

KEY	SPECIES	SIZE	CONDITION	REMAIN OR REMOVE
1	APPLE (Pyrus maius) MULTI-STEM	36"	GOOD	REMAIN
2	TULIP POPLAR (Lirodendron tulipifera)	30"	GOOD	REMAIN
3	WHITE OAK (Quercus alba)	42"	GOOD	REMOVE*
4	NORWAY MAPLE (Acer platanoides) MULTI-STEM	72"	GOOD	REMOVE**
5	SUGAR MAPLE (Acer saccharum) MULTI-STEM	48"	GOOD	REMOVE
6	WHITE OAK (Quercus alba)	36"	GOOD	REMOVE
7	WHITE OAK (Quercus alba)	48"	POOR	REMAIN
8	WHITE OAK (Quercus alba)	36"	POOR	REMAIN
9	WHITE OAK (Quercus alba)	36"	GOOD	REMAIN
10	WHITE OAK (Quercus alba)	36"	POOR	REMAIN
11	WHITE OAK (Quercus alba)-TWIN	36"	GOOD	REMAIN
12	WHITE OAK (Quercus alba)	36"	GOOD	REMOVE
13	WHITE OAK (Quercus alba)	36"	GOOD	REMAIN
14	WHITE OAK (Quercus alba)	42"	GOOD	REMOVE
15	WHITE OAK (Quercus alba)	36"	GOOD	REMAIN
16	WHITE OAK (Quercus alba)	36"	GOOD	REMAIN
17	WHITE OAK (Quercus alba)	36"	GOOD	REMOVE
18	WHITE OAK (Quercus alba)	36"	GOOD	REMOVE
19	WHITE OAK (Quercus alba)—TWIN	42"	GOOD	REMOVE
20	WHITE OAK (Quercus alba)	36"	GOOD	REMAIN
21	TULIP POPLAR (Lirodendron tulipifera)—TWIN	36"	GOOD	REMAIN
22	WHITE OAK (Quercus alba)	72"	GOOD	REMAIN
23	WHITE OAK (Quercus alba)	36"	GOOD	REMAIN
24	WHITE OAK (Quercus alba)	36"	GOOD	REMAIN
25	AMERICAN ELM (Ulmus americana)	60"	GOOD	REMAIN
26	WHITE OAK (Quercus alba)-3 TRUNKS	60"	GOOD	REMAIN
27	WHITE OAK (Quercus alba)	36"	GOOD	REMAIN
28	AMERICAN ELM (Ulmus americana)	36"	GOOD	REMAIN
29	WHITE OAK (Quercus alba)	30"	GOOD	REMA I N
30	WHITE OAK (Quercus alba)	60"	GOOD	REMA I N
31	WHITE OAK (Quercus alba)-TWIN	42″	GOOD	REMAIN
32	WHITE OAK (Quercus alba)	30"	GOOD	REMA I N
33	WHITE OAK (Quercus alba)	40"	GOOD	REMAIN
34	WHITE OAK (Quercus alba)	30"	GOOD	REMAIN
35	RED MAPLE (Acer rubrum)	36"	POOR	REMAIN
36	NORWAY MAPLE (Acer platanoides)	42"	POOR	REMAIN
37	PIN OAK (Quercus palustris)	36"	POOR	REMOVE
38	NORWAY MAPLE (Acer platanoides)—4 TRUNKS	48"	GOOD	REMOVE**
39	NORWAY MAPLE (Acer platanoides)-MULTI-STEM	48"	GOOD	· REMOVE**

* AT FINAL PLAN STAGE, FURTHER ANALYSIS WILL BE CONDUCTED TO DETERMINE IF TREES CAN BE ** AT FINAL PLAN STAGE, FURTHER ANALYSIS WILL BE CONDUCTED TO DETERMINE IF TREES CAN BE SAVED. HOWEVER, THIS SPECIES IS NOT A DESIRABLE SPECIES AND IT MAY BE MORE BENEFICIAL TO REMOVE TREES.

SEQUENCE OF OPERATIONS

PRE-CONSTRUCTION SITE PREPARATION

- 1. FIELD STAKE LIMITS OF DISTURBANCE (L.O.D.) AT 25' INTERVALS.
- 2. REVIEW L.O.D. IN FIELD AND ADJUST IF PRACTICAL.
- 3. INSTALL TREE PROTECTION FENCE AT THE L.O.D. AND IMPLEMENT TREE PROTECTION METHODS AS SHOWN.
- 4. CLEAR AND GRUB AS NECESSARY TO FACILITATE ROOT PRUNING TO A DEPTH OF 2-3 FEET WITHIN THE LIMITS OF THE PROPOSED FOREST RETENTION AREA AND AROUND SPECIMEN TREES TO BE SAVED. CLEAR REMAINING TREES IN A WAY THAT "SAVE TREES" ARE NOT DISTURBED. GRIND STUMPS 12" IN DIAMETER AND LARGER THAT ARE WITHIN 25' OF THE L.O.D.
- 5. DO NOT ATTEMPT TO SAVE TREES WITHIN 25' FROM THE L.O.D. UNLESS, IN THE OPINION OF THE CONSULTING ARBORIST, THEY HAVE A 75% CHANCE OR BETTER OF SURVIVAL.
- 6. PRUNE AND FERTILIZE DESIRABLE 'EDGE TREES' AS PER CONSULTING ARBORIST'S RECOMMENDATIONS AND DETAILS PROVIDED ON THIS SHEET.
- 7. THERE SHALL BE NO STAGING, STORAGE, OR STOCKPILING OF MATERIALS WITHIN THE NONTIDAL WETLANDS OR 25' NONTIDAL WETLANDS BUFFER, OR OUTSIDE OF THE L.O.D.
- 8. REMOVE OR TREAT WITH AN ACCEPTABLE METHOD, NOXIOUS PLANT MATERIAL SUCH AS MULTIFLORA ROSE, TEARTHUMB, AND JOHNSON GRASS BEFORE INSTALLING REFORESTATION PLANTS.
- 9. INSTALL TREE PROTECTION SIGNAGE.
- 10. STABILIZE ANY DISTURBED AREAS USING THE SPECIFIED STABILIZATION MIXTURE WHICH ALLOWS FOR NATURAL REVEGETATION OF FOREST COMMUNITIES.

FOREST CONSERVATION SEQUENCE OF OPERATIONS

- 1. Prior to beginning any grading operations on this site or on a respective lot, there may be a preconstruction meeting held at the site which is to include the Contractor and representatives from Patton Harris Rust & Associates, Inc. (PHR+A). The Howard County Department of Planning and Zoning (DPZ) and the owner will be notified by the Contractor as to the time and place of the field meeting, should they wish to send a representative. The purpose of this meeting will be to review the approved FCP and to field verify the correct Limits of Disturbance (LOD).
- 2. The Limits of Disturbance (LOD) pertinent to the preservation of wooded areas shall be staked in the field with final adjustments being made as necessary to insure adequate protection of the Critical Root Zone of trees designated for retention. Stakes to be used shall be those specified for the "TREE PROTECTION DEVICE" to which approved protective material will be attached. Alternate means of defining the LOD may be used if approved by the DPZ.
- 3. All forest retention areas shall be protected by highly visible, well anchored temporary protection devices (see detail), which shall be securely in place prior to any clearing or grading operations.
- 4. Grading operations or other construction operations which could dislodge or otherwise damage the protective devices shall be avoided along the edges of the LOD lines if possible. Any protective devices which are damaged during site construction operations shall be properly repaired immediately by the Contractor.
- 5. After site grading, utility access road, and driveway construction have been completed, all trees adjacent to the LOD line shall be inspected for indications of crown die-back (summer indicator), damage within respective critical root zones or any dead wood or other conditions which might be hazardous to pedestrians, buildings, utility lines vehicular access ways or parked vehicles.
- 6. Should there be evidence of any damage to tree trunks, branches or the critical root zone of trees within the protected areas, or to isolated specimen trees to be preserved, the damage shall be examined within a period of two (2) days from the date of observance by a licensed tree care professional. Exposed roots should be covered immediately to a depth of 6 — 8 inches with soil, preferably mixed with 50% peat moss or leaf mold.
- 7. Remove damaged, dead or dying trees or limbs only if the trees or limbs pose an immediate safety hazard to buildings, utility lines, vehicles, or access and egress drives or pedestrian areas. Trees designated for pruning or removal shall be pruned or removed using equipment and methods which will not damage or destroy adjacent large trees or understory trees or shrubs designated for retention.
- 8. All temporary forest protection devices will be carefully removed after all general construction, necessary tree surgery, removal of debris, etc. regrading and reseeding of sediment and erosion control disturbance have been completed and acceptance and approval of the work and site conditions have been given by the DPZ.

FOREST CONSERVATION PROGRAM

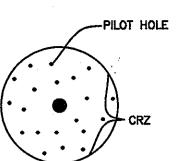
I. <u>OBJECTIVE</u>: IT IS THE OBJECTIVE OF THE FOREST CONSERVATION PLAN OF THE SOBUS PROPERTY TO RETAIN ENVIRONMENTAL INTEGRITY BY PRESERVING EXISTING WOODED AREAS.

II. <u>PRESERVATION:</u>
FOREST PRESERVATION AREAS SHALL BE PERMANENTLY PROTECTED BY FOREST CONSERVATION EASEMENTS.

THERE WILL BE NO STAGING OR STORING OF EQUIPMENT WITHIN THE LIMIT OF DISTURBANCE.

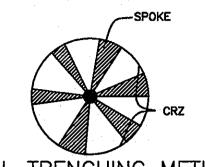
IV. POST CONSTRUCTION MANAGEMENT PRACTICE: A TWO-YEAR POSTED CONSTRUCTION AND MANAGEMENT PROGRAM TO ENSURE FOREST HEALTH IS REQUIRED AND INCLUDES THE FOLLOWING:

- 1-MAINTENANCE OF SIGNS, FENCES, AND TREE PROTECTION DEVICES
- 2-PREVENT UNWARRANTED INTRUSION AND DAMAGE. 3-CAREFUL REMOVAL OF ALL TEMPORARY STRUCTURES AFTER
- 4-ROUTINE INSPECTIONS OF FOREST CONSERVATION EASEMENTS.



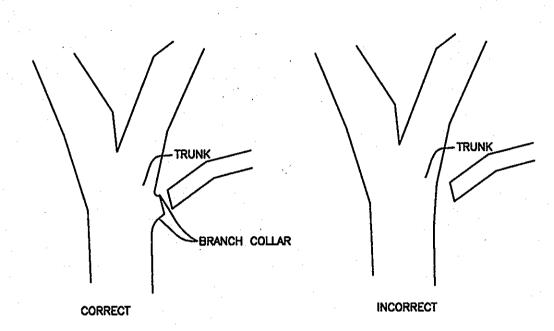
SOIL FRACTURING WITH GRO-GUN

1. USING AIRSPADE, INSTALL PILOT HOLES 4-6" DEEP 8' ON CENTER THROUGHOUT CRITICAL ROOT ZONE (CRZ). 2. USING 185 CFM COMPRESSOR AND GRO-GUN, SEND BURST OF AIR TO PILOT HOLE. 3. APPLY LEAF COMPOST OF EQUAL 2" THICK. 4. SOIL DRENCH AREA WITHIN CRZ.



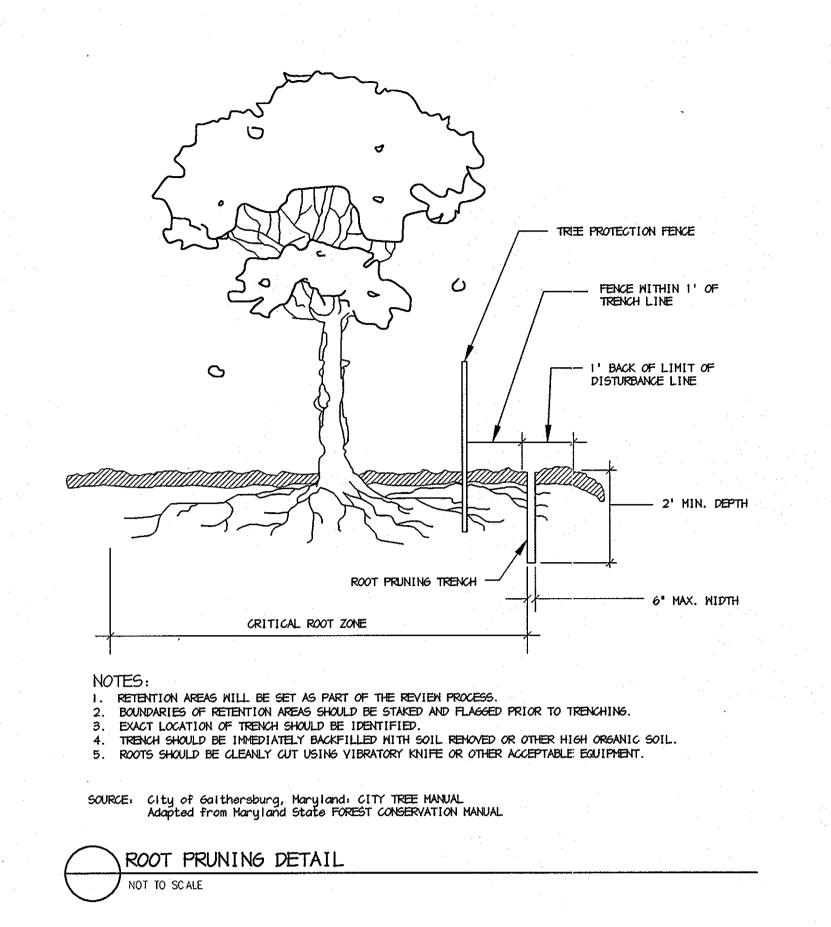
RADIAL TRENCHING METHOD

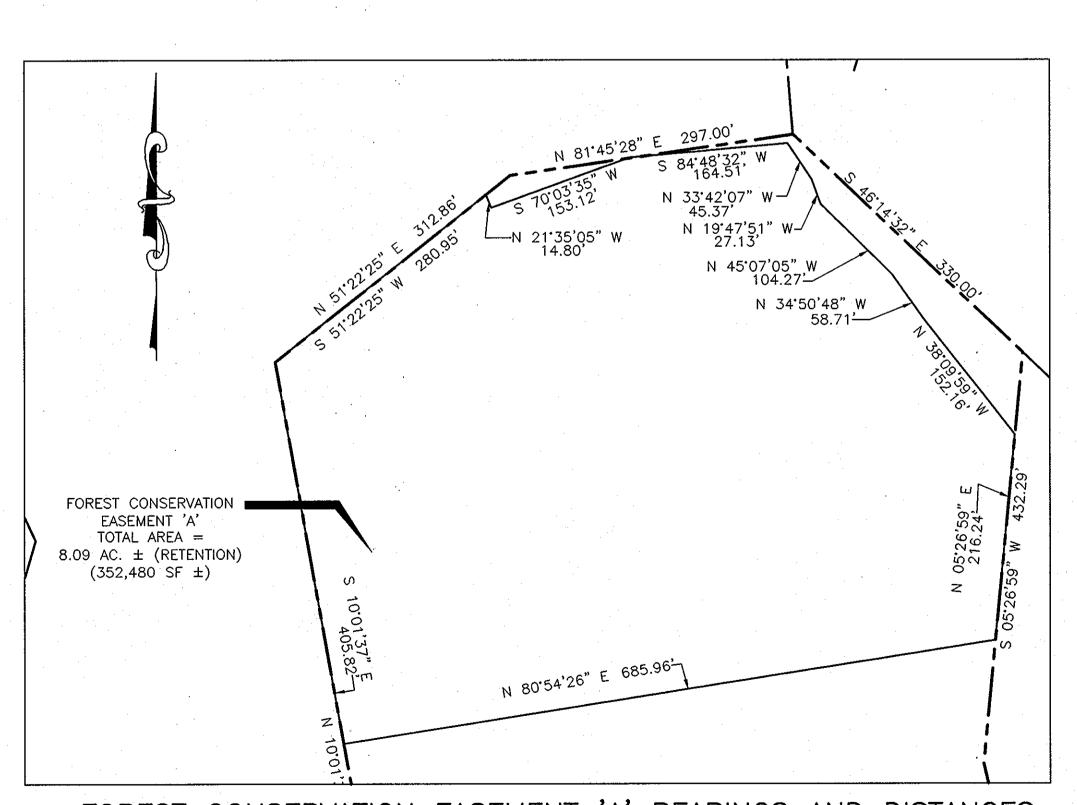
1. USING AIRSPADE, EXCAVATE SPOKES, REMOVE SPOILS AND BACKFILL WITH LEAF COMPOST OR EQUIVALENT.



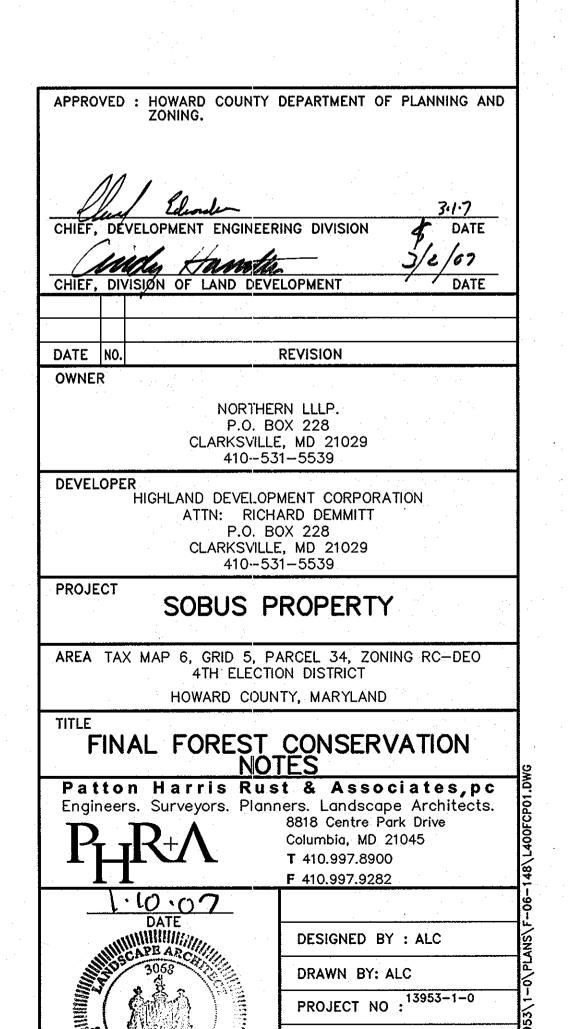
TREE PRUNING METHOD AT BRANCH COLLAR

1. ALL TREES REQUIRING PRUNING SHALL BE PRUNED AS SHOWN. BRANCHES SHALL NOT BE PRUNED BACK TO TRUNK. PRUNE ONLY BACK TO BRANCH COLLAR





FOREST CONSERVATION EASEMENT 'A' BEARINGS AND DISTANCES SCALE: 1" = 100'



DATE: JANUARY 12, 2007

SCALE : NOT TO SCALE

DRAWING NO. 3 OF 3