SPIKOWSKI PLANNING ASSOCIATES

1617 Hendry Street, Suite 416 Fort Myers, Florida 33901-2947

telephone: (239) 334-8866 fax: (239) 334-8878

e-mail: bill@spikowski.com web site: www.spikowski.com

MEMORANDUM

TO: Greater Pine Island Land Use Plan Implementation Committee

FROM: Bill Spikowski **DATE:** August 4, 2003

SUBJECT: MEETING OF AUGUST 13, 2003

The next regular meeting of the Greater Pine Island Land Use Plan Implementation Committee will be held on Wednesday, August 13, 2003, at 7:00 PM. This meeting will be held at St. John's Episcopal Church at 7771 Stringfellow (immediately north of Flamingo Bay).

There are seven sets of amendments to Lee County's Land Development Code that are required to implement the Greater Pine Island community plan update. At the June 11 meeting we reviewed early drafts of two sets of those amendments, which would implement Policy 14.3.3 on building heights and Policy 14.3.5 on neighborhood connectivity.

At the August 13 meeting we will review drafts of two more sets of amendments, which would implement Policy 14.1.5 regarding wetland buffers and Policy 14.4.4 regarding signs. These drafts are attached, using the same format as the first set: the full text of the policy being implemented; then a summary of which sections of the land development code need to be amended; followed by the actual code text, with proposed new text <u>underlined</u> and existing text that would be repealed struck through.

Please review these drafts prior to the August 13 meeting so that we can discuss them then.

Also attached to this memo is a draft agenda for August 13; a summary of the legal documents that have been filed in the pending legal challenge the Greater Pine Island community plan update; and two "conservation practice standards" published by the Natural Resources Conservation Service that are cited in section 14-412(i) of the proposed code (see page 5 of 6).

At future meetings, we will discuss the remaining sets of amendments (the 810/910 traffic rules; the Coastal Rural category and agricultural restoration standards; and commercial building design standards).

ATTACHMENTS: Agenda for August 13 meeting

Docket Sheet 03-1275 summarizing proceedings in legal challenges & defenses

"Implementing Policy 14.1.5" (6 pages)
"Implementing Policy 14.4.4" (10 pages)

NRCS "Conservation Practice Standards": Riparian Forest Buffer and Filter Strip

Greater Pine Island Land Use Plan Implementation Committee

Wednesday, August 13, 2003, 7:00 PM St. John's Episcopal Church, 7771 Stringfellow, St. James City

- 1. Call to order (Chairperson Barbara Dubin)
- 2. Update on legal challenges to the Greater Pine Island plan update
- 3. Implementation of Policy 14.1.5 Wetland Buffers
- 4. Implementation of Policy 14.4.4 Business Signs
- 5. Next steps toward implementation
 - a. "Coastal Rural" land use category
 - b. 810/910 traffic rules
- 6. Set date and time for next meeting (7:00 PM on September 10 or on October 8)
- 7. Adjournment





Docket Sheet 03-1275

RUSSELL M. SETTI & EAGLES LANDING AT PINE ISLAND, INC. vs.

LEE COUNTY AND DEPARTMENT OF COMMUNITY AFFAIRS

***Should you encounter problems printing the PDF files, select the "print as image" box in the Adobe Acrobat Reader print menu.

PDF	File Size	Date	Proceedings
S	62 K < 1 min. @ 56K.	07/31/03	Lee County's Opposition to Petitions for Intervention (filed via facsimile).
٨	10 K < 1 min. @ 56K.	07/31/03	Order on Petition to Intervene. (petition is granted, Intervenors, John E. Cammick; Cambro, Inc.; Tropical Palms General Partnership)
٨	234 K 1.22 min. @ 56K.	07/30/03	Petition to Intervene in Administrative Hearing, Intervenors, John E. Cammick, Cambro, Inc., and Tropical Palms General Partnership (filed by S. Hartsell via facsimile).
S	6 K < 1 min. @ 56K.	07/23/03	Corrected Order. (the petition to intervene is granted; Intervenors, Larry E. Hildreth and others in support of Petitioners' position; Greater Pine Island Civic Association, Inc., Phillip Buchanan, and Barbara Dubin in support of Respondents)
٨	64 K < 1 min. @ 56K.	07/22/03	Letter to Judge Stampelos from M. Bryant requesting an amended order or separate order be entered granting Mr. Buchanan's intervention filed.
S	48 K < 1 min. @ 56K.	07/21/03	Order Continuing Case in Abeyance (parties to advise status by August 21, 2003).
S	138 K < 1 min. @ 56K.	07/21/03	Petition for Leave to Intervene as Respondent in Intervention (filed by T. Reese via facsimile).
٨	6 K < 1 min.	07/21/03	Order. (the petition to intervene is granted; Intervenors Larry E. Hildreth; Greater Pine Island Civic Association,

	@ 56K.		Inc., Barbara Dubin; and Responsible Growth Management Coalition, Inc.)
S	1989 K 10.34 mins. @ 56K.	07/18/03	Petition to Intervene in Administrative Hearing (filed by J. Brugger) filed via facsimile.
S	72 K < 1 min. @ 56K.	07/18/03	Status Report (filed by Petitioner via facsimile).
1	283 K 1.48 min. @ 56K.	07/18/03	Petition for Leave to Intervene (filed by Greater Pine Island Civic Association, Phillip Buchanan and Barbara Dubin).
1	5 K < 1 min. @ 56K.	07/01/03	Order. (petition to intervenor is granted, Intervenors, Breese Rusk Glennon and Soaring Eagle Corp)
S	177 K < 1 min. @ 56K.	<u>06/18/03</u>	Petition to Intervene in Administrative Hearing (Intervenors, Breese Rusk Glennon ("Glennon") and Soaring Eagle Corp. ("Soaring Eagle") (filed via facsimile).
S	7 K < 1 min. @ 56K.	05/20/03	Order Granting Continuance and Placing Case in Abeyance issued (parties to advise status by July 21, 2003).
S	72 K < 1 min. @ 56K.	05/19/03	Joint Motion for Continuance (filed via facsimile).
S	7 K < 1 min. @ 56K.	05/09/03	Amended Notice of Hearing issued. (hearing set for June 10 and 11, 2003; 9:00 a.m.; Fort Myers, FL, amended as to location).
S	7 K < 1 min. @ 56K.	04/28/03	Notice of Hearing issued (hearing set for June 10 and 11, 2003; 9:00 a.m.; Fort Myers, FL).
S	9 K < 1 min. @ 56K.	04/28/03	Order of Pre-hearing Instructions issued.
1	55 K < 1 min. @ 56K.	04/24/03	Respondent Department of Community Affairs` Response to Initial Order (filed via facsimile).
S	48 K < 1 min. @ 56K.	04/16/03	Petitioners` Response to Initial Order (filed via facsimile).
٨	11 K < 1 min. @ 56K.	04/09/03	Initial Order issued.
S	54 K < 1 min. @ 56K.	04/09/03	Agency referral filed.
S	644 K 3.35 mins. @ 56K.	04/09/03	Petition for Administrative Hearing filed.



Notice of Intent to Find the Lee County 04/09/03 Comprehensive Plan Amendments in Compliance filed.







IMPLEMENTING POLICY 14.1.5

RECENT CHANGES TO LEE PLAN POLICY 14.1.5:

POLICY 14.1.5: New <u>development, including</u> "planned development" rezoning approvals, and new subdivisions, and agriculture, that adjoining state-designated aquatic preserves and associated <u>wetlands and</u> natural tributaries <u>shall provide</u> <u>must preserve or create</u> a 50-foot-wide <u>native</u> vegetated buffer area between the development and the waterbody <u>or associated</u> <u>wetlands</u>. <u>This requirement will not apply to existing subdivided lots</u>. <u>For agriculture, this</u> requirement:

- will be implemented through the notice-of-clearing process in chapter 14 of the land development code;
- will include a requirement to use this area as a riparian forest buffer with an adjoining filter strip wherever farmland abuts wetlands; and
- if native vegetation does not currently exist, native tree cover will be established within three years of issuance of the notice of clearing.

SUMMARY OF CODE CHANGES NEEDED TO IMPLEMENT POLICY 14.1.5:

- a. "New development, including "planned development" rezoning approvals, new subdivisions, and agriculture, that adjoin state-designated aquatic preserves and associated wetlands and natural tributaries must preserve or create a 50-foot-wide native vegetated buffer area between the development and the waterbody or associated wetlands." MODIFY 10-416 and 34-935.
- b. "For agriculture, this requirement...will be implemented through the notice-of-clearing process in chapter 14 of the land development code..." <u>ADD NEW PROVISIONS TO 14-374</u>, 14-377, and 14-312.
- c. "For agriculture, ...will include a requirement to use this area as a riparian forest buffer with an adjoining filter strip wherever farmland abuts wetlands..." <u>ADD NEW PROVISIONS TO 14-377 and 14-312.</u>
- d. "For agriculture, ...if native vegetation does not currently exist, native tree cover will be established within three years of issuance of the notice of clearing. <u>ADD NEW PROVISIONS TO 14-377 and 1</u>4-312.

COMPOSITE CODE CHANGES TO IMPLEMENT POLICY 14.1.5:

CHAPTER 10 ARTICLE III, DESIGN STANDARDS AND REQUIREMENTS

Division 6, Open Space, Buffering and Landscaping

Sec. 10-416. Landscape standards.

- (a) General. [no changes required]
- (b) **Building perimeter plantings.** [no changes required]
- (c) Landscaping of parking and vehicle use areas. [no changes required]
 - (d) Buffering adjacent property.
 - (1) (8) [no changes required]
 - (9) Development abutting natural waterway. Except where a stricter standard applies for the Greater Pine Island Area (as defined in Goal 14 of the Lee Plan and as described in section 34-2 of this code), there must be a 25-foot wide vegetative buffer landward from the mean high water line of all nonseawalled natural waterways. Where a proposed new development, including planned development rezoning approvals and new or subdivisions, is located in the Greater Pine Island Area abutting state-designated aquatic preserves and associated wetlands and natural tributaries, the width of the required buffer will be 50 feet landward from the water body and wetlands and the applicant must preserve or plant indigenous native vegetation throughout this buffer; however, these special requirements do not apply to portions of marinas that provide direct water access, or to land that has already been lawfully subdivided into building sites.

Existing vegetation within the buffer area must be retained. The removal or control of exotic pest plants must not involve the use of heavy mechanical equipment such as bulldozers, front end loaders, or hydraulic excavators, unless approved at the time of development order.

(10) – (11) [no changes required]

CHAPTER 14 ARTICLE V, TREE PROTECTION

Sec. 14-374. Definitions.

(a) The following words, terms and phrases, and their derivations, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning. When not inconsistent with the context, words in the present tense include the future and words in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

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Greater Pine Island means the area that is affected by Lee Plan Goal 14 as depicted on the Future Land Use Map and as described in section 34-2 of this code.

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[no other changes to section 14-374]

Sec. 14-377. Exemptions from article.

- (a) This article does not apply to the following:
 - (1) Removal of trees on the following lands as specified in this subsection:
 - a. This article shall not apply to the removal of trees, other than trees worthy of preservation, on lands classified as agricultural land for ad valorem taxation purposes pursuant to F.S. § 193.461(3)(b). Trees, other than trees worthy of preservation, may be removed from agriculturally zoned lands only after the owner or his agent procures a notice of clearing from the administrator (see section 14-412(i) for procedures and for special requirements that apply to proposed agricultural activities in Greater Pine Island). However, if an application to rezone the subject lands is filed within three years from the date when the most recent notice of clearing was

- issued, and the rezoning is granted, the applicable minimum open space requirements of chapter 10 shall be satisfied in the following manner: [no changes required]
- b. Land used for bonafide agricultural purposes that meets the criteria of or has been designated as wetlands.
- c. If the property is located in the critical areas for surface water management, and is not used for bona fide agricultural purposes, indigenous vegetation shall not be cleared in areas that serve as listed species occupied habitat as defined in chapter 10, article III, division 8. The following shall apply: [no changes required]
- d. If the property is located in the critical areas for surface water management, indigenous vegetation shall not be cleared within 25 feet of the mean high-water line or ordinary high-water line, whichever is applicable, of any natural waterway listed in appendix F. Indigenous vegetation may be cleared selectively to allow the placement of docks, pipes, pumps and other similar structures pursuant to applicable county ordinances.
- (2) The removal of trees on public rights-of-way conducted by or on behalf of a federal, state, county, municipal or other governmental agency in pursuance of its lawful activities or functions in the construction or improvement of public rights-of-way or in the performance of its official duties.
- (3) The removal of a protected tree that is dead or which has been destroyed or damaged by natural causes beyond saving or which is a hazard as the result of an act of God and constitutes an immediate peril to life and property.
- (4) The removal of trees by duly constituted communication, water, sewer or electrical utility companies or federal, state or county agency, engineer or surveyor, working under a contract with such federal, state or county agency or when such tree removal is done as a governmental function of such agency.
- (5) The removal of trees by duly constituted communication, water, sewer or electrical

- utility companies in or adjacent to a public easement or right-of-way, provided such removal is limited to those areas necessary for maintenance of existing lines or facilities or for construction of new lines or facilities in furtherance of providing utility service to its customers, and provided further that such removal is conducted so as to avoid any unnecessary damage or removal of trees.
- (6) The removal of trees protected by this article, other than a tree worthy of preservation, by a state-licensed land surveyor in the performance of his duties. The removal of trees protected by this article in a manner which requires clearing a swath of greater than three feet in width shall require approval of the administrator prior to such a removal and clearance.
- (7) The removal of protected trees on a lot zoned for single-family residential use or being used lawfully as a single-family residence or mobile home where the residence or proposed residence is located on a lot no greater than five acres in area. However, this exemption does not apply on the coastal islands listed in subsection (c) below.
- (8) The removal of protected trees, other than a tree worthy of preservation, on the premises of a licensed plant or tree nursery or tree farm where such trees are intended for sale in the ordinary course of the licensee's business.
- (b) Any final development order or other final approval issued by the county which was granted after January 27, 1983, but before the effective date of the ordinance from which this article is derived may, at the discretion of the administrator, be exempted from compliance with this article, to the extent that the restrictions imposed by this article conflict with the approvals given in the final development order or other final approval, in which case the final development order or other final approval shall supersede this article as to those areas in conflict.
- (c) The exemptions herein for single-family residential use in subsection (a)(7) above do not apply to land located on the following coastal islands: Gasparilla Island, Cayo Costa Island, North Captiva Island, Captive Island, Buck Key,

<u>Greater Pine Island</u>, Lover's Key Group of Islands, Black Island, Big Hickory Island, and Little Hickory Island (Bonita Beach).

- (1) The tree permit will be incorporated into the building permit for the site. Review of the tree removal will follow the criteria listed in sections 14-411 and 14-412. For clearing prior to building permit issuance, as a separate tree permit application must be submitted for review and compliance with sections 14-411 and 14-412. No tree permit is required for the annual removal of five trees or less from any single-family residential lot that contains an existing single-family dwelling unit.
- (2) As part of the tree permit site inspections, department of community development staff will also review understory or subcanopy plants and protected species for retention or relocation within the site.
- (3) For <u>Greater Pine Island only</u>, a tree removal permit will be required only on parcels or lots zoned or used for residential purposes that are two acres in size or greater.

Sec. 14-412. Issuance of permit.

- (a) *Submission of application*. Application for a permit to remove any protected tree defined in this article shall be submitted to the administrator, in writing, on a form provided by the administrator, accompanied by a written statement indicating the reasons for removal.
- (b) *Authority of administrator*. The administrator shall have the authority to issue the permit and to inspect all work performed under any permit issued under this article.
- (c) *Required information*. All applications to remove any protected tree defined in this article shall be on forms provided by the administrator. Where an application has been submitted to the administrator for the removal of more than five trees, no tree removal permit shall be issued by the administrator until a site plan for the lot or parcel has been reviewed and approved by the administrator, which shall include the following minimum information:
 - (1) The shape and dimensions of the lot or parcel, together with the existing and

- proposed locations of the structures and improvements, if any.
- (2) A tree location map for the lot or parcel, in a form acceptable to the administrator. For the removal of five trees or less, an on-site examination by the administrator's designee shall be made in lieu of the tree location map requirement.
- (3) Any proposed grade changes that might adversely affect or endanger any trees on the lot or parcel, together with specifications reflecting how the trees can be safely maintained.
- (4) Any proposed tree replacement plan.
- (d) *Criteria for granting*. The administrator shall approve a permit for issuance for the removal of any protected tree if the administrator finds one or more of the following conditions is present:
 - (1) Trees which pose a safety hazard to pedestrian or vehicular traffic or threaten to cause disruption to public utility services.
 - (2) Trees which pose a safety hazard to existing buildings or structures.
 - (3) Trees which prevent reasonable access to a lot or parcel so long as the proposed access point complies with all other county regulations.
 - (4) Diseased trees which are a hazard to people, buildings or other improvements on a lot or parcel or to other trees.
 - (5) Trees so weakened by age, storm, fire or other injury as to, in the opinion of the administrator, jeopardize the life and limb of persons or cause a hazard to property.
 - (6) Trees which prevent the lawful development of a lot or parcel or the physical use thereof.
 - (7) The administrator may require that a tree protected by this article be relocated on the same lot or parcel in lieu of removal.
- (e) Submission of site plan when building permit not required. Where a building permit issuance is not required because no structures are to be constructed and no other development of the lot is to occur, any person seeking to remove a tree protected under this article shall first file a site plan with the administrator meeting the requirements of subsection (c) of this section prior to receiving a tree removal permit from the administrator.

- (f) *Inspection of site*. The administrator may conduct an on-site inspection to determine if any proposed tree removal conforms to the requirements of this article and what effect, if any, removal of the trees will have upon the natural resources, as identified in the Lee Plan, of the affected area prior to the granting or denying of the application. A permit fee will be required for the removal or relocation of any tree protected under the provisions of this article and shall be paid at the time of issuance of the permit. The fees established will be set in accordance with the county administrative code and paid to the administrator. Such fees are hereby declared to be necessary for the purpose of processing the application and making the necessary inspection for the administration and enforcement of this article.
- (g) *Approval or denial*. Based upon the information contained in the application and after investigation of the application, the administrator shall approve or deny the application, and, if approved, the administrator is the party so designated by the Board of County Commissioners to issue the permit for a period not to exceed one year and to collect the permit fee.
- (h) *Conditions*. The administrator may attach conditions to the permit relating to the method of identifying, designating and protecting those trees which are not to be removed in accordance with subsection (g) of this section. A violation of these conditions shall automatically invalidate the permit. Special conditions which may be attached to the permit may include a requirement for successful replacement of trees permitted to be removed with trees of the same size, compatible species and same number.

- (i) Notice of clearing. Upon receipt of all necessary documents, the administrator may issue a notice of clearing in lieu of an individual tree removal permit. A notice of clearing will be the preferred method of confirming that proposed agricultural activities conform with the exemption criteria in section 14-377(a). Notices of clearing for agricultural purposes in Greater Pine Island must comply with the following additional requirements in accordance with Policy 14.1.5 of the Lee Plan:
 - (1) Agricultural land that adjoins statedesignated aquatic preserves and associated wetlands and natural tributaries must preserve or create a 50-foot-wide native vegetated conservation buffer area between all agricultural lands and the natural waterbody and associated wetlands.
 - (2) The purpose of this conservation buffer is to capture or slow the movement of sediments, fertilizers, pesticides, pathogens, and heavy metals that may be concentrated in stormwater runoff and to allow for increased biodiversity and improved wildlife habitat.
 - (3) Stormwater runoff that is discharged through this conservation buffer must be routed through an indirect discharge such as an overflow or spreader swale or similar conveyance of a sufficient dimensions to reduce discharge velocities to historic rates or rates less than two feet per second.
 - (4) This conservation buffer area must be maintained as a forested buffer but may contain a grassed filter strip of up to 15 feet wide. If native vegetation does not currently exist in the remainder of the buffer, native tree cover must be established within three years of issuance of the notice of clearing.
 - (5) Additional recommended design criteria are available in "Conservation Practice Standards" from the National Resources Conservation Service:
 - <u>a.</u> Standard 391 (Riparian Forest Buffer).
 - b. Standard 393 (Filter Strip).
 - (6) These conservation buffer regulations will not be construed a manner that violates the Agricultural Lands and Practices Act, F.S. § 163.3162, or the Florida Right-to-Farm Act, F.S. § 823.14.

CHAPTER 34 ARTICLE VI, DISTRICT REGULATIONS Division 9, Planned Development Districts

Sec. 34-935. Property development regulations.

The provisions of this section do not apply to PRFPDs. Property development regulations for PRFPDs are set forth in section 34-941.

- (a) *Minimum area for planned developments.* [no changes required]
- (b) Minimum setbacks of structures and buildings from development perimeter boundaries. [no changes required]
- (c) Uses permitted within required perimeter setback. [no changes required]
- (d) <u>Planned</u> developments on in Greater Pine Island. Where the proposed planned development is within the Greater Pine Island area and adjoins state-designated aquatic preserves or associated wetlands or natural tributaries, a 50-foot-wide native vegetated buffer area must be provided between any structure or building and the water body and wetlands, the mean high-water line of the water body shall be provided. Indigenous native plants within this buffer must be maintained or planted.
 - (1) These requirements do not apply to:
 - <u>a.</u> Portions of marinas that provide direct water access, or
 - <u>b.</u> <u>Land that has already been subdivided</u> into building sites.
 - (2) No deviation from this these requirements shall be permitted except under extreme circumstances in which the requirements would have the effect of prohibiting all reasonable use of the property.
- (e) Minimum lot size, dimensions and setbacks. [no changes required]
- (f) *Height of buildings.* [no changes required]
 - (g) *Open space.* [no changes required]

IMPLEMENTING POLICY 14.4.4

NEW LEE PLAN POLICY 14.4.4:

POLICY 14.4.4: The county will expand its current sign regulations to include specific standards for Greater Pine Island if an acceptable proposal is submitted by the Greater Pine Island community. These standards would reduce the size of ground-mounted signs, discourage or disallow internally lit box signs, allow wall signs on buildings near the right-of-way, and allow small directional signs on Stringfellow Road for businesses not visible from the road.

SUMMARY OF CODE CHANGES NEEDED TO IMPLEMENT POLICY 14.4.4:

- a. "These standards would reduce the size of ground-mounted signs..." MODIFY 30-153(3)a.8
- b. "... discourage or disallow internally lit box signs..." MODIFY 30-153(3)d
- c. "... allow wall signs on buildings near the right-of-way..." MODIFY 30-153(2)a.4 & 30-153(3)e
- d. "... and allow small directional signs on Stringfellow Road for businesses not visible from the road." <u>ADD PROVISIONS FOR DIRECTIONAL SIGNS TO 30-181(c) & TO ORDINANCE 88-11; REPLACE EXISTING BILLBOARDS BEING USED AS DIRECTIONAL SIGNS BY ADDING 30-55(b)(5) & 30-183(13).</u>

COMPOSITE CODE CHANGES TO IMPLEMENT POLICY 14.4.4:

CHAPTER 30 ARTICLE I. IN GENERAL

Sec. 30-2. Definitions and rules of construction.

- (a) In case of any difference of meaning or implication between the text of this chapter and any other law or regulation, this chapter shall control.
- (b) The following words, terms and phrases, when used in this chapter, have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:

Greater Pine Island means the area that is affected by Lee Plan Goal 14 as depicted on the Future Land Use Map and as described in section 34-2 of this code.

[no other changes to section 30-2]

CHAPTER 30 ARTICLE II, ADMINISTRATION AND ENFORCEMENT

Sec. 30-55. Nonconforming signs.

- (a) *Status*. Every sign, as of the effective date of the ordinance from which this chapter is derived, which is a permitted legally existing sign shall be deemed a legal nonconforming sign. A permitted sign means a sign that was constructed or is in place with a valid permit from the county. All nonconforming signs shall be subject to the provisions of this section. All existing signs which are not legal nonconforming signs must comply with the terms of this chapter.
 - (1) A nonconforming sign may not be enlarged or altered in a way which increases its nonconformity.

- (2) Nothing in this section shall relieve the owner or user of a legal nonconforming sign or owner of the property on which the legal nonconforming sign is located from the provisions of this chapter regarding safety, maintenance and repair of signs. Any repair or refurbishing of a sign that exceeds 25 percent of the value of the sign in its preexisting state shall be considered as an act of placing a new sign and not an act of customary maintenance. It shall be the responsibility of the permittee to provide the division of community development with adequate proof of the cost of such work in the form of an itemized statement of the direct repair cost. whenever such information is requested by the division.
- (3) If any nonconforming sign is destroyed to an extent of 50 percent or more of its assessed value at the time of destruction, the sign shall not be replaced or repaired, in part or in full, except upon full compliance with this chapter.
- (4) A replacement billboard structure may be rebuilt in its present location provided that the structure is in compliance with the following conditions:
 - a. Pursuant to the application for replacement, two legal nonconforming billboard structures shall be removed in exchange for the right to reconstruct one replacement billboard structure.
 - b. One of the structures which is to be removed must be located on the same site as the replacement billboard structure. If only one structure is located on the site of the replacement sign, another nonconforming billboard structure must be removed from another location within the unincorporated area of the county.
 - c. The replacement billboard structure must meet all current county height, size and setback requirements.
 - d. The land use category in which the replacement sign is to be erected shall be the less restrictive of the two land use categories where the two removed nonconforming billboard structures were located. If the land use category is the same for both nonconforming billboard structures, the replacement

- structure may be located at either site. For purposes of this section, the following hierarchy of land use categories should be used to determine the least restrictive land use categories, with the most appropriate categories listed in descending order:
- 1. Intensive development, industrial development, airport commerce and interchange areas;
- 2. Central urban and urban community;
- 3. Suburban and outlying suburban;
- 4. Rural, outer islands and density reduction/groundwater resources; and
- 5. Environmentally critical areas (resource protection area and transitional zones).
- e. Upon approval of the application for replacement and completion of the conditions specified in this subsection, the replacement billboard structure shall be deemed in conformance with this chapter.
- f. No replacement billboard structure may be located in the locations designated in section 30-183(1)b.

(b) Loss of legal nonconformity.

- (1) A legal nonconforming sign shall become an illegal sign which must comply with this chapter if:
 - a. More than 50 percent of the sign is removed or unassembled for a period of more than six months.
 - b. The sign is altered or relocated in any manner which increases its nonconformity or causes it to be less in compliance with the provisions of this chapter. A change in copy of a sign listed as a prohibited sign by this chapter is presumed to be an alteration which increases nonconformity; such a copy change on a prohibited sign is prohibited. To establish that the nonconformity is not increased by replacing copy on a sign, other than on a changeable copy sign (where it is presumed that changing copy cannot increase nonconformity) or a prohibited sign (where a change of copy is never allowed), a sealed

- statement from a state-certified engineer certifying that the sign meets the structural integrity required by the current applicable building code shall be submitted to the building official in those instances when engineering documents are required for original placement of such a sign. All signs for which a change of copy is permitted shall be made to conform with the requirements of this chapter by April 1, 1993, or any such sign shall lose its legal nonconforming status and shall be removed.
- c. Repair or refurbishing exceeds 25 percent of the value of the sign in its preexisting state.
- d. The sign is replaced, except as provided in subsection (a)(4) of this section.
- (2) When a sign face remains blank, which is defined as void of advertising matter, for a period of 12 months it loses its nonconforming status and must be treated as a sign which must comply with all the requirements of this chapter. Signs displaying an "available for lease" message or similar message and partially obliterated signs which do not identify a particular product, service or facility are considered to be blank signs.
- (3) A nonconforming sign that has lost its legal nonconforming status shall be immediately brought into compliance with this chapter, or the sign shall be removed.
- (4) The existence of an illegal sign or a legal nonconforming sign does not constitute a hardship warranting the issuance of a variance from the provisions of this chapter.
- (5) Certain nonconforming off-site directional signs and billboards in Greater Pine Island lost their nonconforming status upon adoption of section 30-183(c). These signs became illegal signs at that time and must be removed within 12 months after adoption of section 30-183(c).
 - a. Qualifying businesses that have used nonconforming billboards as off-site directional signs may replace these billboards with new off-site directional signs located in the right-of-way in accordance with section 30-183(c).

b. All other billboards must be removed within 12 months after adoption of section 30-183(c) unless their owners can demonstrate that the billboard has been in continual compliance with the requirements of this code for nonconforming signs (see section 30-183(b)(1)-(b)(4).

CHAPTER 30 ARTICLE IV, RESTRICTIONS BASED ON LOCATION

Sec. 30-153. Permanent signs in commercial and industrial areas.

In order to provide fair, equal and adequate exposure to the public, and to prevent a single property owner from visually dominating neighboring properties with signs, all nonresidential uses are limited to a total permissible sign area in accordance with the provisions of this section.

- (1) Calculation of total permissible area. Except as specifically provided in section 30-6(1)w, total permitted sign area for any nonresidential use shall be calculated at the ratio of 20 square feet of sign area for every ten linear feet, or major fraction thereof, of frontage on a street which affords vehicle access to the property, subject to the following limitations:
 - a. Single frontage.
 - 1. For uses with 50 feet or less frontage, maximum permitted sign area shall be 100 square feet.
 - 2. For uses with over 50 feet but less than 100 feet of frontage, maximum permitted sign area shall be 150 square feet.
 - 3. For uses with from 100 to 330 feet of frontage, maximum permitted sign area shall be 300 square feet.
 - 4. For uses with over 330 feet of frontage, maximum permitted sign area shall be 400 square feet.
 - b. *Multiple frontage*.
 - 1. Corner lots. Uses located on corner lots may utilize up to the maximum sign area allowed for each frontage providing vehicle

- access. No transfers of allowable area may be made from one frontage to another. See subsection (2)a of this section for exceptions.
- 2. Parallel street frontage. Uses with frontage on two streets which do not form a corner lot shall be allowed sign area credit for the second street as follows:
 - i Both streets collector or better. When both streets serve as collectors or better and public access is available from both streets, each street frontage shall be computed as provided in subsection (1)a of this section. However, no transfers of allowable area may be made from one frontage to the other. (Example: a use located on a through lot between old and new U.S. 41.)
 - ii One street collector or better and one street local. When a use fronts on two streets, one of which is classified as a local street, the following limitations shall apply:
 - (a) If the property across the local street is residential or institutional, or if the primary use on either side of the local street within that block is residential, the sign area allowance on the local street shall be limited to 25 square feet, regardless of frontage.

 (Example: property front has primary access to U.S. 41 but also borders a local street behind the property.)
 - (b) If the property across the local street is commercial or industrial, and the street provides vehicular access to the subject property, sign area allowance shall be the same as provided in subsection (1)a of this section. No transfer of allowable area may be

- made from one street to the other. (Example: a business establishment located in a commercial or industrial area.)
- borders on two local streets, full sign area credit shall be allowed for the street that provides the primary vehicle access. The second street shall be limited to a sign area of 25 square feet. No transfers of allowable sign area shall be made from one street to the other. (Example: a permitted establishment in a primarily residential area.)
- iv Frontage roads. Where a business fronts upon a collector or better street but is separated by a frontage road, the allowable sign area shall be treated as though the frontage road was not there.
- (2) Nonresidential subdivisions and multiple-occupancy complexes with more than five establishments.
 - a. *Identification sign*. A nonresidential subdivision or a multiple-occupancy complex of more than five establishments shall be permitted one ground-mounted identification sign along any street which provides access to the property as follows:
 - 1. One square foot of sign area per face shall be permitted for every one linear foot of frontage, provided that:
 - i No sign shall exceed 200 square feet in area per sign face.
 - ii Only one identification sign shall be permitted along any street frontage of less than 330 linear feet. A second identification sign may be permitted if the frontage along any one street exceeds 330 linear feet, provided that the total combined sign area of both signs does not exceed 300 square feet.

- iii On corner lots, the developer may either place one identification sign on both streets providing access as stipulated in subsections (2)a.1.i and ii of this section, or he may place one sign in the corner with a total sign area based upon the total frontage of both streets provided the maximum sign area shall not exceed 300 square feet per face.
- iv Where a nonresidential subdivision has more than one entrance from the same street, one additional identification sign not exceeding 16 square feet in area, not illuminated, and displaying the name of the development only may be permitted at each additional entrance.
- 2. The maximum height of any identification sign shall be 24 feet.
- 3. Except as provided in subsection (2)a.1.iv of this section, the identification sign may be illuminated with a steady light, but the sign shall not be animated.
- 4. Identification signs shall be set back a minimum of 15 feet from any street right-of-way or easement, and ten feet from any other property line.
 - i This requirement shall not be construed to forbid a wall sign that meets the size limitations of this section from being placed on the front wall of a building that is lawfully closer than 15 feet to a front property line.
 - ii In no case shall an identification sign be permitted between a collector or arterial street and a frontage road.
- b. *Directory signs*. Nonresidential subdivisions and multiple-occupancy complexes of more than five establishments shall be permitted to place a directory sign on the same

- structure as the project identification sign, subject to the following limitations:
- 1. Each directory sign must be of the same background and lettering and color scheme.
- 2. Theaters may advertise on permitted identification signs provided the theater's copy area does not exceed 25 percent of the total permissible sign area.
- 3. The maximum size of sign area for all directory and ground identification signs shall not exceed the size and height limitations as written in subsection (2)a of this section. It shall be the responsibility of the developer to assure adequate space on the directory and identification sign for each tenant. Failure to provide space shall not be grounds for any occupant to request or obtain a variance from the provisions of this section.

c. Individual occupants within multiple-occupancy complex.

Individual offices, institutions, business or industrial establishments located within a multiple-occupancy complex shall not be permitted individual ground-mounted identification signs, but may display wall-mounted, marquee or under-canopy signs as follows:

- 1. Wall signs.
 - i Wall signs are permitted on any wall facing a collector or arterial street or parking lot provided that the total sign area of the wall sign and any attached marquee or canopy sign does not exceed ten percent of the wall area.
 - ii Where the wall abuts residentially zoned property or a delivery vehicle accessway, wall signs shall be limited to a maximum size of 24 square feet in area.
- 2. *Marquee signs*. Marquee signs are permitted only on marquees or canopies otherwise lawfully

- permitted or in existence. Marquee signs shall not extend horizontally beyond the edges of the canopy or marquee to which they are attached or from which they are suspended.
- 3. Under-canopy signs. Signs attached to the underside of a canopy shall have a copy area no greater than four square feet, with a maximum letter height of six inches, subject to a minimum clearance height of eight feet from the sidewalk, and shall be mounted as nearly as possible at a right angle to the building face, and must be rigidly attached.
- 4. Sign content. No sign permitted by this subsection (2)c shall contain any advertising message concerning any business, goods, products, services or facilities which are not manufactured, produced, sold, provided or located on the premises upon which the sign is erected or maintained.
- d. *Interior directional signs*. Directional signs interior to a multiple-occupancy complex of five or more establishments or to a nonresidential subdivision may be permitted subject to the following:
 - 1. Interior directional signs shall not exceed ten feet in height and 32 square feet in total sign area;
 - 2. Individual tenant panels not exceeding four square feet in area may be affixed to the interior directional sign structure provided that the total sign area does not exceed 32 square feet;
 - 3. Signs shall be located in a manner which will not adversely obstruct safe visibility between moving vehicles or vehicles and pedestrians;
 - 4. Signs shall not be visible from outside the complex premises.

- (3) Individual office, institution, business or industrial establishments, and multiple-occupancy complexes with five or less establishments. The following regulations shall apply for any office, institution, business or industrial establishment which is not located within a multiple-occupancy complex and to all multiple-occupancy complexes containing five or less establishments:
 - Every individual office, business or industrial establishment, and a multiple-occupancy complex of five or less establishments, shall be allowed one ground-mounted sign.
 - 1. If the establishment has 50 feet or less frontage on a public right-of-way, the maximum sign area shall be 32 square feet, and the sign shall be located no closer than five feet to any side property line.
 - 2. If the establishment has over 50 feet and up to 100 feet of frontage on a public right-of-way, the maximum permitted sign area shall be 64 square feet, provided that no ground-mounted sign shall be closer than five feet to any side property line.*
 - 3. If the establishment has over 100 feet and up to 300 feet of frontage on a public right-of-way, the maximum permitted sign area shall be 72 square feet, and the sign shall be set back a minimum of ten feet from any side property line.*
 - 4. Establishments having over 300 feet of frontage on a public right-of-way shall be permitted up to 96 square feet of sign area, and the sign shall be set back a minimum of ten feet from any side property line.*
 - 5. Establishments having frontage on more than one public right-of-way may be allowed one additional ground-mounted sign on the secondary frontage of not more than 24 square feet in area.
 - 6. On corner lots, the occupant may be allowed one single

- ground-mounted sign rather than two separate ground-mounted signs (one per street frontage) provided the total sign area of the ground-mounted sign does not exceed 1 1/2 times the maximum size permitted on any one street frontage.
- 7. In multiple-occupancy complexes of five or less occupants, ground sign area not identifying the complex should be divided equally among the occupants.
- 8. *Establishments in subsections
 (3)a.2–3–4 above that are located
 in Greater Pine Island and wish to
 place a ground-mounted sign are
 limited to a maximum sign area of
 48 square feet.
- b. Maximum height of a ground-mounted identification sign shall be 20 feet.
- c. Identification signs may be illuminated, but shall not be animated.
- d. Wall-mounted, marquee or canopy signs may be displayed provided the total sign area of such signs plus any permitted ground-mounted identification sign does not exceed the total permitted sign area for the property based upon the calculations set forth in subsection (1) of this section, provided that not more than ten percent of any wall area may be used for signage. For Greater Pine Island only, internally illuminated box signs mounted on or projecting from a building are discouraged and are <u>limited to a maximum sign</u> area of 12 square feet per establishment.
- e. Identification signs shall be set back a minimum of 15 feet from any right-of-way or easement.
 - 1. This requirement shall not be construed to forbid a wall sign that meets the size limitations of this section from being placed on the front wall of a building that is lawfully closer than 15 feet to a front property line.
 - 2. In no case shall an identification sign be permitted between a collector or arterial street and a frontage road.

- (4) Hospitals or other emergency medical facilities. [no changes required]
- (5) Electronic changing message centers. [no changes required]

Sec. 30-181. Off-site directional signs.

- (a) Residential developments.
- (1) **Location; size.** Off-site, nonilluminating directional signs for subdivisions or residential projects shall be permitted along arterial and collector streets within 500 feet of the nearest intersection involving a turning movement to locate the development, subject to the following:
 - a. For a development proposing a single sign to serve the traveling public from two directions, the sign shall not be closer than 50 feet from the intersection and shall not exceed 64 feet in area.
 - b. For a development proposing two signs, one on each side of the intersection, the sign shall be a minimum of 100 feet from the intersection and shall not exceed 32 square feet in area.
- (2) Number of signs; separation. No subdivision or residential development shall be permitted more than two off-site directional signs, and no off-site directional sign shall be located closer than 100 feet to any other off-site directional sign.
- (3) **Setback.** Off-site directional signs shall be set back a minimum of 15 feet from any street right-of-way.
- (4) **Height.** No off-site directional sign shall exceed a height of eight feet.
- (5) **Copy area.** Off-site directional sign copy message shall be limited to the name of the development and directions to the development entrance. No advertising shall be permitted.

- (b) *Semipublic bodies*. Off-site directional signs for semipublic bodies will be allowed subject to approval of the director or his designee, provided that:
 - (1) **Number of signs.** No semipublic body shall be allowed more than two off-site directional signs. Signs serving two or more semipublic bodies and located at the same intersection shall use the same support structure as necessary.
 - (2) **Location.** Signs shall be located along arterial and collector streets at the nearest intersection involving a turning movement to locate the organization.
 - (3) **Height.** No off-site directional sign shall exceed a height of eight feet.
 - (4) **Size; content.** Sign area shall be limited to four square feet, and signs shall contain only the name and logo of the semipublic body and a pointing arrow indicating the turn toward the organization.
 - (5) **Design generally.** Off-site directional signs shall be of a construction and design approved by the director.
 - (6) Location in right-of-way. Off-site directional signs may be allowed in the right-of-way with approval of the county engineer, based upon local and state highway safety standards, and shall be subject to future removal by the county.
- (c) Greater Pine Island only. The Lee County Department of Transportation will fabricate, install, and maintain off-site directional signs in the right-of-way of Stringfellow Road and Pine Island Road in Greater Pine Island for qualifying businesses and organizations, as provided in Lee County's Commercial Use of Rights-of-Way Ordinance, Ordinance No. 88-11, as may be amended from time to time. Off-site directional signs that do not qualify for subsections (a), (b), or (c) of this section are not permitted.

Sec. 30-183. Billboards.

Billboards are permitted along I-75; and Alico Road, west of I-75; and Metro Parkway, from Daniels Parkway to Ben C. Pratt/Six Mile Cypress Parkway; and any arterial street within the county subject to the following limitations:

(1) Location.

- a. Except as otherwise provided in this section, billboards are permitted in any zoning district provided the area is shown on the county comprehensive plan as intensive development, industrial development, interchange areas or airport commerce. Arterial streets must be designated on the existing functional classification map, as in effect on March 20, 1991.
- b. No billboard will be permitted along:
 - 1. Ben C. Pratt/Six Mile Cypress Parkway.
 - 2. Summerlin Road.
 - 3. McGregor Boulevard.
 - 4. Daniels Parkway/Cypress Lake
 Drive corridor from McGregor
 Boulevard to SR 82, which
 includes Cypress Lake Drive,
 Daniels Parkway, the proposed
 Daniels Parkway extension, Fuel
 Farm Road, portions of
 Chamberlin Parkway and any
 other roads which are not stated in
 this subsection but are located
 within such corridor.
 - 5. Colonial Boulevard east of I-75.
 - 6. Alico Road east of I-75.
 - 7. Koreshan Boulevard.
 - 8. Corkscrew Road.
 - 9. Treeline Avenue Corridor from Daniels Parkway to Bonita Beach Road. This prohibition includes Ben Hill Griffin Boulevard and any other roads which are not stated in this subsection but are located within this corridor. This prohibition specifically contemplates the future renaming of Treeline Avenue.
 - 10. Pine Ridge Road.
 - 11. South Pointe Boulevard

- (2) **Separation.** Minimum distance separation will be as follows:
 - a. Within industrial/business and intensive business areas, 2,000 feet from any other billboard on the same side of the street.
 - b. Within interchange areas, 1,320 feet from any other billboard on the same side of the street.
 - c. Within airport commerce areas, 2,000 feet from any other billboard on the same side of the street.
 - No billboard may be located closer than 100 feet to any intersection with another arterial road.
- (3) **Size.** No billboard may be less than 72 square feet in area per face or more than 400 square feet in size. Embellishments may not extend more than four feet from the top edge or more than two feet from any one side edge. On Alico Road, west of I-75, billboards may not exceed 380 square feet in size.
- (4) **Height.** Billboards may not exceed a height of 20 feet when placed at the sign setback line set forth in subsection (5) of this section, except that, for every two feet the sign is placed back from the required setback line, the height of the sign may be increased by one foot, to a maximum height of 30 feet.
- (5) **Setbacks.** All billboards must be set back a minimum of ten feet from any property line and any building as measured between the closest point of the sign to the property line or building.
- (6) **Roof signs.** Billboards are prohibited on any roof portion of any building.
- (7) **Copy area.** The billboard advertisement shall cover the entire copy area of the billboard.
- (8) Maximum number of signs per structure. Each billboard structure shall be limited to a single sign, which may be single- or double-faced, but side-by-side or vertically stacked (double-tier) signs shall be prohibited.

- (9) **Illumination**. Billboards may be illuminated provided that, if external lighting such as floodlights, thin-line or gooseneck reflectors are used, the light source shall be directed onto the face of the sign and shall be effectively shielded so as to prevent beams or rays of light from being directed into any portion of the street right-of-way.
- (10) **Revolving signs.** Billboards may be a revolving sign as defined in this chapter, but shall not consist of animation or flashing devices.
- (11) **Variances and deviations.** No variances or deviations from subsections (1) or (6) through (10) may be granted.
- (12) Landscaping for billboards on Alico Road, west of I-75. [no changes required]
- (13) Billboards in Greater Pine Island.

 Some billboards remained in place in
 Greater Pine Island despite the
 longstanding prohibition against
 billboards and other off-site advertising
 and directional signs. These signs may
 have been nonconforming signs or they
 may have been illegal signs. Within 12
 months after adoption of section
 30-181(c) into this chapter, all remaining
 billboards must be brought into
 compliance by one of the following
 means:
 - a. Some billboards may be replaced with off-site directional signs installed in rights-of-way by Lee County
 Department of Transportation pursuant to section 30-181(c).
 - b. Some billboards may continue to qualify for nonconforming status and can remain in place, subject to the restrictions in section
 30-153(b)(1)–(b)(4).
 - c. All billboards in Greater Pine Island that cannot demonstrate continual compliance with this chapter's nonconforming standards are illegal and must be removed (see section 30-153(b)(5)).

AMEND LEE COUNTY'S "COMMERCIAL USE OF RIGHTS-OF-WAY ORDINANCE," ORDINANCE 88-11 AS AMENDED, AS FOLLOWS:

SECTION 5: EXCEPTIONS

The commercial use of the right of any road, street, or highway with the county road system is expressly prohibited, except that the commercial uses listed below may occur in the public rights-of-way, but only in compliance with the requirements and conditions set forth herein:

- A. County permitted or Sponsored Special Events [no changes proposed]
- B. Newspaper Vending Racks or Machines [no changes proposed]
- C. Bus Benches [no changes proposed]
- D. Utilities [no changes proposed]
- E. Commercial Loading or Unloading [no changes proposed]
- F. Mobile Food Vendors [no changes proposed]
- G. <u>Directional Signs (Greater Pine Island only)</u>
 The Lee County Department of

Transportation will fabricate, install, and maintain off-site directional signs in the right-of-way of Stringfellow Road and Pine Island Road in Greater Pine Island for qualifying businesses and organizations.

- 1. "Greater Pine Island" means the area that is affected by Lee Plan Goal 14 as depicted on the Future Land Use Map and as described in section 34-2 of the Lee County Land Development Code.
- 2. "Qualifying businesses and organizations" means one of the following types of forprofit, non-profit, or governmental entities currently operating in Greater Pine Island on a parcel of land that does not have road frontage on CR 767 (also known as Stringfellow Road, Oleander Street, and Main Street) or on CR 78 (also known as Pine Island Road):
 - a. Motels/hotels/bed-and-breakfast inns
 - b. Restaurants
 - c. Retail sales and personal services
 - d. Marinas
 - <u>e.</u> Farms or nurseries regularly offering retail sales
 - <u>f.</u> Transient RV parks
 - g. Educational, cultural, and religious institutions
 - h. Governmental agencies
 - i. Other tourist-oriented businesses

- j. "Qualifying businesses and organizations" shall not include residential or mobile home communities and shall not include any entities that are not regularly open to the public.
- 3. Qualifying businesses and organizations may apply for a single off-site directional sign to be fabricated, installed, and maintained by the Lee County Department of Transportation in the right-of-way of Stringfellow Road or Pine Island Road.
 - <u>a.</u> Each directional sign shall be placed just ahead of the nearest street that intersects with Stringfellow Road or Pine Island Road.
 - b. The exact location and placement of each sign will be determined by the DOT in accordance with established clear zone standards and based on additional operational and safety factors for each sign location. If no acceptable location can be found for a requested sign, the application fee will be refunded.
 - c. Directional signs for up to three businesses may be placed on each pair of sign supports. If additional signs are needed, an additional set of sign supports will be installed if sufficient space is available.
 - d. Each directional sign will contain only the name of the qualifying business or organization, a directional arrow, and optionally the appropriate international symbol (such as lodging, food, marina, camping, library, etc.). Lee County DOT shall determine the size of the sign and the font size and type for its lettering, and after consultation with the applicant may shorten the name to ensure legibility to motorists.
 - e. Applications shall be made on forms provided by DOT and must be accompanied by the application fee as specified in the External Fees and Charges Manual (Administrative Code 3-10). An additional fee must be paid annually for the anticipated average cost to maintain and mow around each sign.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

RIPARIAN FOREST BUFFER

(Acre)

CODE 391

DEFINITION

An area of predominantly trees and/or shrubs located adjacent to and up-gradient from watercourses or water bodies.

PURPOSES

- Create shade to lower water temperatures to improve habitat for aquatic organisms.
- Provide a source of detritus and large woody debris for aquatic and terrestrial organisms.
- Create wildlife habitat and establish wildlife corridors.
- Reduce excess amounts of sediment, organic material, nutrients and pesticides in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow
- Provide a harvestable crop of timber, fiber, forage, fruit, or other crops consistent with other intended purposes.
- Provide protection against scour erosion within the floodplain.
- Restore natural riparian plant communities.
- Moderate winter temperatures to reduce freezing of aquatic over-wintering habitats.
- To increase carbon storage.

CONDITIONS WHERE PRACTICE APPLIES

On areas adjacent to permanent or intermittent streams, lakes, ponds, wetlands and areas with ground water recharge that are capable of supporting woody vegetation.

CRITERIA

General Criteria Applicable To All Purposes

The location, layout and density of the riparian forest buffer will accomplish the intended purpose and function.

Dominant vegetation will consist of existing, naturally regenerated, or planted trees and shrubs suited to the site and the intended purpose.

All buffers will consist of a Zone 1 that begins at the normal water line, or at the top of the bank, and extends a minimum distance of 15 feet, measured horizontally on a line perpendicular to the water body.

Occasional removal of some tree and shrub products such as high value trees is permitted in zone 1 provided the intended purpose is not compromised by the loss of vegetation or harvesting disturbance.

Necessary site preparation and planting shall be done at a time and manner to insure survival and growth of selected species.

Only viable, high-quality and adapted planting stock will be used.

Site preparation shall be sufficient for establishment and growth of selected species and is done in a manner that does not compromise the intended purpose.

Livestock shall be controlled or excluded as necessary to achieve and maintain the intended purpose.

Harmful pests present on the site will be controlled or eliminated as necessary to achieve and maintain the intended purpose.

For optimal carbon storage, select plant species that are adapted to the site to assure strong health and vigor and plant the full stocking rate for the site.

Comply with applicable federal, state and local laws and regulations during the installation, operation (including harvesting activities) and maintenance of this practice.

Additional Criteria To Reduce Excess Amounts of Sediment, Organic Material, Nutrients and Pesticides in Surface Runoff and Reduce Excess Nutrients and Other Chemicals in Shallow Ground Water Flow

An additional strip or area of land, Zone 2, will begin at the edge and up-gradient of Zone 1 and extend a minimum distance of 20 feet, measured horizontally on a line perpendicular to the water body. The minimum combined width of Zones 1 and 2 will be 100 feet or 30 percent of the flood plain whichever is less, but not less than 35 feet.

Criteria for Zone 1 shall apply to Zone 2 except that removal of products such as timber, fiber, nuts, fruit and forbs is permitted and encouraged on a periodic and regular basis provided the intended purpose is not compromised by loss of vegetation or harvesting disturbance.

Zone 2 will be expanded in high nutrient, sediment, and animal waste application areas, where the contributing area is not adequately treated or where an additional level of protection is desired.

A Zone 3 shall be added to the riparian buffer when adjacent to cropland or other sparsely vegetated or highly erosive areas to filter sediment, address concentrated flow erosion, and maintain sheet flow. The Filter Strip standard (practice code 393) shall be used to design Zone 3.

Additional Criteria To Provide Habitat For Aquatic Organisms And Terrestrial Wildlife

Width of Zone 1 and/or Zone 2 will be expanded to meet the minimum requirements of the wildlife or aquatic species and associated communities of concern.

Establish plant communities that address the target wildlife needs and existing resources in the watershed.

NRCS, NHCP August 2000

CONSIDERATIONS

The severity of bank erosion, concentrated flow erosion or mass soil movement and its influence on existing or potential riparian trees and shrubs should be assessed. Watershed-level or contributing area treatment or bank stability activities may be needed before establishing a riparian forest buffer.

When concentrated flow erosion and sedimentation cannot be controlled vegetatively, consider structural or mechanical treatments.

Favor tree and shrub species that are native, noninvasive, or have multiple values such as those suited for timber, biomass, nuts, fruit, browse, nesting, aesthetics and tolerance to locally used herbicides.

Tree and shrub species, which may be alternate hosts to undesirable pests, should be avoided. Species diversity should be considered to avoid loss of function due to species-specific pests.

Plants that deplete ground water should be used with caution in water-deficit areas.

Allelopathic impacts of plants should be considered.

The location, layout and density of the buffer should complement natural features, and mimic natural riparian forests.

PLANS AND SPECIFICATIONS

Specifications for applying this practice shall be prepared for each site and recorded using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

The following actions shall be carried out to insure that this practice functions as intended throughout its expected life.

The riparian forest buffer will be inspected periodically and protected from adverse impacts such as excessive vehicular and pedestrian traffic, pest infestations, pesticides, livestock or wildlife damage and fire.

Replacement of dead trees or shrubs and control of undesirable vegetative competition will be

continued until the buffer is, or will progress to, a fully functional condition.

As applicable, control of concentrated flow erosion and sediment deposition shall be controlled by an adjacent filter strip.

Any use of fertilizers, pesticides and other chemicals to assure buffer function shall not compromise the intended purpose.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

FILTER STRIP

(ACRES)

CODE 393

DEFINITION

A strip or area of herbaceous vegetation situated between cropland, grazing land, or disturbed land (including forest land) and environmentally sensitive areas.

PURPOSE

- To reduce sediment, particulate organics, and sediment adsorbed contaminant loadings in runoff
- To reduce dissolved contaminant loadings in runoff
- To serve as Zone 3 of a Riparian Forest Buffer, Practice Standard 391
- To reduce sediment, particulate organics, and sediment adsorbed contaminant loadings in surface irrigation tailwater
- To restore, create or enhance herbaceous habitat for wildlife and beneficial insects.
- To maintain or enhance watershed functions and values

CONDITIONS WHERE PRACTICE APPLIES

This practice applies (1) in areas situated below cropland, grazing land, or disturbed land (including forest land) (2) where sediment, particulate organic matter and/or dissolved contaminants may leave these areas and are entering environmentally sensitive areas; (3) in areas where permanent vegetative establishment is needed to enhance wildlife and beneficial insects, or maintain or enhance watershed function. This practice applies when

planned as part of a conservation management system.

CRITERIA

General criteria applicable to all purposes

Filter strips shall be designated as vegetated areas to treat runoff and are not part of the adjacent cropland rotation.

Overland flow entering the filter strip shall be primarily sheet flow. Concentrated flow shall be dispersed.

State listed noxious weeds will not be established in the filter strip and will be controlled if present.

Filter strip establishment shall comply with local, state and federal regulations.

Additional criteria to reduce sediment, particulate organics, and sediment-adsorbed contaminant loadings in runoff

Filter strip flow length shall be determined based on field slope percent and length, and filter strip slope percent, erosion rate, amount and particle size distribution of sediment delivered to the filter strip, density and height of the filter strip vegetation, and runoff volume associated with erosion producing events. The minimum flow length for this purpose shall be 20 feet.

Filter strip location requirements:

 a) The filter strip shall be located along the downslope edge of a field or disturbed area.
 To the extent practical it shall be placed on the approximate contour. Variation in placement on the contour should not exceed

> NRCS, NHCP March, 1999

- a 0.5% longitudinal (perpendicular to the flow length) gradient.
- b) The drainage area above the filter strip shall have greater than 1% but less than 10% slopes.
- c) The ratio of the drainage area to the filter strip area shall be less than 70:1 in regions with RUSLE-R factor values 0-35, 60:1 in regions with RUSLE-R factor values 35-175, and 50:1 in regions with RUSLE-R factor values of more than 175.
- d) The average annual sheet and rill erosion rate above the filter strip shall be less than 10 tons per acre per year

The filter strip shall be established to permanent herbaceous vegetation consisting of a single species or a mixture of grasses, legumes and/or other forbs adapted to the soil, climate, and nutrients, chemicals, and practices used in the current management system. Species selected shall have stiff stems and a high stem density near the ground surface. Stem density shall be such that the stem spacing does not exceed 1 inch.

Additional criteria to reduce dissolved contaminants in runoff

The criteria given in "Additional criteria to reduce sediment, particulate organics, and sediment adsorbed contaminant loadings in runoff" also apply to this purpose.

Filter strip flow length required to reduce dissolved contaminants in runoff shall be based on management objectives, contaminants of concern, and the volume of runoff from the filter strip's drainage area compared with the filter strip's area and infiltration capacity.

The flow length determined for this purpose shall be in addition to the flow length determined for reducing sediment, particulate organics, and sediment-adsorbed contaminant loadings in runoff. The minimum flow length for this purpose shall be 30 feet.

Additional criteria to serve as Zone 3 of a Riparian Forest Buffer, Practice Standard 391

Except for the location requirements, the criteria given in "Additional criteria to reduce sediment, particulate organics, and sediment adsorbed

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contaminant loadings in runoff" also apply to this purpose.

If concentrated flows entering Zone 3 are greater than the filter strip's ability to disperse them, other means of dispersal, such as spreading devices, must be incorporated.

Additional criteria to reduce sediment, particulate organics, and sediment adsorbed contaminant loadings in surface irrigation tailwater

Filter strip vegetation may be a small grain or other suitable annual with a plant spacing that does not exceed 4 inches.

Filter strips shall be established early enough prior to the irrigation season so that the vegetation can withstand sediment deposition from the first irrigation.

The flow length shall be based on management objectives.

Additional criteria to restore, create, or enhance herbaceous habitat for wildlife and beneficial insects

If this purpose is intended in combination with one or more of the previous purposes, then the minimum criteria for the previous purpose(s) must be met. Additional filter strip flow length devoted to this purpose must be added to the length required for the other purpose(s).

Any addition to the flow length for wildlife or beneficial insects shall be added to the downhill slope of the filter strip. Vegetation to enhance wildlife may be added to that portion of the filter strip devoted to other purposes to the extent they do not detract from its primary functions.

Plant species selected for this purpose shall be for permanent vegetation adapted to the wildlife or beneficial insect population(s) targeted.

If this is the only purpose, filter strip width and length shall be based on requirements of the targeted wildlife or insects. Density of the vegetative stand established for this purpose shall consider targeted wildlife habitat requirements and encourage plant diversity. Dispersed woody vegetation may be used to the extent it does not interfere with herbaceous vegetative growth, or operation and maintenance of the filter strip.

The filter strip shall not be mowed during the nesting season of the target wildlife.

Livestock and vehicular traffic in the filter strip shall be excluded during the nesting season of the target species.

Additional criteria to maintain or enhance watershed functions and values

Filter strips shall be strategically located to enhance connectivity of corridors and noncultivated patches of vegetation within the watershed.

Filter strips should be strategically located to enhance aesthetics of the watershed.

Plant species selected for this purpose shall be for establishment of permanent vegetation.

CONSIDERATIONS

Filter strips should be strategically located to reduce runoff, and increase infiltration and ground water recharge throughout the watershed.

Filter strips for the single purposes of wildlife/beneficial insect habitat or to enhance watershed function should be strategically located to intercept contaminants thereby enhancing the water quality of the watershed.

To avoid damage to the filter strip consider using vegetation that is somewhat tolerant to herbicides used in the upslope crop rotation.

Consider using this practice to enhance the conservation of declining species of wildlife, including those that are threatened or endangered.

Consider using this practice to protect National Register listed or eligible (significant) archaeological and traditional cultural properties from potential damaging contaminants.

Filter strip size should be adjusted to a greater flow length to accommodate harvest and maintenance equipment.

PLANS AND SPECIFICATIONS

Based on this standard, plans and specifications shall be prepared for each specific field site where a filter strip will be installed. A plan

includes information about the location, construction sequence, vegetation establishment, and management and maintenance requirements.

Specifications will include:

- a) Length, width, and slope of the filter strip to accomplish the planned purpose (length refers to flow length across the filter strip).
- b) Species selection and seeding or sprigging rates to accomplish the planned purpose
- Planting dates, care, and handling of the seed to ensure that planted materials have an acceptable rate of survival
- d) A statement that only viable, high quality, and regionally adapted seed will be used
- e) Site preparation sufficient to establish and grow selected species

OPERATION AND MAINTENANCE

For the purposes of filtering contaminants, permanent filter strip vegetative plantings should be harvested as appropriate to encourage dense growth, maintain an upright growth habit, and remove nutrients and other contaminants that are contained in the plant tissue.

Control undesired weed species, especially state-listed noxious weeds.

Prescribed burning may be used to manage and maintain the filter strip when an approved burn plan has been developed.

Inspect the filter strip after storm events and repair any gullies that have formed, remove unevenly deposited sediment accumulation that will disrupt sheet flow, reseed disturbed areas, and take other measures to prevent concentrated flow through the filter strip

Apply supplemental nutrients as needed to maintain the desired species composition and stand density of the filter strip.

To maintain or restore the filter strip's function, periodically regrade the filter strip area when sediment deposition at the filter strip-field interface jeopardizes its function, and then reestablish the filter strip vegetation, if needed. If wildlife habitat is a purpose, destruction of vegetation within the portion of the strip devoted to that purpose should be minimized by

NRCS, NHCP March, 1999 regrading only to the extent needed to remove sediment and fill concentrated flow areas.

Grazing shall not be permitted in the filter strip unless a controlled grazing system is being implemented. Grazing will be permitted under a controlled grazing system only when soil moisture conditions support livestock traffic without excessive compaction.