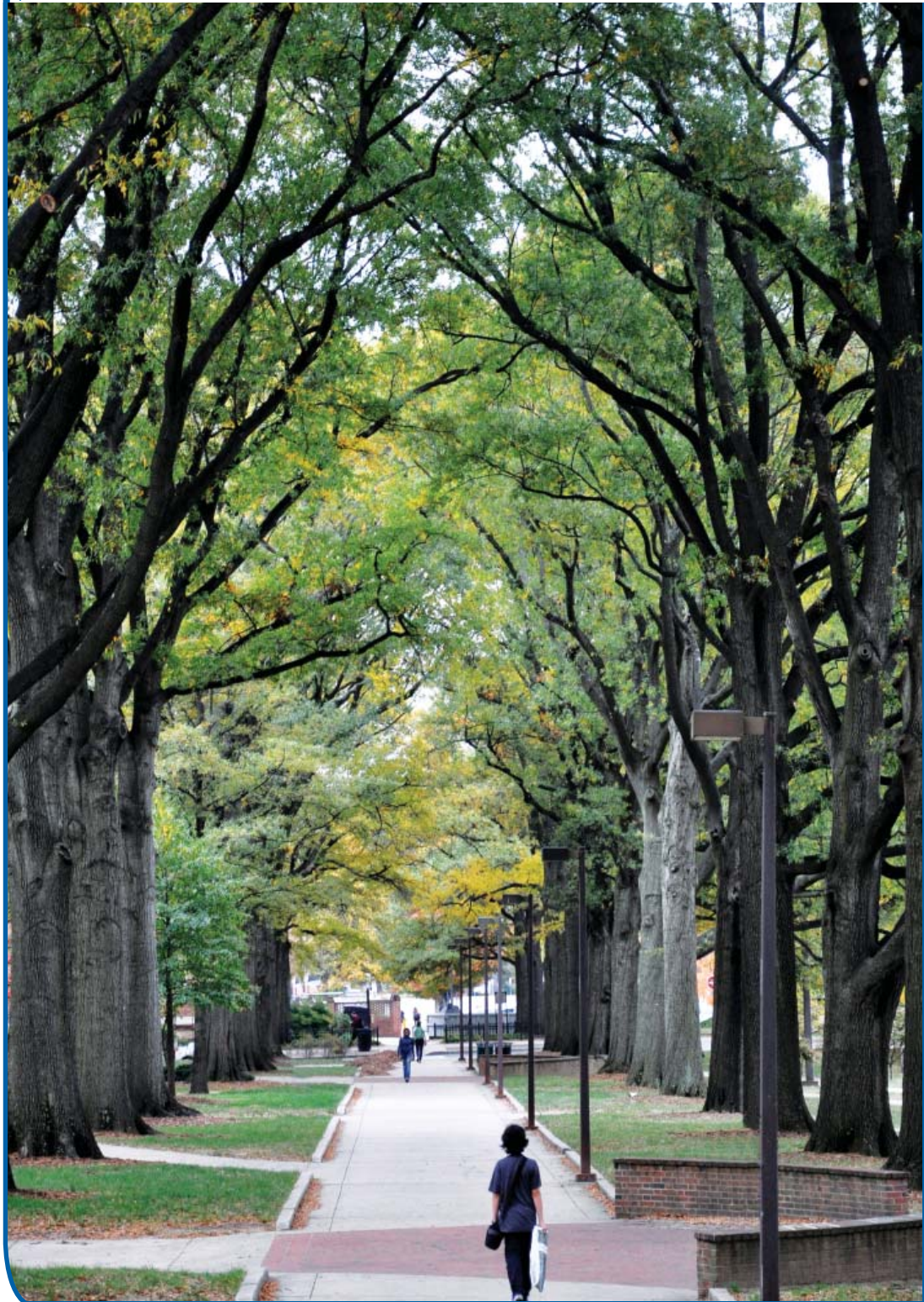




PRINCE GEORGE'S COUNTY

LANDSCAPE MANUAL

DECEMBER 2010



The Maryland-National Capital Park and Planning Commission
www.pgplanning.org



4.7 Buffering Incompatible Uses

(a) Objectives

- (1) Establish a comprehensive, consistent, and flexible buffering system consisting of a specified area of land and vertical elements, such as plant materials, walls, fences, and berms, between adjacent incompatible land uses.
- (2) Form a visual and physical separation between uses of a significantly different scale, character, and/or intensity of development to mitigate undesirable impacts, such as noise, smell, storage facilities, dust, fumes, vibration, litter, vehicle exhaust, and lighting.
- (3) Create a transition between moderately incompatible uses.

(b) Design Guidelines

- (1) Any combination of shade trees, ornamental trees, evergreen trees, and shrubs may be used to achieve the desired buffering effect, as long as the proposed combination of plants yields a total number of plant units equal to or greater than the requirement.
- (2) Buffering elements, such as walls, fences, and berms, should be carefully designed not to unnecessarily obstruct views, restrict light and air, or create hazardous blind spots (see Section 3.5(f), Crime Prevention Through Environmental Design).
- (3) When buffering historic sites from incompatible uses, historically appropriate, noninvasive species should be used to preserve the context of the historic site.
- (4) Consideration should be given to topography, the extent of the environmental setting, and the preservation of vistas whenever possible. When designing bufferyards, equal consideration should be given to preserving and enhancing the views of and the views from historic sites.

- (5) Trees and shrubs planted in the buffer should exhibit substantial variety in species and visual characteristics, include native species, and be designed to create varied and attractive views.
- (6) Plans submitted for review shall show the general location and type of major landscape elements of an existing or proposed buffer on adjacent properties and shall demonstrate that the proposed buffer treatment will provide an attractive visual continuity with existing or proposed buffer treatments on adjacent properties.
- (7) Natural landscape features, particularly existing native plant materials and tree cover, should be preserved and enhanced whenever possible.

(c) Requirements

If the adjoining property is neither vacant (see Section 4.7(c)(5)), a nonconforming use (see Section 4.7(c)(6)), nor a historic site (see Section 4.7(c)(7)), the following methodology shall be used to determine the required bufferyard width and quantity of plant materials between two adjacent uses:

- (1) Locate the proposed development (nonresidential uses only) in Section 4.7, Table 4.7-1, Use Impact Categories. Note whether the use is assigned High (H), Medium (M), or Low Impact (L).
- (2) Locate the adjoining use in Table 4.7-1, Use Impact Categories. Note whether the use is assigned High (H), Medium (M), or Low Impact (L) and whether the proposed and adjacent uses are considered compatible based on the use group. If a developing lot adjoins a vacant lot, see Section 4.7(c)(5). A lot is considered vacant if it contains no structure or vehicle surface area within two hundred (200) feet of the property line. If a developing lot adjoins nonconforming uses, see Section 4.7(c)(6). If a developing lot adjoins a historic site, see Section 4.7(c)(7).

- (A) The assignment of each use as high, medium, or low impact, as indicated in Table 4.7-1, Use Impact Categories, is based on whether the use typically involves one or more of the following:
- (i) Noise.
 - (ii) Outdoor loading spaces and/or dumpsters, other trash collection facilities, or recycling facilities.
 - (iii) Type of trash generated on the site, e.g., food or animal by-product disposal.
 - (iv) Exterior storage.
 - (v) Dust, fumes, vehicle exhaust, and vibration.
 - (vi) Litter.
 - (vii) Lighting during the evening or at night (10:00 p.m.–6:00 a.m.).
 - (viii) Use of the property during the evening or at night (10:00 p.m.–6:00 a.m.).
 - (ix) Generation of more than three hundred (300) daily vehicle trips.
- (B) A High-Impact Use, signified by "H" in Table 4.7-1, Use Impact Categories, is one which, considering the criteria, is expected to have a strong effect on adjacent properties.
- (C) A Medium-Impact Use, signified by "M" in Table 4.7-1, Use Impact Categories, is one which, considering the criteria, is expected to have a moderate effect on adjacent properties.

- (D) A Low-Impact Use, signified by "L" in Table 4.7-1, Use Impact Categories, is one which, considering the criteria, is expected to have a limited effect on adjacent properties.
- (E) When a specific use is not identified in Table 4.7-1, Use Impact Categories, the most similar use shall be used. Interpretations relating to impact categories shall be made by the planning director, or the designee, whose decision shall be appealable to the Planning Board.
- (F) A required bufferyard shall not overlap a required landscape strip along a street (see Figure 4.7-1).

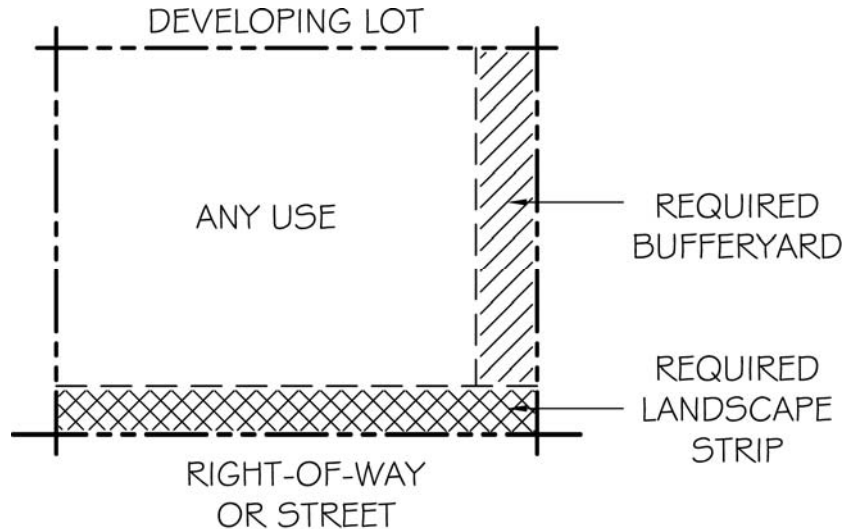


Figure 4.7-1 Relationship of Bufferyards and Landscape Strips

- (G) In the case of a lot that is located in more than one zone, the establishment of a required bufferyard is based on the platted or recorded property line(s), not the zoning line(s).

- (H) For applications proposing horizontally arranged mixed-use under a unified development scheme on a single lot or multiple lots, the impact category for the use nearest a property line shall determine the buffering requirements for that yard (see Figure 4.7-2).

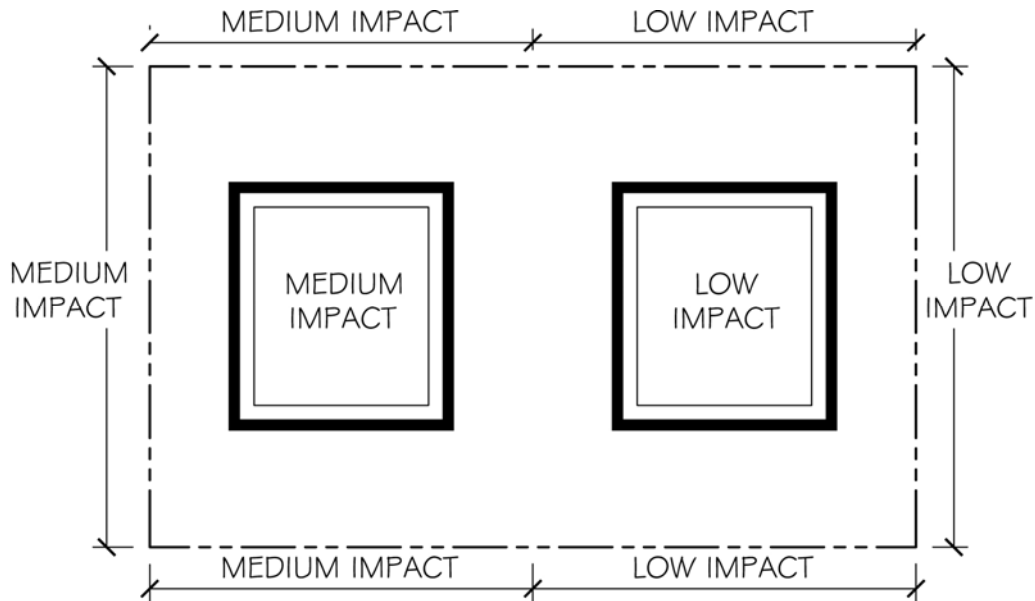


Figure 4.7-2 Use Determination for Horizontally Arranged Mixed-Use Development

- (I) For applications proposing vertically arranged mixed-use development on a single lot or multiple lots, the impact category for the property shall be based on the predominant use of the property. The predominant use is determined by the gross floor area associated with each use (see Figure 4.7-3).

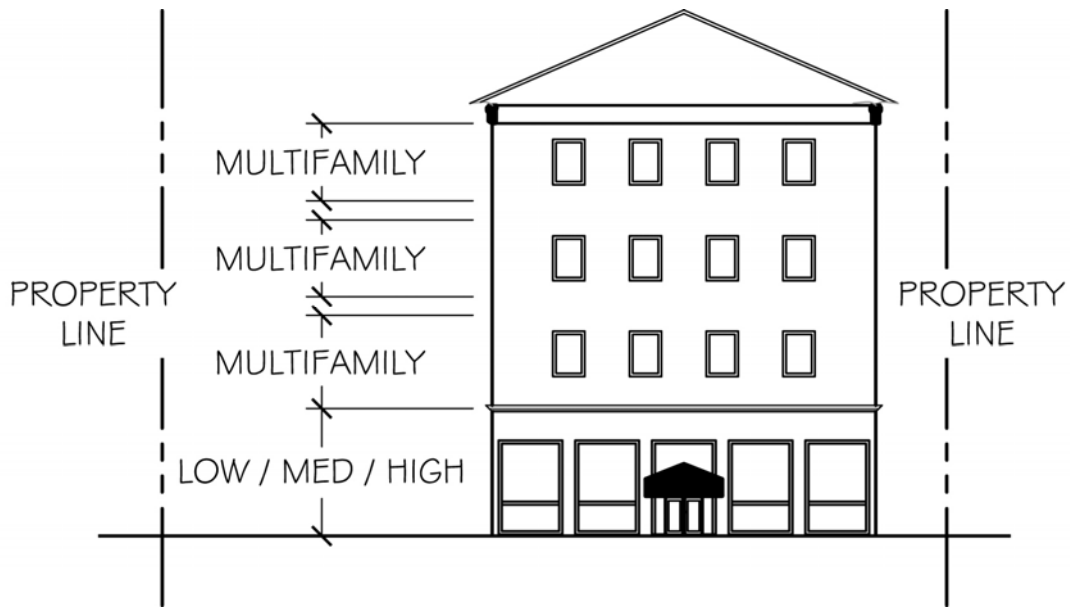


Figure 4.7-3 Use Determination for Vertically Arranged Mixed-Use Development

- (J) For applications including buildings over forty-six (46) feet in height, the bufferyard (setback and landscaped yard) shall be increased by one-third (1/3) of the additional building height when adjoining properties contain one-family attached and/or detached structures.

Table 4.7-1
Use Impact Categories

USE	IMPACT CATEGORY
A. RESIDENTIAL, OTHER THAN SINGLE-FAMILY, MULTIPLEX, MULTIFAMILY, AND LODGING	
The following uses are considered compatible when located on adjoining properties:	
Country Inn or Bed and Breakfast	L
Fraternity or Sorority House	M
Group Residential Facility (20 residents or more)	M
Motel or Hotel	M
Rooming Houses or Boarding Houses	L
B. INSTITUTIONAL/EDUCATIONAL	
1. The following uses are considered compatible when located on adjoining properties:	
Chancery	L
Church or similar place of worship	M
Convent or Monastery	L
Day Care Center for children or adults	L
Eleemosynary or Philanthropic Institutions	L
Nursing or Care Home	L
School (public or private)	M
2. The following uses are not considered compatible with the uses above when located on adjoining properties:	
Hospital	H
Training Facility, general	M
Training Facility, truck driver, military, or any other facility that includes the use of firearms, explosives, or heavy machinery	H

C. PUBLIC/QUASI PUBLIC

1. The following uses are considered compatible when located on adjoining properties:

Fire, Ambulance, or Rescue Station	H
Library	L
Post Office	M
Public Office Buildings	M

2. The following uses are not considered compatible with the uses above when located on adjoining properties:

Jail	H
Sanitary Landfill	H

D. RECREATIONAL/ENTERTAINMENT/SOCIAL/CULTURAL

1. The following uses are considered compatible when located on adjoining properties:

Amusement Arcade	M
Archery Range	L
Athletic Field (lighted)	M
Athletic Field (unlighted)	L
Baseball Batting Range	M
Beach, Public	M
Billiard or Pool Parlor	M
Boat Ramp	M
Bowling Alley	M
Club or Lodge (private)	M
Community Center (public or private)	M
Dog Park	L
Fishing Pier	L
Golf Course or Country Club	L
Golf Driving Range (unlighted)	M
Marina	M

Museum, Aquarium, Art Gallery, Cultural Center, or similar facility	M
Park (with no active recreational facilities)	NO BUFFER
Playground	L
Recreational Campground	M
Reducing/Exercise Salon or Health Club	M
Riding Stable (Equestrian)	M
Rifle, Pistol, or Skeet Shooting Range (indoor)	M
Skate Park (outdoor)	M
Skating Rink	M
Summer Camp	L
Swimming Pool (private or HOA owned)	L
Tennis, Basketball, Handball, or similar court (outdoor)	M
Theater (indoor)	M

2. The following uses are not considered compatible with the uses above when located on adjoining properties:

Amusement Park	H
Arena or Stadium	H
Go-Cart Track	H
Golf Driving Range (lighted)	H
Miniature Golf Course	H
Race Track	H
Rifle, Pistol, or Skeet Shooting Range (outdoor)	H
Swimming Pool (public)	H
Theater (outdoor, including drive-in)	H

E. COMMERCIAL

1. The following uses are considered compatible when located on adjoining properties:

Animal Hospital, Veterinary Office (without kennel or boarding)	M
Antique Shop	L
Bank (with drive-through)	M
Bank (without drive-through)	L

Building Supply (wholly enclosed, except for nursery stock)	M
Commercial and Professional Offices	M
Contractor's Office (without outside storage)	L
Dry Cleaning (pick-up only)	M
Food and Beverage Store	M
Funeral Parlor, Undertaking Establishment (see Section 27-357(a)(1))	M
Laundromat	M
Offices: Accountants, Architects, Clergymen, Engineers, Lawyers, Medical Practitioners, and similarly recognized and learned profession (as an accessory use in a dwelling)	L
Medical Practitioner's Office	M
Real Estate Sales Office (as an accessory use in a dwelling)	L
Restaurant (sit down)	M
Retail Sales and Consumer Service Establishment (including integrated shopping centers) 60,000 square feet GFA or less	M

2. The following uses are not considered compatible with the uses above when located on adjoining properties:

Animal Hospital, Veterinary Office (with kennel or boarding)	H
Building Supply (with outdoor storage)	H
Contractor's Office (with outside storage)	H
Drive-in or Fast-Food Restaurant	H
Dry Cleaning Plant	H
Kennel	H
Retail Sales and Consumer Service Establishment (including integrated shipping centers) larger than 60,000 square feet GFA	H

F. VEHICLE-RELATED USES

The following uses are considered compatible when located on adjoining properties:

Auto Parts with Installation	H
Automobile Filling Station	H
Auto Repair Facilities	H

Auto Dealership without repair facilities	M
Auto Storage Yard (not wrecked cars)	M
Auto Towing Yard	H
Auto Salvage Yard	H
Carwash	H
Rental and display of trucks, recreational vehicles, trailers exceeding 8,500 pounds of gross vehicle weight	H
Rental and display of passenger cars and light trucks	M

G. INDUSTRIAL

The following uses are considered compatible when located on adjoining properties:

Chemical and Allied Manufacturing	H
Distillery for the Production of Fuel Alcohol (industrial continued)	H
Fabrication of Wood, Metal, Paper, Plastic, and Glass Products from materials produced elsewhere	H
Manufacturing and Processing of Lumber, Wood, and related products	H
Manufacturing of Scientific, Specialized, and Technical Instruments and Equipment	H
Metal Production	H
Petroleum, Gas, and Related Products	H
Printing, Publishing, Paper, and related industries	H
Processing of Food and related products for human consumption	H
Rubber and Synthetic Rubber Products	H
Stone, Clay, Glass, and Cement Products	H
Textile Products	H

H. WHOLESALE, WAREHOUSE AND DISTRIBUTION

All general wholesale, warehouse, and distribution	H
Consolidated storage (formerly mini-warehouse)	H

I. RESOURCE PRODUCTION AND RECOVERY

The following uses are considered compatible when located on adjoining properties:

Agricultural uses:

- | | |
|--|---|
| (A) All general agriculture | L |
| (B) Limited to floriculture, horticulture, gardening and private noncommercial greenhouses | L |
| (C) Keeping of homing or racing pigeons | L |

Class Three Fill	H
------------------	---

Concrete Recycling	H
--------------------	---

Nursery or Garden Center	M
--------------------------	---

Rubble Fill	H
-------------	---

Sand or Gravel Wet Processing	H
-------------------------------	---

Sawmill	H
---------	---

Surface Mining	H
----------------	---

J. TRANSPORTATION/PARKING/COMMUNICATION, UTILITIES

The following uses are considered compatible when located on adjoining properties:

- | | |
|---|---|
| Airport, Airpark, Airfield, Airstrip, Heliport, Helistop | H |
| Broadcasting Studio (with tower) | M |
| Broadcasting Studio (without tower) | L |
| Bus Maintenance (at a private school or church) | H |
| Bus or Train Station or Terminal | H |
| Motor Freight Facilities and Terminals | H |
| Parking Garage (commercial) | M |
| Parking Lot (commercial) | M |
| Public Utility Use or Structure (except overhead utility lines but including a tower, monopole, or antenna) | M |

Public Utility with overhead power lines	L
Public Utility Easement without any aboveground structures	NO BUFFER
Rail Lines at or above ground level	H
Satellite Dish Antenna	L
Taxicab Dispatching Station	M
Tower, Pole, Whip, or Antenna (electronic, radio, or television, transmitting or receiving, except a public utility structure or satellite dish antenna)	L

K. MISCELLANEOUS

Auction House	M
Carpentry, Cabinet Making, or other	M
Cemetery	L
Crematory	M
Junk Yard	H
Palmistry/Spiritual Advisor (as an accessory use or otherwise)	L
Recycling Collection Center	H
Rental Business	M
Storage Yard	H
Stormwater Management Pond (on an individual lot)	NO BUFFER
Tattoo Parlor	L

- (3) Consult Table 4.7-2, Minimum Bufferyard Requirements. Locate the use categories for the proposed use and the adjoining use along the appropriate axis. Read down and over to determine the required bufferyard type.

Table 4.7-2
Minimum Bufferyard Requirements

	Adjoining Use					
	One-Family Detached	Townhouses, Multiplexes and Other Attached Units	Multifamily	Low Impact	Medium Impact	High Impact
Proposed Use						
One-Family Detached	NONE	A*	B*	B*	C*	D*
Townhouses, Multiplexes, and Other Attached Units	A	NONE	A*	B*	C*	D*
Multifamily	B	A	NONE	A*	B*	D*
Low Impact	B	B	A	NONE	A*	C*
Medium Impact	C	C	B	A	NONE	B*
High Impact	D	D	D	C	B	NONE

*Indicates the maximum buffer that may be required. If all or any part of the buffer has been provided on the adjacent property, was required by the landscape manual, and is shown on a landscape plan approved in accordance with this section, the proposed use may provide only that amount of the buffer that has not been provided on the adjacent property (see Figure 4.7-4).

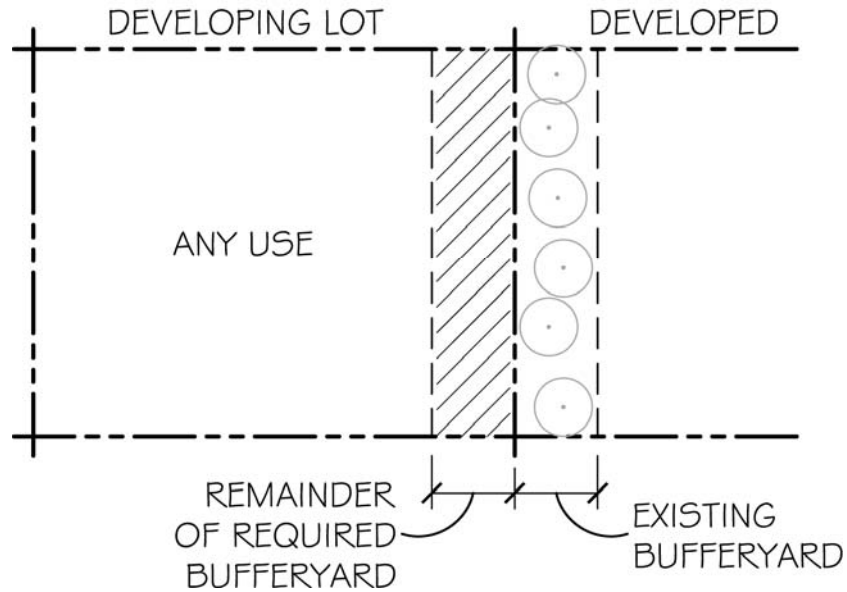


Figure 4.7-4 Required Bufferyard Adjacent to Existing Bufferyard

- (4) Consult Table 4.7-3, Bufferyard Types, to determine minimum building setback, minimum landscaped yard, and plant requirements for each bufferyard type.

Table 4.7-3
Bufferyard Types

Type	Minimum Building Setback	Minimum Landscaped Yard	Number of Plant Units Required per 100 Linear Feet of Property Line
A	20 feet	10 feet	40
B	30 feet	20 feet	80
C	40 feet	30 feet	120
D	50 feet	40 feet	160
E	60 feet	50 feet	180

In order to use and understand Table 4.7-3, Bufferyard Types, the following notes apply:

- (A) Where a greater building setback is required by the Zoning Ordinance to compensate for the height of the building, one (1) additional foot of landscaped yard shall be required for every three (3) feet of required building setback in excess of the setbacks required in Table 4.7-3, Buffered Types.
- (B) Surface parking, loading facilities, trash collection, recycling facilities, and mechanical equipment may not be located in the minimum landscaped yard.
- (C) Number of Plants Required

Any combination of shade trees, ornamental trees, evergreen trees, and shrubs may be used to achieve the desired buffering effect, as long as the proposed combination of plants yields a total number of plant units equal to or greater than the requirement.

Plant unit equivalencies are as follows:

One (1) shade tree = Ten (10) plant units

One (1) evergreen tree = Five (5) plant units

One (1) ornamental tree = Five (5) plant units

One (1) shrub = One (1) plant unit

Plants may be located anywhere within the bufferyard.

- (D) When existing noninvasive trees are located within the entire minimum landscaped yard, preservation of those trees will be allowed to substitute for the required plant materials. When existing trees are located in only part of the minimum landscaped yard, the number of plant units required may be reduced in proportion to the percentage of the area of the

landscaped yard occupied by existing trees. Seventy percent (70%) or more of the critical root zone of all trees proposed to be preserved shall remain undisturbed.

(E) For properties located in the Developing Tier, the required bufferyard may be reduced as follows:

(i) If the width of the required bufferyard (building setback and the landscape yard) is increased, the required plant material may be proportionately decreased for a total maximum reduction of twenty-five percent (25%) of the required plant material; or

(ii) If a six (6) foot high, opaque fence or wall is located within the bufferyard, plant unit requirements may be reduced by up to fifty percent (50%). The wall or fence must provide the maximum concealment.

(F) For properties located in the Developed Tier and/or a Center or Corridor Node, except for those adjoining existing residentially developed lots, the requirements may be reduced up to fifty percent (50%) (including the number of plant units, setback, and landscape yard), if a six (6) foot high, opaque fence or wall is located within the bufferyard. The wall or fence must provide the maximum concealment.

(5) Developing Lots Adjacent to Vacant Lots

(A) A lot is considered vacant if it contains no structure or vehicular surface area within two hundred (200) feet of the property line.

(B) If a developing property with a nonresidential use is adjacent to a vacant property zoned residential, then one hundred percent (100%) of the bufferyard is required. In the Developed Tier and/or a Center or Corridor Node, the landscape yard requirements may be reduced by fifty percent

(50%) on the developing lot if a six (6) foot high, opaque fence or wall is provided on the developing lot (see Figure 4.7-5).

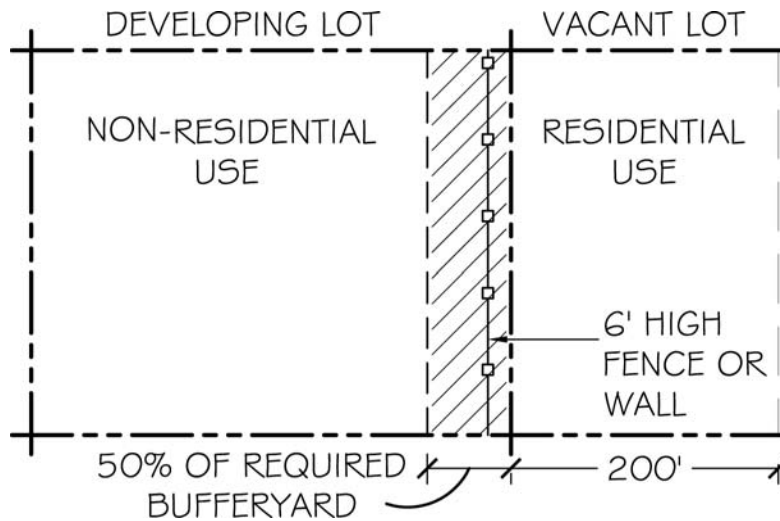


Figure 4.7-5 Developing Non-Residential Use Adjacent to Vacant Residentially-Zoned Property

- (C) If a developing property with a residential use is adjoining vacant property zoned residential, fifty percent (50%) of the bufferyard is required to be provided on the developing lot (see Figure 4.7-6).

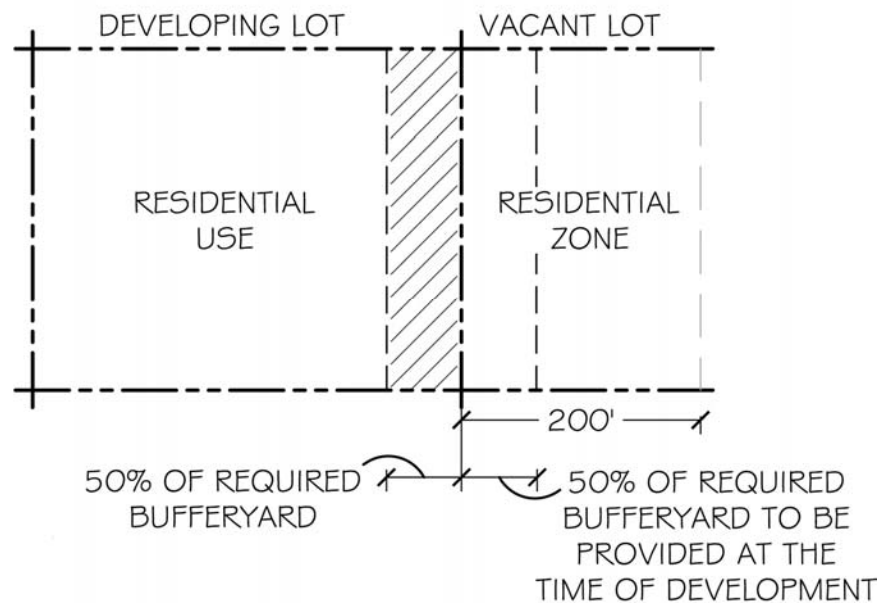


Figure 4.7-6 Developing Residential Use Adjacent to Vacant Residentially-Zoned Property

- (D) If a developing property with a residential use is located adjacent to a vacant lot located in a Commercial or Industrial Zone, the developing property is not required to provide a buffer.
- (E) If a developing property with a non-residential use is located adjacent to a vacant lot located in a Commercial or Industrial Zone, fifty percent (50%) of the bufferyard is required to be provided on the developing lot.
- (F) If a developing property is located in a Commercial Zone and is adjoining vacant property located in a Commercial Zone, the developing property is not required to provide a bufferyard.
- (G) If a developing property is located in an Industrial Zone and is adjoining vacant property located in an Industrial Zone, the developing property is not required to provide a bufferyard.

(6) Developing Lots Adjacent to Nonconforming Uses

If a developing property is adjacent to an incompatible, certified, nonconforming use, the bufferyard requirement may be reduced by fifty percent (50%) if a six (6) foot high, opaque fence or wall is provided on the developing lot (see Figure 4.7-7).

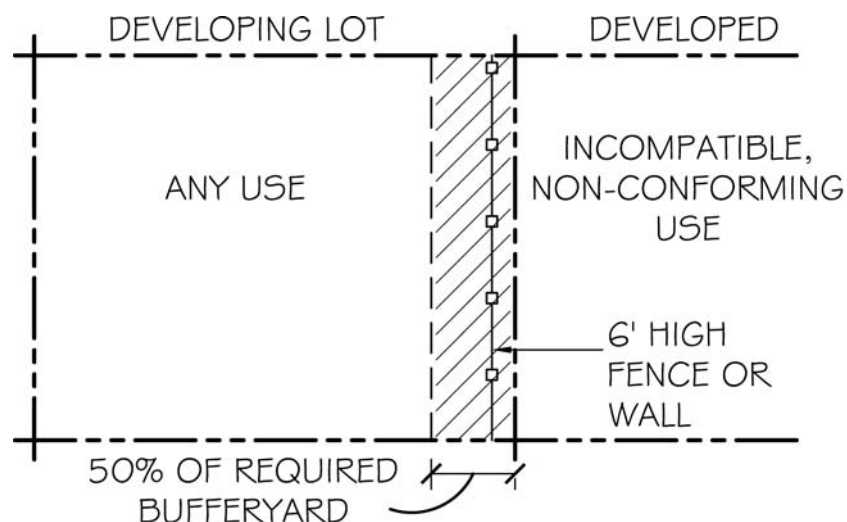


Figure 4.7-7 Developing Property Adjacent to Incompatible, Nonconforming Use

(7) Developing Lots Adjacent to Historic Sites

- (A) If a developing lot adjoins a designated historic site (except underground archeological sites) located within the Developed Tier, a Center, or a Corridor Node, the developing lot shall provide a Type “D” buffer along the entire shared property line (see Table 4.7-3, Bufferyard Types). This requirement does not apply to a property line or right-of-way line adjacent to a special roadway (see Section 4.6(c)(2)).
- (B) If a developing lot adjoins a designated historic site (except underground archeological sites) and is located within the Developing or Rural Tier, the developing lot shall provide a Type “E” buffer along the entire shared property line (see Table 4.7-3, Bufferyard Types and Figure 4.7-8). This requirement does not apply to a property line or right-of-way line adjacent to a special roadway (see Section 4.6(c)(2), Buffering Development from Special Roadways).

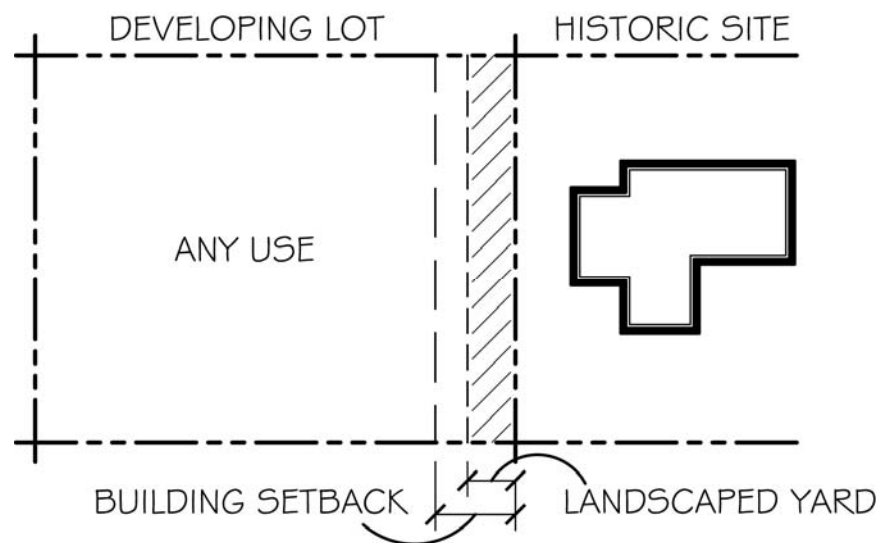


Figure 4.7-8 Developing Property Adjacent to Historic Site

(d) Demonstrating Compliance

The landscape plan shall include a schedule as follows demonstrating compliance with the requirements of this section.

Sample Schedule 4.7-1

Buffering Incompatible Uses Requirements

- | | | |
|--|--|---|
| 1) | General Plan designation: | <input type="text"/> Developed Tier, Corridor
Node or Center
<input type="text"/> Developing or Rural Tier |
| 2) | Use of proposed development: | <input type="text"/> |
| 3) | Impact of proposed development: | <input type="text"/> |
| 4) | Use of adjoining development: | <input type="text"/> |
| 5) | Impact of adjoining development: | <input type="text"/> |
| 6) | Minimum required bufferyard (A, B, C, D or E): | <input type="text"/> A <input type="text"/> B <input type="text"/> C <input type="text"/> D <input type="text"/> E |
| 7) | Minimum required building setback: | <input type="text"/> feet |
| 8) | Building setback provided: | <input type="text"/> feet |
| 9) | Minimum required width of landscape yard: | <input type="text"/> feet |
| 10) | Width of landscape yard provided: | <input type="text"/> feet |
| (The required setback and landscape yard may be reduced by fifty percent (50%) in the Developed Tier, Corridor Node or Center when a six (6) foot high fence or wall is provided.) | | |
| 11) | Linear feet of buffer strip required along property line and right-of-way: | <input type="text"/> linear
feet |
| 12) | Percentage of required bufferyard occupied by existing trees: | <input type="text"/> % |
| 13) | Is a six (6) foot high fence or wall included in bufferyard? | <input type="text"/> yes <input type="text"/> no |
| (The required plant material may be reduced by fifty percent (50%) when a six (6) foot high fence or wall is provided.) | | |
| 14) | Total number of plant units required in buffer strip: | <input type="text"/> p.u. |
| 15) | Total number of plant units provided: | <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 40%;"> shade trees
 evergreen trees
 ornamental trees
 shrubs </div> <div style="width: 30%;"> <input type="text"/> x 10 p.u.=
 <input type="text"/> x 5 p.u.=
 <input type="text"/> x 5 p.u.=
 <input type="text"/> x 1 p.u.= </div> <div style="width: 25%;"> <input type="text"/> p.u.
 <input type="text"/> p.u.
 <input type="text"/> p.u.
 <input type="text"/> p.u. </div> </div> <div style="text-align: right; margin-top: 10px;"> Total <input type="text"/> p.u. </div> |