ADDENDUM E

Design Standards

FOR
TOWN OF LISBON

Industrial/Business Park Special Use and Commercial Special Use Zoning Districts
(herein referred to as the Special Use Districts)

Adopted _____

APPROVED 3-27-09

SECTION 2 LANDSCAPING

Purpose: The intent of this section is to develop quality landscaping that promote green space, protect established trees, and create other quality of life enhancements. The standards apply for all areas of the Special Use Districts, but the reader should be aware that specific plans may require more specific standards.

2.1 Landscaping and Buffering Standards

(A) Berms shall be used to screen high traffic areas from residential homes, break up the visibility from the roadway of large areas of parking, and create separation from dissimilar uses that are adjacent to each other. Berms shall be built with side slopes not exceeding one foot vertical by three feet horizontal unless otherwise approved by the Town Plan Commission and shall be maintained with grasses or alternative landscaping satisfactory to the Town Plan Commission and JPC. The buffering shall be in harmony with terrain adjacent to the development site. The developer shall have provisions for ongoing maintenance such as mowing and weed management of the berms.

(B) Extensive landscaped areas and open spaces shall be in place to reduce the visual intensity of developments in a manner that is consistent with the low intensity countryside character desired in the Town's Land Use Plan. Use buffers and screens, either with landscape, structural, or earthen features to separate vehicular and pedestrian areas, and to beautify/screen parking lots and buildings from the view of the street or other neighboring parcels.

(C) Determining Required Land Use Buffer and Landscape Design: An appropriate land use buffer and landscaping shall be provided between uses based on the intensity of the uses. The greater variance of intensity between adjacent land uses, the higher level of buffering and landscaping shall be provided. Definitions of intensity factors used to determine buffering are defined in the tables shown below.

1. The first step in determining the buffer and landscaping required is to calculate the numerical difference between the land use intensity (LUI) factors of the two adjoining uses from Table 1.

   Example A: If a general commercial project is proposed on a site that borders existing lands zoned for residential density of four to eight units per acre, the calculated Land Uses Intensity difference would be (General Commercial LUI Factor = seven) minus (Res. four to eight units per acre LUI Factor = three) equals an LUI difference of four.

2. The second step in determining a land use buffer and landscape requirement is to adjust the numerical difference between land use intensities for any intervening road, drainage or utility right of way or easements that separate the sites. The difference between LUI factors shall be reduced as noted on Table 2.

   Example B: If the general commercial project from Example A was separated by a local road from the residential density of four to eight units per acre, the adjusted

LUI Factor would be (LUI Difference = four) minus (Local Road deduction = one) equals adjusted LUI Difference of three.

3. The resulting final land use intensity difference is then used to determine the buffer and landscape design type in Table 3.

   Example C: Using the adjusted LUI difference of three from Example B the required buffer width would be 20 feet between the proposed project and existing residential property.

Example LUI Calculation

(General Commercial <.65 ISR)	*minus*	*(Residential 4-8 units/acre)*	*minus*	*(Local Road)*	*=*	*(Adjusted LUI)*
7	-	3	-	1	=	3

4. The following guidelines can be used to help determine the appropriate buffer and landscape design.

   a. The buffer and landscape requirements are calculated per each side of a parcel (North, East, West, and South) and may often times be different for each side of a parcel depending upon the adjacent uses or roadways in any particular site.

   b. The total landscaping requirements once determined for each side can be added together for the site and allocated on the site as deemed appropriate by the Town Plan Commission to accomplish the goals of beautifying/screening parking, accessory structures, and dock doors, and enhancing buildings. Buffer distances must be maintained in each side as required by Table 3 to protect the separation required in that side of the property.

   c. The lineal feet measurement used in Table 3 is calculated by measuring the entire length of the property line on each side of a parcel. The lineal feet measurement of a side is reduced by the portion of the length of the primary building facing that side where no parking lot is found on a perpendicular tangent between the building and the property line on that side and when the building has no dock doors on that side of the building.

   d. In no case shall a landscaping requirement be less than zero.

   e. Parking lots may have special buffering and landscaping requirements as listed in Section 3 Parking.

Land Use Intensity Charts and Diagrams

(The Chart is shaded to represent the example from page 5.)

Table 1 – Land Use Intensity Factor

Land Use	LUI Factor	Land Use	LUI Factor
Office: Less than .60 ISR and 2 stories or less	5	General Commercial: Less than .65 ISR	7
Office: .60 - .65 ISR and 2 stories	6	General Commercial: .65 ISR or greater	8
Office: Over .65 ISR or over 2 stories	7	Heavy Commercial	9
Residential : Less than 4 units per acre	1	Warehouse/Light Manufacturing	8
Residential: 4-8 units per acre	3	Manufacturing	9
Residential: 9-20 units per acre	6		

Notes to Table 1.

1. Impervious surface ratio (ISR) is the amount of land covered by buildings, overhangs, porches, canopies and pavement to the amount of land covered by landscaping.

2. Office includes office and medical office uses, and the office fronts of office/warehousing buildings. Special uses in office zones shall require additional buffering, based on their intensity.

3. "General Commercial" is defined as uses that do not have outside activities such as night use drive-up windows, gasoline sales, significant late night parking lot activity or similar impacts adjacent to the lower intensity land use. (i.e. Hardware Store, Non-Drive Thru Restaurants, Drug Stores).

4. "Heavy Commercial" is defined as all other commercial uses not included in note three. (i.e. Department Stores, Movie Theatres, Grocery Stores).

5. For vacant land, the land use intensity shall be assumed to be based on current zoning or land use plan designation, whichever is the most intense.

Table 2. Intervening Right Of Way Credit

Right-Of-Way or Easement Width	Reduction of LUI Difference
Local Road	**1**
Collector Road	**2**
Arterial Road	**4**
Limited Access HWY	**6**
Utility or Drainage Easement (feet)	
20 to 50	**1**
51 to 100	**2**
101 to 150	**3**
151 or more	**4**

Table 3. Land Use Buffer/Landscape Design

Buffer Type Planted/100 Lin. Ft. of Buffer				
(LUI Diff.)	**Width (ft.)**	**Shade Trees**	**Evergreen Trees**	**Shrubs**
0-3	**20**	**2**	**6**	**20**
4	**30**	**3**	**8**	**25**
5	**40**	**3**	**10**	**35**
6-8	**50**	**6**	**14**	**45**