Tree Protection Plan

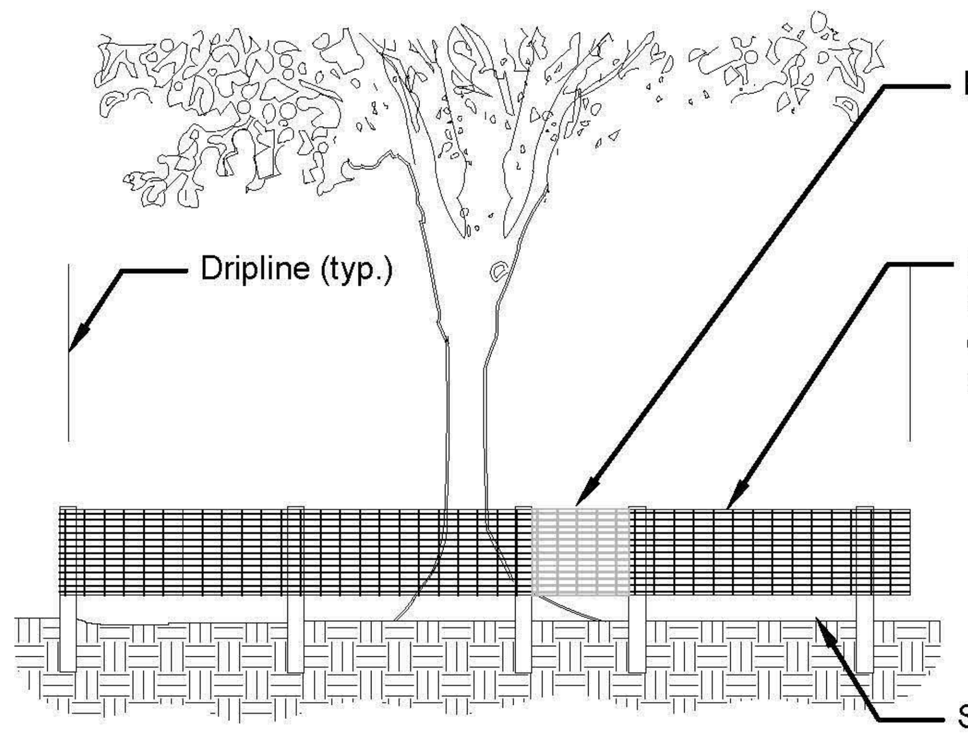
Prior to clearing any of the property for development, the contractor will do the following items:

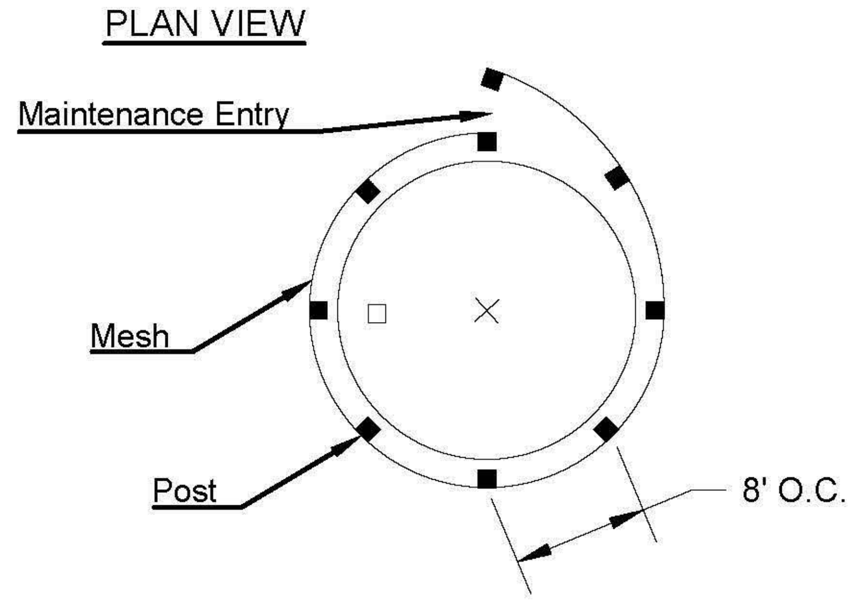
Clearly identify and tag all trees using either plastic ribbon tied around the tree trunk or a tag that is attached to the tree trunk. The numbers shown on each tag shall correspond to the number identified on the Tree Disposition Tabular and/or the Tree Survey.

Prior to site clearing and tree removal, trees to be preserved, mitigate, relocated on-site, relocated off-site, or removed shall be identified using different color plastic ribbon or tag.

Place barricades to protect the root zones of the native vegetation to be preserved. All barricades are to remain in place until all construction activities are complete.

Trees to be preserved shall be barricaded with a minimum 3-foot high plastic mesh (orange OSHA) supported by 5-foot long rebar or 2"x2" wood stakes or equivalent as approved in conjunction with the Final Site Plan or Final Subdivision Plan.



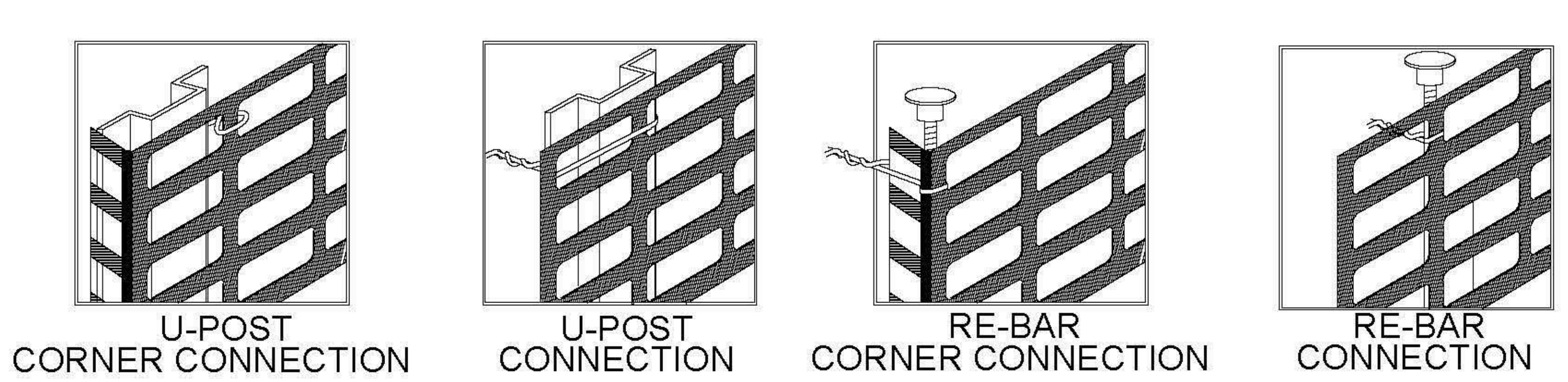


Soil Application:
5 ft tall #14 gauge metal u-post
Color: green
Driven into the ground 1 ft

Asphalt Application:
5 ft tall #5 rebar with plastic safety cap.
Driven into the ground 1 ft

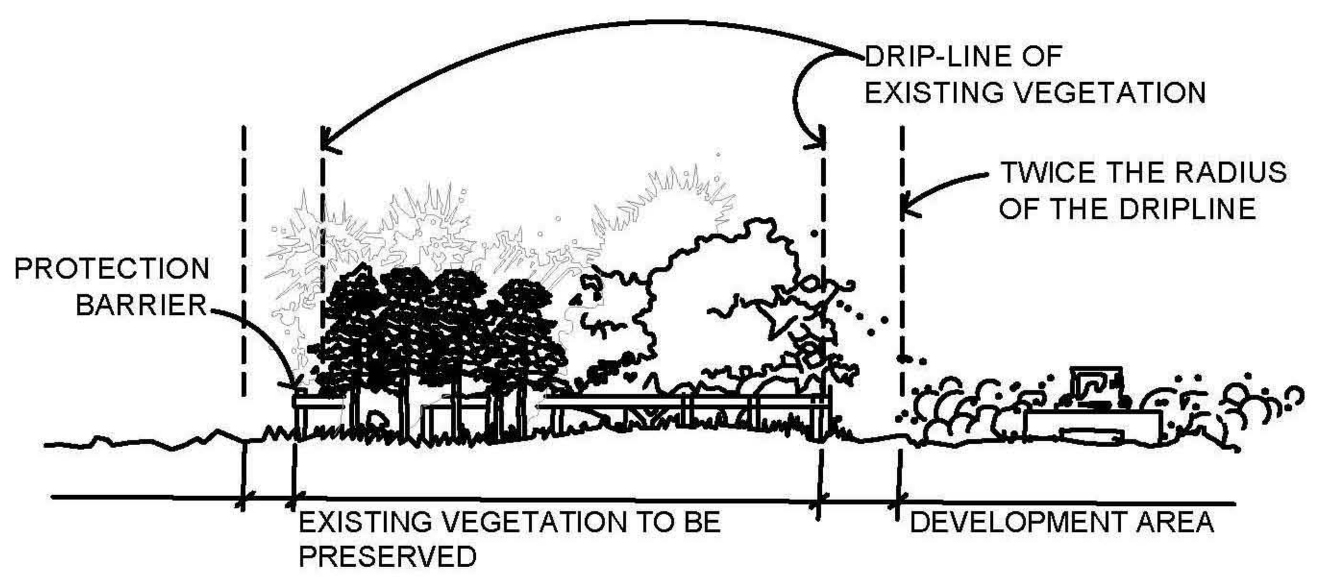
Installation Notes:
A. Space posts every 8 ft.
B. Secure fencing to post with nylon cable ties

Plastic and/or wood strips may also be used to provide additional support and protection between ties and posts.



TREE PROTECTION BARRIER DETAIL

No heavy equipment or machinery is to be used, nor any construction activities, or grade changes occur within twice the radius of the dripline of native trees which are to be preserved in place.



Protective barriers shall remain in place until they are authorized to be removed by Palm Beach County or receipt of a CO.

There shall be limited development within tree preservation areas:

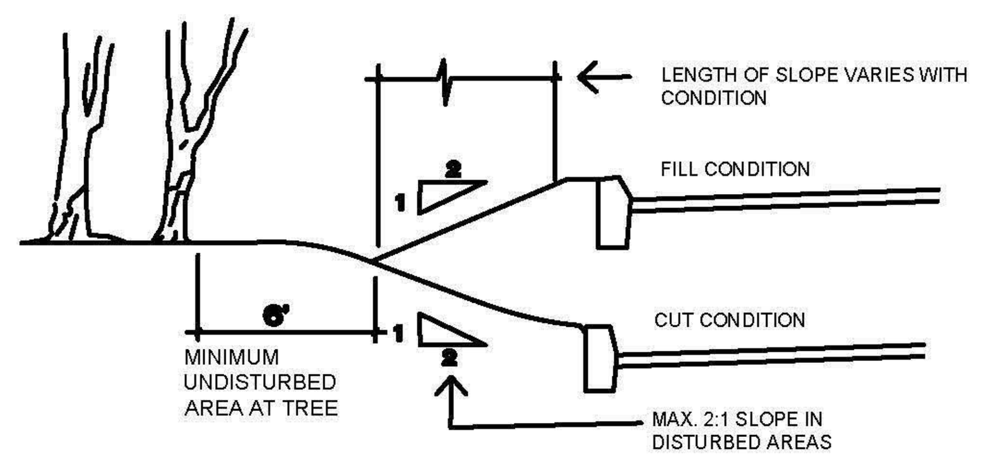
- maintained in its natural state
- provide permeable landscape natural. i.e., grass, mulch
- conform to governing landscape code.

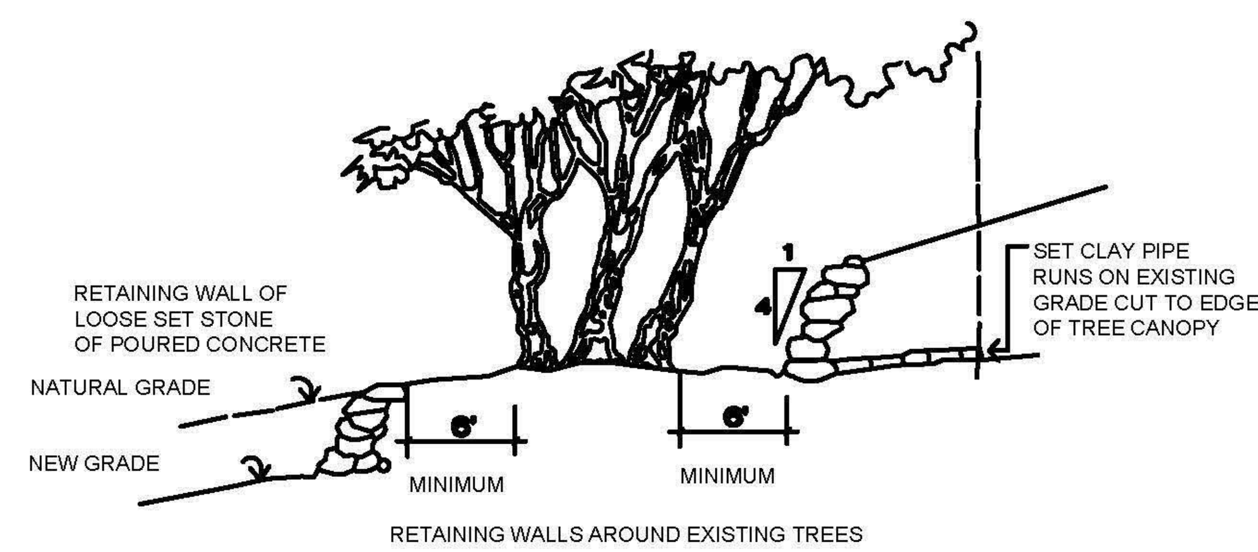
There will be no attachment of signs, etc. to vegetation unless of a non-damaging character.

Prohibited species are to be removed by hand ONLY in preservation areas, and any herbicide applications used should follow label instructions.

No grade changes shall be made within tree preservation areas, which require trenching or cutting of roots unless conditioned. Utility lines shall be installed to protect root systems as much as possible.

No removal of soil or fill in tree preservation areas shall occur.





No clearing shall commence until all protection devices are installed , inspected and approved by the Zoning Division and Environmental Resource Management Department.

TREE RELOCATION PROGRAM

Plant Species Requirements

Live Oaks - Best time to move is in their dormant season. Worst time to move is in the spring because of their flush of new growth and lack of precipitation. They should be root pruned at least two weeks in advance of the move and need to be watered in heavily the first two weeks after transplanting.

Root Pruning and Transplanting

When it is determined that a tree or palm needs to be transplanted, it is beneficial and sometimes required that the plant be root pruned. Root pruning is done to reduce the size of an existing root ball in preparation for transplanting. The root ball is reduced to create a new root system large enough to sustain life in the tree/palm while making its move more effective for transportation. The time it takes for the root system to develop before transplanting will vary from tree to tree, depending on soil moisture content. An estimated wait time follows in the schedule listed below.

1. Clear the area around the tree that has been selected.

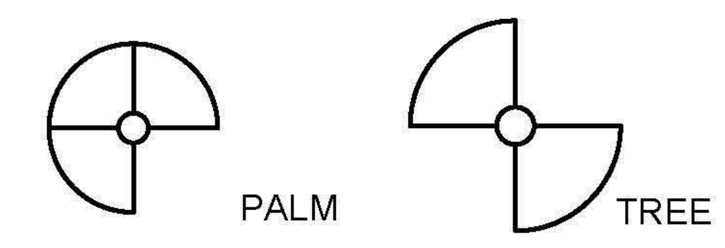
2. Determine the size of the root ball that is being prepared.

Tree Caliper	Root Ball
2-4"	36-42"
4-6"	42-48"
6-8"	48-60"
8-10"	72-84"
12-14"	84-96"
14-16"	96-108"
16-18"	108-120"
18-20"	120-132"
20-24"	132-144"
24-28"	144-156"
28-32"	156-168"
32-36"	168-180"

Sabal Palms	4' Root Ball
Coconut Palms	4-5' Root Ball
Queen Palms	4' Root Ball
Canary Island Date Palms	5-6' Root Ball
Reclinata Palms	6-8' Root Ball
Paurotis Palms	6-8' Root Ball
Sago Palms	3-4' Root Ball
Royal Palms	5-6' Root Ball

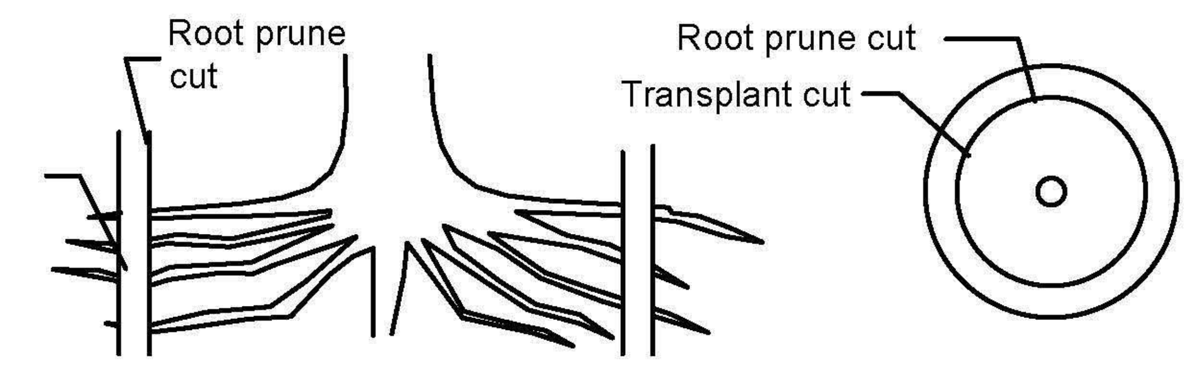
3. Palms may be cut on three sizes leaving the open side toward the strongest northeast winds.

4. Broadleaf trees should be cut on two sides initially opposite each other.



Transplant cut

5. Once the ball size has been determined, mark the spot around the ball and prepare for a 1' trench around the tree. Use sharp spades for root pruning and do not cut under the root ball. Leave old cut roots on top of root ball.



6. Fill trench with existing soil with 1/3 peat humus mixed in. Leave a depression to hold water.

7. Irrigate with a mist head at root ball to help promote feeder roots and maintain watering.

8. Wait time after root pruning until transplanting per individual specifications, for differing types of plant material.

Ficus Trees	6 weeks to 90 days
Palms	6 weeks to 90 days
Oaks, 6" and under	6 weeks to 90 days
Oaks, 6" - 12"	90 days to 6 months
Oaks, 12" and above	6 months to 1 year

9. Fertilize top of ball with milorganite after root pruning.

10. Some bracing may be required after root pruning.

11. A full top will encourage feeder root growth. Previous to transplanting, remove enough top growth to balance the smaller root system. Thin out and trim back unwanted foliage and branches.

12. Cut trench for transplanting outside of root pruned trench to allow for feeder roots.

13. Lift tree from one side to break suction and peel off root ball. If it doesn't break then dig under to sever roots.

Specifications:

1. Contractor shall be responsible for locating any and all underground utilities or obstructions prior to commencing work. In case of conflict with proposed work, notify landcape architect prior to commencement of work.

2. Contractor shall provide adequate irrigation to assure the healthy establishment of relocated trees.

3. Pruning of limbs shall occur only as necessary to facilitate relocation and shall maintain the natural shape and charracter of tree.

4. Finish grade for top of tree plug shall meet the proposed finsih grade after relocation.

5. All plant materials shall be relocated to freshly dug holes with similiar size and type of tree moving equipment. The holes should be filled 1/3 with water, place tree, back fill and water in thoroughly, being sure to avoid air pockets. Provide 4"-6" dish around newly dug plant material to retain water. Water thoroughly after planting as specified.

6. All trees exhibiting shallow root systems shall be staked as required.

7. Prune, thin out and shape relocated trees, shrubs and understory in accordance with desired effect of the landscape architect and to retain natural character. Remove all vines and exotic vegetation. Maintain relocated plant materials for a period of not less than 90 days. Maintain by watering, removing of exotic vegetation or weeds, providing insecticide applications and mulching.

8. The contractor shall protect trees during relocation procedures from scrapes, scars and undue breakage. Understory plant material moved with primary species shall be protected against damage.

9. Landscaping contractor shall provide a one (1) year warranty on all relocated material.

PBC Zoning Stamp:

PBC Amendments:

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Landscape Architecture
Communication Graphics
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#LCC000035

Palm Beach Park of Commerce PIPD
Surf Ranch
Palm Beach County, FL
Preliminary Regulating Plan - Tree Protection Plan

Date:	1-18-17
Project No.:	80-026.148
Designed By:	KWK
Drawn By:	KWK
Checked By:	JB/CW

Revision Dates:
05-23-17 DRO Submission