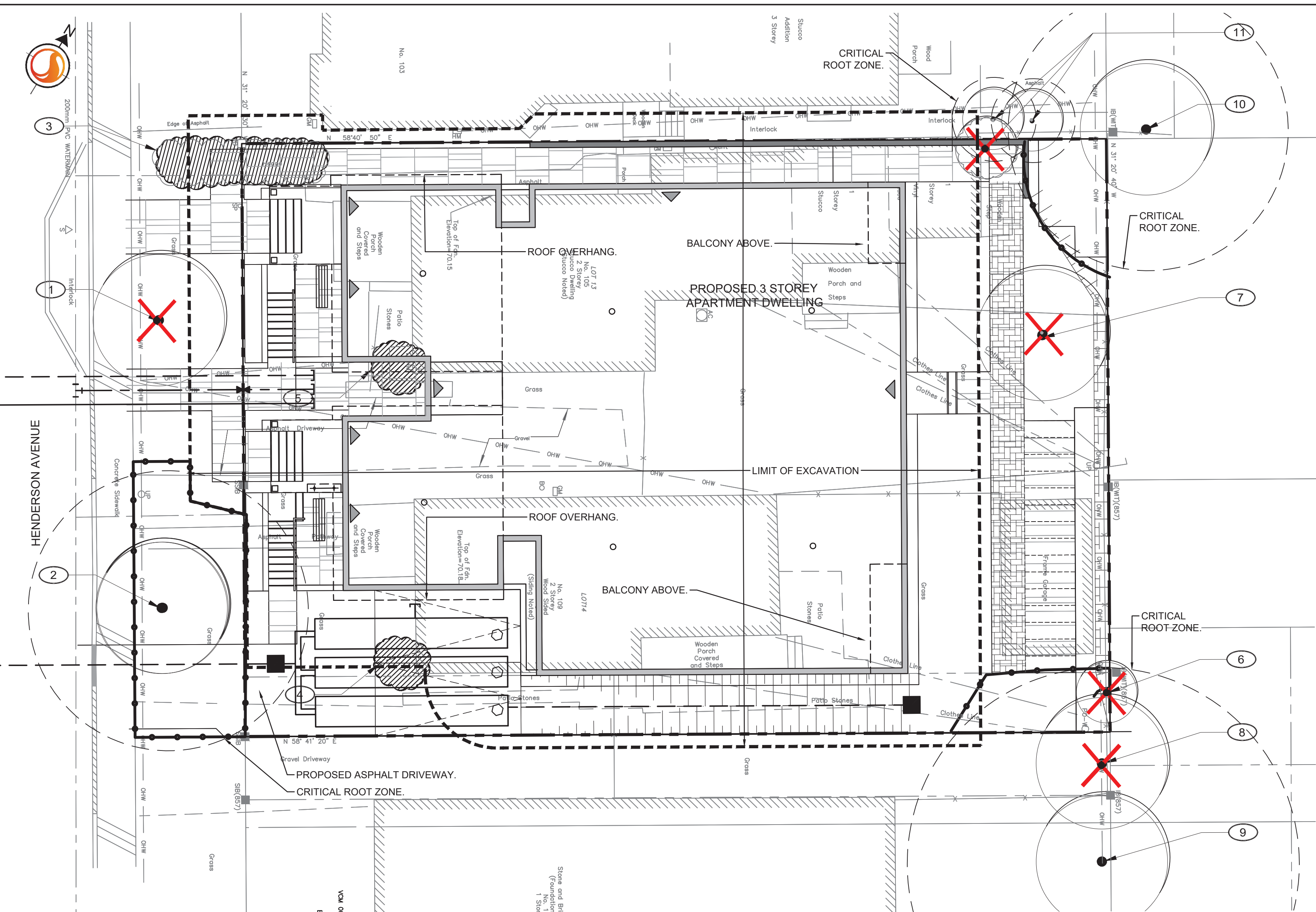


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1 TREE PRESERVATION PLAN

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TREE PRESERVATION NOTES

1. NO VEGETATION SHALL BE REMOVED WITHOUT MUNICIPAL WRITTEN APPROVAL.
2. LOCATION OF EXISTING TREES IS FOR REFERENCE ONLY AND SHALL BE CONFIRMED BY AN ARBORIST AND SURVEYOR.
3. NO VEGETATION REMOVAL SHALL OCCUR BETWEEN APRIL 15 AND JULY 31 OF ANY YEAR TO PROTECT BREEDING MIGRATORY BIRDS, AS WELL AS AT RISK BAT SPECIES. SHALL TREE REMOVAL DURING THIS PERIOD BY UNAVOIDABLE, THE CONTRACTOR IS REQUIRED TO CONDUCT A NESTING SURVEY BY A REGISTERED PROFESSIONAL AVIAN BIOLOGIST TO IDENTIFY AND ENSURE NO NESTING ACTIVITIES ARE PRESENT. TREE REMOVAL WILL BE ALLOWED WITHIN FIVE (5) DAYS OF CONDUCTING THE SURVEY.
4. CONTRACTOR SHALL ENSURE THE PROTECTION OF MATURE TREES IDENTIFIED TO BE RETAINED. TREE PROTECTION FENCING SHALL BE INSTALLED AT THE CRITICAL ROOT ZONE (CRZ) OF TREES WHERE THE CRZ IS ESTABLISHED AS BEING 10 CENTIMETRES FROM THE TRUNK OF A TREE FOR EVERY CENTIMETRE OF TRUNK DIAMETER AT BREAST HEIGHT (DBH). THE CRZ IS CALCULATED AS DBH X 10 CM. TREE PROTECTION FENCING SHALL BE INSTALLED AS DESIGNED.
5. DURING EXCAVATION EQUIPMENT MUST BE MAINTAINED WITHIN THE CONFINES OF THE WORK AREA SO AS NOT TO DISRUPT ANY TURF OR TREE ROOTS UNNECESSARILY. DO NOT PLACE ANY MATERIAL OR EQUIPMENT WITHIN THE CRITICAL ROOT ZONE (CRZ) OF ANY TREE TO BE RETAINED.
6. CONTRACTOR SHALL ENSURE THAT NO FILL WILL BE ALLOWED TO OCCUR ON THE SURFACE ABOVE THE CRITICAL ROOT ZONE (CRZ) OF TREES.
7. ALL EXCAVATED MATERIAL, INCLUDING IMPORTED MATERIAL, MUST BE REMOVED IMMEDIATELY AND NOT PLACED ON GRASS OR NEAR TREES IN ORDER TO PREVENT ROOT DAMAGE, ACCIDENTAL HITTING OF ADJACENT TREES, AND TURF DAMAGE OUTSIDE OF WORK AREA.
8. CONTRACTOR SHALL MINIMIZE SOIL COMPACTION BY KEEPING OPERATION OF MACHINERY AND EQUIPMENT CONFINED TO DESIGNATED WORK AREA.
9. CONTRACTOR SHALL KEEP A SPILL KIT ON SITE.
10. CONTRACTOR SHALL DEVELOP AN EMERGENCY RESPONSE PLAN.
11. CONTRACTOR SHALL AVOID SOIL CONTAMINATION AND FUTURE LIABILITY BY CONFINING THE OILING AND REFUELING OF MACHINERY AND EQUIPMENT TO DESIGNATED STAGING AREA.
12. NO FUEL IS TO BE STORED WITHIN THE CRITICAL ROOT ZONE (CRZ) OF ANY TREE AND EXHAUST FUMES FROM ALL EQUIPMENT MUST NOT BE DIRECTED TOWARDS ANY TREE'S CANOPY.
13. CONTRACTOR SHALL PREVENT ANY DAMAGE TO THE ROOT SYSTEM, TRUNK OR BRANCHES OF ANY TREES TO BE RETAINED ON SITE AND ON ADJACENT PROPERTIES.
14. STORAGE OF EQUIPMENT AND VEHICLES WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES IS STRICTLY PROHIBITED.
15. WHERE LIMBS OR PORTIONS OF TREES ARE REMOVED TO ACCOMMODATE CONSTRUCTION WORK, THEY WILL BE REMOVED CAREFULLY IN ACCORDANCE WITH ACCEPTED ARBORICULTURAL PRACTICES.
16. WHERE NECESSARY, THE TREES WILL BE GIVEN AN OVERALL PRUNING TO RESTORE THEIR APPEARANCE. NOT MORE THAN ONE THIRD OF THE TOTAL BRANCHING SHALL BE REMOVED DURING A SINGLE OPERATION. THE SERVICES OF A CERTIFIED ARBORIST SHALL BE RETAINED FOR THIS TASK.

WORK WITHIN PROTECTED AREAS

1. EXCAVATION WORK:
 - TO ENSURE THE ROOTS ARE NOT DISTURBED MORE THAN NECESSARY AND WHERE EXCAVATION WORKS ARE UNAVOIDABLE WITHIN THE CRZ OF TREES, THE FOLLOWING MITIGATION MEASURES SHALL BE USED:
 - BALL EXCAVATION WITHIN THE CRZ OF TREES SHALL BE BY HAND OR HYDRO EXCAVATION USING THE SMALLEST TOOLS. ROOT CUTTING SHALL BE MADE USING A SHARP SPADE OR KNIFE AT THE LIMIT OF DISTURBANCE PRIOR TO ANY CONSTRUCTION ACTIVITIES.
 - THE CONTRACTOR SHALL ONLY TUNNEL OR BORE WITHIN THE CRZ, INSTEAD OF CREATING A TRENCH.
 - ANY ROOTS THAT ARE EXPOSED BY CONSTRUCTION ACTIVITIES MUST BE COVERED WITH NATIVE TOPSOIL IMMEDIATELY, TO ENSURE THAT THE ROOTS DO NOT DRY OUT OR HAVE ANY FURTHER DAMAGE OCCUR TO THEM.
 - IN ALL THOSE INSTANCES WHERE ROOT PRUNING IS REQUIRED, THE SERVICE OF A CERTIFIED ARBORIST OR QUALIFIED TREE WORKER UNDER THE SUPERVISION OF A CERTIFIED ARBORIST SHALL BE RETAINED. IN ADDITION, ALL REMEDIAL WORKS MUST BE CONDUCTED BY A CERTIFIED CARE PROFESSIONAL TO ENSURE PROPER CARE IS ADMINISTERED IN ORDER TO ENABLE THE CONTINUED HEALTH OF THE TREES.
2. GRADING WORK
 - WHERE RE-GRADING IS REQUIRED WITHIN THE CRZ, IT SHOULD BE PERFORMED BY HAND UNDER THE SUPERVISION OF A CERTIFIED ARBORIST.

APPROVED ☒ REFUSED ☐

THIS 13 DAY OF August, 2020

Erin O'Connell
ERIN O'CONNELL, MCIP, RPP, MANAGER (A)
DEVELOPMENT REVIEW, WEST
PLANNING, INFRASTRUCTURE AND ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

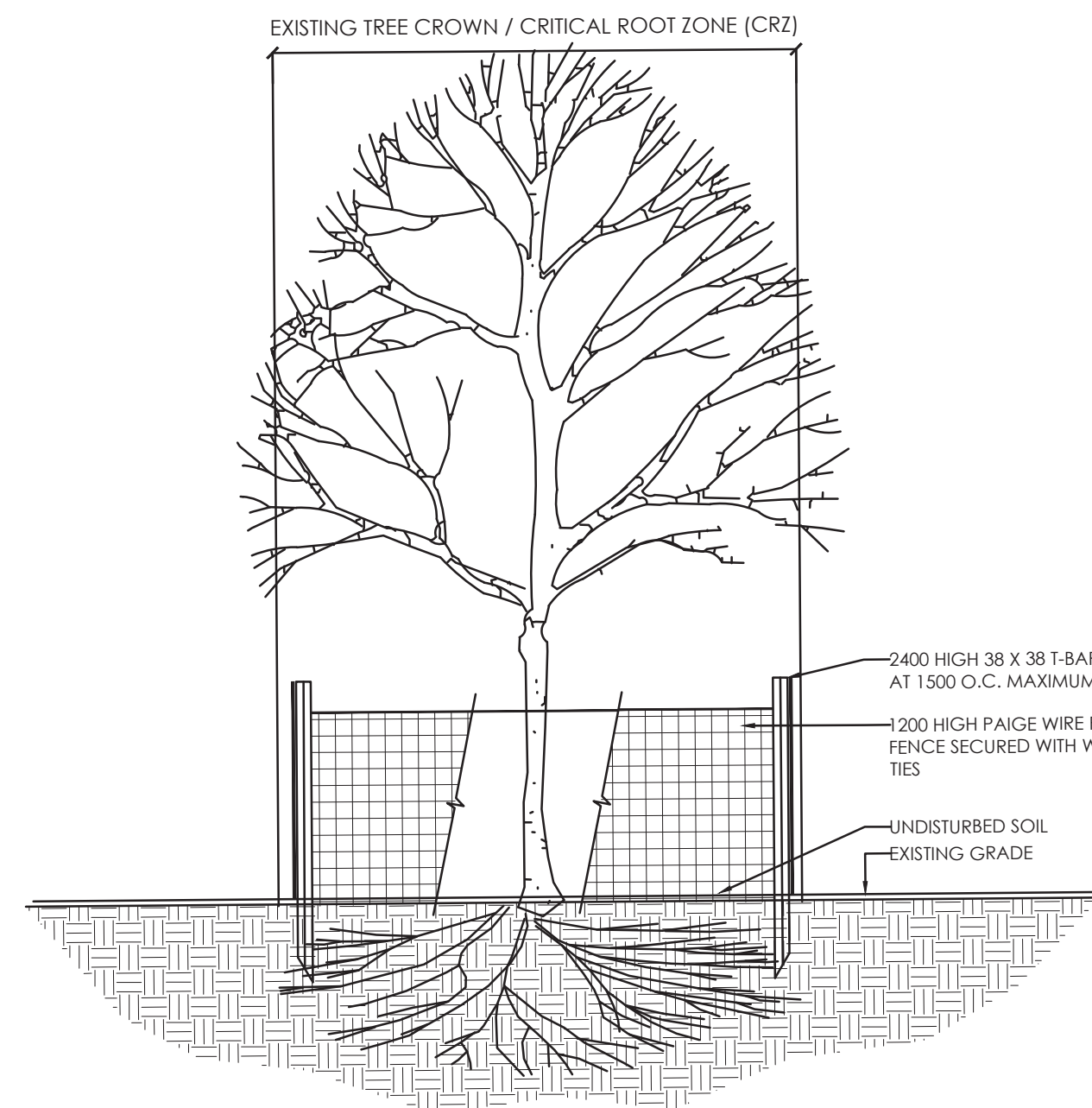


KEY PLAN
N.T.S.

EXISTING VEGETATION SCHEDULE

TREE ASSESSMENT CONDUCTED: March 20, 2018

| PLANT ID | BOTANICAL NAME | COMMON NAME | DBH (cm) | HEALTH/ CONDITION | REMARKS |
|----------|-------------------------|--------------------|----------|-------------------|--|
| 1 | <i>Acer platanoides</i> | Norway Maple | 30 | Poor | Street tree is in severe decline; TO BE REMOVED. |
| 2 | <i>Tilia cordata</i> | Little Leaf Linden | 50 | Good | Street tree; TO BE PROTECTED. |
| 3 | <i>Syringa vulgaris</i> | Common Lilac | N/A | Good | Group of shrubs; partly inside right-of-way; TO BE REMOVED DUE TO EXCAVATION LIMITS. |
| 4 | <i>Syringa vulgaris</i> | Common Lilac | N/A | Good | Shrub; TO BE REMOVED |
| 5 | <i>Syringa vulgaris</i> | Common Lilac | N/A | Good | Shrub; TO BE REMOVED |
| 6 | <i>Acer negundo</i> | Manitoba Maple | 15 | Fair | Tree shoot from dead stump located at 408 Nelson. Existing wood fence separate tree shoot from stump; TO BE REMOVED. |
| 7 | <i>Acer negundo</i> | Manitoba Maple | 20 | Good | Specimen tree; TO BE REMOVED |
| 8 | <i>Acer negundo</i> | Manitoba Maple | 50 | N/A | Tree has recently been cut down. Only the stump remains. |
| 9 | <i>Acer negundo</i> | Manitoba Maple | 70 | Good | 113 Henderson Street; significant pruning of stems and branches. |
| 10 | <i>Acer spp</i> | Maple | 50 | Good/Fair | 392 Nelson Street; TO REMAIN. CRITICAL ROOT ZONE ON 105 HENDERSON TO BE PROTECTED. |
| 11 | <i>Acer negundo</i> | Manitoba Maple | 15 | Good | 99 & 105 Henderson Avenue. TREE ON 105 HENDERSON TO BE REMOVED. |



NOTES:

1. GROUPS OF TREES TO BE PROTECTED SHALL BE TREATED IN A LIKE MANNER WITH FENCING AROUND THE ENTIRE STAND(S).
2. PRUNE BRANCHES TO REMOVE DAMAGED OR OBJECTIONABLE BRANCHES. DO NOT PRUNE LEADERS.
3. TREE PROTECTION SHALL REMAIN UNTIL SUBSTANTIAL PERFORMANCE OF THE PROJECT.
4. IF TREES ARE BEING AFFECTED BY CONSTRUCTION, A WATER AND FERTILIZING PROGRAM WILL BE REQUIRED TO THE SATISFACTION OF THE CITY.

2 TEMPORARY TREE PROTECTION FENCE - SECTION

N.T.S.



Stantec Consulting Ltd.
400 - 1331 Clyde Avenue
Ottawa ON
613.722.4420

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Legend

- EXISTING DECIDUOUS TREE
- EXISTING SHRUBS AREA
- TREE IDENTIFICATION KEY
- EXISTING TREE TO BE REMOVED
- EXISTING WOODED AREA TO BE REMOVED
- PROPOSED TEMPORARY TREE PROTECTION FENCE
- LIMIT OF EXCAVATION
- PROPERTY LINE

Notes

1. TOPOGRAPHIC SURVEY AND BENCHMARK COMPLETED BY ANNIS, OSULLIVAN, VOLLEBEKK LTD. DATED AUGUST 25, 2017. LOCATIONS FOR TREES 8, 9, 10 WAS PROVIDED BY AOS IN NOVEMBER, 2019.
2. SITE PLAN PREPARED BY PROJECT1 STUDIO DATED MAY 26, 2020.
3. GEOTECHNICAL REPORT CP-17-0638 PREPARED BY McIntOSH PERRY DATED MARCH 2018.
4. EXCAVATION LIMIT PROVIDED BY LAMPKING STRUCTURAL SERVICES, DATED NOVEMBER 2019.

| 4 | REVISED SITE PLAN | CTL | ILL | 20.06.05 |
|----------|-------------------------------|-----|-------|----------|
| 3 | REVISIONS BASED ON COMMENTS | CTL | ILL | 20.02.12 |
| 2 | REVISIONS BASED ON COMMENTS | CTL | ILL | 19.12.10 |
| 1 | ISSUED FOR SITE PLAN APPROVAL | ILL | ILL | 18.05.07 |
| Revision | | By | Appd. | YY.MM.DD |

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| | | Dwn. | Chkd. | Dsgn. | YY.MM.DD |

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Client/Project

TC UNITED GROUP
800 INDUSTRIAL AVENUE

APARTMENT BUILDING
105-109 HENDERSON AVENUE
OTTAWA, ONTARIO

Title

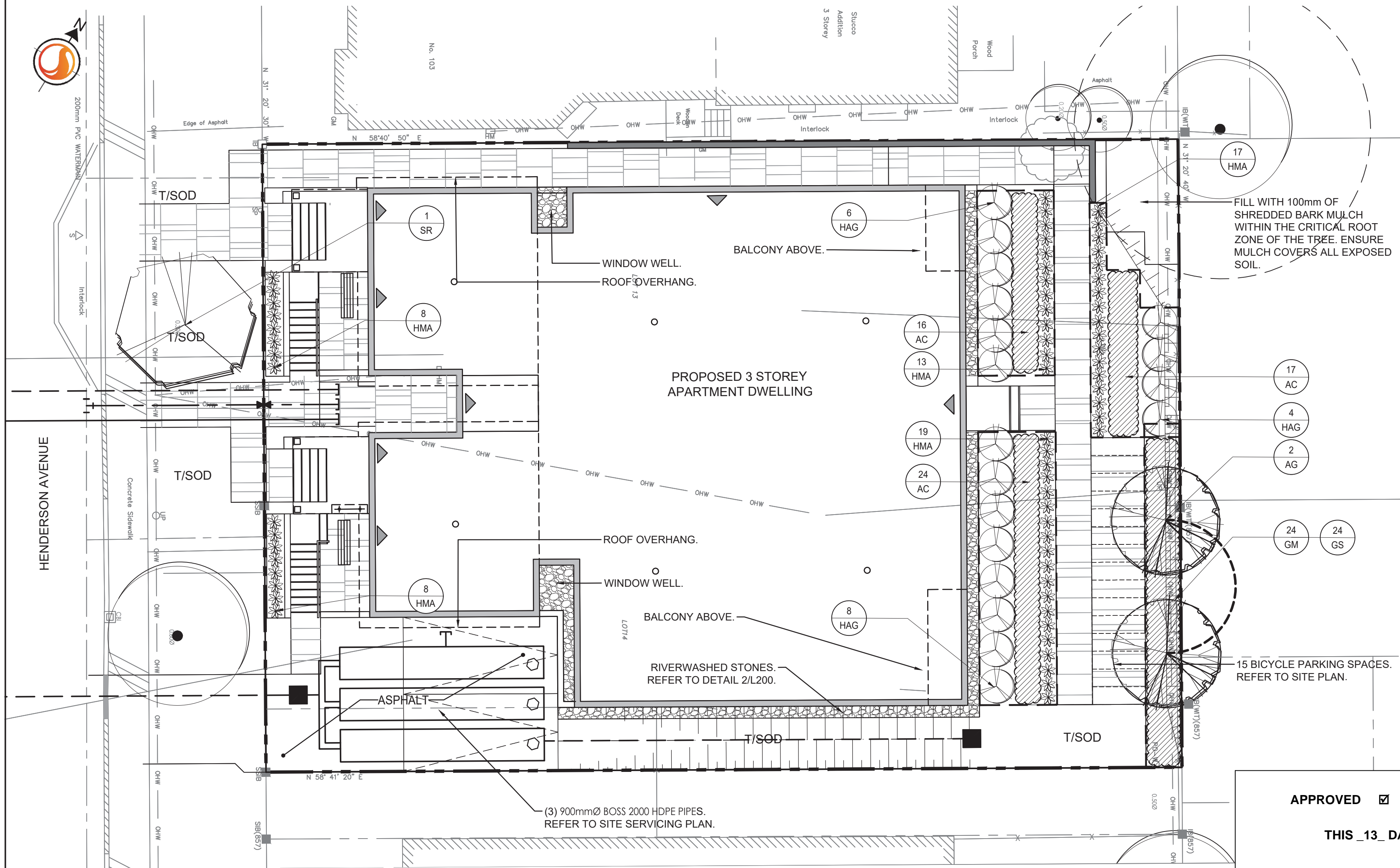
TREE PRESERVATION PLAN

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| Drawing No. | Sheet | Revision |

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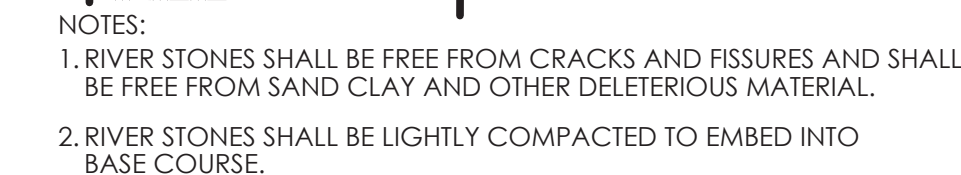


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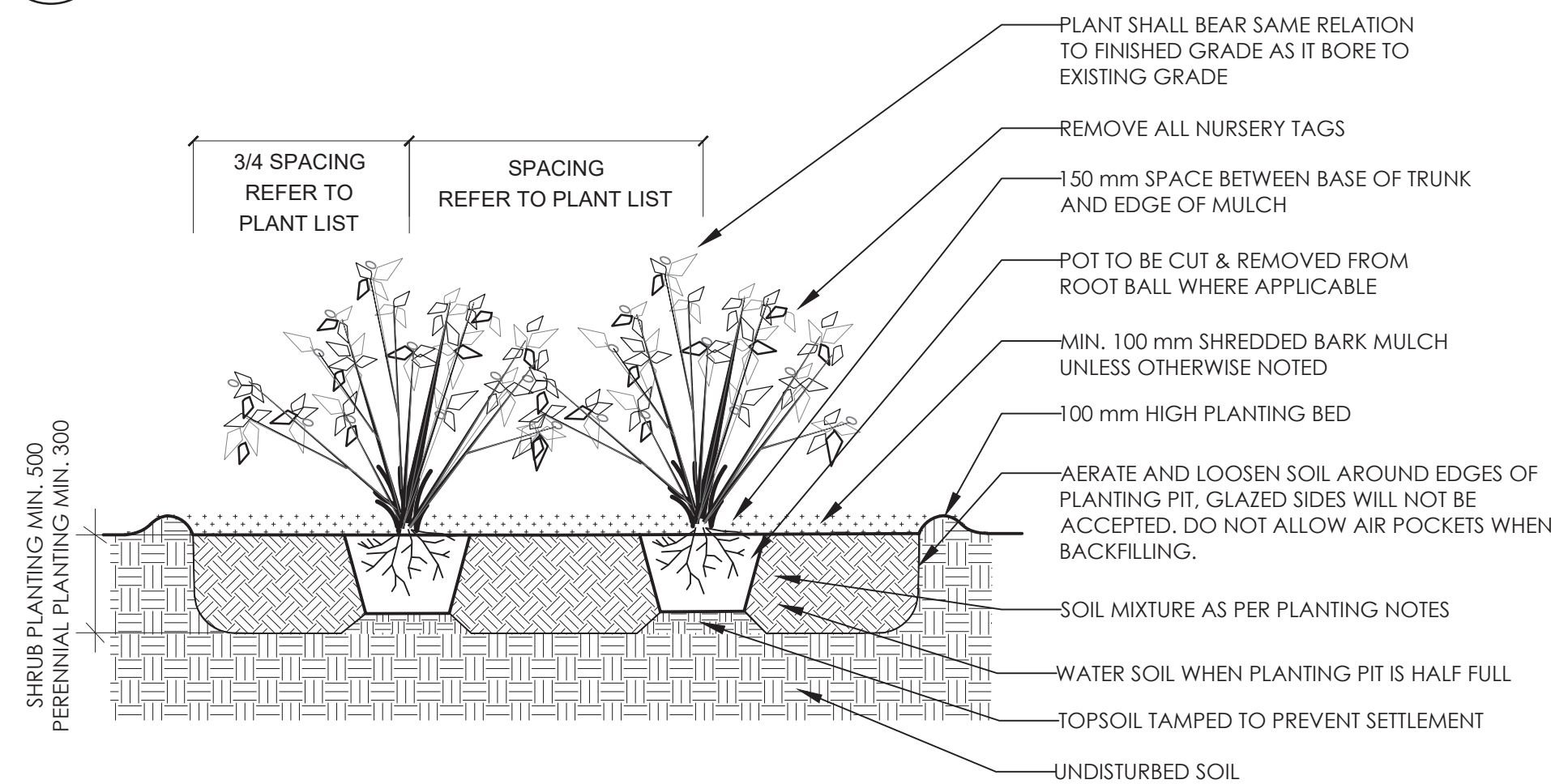
1. REFER TO TREE PRESERVATION PLAN FOR INFORMATION RELATED TO TREE REMOVAL. FREE PROTECTION DIRECTIONS. EXISTING VEGETATED AREAS ON ADJACENT PROPERTIES SHALL REMAIN AND BE PROTECTED BEFORE, DURING, AND AFTER CONSTRUCTION.
2. SOD SHALL BE KENTUCKY BLUEGRASS SOD INSTALLED OVER 135mm OF TOPSOIL. SOD SHALL BE INSTALLED THROUGHOUT WITHIN LIMIT OF WORK AND IN ALL DISTURBED AREAS OUTSIDE THE LIMIT OF WORK. SOD SHALL BE INSTALLED AS PER OPS 803.
3. CONTRACTOR TO LOCATE AND STAKE ALL UTILITIES PRIOR TO ANY WORK ON THE SITE. DO NOT PLANT DIRECTLY ABOVE UNDERGROUND UTILITIES. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT FOR DIRECTION.
4. MAINTAIN A MINIMUM DISTANCE OF 2.0m FROM ALL UNDERGROUND UTILITIES.
5. NO TREES SHALL BE PLANTED UNDER OVERHEAD WIRES.
6. THE LANDSCAPE ARCHITECT MAY ADJUST THE LOCATION OF PLANTING PRIOR TO PLANTING TO MINIMIZE CONFLICTS WITH UTILITIES, DRIVEWAYS AND INTERSECTION VISIBILITY.
7. CONTRACTOR SHALL SUPPLY ALL MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE WORK SHOWN ON THESE DRAWINGS. ANY DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT FOR DIRECTION.
8. DO NOT MAKE SUBSTITUTIONS OF MATERIALS, PRODUCTS OR QUANTITIES WITHOUT PRIOR WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT.
9. THE CONTRACTOR TO MAKE GOOD TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT ANY AREAS DAMAGED BY THE WORK.
10. UPON THE COMPLETION OF WORK EACH DAY, REMOVE ALL DEBRIS, GARBAGE AND SURPLUS MATERIALS FROM THE SITE. KEEP THE SITE CLEAN AND USEABLE AT ALL TIMES.
11. ALL WORKMANSHIP AND MATERIALS (INCLUDING PLANTS) TO BE GUARANTEED FOR ONE FULL YEAR FOLLOWING FINAL ACCEPTANCE OF THE PROJECT.
12. THE CONTRACTOR SHALL REMOVE ALL T-BAR AND WOODEN TREE STAKES PRIOR TO ASSUMPTION BY THE OWNER.
13. AT THE TIME OF INSPECTION FOR ACCEPTANCE ALL TREE PITS SHALL BE CULTIVATED, FREE OR WEEDS, LEAVES, BROKEN BRANCHES AND DEBRIS.

3. THE DETAILS ON THIS SHEET DO NOT REPRESENT ANY PARTICULAR SPECIES.
4. TREES AND SHRUBS AS INDICATED IN THE DETAILS REPRESENT BOTH CONIFEROUS AND DECIDUOUS SPECIES.
5. MATERIAL PLANTED IN GROUP SHALL BE SET IN CONTINUOUS PLANTING BEDS.
6. CENTRE LINE OF SHRUBS SHALL NOT BE CLOSER THAN 2.4m FROM BUILDING FACE TO PROTECT BUILDING FOOTINGS AND INSULATION.
7. PRUNING - TO SUIT SPECIES - PRUNE BRANCHES BY 1/3 TO REMOVE DAMAGED OR OBJECTIONABLE BRANCHES FOLLOWING PROPER HORTICULTURAL PRACTICE. DO NOT PRUNE LEADERS.
8. FIRMLY COMPACT BACKFILLED PLANTING MIXTURE TO ELIMINATE AIR POCKETS OR PREVENT SETTLEMENT.
9. PLANTING MATERIAL QUALITY STANDARDS:
 - ALL PLANT MATERIALS TO CONFORM TO THE CANADIAN NURSERY LANDSCAPE ASSOCIATION FOR VARIETY, SIZE AND CONDITION;
 - PLANT MATERIAL COLLECTED FROM WILD SOURCES WILL NOT BE ACCEPTED;
 - LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REFUSE ACCEPTANCE OF ANY PLANT DISPLAYING POOR GROWTH HABITS, INJURY OR DISEASE;
 - ANY PLANTS THAT DO NOT CONFORM TO THE ABOVE STANDARDS WILL BE PROMPTLY REMOVED FROM THE SITE BY THE CONTRACTOR AND REPLACED WITH MATERIAL OF ACCEPTABLE QUALITY AT NO ADDITIONAL COST TO THE PROJECT.
10. TOPSOIL:
 - SOIL TEXTURE BASED ON THE CANADIAN SYSTEM OF SOIL CLASSIFICATION TO CONSIST OF:
 - CLAY: 14-20%
 - SILT: 0-35%
 - SAND: 45-70%
 - ORGANIC MATERIAL: 4-10%
 - pH: 6-8
 - SPREAD TOPSOIL TO FOLLOWING MINIMUM DEPTHS AFTER SETTLEMENTS UNLESS OTHERWISE NOTED ON DETAILS:
 - 300mm FOR PERENNIALS
 - 500mm FOR SHRUB BEDS
 - 1000mm FOR TREE PLANTING
11. MULCH:
 - MULCH SHALL BE SHREDDED WOOD VARYING IN SIZE FROM 25-125mm IN LENGTH FROM CONIFEROUS TREES,

| QTY | KEY | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|-----|--|------------------------------|--------------|-----------------------------|
| DECIDUOUS TREES - REFER TO DETAIL 4/L200 | | | | | |
| 2 | AG | <i>Amelanchier grandiflora</i> 'Little Princess' | Little Princess Serviceberry | 45 mm [cal.] | W.B.; Plant @ 3000 mm o/c |
| 1 | SR | <i>Syringa reticulata</i> 'Ivory Silk' | Ivory Silk Japanese Lilac | 60 mm [cal.] | W.B.; Plant @ 5000 mm o/c |
| DECIDUOUS SHRUBS - REFER TO DETAIL 3/L200 | | | | | |
| 18 | HAG | <i>Hydrangea arborescens</i> 'Grandiflora' | Hills of Snow Hydrangea | 500 mm [ht.] | C.G.; Plant at 1200 mm o/c |
| PERENNIALS / ORNAMENTAL GRASSES - REFER TO DETAIL 3/L200 | | | | | |
| 57 | AC | <i>Asilbe chinensis</i> 'Amethyst' | Amethyst False Spirea | 1 Gallon | Potted; Plant at 600 mm o/c |
| 24 | GM | <i>Geranium macrorrhizum</i> | Bigroot Geranium | 1 Gallon | Potted; Plant at 450 mm o/c |
| 24 | GS | <i>Geranium macrorrhizum</i> 'Spassart' | Spassart Bigroot Geranium | 1 Gallon | Potted; Plant at 450 mm o/c |
| 65 | HMA | <i>Hakonechloa macra</i> 'Aureola' | Variegated Hakone Grass | 1 Gallon | Potted; Plant at 500 mm o/c |




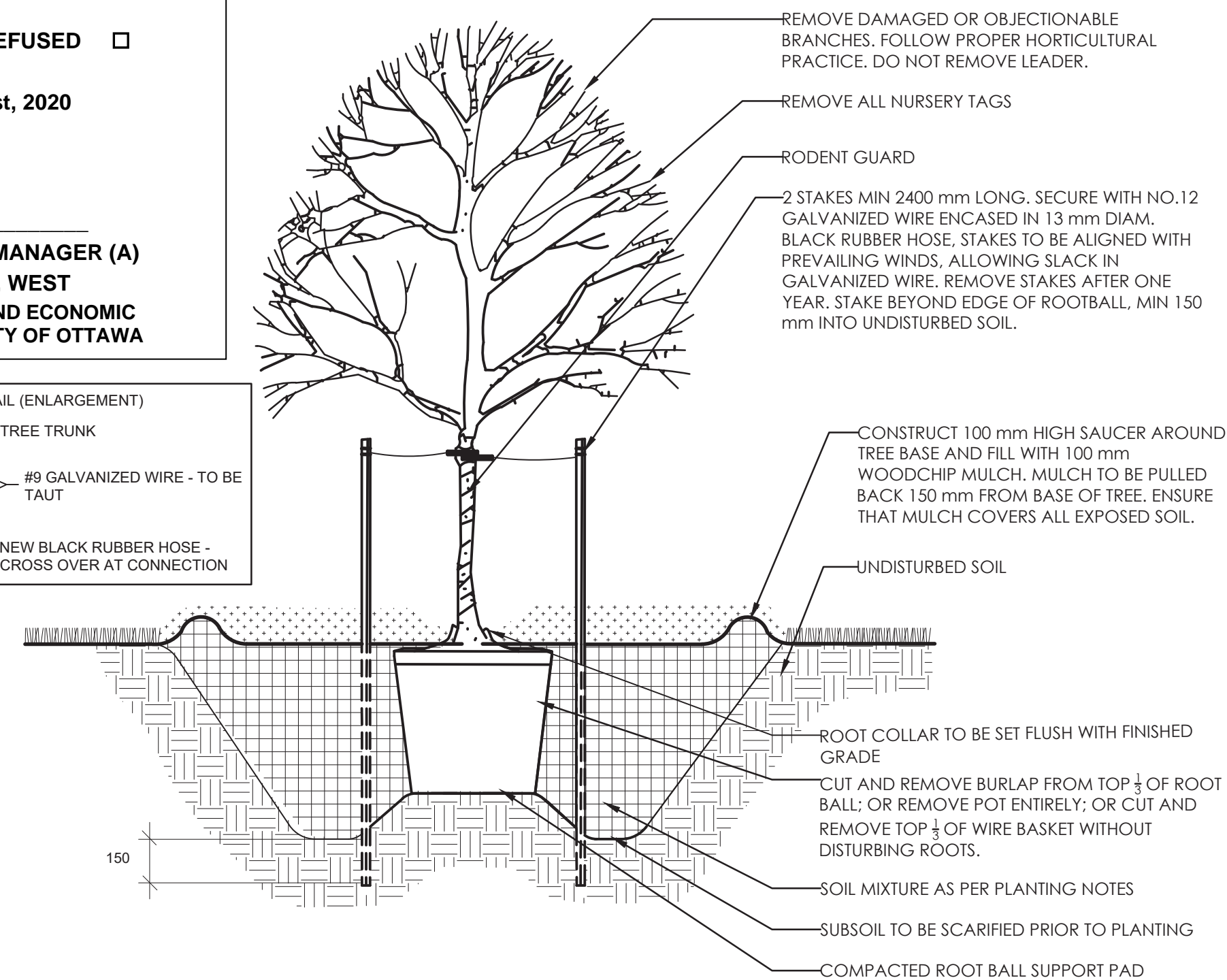
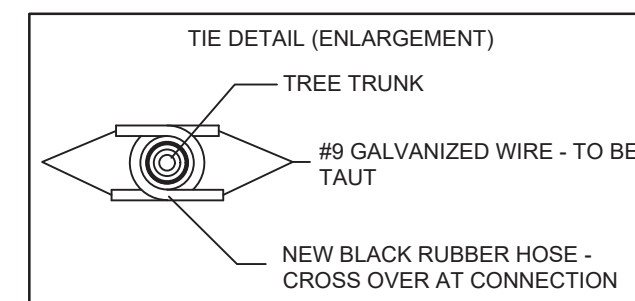
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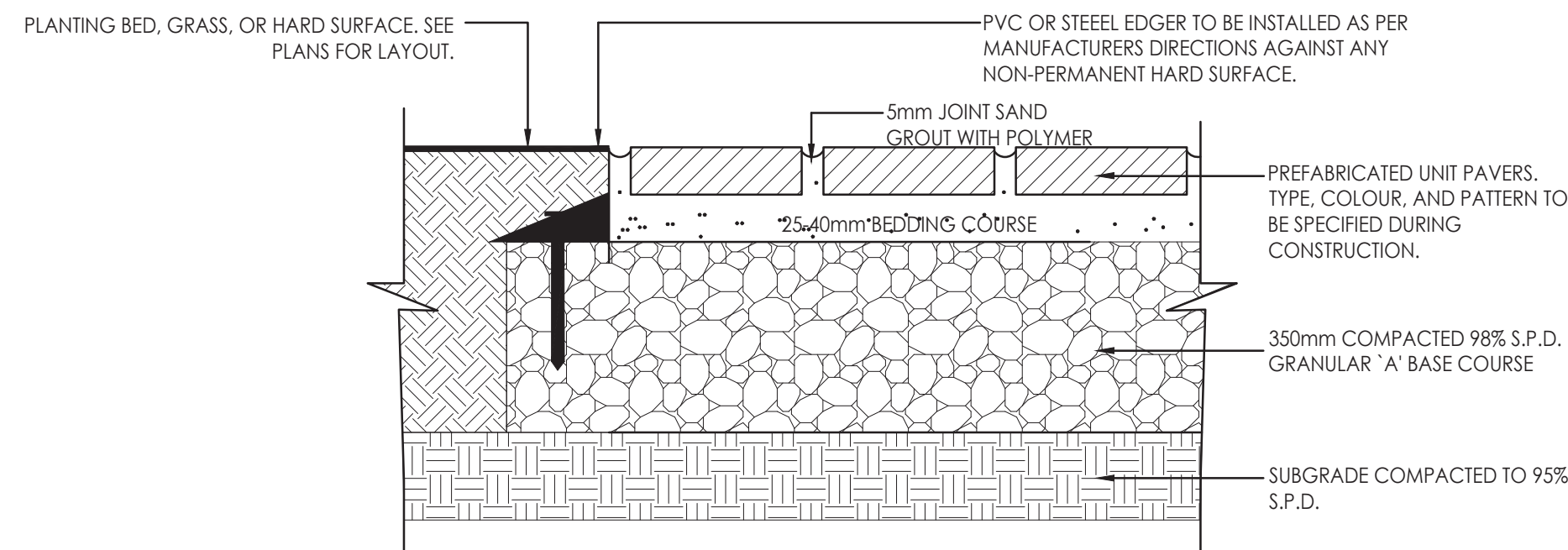
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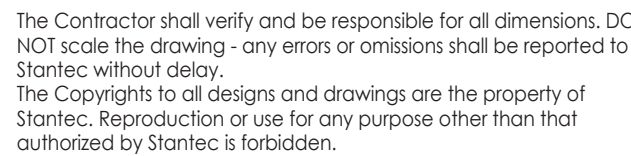

ERIN O'CONNELL, MCIP, RPP, MANAGER (A)
DEVELOPMENT REVIEW, WEST
PLANNING, INFRASTRUCTURE AND ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA



N.T.S.



3 NTS



- EXISTING DECIDUOUS TREE TO REMAIN
- EXISTING SHRUBS AREA TO REMAIN
- PROPOSED DECIDUOUS TREE
- PROPOSED CONIFEROUS SHRUBS
- PROPOSED PERENNIALS
- PROPOSED RIVER WASHED STONES
- PROPOSED UNIT PAVERS
- T/SOD
- PROPERTY LINE
- PLANT SPECIES/QUANTITY KEY

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