seed - Simcoe County Native seed mix

existing elevation

proposed elevation

rock pile/hibernacula

turtle nesting area

brush pile

wildlife directional fence

REVISIONS/ SUBMISSIONS

DESCRIPTION 2022-05-27 Issued for submission 2023-04-18 Issued for submission 2023-06-02 Issued for submission

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August 10, 2023

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

MUNICIPAL FILE NUMBER DO8-HE 417427

Landscape Plan Enlargement

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18. All dimensions in millimeters unless otherwise noted. 19. If discrepancies arise between plant material count shown on drawing and plant list, the drawing shall be considered correct. 20. Contractor to provide minimum two (2) years warranty (including trees on municipal property) from date accepted on all work unless otherwise specified. At the end of this period, minimum survivability of 80% must be documented. Failed stock should be replaced to meet

this requirement. 21. Any site plan or grading and servicing shown is for information only. Refer to approved drawings.

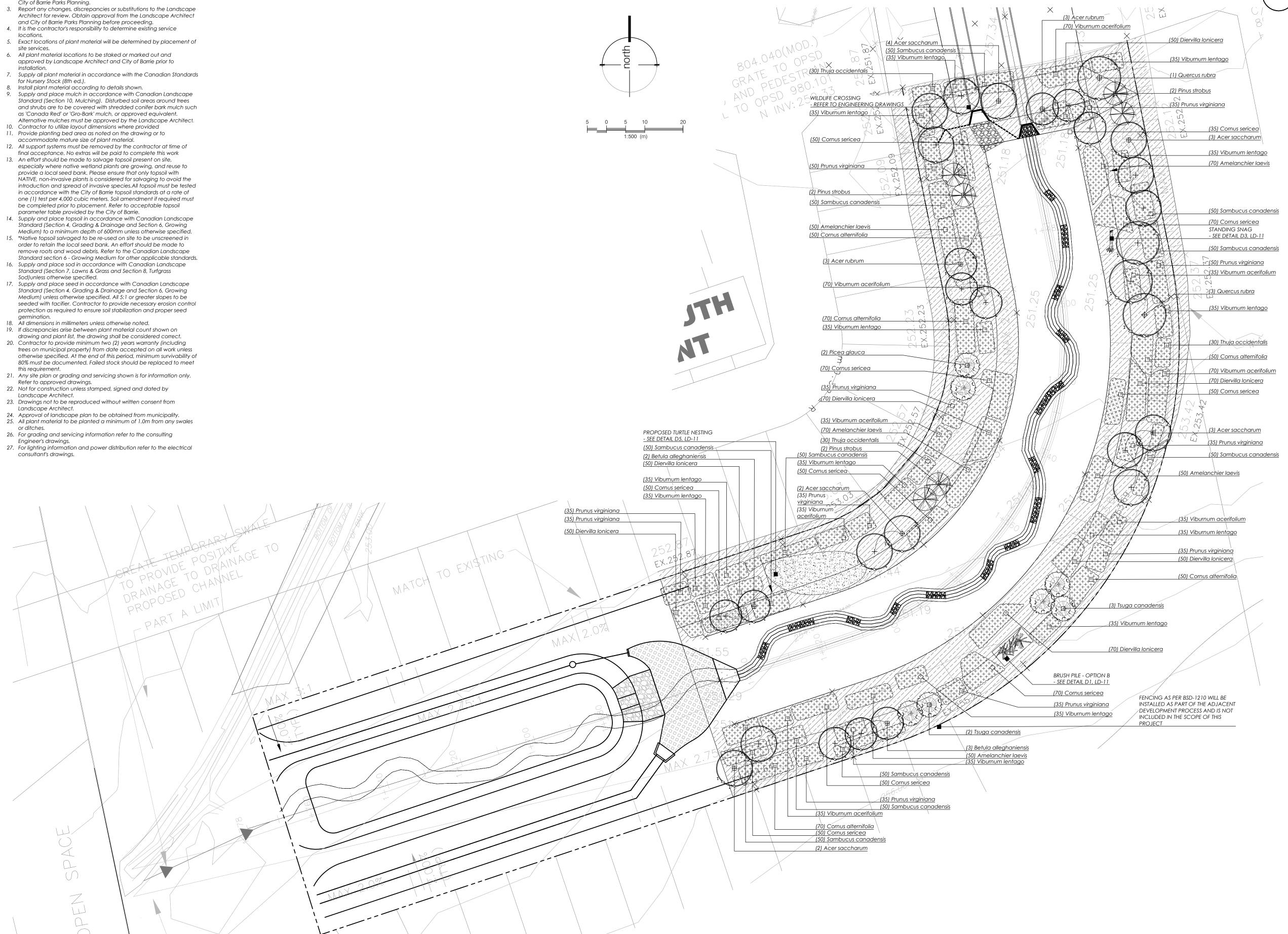
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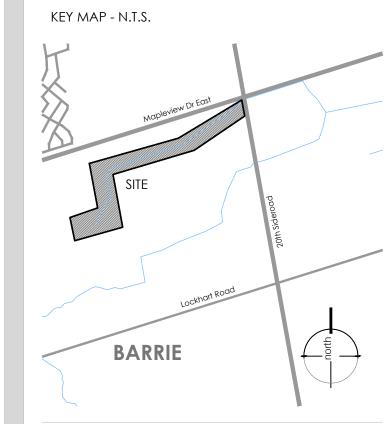
23. Drawings not to be reproduced without written consent from Landscape Architect.

25. All plant material to be planted a minimum of 1.0m from any swales

26. For grading and servicing information refer to the consulting Engineer's drawings.

consultant's drawings.





LEGEND

_____ property line

proposed deciduous tree

proposed coniferous tree

proposed shrub

min. 600mm topsoil, fine grade & seed - Simcoe County Native seed mix

existing elevation

turtle nesting area

rock pile/hibernacula

proposed elevation

brush pile

snag

wildlife directional fence

REVISIONS/ SUBMISSIONS

2023-06-02

4 2023-07-12

2022-05-27 Issued for submission

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THE CITY OF BARRIE ACCEPTED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF ADESSO DESIGN INC. AS TO DESIGN AND **SPECIFICATION** August 10, 2023

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

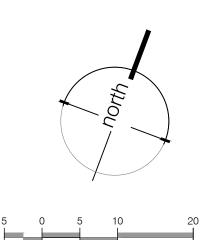
MUNICIPAL FILE NUMBER DO8-HE 417427

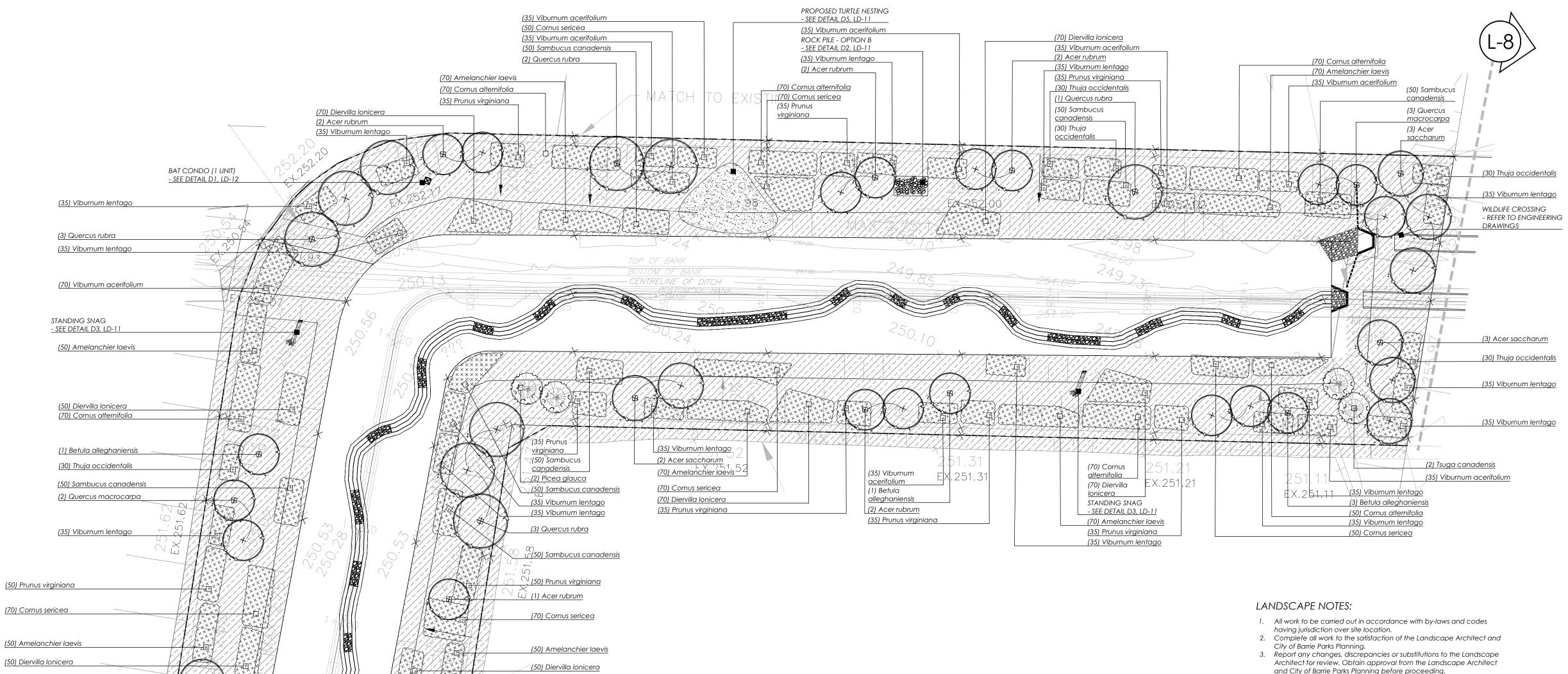
Landscape Plan Enlargement

L-6

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(35) Viburnum lentago

- SEE DETAIL D1, LD-11

(3) Quercus macrocarpa

(30) Thuja occidentalis

(35) Viburnum lentago

(50) Sambucus canadensis

FENCING AS PER BSD-1210 WILL BE

INCLUDED IN THE SCOPE OF THIS

INSTALLED AS PART OF THE ADJACENT

DEVELOPMENT PROCESS AND IS NOT

(30) Thuja occidentalis

(2) Picea glauca

(35) Viburnum lentago

(50) Prunus virginiana

(50) Sambucus canadensis

(1) Betula alleghaniensis

(70) Cornus alternifolia

(50) Diervilla Ionicera

(50) Amelanchier laevis

(50) Cornus alternifolia

(35) Viburnum lentago

(50) Prunus virginiana

(70) Viburnum acerifolium

(2) Betula alleghaniensis

(70) Viburnum acerifolium

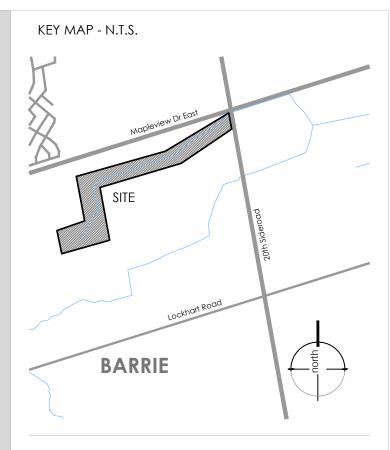
(30) Thuja occidentalis

(2) Acer saccharum

(70) Cornus sericea

BRUSH PILE - OPTION B

- 4. It is the contractor's responsibility to determine existing service
- 5. Exact locations of plant material will be determined by placement of site services.
- 6. All plant material locations to be staked or marked out and approved by Landscape Architect and City of Barrie prior to
- installation. 7. Supply all plant material in accordance with the Canadian Standards for Nursery Stock (8th ed.).
- 8. Install plant material according to details shown. 9. Supply and place mulch in accordance with Canadian Landscape Standard (Section 10, Mulching). Disturbed soil areas around trees and shrubs are to be covered with shredded conifer bark mulch such as 'Canada Red' or 'Gro-Bark' mulch, or approved equivalent.
- Alternative mulches must be approved by the Landscape Architect. 10. Contractor to utilize layout dimensions where provided 11. Provide planting bed area as noted on the drawing or to accommodate mature size of plant material.
- 12. All support systems must be removed by the contractor at time of final acceptance. No extras will be paid to complete this work
- 13. An effort should be made to salvage topsoil present on site, especially where native wetland plants are growing, and reuse to provide a local seed bank. Please ensure that only topsoil with NATIVE, non-invasive plants is considered for salvaging to avoid the introduction and spread of invasive species. All topsoil must be tested in accordance with the City of Barrie topsoil standards at a rate of one (1) test per 4,000 cubic meters. Soil amendment if required must be completed prior to placement. Refer to acceptable topsoil
- parameter table provided by the City of Barrie. 14. Supply and place topsoil in accordance with Canadian Landscape Standard (Section 4, Grading & Drainage and Section 6, Growing Medium) to a minimum depth of 600mm unless otherwise specified.
- 15. *Native topsoil salvaged to be re-used on site to be unscreened in order to retain the local seed bank. An effort should be made to remove roots and wood debris. Refer to the Canadian Landscape Standard section 6 - Growing Medium for other applicable standards.
- 16. Supply and place sod in accordance with Canadian Landscape Standard (Section 7, Lawns & Grass and Section 8, Turfgrass Sod)unless otherwise specified.
- 17. Supply and place seed in accordance with Canadian Landscape Standard (Section 4, Grading & Drainage and Section 6, Growing Medium) unless otherwise specified. All 5:1 or greater slopes to be seeded with tacifier. Contractor to provide necessary erosion control protection as required to ensure soil stabilization and proper seed germination.
- 18. All dimensions in millimeters unless otherwise noted. 19. If discrepancies arise between plant material count shown on
- drawing and plant list, the drawing shall be considered correct. 20. Contractor to provide minimum two (2) years warranty (including trees on municipal property) from date accepted on all work unless otherwise specified. At the end of this period, minimum survivability of 80% must be documented. Failed stock should be replaced to meet
- this requirement. 21. Any site plan or grading and servicing shown is for information only.
- Refer to approved drawings. 22. Not for construction unless stamped, signed and dated by Landscape Architect.
- 23. Drawings not to be reproduced without written consent from Landscape Architect.
- 24. Approval of landscape plan to be obtained from municipality. 25. All plant material to be planted a minimum of 1.0m from any swales
- 26. For grading and servicing information refer to the consulting
- Engineer's drawings. 27. For lighting information and power distribution refer to the electrical consultant's drawings.



LEGEND

property line

proposed coniferous tree

proposed shrub

min. 600mm topsoil, fine grade & seed - Simcoe County Native seed mix

proposed deciduous tree

existing elevation

proposed elevation

turtle nesting area rock pile/hibernacula

brush pile

wildlife directional fence

REVISIONS/ SUBMISSIONS

DESCRIPTION 2022-05-27 Issued for submission 2023-04-18 Issued for submission 2023-06-02 Issued for submission

Issued for tender



4 2023-07-12

PROFESSIONAL SKILL AND ABILITY OF ADESSO DESIGN INC. AS TO DESIGN AND SPECIFICATION August 10, 2023

THE CITY OF BARRIE

ACCEPTED AS TO FORM IN

RELIANCE UPON THE

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

MUNICIPAL FILE NUMBER DO8-HE 417427

Landscape Plan Enlargement

adesso design inc.

landscape architecture



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(1) Acer saccharum

(50) Sambucus canadensis

(30) Thuja occidentalis

ROCK PILE - OPTION B

(50) Prunus virginiana

(50) Sambucus canadensis

- SEE DETAIL D2, LD-1

(2) Picea glauca

(50) Amelanchier laevis

(70) Cornus alternifolia

(70) Cornus sericea

(30) Thuja occidentalis

(50) Diervilla Ionicera

(3) Quercus rubra

(70) Cornus sericea

(30) Thuja occidentalis

(50) Amelanchier laevis

(35) Viburnum lentago

(35) Viburnum lentago

(1) Acer saccharum

(50) Prunus virginiana

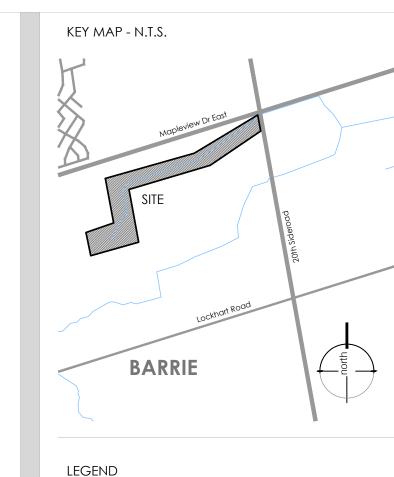
(30) Thuja occidentalis

- REFER TO ENGINEERING DRAWINGS

(3) Pinus strobus
WILDLIFE CROSSING

(2) Acer rubrum

(50) Sambucus canadensis



property line proposed coniferous tree

Sambucus <u>canadensis</u>

saccharum

<u>occidentalis</u>

(35) Prunus virginiana

(70) Cornus alternifolia

(50) Sambucus canadensis

(70) Cornus sericea

(2) Pinus strobus

(50) Amelanchier laevis

(35) Viburnum lentago

BRUSH PILE - OPTION B

- SEE DETAIL D1, LD-11

(1) Acer saccharum

(35) Prunus virginiana

(35) Viburnum lentago

(2) Picea glauca

(2) Acer saccharum

(35) Viburnum acerifolium

(35) Viburnum lentago

(35) Viburnum acerifolium

LANDSCAPE NOTES:

site services.

installation.

having jurisdiction over site location.

City of Barrie Parks Planning.

for Nursery Stock (8th ed.).

(50) Sambucus canadensis

(2) Acer rubrum

STANDING SNAG

- SEE DETAIL D3, LD-11 (35) Viburnum acerifolium proposed deciduous tree

proposed shrub

min. 600mm topsoil, fine grade & seed - Simcoe County Native seed mix existing elevation

turtle nesting area

proposed elevation

rock pile/hibernacula

wildlife directional fence

DESCRIPTION Issued for submission Issued for submission

Issued for tender

Alternative mulches must be approved by the Landscape Architect. 10. Contractor to utilize layout dimensions where provided 11. Provide planting bed area as noted on the drawing or to accommodate mature size of plant material.

and shrubs are to be covered with shredded conifer bark mulch such

1. All work to be carried out in accordance with by-laws and codes

and City of Barrie Parks Planning before proceeding.

6. All plant material locations to be staked or marked out and

Install plant material according to details shown.

4. It is the contractor's responsibility to determine existing service

Complete all work to the satisfaction of the Landscape Architect and

Report any changes, discrepancies or substitutions to the Landscape

Architect for review. Obtain approval from the Landscape Architect

5. Exact locations of plant material will be determined by placement of

7. Supply all plant material in accordance with the Canadian Standards

9. Supply and place mulch in accordance with Canadian Landscape Standard (Section 10, Mulching). Disturbed soil areas around trees

as 'Canada Red' or 'Gro-Bark' mulch, or approved equivalent.

approved by Landscape Architect and City of Barrie prior to

(30) Thuja occidentalis (1) Quercus rubra (2) Acer saccharum (30) Thuja occidentalis

WILDLIFE CROSSING

(50) Diervilla Ionicera (35) Viburnum acerifoliun (2) Quercus macrocarpo (3) Pinus strobus (70) Cornus alternifolia

(50) Amelanchier laevis (35) Viburnum acerifolium

(30) Thuja occidentalis (50) Sambucus canadensis

(3) Quercus rubra (70) Cornus sericea

(50) Diervilla lonicera (35) Viburnum lentago

(35) Prunus virginiana

(35) Viburnum lentaga (70) Cornus alternifolio (2) Acer rubrum

(50) Sambucus canadensi (50) Amelanchier laevis

(2) Quercus rubra

(35) Prunus virginiana (50) Sambucus canadensis

(2) Acer saccharum

PROPOSED TURTLE NESTING

(35) Viburnum acerifolium

(35) Viburnum acerifolium

(30) Thuja occidentalis

(50) Cornus alternifolia

(70) Cornus sericea

(3) Acer saccharum

(70) Prunus virginiana (35) Viburnum lentago

(2) Quercus rubra

(70) Amelanchier laevis

(70) Cornus alternifolia

(50) Sambucus canadensis

(70) Diervilla Ionicera

(35) Viburnum lentago

(70) Amelanchier laevis

(35) Viburnum acerifolium

(35) Viburnum acerifolium

- SEE DETAIL D5, LD-11

(50) Diervilla Ionicera

(2) Quercus rubra

(50) Sambucus canadensis

- REFER TO ENGINEERING DRAWINGS

12. All support systems must be removed by the contractor at time of final acceptance. No extras will be paid to complete this work 13. An effort should be made to salvage topsoil present on site, especially where native wetland plants are growing, and reuse to provide a local seed bank. Please ensure that only topsoil with NATIVE, non-invasive plants is considered for salvaging to avoid the introduction and spread of invasive species. All topsoil must be tested in accordance with the City of Barrie topsoil standards at a rate of

one (1) test per 4,000 cubic meters. Soil amendment if required must be completed prior to placement. Refer to acceptable topsoil parameter table provided by the City of Barrie. 14. Supply and place topsoil in accordance with Canadian Landscape Standard (Section 4, Grading & Drainage and Section 6, Growing Medium) to a minimum depth of 600mm unless otherwise specified. 15. *Native topsoil salvaged to be re-used on site to be unscreened in

order to retain the local seed bank. An effort should be made to remove roots and wood debris. Refer to the Canadian Landscape Standard section 6 - Growing Medium for other applicable standards. 16. Supply and place sod in accordance with Canadian Landscape Standard (Section 7, Lawns & Grass and Section 8, Turfgrass Sod)unless otherwise specified.

17. Supply and place seed in accordance with Canadian Landscape Standard (Section 4, Grading & Drainage and Section 6, Growing Medium) unless otherwise specified. All 5:1 or greater slopes to be seeded with tacifier. Contractor to provide necessary erosion control protection as required to ensure soil stabilization and proper seed germination.
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19. If discrepancies arise between plant material count shown on drawing and plant list, the drawing shall be considered correct. 20. Contractor to provide minimum two (2) years warranty (including trees on municipal property) from date accepted on all work unless

otherwise specified. At the end of this period, minimum survivability of

80% must be documented. Failed stock should be replaced to meet this requirement. 21. Any site plan or grading and servicing shown is for information only.

Refer to approved drawings. 22. Not for construction unless stamped, signed and dated by

Landscape Architect. 23. Drawings not to be reproduced without written consent from

Landscape Architect. 24. Approval of landscape plan to be obtained from municipality.

25. All plant material to be planted a minimum of 1.0m from any swales or ditches.

26. For grading and servicing information refer to the consulting Engineer's drawings.

27. For lighting information and power distribution refer to the electrical consultant's drawings.

REVISIONS/ SUBMISSIONS

2023-07-12

DATE 2022-05-27 2023-04-18 2023-06-02 Issued for submission



RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF ADESSO DESIGN INC. AS TO DESIGN AND **SPECIFICATION** August 10, 2023

THE CITY OF BARRIE

ACCEPTED AS TO FORM IN

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

MUNICIPAL FILE NUMBER DO8-HE 417427

Landscape Plan Enlargement

adesso design inc. landscape architecture



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ENLARGEMENT 'I' - ULTIMATE

(35) Viburnum lentago (2) Betula alleghaniensis \ (50) Sambucus canadensis

(35) Viburnum acerifolium (30) Thuja occidentalis

(2) Quercus

macrocarpa

(70) Prunus virginiana

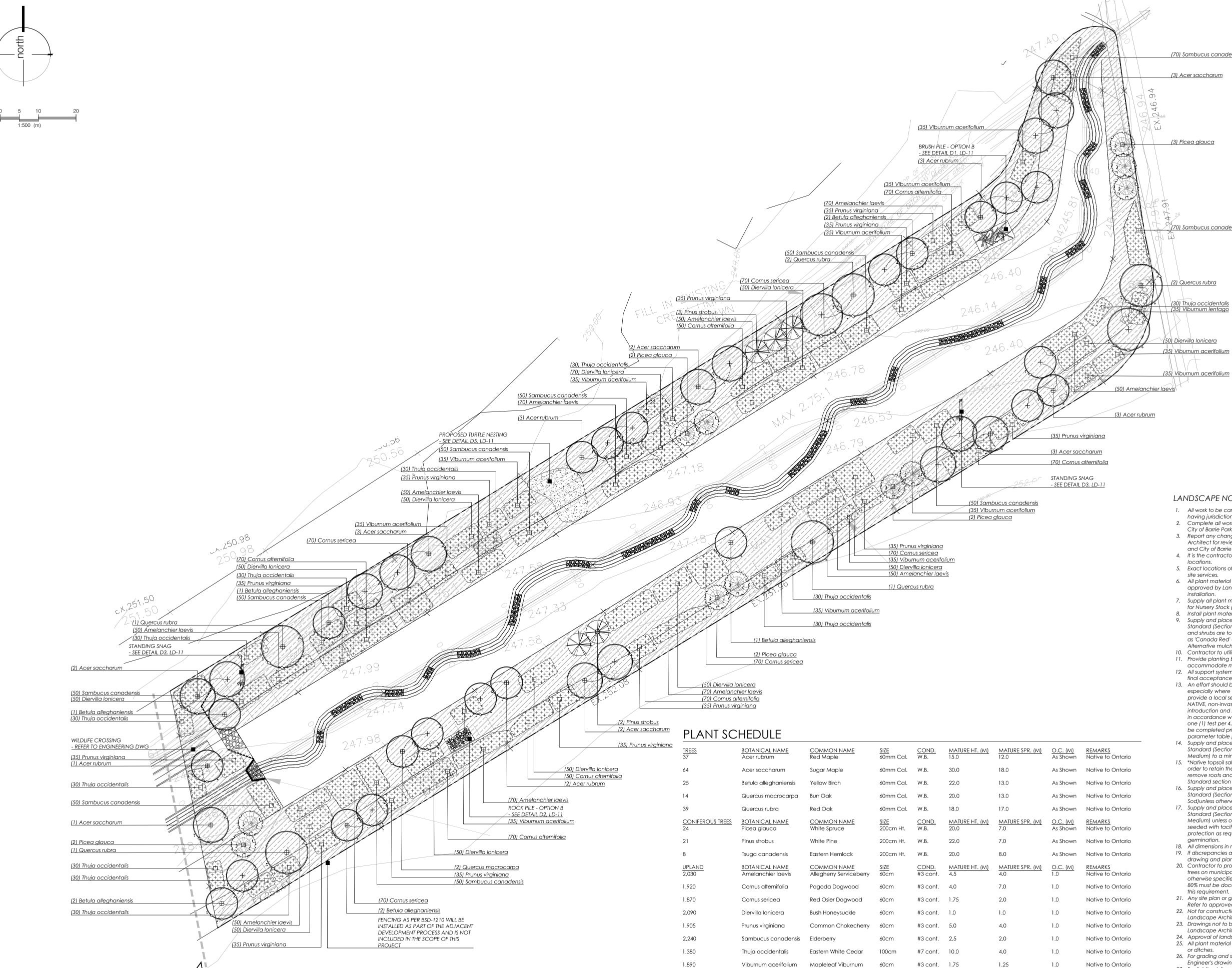
(1) Tsuga canadensis

(50) Amelanchier laevis

(35) Viburnum acerifolium

(50) Sambucus canadensis

(70) Cornus alternifolia



Viburnum lentago

#3 cont. 5.0

1.75

Native to Ontario



____ property line

KEY MAP - N.T.S.

proposed coniferous tree

proposed deciduous tree

min. 600mm topsoil, fine grade & seed

proposed shrub

- Simcoe County Native seed mix existing elevation

proposed elevation

turtle nesting area

rock pile/hibernacula brush pile

wildlife directional fence

REVISIONS/ SUBMISSIONS

DATE DESCRIPTION 2022-05-27 Issued for submission 2023-04-18 Issued for submission

Alternative mulches must be approved by the Landscape Architect. 10. Contractor to utilize layout dimensions where provided 11. Provide planting bed area as noted on the drawing or to

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1. All work to be carried out in accordance with by-laws and codes

and City of Barrie Parks Planning before proceeding.

4. It is the contractor's responsibility to determine existing service

6. All plant material locations to be staked or marked out and

8. Install plant material according to details shown.

2. Complete all work to the satisfaction of the Landscape Architect and

5. Exact locations of plant material will be determined by placement of

approved by Landscape Architect and City of Barrie prior to

7. Supply all plant material in accordance with the Canadian Standards

9. Supply and place mulch in accordance with Canadian Landscape

as 'Canada Red' or 'Gro-Bark' mulch, or approved equivalent.

Standard (Section 10, Mulching). Disturbed soil areas around trees

and shrubs are to be covered with shredded conifer bark mulch such

Report any changes, discrepancies or substitutions to the Landscape Architect for review. Obtain approval from the Landscape Architect

(70) Sambucus canadensis

(3) Acer saccharum

(3) Picea glauca

(70) Sambucus canadensis

(2) Quercus rubra

(30) Thuja occidentali (35) Viburnum lentago

LANDSCAPE NOTES:

installation.

having jurisdiction over site location.

City of Barrie Parks Planning.

for Nursery Stock (8th ed.).

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Sod)unless otherwise specified. 17. Supply and place seed in accordance with Canadian Landscape Standard (Section 4, Grading & Drainage and Section 6, Growing Medium) unless otherwise specified. All 5:1 or greater slopes to be seeded with tacifier. Contractor to provide necessary erosion control protection as required to ensure soil stabilization and proper seed germination.

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- 24. Approval of landscape plan to be obtained from municipality. 25. All plant material to be planted a minimum of 1.0m from any swales or ditches.
- 26. For grading and servicing information refer to the consulting Engineer's drawings. 27. For lighting information and power distribution refer to the electrical consultant's drawings.

2023-06-02 Issued for submission 4 2023-07-12 Issued for tender



RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF ADESSO DESIGN INC. AS TO DESIGN AND SPECIFICATION August 10, 2023

THE CITY OF BARRIE

ACCEPTED AS TO FORM IN

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

MUNICIPAL FILE NUMBER DO8-HE 417427

Landscape Plan

Enlargement

adesso design inc. landscape architecture



69 John Street South, Suite 250 Hamilton, ON L8N 2B9 t. 905.526.8876 www.adessodesigninc.ca

L-9

SCALE: NTS

DO NOT PRUNE LEADERS, TREES WITH DAMAGED OR

MISSING LEADERS WILL NOT BE ACCEPTED

DO NOT PRUNE LEADERS, TREES WITH DAMAGED OR MISSING LEADERS WILL NOT BE ACCEPTED TREE CROWN NOTES: REMOVE AT TIME OF PLANTING ANY DEAD, BROKEN OR DAMAGED LIMBS INCLUDING INTERFERING BRANCHES. DOUBLE LEADERS AND NARROW BRANCH UNIONS REMOVE ALL LABELS AND TAGS AT TIME OF PLANTING TREES ARE TO BE PLANTED PLUM AND HAVE BOTH FULL FORM AND HEALTHY CANOPY STRUCTURE. ANY TREES WHICH DO NOT MEET THIS CRITERIA AND/OR HAVE WEAK BRANCHING STRUCTURE, DO NOT HAVE STRAIGHT TRUNKS OR HAVE UNBALANCED CROWNS WILL NOT BE ACCEPTED 300 MIN TREES ARE TO BE STAKED WITH (2) TWO SOFTWOOD STAKES (38x38x2400mm) EXTENDING 300mm INTO FIRM GROUND AT AN ANGLE AND SECURED VERTICAL PRIOR TO BACKFILLING THE TREE PIT. SECURE USING #12 GAUGE GALVANIZED WIRE ENCASED IN 12mm DIAMETER REINFORCED RUBBER HOSE (ENSURING WIRE ENDS DO NOT PROTRUDE) OR APPROVED EQUIVALENT. STAKING HARDWARE TO BE REMOVED AFTER ONE GROWING BURLAP WRAP TREE FROM TOP OF ROOT BALL TO FIRST BRANCH UNION AND SECURE WITH BIODEGRADABLE TIES. REMOVE AFTER ONE GROWING SEASON KEEP MULCH 50-100mm AWAY FROM TRUNK FORM A 100mm HIGH EARTH SAUCER BEYOND THE EDGE OF THE ROOT BALL AND COVER WITH 100mm OF SHREDDED CEDAR MULCH OOSEN OR SCARIFY THE INSIDE SURFACE OF THE PLANTING HOLE PRIOR TO INSTALLATION OF THE TREE PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL - VARIES -ALL CALIPER TREE PLANTING SHALL HAVE A MINIMUM 600mm DIAMETER ROOT BALL CUT AND REMOVE ALL WIRE, ROPE AND BURLAP FROM THE TOP 150mm OF THE ROOT BALL AT THE TIME OF PLANTING. EXCAVATION TO BE BACKFILLED WITH IMPORTED FRIABLE SCREENED TOPSOIL WHICH IS **APPROVED** TO BE FIRMLY COMPACTED TO ELIMINATE AIR POCKETS AND PREVENT SETTLEMENT. EXPOSED SOIL SHALL BE RE-SODDED OR IN A RESTORATION ENVIRONMENT SEEDED DATE . Gune !!!/S. WITH A SIMCOE COUNTY NATIVE SEED MIX AND ANNUAL RYE NURSE CROP. ALL TWINE AND BURLAP MUST BE BIODEGRADABLE (UNTREATED) Amu ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED REV No. DATE: JUNE 2015 The City of DECIDUOUS TREE SCALE: N.T.S. PLANTING ON SLOPE BSD-1311 STANDARD DETAIL

DO NOT PRUNE LEADERS, TREES WITH DAMAGED OR MISSING LEADERS WILL NOT BE ACCEPTED TREE CROWN NOTES: REMOVE AT TIME OF PLANTING ANY DEAD, BROKEN OR DAMAGED LIMBS INCLUDING INTERFERING BRANCHES, DOUBLE LEADERS AND NARROW BRANCH UNIONS REMOVE ALL LABELS AND TAGS AT TIME OF PLANTING BINDING AND TIES MUST BE REMOVED IMMEDIATELY OLLOWING THE INSTALLATION OF THE TREE TREE HEIGHT IS MEASURED FROM THE FIRST WHORL AND NOT THE TOP OF LEADER TREES ARE TO BE PLANTED PLUM AND HAVE BOTH FULL FORM AND HEALTHY CANOPY STRUCTURE. ANY TREES WHICH DO NOT MEET THIS CRITERIA AND/OR HAVE WEAK BRANCHING STRUCTURE, DO NOT HAVE STRAIGHT TRUNKS OR HAVE UNBALANCED CROWNS WILL NOT BE ACCEPTED TREES ARE TO BE STAKED WITH (2) TWO SOFTWOOD STAKES (38x38x2400mm) EXTENDING 300mm INTO FIRM GROUND AT AN ANGLE AND SECURED VERTICAL PRIOR TO BACKFILLING THE TREE PIT. SECURE USING #12 GAUGE GALVANIZED WIRE ENCASED IN 12mm DIAMETER REINFORCED RUBBER HOSE (ENSURING WIRE ENDS DO NOT PROTRUDE) OR APPROVED EQUIVALENT. STAKING HARDWARE TO BE REMOVED AFTER ONE GROWING KEEP MULCH 50-100mm AWAY FROM TRUNK FORM A 100mm HIGH EARTH SAUCER BEYOND THE EDGE
OF THE ROOT BALL AND COVER WITH 100mm OF SHREDDED CEDAR MULCH - LOOSEN OR SCARIFY THE INSIDE SURFACE OF THE PLANTING HOLE PRIOR TO INSTALLATION OF THE TREE IMPORTED FRIABLE SCREENED LOAM TOPSOIL COMPACTED TO ELIMINATE AIR POCKETS - PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL ALL CONIFEROUS TREE PLANTING SHALL HAVE A MINIMUM 600mm DIAMETER ROOT BALL. CUT AND REMOVE ALL WIRE, ROPE AND BURLAP FROM THE TOP 150mm OF THE ROOT BALL AT THE TIME OF PLANTING. FOR POORLY DRAINED OR COMPACTED SOILS THE ROOT BALL SHALL BE PLACED SO THAT THE ROOT COLLAR IS A MAXIMUM OF 100mm ABOVE THE FINISHED GRADE. FOR ALL OTHER INSTALLATIONS THE ROOT COLLAR SHALL BE AT OR 50mm ABOVE FINISHED DATE JUNE 11.1.15. ALL TWINE AND BURLAP MUST BE BIODEGRADABLE (UNTREATED). DIRECTOR OF ENGINEERING . ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED. EV No. DATE: JUNE 2015 The City of **CONIFEROUS TREE** 4 SCALE: N.T.S. BARRIE PLANTING DETAIL BSD-1312 STANDARD DETAIL

DO NOT PRUNE LEADERS, TREES WITH DAMAGED OR MISSING LEADERS WILL NOT BE ACCEPTED TREE CROWN NOTES: REMOVE AT TIME OF PLANTING ANY DEAD, BROKEN OR DAMAGED LIMBS INCLUDING INTERFERING BRANCHES, DOUBLE LEADERS AND NARROW BRANCH UNIONS REMOVE ALL LABELS AND TAGS AT TIME OF PLANTING BINDING AND TIES MUST BE REMOVED IMMEDIATELY FOLLOWING THE INSTALLATION OF THE TREE TREE HEIGHT IS MEASURED FROM THE FIRST WHORL AND NOT THE TOP OF LEADER TREES ARE TO BE PLANTED PLUM AND HAVE BOTH FULL FORM AND HEALTHY CANOPY STRUCTURE. ANY TREES WHICH DO NOT MEET THIS CRITERIA AND/OR HAVE WEAK BRANCHING STRUCTURE, DO NOT HAVE STRAIGHT TRUNKS OR HAVE UNBALANCED CROWNS WILL NOT BE ACCEPTED TREES ARE TO BE STAKED WITH (2) TWO SOFTWOOD GROUND AT AN ANGLE AND SECURED VERTICAL PRIOR TO BACKFILLING THE TREE PIT, SECURE USING #12 GAUGE GALVANIZED WIRE ENCASED IN 12mm DIAMETER REINFORCED RUBBER HOSE (ENSURING WIRE ENDS DO NOT PROTRUDE) OR APPROVED EQUIVALENT. STAKING HARDWARE TO BE REMOVED AFTER ONE GROWING SEASON KEEP MULCH 50-100mm AWAY FROM TRUNK
FORM A 100mm HIGH EARTH SAUCER BEYOND THE EDGE
OF THE ROOT BALL AND COVER WITH 100mm OF LOOSEN OR SCARIFY THE INSIDE SURFACE OF THE PLANTING HOLE PRIOR TO INSTALLATION OF THE TREE - PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL ALL CONIFEROUS TREE PLANTING SHALL HAVE A MINIMUM 600mm DIAMETER ROOT BALL. CUT AND REMOVE ALL WIRE, ROPE AND BURLAP FROM THE TOP 150mm OF THE ROOT BALL AT THE TIME OF PLANTING. EXCAVATION TO BE BACKFILLED WITH IMPORTED FRIABLE SCREENED TOPSOIL WHICH IS **APPROVED** TO BE FIRMLY COMPACTED TO ELIMINATE AIR POCKETS AND PREVENT SETTLEMENT. EXPOSED SOIL SHALL BE RE-SODDED OR IN A RESTORATION ENVIRONMENT SEEDED TE June 11/15. WITH A SIMCOE COUNTY NATIVE SEED MIX AND ANNUAL RYE NURSE CROP. ALL TWINE AND BURLAP MUST BE BIODEGRADABLE (UNTREATED). DIRECTOR OF ENGINEERING 6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED. EV No. DATE: JUNE 2015 The City of CONIFEROUS TREE BARRIE SCALE: N.T.S. PLANTING ON SLOPE BSD-1313 STANDARD DETAIL

Slope Planting Coniferous Tree - City of Barry Detail

Balled & Burlapped/ Wire Basket Deciduous Tree - City of Barry Detail

Slope Planting Deciduous Tree - City of Barry Detail

Balled & Burlapped/Wire Basket Coniferous Tree - City of Barry Detail

PLANTING NOTES:

1. Soil mixture: four (4) parts native soil, one (1) part well rotted compost.If existing soil is not suitable provide triple mix topsoil or approved equal.

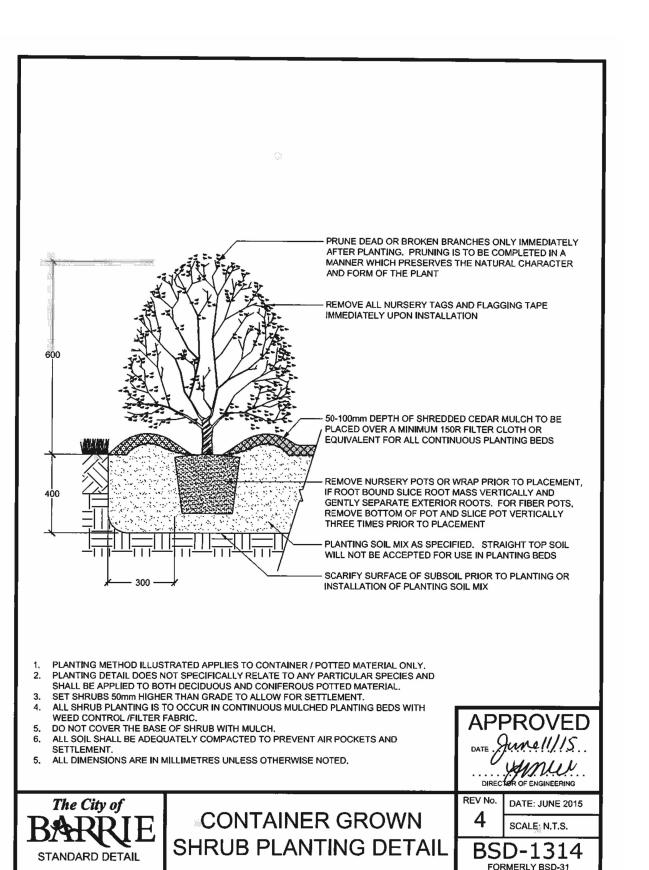
3. Massed shrubs shall be planted in continuous mulched beds unless

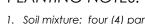
otherwise noted. Staking schedule;

5. All support systems must be removed once tree is established.

8. The following depths of soil are required for planting;

7. Top of root flare shall be positioned 50mm above grade.





2. Saucer shall be soaked with water and mulched immediately following

two (2) softwood stakes 38x38x2400 as per Barrie Standard Detail. 6. All trees to be straight and planted vertically regardless of slope.

 60cm of topsoil across entire valley 90cm of topsoil for trees



REVISIONS/ SUBMISSIONS

Issued for submission Issued for submission Issued for tender 4 2023-07-12

DESCRIPTION

LD-10



THE CITY OF BARRIE ACCEPTED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF ADESSO DESIGN INC. AS TO DESIGN AND SPECIFICATION August 10, 2023

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

MUNICIPAL FILE NUMBER DO8-HE 417427

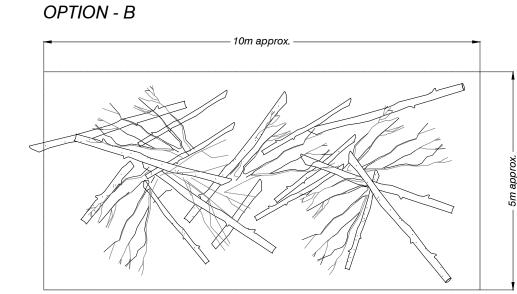
Landscape Details

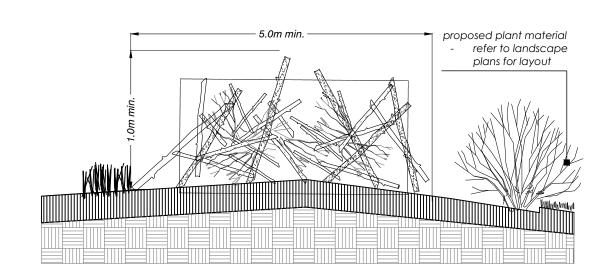
adesso design inc. landscape architecture



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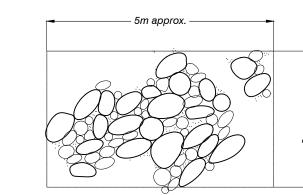
Container Grown Shrub - City of Barry Detail

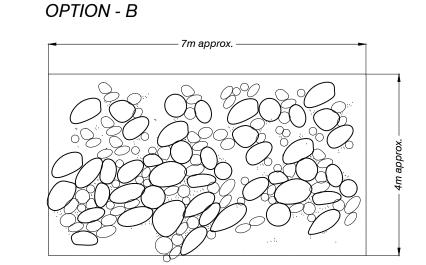


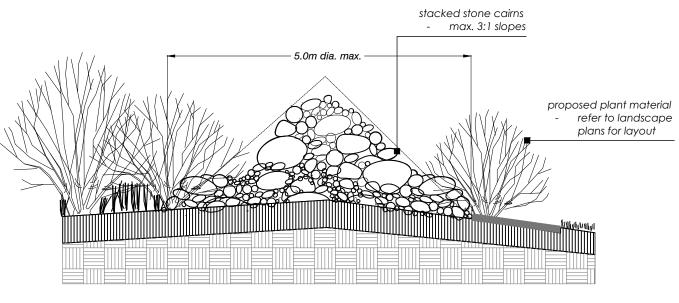


- 1. Brush material to be salvaged from on site and should only come from native species from within the City of Barrie. Do not use invasive species (e.g. Buckthorn or Manitoba Maple) that could potentially regenerate or species that potentially contain insect pests (e.g. Emerald Ash Borer).
- 2. Brush piles to be created at planting stage. Final locations to be reviewed on site with Landscape Architect.

OPTION - A







- 1. Stone to be salvaged from on site, preferably through excavations. Do not source stone from existing rock piles on site (i.e. in remote areas).
- 2. Stone to be stockpiled during fine grading operations. Stones to be clean and free from soil. 3. Piles to be created at planting stage. Final pile locations to be reviewed on site with Landscape Architect.

Rock Pile (Habitat Creation)

tree salvaged from site and driven into ground until stable

Snag Detail - provided by Geoprocess LD-11

Brush Pile (Habitat Creation)

ELEVATION SECTION heavy galvanized hardware cloth with $\frac{1}{4}$ inch mesh 100mm x 200mm cap - − 100mm lip. 100mm x 200mm cap **ROAD SIDE** SPECIES SIDE 38 x 89mm top rail staking on road side 89 x 89mm post staking on road side heavy galvanized hardware cloth with $\frac{1}{4}$ inch mesh compact soil around bottom of fence finished grade 100mm - 150mm 150mm depth 19mm dia. clear crushed granular see landscape plan for layout – 2500mm MAX. – GENERAL NOTES 1. All materials, components and workmanship to conform to building and local by-laws. 2. All wood to be clear pressured treated (or approved equal) and

DETAIL DEVELOPED BASED ON MINISTRY OF

NATURAL RESOURCES AND FORESTRY REPTILE AND

BEST PRACTICES AND REVISED BY GEOPROCESS

AMPHIBIAN EXCLUSION FENCING STANDARDS AND

NOTE:

MINISTRY OF NATURAL RESOURCES AND FORESTRY HARDWARE CLOTH FENCE & GENERAL NOTES 1. Secure the fence on posts placed a recommended 2.5 m apart with

- the stakes on the activity side. 2. Pull the mesh taut and staple or secure with screws and a metal
- stripping to prevent the mesh from being ripped when pressure is
- 3. Installing a top rail or folding the mesh over a taut smooth wire reduces tearing.
- 4. An outward facing lip installed on the species side ensures that snakes and amphibians are unable to climb or jump over the fence.
- 5. Tears can be mended with 18-gauge galvanized wire.6. To deter digging, bury the fence 20 cm down with an additional 10 cm horizontal lip.
- Backfill and compact soil along the entire length on both sides of the
- 8. Once the fence is installed, a survey should be done to ensure that no individuals have been trapped inside.
- 9. Exclusion fencing intended to exclude snakes should have the stakes installed on the activity side (opposite the normal requirement for sediment control fencing) to prevent snakes from using the stakes to maneuver over the fencing.
- 10. For snakes and toads, the fence should have an overhanging lip on
- 11. Fences should be inspected after spring thaw and at regular intervals throughout the active season, especially following heavy rain events. This is particularly important for geotextile fences. Any damage that affects the integrity of the fence (e.g. tears, loose edges, collapses, etc.) should be fixed promptly.
- 12. Tall or woody vegetation on the species side of the fence should be managed if there is a risk that it may enable the animals to climb over. This is most important during spring and fall. Proceed cautiously to not harm animals protected plant species during vegetation
- 13. When installing an eco-passage, fencing or exclusion walls should be used as a guiding system to direct animals to passage openings.
- individuals from predation. 15. Install fences with a turn-around at the ends furthest from the wetland habitat and at any access areas to assist in redirecting animals away
- 16. Curving the ends of the fencing inward (i.e. away from the road or construction site) may help to reduce access to these locations. The ends may also be tied off to natural features on the landscape such

Turtle Nesting Habitat Detail - provided by Geoprocess

sand/gravel mixture 30 - 40 cm thick or more - mound height relative to surrounding ground may vary. existing ground weed barrier sand layer >30 cm thick diameter of 4.0 - 6.0 m _

TURTLE HABITAT - notes provided by Geoprocess Research

- 1. Select south-facing sites near water bodies with well-drained soils and open canopy; 2. Create a circular base layer or mound with a minimum depth of 30 cm of sand and a diameter of 4.0 to 6.0 metres. The top of this mound will ideally be slightly sunk into the ground or level with
- the surrounding area; 3. Completely cover the base layer with a thick organic weed barrier such as wood chips or burlap to reduce plant growth in the nesting site;
- 4. Place a layer of sand or sand/gravel mixture on top of the weed barrier. This layer should be 30 to 40cm thick or grater and mounded. A larger mound with multiple angles for turtles to approach

is ideal. Gravel should be fine (i.e. screenings). Clay, fine sediments, or larger gravel should not be

LD-11

REVISIONS/ SUBMISSIONS

4 2023-07-12

DESCRIPTION 2022-05-27 Issued for submission 2023-04-18 Issued for submission 2023-06-02 Issued for submission

Issued for tender



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THE CITY OF BARRIE

Sandy Cove Creek Landowners Group

MUNICIPALITY City of Barrie

PROJECT Sandy Cove Creek Restoration Barrie

MUNICIPAL FILE NUMBER DO8-HE 417427

Landscape Details LD
Habitat Structures

adesso design inc. landscape architecture



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Wildlife Directional Fence

and planning.

clear western red cedar.

standard C164.

3. All wood to bear lumber grading stamp.

8. See landscape plan for screen location.

SCALE: NTS

selected mainly for good appearance. All members shall be free of

4. All fasteners shall have exterior grade finishes suitable for use with

6. Drive all fastener heads below surface of wood. Use sufficient size

and quantity of fasteners to ensure a stable, secure structure.

5. All galvanizing to be hot dipped in conformance to CSA

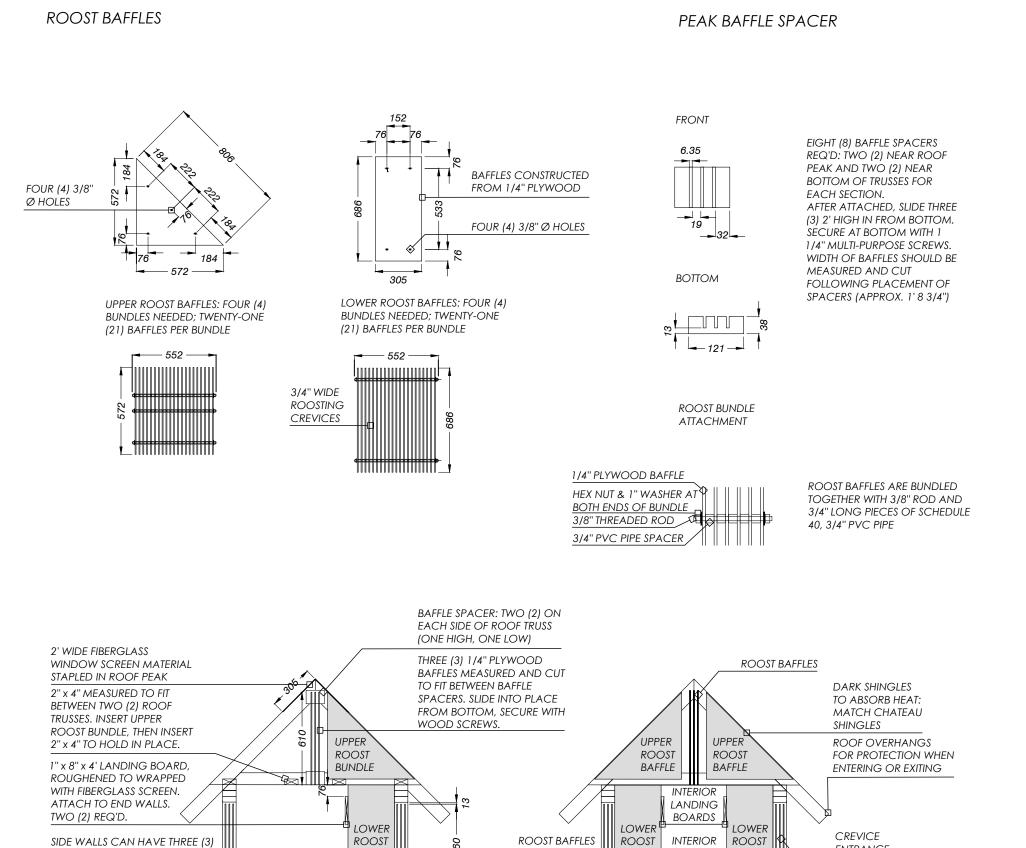
7. Lumber sizes are actual sizes rather than nominal sizes.

wane and bark pockets. All torn grain shall be eliminated by sanding

14. Natural screens such as trees or shrubs can help to reduce road access and can be combined with fencing to provide protection of

from any fence openings.

EXTERIOR FINISHES



IN WALLS

BUNDLE

2' x 6" x 4' ROOST

BUNDLE SUPPORT.

STRETCH FROM SILL TO SILL. FOUR (4) REQ'D

ENTRANCE

AND EXITS

EXTERIOR FOR

BAT LANDING

ROUGH

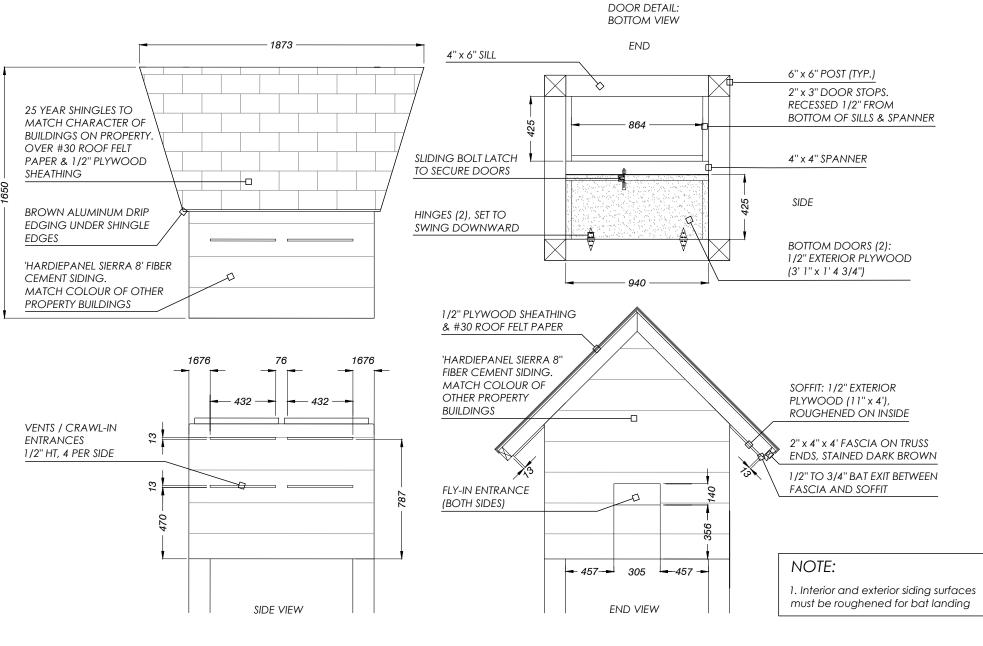
BAFFLE FLY-WAY BAFFLE

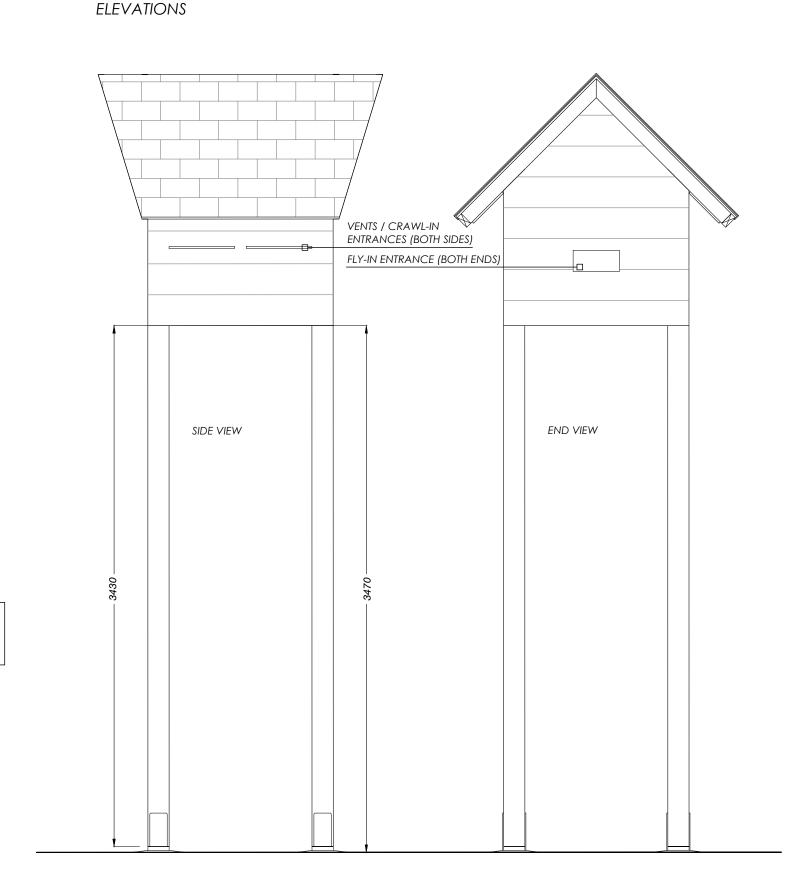
AND FLY-IN

CLOSED BOTTOM

WITH ACCESS DOORS

ENTRANCE





REVISIONS/ SUBMISSIONS

DESCRIPTION 2022-05-27 Issued for submission 2023-04-18 Issued for submission 2023-06-02 Issued for submission

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2" x 4" x 4' FASCIA

ATTACHED TO TRUSS ENDS



4 2023-07-12

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Bat Condo Structure

ROOST BAFFLES INSERTED

KEEP 1/2" CLEAR AT TOP FOR

FOR EACH BAFFLE INSERTED.

USE 1" x 3/4" x 1' 8" SPACERS FOR

BAFFLES IN WALL. TWO (2) REQ'D

BETWEEN FRAMING.

MOVEMENT OF BATS.

SCALE: NTS

LD-12