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A workshop on
**SHORELINE MANAGEMENT
AND STABILIZATION
USING VEGETATION**



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**HOW TO PREVENT INJURY AND DAMAGE TO TREES
BEFORE, DURING, AND AFTER CONSTRUCTION PROJECTS**

BEFORE

1. **START WITH A PLAN.** Discuss the project with a person who really knows trees. Recognize that trees have high value and increase property values.
2. **SORT.** Know which trees must go and which must stay.
3. Consider alternate building plans to help trees that will stay. Consult with the architect. Move a planned walk or even building location. It can be done.
4. Talk to the workers about the need to **PREVENT** tree problems. Let them know that there will be real penalties (\$\$) for unnecessary roughness!
5. Have necessary tree work done in advance on the trees that will remain: fertilize, water, prune, etc. if necessary. This will help the trees to build energy reserves, and it will give you a better view of the final design.
6. Do everything possible to **PROTECT** the trees that will remain. Be innovative. Keep the machines away. Remember that roots go **FAR** beyond the dripline of the trees. Be aware that changing the drainage patterns far from a tree may cause problems later. Consider the flow patterns of ditches or planned new low spots.
7. If a natural area is to remain, do not be tempted to clean out the brush or do anything to the site until the building near it is completed. Beneficial fungi and other plants live along with trees. Use caution if disturbing a site.
8. Some trees may also be wildlife trees. Call the Department of Wildlife for further information.
9. Use all types of barriers to make certain that no machine gets even close to the dripline of the trees. Soil compaction and injury to fine roots can cause slow death. Such injuries are difficult to correct. Don't let them happen.

DURING

1. Keep a close eye on all operators, be quick to let them know you mean business about unnecessary roughness. The word will spread.
2. Be on the alert for spills of all types of liquids, especially gasoline, paints, or oil.
3. Be quick to repair damaged tree protection barriers.
4. If tree trunks, branches, or roots are wounded, have an arborist evaluate the wounds and treat them if necessary.
 - a. On trunk wounds, round out any rough or jagged edges. Do not increase the size of the wound any more than necessary. **DO NOT PAINT.**
 - b. If roots are wounded or torn, make clean cuts to remove wounded wood. **DO NOT PAINT.**
 - c. Shallow bark wounds may be wrapped with wet moss and black plastic if discovered soon after injury.
 - d. Prune broken branches properly.
5. Document the injuries.

6. Do not fertilize wounded or stressed trees. Water injured trees IF soil is dry.
7. If a tree is seriously injured and could constitute a hazard, consider removal rather than allowing it to die slowly.
8. Be on the alert for hazards resulting from falling branches. Even a small branch can kill if it falls on someone.
9. Keep talking about tree injury prevention to your people. Let them know you really mean it.
10. Avoid grade changes when possible.
11. Tunnel through tree roots rather than ditching when installing power, water, and phone lines.

AFTER

1. KEEP YOUR WORD ABOUT UNNECESSARY ROUGHNESS. Monetary penalties will be an effective deterrent to abusive construction practices.
2. Treat wounds.
 - a. Scribe properly. Do not increase the size of the wound any more than necessary.
 - b. Prune injured branches by making proper cuts. If it is necessary to remove more than one-third of the LEAF AREA of a branch, cut the branch all the way back to the next major junction or to the trunk.
 - c. Consider wet moss and black plastic treatment to cover recent bark wounds.
3. Check for hazard trees. Of most serious concern should be a tree that has developed cracks, especially if they are 180 degrees apart on the trunk or on large, horizontal-growing branches.
4. Be cautious when removing all tree protective barriers. Don't cancel all the careful planning and protection by carelessness now.
5. Consider proper cabling and bracing of injured trees, especially if vertical cracks have developed where large limbs have been pushed or where tight crotches split.
6. Do everything possible with fences, barriers, etc. to keep people, machines, and cars far away from trees.
7. Have trees checked regularly by an arborist. Consider a periodic monitoring schedule, with additional inspection after major storms.
8. Have a sound maintenance plan in place and make sure it is followed.

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