

## **TOTAL PARKING AREA = 8250m<sup>2</sup>**

TOTAL CANOPY AREA = 3290m<sup>2</sup> Percentage cover = 39.8%

> SOFT AREA =  $2350 \text{m}^2$ Percentage soft = 28.5

**TOTAL PROPOSED TREES: 29 TOTAL PROPOSED SHRUBS: 9+** 

REFER TO ECOH 1176 ENVIRONMENTAL IMPACT ASSESSMENT, PREPARED BY KILGOUR & ASSOCIATES LTD., 2022 12 22, FOR TREE SPECIES AND CONDITION CHARTS.

NOTE: EXISTING TREE NUMBERS FROM THE ABOVE REPORT.

TREES TO BE REMOVED:

T35, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55 FOR A TOTAL OF 16 TREES.

• PARKING LOT EXTENTS

TREE CANOPY WITHIN

EXISTING TREE TO BE PRESERVED

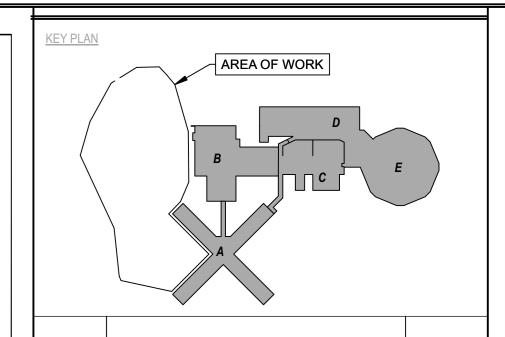
PROPOSED TREE

PROPOSED SHRUB

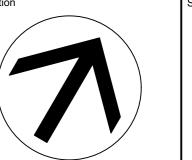
\*\*\*\* EXISTING FENCE

PARKING LOT EXTENTS

TREE CANOPY COVERAGE **TOTAL CANOPY AREA** 3333 **2**3 **TOTAL PARKING AREA** 8256 m2 PERCENT COVERAGE 40%



5	SPC RESUBMISSION	2024/01/12
4	NCC & SPC RESUBMISSION	2023/11/09
3	SPC RESUBMISSION	2023/10/24
2	SPC SUBMISSION	2023/03/14
1	NCC SUBMISSION	2023/03/14
)	Revisions	Date





The Contractor shall check and verify all dimensions and report all errors and omissions to the IO-Owner's/MBS Designee (as applicable) for his/her written direction before proceeding with the Work.

B Sheet No where detailed

PROJECT ENGINEER: CIVIL, STRUCTURAL, MECHANICAL & ELECTRICAL



Jp2g Consultants Inc.

engineers · planners · project managers 1150 MORRISON DRIVE, SUITE 410, OTTAWA, ON K2H 8S9 PHONE: 613-828-7800 FAX: 613-828-2600

LANDSCAPE ARCHITECT:

# Ruhland & Associates Ltd

Ph 613-224-4744 Fx 613-224-1131

AMIS N

OTTAWA CARLETON DETENTION CENTRE TEMPORARY PARKING LOT EXPANSION

INNES ROAD, GLOUCESTER TOWNSHIP

TREE CANOPY PLAN

Scale	Date JANUARY 2023
Drawn by TF	Substantial Performance Date
Designed by MR	Drawing No
Approved by	- TC-1

CADD File NAME



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NOTE: EXISTING TREE NUMBERS FROM THE ABOVE REPORT.

TREES TO BE REMOVED: 87 T35, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55 FOR A TOTAL OF 16 TREES.

CRZ = DBH X 10CM.

CRZ IS TO BE MEASURED FROM THE

OUTSIDE EDGE OF

TREE PROTECTION

SIGNAGE AS PER

CITY STANDARD

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

### **GENERAL NOTES**

- .1 All general site information and conditions compiled from existing plans, surveys and Consultant's field notes. Report all discrepancies prior to any work. No responsibility is born by the Consultant for unknown subsurface conditions.
- .2 The location of the utilities is approximate only, and the exact location should be determined by consulting the Municipal Authorities and Utility Companies concerned. The Contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.
- .3 No tree, designated on this plan as to stay, shall be removed. Where conditions in the field affect the safety or retention of the designated tree, the Consultant and Owner are to be notified.
- .4 Pruning of existing trees shall be done only where required for safety purposes and done under the direction of the Consultant. Pruning to be done only by a qualified Arborist.
- .5 Review project with Consultant and Owner prior to commencing any on site

TREE PROTECTION REQUIREMENTS:

THE WORK IS COMPLETE.

WITHIN THE CRZ:

OUTHOUSES;

 I.2M MIN, HIGH TREE PROTECTION

SPACED AT 2.4M

TREE PROTECTION SPECIFICATION

| EXISTING ROOT SYSTEM - AERATE-

EXISTING SUBGRADE

PRIOR TO MITIGATION

TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ε ACTIVITIES ON SITE.

SOIL AND ROOT DISTURBANCE NOT PERMITTED

HYDROVAC 100 - 150mm GRANULARS, REPLACE WITH 100 - 150mm\_ ORGANIC LAYER WITH SEED MIX #2. ASSUME 50% OF AREA INDICATED ON PLANS

1. PRIOR TO ANY WORK ACTIVITY WITHIN THE CRITICAL ROOT ZONE (CRZ = 10 X DIAMETER) OF A TREE, TREE PROTECTION FENCING MUST BE INSTALLED SURROUNDING THE CRITICAL ROOT ZONE, AND REMAIN IN PLACE UNTIL

2. UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK

- DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING

- DO NOT RAISE OR LOWER THE EXISTING GRADE;

STAFF PRIOR TO THE COMMENCEMENT OF WORK.

ROOTS WHERE ENCOUNTERED.

(2009-200).

TUNNEL OR BORE WHEN DIGGING;

DIRECTED TOWARD ANY TREE CANOPY.

- DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;

- ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT

3. TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC - STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2"X4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE

ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE

CRZ, AND INSTALLATION MUST MINIMISE DAMAGE TO EXISTING ROOTS

. THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE

( E.G. TREE CONSERVATION REPORT, TREE DISCLOSURE REPORT, ETC). THE

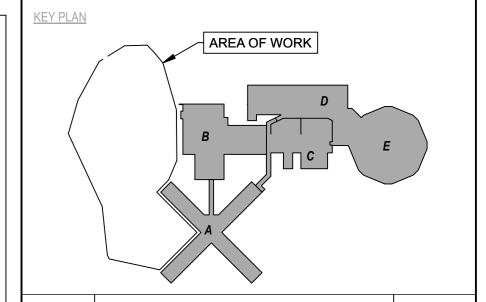
PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY

5. IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIPS, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF

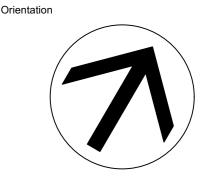
ALL CITY-OWNED TREES ARE PROTECTED UNDER THE MUNICIPAL TREES AND NATURAL AREAS PROTECTION BY-LAW (2006-279), WITHIN THE URBAN AREA. PRIVATELY-OWNED TREES GREATER THAN 50CM DIAMETER ON LOTS 1HA IN SIZE OR LESS. AND TREES GREATER THAN 10CM DIAMETER ON LOTS >1HA. ARE PROTECTED UNDER THE URBAN TREE CONSERVATION BY-LAW

- DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE

- DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OR ANY



1			
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B Sheet No where detailed

PROJECT ENGINEER: CIVIL, STRUCTURAL, MECHANICAL & ELECTRICAL



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PHONE: 613-828-7800 FAX: 613-828-2600

LANDSCAPE ARCHITECT:

## Ruhland & Associates Ltd

landscape architecture • urban design • site planning

info@rala.ca www.rala.ca

Ph 613-224-4744 Fx 613-224-1131

SCALE: NTS DATE: MAY 2019 DRAWING NO.: 1 of 1

REMOVED OR CONTAIN A HIGH

RATIO OF ORGANIC MATERIAL

SEED MIX #2.

ON PLANS

AMIS N

OTTAWA CARLETON DETENTION CENTRE TEMPORARY PARKING LOT EXPANSION WHERE GRANULARS CANNOT BE

ADD 150mm ORGANIC LAYER WITH INNES ROAD, GLOUCESTER TOWNSHIP ASSUME 50% OF AREA INDICATED

**Building No** 

Drawing Title

## **EXISTING TREE PRESERVATION** / TREE REMOVALS PLAN

JANUARY 2023 Substantial Performance Date Drawing No Designed by **L**=1 CADD File NAME

L-1 | Scale: NTS

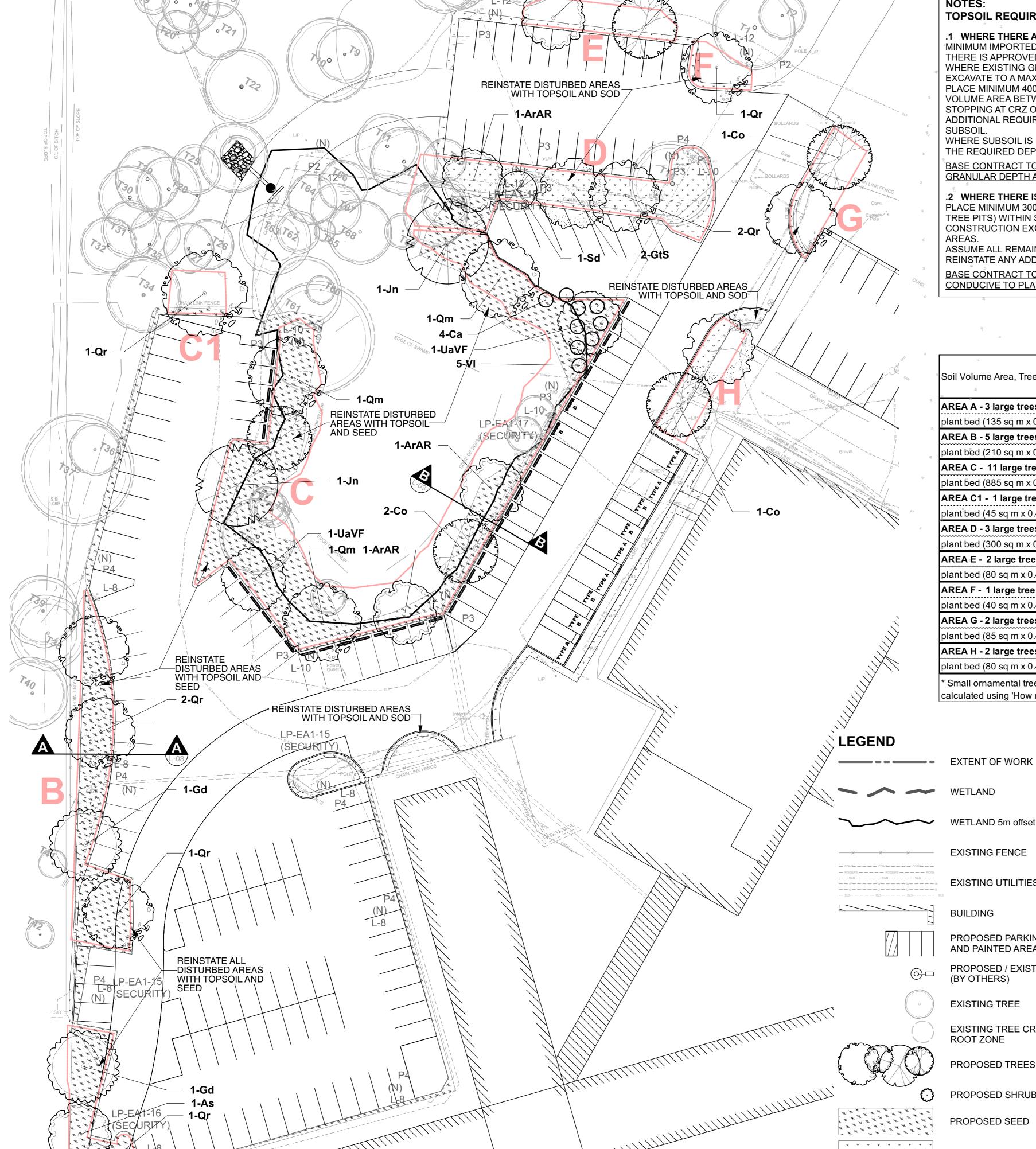
REMOVAL FOR THE INSTALLATION OF PROPOSED TREES

AND REQUIRED PLANTING MEDIUM. REFER TO CIVIL FOR

REMAINDER OF REMOVALS

PROPOSED TREE -REFER TO SECTION A-A

MITIGATION AT EXISTING TREES



## TOPSOIL REQUIREMENTS FOR TREE PLANTING

.1 WHERE THERE ARE EXISTING GRANULARS AND/OR ASPHALT: MINIMUM IMPORTED TOPSOIL DEPTH TO BE 400mm (ACCEPTABLE WHERE THERE IS APPROVED SUBGRADE BELOW).

WHERE EXISTING GRANULARS ARE ENCOUNTERED BELOW 400mm DEPTH, EXCAVATE TO A MAXIMUM DEPTH OF 600mm OR TO APPROVED SUBGRADE. PLACE MINIMUM 400mm DEPTH PLANTING MEDIUM WITHIN REQUIRED SOIL VOLUME AREA BETWEEN TREE PITS (900mm INSIDE 2m RADIUS TREE PITS), AND STOPPING AT CRZ OF EXISTING TREES.

ADDITIONAL REQUIRED DEPTH (as shown in chart) TO CONSIST OF EXISTING

WHERE SUBSOIL IS NOT CONDUCIVE TO PLANT GROWTH, THE REMAINDER OF THE REQUIRED DEPTH TO CONSIST OF IMPORTED TOPSOIL.

BASE CONTRACT TO ASSUME SUBSOIL IS CONDUCIVE TO PLANT GROWTH AND GRANULAR DEPTH AS 400mm.

## .2 WHERE THERE IS EXISTING SOFT LANDSCAPE:

PLACE MINIMUM 300mm DEPTH PLANTING MEDIUM (900mm INSIDE 2m RADIUS TREE PITS) WITHIN SOIL VOLUME AREA, AND AT ALL EXCAVATED AREAS (WITHIN CONSTRUCTION EXCAVATION LIMITS) THAT MAY BE WITHIN THE SOIL VOLUME AREAS.

ASSUME ALL REMAINDER OF SOIL VOLUME REQUIREMENTS ARE MET. REINSTATE ANY ADDITIONAL DISTURBED AREAS WITH 150mm TOPSOIL AND SOD. BASE CONTRACT TO ASSUME SUBSOIL AND EXCAVATION BACKFILL IS CONDUCIVE TO PLANT GROWTH.

Soil Volume Area, Tree Quantity and Size	Tree Quantity	OTTAWA Target Soil Volume (m³)	Design Soil Volume	Soil Adequacy percentage
AREA A - 3 large trees				
plant bed (135 sq m x 0.4 metre deep)	3	54.0	54.0	100.00%
AREA B - 5 large trees »				
plant bed (210 sq m x 0.4 metre deep)	4	72.0	84.0	116.67%
AREA C - 11 large trees, 5 existing tree	s			
plant bed (885 sq m x 0.4 metre deep)	16	288.0	354.0	122.92%
AREA C1 - 1 large tree (continuous area	a)	6.		
plant bed (45 sq m x 0.4 metre deep)	1	18.0	18.0	100.00%
AREA D - 3 large trees, 1 medium tree, 3	existing	trees	h	
plant bed (300 sq m x 0.4 metre deep)	7	123.0	120.0,	97.56%
AREA≀E - 2 large trees				
plant bed (80 sq m x 0.4 metre deep)	2	36.0	32.0	88.89%
AREA F - 1 large tree (continuous area)				
plant bed (40 sq m x 0.4 metre deep)	1	18.0	16.0	88.89%
AREA G - 2 large trees				
plant bed (85 sq m x 0.4 metre deep)	2	36.0	34.0	94.44%
AREA H - 2 large trees				
plant bed (80 sq m x 0.4 metre deep)	2	36.0	32.0	88.89%

\* Small ornamental trees with growth to 8-15cm DBH, large shrubs, and columnar conifers calculated using 'How much soil to grow a big tree' by DeepRoot as a guide

WETLAND 5m offset

EXISTING FENCE

**EXISTING UTILITIES** 

PROPOSED PARKING AND PAINTED AREAS

PROPOSED / EXISTING LIGHT

EXISTING TREE CRITICAL

BUILDING

(BY OTHERS)

ROOT ZONE

PROPOSED TREES

PROPOSED SHRUBS

PROPOSED SEED

PROPOSED SOD

SOIL VOLUME AREA

**EXISTING TREE** 

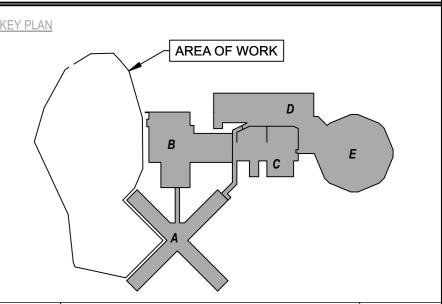
#### Plant List Qty Botanical Name **Common Name** Sched. Size Remarks Ntv H ArAR 3 Acer rubrum Red Maple 70mm caliper WB, Staked Acer saccharum Sugar Maple 70mm caliper WB, Staked Ntv Co Celtis occidentalis Common Hackberry 70mm caliper WB, Staked Gleditsia triacanthos var. 70mm caliper WB, Staked Shademaster Honeylocust inermis 'Shademaster' Gymnocladus dioicus Kentucky Coffee Tree 70mm caliper WB, Staked Juglans nigra **Black Walnut** 70mm caliper WB, Staked 70mm caliper WB, Staked Bur Oak Quercus macrocarpa Ntv Qr 8 Quercus rubra Northern Red Oak 70mm caliper WB, Staked Showy Mountain Ash 70mm caliper WB. Staked Sorbus decora Ntv H UaVF 2 Ulmus americana 'Valley Forge' Valley Forge Elm 70mm caliper WB, Staked 9 SHRUBS Ntv Ca 4 Cornus alternifolia Alternate-Leafed Dogwood 150cm ht. Nannyberry Viburnum Ntv VI 5 Viburnum lentago KEY: Ntv = Native species; Ntv H = Horticulral variety of Native species, Non N = Non-native species

### **GENERAL NOTES**

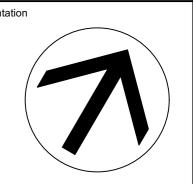
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- .3 No tree, designated on this plan as to stay, shall be removed. Where conditions in the field affect the safety or retention of the designated tree, the Consultant or Owner are to be notified.
- .4 Pruning of existing trees shall be done only to repair existing damage, as shown on plan or as directed by the Consultant or Owner. Pruning to be done only by a qualified Arborist.
- .5 Review project with Consultant prior to commencing any on site work.
- .6 All dimensions shown are to be verified on site prior to any construction. No deviations are to be made from the layouts as shown on this plan without prior consultation with the Consultant or Owner.
- .7 All sodded areas to receive a minimum of 150mm of topsoil over graded sub-base. Do not use mesh. Sod shall come from an approved source and shall be laid within 24 hours of being cut in the nursery. Only nursery sod shall be used.
- .8 Stake planting locations and receive approval of the Consultant, prior to excavation of any planting pits. No substitutions of plant material shall be made without prior approval(s) of the Consultant.
- .9 Where clay is encountered proper drainage must be ensured in tree/shrub pits, prior to planting. Have method approved by the Consultant.
- prior to importing topsoil and sod being laid.

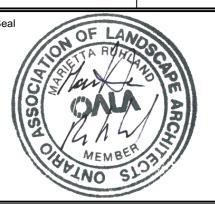
.10 Final subgrade is to approved by the Consultant

- .11 Maintain positive surface runoff through the entire construction period.
- .12 Reinstate all areas and items damaged as a result of construction activities.

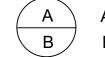


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No	Revisions	Date





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A Detail No

B Sheet No where detailed

ROJECT ENGINEER: CIVIL, STRUCTURAL, MECHANICAL & ELECTRICAL



LANDSCAPE ARCHITECT:

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AMIS N

OTTAWA CARLETON DETENTION CENTRE TEMPORARY PARKING LOT EXPANSION

INNES ROAD, GLOUCESTER TOWNSHIP **OTTAWA** 

**Building No** 

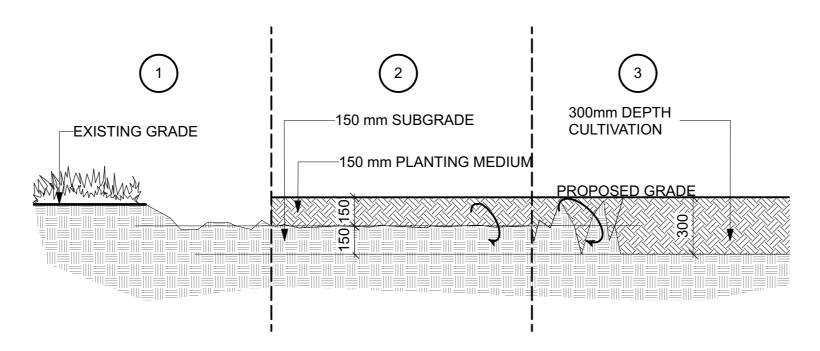
Drawing Title

IO Project No

## LANDSCAPE PLAN

Scale	Date
	JANUARY 2023
Drawn by  TF	Substantial Performance Date
Designed by MR	Drawing No
Approved by	<b>L-2</b>
	CADD File NAME

File Number D07-12-23-0040 Plan: Number #19042



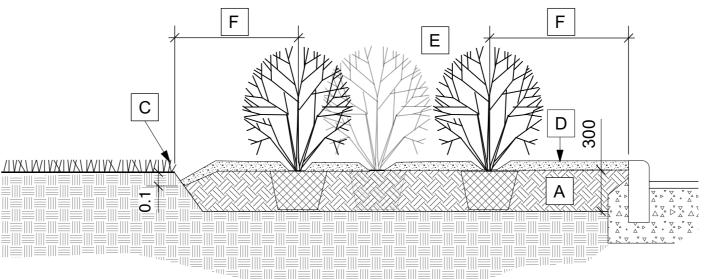
## SOIL PREPARATION

- 1. GRUB OUT GRASSES AND PLANTS (100mm 150mm average depth)
- 2. PLACE 150mm IMPORTED PLANTING MEDIUM
- 3. CULTIVATE TO A FULL DEPTH OF 300mm FROM TOP OF IMPORTED PLANTING MEDIUM
- 4. PLACE 150mm IMPORTED PLANTING MEDIUM
- 5. CULTIVATE TO A FULL DEPTH OF 300mm FROM TOP OF IMPORTED PLANTING MEDIUM



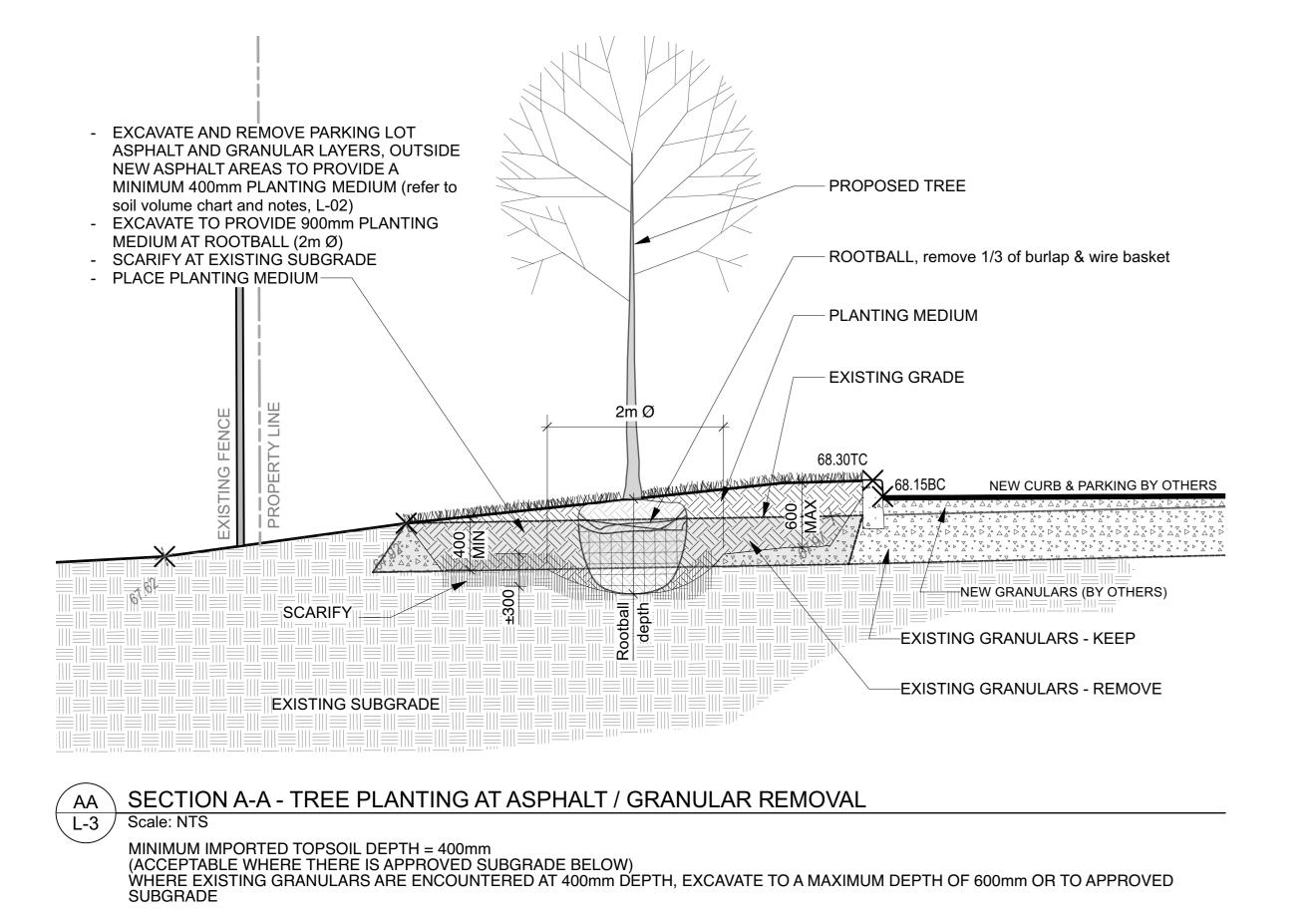


- B ROOTBALL / POT
- C EDGE TO DEPTH OF 100mm
- D 50-75 mm MULCH LAYER, KEEP MULCH AWAY FROM STEMS
- E PRUNE DAMAGE, DISEASED OR WEAK BRANCHES AS PER ACCEPTED HORTICULTURAL PRACTICE
- F SHRUBS TO BE PLANTED 900mm MIN FROM EDGE OF BED/CURB



2m Ø





BB SECTION B-B - TREE PLANTING IN EXISTING SOFT LANDSCAPE

L-3 Scale: NTS

MINIMUM IMPORTED TOPSOIL DEPTH = 300mm

EXISTING SUBGRADE

- EXCAVATE AREAS TO PROVIDE A MINIMUM 300mm

PLANTING MEDIUM (refer to soil volume chart and

- DO NOT EXCAVATE WITHIN THE CRZ OF EXISTING

- EXCAVATE TO PROVIDE 900mm PLANTING

MEDIUM AT ROOTBALL (2m Ø)

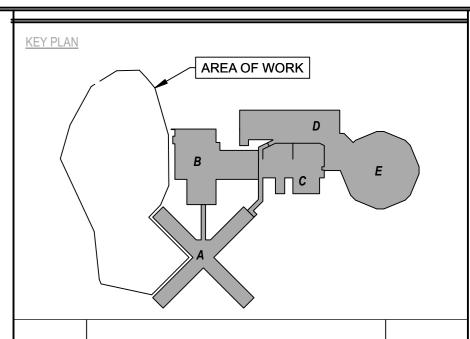
- PLACE PLANTING MEDIUM -

- SCARIFY AT EXISTING SUBGRADE

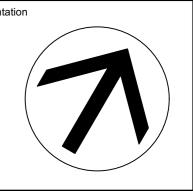
notes, L-02)

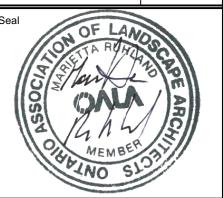
EXISTING WETLAND

MINIMUM IMPORTED TOPSOIL DEPTH = 300mm
(ACCEPTABLE WHERE THERE IS APPROVED SUBGRADE BELOW)
WHERE EXISTING GRANULARS ARE ENCOUNTERED AT 400mm DEPTH, EXCAVATE TO REQUIRED DEPTH FOR SOIL VOLUME REQUIREMENTS, OR TO APPROVED SUBGRADE



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PROJECT ENGINEER: CIVIL, STRUCTURAL, MECHANICAL & ELECTRICAL



LANDSCAPE ARCHITECT:

PROPOSED TREE

remove 1/3 of burlap

PROPOSED GRADE

EXISTING GRADE

\_PARKING LOT, CAR STOP BY OTHERS

ROOTBALL,

& wire basket

# Ruhland & Associates Ltd landscape architecture • urban design • site planning

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AMIS	N	В

Project

OTTAWA CARLETON DETENTION CENTRE
TEMPORARY PARKING LOT EXPANSION

INNES ROAD, GLOUCESTER TOWNSHIP
OTTAWA
IO Project No Site No Building No

Client

Drawing Title

## DETAILS

Scale	Date
	JANUARY 2023
Drawn by TF	Substantial Performance Date
Designed by	Drawing No
MR	1 2
Approved by	-  <b>L-3</b>
	of