

LEGEND

- 3-D1 DETAIL SHEET # NOVATECH OR CITY DETAIL NUMBER SEE LIST FOR CODE
- PROPERTY LIMIT
- EXISTING TREE TO REMAIN, SYMBOL SIZE REFLECTS CRZ
- EXISTING TREE TO REMOVE, SYMBOL SIZE REFLECTS CRZ
- PROPOSED TREE COMPENSATION PLANTING LOCATION
- PROPOSED FUTURE TREE COMPENSATION PLANTING LOCATION
- TREE PROTECTION FENCE
- SPECIES (SEE PLANT LIST)
- KEY ## QUANTITY

GENERAL

1. Read and interpret this drawing/ drawing set in conjunction with all the contract details and specifications, including related civil, utility, structural, architectural, mechanical, electrical, environmental, geotechnical, and survey information.
2. The Contractor is to determine the exact location, size, material, and elevation of all existing utilities prior to commencing construction. Protect and assume responsibility for all existing utilities regardless of being shown on the drawings.
3. It is essential to use the plans and details in conjunction with the specifications and notes.
4. Do not scale drawings. Work to dimensions only.
5. Protect all existing and retained vegetation for the duration of construction according to the contract details and specifications.
6. Reinstatement of areas and items damaged or disturbed, beyond the Limit of Work, because of construction activities, including but not limited to construction staging areas, haul roads, stockpile areas, etc. to the satisfaction of the Consultant. Unless otherwise noted, Contractor is to reinstate all areas to pre-construction condition or better to the satisfaction of the Contract Administrator.

TREE PROTECTION

- Implement the following protection measures for retained trees, both on site and on adjacent sites, prior to any work activity, including tree removal. Maintain tree protection fence in place and in good condition for the duration of site works:
1. The Landscape Architect or Certified Arborist is to determine the location of the tree protection fencing and detail it on any associated plans for the site (e.g. tree conservation report, tree disclosure report, etc.).
 2. Under the guidance of a Landscape Architect or Certified Arborist, erect a fence at the critical root zone (CRZ) of trees. Diameter at breast height (DBH) is the trunk diameter measured at 1.3m height on the tree trunk. The CRZ is calculated as DBH x 10. Refer to the Tree Protection Fence detail.
 3. Refer to the Tree Protection Plan for fence location. City Forestry Staff are to approve both the plan and the installed fence prior to work commencement.
 4. Do not place any material or equipment within 2m of the CRZ of any tree, including outshouses.
 5. Do not attach any signs, notices, or posters to any tree.
 6. Do not disturb, raise, or lower the existing grade within the CRZ without approval.
 7. Only tunnel or bore when digging within the CRZ of a tree. Hand work only where required within the CRZ; absolutely no machinery permitted.
 8. Do not damage the root system, trunk, or branches, or any tree.
 9. Do not extend hard surface or significantly change landscaping.
 10. Ensure that exhaust fumes from all equipment are directed away from any tree canopy.
 11. When trees marked for removal overlap with the CRZ of trees marked for preservation: cut roots at the edge of the CRZ and grind down stumps after tree removals, do not pull out stumps. Ensure there is not root pulling or disturbance of the ground within the CRZ.
 12. Prior to work taking place, notify and consult the Landscape Architect and City Forestry Staff if roots must be cut. Roots 20mm or larger should be cut at right angles with clean, sharp horticultural tools without tearing, crushing, or pulling. Refer to City of Ottawa Specification S.P. F-8011 Tree Protection, Excavation of Root Zone.
 13. If damaged or objectionable branches are observed, consult the Landscape Architect, before any work is conducted. Do not prune leaders. Do not prune more than 1/4 of crown.
 14. Set up a water and fertilizing program, if trees are being affected by site works, to the satisfaction of the Landscape Architect.
 15. The Landscape Architect is to prescribe mitigation measures if the protected fenced area must be reduced to facilitate construction. Measures may include the placement of plywood, wood chips, or steel plating over the roots for protection. City Forestry Staff are to approve said measures prior to fence movement.
 16. City of Ottawa By-law: Protects municipal trees and municipal natural areas in the City of Ottawa and trees on private property in the urban area of the City of Ottawa (2020-340).

PROPOSED AND RETAINED CANOPY CALCULATIONS:

PROPOSED & RETAINED TREES - ESTIMATED CANOPY COVERAGE AT MATURITY				
PROPOSED TREES	AVERAGE MATURE SPREAD	COVERAGE PER TREE AT MATURITY (m ²)	QUANTITY OF TREES	TOTAL CANOPY COVERAGE (m ²)
Deciduous trees - Large	15m	177	6	1060
Deciduous trees - Medium	10m	79	1	79
Existing Deciduous trees - Small	4.5m	16	2	32
RETAINED TREES				
*Retained Deciduous trees - Medium	10m	79	15	1185
*Retained Deciduous trees - Small	4.5m	16	13	208
*Retained Coniferous trees	5m	20	13	255
TOTAL PROPOSED CANOPY COVERAGE (m²):			Total	1759

1. Area of a circle = (π r²) x π
2. Canopy coverage per tree calculation: (average spread/2) x (average spread/2) x π
- *At maturity factor is not added to the existing canopy cover of retained trees at site.

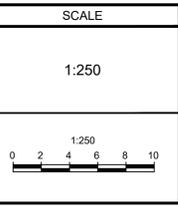
EXISTING TREE INVENTORY:

No.	Botanical Name	Common Name	DBH (cm)	CRZ (m)	Condition	Owner	Remarks	Recomm.
1	Picea glauca	White Spruce	8.0	0.80	F	Client		Conflict
2	Picea canadica	Canadian Spruce	14.0	1.40	G	Client		PROTECT
3	Betula sp.	Paper Birch	14.0	1.40	G	Client		PROTECT
4	Betula sp.	Paper Birch	13.0	1.30	G	Client		PROTECT
5	Betula sp.	Paper Birch	26.0	2.60	G	Client		PROTECT
6	Quercus rubra	Red Oak	29.0	2.90	G	Client		PROTECT
7	Betula sp.	Paper Birch	18.0	1.80	G	Client		PROTECT
8	Betula sp.	Paper Birch	25.0	2.50	G	Client		PROTECT
9	Betula sp.	Paper Birch	24.0	2.40	F	Client	Moderate Crown dieback	PROTECT
10	Ulmus 'Prospector'	Prospector Elm	22.0	2.20	G	Client		PROTECT
11	Ulmus 'Prospector'	Prospector Elm	17.0	1.70	F	Client	Thin canopy	PROTECT
12	Ulmus 'Prospector'	Prospector Elm	15.0	1.50	F	Client	Large wound at base	PROTECT
13	Ulmus 'Prospector'	Prospector Elm	19.0	1.90	G	Client		PROTECT
14	Ulmus 'Prospector'	Prospector Elm	18.0	1.80	G	Client		Conflict
15	Ulmus 'Prospector'	Prospector Elm	22.0	2.20	P	Client	Very large wounds up north side of main stem	Conflict
16	Ulmus 'Prospector'	Prospector Elm	35.0	3.50	P	Client	Poor taper / Thin canopy	Conflict
17	Ulmus 'Prospector'	Prospector Elm	23.0	2.30	F	Client	Minor dieback in upper canopy	Conflict
18	Acer saccharum	Sugar Maple	29.0	2.90	G	Client		Conflict
19	Gleditsia triacanthos	Honey Locust	16.0	1.60	G	Client		Conflict
20	Gleditsia triacanthos	Honey Locust	16.0	1.60	G	Client		Conflict
21	Pinus strobus	White Pine	38.0	3.80	G	Client		PROTECT
22	Pinus strobus	White Pine	32.0	3.20	G	Client		PROTECT
23	Pinus strobus	White Pine	24.0	2.40	G	Client		PROTECT
24	Acer saccharum	Sugar Maple	27.0	2.70	G	Client		PROTECT
25	Acer saccharum	Sugar Maple	31.0	3.10	G	Client		PROTECT
26	Pinus strobus	White Pine	26.0	2.60	P	Client	Thin canopy / Large wound or canker at 1m from base	Conflict
27	Pinus strobus	White Pine	21.0	2.10	P	Client	Thin canopy / Severe dieback	Remove
28	Acer saccharum	Sugar Maple	27.0	2.70	G	Client	Thin canopy	PROTECT
29	Picea glauca	White Spruce	26.0	2.60	G	Client		Conflict
30	Pinus strobus	White Pine	33.0	3.30	G	Client	One sided canopy	Conflict
31	Acer saccharum	Sugar Maple	29.0	2.90	G	Client		PROTECT
32	Acer saccharum	Sugar Maple	41.0	4.10	G	Client	Former leader lost to possible canker / Tree otherwise showing very good vigour	PROTECT
33	Betula sp.	Paper Birch	26.0	2.60	G	Client		PROTECT
34	Thuja occidentalis	White Cedar	37.0	3.70	G	Public		PROTECT
35	Picea pungens	Colorado Spruce	31.0	3.10	G	Public		PROTECT
36	Thuja occidentalis	White Cedar	36.0	3.60	G	Client		PROTECT
37	Picea pungens	Colorado Spruce	42.0	4.20	G	Client		PROTECT
38	Betula sp.	Paper Birch	20.0	2.00	F	Public	Thin canopy / Timmer damage	PROTECT
39	Celtis occidentalis	Hackberry	34.0	3.40	G	Client		PROTECT
40	Pinus strobus	White Pine	27.0	2.70	G	Shared		PROTECT
41	Celtis occidentalis	Hackberry	40.0	4.00	G	Client	Large limb lost due to included bark / Tree is showing good vigour in recovery	PROTECT
42	Acer saccharum	Sugar Maple	30.0	3.00	G	Client		PROTECT
43	Thuja occidentalis	White Cedar	37.0	3.70	G	Client		PROTECT
44	Thuja occidentalis	White Cedar	35.0	3.50	G	Public		PROTECT
45	Thuja occidentalis	White Cedar	33.0	3.30	G	Client		PROTECT
46	Celtis occidentalis	Hackberry	29.0	2.90	G	Client	Included bark at 1.6m from base	PROTECT
47	Picea abies	Norway Spruce	36.0	3.60	G	Client		PROTECT
48	Acer saccharum	Sugar Maple	31.0	3.10	G	Client	Original leader lost / Good vigour	PROTECT

NOT FOR CONSTRUCTION

Owner:
KRP PROPERTIES
c/o [contact name]
[address line 1]
Ottawa, ON [postal]
Phone: [XXX] XXX-XXXX

No.	REVISION	DATE	BY
3.	RE-ISSUED FOR SITE PLAN SUBMISSION	OCT 7/24	RGJ
2.	ISSUED FOR SITE PLAN AND ZONING	SEP 13/24	RGJ
1.	ISSUED FOR COORDINATION	SEP 09/24	RGJ



DESIGN	FOR REVIEW ONLY
MJT	
CHECKED	
RGJ	
DRAWN	
TCB / MJT	
CHECKED	
RGJ	
APPROVED	
RGJ	



NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Copland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone: (613) 254-9643
Facsimile: (613) 254-5867
Website: www.novatech-eng.com

LOCATION		PROJECT No.	
535 LEGGET DRIVE KANATA		124045	
DRAWING NAME		REV #	
TREE CONSERVATION PLAN		REV # 3	
PROPOSED DEVELOPMENT & CANOPY COVER INFORMATION		DRAWING No.	
		124045-TCR2	

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SOIL VOLUMES AVAILABILITY

Planting bed no.	Available Soil Area (sq m)	Available Soil Volume (cu m)	No. of trees proposed			Total No. of trees	Soil calculations	
			Small (20m ³ for single, 12m ³ for multiple)	Medium (25m ³ for single, 15m ³ for multiple)	Large (30m ³ for single, 18m ³ for multiple)		Min. required Soil volume total (cu m)	Soil volume available (cu m)
Planting bed 1	25	25	0	1	1	1	30.00	35.00
Planting bed 2	28	28	0	0	0	1	30.00	30.00
Planting bed 3	46	46	0	0	2	2	36.00	36.00
Planting bed 4	27	27	2	0	0	2	24.00	24.00
Planting bed 5	39	39	0	0	1	1	30.00	30.00
Planting bed 6	125	125	0	0	2	2	36.00	36.00

Note 1. For all planting beds proposed, the available soil depth is considered to be 1m.

CITY DETAILS

Related details from City of Ottawa Standard Tender Documents Volume No. 2 Standard Detail Drawings.

- SC4. Typical Concrete Sidewalk in Boulevard
- SC5. Sidewalk Construction Joints
- SC7.1 Curb Return Entrances - Uncontrolled Intersections

NOVATECH DETAILS

- D1. Standard Deciduous Tree Planting
- D2. Shrub and Perennial Planting
- D3. Bike Layout
- D4. Tree Protection Fence

NORTH

KEY PLAN
N.T.S.

LEGEND

- 3-D1** DETAIL SHEET # NOVATECH OR CITY DETAIL NUMBER SEE LIST FOR CODE
- PROPERTY LIMIT
- PROPOSED CONCRETE
- PROPOSED PAVERS
- PROPOSED DECK
- CLEAR STONE
- SOD
- PROPOSED DECIDUOUS TREE
- PROPOSED SHRUBS
- PERENNIALS & ORNAMENTAL GRASS
- EXISTING TREE TO REMAIN
- TREE PROTECTION FENCE
- PICKET FENCE
- WOOD PRIVACY FENCE
- BUILDING LINE
- OVERHANG
- BENCHES
- DECK FURNITURE

GENERAL

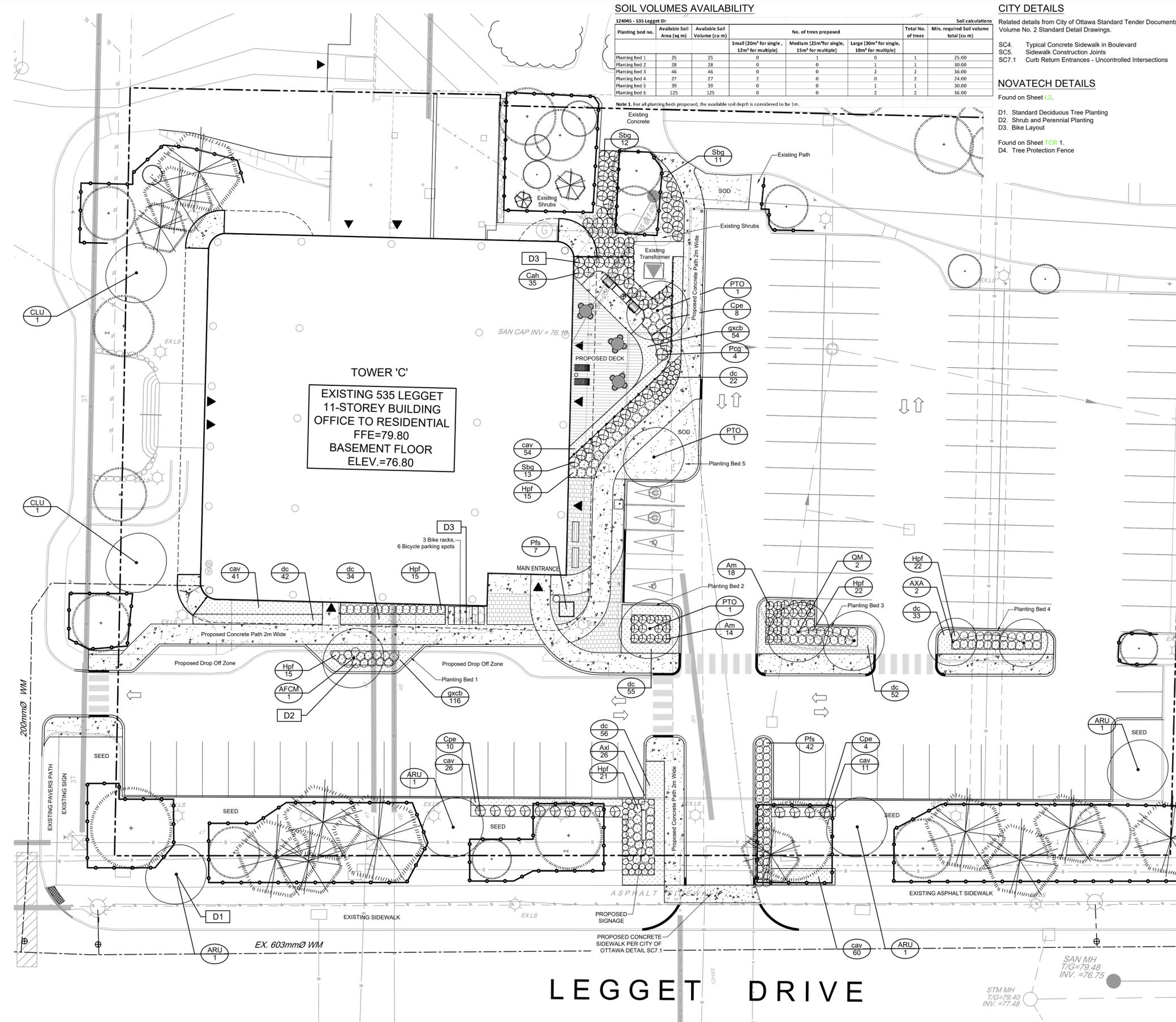
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- Reinstate all areas and items damaged or disturbed, beyond the Limit of Work, because of construction activities, including but not limited to construction staging areas, haul roads, stockpile areas, etc. to the satisfaction of the Consultant. Unless otherwise noted, Contractor is to reinstate all areas to pre-construction condition or better to the satisfaction of the Contract Administrator.

PLANTING

- Plant material to be No. 1 Grade and is to comply with Canadian Standards for Nursery Stock (latest edition) published by the Canadian Nursery Landscape Association.
- Use structurally sound plant material with strong fibrous root system free of disease, defects, and injuries. Use trees with straight trunks, well and characteristically branched for species. Obtain approval from consultant of plant material at source prior to digging. All trees and shrubs to be container grown, potted, WB or BB, as indicated on Plant List. Bare root plants are only acceptable for certain species and as approved by the Landscape Architect.
- Plant material substitutions are not permitted without the written approval from the Consultant, with 48 hours notice, prior to shipping plant material.
- Plant locations are schematic / approximate only. Contractor is to stake out locations on site for approval by the Landscape Architect prior to installation. Contractor will assume full responsibility if the Landscape Architect is not notified.
- The illustrated number of plants shown in the Planting Plan supersedes the estimated number in the Plant List. Contractor to report any discrepancies to the Landscape Architect prior to installation. Contractor will assume full responsibility if the Landscape Architect is not notified.
- Ensure trees are thoroughly watered following planting. Monitor material and ensure adequate moisture until acceptance.
- In heavy clay or poorly drained soils, set root ball with root collar 75-100mm higher than finished grade.
- Approved topsoil depths are as follows:
 - Plant Beds - 450mm continuous depth. Applies to shrubs, perennials, vines, and groundcovers.
 - Sod/ Seed Areas - 100mm depth.
 - Reforestation - 300mm depth.
- Sod to be No. 1 Kentucky Bluegrass Sod grown from minimum mixture of 3 Kentucky Bluegrass cultivars. Quality and source are to comply with Canadian Standards for Nursery Stock, Section 17, (latest edition) published by the Canadian Nursery Landscape Nursery Landscape Association.
- Apply the following mineral fertilizer unless soil tests show other requirements:
 - Plant Beds - (8-32-16), i.e. 8% Nitrogen, 32% Phosphorus, 16% Potash per manufacturer specifications.
 - Sod Areas - (8-32-16), i.e. 8% Nitrogen, 32% Phosphorus, 16% Potash at a rate of 350kg/ha.
- Where applicable, for any plant areas with a mix of species/ cultivars notes, Contractor is to cluster like plants in groups of 3-5 and evenly distribute these in the noted area.

PLANT LIST

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND	SPACING
Deciduous Trees						
AFCM		<i>Acer x freemanii 'Celtam'</i>	Celebration Maple	50mm Cal	WB	As Shown
ARU		<i>Acer rubrum 'Autumn Radiance'</i>	Autumn Radiance Red Maple	50mm Cal	WB	As Shown
AXA		<i>Amelanchier x grandiflora 'Autumn Brilliance'</i>	Autumn Brilliance Serviceberry	50mm Cal	WB	As Shown
CLU		<i>Cnidostemma leucocarpum (formerly lutea)</i>	Yellowwood	50mm Cal	WB	As Shown
PTO		<i>Platanus occidentalis</i>	American Sycamore	50mm Cal	WB	As Shown
QM		<i>Quercus macrocarpa</i>	Bun Oak	50mm Cal	WB	As Shown
Deciduous Shrubs						
Am		<i>Aronia melanocarpa</i>	Black Chokeberry	60cm Ht	PT	80cm O.C.
Cah		<i>Clethra alnifolia 'Hummingbird'</i>	Hummingbird Summersweet	50cm Ht	PT	80cm O.C.
Cpe		<i>Comptonia perennis</i>	Sweet Fern	40cm Ht	PT	150cm O.C.
Hpf		<i>Hydrangea paniculata 'Fire Light Tidal'</i>	Fire Light Tidal Hydrangea	60cm Ht	PT	70cm O.C.
Sbg		<i>Spiraea betulifolia 'Glow Girl'</i>	Glow Girl Birchleaf Spirea	60cm Ht	PT	100cm O.C.
Smbk		<i>Spiraea media 'Blue Kazoo'</i>	Blue Kazoo Spirea	60cm Ht	PT	60cm O.C.
Pcg		<i>Physocarpus opulifolius 'Centre Glow'</i>	Centre Glow Ninebark	60cm Ht	PT	180cm O.C.
Pfs		<i>Potentilla fruticosa 'Bella Sol'</i>	Bella Sol Potentilla	40cm Ht	PT	60cm O.C.
Perennials						
grcb		<i>Geranium x cantabrigiense 'Blokovo'</i>	Blokovo Cranesbill	1g	PT	40cm O.C.
Ornamental Grasses						
cav		<i>Calamagrostis acutiflora 'Avalanche'</i>	Avalanche Feather Reed Grass	1g	PT	70cm O.C.
dc		<i>Deschampsia cespitosa</i>	Tufted Hair Grass	1g	PT	60cm O.C.



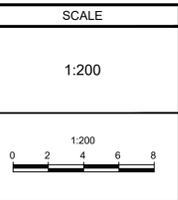
LEGGET DRIVE

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

Owner:
KRP PROPERTIES
c/o [contact name]
[address line 1]
Ottawa, ON [postal]
Phone: (XXX) XXX-XXXX

NOT FOR CONSTRUCTION

No.	REVISION	DATE	BY
3.	RE-ISSUED FOR SITE PLAN SUBMISSION	OCT 7/24	RGJ
2.	ISSUED FOR SITE PLAN AND ZONING	SEP 13/24	RGJ
1.	ISSUED FOR COORDINATION	SEP 09/24	RGJ



DESIGN	RGJ/ML
CHECKED	RGJ
DRAWN	TCB
CHECKED	RGJ
APPROVED	RGJ

FOR REVIEW ONLY

ASSOCIATION OF LANDSCAPE ARCHITECTS
ONTARIO
OCT. 7/24
MEMBER

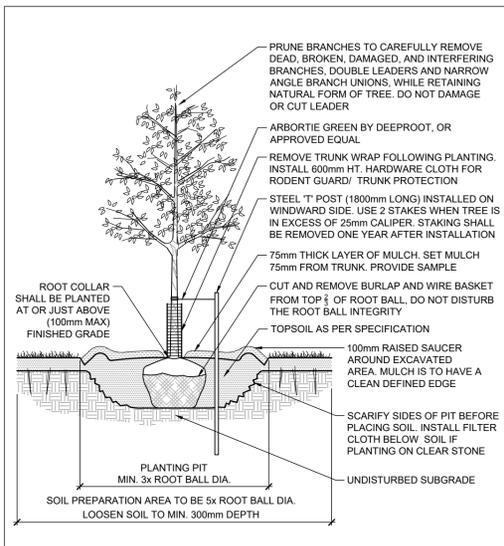
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LOCATION	PROJECT No.
535 LEGGET DRIVE KANATA	124045
DRAWING NAME	REV #
LANDSCAPE CONCEPT PLAN	3
DRAWING No.	
124045-L1	

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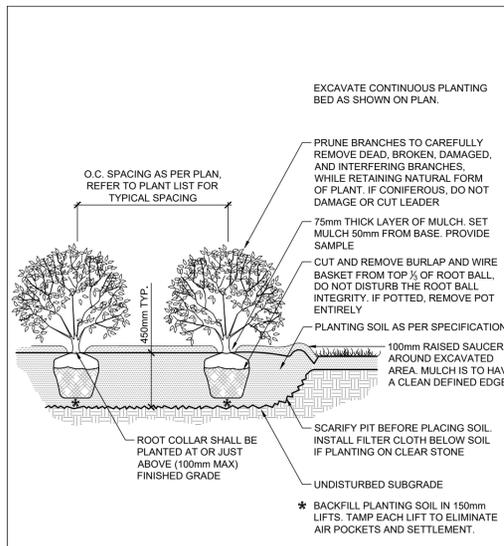
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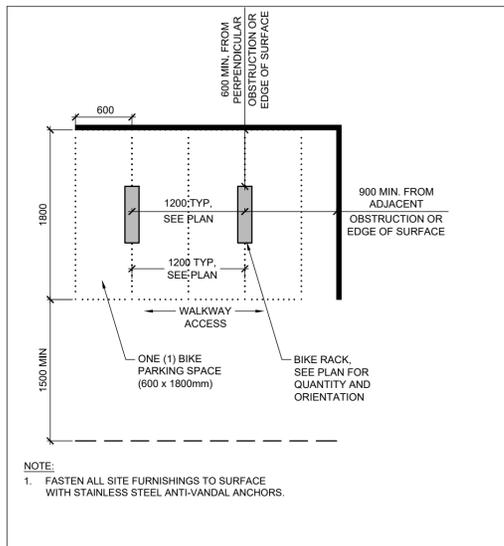
STANDARD DECIDUOUS TREE PLANTING

D1



SHRUB AND PERENNIAL PLANTING

D2



BIKE LAYOUT

D3

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DESIGN	SCALE
CHECKED RGJ	
DRAWN RGJ	
CHECKED TCB	
APPROVED RGJ	

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Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone: (613) 254-9643
Facsimile: (613) 254-5867
Website: www.novatech-eng.com

LOCATION
535 LEGGET DRIVE
KANATA

DRAWING NAME
LANDSCAPE DETAILS

PROJECT No. 124045
REV # 2
DRAWING No. 124045-L2

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