August 15, 2011

To: Washington County Planning Commission

From: Brent Curtis, Planning Manager
Department of Land Use & Transportation

Subject: PROPOSED LAND USE ORDINANCE NO. 739

ADDENDUM STAFF REPORT

For the August 17, 2011 Planning Commission Hearing
(The public hearing will begin no sooner than 7:30 PM)

The August 10, 2011 staff report for the Planning Commission’s August 17th hearing provided information on several issues, including the Main Street Program Guide and a proposal to develop land partition and property line adjustment standards for park conveyance. The purpose of this addendum staff report is to document staff’s progress in responding to written comments submitted by Planning Commission members, and to provide additional information about the Urban/Rural Compatibility topic.

I. WRITTEN COMMENTS FROM PLANNING COMMISSION
Chair San Soucie and Commissioner Manseau provided staff with written comments and questions regarding Ordinance No. 739. Copies of these comments were mailed to the Commission in the meeting materials for the August 17th hearing. The comments have been transferred into a table format for staff to review and respond to. Due to the volume of comments submitted, staff has not been able to complete all the responses at this time. A partially completed comment table is being provided in meeting materials that accompany this Addendum Staff Report. Staff will continue to work through the remainder of the comments and provide comments for your consideration at the August 31st meeting.

II. URBAN / RURAL COMPATIBILITY
The filed ordinance identified three buffer types to promote urban/rural compatibility: Buffer Type 1, Buffer Type 2, and Buffer Type 3. Staff proposed to rename the buffers, per a recommendation from the North Bethany Stakeholder Workgroup that the buffers be named to indicate their salient features. Therefore, Buffer Type 1 has been renamed the Fence Buffer, Buffer Type 2 has been renamed the Natural Features Buffer, and Buffer Type 3 has been renamed the Vegetation Buffer. Below is an overview of the substantive provisions of the proposed urban/rural edge standards associated with each buffer type.
Following the overview, this report contains a more detailed description of the proposed revised urban/rural buffer standards, including proposed revisions to the buffer locations. As discussed in more detail under the descriptions of the Fence Buffer and Vegetation Buffer, the location and extent of these buffers have been amended based on information presented during the public testimony at the August 3rd Planning Commission hearing. In addition, information on the width and area of each buffer type is included in the detailed descriptions, per Chair San Soucie’s request at the August 3rd hearing.

Overview: Substantive Provisions of the Proposed Urban/Rural Buffer

1. Three buffer types are proposed. There is no density loss from any buffer type.

A. **Fence Buffer** (formerly Buffer Type 1) – Buffer treatment provided along the western perimeter, parts of the northern perimeter, and the north end of the eastern perimeter.
   - Fence to discourage trespass to be located at the property line.

B. **Natural Features Buffer** (formerly Buffer Type 2) – Buffer treatment located along parts of the northern perimeter. It is composed of:
   - Fencing;
   - Natural features that Metro used to justify the 2002 UGB expansion
     - Density Restricted Lands, and
     - Forested steep sloped areas between the Density Restricted Lands
     (Note: density may be transferred from these areas which are designated R-6 NB)

C. **Vegetation Buffer** (formerly Buffer Type 3) - provided along most of the eastern perimeter
   - Fencing;
   - A buffer with vegetation (density may be transferred from the buffer area to the remainder of a site). As noted later in this report, staff is working with its arborist to identify the narrowest vegetation buffer, which will take the place of Ordinance No. 739's proposed separation buffer and vegetation buffer.

2. There is no loss of density from any buffer type.

3. Fencing is provided along the perimeter of Subarea to prevent trespass (urban residents and pets).

4. Fencing along public use areas will be posted with informational signage about adjacent farm/forest uses and “no trespassing.”

5. All development will be required to record a farm/forest waiver.
6. An informational brochure about farm/forest activities and potential conflicts between these uses and new urban development will be provided to residents and businesses.

7. The Review Authority may require additional buffering at the development review stage if it is determined to be necessary. The amount and type of additional buffering allowed would be specified in the Code.

**Proposed Revised Urban/Rural Buffer Standards**
More detailed information about each of the buffer types is provided below.

**A. FENCE BUFFER**
The Fence Buffer consists of a fence to discourage trespass. This treatment is applicable along the Subarea's western perimeter and the west end of the northern perimeter. In addition, as discussed below, staff concludes that this treatment should be applied to the east end of the northern perimeter, and the north end of the eastern perimeter.

**Rationale**
The use of the Fence Buffer along the western perimeter and west end of the northern perimeter is proposed for the following reasons:

- The adjacent rural properties are currently in pasture and/or livestock (cattle) use. According to a review of aerial photos from 1969, 1984, 1998, and 2009, these properties appear to have been in pasture and/or livestock use for more than 30 years.
- Pasture and livestock uses are not associated with chemical spray activities, or significant dust generation. The likely conflict between these types of uses and future urban uses in North Bethany is trespass.
- Slopes of 15 to 25 percent are present on these adjacent properties where they abut the northern perimeter of North Bethany, providing a topographical separation between the agricultural activities on these properties and future urban uses in North Bethany.
- The adopted Parks, Trails and Pedestrian Connections Map identifies a trail corridor along a majority of the western perimeter. The adopted Density Restricted Lands Map identifies a riparian area adjacent to the lower end of the western perimeter. These features will be located between future urban homesites and the western perimeter, providing a separation from adjacent agricultural activities.

In addition, based on testimony submitted at the August 3rd hearing, staff has revised the Urban/Rural Edge Map to apply the Fence Buffer at two new locations: the east end of the northern perimeter, and the north end of the western perimeter. (The revised Urban/Rural Edge Map is Attachment A).

The rural property adjacent to the east end of the northern perimeter is owned by Carolyn Perrin, and the lower portion abutting North Bethany is being cultivated for wheat. Because typical agricultural practices for wheat can include ground spraying and harvest activities that can generate dust, the filed ordinance had proposed a Vegetation Buffer alongside
Ms. Perrin’s property. However, Ms. Perrin noted in her testimony that her rural property was being cultivated in conjunction with contiguous property within North Bethany that she also owns. Ms. Perrin stated that when she sells her North Bethany property for residential development the portion of her rural property that is farmed for wheat will become inaccessible. At that point, she will discontinue the wheat cultivation and reforest that portion of her rural property in Multnomah County. Based on this new information, staff concludes that a Fence Buffer, rather than a Vegetation Buffer, is appropriate along the east end of the northern perimeter.

The rural property adjacent to the north end of the eastern perimeter is owned by David and Kathy Blumenkron. The lower third of this property appears to have been recently used for hay or grass seed production. Because typical agricultural practices for hay and grass seed can include ground spraying and/or harvest activities that can generate dust, the filed ordinance had proposed a Vegetation Buffer alongside the entirety of this property. However, Tom Vanderzanden stated in his August 3rd testimony that he represented the property owners, and he noted that the majority of the property had been logged several years ago. After the hearing, staff checked with Multnomah County and the Department of Forestry, and discovered the following:

- The property has a forest zone designation (CFU-2);
- The majority of the property was logged in 2001 and was restocked with merchantable timber in 2003, as verified by the Department of Forestry;
- The Department of Forestry conducted a second inspection of the restocked timber area in 2007.

Based on this information, the northern two-thirds of the property appears to be managed for forestry use, not agricultural use.

Metro Condition 02-987A requires the county to “…adopt provisions…to ensure compatibility between urban uses in an included study area and agricultural practices on adjacent land outside the UGB zoned for farm or forest use.” (emphasis added) However, the condition does not require the county to adopt compatibility provisions for forest practices on adjacent rural lands. Therefore, staff concludes that a Fence Buffer, rather than a Vegetation Buffer, is appropriate along the north end of the eastern perimeter, adjacent to the portion of this site that is being managed for forestry use.

**Buffer Length and Area**

As shown on revised Urban/Rural Edge Map, the length and location of the Fence Buffer has been revised as described above. The Fence Buffer has a total length of approximately 6,507 feet, so it constitutes approximately 46 percent of the North Bethany boundary’s total length. The location of the Fence Buffer will be along the boundary line, so it will not have a width or area per se.
Elements of the Fence Buffer

1. **Type 1 Fence** – A minimum 6 ft. tall wood fence or cyclone fence with small mesh
2. For fencing alongside public use areas (e.g., park, trail), signage shall be posted that indicates the adjacent rural properties are used for farm and/or forestry purposes and that trespassing is prohibited.

It should be noted that members of the North Bethany Stakeholder Workgroup recommended the use of a 5-foot “no-climb” farm fence to deter trespass along the North Bethany boundary. However, staff’s online research of this fence type indicates that the term “no-climb” does not refer to an inability of people to scale such a fence, but rather the inability of a farm animal to place its hooves within the fence openings. In addition, at the August 3rd hearing, adjacent rural property owners reiterated their concerns about the impact of trespass by future urban residents. Furthermore, on August 5th, during a site visit to one of these adjacent rural properties, staff observed a herd of elk running up the hillside toward North Bethany’s northern boundary. For these reasons, staff believes that a sturdier fence type, which is more difficult for people to climb and less likely to be damaged by large wildlife on the run, is warranted along the boundary to discourage trespass. On that basis, staff recommends a minimum 6-foot wood or cyclone fence.

Additional buffering that may be required by the Review Authority at the time of development application review:

1. Perimeter fence shall be sight obscuring to address conflicts between adjacent uses
2. Increase fence height to deter trespass
3. Include sloped angle at top of fence to deter trespass
4. If the agricultural use has changed to a use involving chemical spraying and/or dust (example: orchard), the addition of a Vegetation Buffer as described in Section II.C, below

**B. NATURAL FEATURES BUFFER**

The Natural Features Buffer consists of the buffer elements along the Subarea’s north edge that were identified in Metro’s findings for bringing North Bethany into the UGB. These elements are Abbey Creek and its riparian areas, steep slopes, and the forested areas. This treatment uses density restricted lands (riparian areas, +25% slopes) and forested lands between the density restricted lands as a buffer between future urban uses in North Bethany and adjacent rural uses.

**Rationale**

The proposed Natural Features Buffer along a portion of the northern perimeter was selected to maintain consistency with the boundary that Metro adopted to justify its 2002 UGB expansion for North Bethany. The elements of the Natural Features Buffer provide an effective separation between urban and farm/forest uses. In order to preserve the function of these natural areas, they need to be maintained in their natural state.
Metro's 2002 UGB expansion states that the county "... shall adopt provisions in its comprehensive plan and zoning regulations - such as setbacks, buffers and designated lanes for movement of slow-moving farm machinery - to ensure compatibility between urban uses in an included study area and agricultural practices on adjacent land outside the UGB zoned for farm or forest use." This condition was not in place when other parts of the county were planned in the early 1980s. Consequently, the North Bethany Subarea needs to be treated differently than pre-existing UGB areas. For example, in the pre-existing UGB areas, density was applied to riparian, forested and steep sloped areas. In North Bethany, however, density was not applied to riparian areas and slopes greater than 25 percent, consistent with Metro's Title 11 requirements. This is one of the reasons that staff had not intended to allow development in the steep sloped areas of North Bethany that are density restricted areas. As noted above, allowing development in these areas defeats the purpose of the Natural Features Buffer, which is intended to separate future urban development from nearby farm/forest lands. Metropolitan Land Group’s proposal to build in these areas would allow the hillside to be filled and homes placed in the fill area, or would allow homes to be built on piers on the hillside. Both activities would bring homes close to the adjacent rural lands, and negate the separation and buffering functions of these natural features.

In their written testimony dated August 10, 2011, MLG has stated that existing regulations will preserve the bulk of this area in its natural state, without the need for the Natural Features Buffer. Staff disagrees with this assessment. State regulations and Clean Water Service requirements do not address the portions of the Natural Features Buffer that are not riparian areas. Also, these forested areas are not subject to the county's Goal 5 requirements, so no protection is provided by those regulations. Furthermore, Multnomah County's Goal 5 overlays on adjacent rural lands allow agricultural and forest activities to occur within those areas. Consequently, Multnomah County's regulations cannot be relied upon to preserve a buffer between rural farm activities and future urban uses in North Bethany.

In their testimony, MLG has proposed an alternative of a 20-foot no-build setback along this portion of the North Bethany boundary. This proposal represents the reduction of an earlier alternative that MLG had presented to the North Bethany Stakeholder Workgroup on July 28th, which proposed a 50-foot no-build setback in this area.

Staff does not believe that a 20-foot or even a 50-foot setback is sufficient to promote urban/rural compatibility in this area. One reason is the proximity of riding trails on the adjacent rural property owned by Joe Rayhawk. Mr. Rayhawk operates a horse boarding and training facility on the property, an activity that is classified as a farm use under state law [ORS 215.213(2)(a)].

Mr. Rayhawk submitted written testimony to the Planning Commission during the hearings for Ordinances 712 and 730, describing the negative impacts that would accrue to his agricultural practices with urban development adjacent to his property. In his letters, dated July 31, 2009 and August 11, 2010, Mr. Rayhawk noted that the riding trail in his property runs parallel with the northern perimeter of North Bethany and is in close proximity to the
boundary, within 10 feet in some areas. Two county staff members visited Mr. Rayhawk’s property with his permission on August 5, 2011, and verified that a significant portion of the riding trail is in close proximity to North Bethany’s northern boundary, as shown on the attached map (Attachment B). Mr. Rayhawk noted that trespass onto his property by urban residents, or activity within North Bethany that is within view or earshot of the riding trail, could frighten horses and endanger riders.

The development of homesites on the hillside at a distance of only 20 feet from the boundary would likely necessitate removal of all existing hillside vegetation down to the boundary itself. MLG’s proposal would allow the forested hillside to be filled through the construction of a retaining wall 20 feet from the northern boundary. This would allow the hillside to be filled to make level building sites. The placement of homes on the hillside above the boundary and only 20 feet from it, with no vegetation to screen views of urban residential activity in rear yards and decks and insufficient distance to minimize urban residential sounds such as barking dogs and radios, would result in many opportunities to startle horses on the nearby riding trails below.

Buffer Length and Area
Staff has revised the Natural Features Buffer to remove two areas of non-density restricted land that have slopes of less than 15 percent. The areas being removed from this buffer type, and the steeper slopes within the remainder of the Natural Features Buffer, are shown on Attachment C.

The Natural Features Buffer extends for approximately 4,779 lineal feet along the northern boundary and constitutes approximately 34 percent of the boundary’s length. As currently shown on the Urban/Rural Edge Map in the filed ordinance, the width of the Natural Features Buffer ranges from approximately 158 feet at its narrowest point to approximately 465 feet at its widest point. The area of the buffer consists of approximately 23.92 acres of Density Restricted Lands (+25% slopes, riparian areas, CWS estimated vegetated corridors) and approximately 4.70 acres of lands that are not density-restricted.

Elements of the Natural Features Buffer:
1. Development is precluded in these areas, including utilities (sewer, stormwater facilities)
2. Provide Type 1 fencing at the top of slope (minimum 6-foot wood or cyclone fence)
3. Place natural areas in a tract or dedicate to an appropriate public agency

Additional buffering that may be required by the Review Authority at the time of development application review:
1. Provide fencing along the northern perimeter boundary in addition to fencing at top of slope
C. VEGETATION BUFFER
The Vegetation Buffer consists of an area parallel to the boundary, which will be planted with coniferous trees and understory shrubs. This treatment is applicable along the majority of the Subarea's eastern perimeter.

Rationale
The purpose of the Vegetation Buffer is to provide visual screening, separation and filtering of dust from adjacent agricultural activities to the east.

- Aerial photo information and property owner reports indicate that farming activity such as cultivation of wheat, hay and grass seed are occurring, or have occurred in recent years, on several of the adjacent properties.
- These farming activities are typically associated with ground spraying and harvest activities that generate dust. An August 29, 2009 letter from wheat farmer Alan Schaaf, included in the meeting materials packet for the August 17th hearing, illustrates the potential for impact on both urban residences and farm operations when there is no buffer present between such uses.
- The land along either side of the east perimeter is relatively level, so there are no topographic differences to separate the urban and rural uses in this area.
- The adjacent rural lands are primarily designated as Exclusive Farm Use, and all are designated Rural Reserves, which is a 50-year designation.

The adopted Parks, Trails and Pedestrian Connections Map identifies a trail along the majority of North Bethany’s eastern perimeter. MLG’s testimony dated August 10th suggests that the width of the vegetation buffer should include all or a portion of the trail corridor width.

However, the Vegetation Buffer will need to be somewhat densely planted with trees and understory shrubs to function as an effective filter for spray drift and dust. In contrast, Tualatin Hills Park and Recreation (THPRD) staff indicated that a significant portion of the width of the trail corridor will need to remain unobstructed to facilitate the actual trail and its maintenance. Therefore, staff disagrees with any suggestions to require the trail corridor to share the discrete area that will be set aside for the Vegetation Buffer because there isn't sufficient room for the trail and the vegetation. Staff also notes that the county doesn't have the authority to tell another service provider how to build and maintain its facilities. There is no reason, however, that would preclude the consolidation into a wider area that includes the necessary buffer plantings and sufficient area for the trail.

MLG’s August 10th testimony also advocates for the use of deciduous trees in the Vegetation Buffer. However, the buffer research publications and policy documents that staff has reviewed are consistent in recommending that the majority of trees within vegetation buffers be coniferous species. The publications note that use of coniferous trees is recommended because research has shown that thin, needle-like foliage is most effective at intercepting spray droplets and dust. For example, the Guide to Edge Planning, published by the British Columbia Ministry of Agriculture, recommends that the plantings in a vegetation buffer
should include at least 60 percent evergreen conifers (an electronic version of this publication is included in the Planning Commission’s meeting materials packet for August 17 – see page 23 of the publication). Therefore, staff recommends that the majority of trees within the Vegetation Buffer be coniferous species, consistent with the tree species listed in the filed ordinance.

Buffer Length and Area
As shown on the Revised Urban/Rural Edge Map, the proposed length and location of the Vegetation Buffer has been adjusted in accordance with testimony received at the August 3rd hearing. (As noted earlier in Section II.A of this report, the Vegetation Buffer adjacent to the east end of the northern perimeter and the north end of the eastern perimeter has been replaced by a Fence Buffer). The revised length of the Vegetation Buffer extends for approximately 2,672 feet along the eastern boundary and constitutes approximately 19 percent of the Subarea boundary’s total length. Staff is conferring with our arborist to specify the appropriate minimum width of the vegetation buffer along the east boundary. The arborist has been inaccessible during the last week due to travel out of the area, but has recently returned and is working on refining the specifications for the vegetation buffer along the eastern perimeter. Staff hopes to provide updated information at the August 17th hearing.

In the meantime, in order to provide the Planning Commission with a hypothetical example of buffer area, staff has calculated the buffer area that would result if a Vegetation Buffer width of 25 feet was utilized. Using 25 feet as a sample width, the resulting buffer area would be approximately 1.53 acres (66,889 square feet). The width of the Vegetation Buffer will affect the amount of buildable area of North Bethany Tax Lots 100, 500, and 803, which are shown on the attached map, Attachment D. The buffer width includes a portion of a Beaverton School District site, and a portion of the linear park that will be located on the north side of Road A. When the buffer area of these non-residential features are subtracted out, the buildable areas of Tax Lots 100, 500, and 803 are reduced by 0.15 acre (6568 sq. ft.), 0.17 acre (7,460 sq. ft.), and 0.40 acre (17,934 sq. ft) respectively by the 25-foot buffer width. The affected area on the three parcels is designated R-6 NB, which permits up to six units per acre. Based upon a density of 6 units per acre, the affected area would equate to a total of four dwelling units; 1 unit each on Tax Lots 100 and 500 and 2 units on Tax Lot 803. However, the density associated with those residential units can be transferred to the remainder of Tax Lots 100, 500, and 803, resulting in no net loss in residential density. These tax lots range in size from 31.50 acres to 40 acres. Each tax lot has two or three residential land use designations. Given the large size of each tax lot and the multiple types of residential zoning, it will be very easy to accommodate the transfer of those units.

The effect of increasing the width of the Vegetative Buffer to 50 feet would result in the following impacts:

Tax Lot 100: 0.30 acre (13,135 sq. ft.) of buffer area equals a density transfer of 2 units on a 40 acre parcel.
Tax Lot 500: 0.34 acre (14,920 sq. ft.) of buffer area equals a density transfer of 2 units on a 31.50 acre parcel.

Tax Lot 803: 0.82 acre (35,868 sq. ft.) of buffer area; density transfer of 5 units on a 36.75 acre parcel.

Again, given the large size of each tax lot and the multiple types of residential zoning, it will be very easy to accommodate the transfer of those units.

Elements of the Vegetation Buffer:

1. Type 1 Fence
2. Type 1 Vegetation Buffer: Using the proposed tree and shrub species shown in Ordinance No. 739 (see page 47 of Exhibit 4), staff in conjunction with its arborist will identify the narrowest vegetation buffer needed. We hope to be able to provide you with this information on August 17th. This information will identify the minimum buffer width, the type of tree and shrubs to be planted and their spacing.

   Staff's revised Vegetation Buffer will incorporate Ordinance No. 739's proposed "separation buffer" and the "vegetation buffer" into a single entity titled "Vegetation Buffer". The result is to reduce the overall width of the buffer area.

3. For residential development: the vegetation buffer and fence would be placed in a tract or dedicated to an appropriate public agency.
4. For other uses, such as schools, the vegetation buffer may be maintained as part of development site with restriction to maintain the area as a buffer, or it may be dedicated to an appropriate public agency.

Additional buffering that may be required by the Review Authority at the time of development application review:

1. Perimeter fence shall be sight obscuring to address conflicts between adjacent uses
2. Increase fence height to deter trespass
3. Include sloped angle at top of fence to deter trespass
4. Provide a wider Vegetation Buffer with more vegetation (Staff will create a table of varying widths and plants based upon updated information from the county's arborist)

D. ADDITIONAL PROVISIONS

In order to make future residents/businesses aware that they are adjacent to agricultural and/or forested areas and may experience dust, noise and odors from these uses, all development in the Subarea will be required to record a farm/forest waiver. Staff also proposes to prepare an informational brochure about farm and forest practices to help inform future residents and businesses about these nearby uses.
North Bethany Planning Area: Urban/Rural Edge

The information on this map was derived from several databases and care was taken in its creation. Washington County cannot accept any responsibility for errors, omissions, or positional accuracy. There are no warranties for this product. However, notification of any errors will be appreciated.

Washington County - Long Range Planning Division

Fence Buffer  Trail Corridor  Natural Features Buffer  Tax Lot  County Line

% Slope
- 0 - 5%
- 5 - 15%
- 15 - 25%
- 20 - 25%
- >25%

Wetland

Attachment C
WASHINGTON COUNTY - LONG RANGE PLANNING

Example of 25' Vegetation Buffer

*Note: Based on a density calculation of 6 units per acre.

Buffer Area - 0.15 Acres
1 housing unit* to be transferred to remainder of parcel.

Buffer Area - 0.17 Acres
1 housing unit* to be transferred to remainder of parcel.

Buffer Area - 0.23 Acres
1 housing unit* to be transferred to remainder of parcel.

Buffer Area - 0.17 Acres
1 housing unit* to be transferred to remainder of parcel.

*Note: Based on a density calculation of 6 units per acre.