

## Landscaping Requirements

In an effort to clarify the landscaping requirements that the Architectural Review Committee has for all residential submittal, we have listed the required information for all submittal, in order that proper evaluation and eventual approval by the committee can be given.

### Plan submittal

Accompanying each residential submittal, a professional designed landscape plan describing and/or indicating the following minimum landscape elements is required.

1. All areas to remain wooded an/or in they're undisturbed state, upon completion of the residence must be shown on the landscape plan.
2. All areas to be sodded must be shown. Keep in mind the sod must be installed to meet the existing street pavement.
3. All planting areas, shrubs, ground cover, etc., must be shown on the plan and meet the following minimum requirements.
4. In addition, on all corner lots and on lots abutting a golf course, or a waterway additional as specified will be required in the rear or side yard on sheet # 7.
5. On lots abutting other lots to the back and (both) sides, no rear yard landscaping is required, but is encouraged.
6. Reference Ordinance No. 2000-23 for tree requirements.
7. On lots abutting a main street such as Belle Terre Parkway, White View Parkway, Rymfire Dr., Etc., if the natural buffer in the rear is removed additional landscaping will be required in the rear yard.

All shrub plantings will be installed at a minimum of 3 to 4 gallon sizes, equal to or better than Florida grade # 1. The overall height of all shrubs should be approximate 24" to 30" in height when installed and 18" to 25" in spread. All ground cover plants are to be installed at a three gallon size.

All plants will be healthy specimens and native to the area. Shrub planting should be installed to improve the over all appearance of the house and exact quantities depend upon the house elevation and the amount of natural vegetation to remain.

ORDINANCE NO. 2000-023

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALM COAST, FLORIDA, AMENDING CHAPTER 5.01.00 ("LANDSCAPE AND BUFFER YARD REQUIREMENTS") AND CHAPTER 6.01.00 ("TREES") OF THE CITY LAND DEVELOPMENT CODE; PROVIDING ADDITIONAL LANDSCAPE BUFFERS ALONG PARKWAYS AND ARTERIAL STREETS; PROVIDING LANDSCAPE BUFFERS BETWEEN DIFFERENT LAND USES; REPEALING INCONSISTENT ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE

IT IS HEREBY ORDAINED BY THE CITY OF PALM COAST:

Section 1: The City Council finds that Policies 10.1 through 10.8 of the City's Comprehensive Plan require the adoption of Land Development Regulations for roadway buffers, landscape and natural vegetation buffers, vegetative berms, fences, walls and screens to maintain the quality of existing and proposed residential areas and to minimize or protect against the impacts of commercial, office or industrial land uses.

Section 2: Section 5.01.04 of the Land Development Code is amended to provide:

**5.01.04 Landscape development standards**

(1) Where this section requires landscape development, an applicant for development approval shall submit a landscape plan showing proposed landscape areas for review and approval by the City, concurrent with an application for subdivision or site plan review or, if not previously reviewed, with an application for building permit. Such a plan shall be required for all new development subject to landscape requirements, including the expansion of existing development and, if required, with application for a building permit for rehabilitation/renovation projects.

(2) *Landscape area requirements.* Multifamily residential, mobile home park, office, commercial or public land uses shall devote a minimum of fifteen (15) percent of the total developed area to landscape development with landscape development of five (5) percent of the total developed area contained within the interior area of the site.

(3) *Industrial land uses.* Industrial land shall devote a minimum of ten (10) percent of the total developed area to landscape development.

(4) *Buffers, Offstreet parking and vehicle use areas.* Offstreet parking facilities and other vehicle use areas, excepting permitted accessways, shall meet the following requirements.

Landscape buffers shall be established and maintained in accordance with this section.

(a) **Perimeter requirements:**

~~1.~~ **Front perimeter landscape areas.** A 20-foot-wide strip of land, located between the front property line and any building or vehicular use area shall be landscaped as required in this section, along all streets, except where this section specifically requires an additional width. Width of sidewalks shall not be included or counted as part of the front perimeter setback area.

2. **Side and rear perimeter landscape areas.** A ten-foot-wide strip of land, located between the side and rear property lines and any building or vehicular use area, shall be landscaped as required in this section, except where this section specifically requires an additional width. The required width shall be increased to 25 feet for multi-family projects. Common driveways serving adjacent property are exempt.

3. **Special requirements for front perimeter landscape areas along certain parkways and arterial roads.** Along Colbert Lane, Palm Harbor Parkway, Old Kings Road, and Palm Coast Parkway, the average width of the front perimeter setback area shall be 35 feet.

a. *Limitation:* If the area of the required front perimeter landscape area exceeds twelve per cent (12%) of the total area of the lot, tract or parcel, then the applicant may reduce the required front perimeter setback area to not more than twelve per cent (12%) of the total area so long as the average width is never less than 25 feet.

b. *Unique hardship:* An applicant may apply for a variance under Section 5.01.06 in any case where, owing to the special size, shape or configuration of a lot, a unique hardship would arise by the literal application of this special requirement.

c. *Compensating area:* At the option of the applicant and with the approval of the City, the special front perimeter setback area requirements along designated parkways and arterial roads may be reduced by the provision of interior landscape areas of equivalent area, provided that in no case shall the width of the front perimeter setback area be less than 25 feet.

4. **Calculation.** Required perimeter landscape areas shall extend along the entire length of the property boundary, except where accessways and easements are shown in an approved site plan. The average width of a required perimeter landscape area shall be computed by multiplying the required width of the landscape area times the length of the property line parallel to and adjoining the area (excluding the area of any approved accessway or easement). During site plan review, the applicant may request or the City may require that the actual width of the landscape area vary from place to place (but never less than 20 feet) in order to accommodate the preservation of nearby existing index trees or other site conditions, so long as the total required landscape area is not increased. All areas set aside for

required perimeter landscape areas shall also be included in the percentage of pervious surface area required under the applicable zoning district regulations, and may be approved for secondary usage as surface water management, underground utilities and monument signage, so long as the primary purpose of the survival and effectiveness of the landscape buffer is not jeopardized.

(b) Material requirements in perimeter areas.

1. **Tree count.** Except where special requirements are specified in this section along certain parkways and arterial roads, and in addition to any plantings required by this Code abutting vehicular use areas, the total tree count requirements within the front perimeter landscape area shall be determined by using a ratio of one (1) tree for each twenty-five (25) linear feet of lot frontage or major fraction thereof. The total tree count requirement within the side and rear perimeter landscape areas shall be determined by using a ratio of one tree for each fifty (50) linear feet or major fraction thereof. No less than fifty (50) per cent of the required trees shall be native shade trees.

2. Special requirements along certain parkways and arterial roads. In the front perimeter landscape area along any road described in Section 5.01.04 (4)(a)3., the material requirements shall be as follows:

a. Preservation of all existing Index/shade trees within the required area.

b. Installation of one index tree for each twenty-five lineal feet or major fraction thereof of lot frontage abutting the right of way.

c. Installation of six understory trees (not less than eight feet in height, and 1.5 inch caliper measured at four and one-half feet above ground, at time of planting, for each one hundred lineal feet of lot frontage abutting the right of way.

d. Installation of twenty shrubs of 24 inches minimum height for each one hundred feet of lot frontage abutting the right of way.

3. **Ground cover.** Grass or other ground cover shall be placed on all areas within the front, side and rear setback perimeter landscape areas not occupied by other landscape materials or permitted accessways.

4. **Visual screen in perimeter areas.** A visual screen shall be placed within the perimeter landscape areas and shall run the entire length of such abutting property line, except at permitted accessways. The screen shall be installed to provide an opaque, continuous screen not less than thirty inches in height, except at permitted accessways.

5. **Exception: Sight triangles.** Notwithstanding the requirements of this subsection, a sight triangle shall be provided at those points where an accessway intersects

a public right-of-way. The area within the sight triangle shall be provided at those points where an accessway intersects a public right-of-way. The area within the sight triangle shall be maintained in accordance with this section.

a. *Cross-visibility level.* An unobstructed cross-visibility between two (2) and ten (10) feet above the level of the center line of the public right-of-way shall be maintained within the sight triangle.

b. *Trees.* Trees having limbs and foliage trimmed so that the cross-visibility is not obscured shall be allowed to overhang within the sight triangle, provided the location of the tree itself does not create a traffic hazard.

(c) **Interior planting areas.**

1. **Size.** In vehicular use areas within the interior of a site, one planting area of at least two hundred fifty square feet in area and no less than six feet in width shall be required for each four thousand square feet or major fraction thereof, of vehicular use area.

2. **Materials.** Each such area shall contain a native shade tree together with other landscape planting materials. Interior planting areas shall be located to most effectively relieve the monotony of large expanses of paving and contribute to orderly circulation of vehicular and pedestrian traffic.

3. **Overhang.** Vehicles shall not overhang more than two feet into an interior planting area.

(5) *Buffer standards relating to incompatible land uses and zones.*

(a) The following shall constitute incompatible uses and zones:

1. Multifamily use, three (3) or more attached units, when abutting to single-family housing or lands zoned for single-family housing.

2. Office use or zones, when abutting to single-family housing use or lands zoned for single-family housing.

3. Mobile home park use or zones, when abutting to single-family housing, two-family housing, multifamily housing and office uses, and lands zoned for single-family housing, multifamily housing and office uses.

4. Commercial uses or zones, when abutting to single-family housing, two family housing, multifamily housing or mobile home park or mobile home subdivision uses or lands zoned for single-family housing, multifamily housing or mobile home park or mobile home subdivision uses.

5. Industrial uses or zones, when abutting to any nonindustrial uses or zones.

6. -- All residential uses or zones, when abutting any public park.

(b) Between incompatible land uses or zones, a buffer strip shall be required. Said buffer strip shall be at least ten (10) feet in width the entire length of all such common boundaries. Where commercial, industrial or multifamily residential uses adjoin single family or two family residential uses, whether with or without intervening roads, waterways or common areas, the landscaped buffer shall be twenty-five feet in width.

(c) Buffer material requirements shall be as follows:

1. **Tree count.** The total tree count required within the buffer strip shall be determined by using a ratio of one (1) tree for each twenty-five (25) linear feet of required buffer strip, or majority portion thereof, with a minimum of fifty (50) percent of said trees being native shade trees. Trees shall be spaced so as to allow mature growth of shade trees.

2. **Ground cover.** Grass or other ground cover shall be planted on all areas of the buffer strip required by this section which are not occupied by other landscape material.

3. **Visual screen.** A visual screen running the entire length of all common boundaries shall be installed within the buffer strip, except at permitted accessways. Such strips shall provide a minimum of sixty (60) percent opacity for that area between the finished grade level at the common boundary line and six (6) feet above said level and horizontally along the length of all common boundaries. A six-foot high solid wall or fence may be substituted to meet the visual screen requirements of this section when existing trees located in the buffer strip prevent the development of a planted landscape screen.

(d) **Prevailing requirement.** Whenever parcels of land fall subject to both the perimeter landscaping requirements and the uncomplimentary land use buffer strip requirements of the article, the latter requirement shall prevail.

(6) *Plant material standards.*

(a) Unless otherwise provided herein, only Florida No. 1 or better plant material as described in "Grades and Standards for Nursery Plants," Part 1 1963 and Part II, State of Florida, Department of Agriculture, Tallahassee, shall be credited on the landscape development requirements of this section.

(b) Portions of a developed area left in the natural state shall be credited in the landscape development requirements of this section.

(c) Trees shall be subject to the following:

1. *Height.* Trees shall have a minimum height of fourteen feet and a minimum diameter of three inches measured at four and one half feet aboveground at the time of planting.

2. *Crown spread.* Species of trees which will meet the twenty-foot mature height requirement, but will have an average mature crown of less than twenty (20) feet may be substituted by grouping the same so as to create the equivalent of a crown spread of twenty (20) feet.

3. *Planting area.* The planting area for each tree shall be a minimum of one hundred (100) square feet around the trunk of the tree and shall be maintained in either vegetative landscape material or pervious surface cover.

(d) Shrubs and hedges shall be subject to the following:

1. *Minimum height.* They shall be a minimum height of twelve (12) inches at the time of planting.

2. Hedges and shrubs utilized for required screening shall meet the minimum requirements for screening within the code.

3. *Prohibited species.* No species of deciduous shrub shall be credited on the visual screening requirements of this subsection.

4. *Placement.* The placement of shrubs used to fulfill the visual screening requirements shall not exceed five (5) feet on center, and shall be no closer than two (2) feet to the edge of any pavement.

(e) Vines, groundcover, lawn grasses, synthetic plant material, and architectural planters shall be subject to the following:

1. *Vines.* Vines shall be thirty (30) inches in length within one (1) calendar year from the time of planting.

2. *Groundcovers other than lawn grasses.* Groundcovers other than lawn grasses shall be planted so as to provide seventy-five (75) percent coverage within one calendar year from the time of planting.

3. *Lawn grasses.* Lawn grasses shall be subject to the following:

a. Lawn grasses planted for credit on the landscaping requirements shall be perennial species capable of thriving in the county.

b. Lawn grasses shall be planted so as to achieve complete coverage within two (2) calendar years from the time of planting.

c. Grasses may be sodded, sprigged, plugged or seeded except that solid sod shall be used in swales or other areas subject to erosion.

4. *Synthetic plant material.* No credit shall be granted for use of artificial plant material.

5. *Architectural planters.* Credit shall be given for use of architectural planters which meet the following criteria:

a. Architectural planters for shrubs shall have a planting area of not less than ten (10) square feet and a depth of not less than eighteen (18) inches.

b. Architectural planters for trees shall have a planting area of not less than twelve (12) square feet and a depth of not less than four (4) feet.

(f) Irrigation or access to irrigation shall be provided for all landscaped areas. Such irrigation shall also be indicated on the landscape plan required herein.

Section 3. Section 501.05(2) is amended as follows:

Whenever the provisions of this section are applicable in accordance with Section 5.01.03, a building permit shall be required.

(1) *Submission of landscape plan.* A landscape plan in accordance with the landscape, buffer, tree and resource protection requirements of this Code shall be submitted where required for site plan review and upon application for a building permit. The landscape plan shall include sufficient information for the county to determine whether the proposed landscape improvements are in conformance with the landscape standards and other requirements of this section. General areas of native vegetation to be preserved shall be shown on the plan.

(2) *Contents of Landscape Plan.* The landscape plan shall be submitted to the City and shall include at a minimum:

a. a description of the species, sizes, quantity and location of all trees, shrubs and landscape materials;

b. a depiction of the site including proposed structures, vehicle use areas and relationships of the site to adjacent public or private streets and properties.

c. In addition to the requirements of any other portion of this Code, the landscape plan shall include an existing tree survey depicting the location of all existing

Index/Shade trees, ten inches or greater in diameter within 50 feet of rights of way and within 20 feet of any other property line, and all Index/Shade trees twenty inches or greater in diameter on the remainder of the parcel.

d. Provisions that index trees larger than 20 inches in diameter shall be protected during construction and thereafter within the drip line (outer edge of the canopy) from any activity that would damage roots, including but not limited to traffic, fill dirt, excavation, compaction, change in grade or storage of construction materials.

(3) *Permit procedures.*

a. Applications for approval of landscape plans shall be made to the county, at the time an application is submitted to the county for a building permit.

b. No building permit, if required, shall be issued unless and until the county has approved the application for a landscape plan.

c. A certificate of occupancy shall be issued, when the county has determined that required site improvements have been installed according to the approved application and plan. In cases of hardship a performance bond equaling one hundred fifty (150) percent of the unfinished landscape improvements identified in the approved plan shall be posted for a period not exceeding sixty (60) days.

d. A copy of the approved permit and plan shall be available on site during installation of landscape improvements.

e. Landscaping shall be installed in accordance with the approved permit as a prerequisite of issuance of a certificate of occupancy or occupancy of the building. The planning board may authorize a temporary variance, exception, or certificate of occupancy upon consideration of an amended site plan, if completion of the landscaping has been delayed by weather or other conditions inhospitable to the plant materials or other circumstance beyond the control of the applicant.

Section 4: Section 6.01.01(b) of the Land Development Code is amended as follows:

(b) Replacement tree: A tree of a species listed in Section 6.01.09 and having a minimum caliper of three inches measured at four and one half feet aboveground and having a minimum height of fourteen feet when planted.

Section 5: Section 6.01.06 of the Land Development Code is amended as follows:

**Replacement trees.** Where trees must be replaced, the replacement stock shall:

(a) consist of a tree species listed in the index tree list and having a minimum caliper of three inches measured at four and one half feet aboveground and having a minimum height of fourteen feet when planted.

(b) be shown on a site plan with the location, common name and minimum size requirements clearly depicted.

Section 6. This ordinance is supplemental to all other requirements of existing ordinances; provided that all portions of codes or ordinances irreconcilable with this ordinance are superseded only in the application and only to the extent of the irreconcilability.

Section 7. This ordinance shall take effect immediately upon becoming a law.

PASSED AND ADOPTED ON FIRST READING THIS 4<sup>th</sup> DAY OF APRIL 2000.

CITY COUNCIL  
CITY OF PALM COAST, FLORIDA

BY: James V. Canfield  
JIM CANFIELD, MAYOR

ATTEST:

BY: Doreen Courtney  
CITY CLERK

## Zoning and Urban Forestry

### PLANT LIST

<u>PLANT GROUPS</u>	<u>SALT TOL.</u>	<u>INTEREST</u>	<u>SPACING</u>	<u>COLD TOL.</u>	<u>MATURE HEIGHT</u>
<b><u>GROUND COVERS</u></b>					
Blue Pacific Juniper	Yes	Evergreen	2-4'	Yes	5-6"
Dwarf Confed. Jasmine	No	Flower	2-3'	Yes	6-8"
Ajuga Reptans	No	Flower & Leaf	6-12"	Yes	3-4"
Lantana	Yes	Flower	2-3'	Comes Back	8-10"
Parsons Juniper	Yes	Evergreen	3-4'	Yes	1-2'
Liriope species	Yes	Flower	6-12"	Yes	6-12"
Holly Fern	No	Leaf	1-2'	Yes	12-15"
Day Lily	No	Flower	1-2'	Yes	12-15"
<b><u>LOW SHRUBS</u></b>					
Schillings Holly	Yes	Evergreen	2-4'	Yes	24-30"
Wheeleri Pittosporom	No	Evergreen	2-4'	Yes	18-24"
Rotunda Holly	No	Berries	3-4'	Yes	24-30"
Red Ruffle Azalea	No	Flower	3-4'	Yes	24-30"
Indian Hawthorne Dwarf	Yes	Flower	3-4'	Yes	30-36"
Radicans Gardenia	No	Flower & Scent	2-3'	Yes	15-18"

PLANT LIST  
PAGE TWO

	<u>SALT TOL.</u>	<u>INTEREST</u>	<u>SPACING</u>	<u>COLD TOL.</u>	<u>MATURE HEIGHT</u>
<b><u>MEDIUM SHRUBS</u></b>					
Pittosporom Species	Yes	Evergreen	3-4'	Yes	3-6'
Ligustrum Species	Yes	Flower	3-4'	Yes	3-6'
Blue Vase Juniper	No	Color	3-4'	Yes	3-4'
Heavenly Bamboo	No	Color	3-4'	Yes	3-4'
Mahonia Species	Yes	Leaf & Flower	3-4'	Yes	4-6'
Glossy Abelia	No	Flower	4-5'	Yes	5-6'
Viburnum Species	No	Evergreen	4-5'	Yes	5-10'
Indica Azalea	No	Flower	3-4'	Yes	3-6'
Pineapple Guava	No	Flower	4'	Yes	4-6'
Camellia Species	No	Flower	3-4'	Yes	5-6'
Gardenia Species	No	Flower & Scent	3-4'	Yes	3-6'
Podocarpus	No	Evergreen	2-4'	Yes	3-8'

**PLANT LIST  
PAGE THREE**

	<u>SALT TOL.</u>	<u>INTEREST</u>	<u>SPACING</u>	<u>COLD TOL.</u>	<u>MATURE HEIGHT</u>
<b><u>SMALL/MEDIUM TREES</u></b>					
Bottlebrush Species	No	Flower	5-6'	Yes	15-20'
East Palatka Holly	No	Berries	6-8'	Yes	20-25'
Dahoon Holly	Some	Berries	6-8'	Yes	20-25'
Crepe Myrtle	No	Flower	6-8'	Yes	20-25'
Wax Myrtle	Some	Berries	5-6'	Yes	15-20'
Ligustrum Standard	Yes	Flower	6-8'	Yes	20-25'
Loquat	No	Flower & Fruit	8-10'	Yes	20-25'
Indian Hawthorn Std.	Yes	Flower	8-10'	Yes	10-15'
<b><u>SHADE TREES</u></b>					
Red Maple	No	Fall Color	15-20'	Yes	50-60'
Sweet Gum	No	Fall Color	15-20'	Yes	50-60'
Magnolia	No	Flower	10-15'	Yes	50-60'
Live Oak	Some	Evergreen	20-25'	Yes	80-100'
Laurel Oak	Some	Evergreen	20-25'	Yes	80-100'
Drake Elm	No	Branching	10-20'	Yes	40'

**PLANT LIST  
PLANT FOUR**

	<u>SALT TOL.</u>	<u>INTEREST</u>	<u>SPACING</u>	<u>COLD TOL.</u>	<u>MATURE HEIGHT</u>
<b><u>SHADE TREES cont.</u></b>					
Weeping Willow	No	Branching	25-30'	Yes	50-60'
River Birch	No	Bark	10-15'	Yes	60-70'
<b><u>SPECIMEN PLANTS</u></b>					
Agave Species	Yes	Form	6-8'	Yes	5-6'
Sago Palm	Some	Form	4-6'	Yes	5-6'
Yucca Species	Some	Form	4-5'	Some	4-6'
Tree Azalea	No	Flower	4-5'	Yes	6-8'
Aucuba	No	Leaf	4'	Yes	4-6'
Hibiscus	No	Flower	4'	Comes Back	6-8'
Japanese Black Pine	Yes	Form	8-10'	Yes	35'
Torulosa Juniper	Yes	Form	5-6'	Yes	8-15'
<b><u>PALMS (cannot be counted as tree credit per Urban Forestry Department)</u></b>					
Sabal	Yes	Form	8-10'	Yes	60-70'
Washingtonia	Some	Form	6-10'	Some	80-90'
Pindo	Some	Form	15-20'	Yes	20'
Chinese Fan Palm	No	Form	10-15'	Some	20'
Mediterranean Fan Palm	Some	Form	6-10'	Yes	10-15'

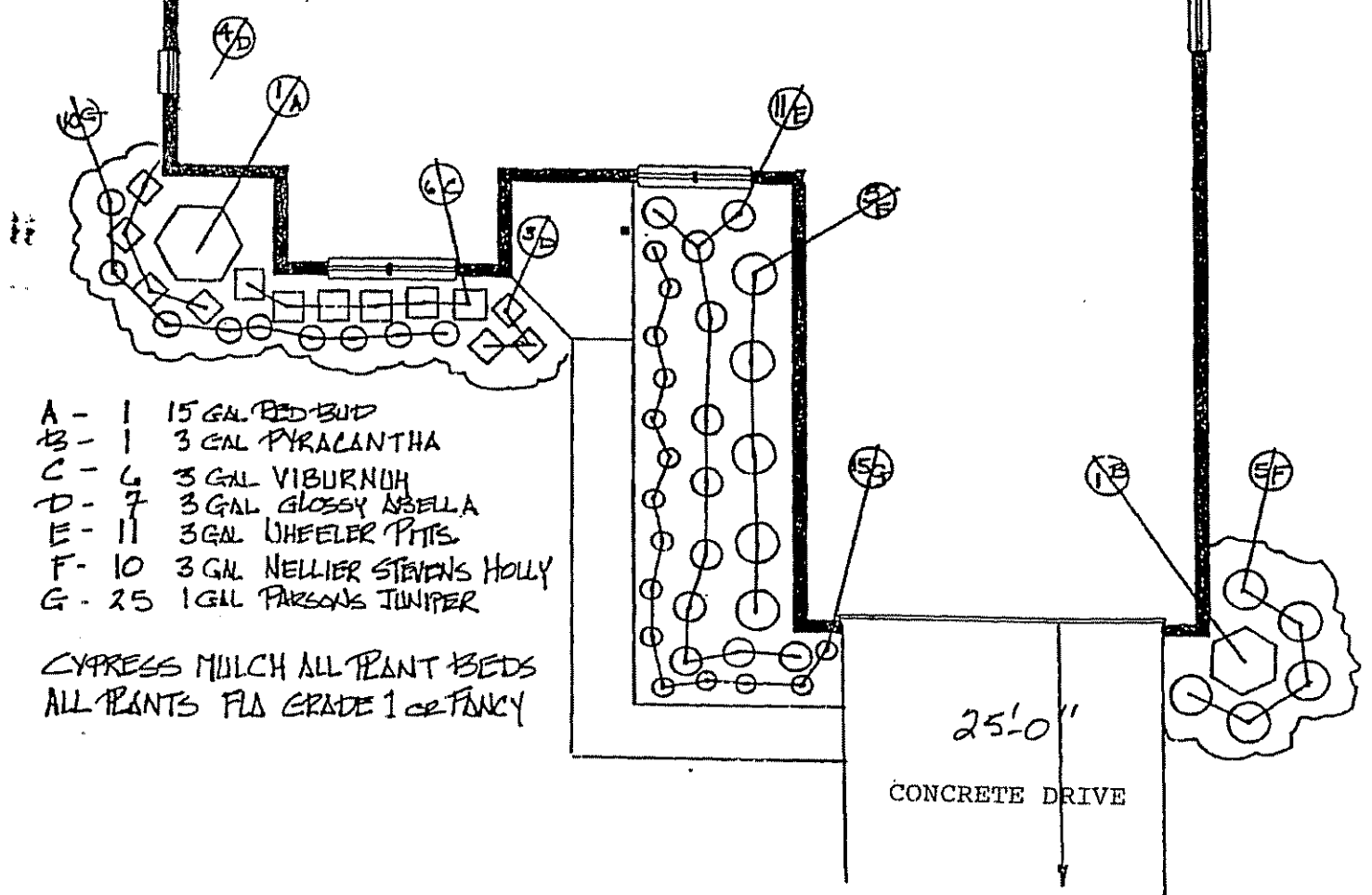
REAR PROPERTY LINE

49' 0"

16'-2"

22'-4"

HOUSE



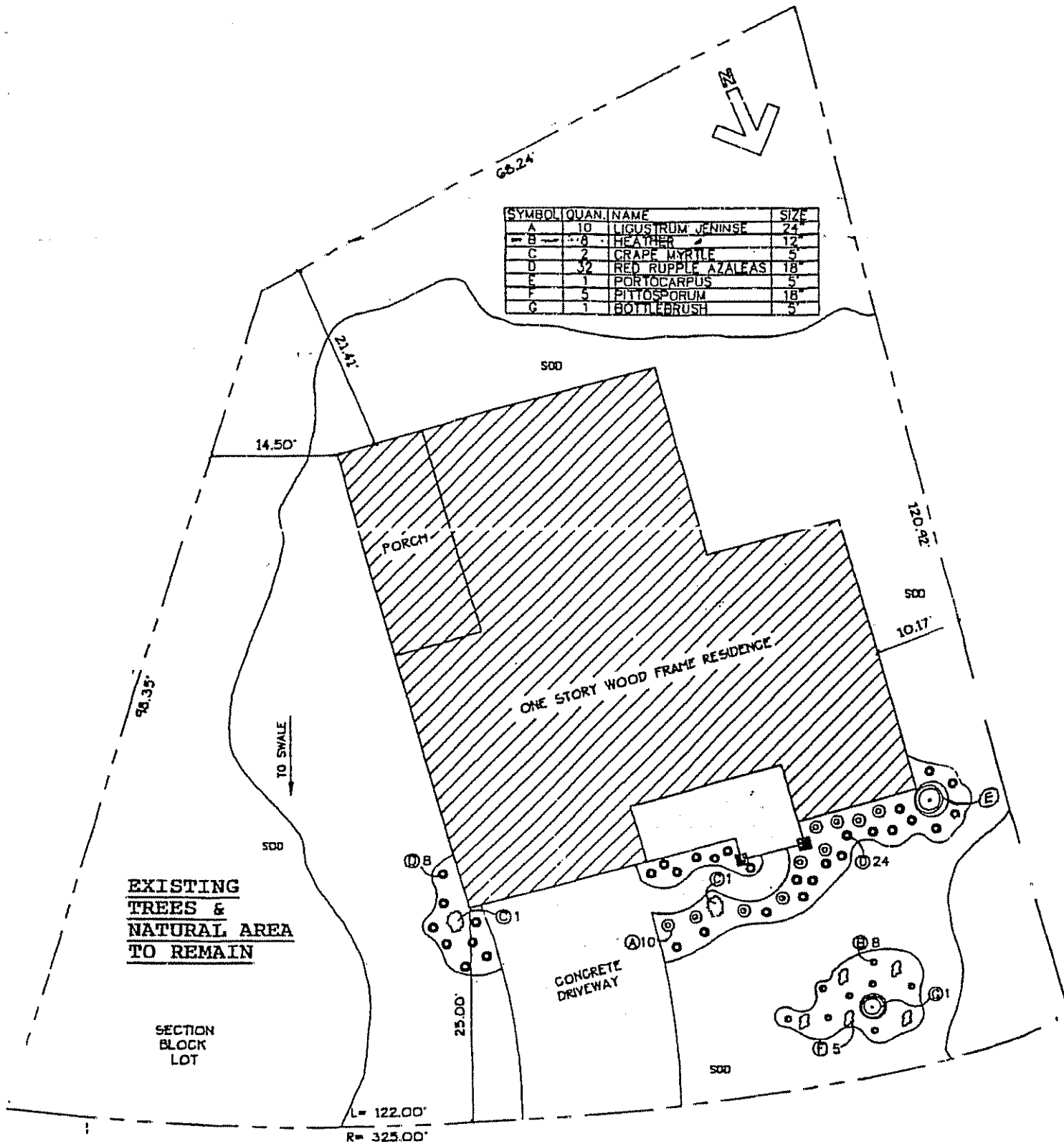
- A - 1 15 GAL RED BUD
- B - 1 3 GAL PYRALANTHA
- C - 6 3 GAL VIBURNUM
- D - 7 3 GAL GLOSSY ABELLA
- E - 11 3 GAL WHEELER PITS
- F - 10 3 GAL NELLIER STEVENS HOLLY
- G - 25 1 GAL PARSONS JUNIPER

CYPRESS MULCH ALL PLANT BEDS  
 ALL PLANTS FLA GRADE 1 or FANCY

25'-0"  
 CONCRETE DRIVE

FRONT PROPERTY LINE

SAMPLE OF AN ACCEPTABLE LANDSCAPING PLAN

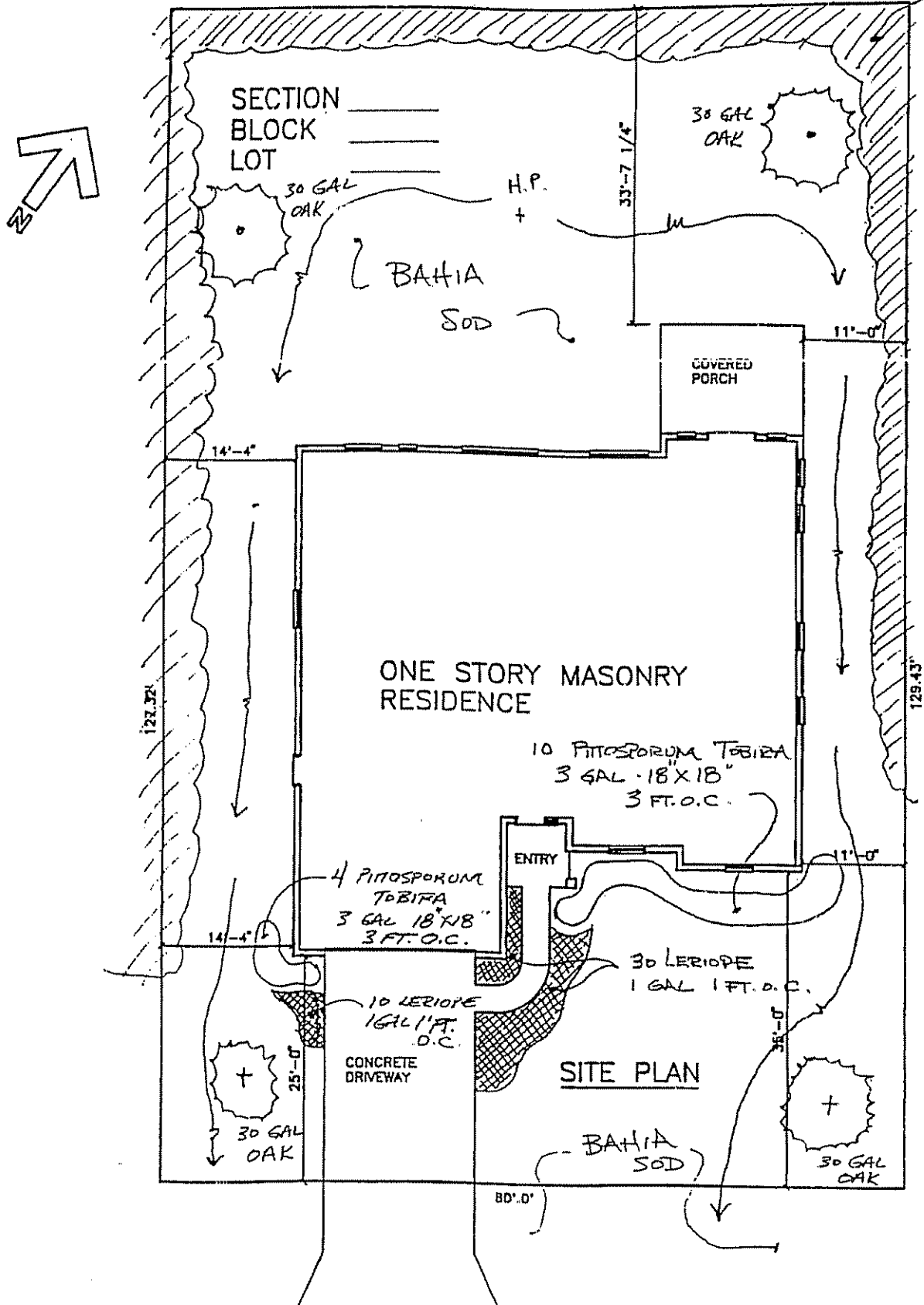


EXAMPLE OF AN ACCEPTABLE LANDSCAPING PLAN WITH CLEARING OF EXISTING TREES AND NATURAL VEGETATION IN HOUSE AREA ONLY.

SAMPLE

ACCEPTABLE LANDSCAPING & CLEARING PLAN

SAME PALMETTO & WAX MYRTLE WHERE POSSIBLE





**CITY OF PALM COAST  
URBAN FORESTRY DEPARTMENT  
Residential New Construction Application Procedure**

**3/22/05**

## Residential New Construction Application Procedure

- Submit boundary survey indicating all index trees in setback area. Indicate all specimen trees regardless of location
- Submit a site plan showing the house and driveway locations
- Within the front 25' or rear 20' setbacks (10' setback if a building permit has been submitted for a pool), all index trees on standard size lots (80' x 125') are required to be surveyed as to location, diameter size and type, protected and preserved unless a legitimate reason can be given for their removal. Index trees in the side yard setback areas are not required to be saved unless it is a corner lot. If trees are to be removed for a **VALID** reason mark through the tree with an "X" (see attached valid reasons).
- Finished floor elevation of structure, including road elevations if extensive fill is needed, show edge of fill, spot elevations of existing grade to determine if required fill material prevents the preservation of the tree
- Indicate lot corners and numbers in the field
- Indicate outer limits of house corners
- Prior to submitting the building application all existing index trees to remain shall have barriers (orange fencing) constructed to the outer limits of the drip lines of individuals or clumps of trees where possible (a good rule of thumb is one foot distance per inch diameter of tree)
- If a natural buffer is left at the rear/side of property, individual trees need not be barricaded, but a delineation of that buffer is required with orange fencing at the clearing limits.
- Barricades/flagging shall remain prior to and throughout construction. Removal of vegetation within barricades shall be done by hand.
- If applicant intends on applying for tree credits for existing pines (6" caliper and greater) or existing index trees down to 1 ½" in diameter, barricades shall be installed to protect root zones from compaction and construction damage. Due to pine trees sensitivity to root damage, unless they can be adequately protected during construction, the City recommends these trees are to be removed and replaced with index trees.
- If any "specimen" trees are on the site, preservation to the greatest extent possible is required (i.e., Shifting house any direction within the building setbacks). On lots larger than 10,000 square feet, this provision will be strictly enforced.
- If trees are not barricaded, a **STOP WORK** order will be issued

## VALID REASONS FOR TREE REMOVAL

- Tree is near a distribution/transmission power line
- Tree has poor form or weak branch structure
- Tree is not in the front 25' or 20' setback area (10' setback if a pool exists).
- Tree area is overstocked
- Tree /vegetation is deemed a fire hazard by the Fire Department/Landscape Architect/ or Urban Forester
- Tree root zone area can not be protected due to proximity of driveway, house or utility work.
- Fill amount exceeds the tolerance of the tree for survivability (species dependent)
- If required drainage on the lot can not be achieved without removal of tree, including fill over root system or other grading that will destroy the roots

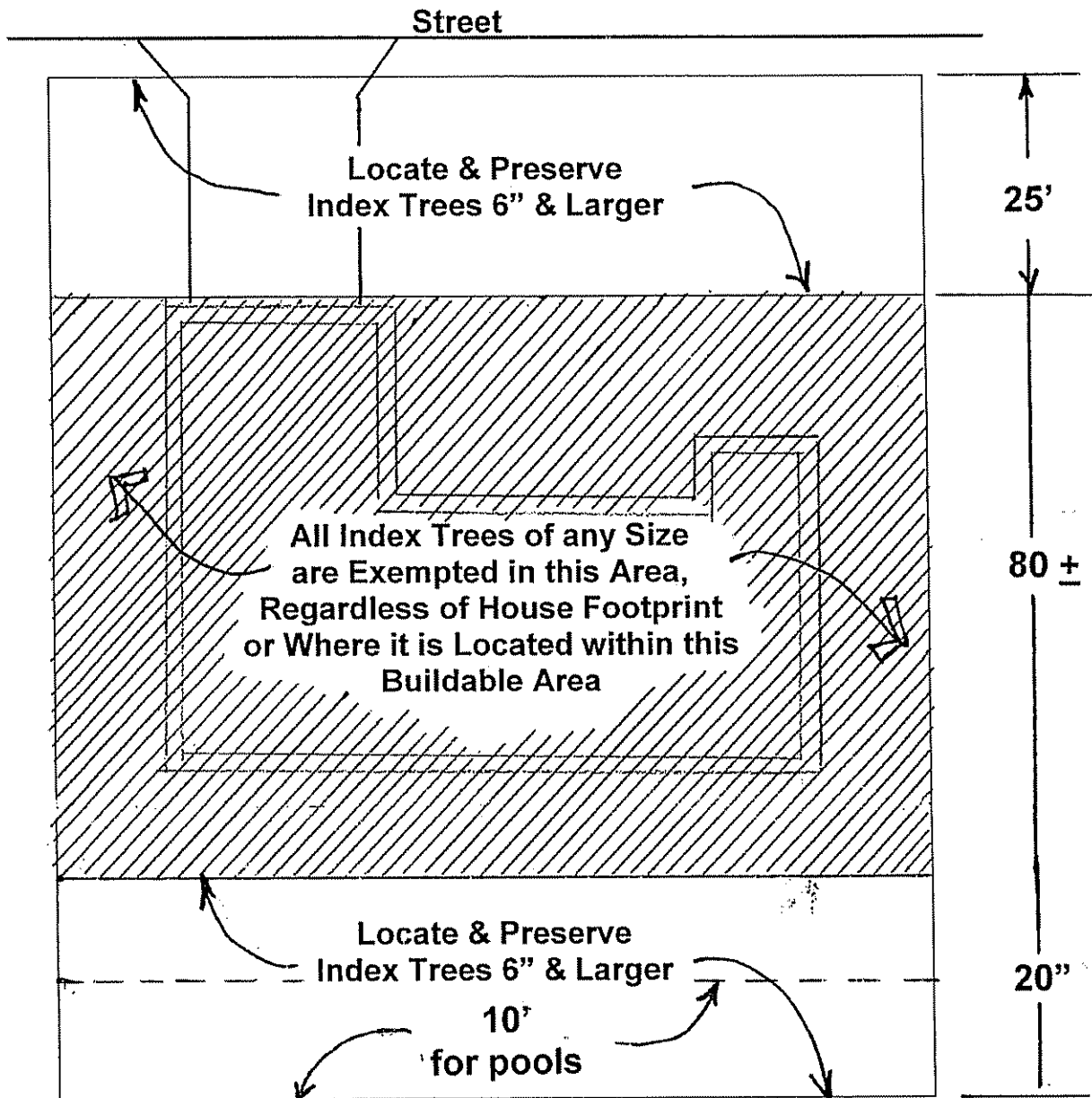
## • **REPLACEMENT TREE REQUIREMENTS**

Tree species listed on the index tree or shade tree list  
Florida #1 Nursery stock, 2" in diameter measured at 6" above ground level, and measuring 8' in Height after planting. 50% of the trees must be selected from the Flagler County Shade Tree List. Understory trees per the Attached Understory Tree List may credit at a minimum caliper of 1-1/2" as measured 6" above ground level and a minimum height of 5-6'.

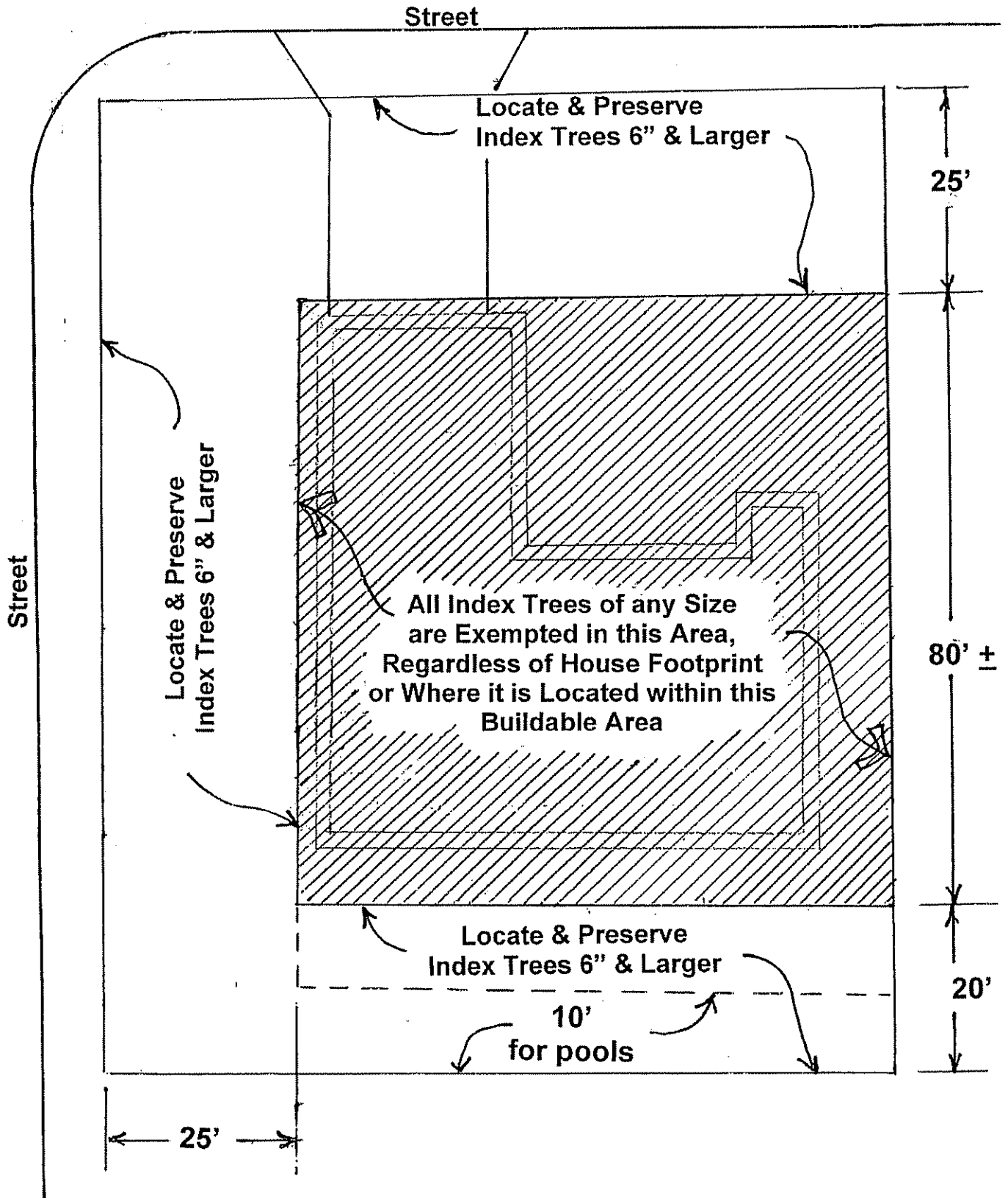
**NEW RESIDENTIAL TREE PRESERVATION**  
**DIRECTIVE FROM THE CITY MANAGER**

Effective 3/9/04

- . Exempting side yards entirely (except on side corner lots)
- . Preserving index trees in the front yard setback (25')
- . Preserving index trees in the rear yard setback (20')



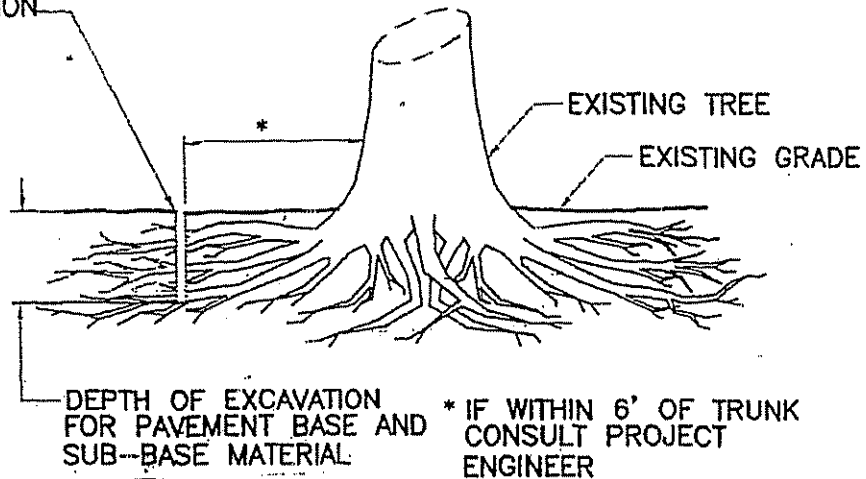
Side/Corner Lot Typical Situation





# ROOT PRUNING DETAIL

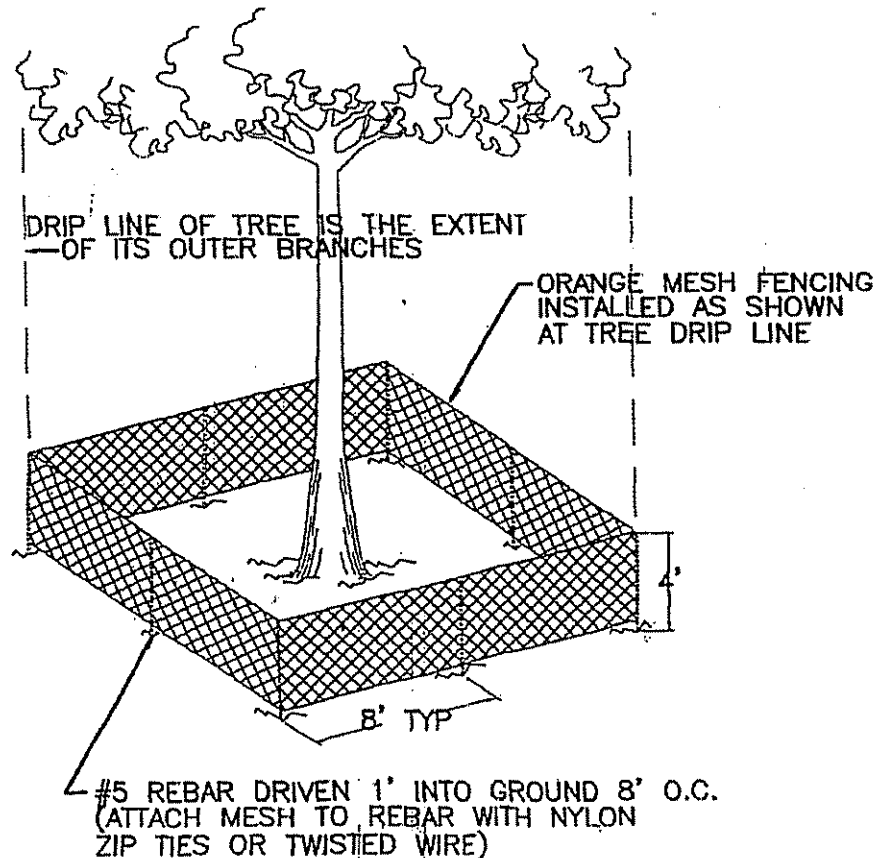
POINT AT WHICH ROOTS ARE PRUNED PRIOR TO EXCAVATION



## NOTES:

- 1) CUTS ARE TO BE MADE CLEANLY WITH A SHARP ROOT PRUNING TOOL (SUCH AS A DOSCO OR VERMEER ROOT PRUNER).
- 2) INSTALL ORANGE PLASTIC MESH TREE BARRIER, WITH REBAR SUPPORTS, AT POINT OF PRUNING AND CONTINUE COMPLETELY AROUND TREE, PROTECTING THE AREA WITHIN THE DRIP LINE (EXTENT OF OUTER BRANCHES).
- 3) ROOT PRUNING PROCEDURE MUST BE DONE AND INSPECTED PRIOR TO ISSUANCE OF A BUILDING PERMIT OR GRADING AND FILLING PERMIT.

# TREE PROTECTION BARRIER DETAIL



### UNDERSTORY TREE LIST

(Understory trees are to be a minimum of 1-1/2" caliper as measured 6" above ground level and must be 5-6' tall to qualify as a replacement tree.)

<b>COMMON NAME</b>	<b>BOTANICAL NAME</b>
Chickasaw Plum	Prunus angustifolia
Crepe Myrtle	Lagerstroemia indica
Holly (std.)	Ilex, spp.
Indian Hawthorn (std.)	Raphiolepis indica-majestic beauty
Florida Dogwood	Cornus florida
River Birch	Betula nigra
Oleander	Nerium oleander
Japanese Blueberry	Elaeocarpus decipiens
Jerusalem Thorn	Parkinsonia aculeate
Redbud	Cercis Canadensis
Ligustrum (std.)	Ligustrum-lucidum, japonica
Loquat	Eriobotrya japonica
Magnolia	Magnolia grandiflora-little gem, mgtig
Podocarpus (std.)	Podocarpus spp.
Scrub Oak	Quercus geminate
Viburnum (std.)	Viburnum odoritissum

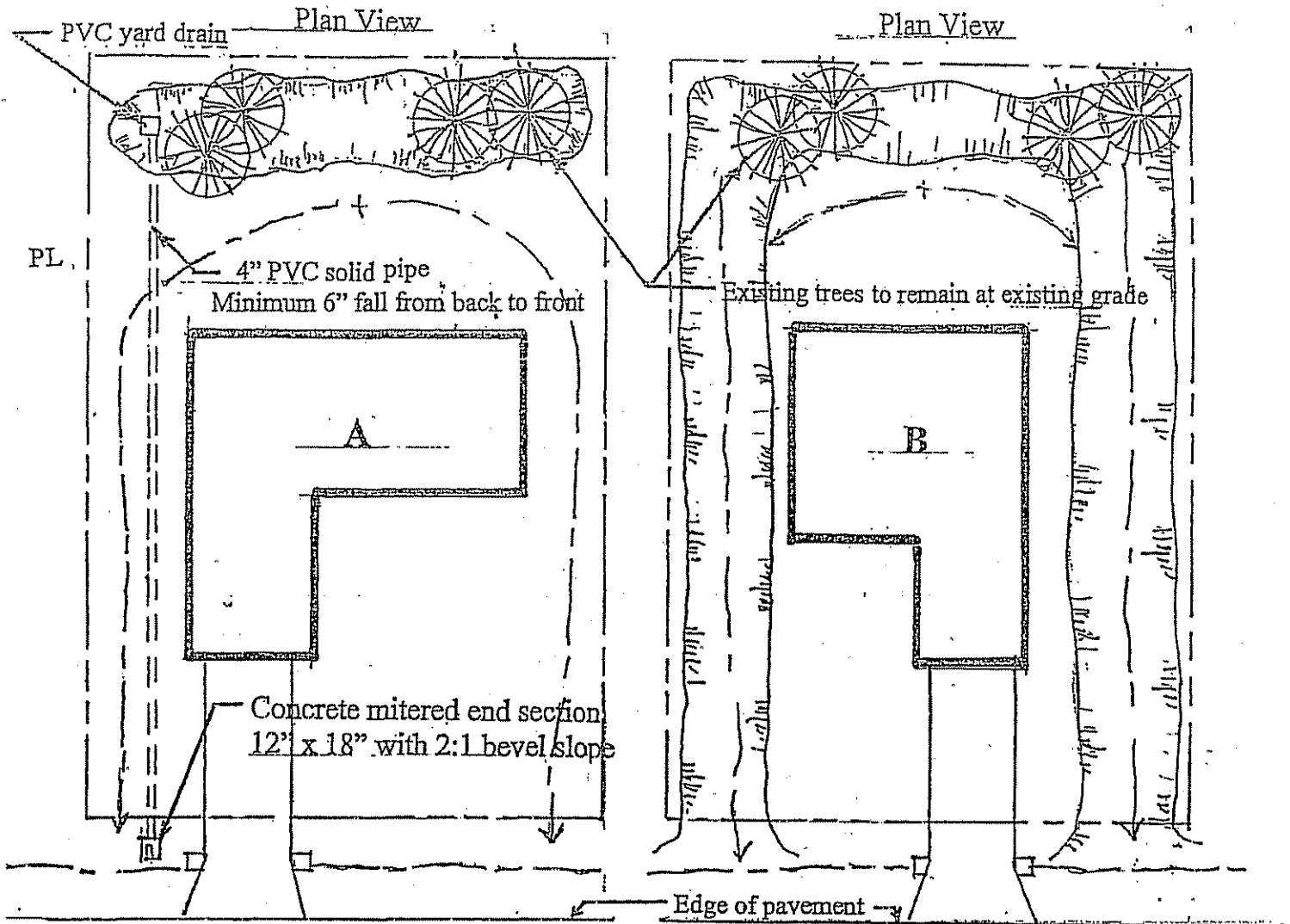
### INDEX TREE LIST

American Holly	Jerusalem Thorn
Apple	Loblolly Bay
Ash, green	Loquat
Cypress	Magnolia, Southern
Black Cherry	Maple
	Mimosa
Cherry Laurel	Oak
Chickasaw Plum	Peach
Crepe Myrtle	Podocarpus, Yew & Nagi
Dahoon Holly	Redbud
Dogwood, Flowering	Red Cedar
Elm	Sweetgum
Fringe	Sycamore
Glossy Privet	Tupelo, Black & Swamp
Hackberry	Weeping Willow
Hickory	Yellow-poplar (tulip tree)

### SHADE TREE LIST

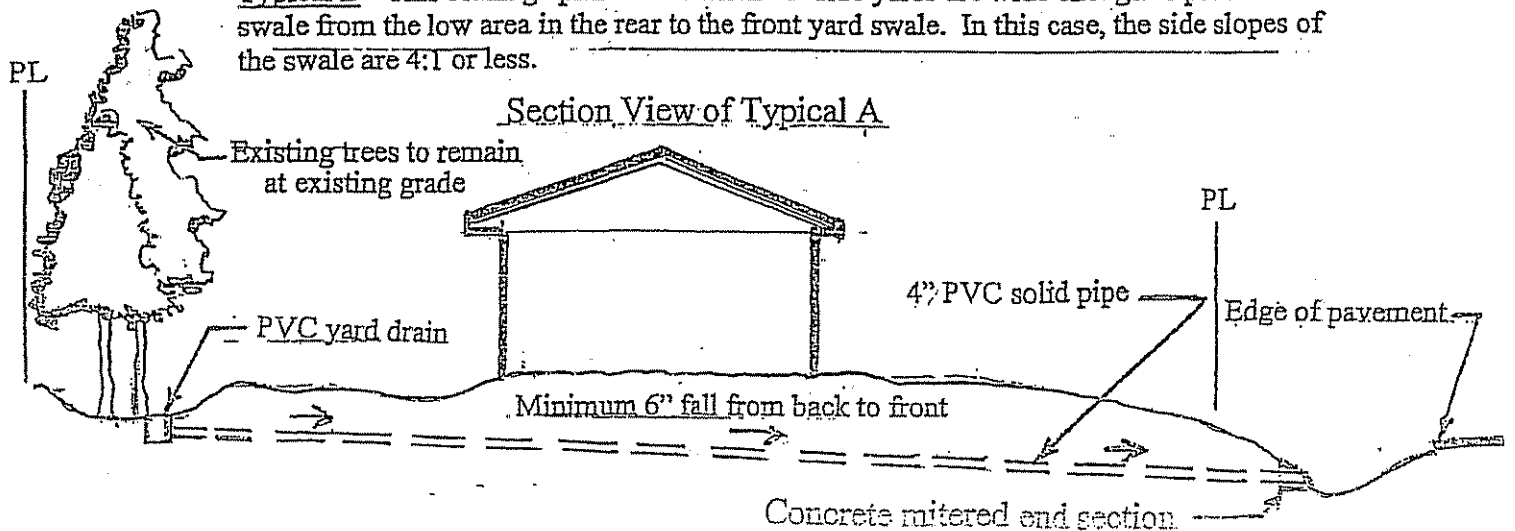
Native Shade Trees:	Other Acceptable Shade Trees:
Elm, Winged	Ash, Green
Hickory, Pignut	
Magnolia, Southern	Elm, Chinese
Maple, Red	Elm, Drake
Oak, Laurel	Oak, Shumard
Oak, Live	Sycamore
Southern Red Cedar	
Sweetgum	
Oak, Water	
Other trees as may be allowed by the City Landscape Architect and Urban Forester	

# REAR YARD DRAINAGE DETAIL ALTERNATIVES



Typical A- This drainage solution is applicable when drainage must be provided from a low area in the back yard where there is not sufficient side yard width to construct a surface swale at the required depth.

Typical B- This drainage plan works when the side yards are wide enough to provide a swale from the low area in the rear to the front yard swale. In this case, the side slopes of the swale are 4:1 or less.





**ADP**  
Quality Products by MDS

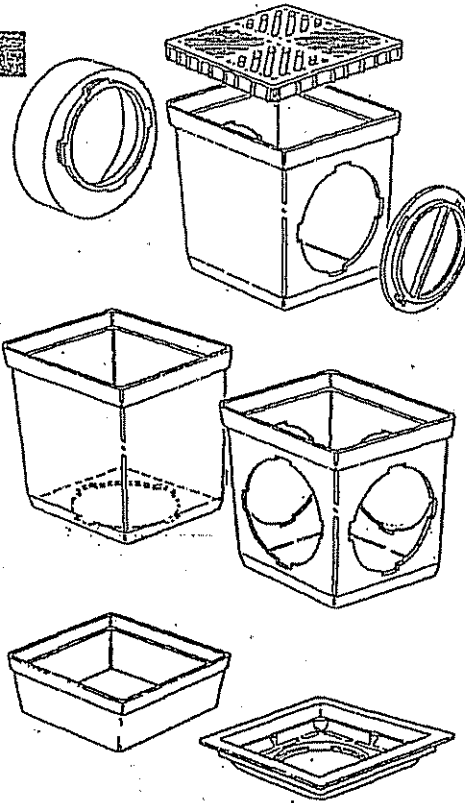
**2000/76000 SERIES Catch Basins & Accessories**

DESCRIPTION	P/N	COLOR	CTN. QTY.
12" X 12" SQUARE GRATE (fits square catch basin, 12" extension & low profile adpt)	A-2112	BLACK	8
	A-2212	GREEN	8
	A-2312	SAND	8
	A-2412	GRAY	8
12" X 12" BASIN DOUBLE OPENING FOUR OPENING can be used with universal outlets	A-6122	BLACK	4
	A-6124	BLACK	4
12" SUMP BOX	A-6120	BLACK	4
6" EXTENSION for 12" X 12" Basin	A-6125	BLACK	8
12" X 12" LOW PROFILE ADAPTER can be used with universal outlets	A-6127	BLACK	8

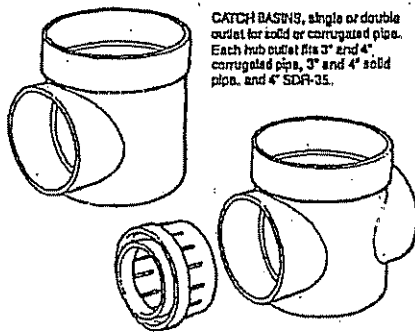
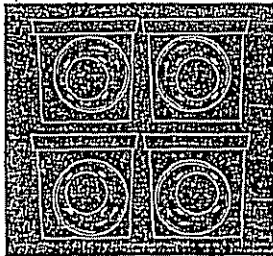
DESCRIPTION	P/N	COLOR	CTN. QTY.
9" X 9" SQUARE GRATE (fits square catch basin, 5" extension & low profile adpt)	A-2109	BLACK	8
	A-2209	GREEN	8
	A-2309	SAND	8
	A-2409	GRAY	8
9" X 9" BASIN DOUBLE OPENING FOUR OPENING can be used with universal outlets	A-6092	BLACK	4
	A-6094	BLACK	4
9" X 9" SUMP BOX	A-6090	BLACK	8
6" EXTENSION for 9" X 9" Basin	A-6096	BLACK	8
9" X 9" LOW PROFILE ADAPTER can be used with universal outlets	A-6097	BLACK	8

The 9" and 12" Square Catch Basin series are made from high quality high impact Poly-Styrene. The 9" and 12" square grates are made from virgin CO-Polymer Polypropylene for strength, durability, and cold weather resistance. U.V. color stabilizer is added for long life.

The Catch Basins are available with 2 or 4 outlets, or as a Sump Box (no outlets). Also our revolutionary new bottom outlet provision, (pat. pending), gives you versatility to adjust to any application. (Just scribe the outline on the inside of the bottom of the box with a knife, flip over the box and knock out the insert. Do it yourself or order it that way.)



**6" Round Catch Basins**



CATCH BASINS, single or double outlet for solid or corrugated pipe. Each hub outlet fits 3" and 4" corrugated pipe, 3" and 4" solid pipe, and 4" SDR-35.

The following grates fit the 6" Catch Basins:  
7" Square, 6" Square, 6" Round,  
8" Round, and 6" Astum.

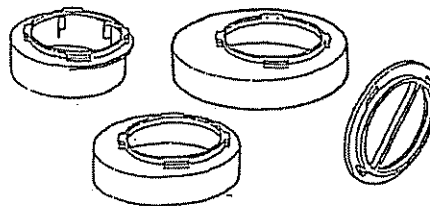
DESCRIPTION	P/N	COLOR	CTN. QTY.
SINGLE OUTLET	A-6051	BLACK	10
DOUBLE OUTLET	A-6052	BLACK	10
UNIVERSAL OUTLET INSERT, for use with 6" outlets, fits 3" and 4" corr, 3" and 4" G/D and 4" SDR-35	A-6366	BLACK	20

Applications — Driveways, Walkways, Grassy Areas, Swimming Pool Decks, Golf Courses, Golf Cart Paths, etc. (Not for use on public streets or roadways).

The Hub Outlets have a unique 1" offset (pat. pending). Used our competition does not offer. This enables the end user to shift the box up, down, or side to side in the trench for more flexibility. It will also allow the user to create a down slope, if needed.

**Basin Outlets & Plugs**

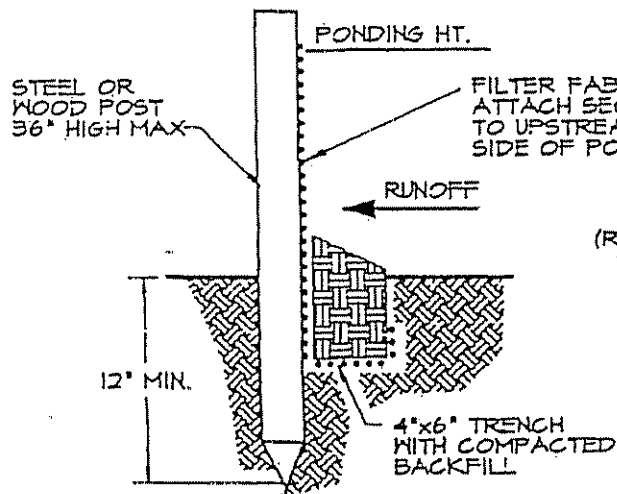
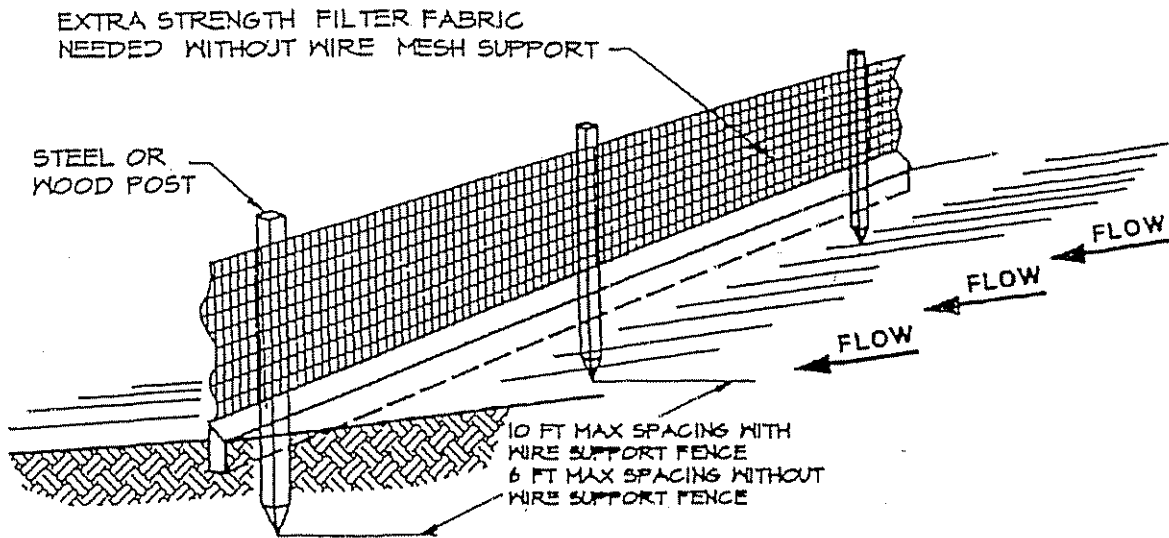
DESCRIPTION	P/N	COLOR	CTN. QTY.
PLUG	A-6000	BLACK	20
4" OUTLET S/D & CORR.	A-6044	BLACK	20
6" OUTLET S/D & CORR.	A-6065	BLACK	20
8" OUTLET CORR.	A-6088	BLACK	20



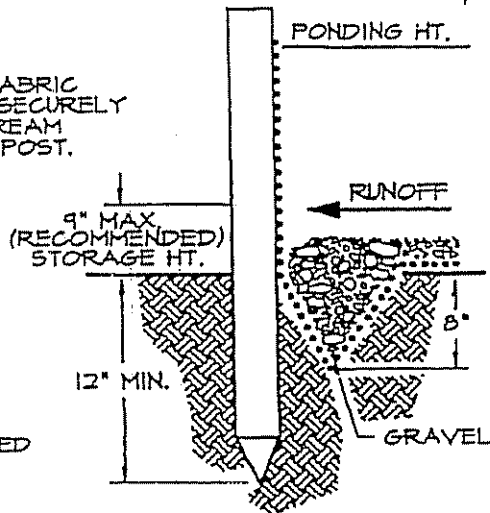
The Hub Outlets fit both 9" x 9" and 12" x 12" Catch Basins and can let you easily adapt to 4", 6", and 8" sewer, drain or corrugated pipe.

# SILT FENCE DETAIL

## Chapter 4 - Best Management Practices - Temporary Measures



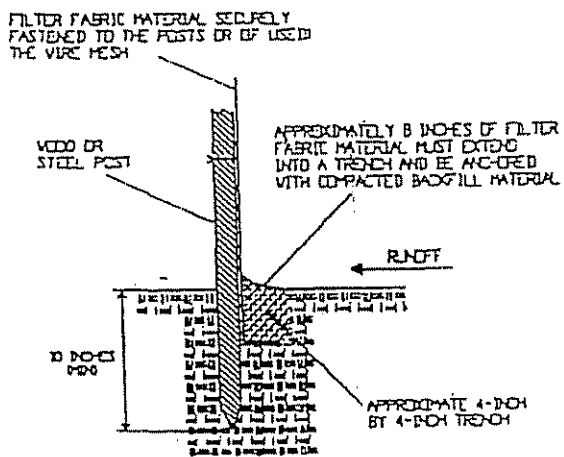
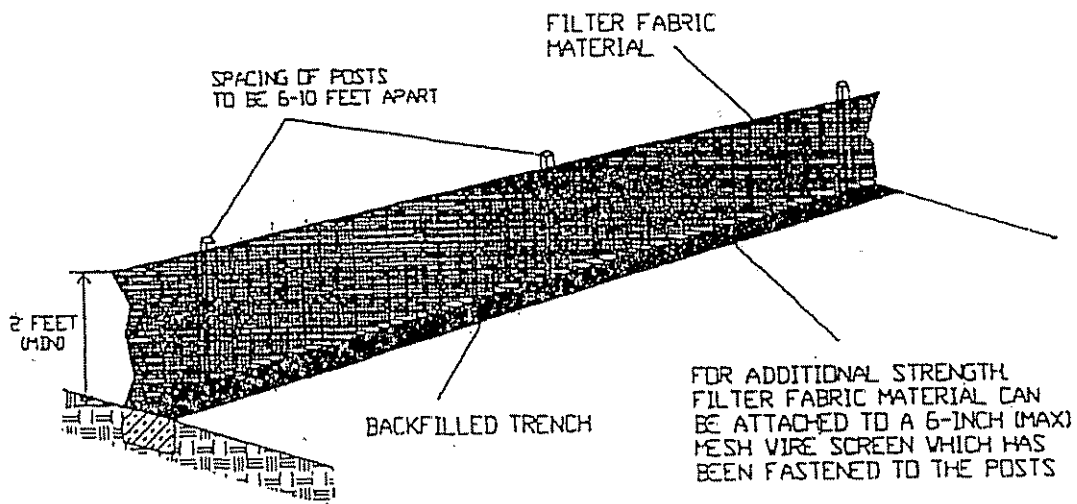
**STANDARD DETAIL**  
TRENCH WITH NATIVE BACKFILL



**ALTERNATE DETAIL**  
TRENCH WITH GRAVEL

**NOTE:**

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.



### ATTACHING TWO SILT FENCES

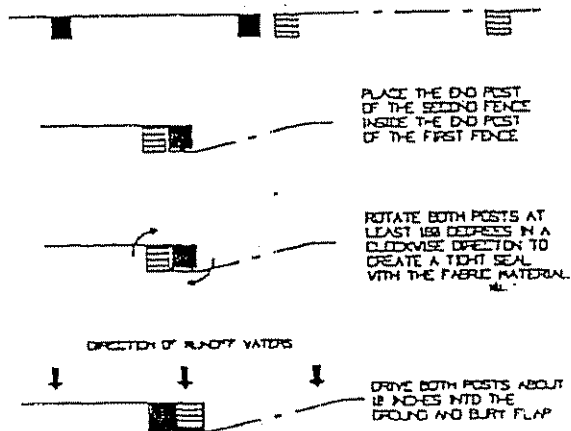
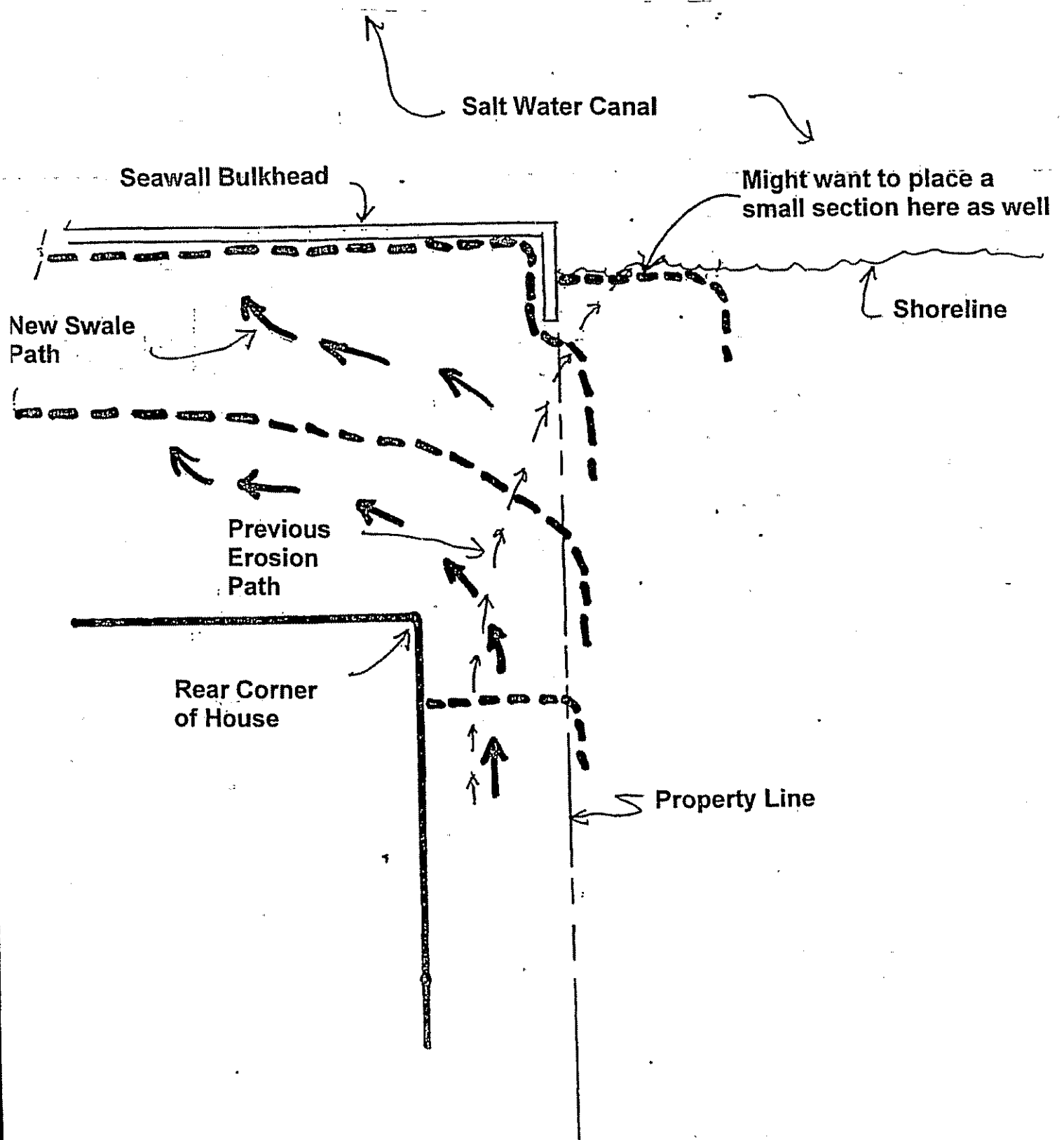


Plate 4.06d Installing a Filter Fabric Silt Fence

Source: HydroDynamics, Inc.

# SILT FENCE LOCATION (TYPICAL CANAL LOT OR OTHER STEEPLY SLOPED AREAS)



NO SCALE

HOUSE

# PEP TANK DIMENSIONS

APPROXIMATE  
"NO PLANT"  
AREA

