ARTICLE 08

MODULATION AND BONUSES

DIVISION 08.000 PURPOSE

This Ordinance uses hard standards in many places because a completely flexible performance standard would be too lengthy or complicated to administer. In other cases, uncommon, yet logical, exceptions to a standard have been anticipated. Specific standards are identified that may be modulated pursuant to this Division.

DIVISION 08.100 MODULATION STANDARDS

SECTION 08.110 REVIEW AND APPROVAL

The Zoning Officer shall review all requests for modulation of standards against this Division. A report indicating the modulation approval shall be placed on file and indicated by a note on the final plat.

SECTION 08.120 CONSTRUCTION ENVELOPES

The site capacity calculations and net densities in Article 04 and Article 05 assume all of a residential lot will be disturbed during development. This Section provides the rules by which resource protection is permitted to occur *on a lot*. It is permitted only when the minimum lot size exceeds twenty thousand (20,000) square feet. All eligible lots shall place a conservation easement over the resource area in question, restricting the use of that land to open space uses and prohibiting the clearing, cutting, or disturbing of vegetation. All construction envelope developments shall follow this Section's standards.

A. The net density in Table 08.120 shall be substituted for that in Table 04.110 A. based on the size of the maximum area of the construction envelope used in the development.

B. The construction envelope may occupy no more than seventy-five (75) percent of the lot.

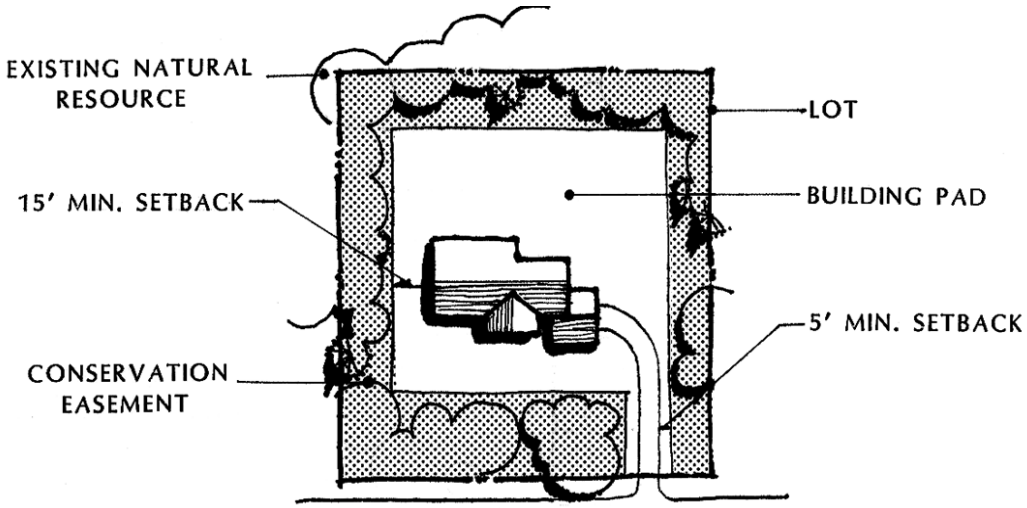
C. All lot construction and clearing shall be confined to the construction envelope including buildings, decks or patios, driveways, lawns, pools, tennis courts, septic tanks and tile fields, and utility access. The construction envelope shall be extended fifteen (15) feet from the foundation and five (5) feet from any other area to be developed or disturbed to provide for machinery and earth movement. The construction envelope shall be fenced to prevent equipment from intruding into the conservation areas. Figure 08.120 shows the relationship between the lot, construction envelope, and conservation areas on a lot.

Table 08.120
CONSTRUCTION ENVELOPE NET DENSITIES

Maximum Envelope Area (s.f.)	Net Density	Minimum Lot Area
10,000	2.17	20,000 sf.
15,000	1.51	20,000 sf.
20,000	1.16	1 ac.
25,000	0.95	1 ac.
30,000	0.80	1 ac.
40,000	0.61	2 ac.
50,000	0.49	3 ac.
60,000	0.41	3 ac.
80,000	0.31	3 ac.

D. The Zoning Officer shall inspect for damaged trees in the conservation easement before occupancy and shall require mitigation for those trees damaged. The mitigation rate shall be three (3) trees, five (5) to six (6) feet in height, for each tree damaged; new trees may be bare-root plants.

Figure 08.120
LOT WITH CONSTRUCTION ENVELOPE



SECTION 08.130 BUFFERYARDS

The standards in Table 13.140 have been tested to ensure they meet the opacity standard. Numerous other mixes can meet the standard. The bufferyard calculation (or the Kendigsoft Bufferyard Model) provided in Section 13.141 can be used to design an individualized buffer that meets the required opacity standard.

SECTION 08.140 STREET YARD SETBACKS

The street yard is normally kept free of structures; however, landscaping or variations in setback can reduce the need for the setback. In other cases, building form may dictate a different type of setback.

A. **Single-family and Lot Line**. A combination of landscaping and facades that are articulated or staggered to give the sense that setbacks are varied can provide an environment equal to that in which all houses sit exactly on the setback line. The setback may be reduced where the following are met:

1. Building construction envelopes are described for each lot to provide a streetscape with varied building locations.
2. In addition to the street buffer requirements (Table 04.110 A.), one plant unit per two hundred (200) feet of street frontage shall be placed in the right-of-way or first ten (10) feet of the lot.
3. Where the setback in Table 04.110 A. is greater than thirty-five (35) feet, the setback shall average ten (10) percent less than that specified in Table 04.110 A. No single lot setback reduction shall be greater than a thirty (30) percent.
4. Where the setback in Table 04.110 A. is thirty-five (35) feet or less, the development's setbacks shall average the setback listed in Table 04.110 A. No single lot setback reduction shall be greater than twenty (20) percent.
5. This provision shall only be used along the development's internal streets, not where facing single-family homes across a street.

B. **Adjoining Lots Are Nonconforming.** In older parts of the City, setbacks may not conform or may vary from lot to lot. In these areas, the Zoning Administrator may approve unique setbacks under the following conditions:

1. Where forty (40) percent of the lots on a block face are nonconforming, the unit may be set back as so to blend in with the average distance of the existing nearby structures.
2. Where existing block faces are all nonconforming, the Zoning Administrator, upon determining local conditions, shall determine the setback.
3. The front wall of the house shall be at the minimum setback line. The garage shall have a minimum setback of 25'.

(Ordinance 2789, 11/27/01)

C. **Side Loading Garages**. Side loading garages located in front of the house shall be permitted on single-family detached house lots listed as fifteen thousand (15,000) square feet in Table 04.110 A. The setback for such garages may be reduced, provided the following are met:

1. Side load garage setbacks shall be a minimum of fifteen (15) feet.
2. One (1) plant unit shall be installed for each side load garage in the area between the garage and the right-of-way.
3. Within a development, no more than forty (40) percent of the total lots may be side load garages. No more than three (3) adjacent lots may contain side load garages. The orientation shall be broken-up so that garages do not all face the same direction.

SECTION 08.141 PATIO AND ATRIUM DWELLING UNITS

The wall enclosing these lots may be eliminated or reduced in height or opacity where the unit faces open space. The street yard should be varied to avoid monotony. The following rules govern wall modulation:

A. Where the wall abuts open space within the development, it may be reduced in height, length, or opacity in accordance with Table 08.141.

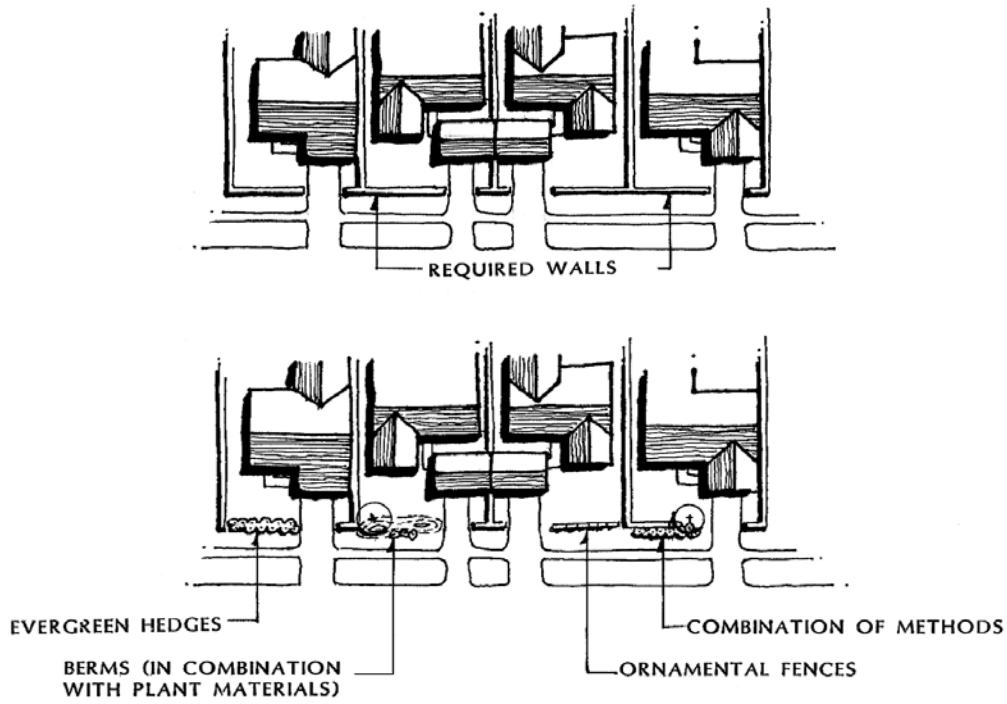
Table 08.141
PERCENT REDUCTION IN TOTAL AREA OF WALL

Type of Cover	Width of Open Space*			
	30-40 ft.	**41-60 ft.**	**61-100 ft.**	**101 ft. +**
Lawn	10%	15%	30%	40%
Old Field	30%	40%	60%	80%
Young Woodland	50%	70%	90%	100%
Mature Woodland	60%	80%	100%	100%

*If a trail or walk is present, add ten (10) feet to width.

B. A patio or atrium dwelling unit's street face (where applicable) may be articulated to avoid monotony. The wall requirement shall be eliminated in favor of some combination of the wall and one or more of the techniques shown in Figure 08.141.

Figure 08.141
TECHNIQUES FOR ARTICULATING PATIO AND ATRIUM STREET FACE WALLS



SECTION 08.142 WINDOWLESS WALL

In lot-line, atrium, and patio units, windows are prohibited from looking into the neighboring yards. Windows shall be permitted in walls designated as windowless provided the following conditions are met:

A. The adjoining land is a public right-of-way.

B. The adjoining land is open space having a minimum width of fifteen (15) feet, where the unit on the opposite side of the open space is walled.

C. The adjoining land is open space having a minimum width of thirty (30) feet.

D. The windows face a closed courtyard, or the windows are located at a height that prevents a view into the adjoining property.

SECTION 08.143 BUILDING SEPARATION

This Section sets forth the residential building spacing regulations and standards. Various attached dwelling unit types have no side lot lines, since the individual dwelling units are attached. However, blocks of attached units are regulated by building spacing. A variety of situations can modify the basic standards. The normal separation assumes the building walls are generally parallel, but that need not be the case; this circumstance also changes the separation requirements needed to provide light and air and fire access. The following standards permit modification of building spacing under the specified conditions.

A. **Irregular Facing Walls.** Where facing building planes are not a straight line, the average distance between the adjoining walls shall be used, provided no portion of the building is closer than eighty (80) percent of the minimum building spacing.

B. **Non-Parallel Building Alignment.** Where building walls are not parallel, the minimum building separation may be reduced. The average separation must be equal to the requirement of Table 04.110 B. and the minimum shall be no less than eighty (80) percent of that requirement.

C. **Building Code.** The building code may establish increased requirements for fire-rated construction where building setbacks are reduced, thus increasing costs, or require stricter standards.

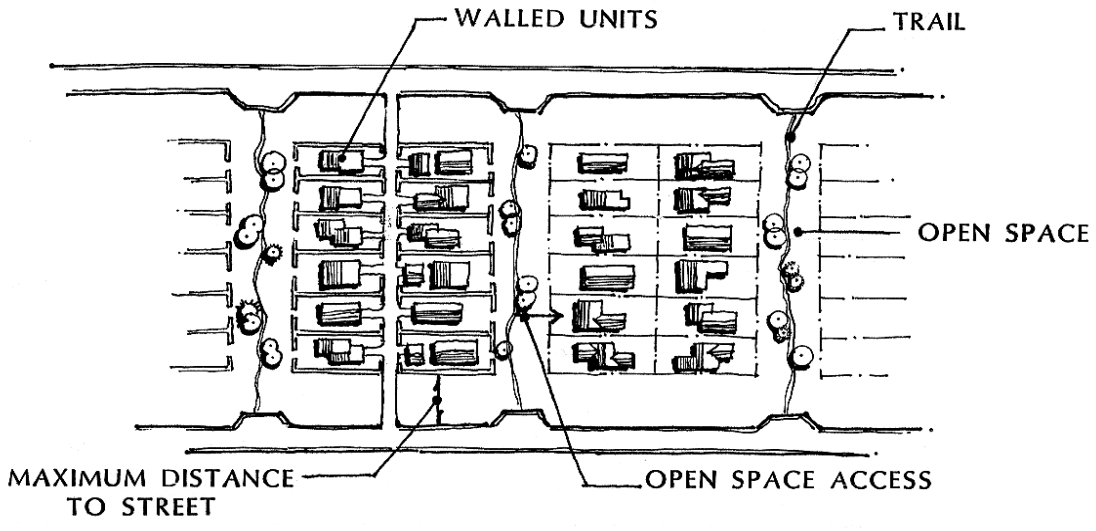
SECTION 08.144 NO ROAD FRONTAGE

A. Under certain circumstances, atrium, patio, village houses, and town houses of all types do not have to front a street. All such units shall front an open space that meets the standards in Table 08.144. The maximum distance such a unit may be away from a street depends on whether the lot has direct access to both the open space and an alley that provides the lots with on-site parking and emergency access, or whether access is solely via the open space. The distance in Table 08.144 is doubled if a road or emergency access alley is available at both ends of the open space. Figure 08.144 illustrates the various conditions.

B. Buildings or uses fronting a pedestrian precinct in the D District need have no street frontage. Fire fighting measures for the complex shall be approved by the Paola Fire Department. Adequate access for other emergency vehicles as well as the loading needs of these uses or buildings shall also be provided.

Table 08.144 STANDARDS FOR SPECIFIC RESIDENTIAL UNITS WITH NO ROAD FRONTAGE			
Width of Open Space (ft.)	**Walled Unit**	**Maximum Distance from Street (ft.)**	
		Open Space Access	**Alley and Open Space Access**
8	yes	60	100
12	yes	75	150
20	no	100	180
30	no	120	200

Figure 08.144
RESIDENTIAL UNITS WITH NO ROAD FRONTAGE



SECTION 08.145 FLAG LOTS

Flag lots are generally prohibited because they have often been used to avoid building a street to serve a subdivision, and their use increases the number of curb cuts on arterial or collector roads. However, conditions exist where flag lots are reasonable and can even enhance the community's character. These conditions are set forth below and illustrated in Figure 08.145.

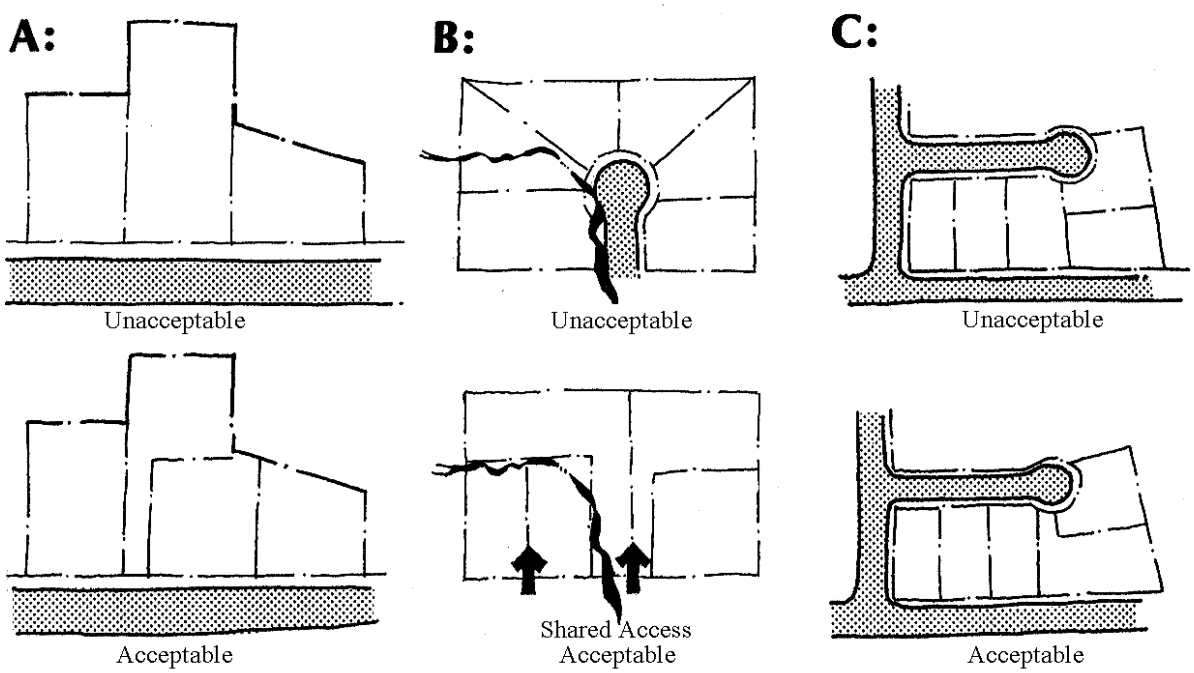
A. If the property to be subdivided has very irregular boundaries and the narrowest of streets does not work, a flag lot may be used to serve a single lot. (See A below).

B. In a resource protection area, a flag lot may be used to reduce resource destruction which would have occurred by extending the cul-de-sac further into the sensitive area. (See B below).

C. A flag lot shall be used to avoid lots taking access to arterial or collector streets as long as the flag lot does not take access from the arterial or collector. (See C below)

D. A combined curb cut for the flag lot and one or more lots may be required where Staff believes such design will improve safety.

Figure 08.145
FLAG LOT CONDITIONS



SECTION 08.150 LOT SHAPES

Normally, lot shapes are rectangular or pie-shaped. This pattern works well in some cases; rectangular lots are important when lots are rather small since they provide a maximum buildable area. Pie-shaped lots can be very inefficient. The most important element is that the lot contains a building construction envelope adequate for conventional house design. Lot shapes may be irregular under the following circumstances (see Figure 08.150):

A. Where lots are surrounded by open space, lots of approximately trapezoidal shape may be used to maximize the benefits of the open space and reduce road length.

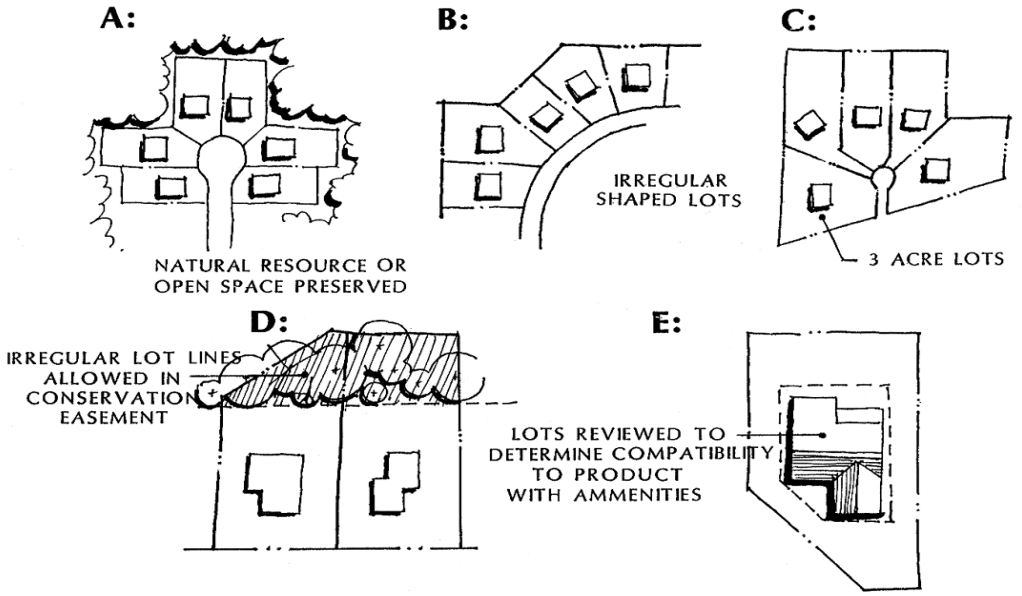
B. Where the property has a shape that makes it difficult to lot efficiently, the developer should be able to use irregular lot shapes rather than waste land.

C. Where lots exceeding three (3) acres are provided, the lot shape that provides efficient use of the land and minimum lot size may be used.

D. Portions of lots in a conservation easement may have irregular shapes, since they cannot be used for construction.

E. All lot sizes and shapes shall be reviewed to determine if houses similar to those normally built in the district can be constructed with normal patios or decks within the building envelope.

Figure 08.150
IRREGULAR SHAPED LOTS



SECTION 08.151 CUL-DE-SAC OR BLOCK LENGTH

Cul-de-sac length is generally set to avoid unduly long roads where only one means of access exists. Maximum block lengths provide for good circulation in lengthwise and cross streets. However, instances may arise where a longer block length or cul-de-sac length is justified.

A. A cul-de-sac's maximum length may be extended to serve twenty-four (24) lots provided:

1. No stub street is possible on any cul-de-sac whose length would exceed eighteen (18) lots.

2. The average number of lots served by cul-de-sacs in the development is sixteen (16) or less.

B. Up to twenty-eight (28) lots per block length or cul-de-sac may be permitted where:

1. Unique topography, shape, or physical features make it difficult to connect to another street without building structures that are well above normal improvement costs; or

2. The connection would result in undesirable intrusions into natural resources; and

3. Adjoining developments provided no connections, which if linked to the subject property would reduce the need for the modulation, or no stubs are possible to adjoining vacant land.

SECTION 08.152 INTERSECTIONS

Intersections may be permitted closer than the three hundred (300) foot centerline distances where:

A. The depth of a block is less than these distances. An exception shall be granted unless a reasonable alternative street configuration exists which will provide the needed separation; or

B. Topographic, natural resource, or ownership problems make providing the separation impractical or undesirable; or

C. A narrower distance may be permitted where Staff determines the shorter distance results in safer conditions based on site distances.

SECTION 8.153 LANDSCAPING

The total number of landscaping units may be reduced by 25% when underground irrigation is provided. However, the reduction may not be taken from any required bufferyards, special buffers, or street trees.