

March 18, 2021

BEL 217263

Ms. Jessica Chan
Natural Heritage Ecologist
120 Bayview Parkway
Newmarket, ON L3Y 3W3

Re: Response to Lake Simcoe Region Conservation Authority Comments, Ecological Offsetting Strategy, Proposed Development at 231-249 Reach Street Uxbridge – The Venetian Group, Plan of Subdivision (Region File S-U-2018-01; Plan of Common Element Condominium (Region File: C-U-2018-01); Zoning By-law Amendment: ZBA-2018-08

Dear Ms. Chan:

The following provides Beacon Environmental Limited (Beacon's) response to the LSRCA comments (May 26, 2020) on the Ecological Offsetting Strategy (EOS) completed by Beacon Environmental Limited (Beacon, February 2020) for the above noted proposed development at 231-249 Reach Street, Uxbridge. The calculations of the initial EOS (February 2020) are revised through this letter and are based on the final grading plans (SKA, December 2020).

The subject property has been planned to maximize the use of this urban space and meet development policies as approved by the Township and the LSRCA. As such, the entire property provides some function as either built form or infrastructure. Three of the identified areas are providing LID function to achieve infiltration targets, phosphorous reduction and, water quality and quantity controls as required by the LSRCA.

The LSRCA comments are provided in bold followed by Beacon's response.

1. The provided Ecological Offsetting Plan does not reflect the discussions between the LSRCA and Beacon Environmental (Ron Huizer) during the meeting on August 19, 2019. As per the email summarizing the meeting's discussion, it was agreed that the additional 0.052 ha of woodland removal (compared to the 2017 approved draft plan) would be offset on-site based on a 2:1 replacement ratio as per LSRCA's Ecological Offsetting Policy (i.e. 0.104 ha of on-site woodland restoration). Please revise the plan accordingly or provide justification for why the highlighted areas in the provided correspondence cannot be used for on-site woodland restoration.

The EOS has been revised to reflect the request for on-site compensation and is now provided in two components: On-Site Compensation and Cash-in-Lieu.

1. On-Site Compensation

The LSRCA agreed that limited encroachments within the north-west woodland and eastern woodland could be considered subject to the area of those encroachments being replaced on-site at a 2:1 ratio through the EOS.

In addition to the areas of encroachment, the plan requires 121 m² of grading within the features (north-west woodland/Area A and eastern woodland). As these areas of grading will be fully restored, compensation is not required and this area is not carried forward in the calculations.

As referred to in the LSRCA comment, there was approximately 0.052 ha (520 m²) of development encroachments into the north-west woodland and the eastern woodland. Through detailed design, the plan has evolved and the combined area of encroachment is now 0.046 ha (460 m²), mainly due to a reduction in the size of the LID (Area B) in the north east.

Therefore, at a ratio of 2:1, the area of on-site compensation required is 0.092 ha (920 m²).

The compensation will be achieved through gains in the natural system where areas that are outside of the dripline are not being developed and are incorporated into the natural heritage system. This occurs along the eastern woodland edge and totals 112 m². There are also two areas of gain associated with the north-west woodland (Area A) that totals 122 m². Combined, these areas provide 234 m² towards the required area of compensation (**Attachment A**).

In addition to these areas of gain, there are two areas of restoration, where post-development, these areas will be restored and incorporated into the natural heritage system. These are Areas B and C, which provide 458 m² and 106 m² respectively, for a total of 564 m² (**Attachment A**).

Lastly, tree planting will occur along the northern fence line and walkway to Village Green Lane. As the area between the parking and the fence is designated for snow storage, the area cannot be naturalized. Instead, native species of trees will be planted along the fence line and walkway. This area accounts for an additional 215 m² (**Attachment A**).

In summary, the proposed on-site compensation is as follows:

Gains in the north-west woodland (Area A) and eastern woodland:	234 m ²
Two areas of restoration (Areas B & C):	564 m ²
Tree Planting along northern fence line and walkway:	215 m ²
Total:	1,013 m ²

This plan achieves the 920 m² of onsite compensation requested by the LSRCA and exceeds this requirement by 93 m². This surplus has been deducted from the cash-in-lieu value.

The planting plan for the subject property has been revised to provide further detail for the areas identified by the LSRCA and reflects the assessment below. Please see **Attachment C** for the revised planting plan which includes full species lists.

In response to the LSRCA's request to restore the four areas they identified (Areas A-D) as shown on **Attachment B**, the consulting team examined each area, and offers the following comments:

Area A

This area is the buffer of the woodland in the northwest corner of the site at the corner of Block 1 and Block 2. Due to the existing and proposed grades, a 3:1 slope up from the woodland is required, which necessitates a retaining wall at the top of the slope. An area of approximately 75 m² of woodland will be permanently lost; with a gain in woodland of approximately 122 m².

This area will be seeded with the Edge and Fringe seed mix, which includes native species such as: Butterfly Weed (*Asclepias tuberosa*), Black Eye Susan (*Rudbeckia hirta*) and Showy Tick Trefoil (*Desmodium canadense*). It will also be planted with native trees: Sugar Maple (*Acer saccharum*), Basswood (*Tilia americana*), and Ironwood (*Ostrya virginiana*); with native shrubs: Chokecherry (*Prunus virginiana*), Staghorn Sumac (*Rhus typhina*), and Serviceberry (*Amelanchier canadensis*).

Area B

This area is situated in the northeast of the site where there is a gap between the woodland edge and the rear yards of Block 3. A subsurface stacked storm chamber is planned for this space. This area is approximately 458 m².

This area will have a seating structure adjacent to the walkway. The area around the seating structure will be seeded with Edge and Fringe seed mix planted with native trees: Sugar Maple, Basswood, Ironwood, Bitternut Hickory (*Carya cordiformes*) and White Pine (*Pinus strobus*); with native shrubs: Chokecherry, Chokeberry (*Aronia melanocarpa*), Staghorn Sumac, Elderberry (*Sambucus canadensis*), Ninebark (*Physocarpus opulifolius*), Gray Dogwood (*Cornus racemosa*) and Serviceberry.

Area C

This wedge of space between Blocks 4 and 5 will also function as an LID in the form of a granular infiltration gallery. This area is approximately 106 m².

This space will be Edge and Fringe seed mix and planted with clusters of the following native shrubs: Staghorn Sumac, Chokecherry, and Serviceberry.

Area D

This area is situated in the southeast of the site between Blocks 5 and 6. A surface capture system in the form of an infiltration swale is planned for this area.

As this infiltration area will be sodded and mown as part of a private lot it is not considered to be part of the restoration.

2. Cash-in-Lieu Calculations

In the earlier EOS submission (Beacon, February 2020), the cash-in-lieu calculation included the 0.052 ha of grading encroachment. The cash-in-lieu calculation has now been revised to exclude this area as it is now being compensated for on-site (as described above). The surplus of on-site restoration (0.092 ha) has now been included in this cash-in-lieu calculation.

The calculations for the cash-in-lieu value are provided below which includes compensation for:

- Pine plantation (CUP3-3): 0.77 ha
- Cultural woodland (CUW a/b): 0.16 ha
- Woodland encroachment (FOC3-1): 0.046 ha

Total Woodland Replacement: 0.976 ha

The VPZ of the woodland features (i.e., FOC3-1, CUP3, FOM) is 0.55 ha. The LSRCA have agreed that the garden trees can also be compensated for at a rate of 1:1, which totals 0.24 ha.

VPZ & Garden Tree Loss

- Woodland VPZ 0.55 ha
- Garden Trees 0.24 ha

Total VPZ 0.79 ha

On-site feature replacement:

- Gains in Area A and eastern woodland: 234 m²
- Restoration Areas B & C: 564 m²
- Tree Planting northern fence and walkway: 215 m²

Total on-site replacement: 1,013 m²

Total outstanding woodland replacement:

= 2.7442 ha – 0.1013 ha

= 2.6407 ha

The cash-in-lieu cost is the sum of the following four parts:

Feature Creation Cost:

= Outstanding Woodland Replacement Area x Woodland Replacement Cost (Table 2 LSRCA)
= = 2.6407 ha x \$48,500/ha
= \$128,073.95

Ecosystem Service Value:

$$\begin{aligned} & (\text{Total Woodland Area Loss} + \text{VPZ loss}) \times \text{woodland ESV} \\ & = (0.976 \text{ ha} + 0.79 \text{ ha}) \times \$6,046 \\ & = 1.766 \text{ ha} \times \$6,046 \\ & = \$10,677.24 \end{aligned}$$

Land Securement Cost:

$$\begin{aligned} & 15\% \text{ of (feature creation cost} + \text{ESV cost)} \\ & = 0.15 \times (\$128,073.95 + \$10,677.24) \\ & = \$20,812.68 \end{aligned}$$

Administration Fee:

$$\begin{aligned} & 15\% \text{ of all costs} \\ & = 0.15 \times (\$128,073.95 + \$10,677.24 + \$20,812.68) \\ & = 0.15 \times \$159,563.87 \\ & = \$23,934.58 \end{aligned}$$

Total Cash-in-lieu

$$\begin{aligned} & = \text{Feature Creation Cost} + \text{Ecosystem Service Value} + \text{Land Securement Cost} + \text{Administration Fee} \\ & = \$128,073.95 + \$10,677.24 + \$20,812.68 + \$23,934.58 \\ & = \mathbf{\$183,498.45} \end{aligned}$$

3. Summary and Conclusion

The EOS for this property is comprised of two components: on-site compensation and a cash-in-lieu payment.

The on-site compensation is for the areas of encroachment into the feature. The required compensation is provided through the gains to the system, restoration of Areas A-C and planting along the northern fence line and walkway. These areas (1,013 m²) exceed the required area of on-site compensation required (920 m²).

The cash-in-lieu payment provides compensation for the removal of other woodland on site (0.93 ha). This calculation totals **\$183,498.45**.

We trust the above meets your present needs. Should you have any questions please do not hesitate to contact the undersigned at (905) 201-7622 ext. 233.

Prepared by:
Beacon Environmental



Kim Baker, B.Sc.
Senior Ecologist


Attachment A

Proposed Plan of Subdivision. Reach Street, Uxbridge

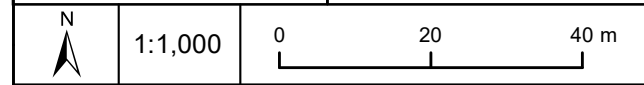
Legend

- Subject Property
- Proposed Development
- Staked Woodlot Edge (TRCA 2018)
- Proposed LID Granular
- Areas of Gain
- Areas of Encroachment



 **BEACON ENVIRONMENTAL** Project: 217263
 Last Revised: January, 2021

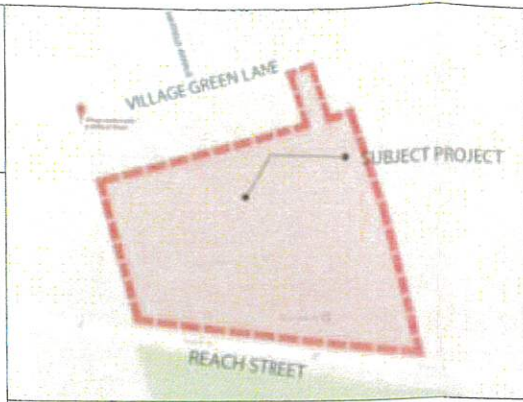
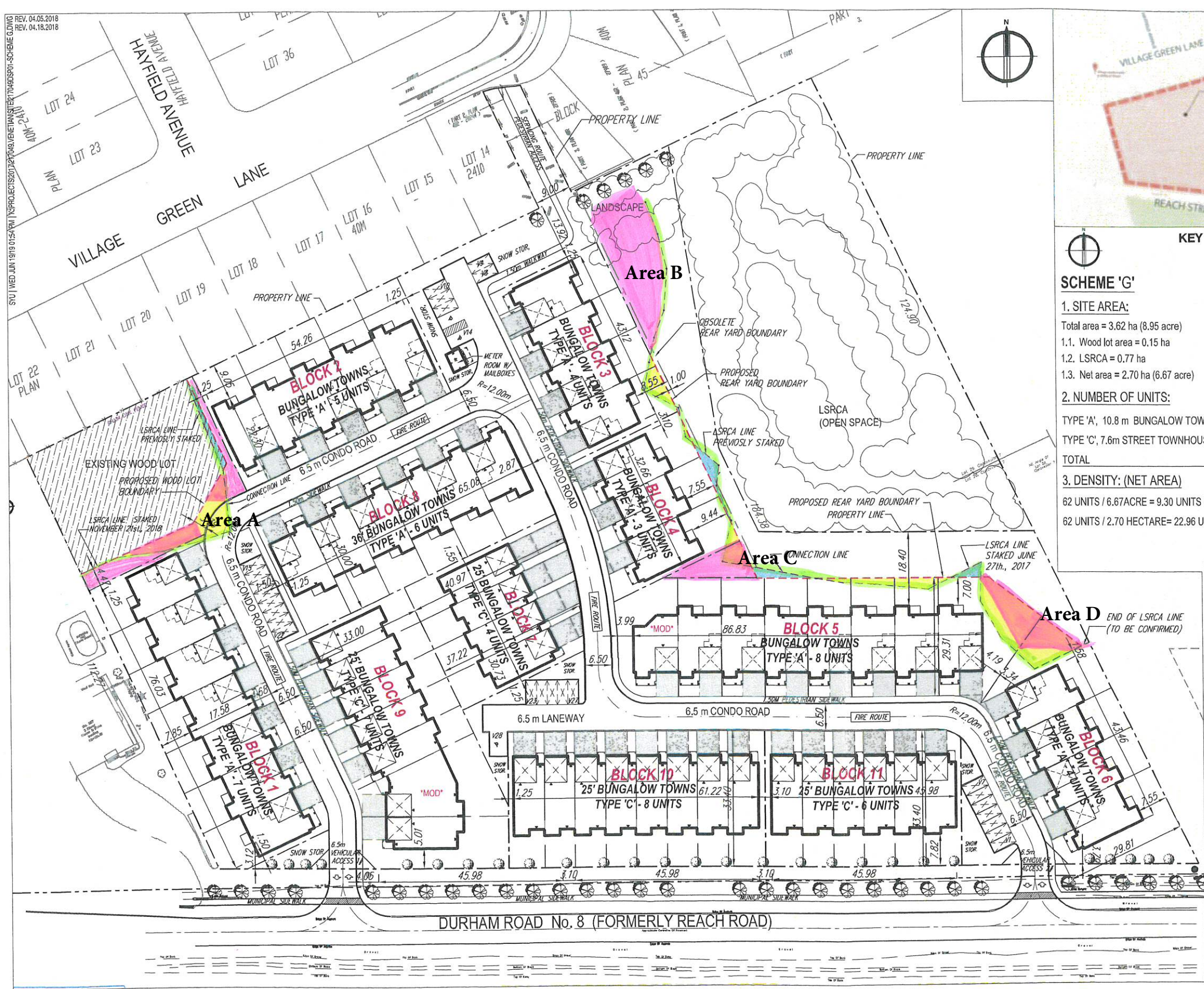
Client: Venetian Group Prepared by: BD
 Checked by: RH



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 Ontario Orthoimagery Baselayer: FBS Durham 2020

Attachment B

REV. 04.05.2018
 REV. 04.18.2018
 STU WED JUN 19 10:54 AM I:\PROJECTS\2017\217049\VENETIAN\217049SP1-SCHEME G.DWG
 11/2-100



KEY MAP - NOT TO SCALE

SCHEME 'G'

1. SITE AREA:

- Total area = 3.62 ha (8.95 acre)
- 1.1. Wood lot area = 0.15 ha
- 1.2. LSRCA = 0.77 ha
- 1.3. Net area = 2.70 ha (6.67 acre)

2. NUMBER OF UNITS:

- TYPE 'A', 10.8 m BUNGALOW TOWNHOUSE, 1-1/2 STOREY = 37 UNITS
- TYPE 'C', 7.6m STREET TOWNHOUSES, 1-1/2 STOREY = 25 UNITS
- TOTAL = 62 UNITS**

3. DENSITY: (NET AREA)

- 62 UNITS / 6.67ACRE = 9.30 UNITS PER ACRE
- 62 UNITS / 2.70 HECTARE = 22.96 UNITS PER HECTARE

4. PARKING:

PARKING REQUIRED: 2.0 PER UNIT // 0.5 VISITOR SPACE			
	#UNITS	RES. SPACES	VISITOR SPACES
TYPE 'A'	37	74	19
TYPE 'C'	25	50	13
PARKING PROVIDED:			
	#UNITS	RES. SPACES	VISITOR SPACES
TYPE 'A'	37	74	74 (ON DRIVEWAY)
TYPE 'C'	25	50	50 (ON DRIVEWAY)
TOTAL PARKING PROVIDED			276 (4.45 / UNIT)

5. AREA BALANCE OF LSRCA LINE AND WOOD LOT:

DEFINITION	AREA	LEGEND
AREA OF ENCROACHMENT LSRCA LINE AND WOOD LOT (TAKEN)	-521.36 sqm -5611.87 sq.ft.	[Yellow box]
AREA OF CONSERVED WOOD LOT	1374.87 sqm 14798.98 sq.ft.	[Hatched box]
AREA OF ADDITIONAL LANDS OUTSIDE OF LSRCA TO BE CONVEYED TO LSRCA (GIVEN)	+84.80 sqm +912.78 sq.ft.	[Blue box]
RESULT (LSRCA COMPENSATION)	-436.56 sqm -4699.09 sq.ft.	

LEGEND:

---	OBsolete REAR YARD BOUNDARY	---	STAKE LINE
---	PROPOSED REAR YARD BOUNDARY	---	FIRE ROUTE
---	LSRCA LINE	---	PROPERTY LINE
[Symbol]		[Symbol]	GROUND PARKING SPACE

SITE PLAN
 SCALE: 1:1000

- Drip line
 - additional gain area



VENETIAN GROUP - 217049

REACH STREET, UXBRIDGE, ONTARIO
 8966 Woodbine Ave, Markham, ON L3R 0J7 | T 905.737.5133 | F 905.737.7326 | FEB.4, 2019 | SY | 217049DSP01-SCHEME G
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SITE PLAN-SCHEME G

SCALE = 1:1000

Attachment C

PLANT LIST - RESTORATION

DECIDUOUS TREES							
KEY	QTY.	BOTANICAL NAME	COMMON NAME	CAL. (mm)	HT. (cm)	SPREAD ROOTS (cm)	REMARKS
AS250	4	Acer saccharum	Sugar Maple	-	250	-	CG / FP -
CO250	2	Carya cordiformis	Bitternut Hickory	-	250	-	CG / FP -
OZ250	5	Ostrya virginiana	Ironwood	-	250	-	CG / FP -
TA250	4	Tilia americana	Basswood	-	250	-	CG / FP -
TA45	5	Tilia americana	Basswood	45	-	-	WB -

CONIFEROUS TREES							
FS150	3	Pinus strobus	Eastern White Pine	-	150	-	WB -

DECIDUOUS SHRUBS							
AC100	37	Amelanchier canadensis	Serviceberry	-	100	50	3 gal. pot -
AMC50	31	Aronia melanocarpa	Chokeberry	-	50	30	3 gal. pot -
CR100	21	Cornus racemosa	Gray Dogwood	-	100	50	3 gal. pot -
PO80	14	Physocarpus opulifolius	Ninebark	-	80	40	3 gal. pot -
PVR80	44	Prunus virginiana	Chokecherry	-	80	40	3 gal. pot -
RT80	36	Rhus typhina	Staghorn Sumac	-	80	40	3 gal. pot -
SC80	8	Sambucus canadensis	Elderberry	-	80	50	3 gal. pot -

WB - WIRE BASKET CG - CONTAINER GROWN FP - FIELD POTTED pot - POT GROWN

PLANT LIST - EDGE REINFORCEMENT

DECIDUOUS TREES							
AS150	12	Acer saccharum	Sugar Maple	-	150	-	CG / FP -
FG150	6	Fagus grandifolia	American Beech	-	150	-	CG / FP -
TA150	6	Tilia americana	Basswood	-	150	-	CG / FP -

DECIDUOUS SHRUBS							
AC60	20	Amelanchier canadensis	Serviceberry	-	60	30	3 gal. pot -
CA60	20	Corylus cornuta	Beaked Hazelnut	-	60	30	3 gal. pot -
HW60	20	Hamamelis virginiana	Witchhazel	-	60	30	3 gal. pot -
PVR60	40	Prunus virginiana	Chokecherry	-	60	30	3 gal. pot -
SAL60	20	Symphoricarpos albus	Snowberry	-	60	30	3 gal. pot -

WB - WIRE BASKET CG - CONTAINER GROWN FP - FIELD POTTED pot - POT GROWN

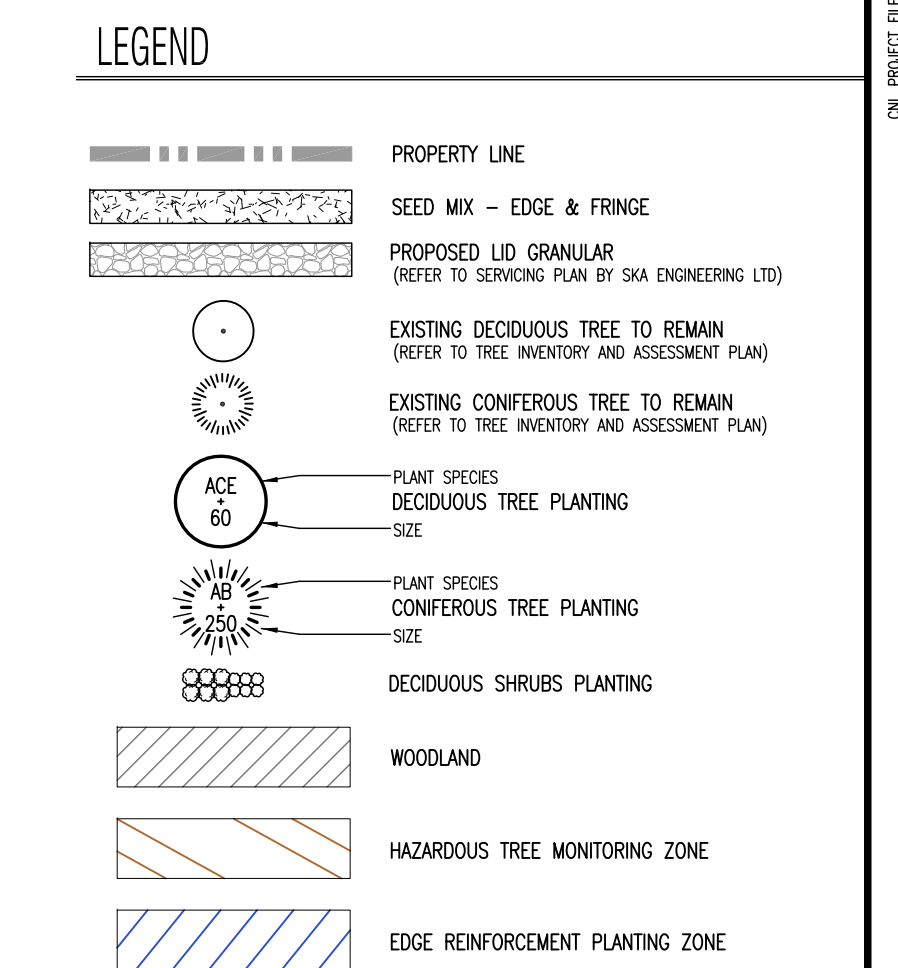
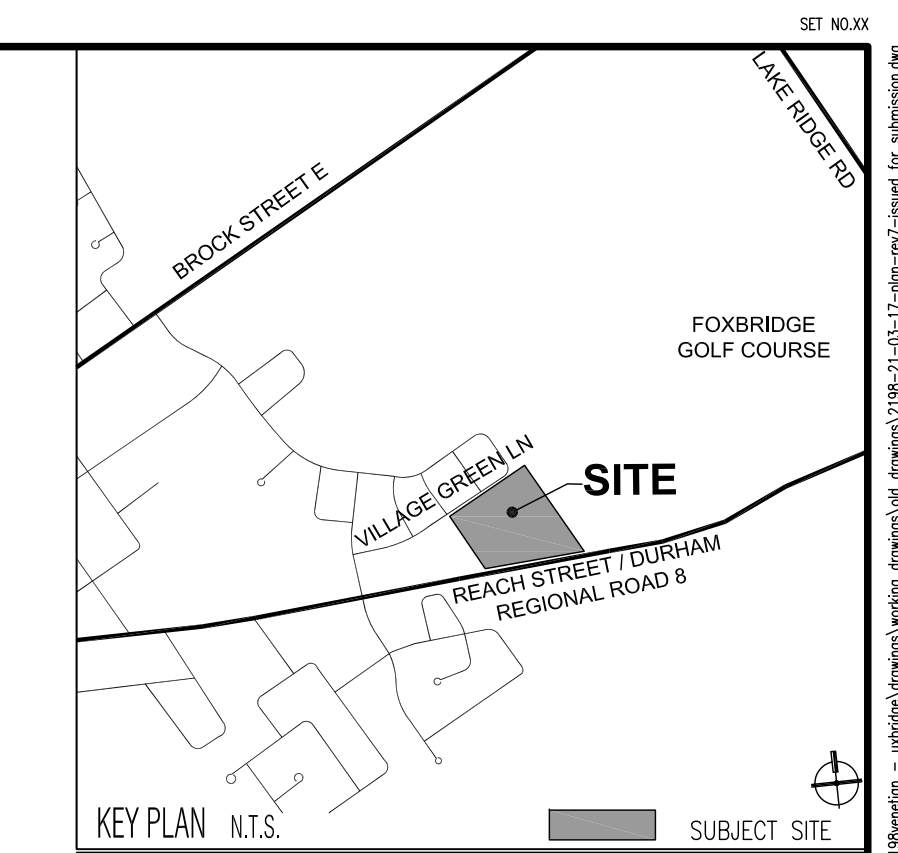
PLANT LIST - BUFFER PLANTING

BUFFER PLANTING ALSO SHOWN ON LANDSCAPE PLAN L1

DECIDUOUS TREES							
AS60	10	Acer saccharum	Sugar Maple	60	-	-	WB -

DECIDUOUS SHRUBS							
AC100	7	Amelanchier canadensis	Serviceberry	-	100	50	3 gal. pot -
CR100	10	Cornus racemosa	Gray Dogwood	-	100	50	3 gal. pot -
CS100	10	Cornus stolonifera	Red-Osier Dogwood	-	100	50	3 gal. pot -
PO80	9	Physocarpus opulifolius	Ninebark	-	80	40	3 gal. pot -
PVR80	8	Prunus virginiana	Chokecherry	-	80	40	3 gal. pot -
SC80	9	Sambucus canadensis	Elderberry	-	80	50	3 gal. pot -

WB - WIRE BASKET CG - CONTAINER GROWN FP - FIELD POTTED pot - POT GROWN



EDGE MANAGEMENT PROGRAM

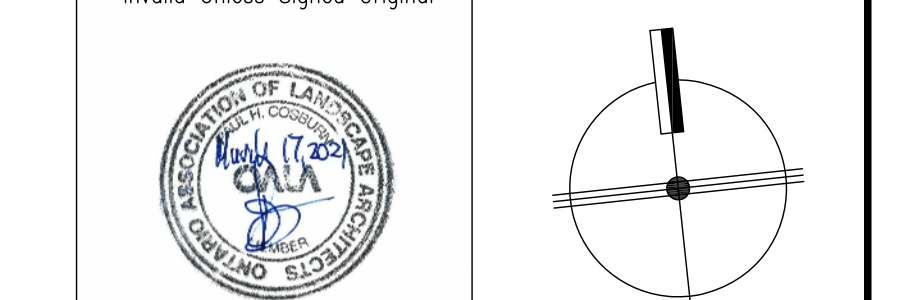
- ### HAZARDOUS TREE MONITORING ZONE (15M FROM RESIDENTIAL LOTS)
- The Hazardous Tree Monitoring Zone will be evaluated after site removals are completed by a Certified Arborist with qualification in hazardous tree assessment. The Arborist will submit a report including the inventory of all hazardous trees which warrant immediate removal. This report will be submitted to Township of Uxbridge and LSRCA for review and approval. The report is to include tree removal procedures to minimize impact to the forest edge. Tree removals will be completed as expeditiously as possible and coordinated with the nesting bird studies as required.
 - A monitoring report by a qualified Arborist shall be completed in June of each year following the tree clearing to review and determine the presence of any new hazardous trees and their removal procedures. This report will be submitted to Township of Uxbridge and LSRCA for review and approval. Any tree removal requirements to be undertaken expeditiously.
 - Monitoring reports to be prepared each successive year until the project is certified complete.
- ### EDGE REINFORCEMENT PLANTING ZONE
- The newly created woodland edge will have opportunities for reinforcement plants of tree and shrubs dispersed along its length. The total length of the Edge Reinforcement Planting zone is 239m encompassing both woodland areas. A planting rate of 1 tree/10m for trees and 1 shrub/2m along forest edge is recommended.
 - Planting locations are to be determined on a site specific basis where openings exist in the forested edge or as openings are created through the removal of hazardous trees.
 - Tree plantings are recommended for planting individually. Shrub plantings are recommended in small groups of 3-5 of the same species.

Base Information

Topographic survey information received in digital format from ERTL Surveyors and received on November 28, 2017.
Site plan, grading & servicing information received in digital format from SKA Engineering Ltd, Project No. 17-386 and received on March 16, 2021.
Electrical information received in digital format from RTG Systems Inc., Sheet No. SL-1 and received on March 9 2021.

7	Issued for Submission	SW	21 03 17
6	Issued for Submission	CMO	21 02 25
5	For LSRCA Submission	CMO	21 02 17
4	For Submission to LSRCA	SW	20 08 20
3	For Submission to LSRCA	SW	20 06 18
No	Revision	By	Yr Mo Da

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landscape architects
20 crown street dr. suite 2 markham, on L3R 9V9
1 905 940 4443
cosburnnauboris.ca

24 REACH STREET
VENETIAN GROUP
TOWNSHIP OF UXBRIDGE

LANDSCAPE RESTORATION AND EDGE MANAGEMENT PLAN

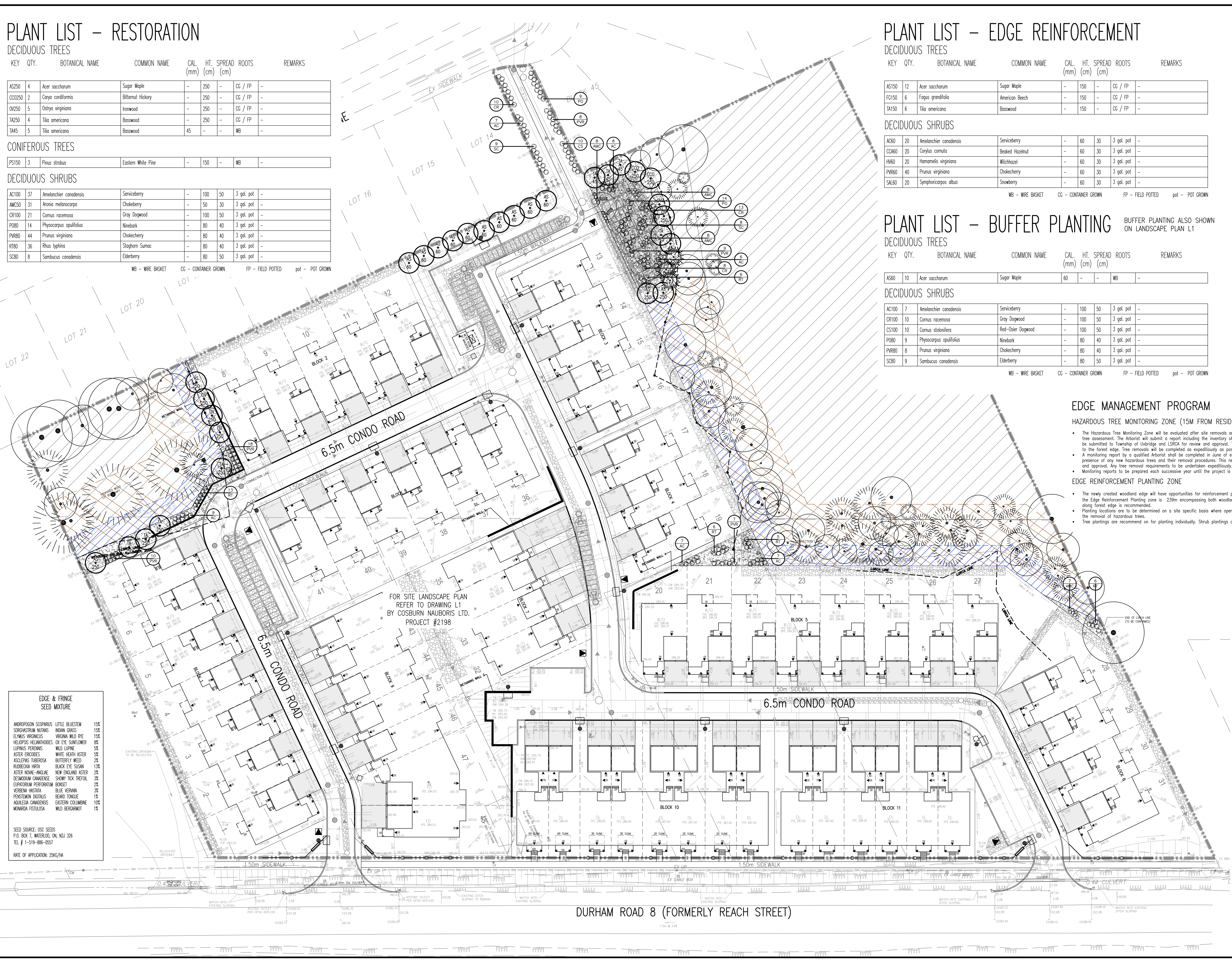
Drawn by	MR	Scale	1:400
Checked by	PHC	Plot Date	2021-03-17
Approved by	PHC	Project	2198

LR1
Drawing No.

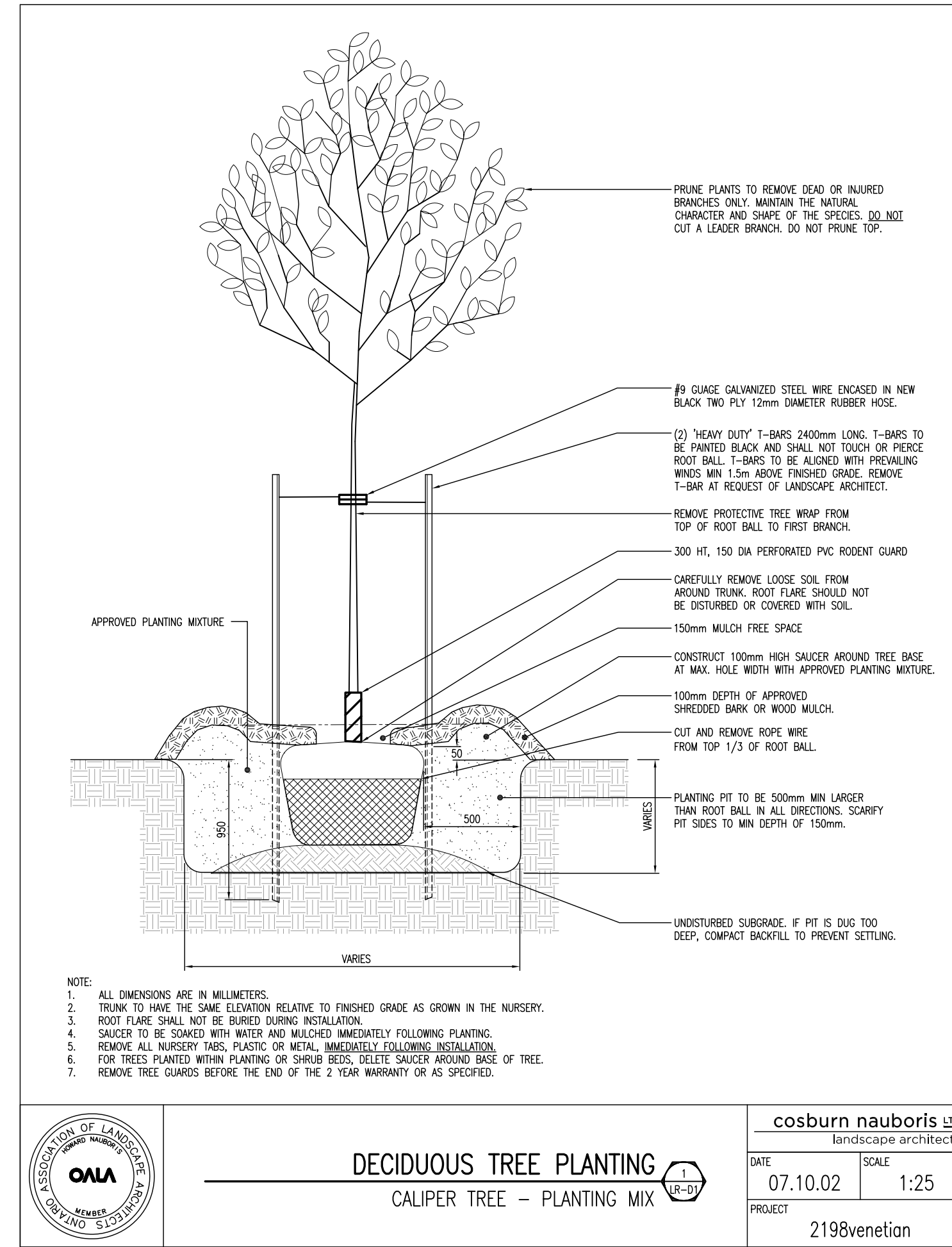
EDGE & FRINGE SEED MIXTURE

ANDROPOGON SCOPARIUS	LITTLE BLUESTEM	15%
SORGHASTRUM NITENS	INDIAN GRASS	15%
ELYMUS VIRGATICUS	VIRGINIA WILD RYE	15%
HELIOPSIS HELANTHOIDES	OX EYE SUNFLOWER	8%
LUPINUS PERENNIS	WILD LUPINE	5%
ASTER ERIOCHLOIS	WHITE HEATH ASTER	5%
ASCLEPIAS TUBEROSA	BUTTERFLY WEED	2%
RUBICECCHIA HIRTIA	BLACK EYE SUSAN	13%
ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	2%
SEMBICKIM CONVALLIS	SHOWY TON TITREOL	3%
ERIPATORIUM PERFORATUM	BONSET	2%
VERBENA HASTATA	BLUE VERVAIN	3%
PONSTEMON DIGITALIS	BEARD TONGUE	1%
AGILECHIA CANADENSIS	EASTERN COLICLIAMINE	10%
MORARIA FISTULOSA	WILD BERGARONI	1%

SEED SOURCE: OSC SEEDS
P.O. BOX 7, WATERLOO, ON N2A 3Z6
TEL # 1-519-886-0567
RATE OF APPLICATION: 25KG/HA



DURHAM ROAD 8 (FORMERLY REACH STREET)



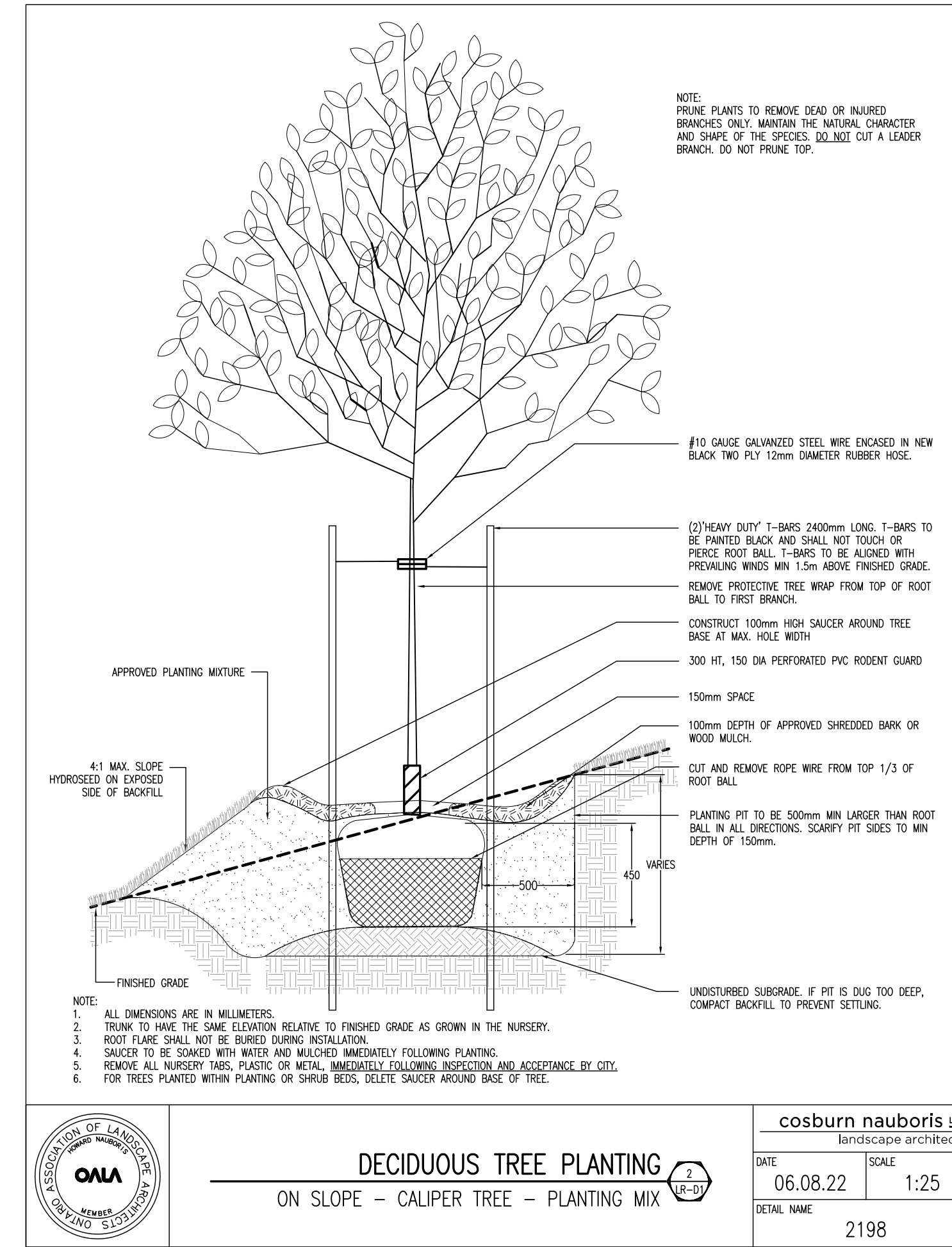
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DECIDUOUS TREE PLANTING
CALIPER TREE - PLANTING MIX

DATE: 07.10.02 SCALE: 1:25

PROJECT: 2198venetian

MEMBER OF THE ASSOCIATION OF LANDSCAPE ARCHITECTS



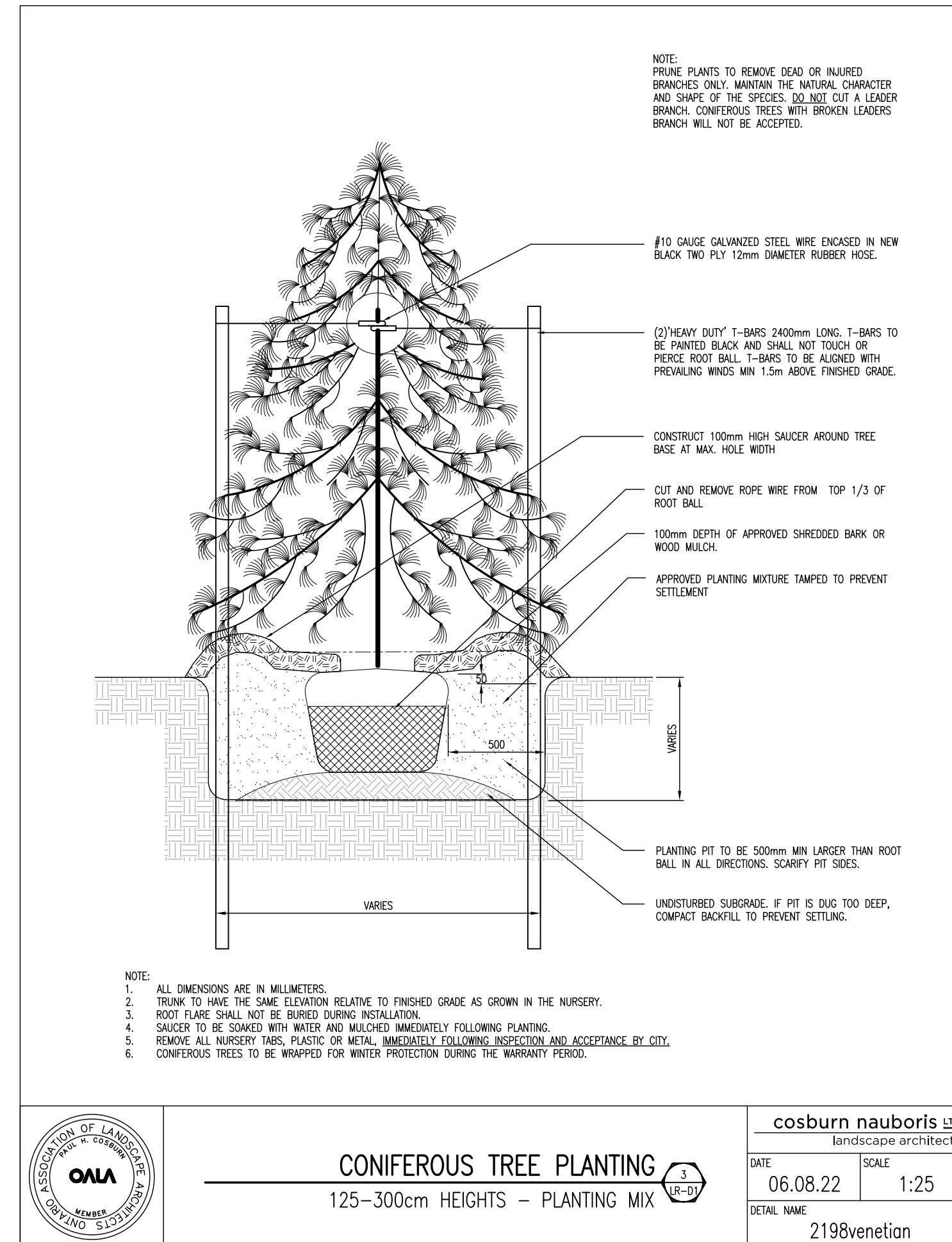
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DECIDUOUS TREE PLANTING
ON SLOPE - CALIPER TREE - PLANTING MIX

DATE: 06.08.22 SCALE: 1:25

DETAIL NAME: 2198

MEMBER OF THE ASSOCIATION OF LANDSCAPE ARCHITECTS



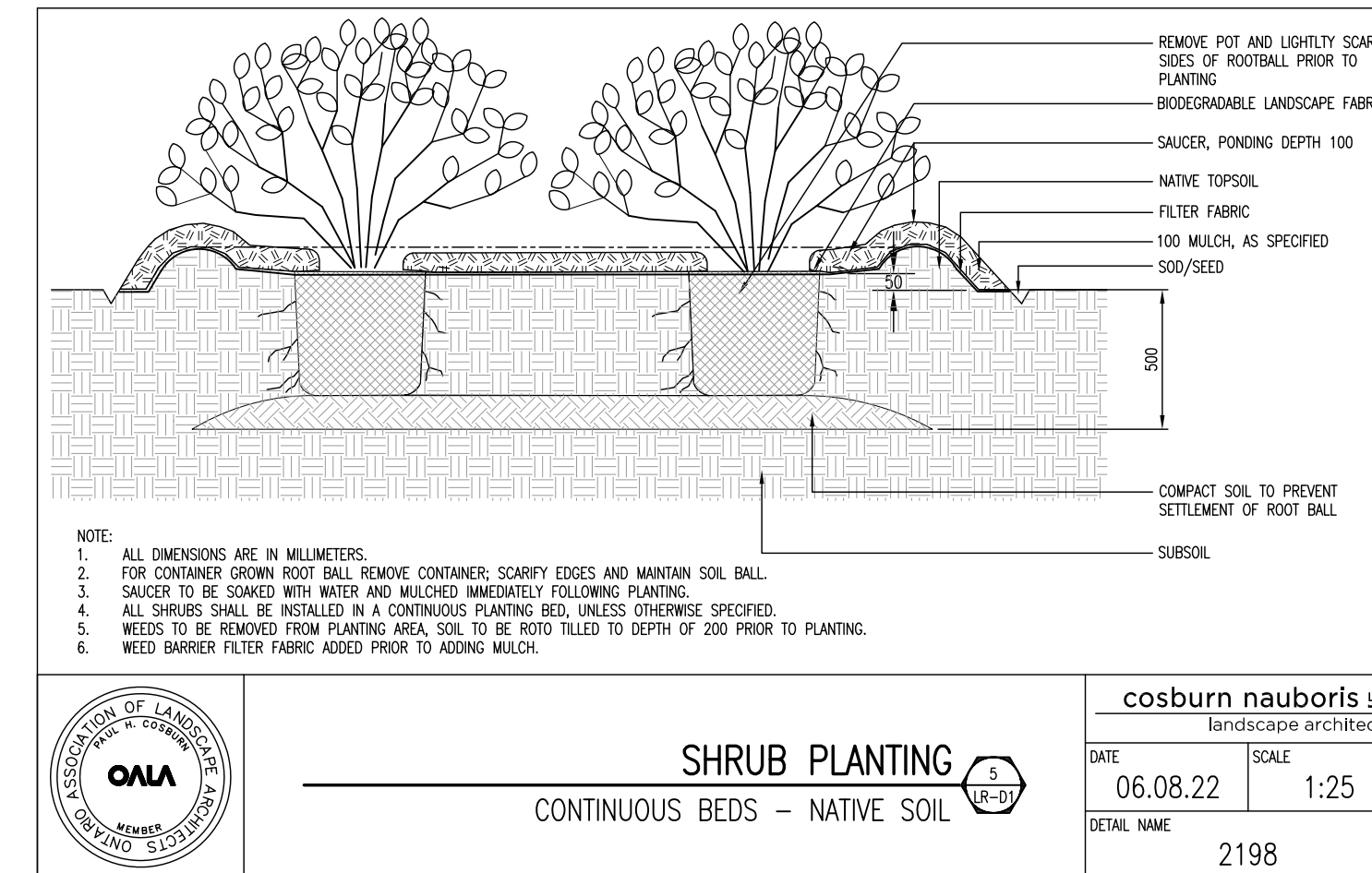
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CONIFEROUS TREE PLANTING
125-300cm HEIGHTS - PLANTING MIX

DATE: 06.08.22 SCALE: 1:25

DETAIL NAME: 2198venetian

MEMBER OF THE ASSOCIATION OF LANDSCAPE ARCHITECTS



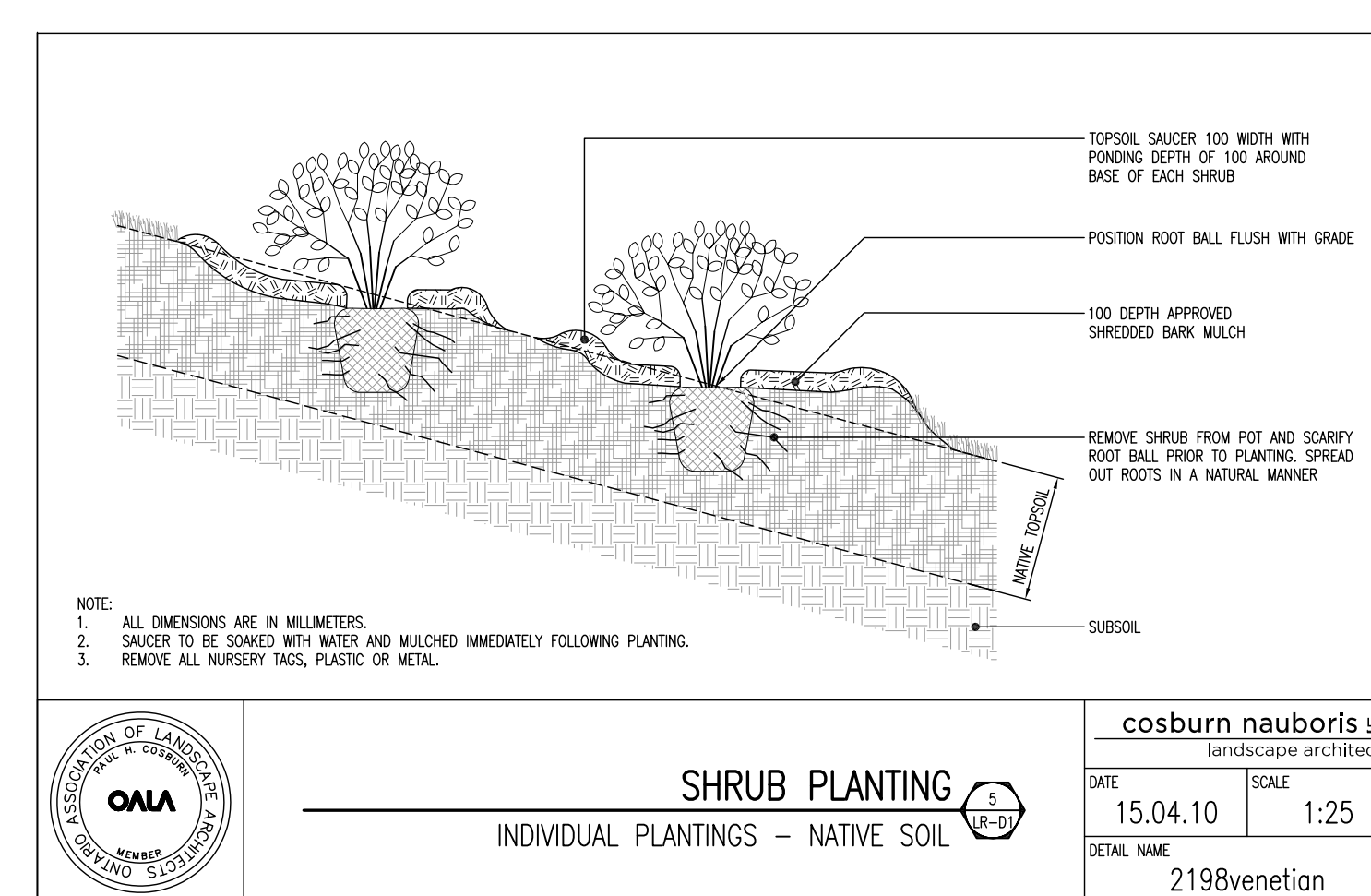
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SHRUB PLANTING
CONTINUOUS BEDS - NATIVE SOIL

DATE: 06.08.22 SCALE: 1:25

DETAIL NAME: 2198

MEMBER OF THE ASSOCIATION OF LANDSCAPE ARCHITECTS



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SHRUB PLANTING
INDIVIDUAL PLANTINGS - NATIVE SOIL

DATE: 15.04.10 SCALE: 1:25

DETAIL NAME: 2198venetian

MEMBER OF THE ASSOCIATION OF LANDSCAPE ARCHITECTS

7	Issued for Submission	SW	21 03 17
6	Issued for Submission	CMO	21 02 25
5	For LSRCA Submission	CMO	21 02 17
4	For Submission to LSRCA	SW	20 08 20
3	For Submission to LSRCA	SW	20 06 18
No	Revision	By	Yr Mo Da

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Invalid Unless Signed Original

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24 REACH STREET
VENETIAN GROUP
TOWNSHIP OF UXBRIDGE

**LANDSCAPE RESTORATION AND
EDGE MANAGEMENT DETAILS**

Drawn by	CMO	Scale	AS SHOWN	LR-D1 Drawing No.
Checked by	PHC	Plot Date	2021-03-17	
Approved by	PHC	Project	2198	