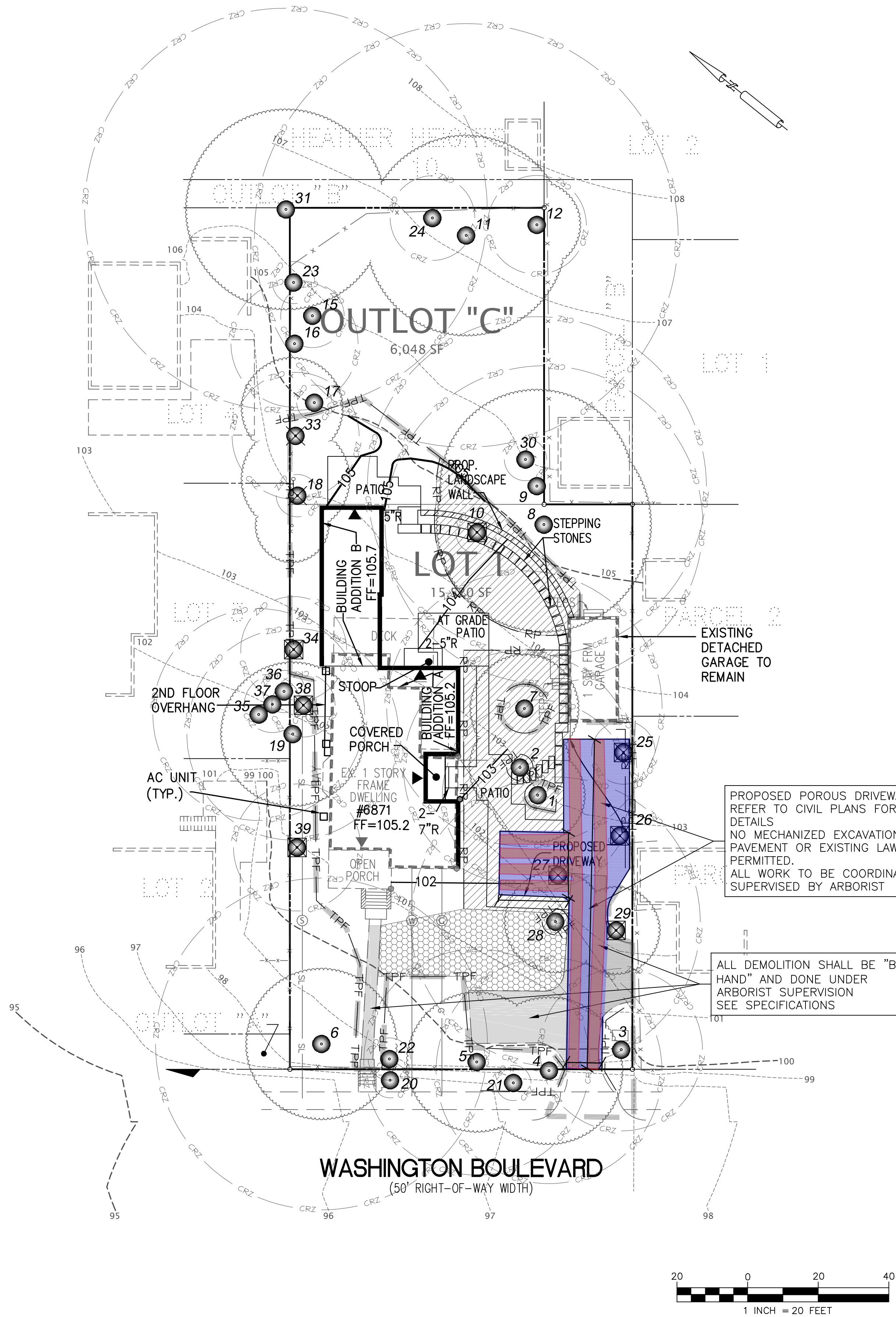


Y:\2011\Hadley-Zadonsky Residence_Arlington.dwg(DWG)D:\GURUG-Hadley_2011.12.08.dwg TPL 12/8/2011 10:46:53 PM PulacC, Davey Resource Group, Land Development Solutions



LEGEND

EXISTING TREE
WITH CRITICAL ROOT ZONE (CRZ)
TO REMAIN

EXISTING TREE TO BE REMOVED

EXISTING TREE TO BE REMOVED BY
ARBORIST (SEE SPECIFICATIONS)

PROPOSED TREE PROTECTION FENCE
(SEE DETAIL & SPECIFICATIONS)

PROPOSED TEMPORARY TREE
PROTECTION FENCE
(SEE DETAIL & SPECIFICATIONS)

PROPOSED ROOT PRUNING
(SEE DETAIL & SPECIFICATIONS)

PROPOSED LOD

PROPOSED ROOT AERATION MATTING
(SEE DETAIL & SPECIFICATIONS)

SPECIAL DEMOLITION REQUIRED
(SEE SPECIFICATIONS)

TEMP ROOT PROTECTION MATTING
(SEE DETAIL AND SPECIFICATIONS)

20 YEAR TREE COVER WORKSHEET	
1 GROSS SITE AREA	21568 SQ. FT.
2 PERCENT OF TREE COVER REQUIRED	20 %
3 TREE COVER REQUIRED	4314 SQ. FT.
4 TREE CANOPY TO BE PRESERVED	4736 SQ. FT.
5 CREDIT FOR TREES TO BE PRESERVED (1.25xcanopy)	5920 SQ. FT.
6 ADDITIONAL CREDITS	SQ. FT.
7 TREE COVER TO BE PROVIDED BY PLANTING TREES	0 SQ. FT.
8 TOTAL TREE COVER PROVIDED	5920 SQ. FT.
9 EXCESS TREE COVER	1606 SQ. FT.

*ONLY TREES #5, 6, 8, 9 & 11 ARE USED FOR CANOPY CREDIT

DRAWN: C.J.H.

DESIGN: C.A.C.

CHECKED: D.A.Z.

REV. NO.
0

BASED ON PLANS PROVIDED BY
WALTER L. PHILLIPS

REV.	DATE	COMMENT

Land Development Solutions
2138 Priest Bridge Ct., Suite 4, Cotton, MD 21114
Office: 410.285.0164
National: 877.818.7337

DAVEY
RESOURCE GROUP
A Division of The Davey Tree Expert Company

HADLEY - ZADONSKY RESIDENCE
6871 NORTH WASHINGTON BLVD
ARLINGTON, VA 22213

TREE PRESERVATION PLAN

CLIENT:
STEPHEN HADLEY &
IRENE ZADONSKY
6871 NORTH WASHINGTON BLVD
ARLINGTON, VA 22213

SCALE:
1" = 20'

DATE:
12/08/2011

SHEET NO:
TP1

THIS PLAN IS FOR TREE PRESERVATION PURPOSES ONLY AND NOT FOR CONSTRUCTION. THE PROFESSIONAL'S SEAL IS INVALID ON ANY PLOT THAT DOES NOT INCLUDE AN ORIGINAL SIGNATURE.

1. GENERAL

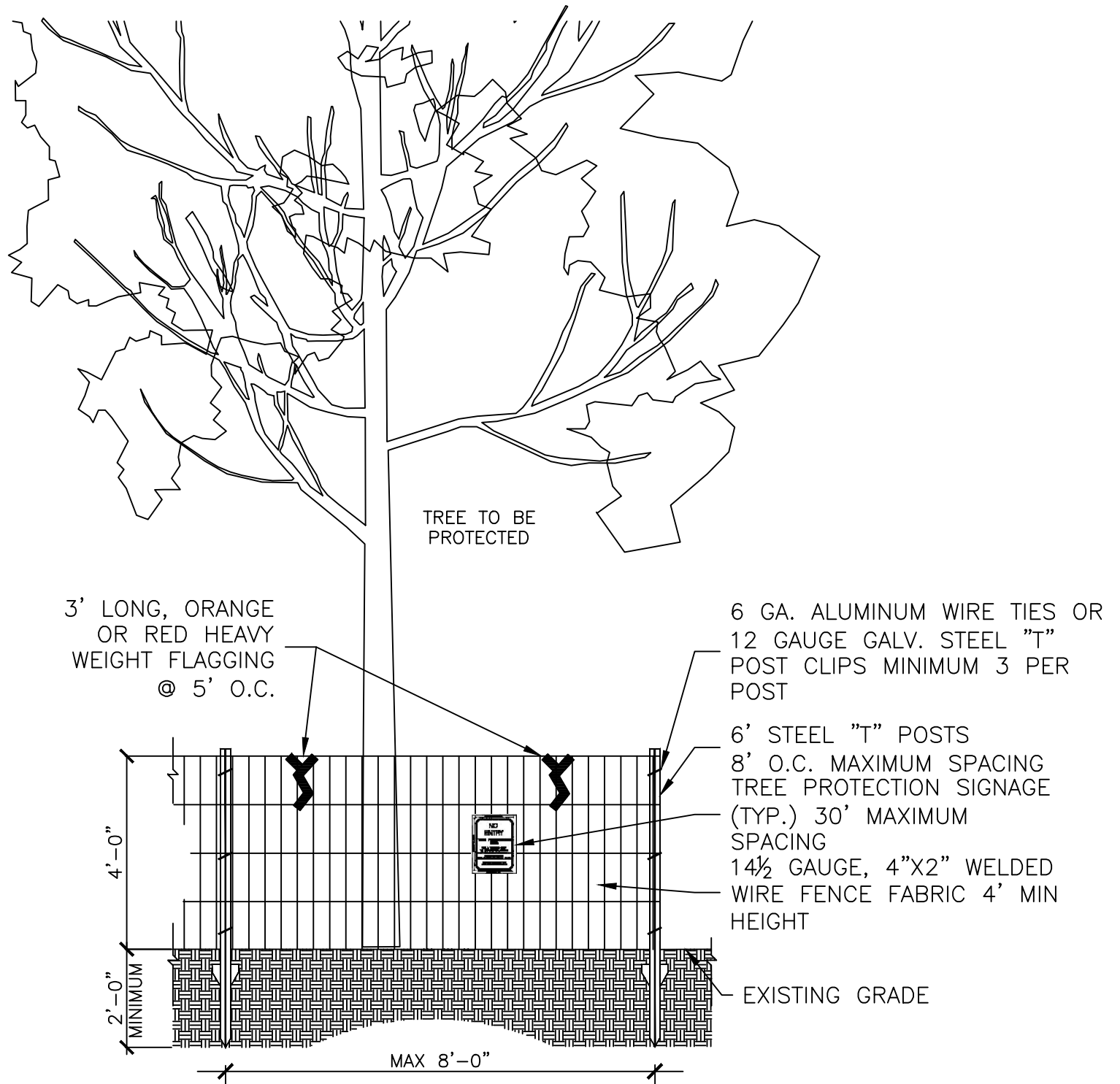
- 10.4. TOPSOIL SHALL NOT BE DISTURBED OR REMOVED. NO GRUBBING, GRADING, EXCAVATION OR EQUIPMENT TRAFFIC SHALL BE ALLOWED IN THE AREA TO RECEIVE RPM. EQUIPMENT MAY TRAVEL ON RPM AFTER IT IS INSTALLED, BUT SHOULD BE MINIMIZED. TRACKED EQUIPMENT SHOULD NOT TURN ON RPM TO AVOID DAMAGE.
- 10.5. MATTING MATERIAL SHALL BE TENAX TENDRAIN 770/2 OR APPROVED EQUIVALENT.
- 10.6. RPM SHALL BE INSTALLED BY A CERTIFIED ARBORIST.
- 10.7. RPM SHALL NOT BE REMOVED BY SITE CONTRACTORS.
11. ROOT AERATION MATTING
- 11.1. PERMANENT MATTING TO PROTECT EXISTING ROOTS AND SOILS FROM PROPOSED GRADE FILLS AND STRUCTURES.
- 11.2. INSTALL A SINGLE LAYER OF MATTING ON EXISTING, UNDISTURBED GRADE. REMOVE DEBRIS BY HAND.
- 11.3. TEMPORARY FENCING (ORANGE PLASTIC OR OTHER) MUST BE INSTALLED IN THE AREAS TO RECEIVE RAM IF FILL IS NOT TO BE PLACED IMMEDIATELY AT THE BEGINNING OF CONSTRUCTION OR THE AREA IS NOT INITIALLY PROTECTED BY TEMPORARY RPM.
- 11.4. TOPSOIL SHALL NOT BE DISTURBED OR REMOVED. NO GRUBBING, GRADING, EXCAVATION OR EQUIPMENT TRAFFIC SHALL BE ALLOWED IN THE AREA TO RECEIVE RAM. EQUIPMENT MAY TRAVEL ON RAM AFTER IT IS INSTALLED AND FILL MATERIAL PLACED, BUT SHOULD BE MINIMIZED.
- 11.5. MATTING MATERIAL SHALL BE TENAX TENDRAIN 770/2 OR APPROVED EQUIVALENT.
- 11.6. RAM SHALL BE INSTALLED BY A CERTIFIED ARBORIST.
- 11.7. RAM IS PERMANENT AND SHALL NOT BE REMOVED BY SITE CONTRACTORS. FILL MATERIAL SHALL BE PLACED DIRECTLY ON RAM.
- 11.8. FILTER FABRIC (SILT FENCE FABRIC) SHALL BE INSTALLED IN 2 LAYERS AS SHOWN IN THE DETAIL (NOT TRENCHED) TO PROTECT THE RAM CORE FROM CONTAMINATION. INSTALLATION OF SILT FENCE FOR EROSION CONTROL SHALL BE COORDINATED WITH THE ARBORIST AND MUST BE PERFORMED BY THE ARBORIST TO PREVENT DAMAGE TO TREE ROOTS FROM TRENCHING OPERATIONS. EROSION CONTROL SOCKS MAY BE USED IN LIEU OF SILT FABRIC.
12. SPECIAL "BY HAND" DEMOLITION PROCEDURES
- 12.1. DEMOLITION OF EXISTING IMPROVEMENTS WITHIN TREE PROTECTION AREAS (TPAS) SHALL BE PERFORMED BY THE CONTRACT ARBORIST OR DIRECTLY SUPERVISED BY A CERTIFIED ARBORIST.
- 12.2. DEMOLITION SHALL BE "BY HAND", USING HAND OPERATED TOOLS OR SMALL EQUIPMENT STAGED OUTSIDE THE TPA.
- 12.3. DEPTH OF DEMOLITION SHALL ONLY BE THAT NECESSARY TO REMOVE DESIGNATED ITEMS. NO EXCAVATION SHALL OCCUR EXCEPT AS NOTED HEREIN. EXCAVATION SHALL NOT OCCUR BELOW THE EXISTING PAVEMENT OR BASE AGGREGATE. IF ROOTS ARE ENCOUNTERED DURING DEMOLITION, EXCAVATION SHALL STOP IMMEDIATELY.
- 12.4. MATERIALS SHALL BE REMOVED FROM TPAS IMMEDIATELY. NO STAGING OR STOCKPILING SHALL OCCUR IN TPAS.
- 12.5. MECHANIZED EQUIPMENT SHALL NOT ENTER THE TPAS.
- 12.6. BACKFILL OF VOIDS FROM DEMOLITION WITHIN THE TPAS SHALL BE LOOSELY PLACED TOPOSOIL ONLY THE AMOUNT OF SOIL NECESSARY TO FILL THE VOID WITHOUT SPREADING OVER EXISTING ADJACENT GRADES SHALL BE ALLOWED.
- 12.7. ROOTS ENCOUNTERED DURING DEMOLITION SHALL BE REVIEWED ON A CASE-BY-CASE BASIS BY THE CONTRACT ARBORIST. THE ARBORIST SHALL PROVIDE APPROPRIATE TREATMENT OR PRUNING METHODS AS NEEDED AND IN GENERAL CONFORMANCE WITH ACCEPTED INDUSTRY STANDARDS AND THIS SECT
13. SSAT EXCAVATION WITHIN CRZS
- 13.1. PROPOSED DRY UTILITIES, LIGHTING CONDUITS, HARDSCAPE, OR SPRINKLERS WITHIN TREE PROTECTION AREAS (TPAS) SHALL BE EXCAVATED BY SUPERSONIC AIRTOOL (SSAT) TO MINIMIZE DAMAGE TO ROOT SYSTEMS.
- 13.2. OWNER, CONTRACTOR, CONTRACT ARBORIST, AND ARLINGTON COUNTY SHALL REVIEW THE PROPOSED LOCATION(S) DURING THE PRE-CONSTRUCTION MEETING.
- 13.3. PRE-WATERING OF THE PROPOSED AREAS OF EXCAVATION DURING SUMMER AND FALL MONTHS IS RECOMMENDED TO MAINTAIN ROOT / SOIL MOISTURE.
- 13.4. THE CONTRACT ARBORIST SHALL PROVIDE A QUALIFIED ARBORIST CREW EXPERIENCED WITH THE SSAT AND UTILITY EXCAVATION TO PROTECT ADJACENT TREES, OPEN THE EXCAVATION, HAND PRUNE MINOR ROOTS, AND IDENTIFY AND PROTECT PRIORITY ROOTS TO REMAIN. COORDINATION WITH THE APPROPRIATE SUB-CONTRACTOR SHALL BE MADE TO DETERMINE APPROPRIATE WIDTH, DEPTH & SEQUENCING, UTILITY INSTALLATION, BACKFILL, COMPLETION, AND COVER.
14. SOIL CARE / FERTILIZATION
- 14.1. INITIAL SOIL TESTING WITHIN TREE PROTECTION AREAS IS REQUIRED. CONDUCT INDIVIDUAL SOIL TESTS FOR SEPARATE TREE PROTECTION AREAS (SMALL ADJACENT AREAS MAY BE TESTED TOGETHER). SOIL TEST SHALL BE A REPRESENTATIVE SAMPLE FROM EACH AREA.
- 14.2. TREATMENTS TO THE TREE PROTECTION AREAS FOR SPECIFIED TREES (SEE TPAK) SHALL BE BASED ON THE RESULT OF THE SOIL ANALYSIS. FERTILIZATION SHALL BE CONSISTENT WITH THE RECOMMENDATIONS OF THE ANSI – 300 (PART 2) TREE, SHRUB, AND OTHER WOODY PLANT MAINTENANCE – STANDARD PRACTICES (FERTILIZATION) 2004.
- 14.3. APPLICATION RATES SHALL NOT EXCEED A RATE OF 1 POUND OF ACTUAL NITROGEN PER 1,000 SQUARE FEET ANNUALLY. FERTILIZER USED SHOULD INCLUDE HUMIC ACIDS, SOLUBLE SEAWEED EXTRACTS AND SOIL BIOLOGICAL INOCULANTS.
15. TREE CONDITION MONITORING INSPECTIONS
- 15.1. CONTRACT ARBORIST SHALL PROVIDE MONITORING OF THE CONDITION OF RETAINED TREES IN TREE PROTECTION AREAS, AND TREATMENT OF DETRIMENTAL CONDITIONS (INSECTS, DISEASES, NUTRIENT DEFICIENCIES, SOIL MOISTURE, ETC.), AS THEY OCCUR, OR AS APPROPRIATE FOR EFFECTIVE MANAGEMENT.
- 15.2. INSPECTIONS SHALL BE PERFORMED AT LEAST MONTHLY DURING THE GROWING SEASON, BEGINNING PRIOR TO CONSTRUCTION AND CONTINUING THROUGHOUT CONSTRUCTION AND FOR AT LEAST ONE YEAR SUBSEQUENT TO COMPLETION OF CONSTRUCTION ACTIVITIES.
- 15.3. A WRITTEN SUMMARY REPORT INCLUDING SPECIFIC TREATMENTS MADE AND RECOMMENDATIONS FOR ADDITIONAL TREATMENTS SHALL BE PROVIDED TO THE OWNER AND PROJECT ARBORIST SUBSEQUENT TO EACH INSPECTION.
16. TREE GROWTH REGULATOR (TGR)
- 16.1. PACLOBUTRAZOL SOIL APPLIED TREE GROWTH REGULATOR (CAMBISTAT® OR EQUIVALENT) SHALL BE APPLIED TO IMPLANTED TREES. APPLICATIONS SHALL FOLLOW MANUFACTURER'S LABEL AND APPLIED INSTRUCTIONS.
- 16.2. TGR REDUCES CANOPY GROWTH WHICH CAN INCREASE FIBROUS ROOT SYSTEM GROWTH OVER 2-3 YEARS. THIS CAN INCREASE TOLERANCE TO DROUGHT STRESS AND IMPROVE ABSORPTION OF NUTRIENTS AND MOISTURE DURING THE STRESS RECOVERY PERIOD.
17. TREE TRUNK PROTECTION WRAP
- 17.1. TRUNKS OF TREES IN CLOSE PROXIMITY TO CONSTRUCTION SHALL BE PROTECTED WITH A SINGLE LAYER OF GEOTEXTILE. GEOTEXTILE SHALL BE DOUBLE SIDED, GEONET CORE WITH NON-WOVEN COVERING (SUCH AS TENAX TENDRAIN 770/2) OR EQUIVALENT.
- 17.2. WRAP SHALL BE NOT LESS THAN 10' HIGH ON TRUNK OR UP TO THE LOWEST LIMB (WHICHEVER IS LESS). EXPOSED ROOT FLARE SHALL ALSO BE FULLY COVERED.
- 17.3. WRAP SHALL BE TIED WITH ROPE OR WIRE. THE MATERIAL SHALL NOT CONTACT TRUNK.
- 17.4. WRAP SHALL BE REMOVED PROMPTLY AFTER CONSTRUCTION.

[illegible]

1. TREE LOCATIONS MAY BE APPROXIMATE. OWNER AND CONTRACT ARBORIST SHALL VERIFY ALL TREE LOCATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND/OR TREATMENT OR REMOVAL.
2. PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO COMMENCEMENT OF DEMOLITION/CONSTRUCTION ACTIVITY. ARLINGTON COUNTY, OWNER, DESIGN TEAM MEMBERS (PROJECT ARBORIST, LANDSCAPE ARCHITECT, ENGINEER AND ARCHITECT), CONTRACT ARBORIST, SITE AND LANDSCAPE CONTRACTORS SHALL ATTEND.
3. THE INSPECTION OF THESE TREES CONSISTED SOLELY OF A VISUAL INSPECTION FROM THE GROUND. WHILE MORE ADVANCED TECHNIQUES ARE AVAILABLE FOR INSPECTION AND EVALUATION, THEY WERE NEITHER REQUESTED NOR CONSIDERED NECESSARY OR APPROPRIATE AT THIS TIME.
4. TREES RATED "POOR" OR "DEAD" THAT ARE NOT RECOMMENDED FOR REMOVAL DUE TO CONSTRUCTION IMPACT MAY WARRANT FURTHER EVALUATION AND/OR TREATMENT OR REMOVAL.

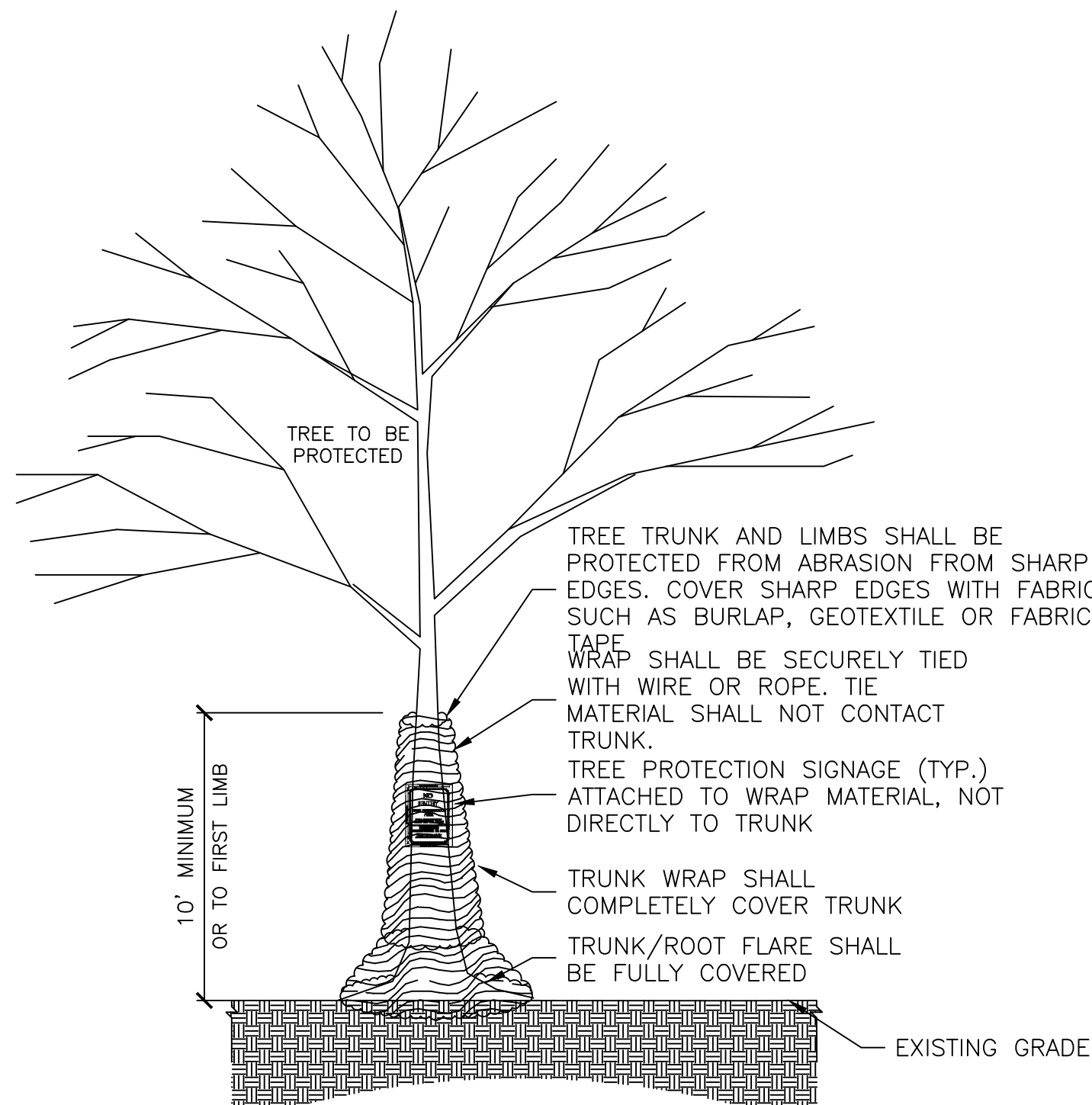
- **Certified Arborist:** Credential of an individual arborist issued and administered by the International Society of Arboriculture. This credential must be current and valid to qualify to use the copyrighted designation of "Certified Arborist". Refer to www.isa-arbor.com for additional information.
- **Project Arborist:** Arboricultural firm contracted to provide site investigation and documentation (tree inventories, assessments, forest stand delineations, etc.) and develop tree preservation plans, methods, details and specifications in collaboration with the project design team.
- **Contract Arborist:** Arboricultural firm contracted to implement the approved tree preservation plans on site. All crews conducting arboricultural operations on site shall consist of at least one Certified Arborist who directly oversees all work by that crew. Arboricultural operations include, but are not limited to, pruning, tree protection device installation and maintenance (fencing, staking, etc.), root pruning, air tool root excavation/exploration, soil care activities, soil testing, mulch application, tree inspections, pesticide/pesticidal applications and tree removal.

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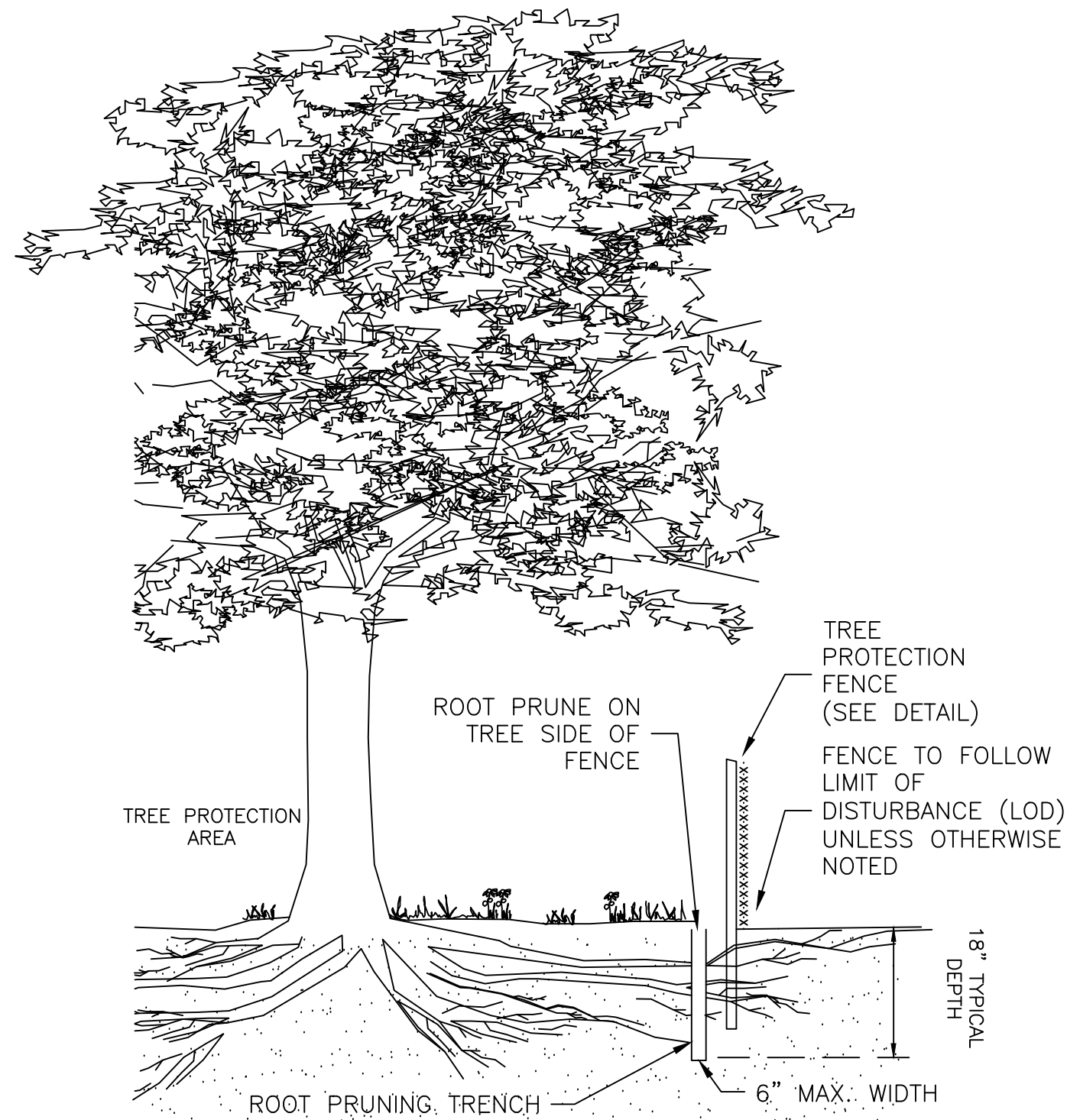
- NOTES:
1. TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION.
 2. WHERE REQUIRED, SUPER SILT FENCE MAY BE USED IN LIEU OF WELDED WIRE FOR TREE PROTECTION PROVIDED IT IS INSTALLED AND MAINTAINED AS A TREE PROTECTION MEASURE AND IS POSTED WITH TREE PROTECTION SIGNS.
 3. TREE PROTECTION FENCE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. REMOVE FENCE ONLY WITH APPROVAL AND AFTER ALL SITE WORK HAS BEEN COMPLETED.

1 WELDED WIRE TREE PROTECTION FENCE (TYPICAL)
TP3 SCALE: NTS



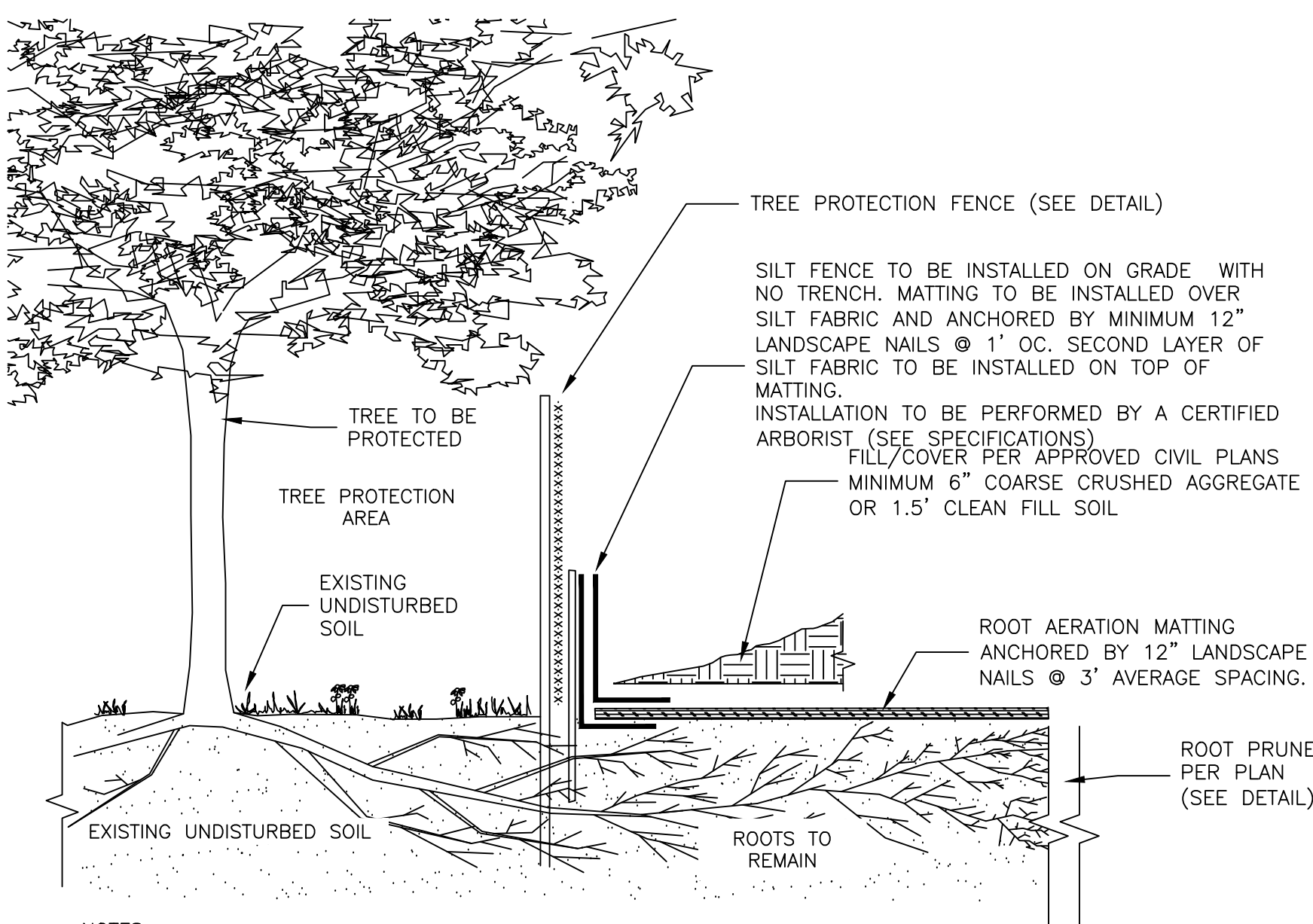
- NOTES:
1. TRUNK WRAP MATERIAL SHALL BE DOUBLE SIDED GEOCOMPOSITE, GEONET CORE WITH NON-WOVEN COVERING (SUCH AS TENAX TENDRAIN 770/2) OR EQUIVALENT.
 2. WRAP SHALL BE INSTALLED BY A CERTIFIED ARBORIST.
 3. WRAP SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION.
 4. WRAP SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. REMOVE WRAP ONLY WITH APPROVAL AND AFTER ALL SITE WORK HAS BEEN COMPLETED.
 5. WRAP SHALL BE REMOVED PROMPTLY AFTER CONSTRUCTION.
 6. MAJOR SCAFFOLD LIMBS MAY ALSO REQUIRE THIS PROTECTION AS DIRECTED BY THE PROJECT ARBORIST.

1 TREE TRUNK & LIMB PROTECTION WRAP (TYP)
TP3 SCALE: NTS



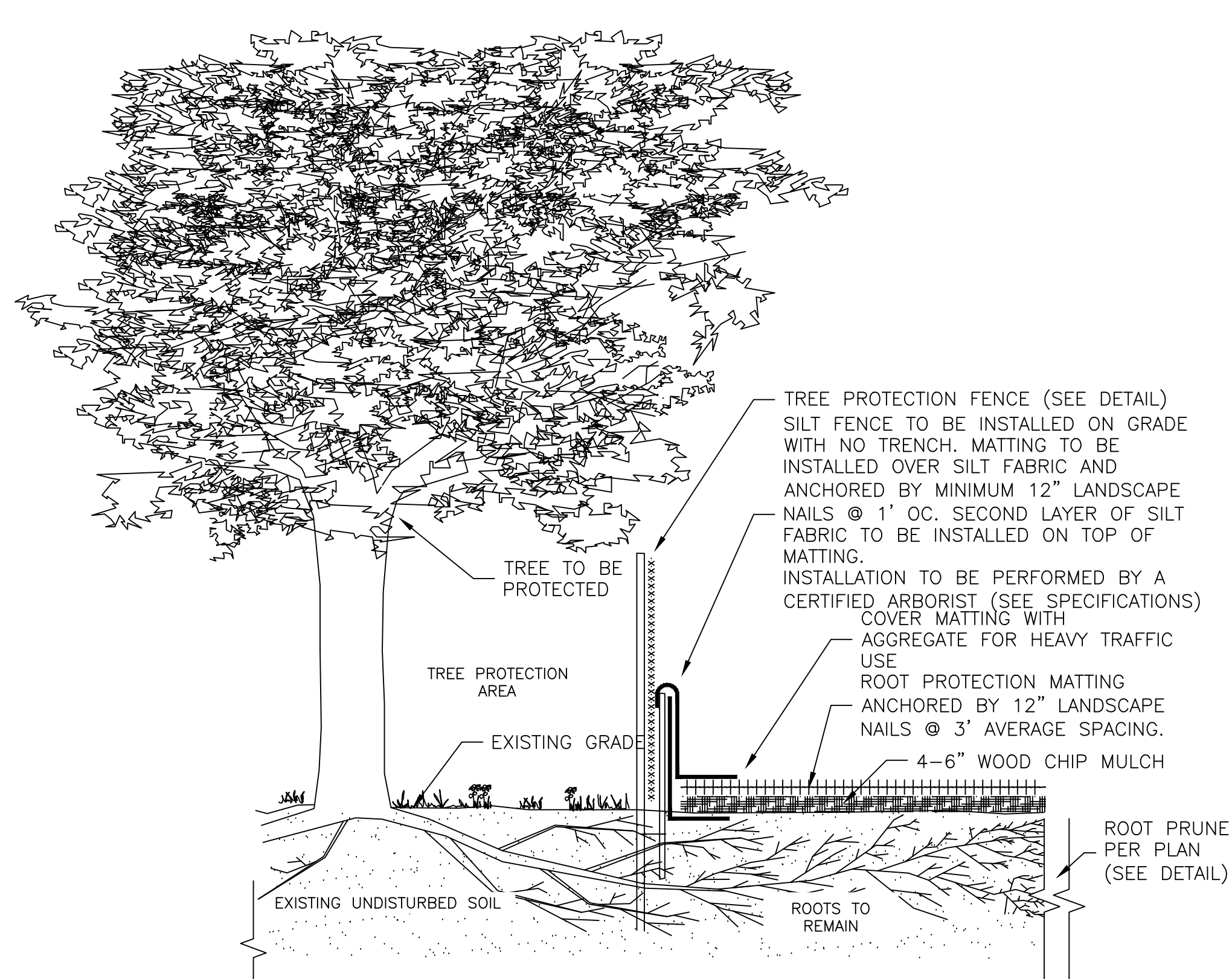
- NOTES:
1. TREE PROTECTION AREA WILL BE DETERMINED AS PART OF THE PLAN REVIEW PROCESS. EXACT LOCATION, DEPTH AND METHODS OF ROOT PRUNING TO BE DETERMINED IN THE FIELD BY PROJECT ARBORIST.
 2. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING.
 3. TRENCH SHOULD BE BACKFILLED IMMEDIATELY OR INCORPORATED WITH SILT FENCE INSTALLATION.
 4. ROOTS SHOULD BE SEVERED BY TRENCHER, VIBRATORY PLOW OR APPROVED EQUIVALENT. ROOTS OVER 1.5" DIAMETER SHOULD BE CLEANLY CUT BY HAND. ROOT PRUNING ADJACENT TO SPECIMEN TREES MAY REQUIRE SOIL REMOVAL BY SUPERSONIC AIR TOOL TO MINIMIZE TREE AND ROOT IMPACTS.

1 ROOT PRUNING (TYPICAL)
TP3 SCALE: NTS



- NOTES:
1. MATTING MATERIAL SHALL BE AMERDRAIN® 700 PERFORATED SHEET DRAIN OR APPROVED EQUIVALENT. MANUFACTURER: AMERICAN WICK DRAIN CORP., 1209 AIRPORT ROAD, MONROE, NC 28110
 2. RAM SHALL BE ANCHORED BY 12" LANDSCAPE NAILS @ 3' AVERAGE SPACING.
 3. RAM SHALL BE INSTALLED BY A CERTIFIED ARBORIST EXPERIENCED WITH THESE SYSTEMS.
 4. PROPOSED RAM IN STRUCTURAL SITUATIONS SHALL BE REVIEWED AND APPROVED BY THE PROJECT CIVIL ENGINEER. ADDITIONAL LAYERS OF MATERIALS, SUCH AS GEONET AND/OR GEOGRID, MAY BE REQUIRED.
 5. ALL SITE PREPARATION/GRADING TO BE DONE USING SSAT TO MINIMIZE ROOT DAMAGE.
 6. ALL ADJACENT WORK SHALL BE SUPERVISED BY CERTIFIED ARBORIST

1 ROOT AERATION MATTING (TYP)
TP3 SCALE: NTS



- NOTES:
1. MATTING MATERIAL SHALL BE DOUBLE SIDED GEOCOMPOSITE, GEONET CORE WITH NON-WOVEN COVERING (SUCH AS TENAX TENDRAIN 770/2) OR APPROVED EQUIVALENT.
 2. RPM SHALL BE INSTALLED BY A CERTIFIED ARBORIST.
 3. TO BE USED FOR DESIGNATED TEMPORARY CONSTRUCTION ACCESS AND STOCKPILE AREAS.
 4. MATTING SHALL BE PLACED ON 4-6" WOOD CHIP MULCH UNLESS OTHERWISE DIRECTED.
 5. FOR HEAVY TRAFFIC AREAS, MATTING SHALL BE COVERED WITH 6-8" WELL GRADED CRUSHED AGGREGATE. ADDITIONAL LAYERS OF GEOTEXTILE MAY BE NEEDED.

1 TEMPORARY ROOT PROTECTION MATTING (TYPICAL)
TP3 SCALE: NTS



** REFER TO CIVIL PLANS FOR DRIVEWAY SECTION AND DETAILS.

** DRIVEWAY DEMOLITION AND INSTALLATION SHALL BE COORDINATED WITH AND SUPERVISED BY THE CONTRACT ARBORIST TO ENSURE ROOT DAMAGE IS MINIMIZED.

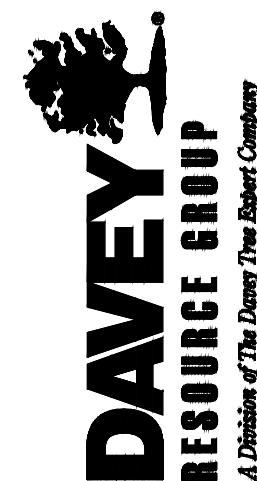
DRAWN:	C.J.H.	REV. NO.	0
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CHECKED:	D.A.Z.		

BASED ON PLANS PROVIDED BY
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REV.	DATE	COMMENT



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HADLEY - ZADONSKY RESIDENCE
6871 NORTH WASHINGTON BLVD
ARLINGTON, VA 22213

TREE PRESERVATION PLAN

CLIENT:
STEPHEN HADLEY &
IRENE ZADONSKY
6871 NORTH WASHINGTON BLVD
ARLINGTON, VA 22213

SCALE: 1" = 20'

DATE: 12/08/2011

SHEET NO:

TP3