

Think Quality - Think Future

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MEMORANDUM

TO: Blount County Planning Commission

FROM: John Lamb

DATE: September 19, 2007

SUBJECT: New proposed amendments to Zoning Regulations Section 7.2 subsections E and F concerning drainage and erosion control plans in site plan requirements, and new Section 7.14 concerning design requirements for commercial buildings.

The following are proposed amendments to the Zoning Regulations requested by the Planning Commission during past meetings. If the Planning Commission finds the proposals to be appropriate, the Commission should take action to recommend to the County Commission. The County Commission has final authority on zoning matters. Since the proposed amendments would affect zoning in the planning regions of Maryville and Alcoa, those city planning commissions will also need to conduct independent review and recommendation prior to vote by the County Commission.

Proposed amendment 1 – Section 7.2 Site Plan Requirements, subsections E and F on drainage plan and erosion control plan. In the past, the Planning Commission discussed issues of detention for commercial developments, particularly additions to impervious surfaces for existing developments. Staff also notes that regulations for erosion control plans needs updating to meet newer requirements under Storm Water Phase 2 program.

The present language is the following:

E. A drainage plan with calculations of discharge and plans for discharge and detention if the site is greater than three acres, or if more than 40 percent of the site is to be covered in non-permeable surface.

F. An erosion control plan approved by an appropriate state agency if such plan is required by any applicable state regulations.

The proposed amended wording is the following:

E. A drainage plan with calculations of discharge and plans for discharge and detention if disturbance of the site is one acre or greater for new development, or if there is an increase of more than 10 percent of impermeable surface for additions to existing development sites.

F. An erosion control plan approved by an appropriate agency if such plan is required by any applicable state or local regulations.

Proposed amendment 2 - New Section 7.14 concerning commercial and industrial design requirements. The Planning Commission directed staff at the last regular meeting to formulate wording for design requirements for commercial development. Maryville design requirements were presented as a model for discussion. The following is a proposed amendment to add a new Section 7.14 to the zoning regulations. Staff notes also that the design requirements assume a higher level of site plan submission than presently required, and appropriate wording is proposed.

Section 7.14. Design Requirements for Commercial and Industrial Developments.

A. The site plans required in this section shall conform to requirements of Section 7.2 and other requirements specified in this Section. All elements of use, including associated accessory elements such as garbage disposal areas, heating and air units exterior to buildings, and loading docks, shall be shown on the site plan. Site plan submittal shall contain required plans for stormwater management under this section, other applicable sections in the zoning regulations, and other County and State grading and stormwater permit regulations.

The site plan shall contain specific design of parking areas required in this section and other sections in the zoning regulations.

- B. Site plans and site plan elements shall be prepared by qualified professionals. Qualified professionals shall be licensed as one or a combination of architect, landscape architect and/or engineer.
- C. To mitigate the impact of building appearance along scenic highways and other existing roads within the county exterior to a commercial development, the following design requirements shall apply.
 - 1. The front, side and rear elevation of any building shall be provided as part of site plan submission for review and approval.
 - 2. The front (facing highway or road) and side wall planes of buildings shall be staggered by occasional changes in surface planes or changes of materials or architectural features to avoid monolithic “box” appearance. Walls and roof visible to public roads shall have changes of wall and roof planes with at least a three (3) foot projection or recess no less than every thirty (30) feet horizontally. In addition, any of the following elements shall be integrated in walls visible to public roads at no less than thirty (30) feet spacing, both horizontally and vertically: porches; awnings; stairwells; doors; windows; chimney; changes in construction materials. Excessive repetition of only one or two architectural features above is prohibited.

Elements that are not acceptable as a means to comply with the requirement above include, but are not limited to: gutter downspouts; garage doors; retaining walls; changes in paint color, color bands or small (less than two (2) square feet) accent materials using flat tile; narrow trim; common hallways parallel to outside walls not including stairwells; window and door frames; shutters; structural or decorative columns; and narrow extensions (less than three feet wide) of fire walls.

3. Exterior walls visible from public roads may not be comprised of aluminum or flat-faced concrete block. Exterior glass shall compose a minimum of five (5) percent of the façade of the building, unless the building is an open-air structure such as a produce market.

4. All accessory garbage and disposal facilities (dumpsters, etc.) and accessory heating and air facilities shall be screened with materials compatible in appearance to the principal structure. Loading docks shall be placed away from fronting roads, and shall be screened if visible from residential uses.

D. (Alternative 1) Lighting Standards: In both rural and urban settings, proper design of commercial lighting is important in order to address impacts on surrounding properties and the character of the community. A complete lighting plan shall be part of site plan documents, and the Planning Commission may set appropriate conditions for spill light mitigation during site plan review and approval. The following apply particularly to new commercial developments, and may also be applied to substantial additions or expansions to existing developments. All lighting structures in existence prior to adoption of these regulations are exempt from further regulations, provided that replacement of structures shall meet all of these regulations.

1. Maximum spill light (light trespass) at perimeter of a commercial property shall be subject to the following performance standards and requirements:

For locations in the Urban Growth Boundary of Maryville and Alcoa as defined in the 1101 Growth Plan, maximum spill light shall be no greater than 0.8 footcandles.

For locations in the Rural Areas as defined in the 1101 Growth Plan, maximum spill light shall be no greater than 0.4 footcandles.

An electrical engineer shall prepare and certify a lighting plan. The electrical engineer(s) who prepares the lighting plan shall inspect the installation of all lighting equipment, and conduct a performance verification to measure spill light illuminance

levels of all lighting after lighting installation, to include night-time field measurements of spill light at a vertical height of 6 feet from ground level at points spaced no greater than fifty feet apart along the perimeter of the commercial property, and at points along the perimeter closest to lighting fixtures. Where lighting installation does not meet required performance standards, the engineer shall coordinate adjustment of the lighting installation to meet such standards and again conduct performance verification measurements specified above. Upon completion of installation, inspection of installation, and performance verification measurements (with any necessary adjustments), the engineer shall submit a drawing showing the final measured spill light illumination levels specified at points along the perimeter identified above, with professional stamp and signed certification letter that lighting installation and performance meets all applicable standards and the approved site plan. For phased installation of lighting, new measurements for all lighting, drawing, and certification shall be required for each phase as specified above.

2. Means for minimizing and mitigating glare shall be part of the lighting plan submitted for site plan review and approval.

3. All lighting structures of greater than 1000 lumens shall be full cut-off type to minimize unnecessary scattering of light. All lighting structures shall be designed and placed so as to minimize light spill and glare to surrounding residential properties.

4. The site plan for lighting shall include all lighting pole locations and luminaire mounting heights, all security and safety lighting structures, and projected spill light illuminance and glare of all lighting combined at commercial property perimeter, meeting standards above. No light shall be mounted at height greater than 20 feet.

5. Tall shrubs and trees may be considered as screens to reduce glare and spill light.

The following is presented as Alternative 2 from Section 6 of the Maryville regulations for lighting requirements:

OUTDOOR LIGHTING REQUIREMENTS

This Section involves the measurement and regulation of light along property lines to protect the privacy, comfort, and character of existing residential neighborhoods. Outdoor lighting is important for night visibility, safety, and security. Outdoor lighting can, however, also invade privacy and cause nuisance if excessive glare and direct light trespasses on established residential properties. These requirements ensure that new development minimizes the amount of light that may shine on abutting properties. The following is required when installing lights:

- a. A lighting plan may be required (as determined by the Planning Department);
- b. A light “point by point” footcandle diagram must be shown on the site plan with a 10x10 foot maximum grid. The diagram should cover the at least ten feet on either side of property lines that border residential zones or uses;
- c. Lighting must not exceed one footcandle at or beyond the property line zoned or used for residential purposes;
- d. Any luminaire with a lamp(s) rated at a total of more than 1800 lumens, and all flood or spot luminaires with a lamp(s) rated at a total of more than 900 lumens shall not emit any direct light above a horizontal plane through the lowest direct light emitting part of the luminaire;
- e. Laser source lights or any similar high intensity light for outdoor advertising or entertainment is prohibited; and
- f. The operation of searchlights for advertising purposes is prohibited.

Staff notes that the provisions for lighting may also be applied to other uses such as apartments. If the Commission wishes to expand application of light standards to other uses, a separate section on light standards may be indicated. Given the technical nature of lighting standards, the Commission may wish to seek expert review and advice on formulating regulations.