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APPENDIX A BUFFERYARD PERFORMANCE STANDARDS

- A. Bufferyards shall be constructed to mitigate problems associated with traffic, noise, vibration, odor, glare, dust, smoke, pollution, water vapor, conflicting land uses and/or density, height, mass, layout of adjacent uses, loss of privacy, unsightly views, or other potential negative effects of development. Buffering may be achieved by altering setbacks, using landscaping, building a fence and/or a berm, alteration of building location, fenestration, and/or mass, or a combination of the above techniques.
- B. Bufferyards shall be located on the outer perimeter of a lot or parcel, extending to the lot or parcel boundary line. Bufferyards shall not be located on any portion of an existing or dedicated public or private street or right-of-way unless otherwise approved by the North Park DRC and Broomfield.
- C. When fences or walls are located in the same frontage with required landscaping or in a required landscape bufferyard, the fence or wall should be incorporated into the overall design in a manner that emphasizes the visual attractiveness of the landscape. A fence or wall located in a required landscape bufferyard shall not significantly obscure or hide the landscape as seen from the street or other adjacent area used by the public.

14.1 BUFFERYARD NORMATIVE GUIDELINES

- A. Tables I and II should be used to determine bufferyard dimensions and plant material specifications. Table I should be used to determine the type (A, B, C, D, E, EX, or N.A.) of bufferyard required between districts or uses. Once the type of bufferyard is obtained, Table II outlines plant material specifications for alternative widths of bufferyards. Each property line should be ana-

lyzed separately to determine the type of bufferyard required.

B. Example

For example, assume a neighborhood commercial convenience store is to be developed on the corner of a state highway and a collector street. Another neighborhood commercial use is located on one adjacent lot, and a multifamily development is located on the adjacent lot to the rear. The bufferyard requirement is formulated as follows:

Look in Table 14-1A. The bufferyard types are:

- *Between the convenience store and multifamily = B.*
- *Between the convenience store and state highway = C.*
- *Between the convenience store and the collector = B.*
- *Between the convenience store and the adjacent commercial = NA.*

Now look at Table 14-1B.

- *This outlines each bufferyard type. Each bufferyard type allows for flexibility in design in that the wider the bufferyard, the fewer the number of plant materials are suggested in the design guideline. The numbers of plant materials listed are for each 100 feet of bufferyard.*
- *Take for example bufferyard Type B, which would, in a "normative" situation, be the bufferyard to the applied between the collector and the multifamily development in the above example. If fifteen (15) foot-wide buffers were designed in these areas, the number of plant materials would be 2 canopy trees, 2 flowering trees or large shrubs, 5 shrubs, and 1 evergreen tree for each 100 linear feet of bufferyard.*
- *As a second alternative, a twenty-five foot bufferyard could be designed within the parameters of a B Type buffer. In this case the number of plant ma-*



materials could be reduced by .80 for each 100 linear feet of bufferyard.

- *If a masonry wall is built within a ten (10) foot bufferyard, the number of plant materials could be reduced by 50 percent (.50). Thus if the wall were to be built, there would be one canopy tree, 1 flowering tree or large shrub, 2.5 shrubs, and .5 evergreen trees to be placed for each 100 feet of the Type B bufferyard.*

As you can see, a variety of bufferyards could be designed from a single bufferyard type.

- C. Those conflicting uses classified as "EX" may warrant bufferyards which are more stringent than a standard "E" type bufferyard. For example, buffering an industrial batch plant or gravel mine from a less intensive use. For conflicting uses classified as "EX", the City may specify a bufferyard which is more stringent, in terms of width and landscaping, than the standard "E" type bufferyard if one or more of the following criteria holds true:

- *If the E type bufferyard does not sufficiently mitigate noise, glare, fumes, smoke, dust, unsightly views, and vibration within the site;*
- *If the large scale of the project, both in terms of mass or height, indicate the need for a wide landscaped bufferyard;*
- *If an existing sensitive use, including, but not limited to, schools, churches, dwelling units, hospitals, group care facilities, are located adjacent to the use to be developed.*

- D. The bufferyard specifications may be reduced or eliminated by the City if all of the following criteria hold true:

- The development or redevelopment complements the adjacent, conflicting use in terms of mass, height, color, use, access, landscaping, parking, and exterior facade materials;

The development or redevelopment mitigates substantially all negative external effects, including, but not limited to, noise, dust, smoke, unsightly views, vibration and fumes on site.



Table 14-1A

| USE OR DISTRICT ADJACENT TO: DEVELOPMENT: | V | A | OS | AR | Pk | Dwt | Dwt | SFD | DPX | MF | NC | CC | RC | Dt | LI | HI | UI | Uh | SI | NSI | OE | RDFL | PL | RR | SH | Ar | C | LS | PS | RLPF | | | | | | |
|--|----|----|----|----|----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|-----|----|------|----|----|----|----|----|----|----|------|----|----|----|----|----|----|
| Vacant - V | na | na | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Agricultural - A | na | na | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Open Space - OS | na | na | na | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Active Recreation - AR | na | na | na | na | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Park - Pk | na | na | na | na | na | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ditch with trail - Dwt | na | na | na | na | na | na | na | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ditch without trail - Dwt | na | na | na | na | na | na | na | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Single Family Detached - SFD (R1e, R1) | na | na | A | D | B | B | na | na | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duplex - DPX (R2) | A | na | A | C | B | B | na | na | na | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-Family - MF (R3e, R3) | A | B | C | C | B | B | A | C | B | na | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Neighborhood Commercial - NC (B) | A | A | B | B | B | B | A | B | B | B | na | | | | | | | | | | | | | | | | | | | | | | | | | |
| Community Commercial - CC (B) | A | B | B | C | C | B | A | C | C | C | B | na | | | | | | | | | | | | | | | | | | | | | | | | |
| Regional Commercial - RC (B) | B | C | C | B | B | B | A | D | D | D | C | B | na | | | | | | | | | | | | | | | | | | | | | | | |
| Downtown - Dt (Be) | A | na | A | B | B | B | A | C | C | C | B | B | na | | | | | | | | | | | | | | | | | | | | | | | |
| Light Industrial - LI (I) | A | A | B | B | C | B | na | E | E | E | B | B | na | | | | | | | | | | | | | | | | | | | | | | | |
| Heavy Industrial - HI (I) | C | C | C | D | E | B | na | EX | EX | EX | EX | C | EX | C | B | na | | | | | | | | | | | | | | | | | | | | |
| Utilities (light) - UJ | A | A | B | B | C | B | na | B | B | B | C | B | na | | | | | | | | | | | | | | | | | | | | | | | |
| Utilities (heavy) - Uh ie. sewer plant, power line | B | B | C | C | C | B | na | E | E | E | C | C | na | | | | | | | | | | | | | | | | | | | | | | | |
| Sensitive Institutional - SI ie. schools, churches | B | B | B | C | B | B | A | B | B | B | C | D | E | B | C | EX | C | EX | na | | | | | | | | | | | | | | | | | |
| Non-Sensitive Institutional - NSI | A | B | B | C | C | B | A | C | B | C | B | B | C | D | B | C | C | na | | | | | | | | | | | | | | | | | | |
| Outdoor Entertainment - OE | na | na | D | C | D | B | na | EX | EX | EX | E | C | B | B | C | D | na | C | EX | B | na | | | | | | | | | | | | | | | |
| Rear or Double Frontage Lot - RDFL | na | na | na | na | na | na | na | D | D | D | D | D | E | D | E | E | D | E | D | D | C | na | | | | | | | | | | | | | | |
| Parking Lot - PL | B | B | B | B | B | A | A | C | C | C | B | B | B | B | B | B | C | B | C | B | B | B | na | | | | | | | | | | | | | |
| Railroad - RR | na | na | B | C | B | B | na | D | D | D | B | A | A | A | na | na | na | na | EX | C | na | na | na | na | na | na | na | na | na | na | na | na | na | na | | |
| State Highway - SH | na | na | B | C | C | B | A | na | na | na | C | C | C | C | B | D | E | D | E | D | C | C | na | C | B | na | na | na | na | na | na | na | na | na | | |
| Arterials - Ar | na | na | B | C | C | B | A | na | na | na | C | C | C | C | B | D | E | D | E | D | C | C | na | C | B | na | na | na | na | na | na | na | na | na | na | |
| Collectors - C | na | na | B | B | B | B | A | na | na | na | B | B | B | B | C | D | C | C | C | B | C | na | C | A | na | na | na | na | na | na | na | na | na | na | na | |
| Local Streets - LS | na | na | A | B | B | B | B | na | na | na | B | B | B | B | A | B | B | B | B | B | B | B | na | B | C | na | na | na | na | na | na | na | na | na | na | |
| Private Street - PS | na | na | na | B | A | na | A | na | na | na | B | A | na | A | na | na | na | na | na | na | na | na | C | B | B | B | B | B | B | B | B | B | B | na | na | |
| Outdoor Storage | EX | EX | EX | EX | EX | EX | EX | EX | EX | EX | EX | D | D | EX | C | A | C | A | EX | D | E | EX | A | EX | A | EX | EX | EX | EX | EX | EX | EX | EX | EX | na | |
| Rear Lot Privacy Fence - RLPF | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na |



Table 14-1B

| STANDARD SPECIFICATION | WIDTH OF BUFFER | PLANT MULTIPLIER | 6' MASONRY WALL PLANT MULTIPLIER | 3' BERM PLANT MULTIPLIER |
|--|-----------------|------------------|----------------------------------|--------------------------|
| BUFFER YARD | | | | |
| TYPE: A | | | | |
| 1 Canopy Tree | 10' width = | 1.25 | | |
| 1 Flowering Tree or Large Shrub | 15' width = | 1.00 | 0.50 | 0.75 |
| 3 Shrubs | 20' width = | 0.90 | | |
| 0 Evergreen/Conifer | 25' width = | 0.80 | | |
| TYPE: B | | | | |
| 2 Canopy Trees | 10' width = | 1.25 | | |
| 2 Flowering Trees or Large Shrubs | 15' width = | 1.00 | | |
| 5 Shrubs | 20' width = | 0.90 | 0.50 | 0.75 |
| 1 Evergreen/Conifer | 25' width = | 0.80 | | |
| | 30' width = | 0.70 | | |
| TYPE: C | | | | |
| 3 Canopy Trees | 10' width = | 1.25 | | |
| 2 Flowering Trees or Large Shrubs | 15' width = | 1.00 | | |
| 15 Shrubs | 20' width = | 0.90 | | |
| 3 Evergreens/Conifers | 25' width = | 0.80 | 0.65 | 0.80 |
| | 30' width = | 0.70 | | |
| | 35' width = | 0.60 | | |
| | 40' width = | 0.50 | | |
| TYPE: D | | | | |
| 4 Canopy Trees* | 15' width = | 1.25 | | |
| 4 Flowering Trees or Large Shrubs* | 20' width = | 1.00 | | |
| 25 Shrubs* | 25' width = | 0.90 | | |
| 3 Evergreens/Conifers* | 30' width = | 0.80 | 0.75 | 0.85 |
| | 35' width = | 0.70 | | |
| | 40' width = | 0.60 | | |
| | 45' width = | 0.50 | | |
| TYPE: E | | | | |
| 5 Canopy Trees | 20' width = | 1.25 | | |
| 6 Understory Trees | 25' width = | 1.00 | | |
| 30 Shrubs | 30' width = | 0.90 | | |
| 4 Evergreens/Conifers | 35' width = | 0.80 | NA | NA |
| | 40' width = | 0.70 | | |
| | 45' width = | 0.60 | | |
| | 50' width = | 0.50 | | |
| TYPE: F | | | | |
| 3 Canopy Trees | 10' width = | 1.25 | | |
| 3 Evergreen Trees | 15' width = | 1.00 | | |
| 5 Large Evergreen Shrubs | 20' width = | 0.90 | NA | NA |
| 5 Large Flowering Shrubs | 25' width = | 0.80 | | |
| 20 Small to Medium Shrubs | 30' width = | 0.70 | | |
| <p>NOTES:</p> <ul style="list-style-type: none"> - BUFFER YARD REQUIREMENT = (STANDARD SPECIFICATION) X (MULTIPLIER) - MINIMUM WIDTH OF BUFFER WITH MASONRY WALL = 10' - BUFFER YARD TYPE "EX" SEE SECTION 4.04.C - BUFFER YARD TYPE "C" MAY BE MODIFIED FOR CURBSIDE LANDSCAPING TO MEET THE INTENT OF SECTION 4.05.04 - ALL PLANT QUANTITIES ARE PER 100 LINEAR FEET, LESS THE DISTANCE REQUIRED FOR VEHICLE ACCESS TO THE PROPERTY - THE PLANT MULTIPLIER SHALL NOT BE USED TO REDUCE THE NUMBER OF CANOPY TREES ON STATE HIGHWAYS OR ARTERIAL STREETS. | | | | |