

1  
2  
3 **CHAPTER 21.07: DEVELOPMENT AND DESIGN STANDARDS ..... 333**  
4 **21.07.010 General Provisions ..... 333**  
5 A. Purpose ..... 333  
6 B. Alternative Equivalent Compliance..... 333  
7 **21.07.020 Natural Resource Protection ..... 335**  
8 A. Purpose ..... 335  
9 B. Stream, Water Body, and Wetland Protection..... 335  
10 C. Steep Slope Development..... 341  
11 D. Wildlife Conflict Prevention Areas ..... 344  
12 **21.07.030 Open Space ..... 345**  
13 A. Purpose ..... 345  
14 B. Private Common Open Space..... 345  
15 **21.07.040 Drainage, Stormwater Runoff, Erosion Control..... 347**  
16 **21.07.050 Utility Distribution Facilities ..... 348**  
17 A. Underground Placement Required for New or Relocated Lines ..... 348  
18 B. Exceptions ..... 348  
19 C. Variances..... 348  
20 D. Nonconforming Overhead Lines..... 349  
21 E. Designation of Target Areas..... 349  
22 F. Nonconforming Overhead Lines..... 351  
23 G. Lines in Municipal Right-of-Way..... 352  
24 H. Conversion of Service Connections ..... 353  
25 **21.07.060 Transportation and Connectivity..... 353**  
26 A. Purpose ..... 353  
27 B. Applicability..... 353  
28 C. Traffic Impact Mitigation ..... 353  
29 D. Streets and On-Site Vehicular Circulation..... 354  
30 E. Standards for Pedestrian Facilities..... 357  
31 F. Standards for Bicycle Facilities ..... 359  
32 **21.07.070 Neighborhood Protection Standards ..... 359**  
33 A. Purpose and Relationship to Other Requirements..... 359  
34 B. General Conditions..... 359  
35 C. Residential Development Adjacent To Existing Commercial or Industrial Use..... 360  
36 **21.07.080 Landscaping, Screening, and Fences..... 360**  
37 A. Purpose ..... 360  
38 B. Applicability..... 361  
39 C. Landscaping Plan ..... 361  
40 D. Alternative Equivalent Compliance..... 361  
41 E. Cross-reference to Other Requirements ..... 362  
42 F. Landscaping ..... 362  
43 G. General Landscaping Requirements and Standards ..... 372  
44 H. Screening..... 376  
45 I. Fences..... 378  
46 **21.07.090 Off-Street Parking and Loading..... 380**  
47 A. Purpose ..... 380  
48 B. Applicability..... 380  
49 C. Parking Lot Layout and Design Plan (10 or More Spaces)..... 381  
50 D. Off-Street Parking Requirements ..... 382  
51 E. Parking Alternatives..... 393  
52 F. Off-Street Loading Requirements..... 396

1 G. Computation of Parking and Loading Requirements ..... 399  
2 H. Parking Lot Design Standards..... 401  
3 I. Vehicle Stacking Spaces..... 408  
4 J. Accessible Parking Requirements..... 409  
5 K. Modification of Parking Requirements..... 412  
6 **21.07.100 Residential Building Standards..... 412**  
7 A. Purpose ..... 412  
8 B. Applicability..... 412  
9 C. Alternative Equivalent Compliance..... 412  
10 D. Standards for Single-Family and Two-Family Residential Dwellings ..... 412  
11 E. Standards for Townhouse Residential ..... 415  
12 F. Standards for Multi-Family Residential (Four or Fewer Stories) ..... 416  
13 G. Standards for Multi-Family Residential (More Than Five Stories)..... 420  
14 **21.07.110 Public/ Institutional and Commercial Building Standards..... 420**  
15 A. Purpose ..... 420  
16 B. Applicability..... 420  
17 C. Alternative Equivalent Compliance..... 420  
18 D. Weather Protection for Pedestrians ..... 421  
19 E. Height Transitions For Neighborhood Protection ..... 421  
20 F. Snow Storage ..... 421  
21 G. General Standards Menu ..... 421  
22 **21.07.120 Large Commercial Establishments ..... 425**  
23 A. Purpose ..... 425  
24 B. Applicability..... 426  
25 C. Relationship to Other Standards ..... 426  
26 D. Mandatory Standards ..... 426  
27 E. General Standards Menu ..... 428  
28 **21.07.130 Exterior Lighting ..... 433**  
29 A. Purpose ..... 433  
30 B. Applicability..... 433  
31 C. Exempt Lighting..... 434  
32 D. Nonconformities..... 434  
33 E. Lighting Zones Established ..... 434  
34 F. Standards for Safety, Personal Security, and Convenience..... 435  
35 G. Control of Glare and Light Trespass ..... 436  
36 H. Timing Controls ..... 437  
37 I. Standards for Specific Types of Lighting..... 437  
38 **21.07.140 Operational Standards ..... 439**  
39 A. Purpose ..... 439  
40 B. Applicability..... 440  
41 C. Standards ..... 440  
42

# CHAPTER 21.07: DEVELOPMENT AND DESIGN STANDARDS<sup>1</sup>

## 21.07.010 GENERAL PROVISIONS

### A. Purpose<sup>2</sup>

The development and design standards set forth in this chapter shall apply to the physical layout and design of development in Anchorage. These provisions address the physical relationship between development and adjacent properties, public streets, neighborhoods, and the natural environment, in order to implement the comprehensive plan vision for a more attractive, efficient, and livable community. The specific purposes of this chapter include:

1. To encourage the proper use of the land by promoting an appropriate balance between the built environment and the preservation and protection of open space and natural resources;
2. To protect public and private investment through preservation of open spaces, protection of natural resources including existing trees, providing buffers between incompatible uses and along roadways, and encouraging the planting of new trees and vegetation as deemed appropriate;
3. To promote sound management of water quality and quantity through preservation of natural areas and their functions and by encouraging soil management and the use of native plant materials;
4. To provide appropriate standards to ensure a high quality appearance for Anchorage and promote good design while also allowing flexibility, individuality, creativity, and artistic expression;
5. To provide development and design standards that address and are tailored to Anchorage's northern climate;
6. To strengthen and protect the image, identity, and unique character of Anchorage and thereby to enhance its business economy;
7. To protect and enhance residential neighborhoods, commercial districts, and other areas by encouraging physical development that is of high quality and is compatible with the character, scale, and function of its surrounding area;
8. To encourage developments that relate to adjoining public streets, open spaces, and neighborhoods with building orientation and physical connections that contribute to the surrounding network of streets and walkways; and
9. To provide road connectivity for the movement of people, goods, and services.

### B. Alternative Equivalent Compliance<sup>3</sup>

#### 1. Purpose

Alternative equivalent compliance is a procedure that allows development to meet the intent of the design-related provisions of this chapter through an alternative design. It is not a general waiver or weakening of regulations. Rather, the procedure permits a site-specific plan that is equal to or better

1 than the strict application of a design standard specified in this title. This  
2 procedure is not intended as a substitute for a variance or administrative  
3 modification or as a vehicle for relief from standards in this chapter.

4 **2. Applicability**

5 The alternative equivalent compliance procedure shall be available only for  
6 the following sections of this chapter:

- 7 a. Section 21.07.060, *Transportation and Connectivity*;
- 8 b. Section 21.07.080, *Landscaping, Screening and Fencing*;
- 9 c. Section 21.07.090, *Off-Street Parking and Loading*;
- 10 d. Section 21.07.100, *Residential Building Standards*;
- 11 e. Section 21.07.110, *Public/Institutional and Commercial Building*  
12 *Standards*;
- 13 f. Section 21.07.120, *Large Commercial Establishments*; and
- 14 g. Section 21.07.130, *Exterior Lighting*.

15 **3. Pre-Application Conference Required**

16 An applicant proposing to use alternative equivalent compliance under this  
17 section shall request and attend a pre-application conference prior to  
18 submitting the site plan for the development, to determine the preliminary  
19 response from the Director. Based on that response, the site plan application  
20 shall include sufficient explanation and justification, in both written and  
21 graphic form, for the alternative compliance requested.

22 **4. Decision-Making Responsibility**

23 Final approval of alternative equivalent compliance under this section shall be  
24 the responsibility of the decision-making body responsible for deciding upon  
25 the application. For example, proposed alternative equivalent compliance on  
26 a major site plan application shall be considered and decided upon by the  
27 Urban Design Commission. By-right projects that would not ordinarily require  
28 review under this title, yet which are proposing alternative equivalent  
29 compliance, shall receive written approval of the alternative equivalent  
30 compliance from the Director. All applications for alternative equivalent  
31 compliance shall be processed and reviewed in a timely fashion.

32 **5. Criteria**

33 To grant a request for alternative equivalent compliance, the decision-making  
34 body shall find that the following criteria are met:

- 35 a. The proposed alternative design achieves the intent of the subject  
36 design standard to the same or better degree than the subject  
37 standard.
- 38 b. The proposed alternative design achieves the goals and policies of  
39 the Comprehensive Plan to the same or better degree than the  
40 subject standard.

1 c. The proposed alternative design results in benefits to the community  
2 that are equivalent to or better than compliance with the subject  
3 design standard.

4 **6. Effect of Approval**

5 Alternative compliance shall apply only to the specific site for which it is  
6 requested and does not establish a precedent for assured approval of other  
7 requests.

8 **21.07.020 NATURAL RESOURCE PROTECTION<sup>4</sup>**

9 **A. Purpose**

10 The Municipality contains many natural amenities, including stream corridors, river  
11 corridors, natural drainages, wildlife habitat areas, water bodies, wetlands, significant  
12 viewsheds, and hillsides, as well as significant amounts of native forest, tree cover,  
13 and open space, all of which contribute to the Municipality's character, quality of life,  
14 and property values. The regulations of this section are intended to ensure that the  
15 natural character of the Municipality is reflected in patterns of development and  
16 redevelopment, and significant natural features are incorporated into open space  
17 areas.

18 **B. Stream, Water Body, and Wetland Protection<sup>5</sup>**

19 **1. Purpose**

20 The following requirements are intended to promote, preserve, and enhance  
21 the important hydrologic, biological, ecological, aesthetic, recreational, and  
22 educational functions provided by stream and river corridors, associated  
23 riparian areas, water bodies, and wetlands.

24 **2. Applicability**

25 This subsection 21.07.020.B. shall apply to all new development, except for  
26 the following development or activities:

27 a. Development on lots of record that were approved for single-family  
28 residential use prior to the effective date of this title, which shall  
29 remain subject to applicable setback regulations in effect prior to  
30 adoption of this title;

31 b. Maintenance and repair of existing public roads, utilities, and other  
32 public facilities within an existing right-of-way or easement;

33 c. Flood prevention or rehabilitation work carried out by a government  
34 agency or approved by a government agency;

35 d. Maintenance and repair of flood control structures and activities in  
36 response to a flood emergency; and

37 e. Wetland and wildlife habitat restoration, construction, and/or  
38 enhancement that improves or restores the wetland or stream corridor  
39 functions, provided that the proposed activity is approved by the  
40 appropriate agency such as the U.S. Corps of Engineers or the  
41 Alaska Department of Fish and Game.

- 1  
2  
3  
4  
5  
6
- 7  
8  
9  
10  
11
- 12  
13  
14  
15
- 16  
17  
18  
19  
20  
21  
22  
23  
24  
25
- 26  
27  
28  
29  
30  
31  
32
- 33  
34  
35  
36  
37  
38  
39
- 40  
41  
42
- 43  
44
3. **Relationship to Other Regulations**
- a. This subsection 21.07.020.B. does not repeal or supersede any existing federal, state, or local laws, easements, covenants, or deed restrictions. When this subsection imposes a higher or more restrictive standard than found in another applicable ordinance, statute, or regulation, this subsection shall apply.
- b. No person shall engage in any activity that will disturb, remove, drain, fill, dredge, clear, destroy, or alter any area, including vegetation, within a wetland that falls in the jurisdiction of the federal government and its agencies, except as may be expressly allowed under a permit issued by the appropriate federal agency.
- c. The decision-making body shall not grant preliminary or final approval to any development or activity, including subdivisions, in a wetland that falls within the federal government’s jurisdiction until all necessary federal approvals and permits have been obtained.
4. **Buffer/Setback Requirements**
- a. ***Streams or River Corridors***<sup>6</sup>
- i. In the R-10 district, all buildings, accessory structures, and parking lots shall be set back at least 100 feet horizontally from the ordinary high-water mark of stream or river corridors or, if not readily discernible, from the defined bank of the stream or river. Except as provided in 6. below, no disturbance is permitted in the 100-foot setback area. Development in the R-10 district also is subject to the district-specific development standards in section 21.04.020.I.
- ii. In the R-5, R-6, R-7, R-9, I-1, and I-2 zoning districts, all buildings, accessory structures, and parking lots shall be set back at least 50 feet horizontally from the ordinary high-water mark of stream or river corridors or, if not readily discernible, from the defined bank of the stream or river. Except as provided in 6. below, no disturbance is permitted in the 50-foot setback area.
- iii. For all zoning districts not listed in subsections i. and ii. above, all buildings, accessory structures, and parking lots shall be set back at least 25 feet horizontally from the high-water mark of stream or river corridors or, if not readily discernible, from the defined bank of the stream or river. Except as provided in 6. below, no disturbance is permitted in the 25-foot setback area.
- iv. Segments of streams or tributaries that are contained in culverts for a contiguous length of 100 feet or more are not regulated by this subsection.
- v. Setbacks required in this subsection shall extend the specified distance from both sides of the stream or river.

- 1 vi. For parcels where there are wetlands contiguous with a  
2 stream, setback requirements are listed in Table 2 of the  
3 Anchorage Wetlands Management Plan.
- 4 b. **Wetlands**
- 5 i. To the maximum extent feasible, class A and those class B  
6 wetlands which, as a result of U.S. Corps of Engineers  
7 permitting, are not authorized for development, shall be  
8 tracted out and thus not included as part of a platted  
9 development lot. Wetland classes are defined and delineated  
10 in the Anchorage Wetlands Management Plan.
- 11 ii. Except as provided in 6. below, all buildings, accessory  
12 structures, fills and other storage of materials, and parking  
13 lots shall be set back at least 15 feet horizontally from the  
14 delineated edge of all Class A wetlands, and all portions of  
15 Class B and C wetlands not authorized for development; no  
16 disturbance is permitted in the 15-foot setback area.
- 17 c. **Water Bodies**
- 18 In all districts, all buildings, accessory structures, and parking lots  
19 shall be set back at least 15 feet horizontally from the edge of water  
20 bodies. Except as allowed in 6. below, no disturbance is permitted in  
21 the 15-foot setback area. Uses such as docks, boathouses, and  
22 floatplane storage sheds that require direct access to a water body by  
23 their very nature or function shall be exempted from this setback  
24 requirement.
- 25 d. **Credit for Other Requirements of this Title**
- 26 Stream corridor, water body, and wetland setback areas shall be  
27 credited toward any applicable private open space requirements or  
28 landscaping requirements only if such setback areas serve the  
29 purposes of those requirements as set forth in this title.
- 30 5. **Boundary Delineation**
- 31 a. **Official Definitions and Standards<sup>7</sup>**
- 32 i. In cases where stream channels or water bodies are not  
33 mapped and recorded in official plans or other documents,  
34 delineation of such features shall be made according to the  
35 municipal Watershed Management Division's definitions and  
36 standards, and may be subject to formal verification by the  
37 municipal Watershed Management Division.
- 38 ii. In cases where wetlands are not mapped and recorded in  
39 official plans or other documents, including the Anchorage  
40 Wetlands Management Plan, delineation of such features  
41 shall be performed using procedures as described in the U.S.  
42 Corps of Engineers 1987 Wetlands Manual. Delineations  
43 shall be subject to formal verification by the Department  
44 and/or the U.S. Corps of Engineers.

1                   **b.       Stream and River Corridor Boundaries**

2                   Stream and river corridors shall be delineated at the ordinary high-  
3                   water mark or, if not readily discernible, the defined bank of the  
4                   stream or river, as those terms are defined in chapter 21.13. The  
5                   municipal Watershed Management Division shall maintain the official  
6                   record of all stream and river corridor boundaries.

7                   **c.       Wetland Boundaries**

8                   i.       *Mapped Wetlands*

9                   Boundary delineation of wetlands shall be established by  
10                  reference to the Anchorage Wetlands Management Plan,  
11                  which is available for reference in the Department and which  
12                  is hereby adopted and incorporated into this title by  
13                  reference. Plats shall depict class A and B wetland  
14                  boundaries, and boundaries of class C wetlands that are not  
15                  authorized for development.

16                  ii.       *Unmapped Wetlands*

17                  The review of a development proposal may discover a  
18                  potential wetland that has not been mapped or for which the  
19                  boundaries have not been clearly established. In such  
20                  instances, the boundaries of the wetland shall be delineated  
21                  according to subsection 5.a.ii. above. Any new wetland  
22                  boundaries delineated herein shall be submitted to the U.S.  
23                  Corps of Engineers for approval.

24                  **6.       Development Standards<sup>8</sup>**

25                  **a.       Prohibited Activities**

26                  i.       No person shall engage in any activity that will disturb,  
27                  remove, fill, drain, dredge, clear, destroy, or alter an area,  
28                  including vegetation, within stream or river corridors, pond or  
29                  lake edges, wetlands, or their associated buffer/setback  
30                  areas, except as may be expressly allowed in this section or  
31                  title.

32                  ii.       Channel alteration, including culvertization other than for  
33                  roadway and driveway crossings, is prohibited unless a  
34                  variance is obtained under the provisions of section  
35                  21.03.190, a flood hazard permit is obtained as per section  
36                  21.03.100, and relevant state and federal permits are  
37                  obtained.

38                  iii.       No storage or processing of hazardous materials or other  
39                  substances that would constitute a violation of AMC chapter  
40                  15.40 is permitted.

41                  **b.       Utilities**

42                  Utilities, including potable water wells, may be allowed in a  
43                  buffer/setback area only if the decision-making body determines that  
44                  there is no practical alternative. Any disturbance of the buffer area  
45                  shall be reclaimed by regrading to original contours and revegetation  
46                  with native species. Provisions for reclamation of the disturbed area  
47                  shall be included in any development or improvements agreement for



1 the project, with adequate collateral to guarantee the reclamation will  
2 completed. Utility corridors in buffer/setback areas shall be  
3 located at the outside edge of the area or if crossing the setback  
4 laterally shall disturb only the minimum area necessary to install the  
5 utility. Access roads for maintenance of utilities shall be located  
6 outside the buffer/setback area to the maximum extent feasible.  
7 Access for maintenance of utilities in buffer/setback areas should be  
8 at specific points rather than parallel to the utility corridor whenever  
9 possible.

10 **c. Recreation, Education, or Scientific Activities**

11 Structures and improvements for recreational, educational, or  
12 scientific activities such as trails, docks, fishing access, and wildlife  
13 management and viewing may be permitted in a buffer/setback area  
14 by the appropriate government agency.

15 **7. Preservation and Restoration of Vegetation**

16 All existing vegetation within the stream/river corridor, lake or pond edge, or  
17 wetland buffer/setback area shall be preserved and, where necessary to  
18 provide adequate screening or to repair damaged riparian areas,  
19 supplemented with additional native planting and landscaping. The removal  
20 of dead or naturally fallen trees or vegetation, or trees or vegetation that the  
21 Municipality finds to be a threat to the public health, safety, or welfare, shall  
22 be exempt from this requirement.

23 **8. Wetland Mitigation Requirements**

24 When a wetland or its buffer is altered in violation of law or without specific  
25 permission or approval by the decision-making body, the Director shall require  
26 restoration to the previous condition, to the maximum extent feasible,  
27 according to an approved wetland mitigation plan.

28 **9. Structures and Uses Otherwise Prohibited**

29 This section does not permit any structure, or any use of land or a structure,  
30 otherwise prohibited by this title.

31 **10. Implementation of Anchorage Wetlands Management Plan<sup>9</sup>**

32 **a. Municipal Zoning and Platting Actions**

33 Municipal zoning and platting actions taken under this title shall be  
34 consistent with the Anchorage Wetlands Management Plan.

35 **i. "A" Wetlands**

36 Wetlands designated "A" in the Anchorage Wetlands  
37 Management Plan and in Table 2 of that Plan shall be  
38 protected as indicated in that table and in chapter 4 of the  
39 Anchorage Wetlands Management Plan.

40 **ii. "B" Wetlands**

41 New development plans in "B" wetlands shall obtain a U.S.  
42 Corps of Engineers permit, concurrent with or prior to  
43 necessary approval by the Platting Board and/or the Planning  
44 and Zoning Commission. In order to maximize protection of  
45 wetlands designated "B," in addition to the criteria normally  
46 considered in subdivision, site plan, and conditional use

1 applications, the Platting Authority or the Planning and Zoning  
2 Commission shall, prior to approval, make explicit findings  
3 that, or the applicant shall certify with their U.S. Corps of  
4 Engineers permit that:

5 (A) The proposed design and placement of roadways, utility  
6 lines, and structures will not interfere with the natural  
7 drainage function indicated in the required hydrologic  
8 studies or that such interference can be adequately  
9 mitigated to maintain the natural drainage function;

10 (B) The soils in the area proposed for development shall  
11 adequately support roadways and structures, or that  
12 properly designed roads and foundations will be  
13 provided; and

14 (C) Habitat areas identified in federal, state, or municipal  
15 documents shall be adequately protected.

16 Maintenance of open space in its natural state shall be  
17 required where the Platting Authority or the Planning and  
18 Zoning Commission determines that such maintenance is  
19 necessary to protect the hydrologic and habitat values of  
20 wetlands on the property being developed or on adjacent  
21 property. Areas where open space is to be preserved in its  
22 natural state shall be indicated on the plat or approved site  
23 plan. The Platting Authority and Planning and Zoning  
24 Commission may require such land development techniques  
25 and such additional conditions as may be appropriate to carry  
26 out the intent of the wetlands plan and such other wetlands  
27 studies as may be relevant.

28 iii. "C" Wetlands

29 When approving plats or conditional use permits in wetlands  
30 designated "C" under the plan, the Platting Authority or the  
31 Planning and Zoning Commission shall, whenever  
32 practicable, include the recommended construction mitigation  
33 techniques and conditions and enforceable policies in Table 2  
34 of the Anchorage Wetlands Management Plan.

35 b. **Application of Plan to Approved Projects**

36 Conditional uses and preliminary plats approved prior to March 12,  
37 1996, the date of adoption of the revised Anchorage Wetlands  
38 Management Plan, shall not have additional conditions imposed upon  
39 them as a result of requirements of the plan except as follows:

40 i. The "A" designation shall apply regardless of prior approvals.

41 ii. Approved plats or conditional uses in wetlands that are  
42 returned to the Platting Authority or Planning and Zoning  
43 Commission for major amendment may be examined for  
44 conformity with plan goals and enforceable policies of the  
45 Anchorage Wetlands Management Plan.

1 iii. A new U.S. Corps of Engineers permit is required.

2 **C. Steep Slope Development<sup>10</sup>**

3 **1. Purpose**

4 The purpose of this subsection 21.07.020.C. is to:

- 5 a. Prevent soil erosion and landslides;
- 6 b. Provide safe circulation of vehicular and pedestrian traffic to and  
7 within hillside areas and to provide access for emergency vehicles  
8 necessary to serve the hillside areas;
- 9 c. Encourage only minimal grading that relates to the natural contour of  
10 the land;
- 11 d. Preserve the most visually significant slope banks and ridge lines in  
12 their natural state;
- 13 e. Preserve visually significant rock outcroppings, native plant materials,  
14 natural hydrology, and other areas of visual significance;
- 15 f. Encourage variety in building types, grading techniques, lot sizes, site  
16 design, density, arrangement, and spacing of buildings in  
17 developments;
- 18 g. Encourage innovative architectural, landscaping, circulation, and site  
19 design; and
- 20 h. Discourage mass grading of large pads and excessive terracing.

21 **2. Applicability<sup>11</sup>**

22 This subsection 21.07.020.C. shall apply to any development or subdivision  
23 proposal or lot created after the effective date of this title within the  
24 Municipality for properties with an average slope of 20 percent or greater, or  
25 where adverse conditions associated with slope stability, erosion, or  
26 sedimentation are present as determined by the Municipal Engineer.

27 **3. Standards<sup>12</sup>**

28 All proposed development subject to this section shall comply with the  
29 following standards.

30 **a. Slopes Greater than 30 Percent**

31 One hundred percent of areas with slopes greater than 30 percent  
32 shall remain undisturbed, except as expressly allowed by section  
33 21.04.020J. This requirement shall not apply to small, isolated steep  
34 slope areas within a site that do not exceed 5,000 square feet.

35 **b. Cutting, Grading, and Filling**

36 i. Cutting and grading to create benches or pads for buildings  
37 or structures shall be avoided to the maximum extent  
38 feasible.

- 1  
2  
3
- ii. Except for driveways, cut and fill slopes shall be entirely contained within a lot (i.e., natural grade at the lot lines shall be maintained).
- 4  
5  
6  
7  
8  
9
- iii. Sharp angles shall be rounded off, in a natural manner, at the top and ends of cut and fill slopes (within approximately five feet of the sharp angle) unless steep angles are a natural character of the site. Where this would damage tree root systems, the amount of rounding off may be reduced and shrubs used instead to hide the transition.
- 10  
11  
12  
13
- c. ***Raising or Lowering of Natural Grade***  
The original, natural grade of a lot shall not be raised or lowered more than four feet at any point for construction of any structure or improvement, except:
- 14  
15  
16  
17  
18
- i. The site's original grade may be raised or lowered a maximum of six feet if retaining walls are used to reduce the steepness of man-made slopes, provided that the retaining walls comply with the requirements set forth in this subsection.
- 19  
20  
21
- ii. As necessary to construct a driveway from the street to a garage or parking area, grade changes or retaining walls up to six feet may be allowed.
- 22  
23  
24
- iii. For the purposes of this subsection 21.07.020.C.3.c., basements and buildings set into a slope are not considered to lower the natural grade within their footprint.
- 25  
26  
27  
28  
29  
30  
31
- d. ***Retaining Walls***  
Retaining walls may be used to minimize cut and fill. Generally, a retaining wall shall be no higher than four feet, except that a wall varied in height to accommodate a variable slope shall have an average height no greater than four feet and a maximum height no greater than eight feet in any 100-foot length. A higher wall is permitted:
- 32  
33
- i. Where used internally at the split between one- and two-story portions of a building; and
- 34  
35  
36
- ii. Where substantially hidden from public view at the rear of a building, where it may not exceed the eave height of the building.
- 37  
38  
39  
40  
41  
42  
43
- e. ***Vehicular Routes***
    - i. Streets, roads, private access roads, driveways, and other vehicular routes shall not be allowed to cross slopes between 30 and 50 percent, except that a short run of no more than 100 feet or 10 percent of the road/street's entire length, whichever is less, may be allowed by the decision-maker upon finding that:

- 1 (A) Such street or road will not have significant adverse  
2 safety or environmental impacts, or appropriate  
3 engineering or other measures will be taken by the  
4 developer to substantially mitigate any such adverse  
5 impact; and
- 6 (B) No alternate location for access is feasible or available.
- 7 ii. No street, road, private access road, driveway, or other  
8 vehicular route shall cross slopes greater than 50 percent.
- 9 iii. Streets, roads, private access roads, and other vehicular  
10 routes shall follow natural contour lines to the maximum  
11 extent feasible.
- 12 iv. Grading for streets, roads, private access roads, and other  
13 vehicular routes shall be limited to the cartway portion of the  
14 right-of-way, plus up to an additional ten feet on either side of  
15 the cartway as needed, except that when developing access  
16 on slopes in excess of 25 percent, only the cartway right-of-  
17 way shall be graded plus the minimum area required for any  
18 necessary curb, gutter, or sidewalk improvements. The  
19 remainder of the access right-of-way shall be left undisturbed  
20 to the maximum extent feasible.
- 21 f. **Natural Drainage Patterns**  
22 Site design shall not change natural drainage patterns, except as  
23 provided below.
- 24 i. All final grading and drainage shall comply with title 23 and  
25 the Municipality's Erosion-Sediment Control Handbook.
- 26 ii. To the maximum extent feasible, development shall preserve  
27 the natural surface drainage pattern unique to each site as a  
28 result of topography and vegetation. Grading shall ensure  
29 that drainage flows away from all structures, especially  
30 structures that are cut into hillsides. Natural drainage  
31 patterns may be modified on site only if the applicant shows  
32 that there will be no significant adverse environmental  
33 impacts on site or on adjacent properties. If natural drainage  
34 patterns are modified, appropriate stabilization techniques  
35 shall be employed.
- 36 iii. Development shall mitigate all negative or adverse drainage  
37 impacts on adjacent and surrounding sites.
- 38 iv. Standard erosion control methods shall be used during  
39 construction to protect water quality, control drainage, and  
40 reduce soil erosion. Sediment traps, small dams, barriers of  
41 straw bales, or other methods acceptable to the Municipality  
42 shall be located wherever there are grade changes, to slow  
43 the velocity of runoff.

- 1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39
- g. Winter Erosion Blanket<sup>13</sup>**  
If a disturbed slope is not stabilized by October 15, then the developer/builder shall install an erosion blanket (or some equivalent) when finished working, but no later than October 15, to protect the site during the winter season.
  - h. Utilities on Slopes**  
Where the landowner requires buried utilities to be placed on side slopes and where the utility corridor runs transverse to the side slope, the side slope portion of the corridor shall be no more than 10 percent.
- D. Wildlife Conflict Prevention Areas<sup>14</sup>**
- 1. Applicability**  
This subsection shall apply within 200 feet on either side of the ordinary high water of the following streams: Eklutna River (downstream from the Old Glenn Highway), Thunderbird Creek, Peters Creek and its tributaries; Fire Creek (downstream from the Old Glenn Highway), Eagle River, South Fork of Eagle River (below the falls), Ship Creek (upstream from Reeve Blvd.), Campbell Creek (upstream from Lake Otis Parkway); Rabbit Creek, Little Rabbit Creek, Indian Creek, Bird Creek, and Portage Creek.
  - 2. Standards**  
Within the area identified in subsection 1. above, the following mandatory standards shall apply:

    - a.** No landfills, transfer stations, schools, or campgrounds are allowed.
    - b.** Any commercial, institutional, or industrial development shall store edible garbage in bear-proof containers, and shall not store food outside.
    - c.** Roads and driveways are allowed only if there is no feasible and prudent alternative.
    - d.** Stream crossings, either by roads, driveways, or trails, shall be designed to facilitate wildlife passage along the stream, and minimize wildlife-human conflicts.
  - 3. Guidelines**  
Within the area identified in subsection 1. above, the following voluntary guidelines shall apply:

    - a.** Fences are discouraged.
    - b.** New buildings are encouraged to be sited outside these areas.
    - c.** Trails should be sited outside these areas, and/or with direct consultation with the state Department of Fish and Game.
    - d.** All outdoor trash receptacles should be bear-proof.

- e. Bird feeders should be empty between April 15 and October 15.
- f. Food, including pet food and bird seed, should be stored indoors and/or in bear-proof containers.
- g. Bee hives, vegetable gardens, fruit trees and berry bushes, and composting is discouraged in this area.
- h. Pet runs and livestock should not be kept in this area, or should be penned with an electric fence.

**21.07.030 OPEN SPACE**

**A. Purpose**

This section 21.07.030 is intended to ensure that open space and natural areas throughout the Municipality are considered and protected during the development review process. Open space serves numerous purposes, including preserving natural areas and resources and scenic views; providing health benefits and greater resident access to open areas and recreation; and enhancing the quality of new development in the Municipality.

**B. Private Common Open Space<sup>15</sup>**

**1. Purpose**

Private common open space is private open land area set aside for the exclusive use and enjoyment of a development's residents, employees, or users. Goals and requirements for common open space complement this title's requirements for dedicated open space and parks, and serve similar purposes.

**2. Applicability<sup>16</sup>**

Development in the Municipality shall be required to set aside a portion of land as private common open space according to the following minimum requirements, except as provided in subsection 3. below:

- a. Multi-family residential development containing six or more units: 800 square fee per dwelling unit.
- b. Commercial/Mixed-Use development: 15 percent of total land area.

**3. Infill and Redevelopment Areas—In-Lieu Option<sup>17</sup>**

In lieu of a percent open space set aside, all commercial and residential development in the central business districts, the Midtown Mixed-Use District, and designated infill and redevelopment areas may, with the approval of the Director, provide alternative open space and environmental amenities such as those listed below. The economic value of the amenities provided pursuant to this subsection shall be comparable to the economic value of the space that shall have been required under subsection 2. above.

- a. Plazas;
- b. Fountains;

- 1                   c.     Roof gardens;
- 2                   d.     Playgrounds;
- 3                   e.     Street trees and landscaping not already required by this title or other  
4                         Municipal ordinances or policies; or
- 5                   f.     Community meeting space open to the public.
  
- 6                   4.     **Standards**
- 7                   a.     ***Locational Criteria***
- 8                         To the maximum extent feasible, where significant natural and scenic  
9                         resource assets exist on a property, the subdivider, developer, or  
10                         owner shall give priority to their preservation as private common open  
11                         space. In reviewing the proposed location of private common open  
12                         space areas, the Director shall use all applicable plans, maps, and  
13                         reports to determine whether significant resources exist on a  
14                         proposed site that should be protected, with priority being given to the  
15                         following areas (which are not listed in a particular order):
- 16                         i.     Wetlands;
- 17                         ii.    Flood Hazard Overlay District;
- 18                         iii.   Lakes, rivers, and stream/riparian corridors;
- 19                         iv.   Wildlife migration corridors;
- 20                         v.    Areas with average slopes over 20 percent; and
- 21                         vi.   Tree retention areas.
  
- 22                   b.     ***Areas Not Credited***
- 23                         Lands within the following areas shall not be counted towards  
24                         required private common open space set-aside areas:
- 25                         i.     Private yards, except that 50% of a private yard may count  
26                         towards required private common open space as long as no  
27                         dimension is less than fifteen feet;
- 28                         ii.    Public or private streets or rights of way;
- 29                         iii.   Open parking areas and driveways for dwellings; and
- 30                         iv.   Land covered by structures not intended solely for  
31                         recreational uses.
  
- 32                   c.     ***Use of Common Open Space Areas***
- 33                         Common open space areas shall not be disturbed, developed, or  
34                         improved with any structures or buildings, except for the limited  
35                         purposes allowed below:



- 1  
2  
3
- i. Facilities for active recreation (equipment for such uses shall be indicated on the site and/or subdivision plan provided by the developer).
  - 4  
5  
6  
7  
8 ii. Common open space areas may include passive recreational and educational purposes approved by the Director, including but not limited to walking, biking, picnicking, fishing, preservation of natural areas and scenic resources, parks, environmental education, and wildlife habitat protection.
  - 9  
10 iii. Clearing of underbrush and debris and the provision of walks, fountains, fences, and other similar features are allowed.
- 11  
12  
13 d. **Design Criteria**  
Land set aside for private common open space shall meet the following design criteria, as relevant:
- 14  
15  
16  
17  
18  
19  
20 i. Common open space areas shall be distributed throughout the development and located so as to be readily accessible and useable by residents, unless the lands are sensitive natural resources and access should be restricted. At least one-half of such open space shall be contiguous, and no portion of the required open space may be less than 2,000 square feet or less than 30 feet in its smallest dimension.
  - 21  
22  
23  
24  
25  
26  
27 ii. The lands shall be compact and contiguous unless the land shall be used as a continuation of an existing trail, or specific topographic features require a different configuration. An example of such topographic features would be the provision of a trail or private open area along a riparian corridor. A portion of the open space should provide focal points for the development.
  - 28  
29  
30  
31  
32  
33 iii. Where private common open space areas, trails, parks, or other public spaces exist adjacent to the tract to be subdivided or developed, the private common open space shall, to the maximum extent feasible, be located to adjoin, extend, and enlarge the presently existing trail, park, or other open area land.
- 34  
35  
36  
37 e. **Ownership**  
All private common open space areas shall be owned jointly or in common by the owners of the development or permanently preserved through some other mechanism satisfactory to the Director.
- 38  
39  
40 f. **Fee In Lieu Prohibited**  
The payment of fees in lieu of the set-aside of land for private common open space is prohibited.

41 **21.07.040 DRAINAGE, STORMWATER RUNOFF, EROSION CONTROL**

42 [RESERVED]<sup>18</sup>

**21.07.050 UTILITY DISTRIBUTION FACILITIES<sup>19</sup>**

**A. Underground Placement Required for New or Relocated Lines**

1. Except as provided in subsection B. below, all newly installed or relocated utility distribution lines shall be placed underground.
2. Utility distribution lines owned or operated by utilities that are parties to a joint trench agreement shall be placed underground in a joint trench.
3. Nothing in this section restricts the maintenance, repair, or reinforcement of existing overhead utility distribution lines.

**B. Exceptions**

1. Except where an assessment district has been formed to convert overhead utility distribution lines as provided in title 19.60, utility distribution lines need not be placed underground in the Class B improvement area defined in subsection 21.08.050.B., or in the I-2 zoning district. However, in the following areas newly installed or relocated utility distribution lines shall be placed underground: Lower Hillside, between and including Abbott Road, Rabbit Creek Road, Hillside Drive and the New Seward Highway.
2. Except where an assessment district has been formed to convert overhead utility distribution lines as provided in title 19.60, CATV utility distribution lines need not be placed underground where there are other overhead utility distribution lines; provided that, when all of the other overhead distribution lines are placed underground, the CATV utility distribution line shall be placed underground in a joint trench with the other utility distribution lines.
3. A new utility distribution line may be placed overhead when necessary immediately to restore service interrupted by accident or damage by flood, fire, earthquake or weather; provided that the utility distribution line shall be replaced by a utility distribution line conforming to this chapter within 12 months of its placement.
4. A utility distribution line or service connection may be placed on the surface of frozen ground, provided that it is placed underground within 12 months thereafter.
5. New facilities may be added to existing overhead utility distribution facilities located outside target areas.
6. A temporary utility distribution line may be placed overhead in connection with new construction if the utility's tariff approved by the state public utilities commission expressly provides for removal of that line by a date certain, not to exceed 12 months thereafter.

**C. Variances**

1. The Director may grant a variance from subsection A. above when any of the following is found:

- 1 a. Placing a utility distribution line underground would cause an  
2 excessive adverse environmental impact;
- 3 b. Placing a utility distribution line underground would threaten public  
4 health and safety, because the placement cannot be shown to meet  
5 acceptable technical standards for safety; or
- 6 c. Placing a utility distribution line underground in an environmentally  
7 sound and safe manner would cost more than three times the cost of  
8 placing the line overhead, where the applicant demonstrates the  
9 relative cost to the satisfaction of the Director.
- 10 2. The Director may grant a variance from subsection A. above when he or she  
11 finds that the utility distribution line is being placed overhead temporarily for  
12 one of the reasons listed in this subsection:
- 13 a. The line is being placed to provide service when weather conditions  
14 do not allow excavation for underground placement;
- 15 b. A permanent location for underground placement is not available  
16 because of construction in progress; or
- 17 c. The line is being placed to provide service to a temporary use or  
18 structure.
- 19 3. The Planning and Zoning Commission may adopt regulations in accordance  
20 with AMC chapter 3.40, delegating authority to grant variances under  
21 subsection 1. and 2. above to the Director.
- 22 4. A variance issued under this subsection shall expire within two years of its  
23 issuance.
- 24 **D. Nonconforming Overhead Lines<sup>20</sup>**
- 25 Existing overhead utility distribution lines located where this title requires new or  
26 relocated utility distribution lines to be placed underground are nonconforming utility  
27 distribution lines and are subject to the provisions of this subsection. A utility  
28 distribution line is not a nonconforming structure or use under chapter 21.11,  
29 *Nonconformities*, solely because it is a nonconforming overhead line under this  
30 section.
- 31 **E. Designation of Target Areas<sup>21</sup>**
- 32 1. An electric utility that owns poles that support nonconforming utility  
33 distribution lines shall prepare or otherwise include as part of its annual  
34 capital improvement plan, a five-year undergrounding program consistent with  
35 subsection F. below. This five-year program shall be updated on an annual  
36 basis. Priorities shall be based on undergrounding in conjunction with the  
37 electric utility's essential system improvements and then by target area as set  
38 forth below in no particular order of priority. The Director shall review and  
39 provide comment for consideration by the electric utilities on these five-year  
40 programs. When reviewing and commenting on these programs, the Director  
41 shall consider the following factors in no particular order of priority:

- 1 a. Whether undergrounding will avoid or eliminate an unusually heavy  
2 concentration of overhead distribution facilities.
- 3 b. Whether the street or general area is extensively used by the general  
4 public and carries a heavy volume of pedestrian or vehicular traffic.
- 5 c. Whether the appearance of grounds and structures adjacent to the  
6 roadway is such that the removal of the overhead facilities will  
7 substantially improve the general appearance of the area.
- 8 d. Whether the street or area affects a public recreation area or an area  
9 of scenic interest.
- 10 e. Whether there is a significant opportunity to achieve economies due  
11 to the anticipated relocation or replacement of overhead lines or the  
12 widening or realignment of streets within a given area.
- 13 f. Whether the five-year program sufficiently addresses the objectives of  
14 subsection F. below.
- 15 g. Whether the area under consideration is within a zone where new  
16 and relocated distribution lines are required to be placed  
17 underground.
- 18 h. Whether the installation of underground distribution lines is  
19 economically, technically and environmentally feasible, including the  
20 effect on the attached utility.
- 21 2. The Director shall confirm annually that the electric utilities have developed  
22 project undergrounding implementation plans. The Director shall consult with  
23 the utilities and public agencies affected by any implementation plan. In  
24 reviewing implementation plans, the Director shall consider the factors stated  
25 in subsection 1. above.
- 26 3. The following shall be target areas:
- 27 a. Central Business District: between and including Third Avenue and  
28 Tenth Avenue and L Street and Ingra Street.
- 29 b. Mid-town area: between and including New Seward Highway and  
30 Minnesota Drive and International Airport Road and Fireweed Lane.
- 31 c. All municipal and state street improvement projects except for those  
32 which do not require relocation of utility distribution facilities.
- 33 d. The following major traffic corridors:
- 34 i. Old Seward Highway.
- 35 ii. Ingra and Gambell Streets between and including Ninth  
36 Avenue and Fireweed Lane.

- 1                                   iii.     Northern Lights Boulevard and Benson Boulevard between  
2   and including Glenwood Street and Arlington Drive.
- 3                                   iv.     Muldoon Road between and including New Glenn Highway  
4   and Patterson Street.
- 5                                   v.     Tudor Road between and including Patterson Street and  
6   Arctic Boulevard.
- 7                                   vi.     Boniface Parkway between and including 30th Avenue and  
8   New Glenn Highway.
- 9                                   vii.    Spenard Road between and including Hillcrest Drive and  
10    International Airport Road.
- 11                                  viii.   Arctic Boulevard between 17<sup>th</sup> Avenue and Tudor Road.
- 12                                  ix.     Lake Otis Parkway between Tudor Road and Abbott Loop
- 13                                  e.     All park, recreational use and scenic interest areas.
- 14                                  f.     Eagle River Central Business District between and including the New  
15   Glenn Highway, North Eagle River Access Road, Aurora street as  
16   extended to the Old Glenn Highway and the Old Glenn Highway.
- 17                                  g.     Any area where utility distribution facilities are provided by more than  
18   one utility as a result of mergers and boundary changes approved by  
19   the state public utilities commission.
- 20                                  h.     School and university areas.

21                   **F.     Nonconforming Overhead Lines**

- 22                   1.     An electric utility that owns poles that support nonconforming utility  
23   distribution lines shall remove the poles and place those lines underground.  
24   Any other utility that attaches to such poles shall place its lines underground  
25   at the same time that the pole owner places lines underground.
- 26                                  a.     The electric utility that owns poles shall, in each fiscal year, expend at  
27   least two percent of a three-year average of its annual gross retail  
28   revenues derived from utility service connections within the  
29   municipality, excluding toll revenues, revenues from sales of natural  
30   gas to third parties, and revenues from sales of electric power for  
31   resale for purposes of undergrounding nonconforming lines. An  
32   electric utility's expenditures, pursuant to AS 42.05.381(h), within the  
33   Municipality of Anchorage, shall be counted toward satisfaction of the  
34   two percent expenditure required by this subsection.
- 35                                  b.     A utility with lines attached to a pole that is to be removed under this  
36   subsection shall place its lines underground at the same time that the  
37   pole owner places its lines underground. To underground  
38   nonconforming utility lines, an attached utility shall not be required to  
39   expend more than two percent of its annual gross retail revenues

- 1 derived from utility service connections within the Municipality,  
2 excluding toll revenues. For the purpose of satisfying 21.90.070, the  
3 utility's expenditures pursuant to AS 42.05.381(h) within the  
4 Municipality of Anchorage are counted toward this two percent  
5 expenditure limit.
- 6 c. The electric utility that owns poles may choose which existing lines to  
7 underground in order to fulfill the two percent expenditure  
8 requirement, in consultation with appropriate public agencies and any  
9 other utilities.
- 10 d. An electric utility that owns poles that does not expend the amount  
11 required in subsection A. of this section, or that expends more than  
12 that amount, may carry over the under expenditure or over  
13 expenditure as an adjustment to the following year's obligation.
- 14 2. The electric utility that owns poles shall notify the Director, and utilities or  
15 entities with lines attached to such poles, of the approximate date that the  
16 owner plans to remove the poles. Such notice, where possible, shall be given  
17 at least four months in advance of the undergrounding except where an  
18 emergency or other unforeseen circumstances preclude such notice, in which  
19 case such advance notice as is reasonable under the circumstances shall be  
20 provided.
- 21 3. A utility shall annually submit a report of its undergrounding projects and  
22 expenditures for non-conforming lines to the Director within 120 days of the  
23 end of the preceding calendar year.
- 24 4. All new service connections shall be placed underground in the same manner  
25 as required for utility distribution lines under subsection A. above. New  
26 service lines may be temporarily installed above ground from October through  
27 May, if placed underground within one year of installation.
- 28 **G. Lines in Municipal Right-of-Way**
- 29 1. The Department of Project Management and Engineering shall furnish to a  
30 utility owning or operating utility distribution lines all planning documents for  
31 municipal road construction that will require the relocation of those utility  
32 distribution lines.
- 33 2. Once a utility installing a utility distribution line underground in material  
34 compliance with a right-of-way permit issued by the Department of Project  
35 Management and Engineering and in accordance with this chapter, the  
36 Municipality shall reimburse the cost of any subsequent relocation of the utility  
37 distribution line required by municipal road construction.
- 38 3. If municipal road construction requires the relocation of a nonconforming  
39 utility distribution line, the Municipality, as part of the road construction project  
40 cost, shall reimburse the cost of the relocation. Reimbursable costs under  
41 this subsection include engineering and design, inspection, construction and  
42 general overhead costs, but exclude utility plant betterment costs. Plant  
43 betterment costs are the costs of providing utility distribution line capacity or

1 quality beyond what current industry standards require for the capacity or  
2 level of service existing before the relocation.

3 **H. Conversion of Service Connections**

4 A utility that places a nonconforming utility distribution line underground as required by  
5 subsection c. above shall bear the cost of placing underground any related service  
6 connections or other utility facilities on a customer's premises, in accordance with the  
7 utility's applicable tariff or rules or regulations of operation.

8 **21.07.060 TRANSPORTATION AND CONNECTIVITY**

9 **A. Purpose**

10 The purpose of this section 21.07.060 is to support the creation of a highly connected  
11 transportation system within the Municipality in order to provide choices for drivers,  
12 bicyclists, and pedestrians; increase effectiveness of municipal service delivery;  
13 promote walking and bicycling; connect neighborhoods to each other and to local  
14 destinations such as employment, schools, parks, and shopping centers; reduce  
15 vehicle miles of travel and travel times; improve air quality; reduce emergency  
16 response times; mitigate the traffic impacts of new development, and free up arterial  
17 capacity to better serve regional long-distance travel needs.

18 **B. Applicability**

19 The standards of this section 21.07.060 shall apply to all development in the  
20 Municipality.

21 **C. Traffic Impact Mitigation**

22 **1. Traffic Impact Analysis Required**

23 The transportation system for new development shall be capable of  
24 supporting the proposed development in addition to the existing uses in the  
25 area. Evaluation of system capacity shall be undertaken through a Traffic  
26 Impact Analysis (TIA), which should consider the following factors without  
27 limitation: street capacity and level of service; vehicle access and loading; on-  
28 street parking impacts; the availability of transit service and connections to  
29 transit; impacts on adjacent neighborhoods; and traffic safety including  
30 pedestrian safety. At a minimum, a Traffic Impact Analysis (TIA) shall be  
31 required with applications for development review and approval when:

- 32 **a.** Trip generation during any peak hour is expected to exceed 500 trips  
33 per day or more than 100 trips during any one-hour peak period,  
34 based on traffic generation estimates of the Institute of Transportation  
35 Engineers' Trip Generation Manual (or any successor publication);
- 36 **b.** A TIA is required by the Planning and Zoning Commission or  
37 Assembly as a condition of any land use application approved  
38 pursuant to the requirements of this title; or
- 39 **c.** The Director shall, unless the Traffic Engineer deems it unnecessary  
40 through a waiver, also require a TIA for:

- 1 i. Any project that proposes access to a street with Level of
- 2 Service "D" or below;
- 3 ii. Any application for a rezoning, conditional use, or major site
- 4 plan review;
- 5 iii. Any case where the previous TIA for the property is more
- 6 than two years old;
- 7 iv. Any case where increased land use intensity will result in
- 8 substantially increased traffic generation and reduction of the
- 9 existing level of service on affected streets by at least one
- 10 service level; or
- 11 v. Any case in which the Traffic Engineer determines that a TIA
- 12 should be required because of other traffic concerns than
- 13 may be affected by the proposed development.

14 **2. TIA and Development Review Process**

- 15 a. A scoping meeting between the developer and the Traffic Engineer
- 16 shall be required prior to the start of the TIA in order to determine its
- 17 parameters.
- 18 b. When access points are not defined or a site plan is not available at
- 19 the time the TIA is prepared, additional studies may be required when
- 20 a site plan becomes available or the access points are defined.

21 **3. Traffic Mitigation Measures**

22 The applicant shall, as part of the Traffic Impact Analysis, recommend  
 23 measures to minimize and/or mitigate the anticipated impacts and determine  
 24 the adequacy of the development's planned access points. Mitigation  
 25 measures shall be acceptable to the Traffic Engineer and may include,  
 26 without limitation: an access management plan; transportation demand  
 27 management measures; street improvements on or off the site; placement of  
 28 pedestrian, bicycle or transit facilities on or off the site; or other capital  
 29 improvement projects such as traffic calming infrastructure or capacity  
 30 improvements.

31 **D. Streets and On-Site Vehicular Circulation**

32 **1. Street Standards**

33 All streets shall meet the standards and requirements set forth in subsections  
 34 21.08.030.F.2., *Street Grades*, 21.08.030.F.3., *Street Alignment*, and  
 35 21.08.030.F.4. *Street Intersections*.

36 **2. Parking Lots**

37 In addition to complying with the standards in this subsection 21.07.060.D.,  
 38 parking areas shall comply with the standards set forth in section 21.07.090,  
 39 *Off-Street Parking and Loading*.

40 **3. Street Connectivity**

41 **a. Purpose**



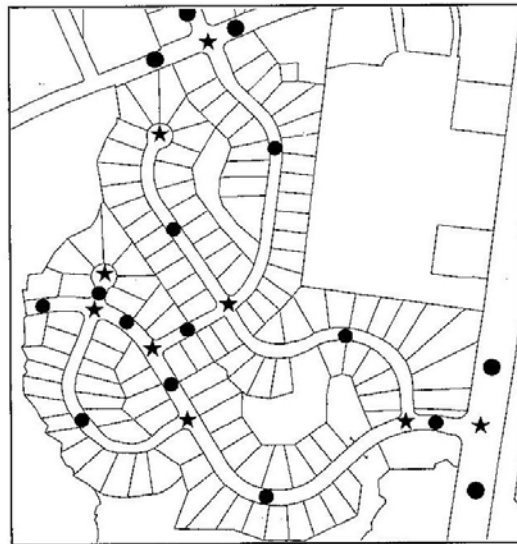
1 Street and block patterns should include a clear hierarchy of well-  
2 connected streets that distribute traffic over multiple streets and avoid  
3 traffic congestion on principal routes. Within each residential  
4 development, the access and circulation system and a grid of street  
5 blocks should accommodate the safe, efficient, and convenient  
6 movement of vehicles, bicycles, and pedestrians through the  
7 development, and provide ample opportunities for linking adjacent  
8 neighborhoods, properties, and land uses. Local neighborhood street  
9 systems are intended to provide multiple direct connections to and  
10 between local destinations such as parks, schools, and shopping.  
11 These connections should knit separate developments together,  
12 rather than forming barriers between them.

13 b. **Internal Street Connectivity (Connectivity Index)<sup>22</sup>**

14 i. All development shall achieve a connectivity index of 1.65 or  
15 greater.

16 ii. The connectivity index for a development is calculated by  
17 dividing its links by its nodes. Figure 21.07-1, *Calculation of*  
18 *Connectivity*, provides an example of how to calculate the  
19 connectivity index. Nodes (stars) exist at street intersections  
20 and cul-de-sac heads within the development. Links (circles)  
21 are stretches of road that connect nodes. Street stub-outs  
22 are considered as links. One link beyond every node that  
23 exists in the development and provides access to the greater  
24 municipal street system shall be included in the index  
25 calculation. In the diagram, there are 16 links (circles) and  
26 nine nodes (stars); therefore the connectivity index is 1.78  
27 ( $16/9 = 1.78$ ).

28 **FIGURE 21.07-1: CALCULATION OF CONNECTIVITY**



29  
30 iii. The Connectivity Index standard of 1.65 or greater may be  
31 reduced if the owner/developer demonstrates it is impossible

1 or impracticable to achieve due to topographic conditions,  
2 natural features, or adjacent existing development patterns.

3 iv. Whenever cul-de-sac streets are created, at least one eight-  
4 foot wide pedestrian access easement shall be provided, to  
5 the extent practicable, between each cul-de-sac head or  
6 street turnaround and the sidewalk system of the closest  
7 adjacent street or pedestrian pathway. This requirement shall  
8 not apply where it would result in damage to or intrusion into  
9 significant natural areas such as stream corridors, wetlands  
10 and steep slope areas.

11 c. **External Street Connectivity**

12 i. The arrangement of streets in a development shall provide for  
13 the alignment and continuation of existing or proposed streets  
14 into adjoining lands in those cases in which the adjoining  
15 lands are undeveloped and intended for future development  
16 or in which the adjoining lands are developed and include  
17 opportunities for such connections.

18 ii. Street rights-of-way shall be extended to or along adjoining  
19 property boundaries such that a roadway connection or street  
20 stub shall be provided for development at least every 1,500  
21 feet for each direction (north, south, east, and west) in which  
22 development abuts vacant lands. The Director may waive  
23 this requirement where topography or the presence of  
24 sensitive natural areas makes compliance impractical.

25 iii. At all locations where streets terminate with no street  
26 connection, but a future connection is planned or  
27 accommodated, a sign shall be installed at the location with  
28 the words "FUTURE ROAD CONNECTION" to inform  
29 property owners.

30 d. **Vehicular Access to Public Streets**

31 Any development of more than 100 residential units or additions to  
32 existing developments such that the total number of units exceeds  
33 100 shall be required to provide vehicular access to at least four  
34 public streets unless such provision is deemed impractical by the  
35 Director, Traffic Engineer, and Municipal Engineer due to topography,  
36 natural features, rural character (if the area within which the  
37 development is located is rural), or the configuration of adjacent  
38 developments.

39 e. **Connections to Vacant Land**

40 Where new development is adjacent to land likely to be developed or  
41 redeveloped in the future, all streets, bicycle paths, and access ways  
42 in the development's proposed street system shall continue through  
43 to the boundary lines of the area, as determined by the Director,  
44 Traffic Engineer, and the Municipal Engineer, to provide for the  
45 orderly subdivision of such adjacent land or the transportation and  
46 access needs of the community. In addition, all redevelopment and  
47 street improvement projects shall take advantage of opportunities for

1 retrofitting existing streets to provide increased vehicular and  
2 pedestrian connectivity.

3 **f. Cul-de-Sacs and Dead-End Streets**

4 The design of street systems is encouraged to use through-streets.  
5 Permanent cul-de-sacs and dead-end streets are appropriate when  
6 topography, the presence of natural features, and/or vehicular safety  
7 factors make a vehicular connection impractical. Where cul-de-sacs  
8 or dead-end streets are unavoidable, site and/or subdivision plans  
9 shall incorporate provisions for future vehicular connections to  
10 adjacent, undeveloped properties, and to existing adjacent  
11 development where existing connections are poor.

12 **g. Cross Access to Adjacent Properties**

13 All non-residential development shall be designed to allow for cross-  
14 access to adjacent properties to encourage shared parking and  
15 shared access points on public or private streets. When cross-access  
16 is deemed impractical by the Traffic Engineer or Municipal Engineer  
17 on the basis of topography, the presence of natural features, or  
18 vehicular safety factors, this requirement may be waived provided that  
19 appropriate bicycle and pedestrian connections are provided between  
20 adjacent developments or land uses. A cross access easement must  
21 be recorded prior to issuance of a Certificate of Zoning Compliance  
22 for the development.

23 **h. Neighborhood Protection from Cut-through Traffic**

24 Street connections shall connect neighborhoods to each other and to  
25 local destinations such as schools, parks, greenbelt trail systems and  
26 shopping centers, while minimizing neighborhood cut-through vehicle  
27 traffic movements that are non-local in nature. Configuration of local  
28 and internal streets and traffic calming measures shall be used to  
29 discourage use of the local street system for cut-through collector or  
30 arterial vehicle traffic.

31 **E. Standards for Pedestrian Facilities**

32 **1. Sidewalks**

33 **a.** All sidewalks shall be designed to comply with the standards of the  
34 Design Criteria Manual (DCM) and Municipality of Anchorage  
35 Standard Specifications (MASS).

36 **b.** Sidewalks shall be installed on both sides of all arterials, collector  
37 streets, and local streets (including loop streets and cul-de-sacs), and  
38 within and along the frontage of all new development or  
39 redevelopment. This requirement shall not apply to local streets in  
40 districts in which the minimum lot size is 40,000 square feet or greater  
41 or in steep-slope areas where sidewalks on one side of the street  
42 may be approved by the Director to reduce excessive slope  
43 disturbance, adverse impacts on natural resources, and potential soil  
44 erosion and drainage problems.<sup>23</sup>

45 **c.** To the extent reasonably feasible, pedestrian crossings shall be  
46 made safer for pedestrians whenever possible by shortening

1 crosswalk distance with curb extensions, reducing sidewalk curb radii,  
2 and eliminating free right-turn lanes. Signals that allow longer  
3 crossing times in commercial and mixed-use districts, mid-block  
4 crossings in high-pedestrian use areas (if well-marked and traffic  
5 speeds are low), and raised crosswalks and medians shall be  
6 provided as appropriate.

7 **2. On-site Pedestrian Walkways**

8 **a. Continuous Pedestrian Access**

9 Pedestrian walkways shall form an on-site circulation system that  
10 minimizes conflict between pedestrians and traffic at all points of  
11 pedestrian access to on-site parking and building entrances.

12 **b. On-site Pedestrian Connections**

13 Site plans shall orient to pedestrian site access points and  
14 connections to surrounding street and trails networks, to destinations  
15 such as schools or shopping within one-quarter mile of the site, and  
16 to pedestrian linkage points on adjacent parcels, including building  
17 entrances, transit stops, walkway easements, and signalized street  
18 crossings. On-site pedestrian walkways shall connect (a) building  
19 entrances to one another and (b) from building entrances to public  
20 sidewalk connections and existing or planned transit stops. If  
21 buildings are not placed directly on the public sidewalk, then  
22 pedestrian walkways shall link the principal pedestrian site access to  
23 building entrances. All developments that contain more than one  
24 building shall provide walkways between the principal entrances of  
25 the buildings.

26 **c. Through-Block Connections**

27 Within residential and/or non-residential developments, pedestrian  
28 ways, crosswalks, or multi-purpose trails no less than five feet in  
29 width shall be constructed near the center and entirely through any  
30 block that is 900 feet or more in length where necessary to provide  
31 adequate pedestrian circulation or access to schools, churches, retail  
32 stores, personal service establishments, recreational areas, or  
33 transportation facilities.

34 **d. Cul-de-sacs and Dead-end Streets**

35 Where residential developments have cul-de-sacs or dead-end  
36 streets, such streets shall be connected to the closest local or  
37 collector street or to cul-de-sacs in adjoining subdivisions via a  
38 sidewalk or multi-use path, except where deemed impractical by the  
39 Director.

40 **3. Trails**

41 While not encouraged to substitute for a good system of on-street facilities,  
42 multi-use trails may be used to enhance pedestrian and bicycle travel where  
43 the existing circulation system does not serve these needs well, or where  
44 other open spaces provide corridors free of obstacles. However, all trails  
45 shall connect to the street system in a safe and convenient manner, and shall  
46 meet the following requirements in addition to the standards contained in the  
47 Areawide Trails Plan, Design Criteria Manual (DCM), and Municipality of  
48 Anchorage Standard Specifications (MASS):

- 1 a. All trail connections shall be well-signed with destination and  
2 directional signing.
- 3 b. All trails shall connect origin and destination points such as residential  
4 areas, schools, shopping centers, parks, etc.
- 5 c. All trails shall be built in locations that are visible and easily  
6 accessible, for the personal safety of users.
- 7 d. Trails shall be designed in such a manner that motor vehicle  
8 crossings can be eliminated or significantly minimized.

9 **4. Use and Maintenance of Sidewalks, Walkways, and Trails**

- 10 a. **Restrictions on Use**  
11 Sidewalks, walkways, and trails are intended to provide pedestrian  
12 access. Vehicle parking, required snow storage for vehicle areas,  
13 garbage containers, merchandise storage or display, utility boxes and  
14 poles, signs, trees, and other obstructions shall not encroach into the  
15 required minimum clear width of any required sidewalk, trail, walkway,  
16 or other pedestrian way. Pedestrian amenities including bollards and  
17 garbage containers for pedestrians are exempt from this requirement.
- 18 b. **Maintenance and Snow Removal**  
19 Sidewalks, trails, and walkways required by this title shall be  
20 maintained in usable condition throughout the year, including snow  
21 removal as appropriate.

22 **F. Standards for Bicycle Facilities**

- 23 1. **Bicycle Lanes Encouraged**  
24 Locations for bicycle lanes are identified in the Areawide Trails Plan and  
25 information about the design standards are included in the Design Criteria  
26 Manual. Bicycle lanes are encouraged in the design of all arterial, collector,  
27 and local streets where low traffic speeds and volumes allow bicyclists and  
28 motorists to share the road safely.

29 **21.07.070 NEIGHBORHOOD PROTECTION STANDARDS<sup>24</sup>**

30 **A. Purpose and Relationship to Other Requirements**

31 This section provides for transitions between non-residential and residential uses,  
32 through discretionary approval criteria that may be applied in combination with other  
33 development standards in this chapter 21.07, in order to provide significantly more  
34 protection for neighborhoods from the impacts of adjacent development. This section  
35 makes available a menu of additional tools to use in discretionary approvals to protect  
36 residential neighborhoods from potential adverse impacts of adjacent nonresidential  
37 uses, including limitations on hours of operation, noise, and lighting.

38 **B. General Conditions**

39 As a condition of the approval of any conditional use permit, site plan review<sup>25</sup>,  
40 subdivision, or variance of any nonresidential use located in or within 300 feet of any  
41 residential district, the decision-making body shall be authorized to impose conditions

1 that are necessary to reduce or minimize any potential adverse impacts on residential  
2 property. Such conditions may include but are not limited to the following:

- 3 1. Hours of operation and deliveries;
- 4 2. Location on a site of activities that generate potential adverse impacts on  
5 adjacent uses, such as noise and glare;
- 6 3. Placement of trash receptacles, compactors, or recycling;
- 7 4. Location and screening of loading and delivery areas;
- 8 5. Lighting location, design, intensity, and hours of illumination;
- 9 6. Placement and illumination of outdoor vending machines, telephones, or  
10 similar outdoor services and activities;
- 11 7. Additional landscaping and screening to mitigate adverse impacts;
- 12 8. Height restrictions to preserve light and privacy and views of significant  
13 features from public property and rights of way;
- 14 9. Preservation of natural lighting and solar access;
- 15 10. Ventilation and control of odors and fumes; and
- 16 11. Paving to control dust.

17 **C. Residential Development Adjacent To Existing Commercial or Industrial Use<sup>26</sup>**

18 When a residential development is proposed adjacent to an existing commercial or  
19 industrial use, the decision-making body may impose neighborhood protection  
20 standards and may require the residential development to be configured and dwelling  
21 units located to minimize potential conflicts with or adverse impacts from the existing  
22 industrial development. Any required mitigation measures shall be installed and  
23 maintained by the residential development, not the existing commercial or industrial  
24 use.

25 **21.07.080 LANDSCAPING, SCREENING, AND FENCES<sup>27</sup>**

26 **A. Purpose**

27 This section is intended to ensure that new landscaping and the retention of existing  
28 vegetation is an integral part of all development and that it contributes added high  
29 quality to development, retains and increases property values, improves the  
30 environmental and aesthetic character of the community. It is also the intent of this  
31 section to provide flexible requirements that encourage and allow for creativity in  
32 landscape design. Specific purposes include to:

- 33 1. Improve the general appearance of Anchorage, its aesthetic appeal and  
34 identity, and the image of its street corridors and urban districts;

- 1                   2.       Encourage a pleasant visual character for new development which recognizes  
2                   aesthetics and safety issues;
- 3                   3.       Unify development and enhance and define public and private spaces;
- 4                   4.       Improve compatibility between land uses by reducing the visual and  
5                   operational impacts of more intensive uses upon adjacent properties;
- 6                   5.       Promote the use of existing vegetation and retention of Anchorage's trees,  
7                   woodlands and urban forest;
- 8                   6.       Reduce runoff and erosion, control dust, and preserve air and water quality;  
9                   and
- 10                  7.       Encourage use of native plants or provide landscaping that is compatible with  
11                  the climate and natural setting of the Anchorage area and can provide desired  
12                  effects even during harsh urban and winter conditions.

13                  **B.       Applicability**

14                  All development, unless specifically exempted in this section 21.07.080 shall comply  
15                  with the landscaping and screening standards of this section 21.07.080. Additional  
16                  landscaping may be required by other standards set forth in this title. Except where  
17                  specifically stated otherwise, the following development is exempt from the  
18                  requirements of this section:

- 19                  1.       Individual single-family, two-family and townhouse residential dwellings on  
20                  separate lots, where such residential use is the primary use on the lot;
- 21                  2.       New single-family, two-family and townhouse subdivisions with fewer than 5  
22                  lots and less than 5 dwellings; and
- 23                  3.       Temporary uses listed in section 21.05.080, except that landscaping and/or  
24                  screening may be required pursuant to the provisions for the specific  
25                  temporary use in section 21.05.080.

26                  **C.       Landscaping Plan<sup>28</sup>**

27                  All landscaping and screening required under this section 21.07.080 shall be reflected  
28                  on a landscaping plan reviewed and approved by the decision-making body. Such  
29                  plan may be combined with any land clearance, vegetation protection, erosion control,  
30                  or snow removal plan required for compliance with other sections of this title. Where  
31                  a landscaping plan is required under this title, the plan shall include the information  
32                  specified in the Title 21 User's Guide.

33                  **D.       Alternative Equivalent Compliance**

34                  The standards of this section 21.07.080 are intended to encourage development  
35                  which is economically viable and allow creative solutions while achieving the intent of  
36                  this section. Site conditions may arise where normal compliance is impractical or  
37                  impossible, or where the maximum achievement of the Municipality's objectives can  
38                  be obtained through alternative compliance. The alternative equivalent compliance  
39                  procedure set forth in subsection 21.07.010.B. may be used to propose alternative

1 means of complying with the intent of this section. Any proposed alternative  
2 landscaping and screening shall be equal to or greater than normal compliance in  
3 terms of quality, durability, hardness and ability to fulfill the standards of this section.  
4 In order to be considered for alternative equivalent compliance, one or more of the  
5 following landscaping-specific conditions shall be met:

- 6 1. Topography, soil, vegetation, or other site conditions are such that full  
7 compliance is impossible or impractical; or improved environmental quality  
8 would result from the alternative compliance;
- 9 2. Sites involving space limitations or unusually shaped parcels may justify  
10 alternative compliance for in-fill sites and for improvements and  
11 redevelopment in older areas;
- 12 3. Safety considerations make alternative compliance necessary; or
- 13 4. An alternative compliance proposal is equal to or better than normal  
14 compliance in its ability to fulfill the intent of this section.

15 **E. Cross-reference to Other Requirements**

16 Any use required to provide landscaping or screening pursuant to the use-specific  
17 standards of sections 21.05.030 through 21.05.060 shall provide such use-specific  
18 landscaping or screening. In the event of a conflict between the use-specific  
19 requirements and the requirements of this section 21.07.080, the use-specific  
20 provisions shall govern.

21 **F. Landscaping<sup>29</sup>**

22 **1. General Description of Landscaping Requirements**

23 Four types of landscaping<sup>30</sup> may be required for a development, depending  
24 on the use and zoning district of the property and adjacent properties, and the  
25 portion of the property involved. These types of landscaping are: (1) site  
26 enhancement landscaping, (2) site perimeter landscaping, (3) parking lot  
27 landscaping, and (4) trees. Each type of required landscaping shall meet the  
28 minimum standards of subsection 21.07.080G, *General Landscaping*  
29 *Requirements and Standards*, and shall be shown on a landscaping plan that  
30 meets the requirements of subsection 21.07.080C, Landscaping Plan, unless  
31 exempted by the terms of those sections. The type and amount of planting  
32 material required to meet these requirements is determined by adding up  
33 "landscape units," which are described in subsection 21.07.080F.3. below.  
34 The site enhancement, site perimeter, parking lot and tree landscaping  
35 requirements are set forth in subsections 21.07.080F.4., 5., 6., and 7. below.

36 **2. Shared Credit among Landscaping Types**

37 Credit for one type of landscaping may be applied to another, within the  
38 following parameters:

- 39 a. Landscaping provided to meet a site perimeter landscaping  
40 requirement may be used to satisfy a requirement for parking lot  
41 perimeter landscaping, or vice versa, along the same lot line or street  
42 frontage;



- 1                   b.       Trees retained or planted as part of site enhancement, perimeter or
- 2                                   parking lot landscaping may be counted toward a tree landscaping
- 3                                   requirement, where the landscaping area coincides with a required
- 4                                   tree area;
  
- 5                   c.       Trees retained or planted as part of a tree requirement may count
- 6                                   toward other kinds of landscaping;
  
- 7                   d.       Where one kind of required landscaping area coincides with another,
- 8                                   the stricter provisions shall apply; and
  
- 9                   e.       Site enhancement and interior parking lot landscaping may not be
- 10                                  counted toward site perimeter or parking lot perimeter landscaping.
- 11                                  Interior parking lot landscaping requirements may not be met by any
- 12                                  other type of landscaping.

13                   **3.       Landscape Units Awarded**

14                                  To provide for flexibility, allow design creativity, and encourage use of larger

15                                  trees and retention of natural vegetation, the required amount of planting

16                                  material for site enhancement, site perimeter, parking lot or tree retention

17                                  landscaping is based on a “landscape units” point system. The number of

18                                  units awarded to each landscaping element is as follows:

19

20

21

22

23

TABLE 21.07-2: LANDSCAPE UNITS AWARDED		
Landscape Material	Landscape Units Awarded	
	Newly Installed	Existing Retained
Landmark or Signature Tree	n/a	16
Evergreen Tree, >10 ft high	8	14
Evergreen Tree, >8 – 10 ft high	8	11
Evergreen Tree, 6 – 8 ft high	6	9
Deciduous Tree, > 8” caliper	n/a	14
Deciduous Tree, >4 – 8” caliper	n/a	11
Deciduous Tree, >2.5 – 4” caliper	7	7
Deciduous Tree, 1.5” – 2.5” caliper or multi-stem	4	4
Shrubs, 36” high	1	1.2
Shrubs, 24” high	0.8	0.9
Shrubs, 18” high	0.5	0.6
Perennials/ground cover	1 per 400 sq ft	
Annual flower bed	1 per 400 sq ft	
Lawn Grass	1 per 800 sq ft	
Flower Basket Support	0.2 per basket	
Earthen Berm, minimum 18” high	0.05 per linear foot	

TABLE 21.07-2: LANDSCAPE UNITS AWARDED	
Hardscape Material	Units Awarded
Decorative (Ornamental) Fence	0.20 per linear foot
Screening (Opaque) Fence (6 ft high or greater)	0.40 per linear foot
Shredded bark or 3"+ rock mulch such as river rock	1 per 500 sq ft
Ornamental pavers	1 per 250 sq ft
Landscape Boulders, 3' or greater in height	1 per boulder
Seating	0.40 per linear foot
Landscape lighting, sculpture, art, water feature, and/or sheltering structure/landmark	As determined by UDC, per 21.07.080.E.1.d
Retained Existing Vegetation Mass [1]	Bonus Landscaping Units Awarded
300+ square feet with a minimum of 3 deciduous trees (4" caliper or greater), 3 evergreen trees (minimum 6 feet high) or any combination thereof	15%
500+ square feet with a minimum of 5 deciduous trees (4" caliper or greater), 5 evergreen trees (minimum 6 feet high) or any combination thereof	20%
800+ square feet with a minimum of 8 deciduous trees (4" caliper or greater), 8 evergreen trees (minimum 6 feet high) or any combination thereof	25%

**NOTES:**  
 [1] Points awarded for retained vegetation in perimeter buffers may only be applied in the buffer area along the same lot line or street frontage where the vegetation is found.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24

**4. Site Enhancement Landscaping<sup>31</sup>**

**a. Purpose**

Site enhancement landscaping increases the greenery and seasonal color on open areas of a site, adding beauty to both the property and the community. It includes foundation plantings, front, side and rear-yard greenery, and common area plantings, but not street frontage space, parking lots or site perimeter buffers. It enhances the appearance and function of the building and site and reinforces its continuity with the surrounding properties. For example, site enhancement landscaping can provide orientation and improve pedestrian comfort.

**b. Applicability of Site Enhancement Landscaping**

All ground surfaces on any development site that are not devoted to buildings, structures, storage yards, drives, walks, off-street parking or other authorized facilities, and not otherwise devoted to landscaping required by this chapter, shall provide site enhancement landscaping.

**c. Specifications for Site Enhancement Landscaping**

In any area where site enhancement landscaping is required, a minimum of 1 landscape unit per 50 square feet (.02 units per 1 square foot) of planting area shall be provided, with at least one-half of the landscape units being trees. Buildings shall be separated from vehicle driveways or parking areas by a walkway or foundation

1 plantings, except in loading service areas and in industrial zones or  
2 the AD district.

3 **5. Site Perimeter Landscaping**

4 **a. Purpose**

5 Site perimeter landscaping separates land uses of different  
6 characteristics or intensities, to minimize the effects of one land use  
7 on another. It softens or reduces unwanted views, operational  
8 effects, and other impacts of a land use on adjacent properties.  
9 Buffers include the use of trees, shrubs, setbacks devoted to  
10 vegetation, berms and fences. Perimeter landscaping can also mark  
11 the interface between public streets and individual property, soften  
12 the visual impacts of development on public streets, and help to  
13 frame Anchorage's streetscapes with trees and vegetation. Four  
14 levels of site perimeter landscaping are provided to accommodate a  
15 variety of land uses at a variety of intensities:<sup>32</sup>

16 **i. L1 Edge Treatment**

17 Edge Treatment perimeter landscaping is used to define the  
18 boundary between private property and public streets, or  
19 between two parcels. It is applied where a minimal visual  
20 break or buffer is adequate to soften the impacts of a use,  
21 and additional landscaping is not necessary. It does not  
22 visually obscure the appearance of a land use. It consists of  
23 ground covers, perennials, wildflowers, shrubs, fencing, or  
24 other hardscape elements.

25 **ii. L2 Buffer**

26 Buffer perimeter landscaping uses a combination of distance  
27 and low level buffer landscaping to soften the visual impacts  
28 of a use or development, or where visibility between areas is  
29 more important than a visually obscuring screen. It is usually  
30 applied along street lot lines, and helps to frame Anchorage's  
31 streetscapes with consistent treatments of trees and  
32 vegetation. It is the narrowest buffer that provides enough  
33 planting bed width for trees.

34 **iii. L3 Separation**

35 Separation perimeter landscaping is intended to provide  
36 greater physical and visual separation between uses or  
37 developments. It provides enough width so that trees may be  
38 clustered to provide greater visual buffering.

39 **iv. L4 Screening**

40 Screening perimeter landscaping is employed as the highest  
41 level separation where there are incompatible land uses of  
42 contrasting character and density. It is also used along  
43 freeways to protect major visual corridors and entrance  
44 gateways into the community.

45 **b. Applicability of Site Perimeter Landscaping**

46 Site perimeter landscaping shall be provided along the perimeter  
47 property line of development sites, except for at approved points of

1  
2

pedestrian or vehicle access, in accordance with Table 21.07-3 as follows:

TABLE 21.07-3: APPLICABILITY OF SITE PERIMETER LANDSCAPING									
District of Proposed Development	Required Level of Site Perimeter Landscaping (Level 1, 2 or 3) Adjacent to the Following Zoning Districts or Streets:								
	R-5 to R-10, TA, W	R-1, R-2, R-3	R-4, RMX, O	C-2 (A,B,C), RCMU	NMU-1, NMU-2, CCMU	AC, I-1	OL	Freeway [2]	Collector, Arterial, Expressway
R-5 - R-10, TA [1]								L4	L2
PLI	L3	L2	L2					L4	L3
R-1, R-2 [1]	L2						L2	L4	L2
R-3 [1]	L3	L2					L2	L4	L2
R-4, RMX	L4	L3					L3	L4	L2
C-2 (A, B, C)								L4	
NMU-1, NMU-2, CCMU, O	L3	L2	L2				L3	L4	
RCMU, MMU		L3	L2		L2		L3	L4	
AC, MC	L3	L3	L3	L2	L2		L3	L4	L2
I-1 IC	L3	L3	L3	L2	L2		L3	L4	L2
AF	L3	L3	L3	L3	L3			L4	L4
MI, I-2, AD	L4	L4	L4	L3	L3	L2	L4	L4	L2
Non-residential use in R zone	L3	L2	L2				L2	L4	L2
<b>NOTES:</b> [1] Individual single-family, two-family and townhouse residential dwellings on separate lots, or to new single-family, two-family and townhouse subdivisions with fewer than 5 lots and less than 5 dwellings are exempt from site perimeter landscaping requirements. L4 screening landscaping requirement along freeways shall apply to any lot adjacent to the right-of-way of a freeway designated in the OS&HP on roadway sections built to freeway design standards with full grade separations of intersecting streets, or to streets functioning as frontage roads for such freeways.									

3

c. **Specifications for Site Perimeter Landscaping**

In any area where site perimeter landscaping is required according to Table 21.07-3, the planting requirements in Table 21.07-4 shall apply. The amount of landscaping required in Table 21.07-4 is measured per linear foot of property line or street frontage. Access driveways shall not be subtracted from the linear frontage in calculations of the amount of landscaping required. If there are driveways along the frontage or property line, required landscaping shall be condensed into the remaining site perimeter landscaping area.

4  
5  
6  
7  
8  
9  
10  
11  
12

1

**TABLE 21.07-4: SPECIFICATIONS FOR SITE PERIMETER LANDSCAPING**

Requirement	L1 Edge Treatment	L2 Buffer	L3 Separation	L4 Screening [3]
Planting Area Width (minimum average) [1]	3 ft	8 ft	15 ft	30 ft.
Planting Area Width (minimum at any point) [1]	3 ft	8 ft	12 ft	20 ft
Total Landscape Units Required per linear foot of property line or street frontage	0.30 units per linear foot	0.40 units per linear foot	1.1 units per linear foot	2.2 units per linear foot
Minimum number of landscape units that shall be trees	none	0.25 units per linear foot	0.60 units per linear foot	1.5 units per linear foot [4]
Minimum number of landscape units that shall be evergreen trees	none	none	0.30 units per linear foot [2]	1.0 units per linear foot [2]
Minimum number of landscape units that shall be shrubs	0.20 units per linear ft, either hedge or fence	0.05 units per linear foot	0.10 units per linear foot	0.15 units per linear foot
<b>Additional Standards:</b>				
[1] Minimum width of planting area shall be measured as the width of the planting beds between the back of edge curbing. Where there will be vehicle overhang along any curb edge, add 2 feet to the required minimum width.				
[2] Because of low sun angles at Anchorage's latitude, in order to minimize solar shadowing of abutting residential lots in the spring and fall, the director may waive the requirement that a minimum number of trees shall be evergreen, along north lot lines that abut residential or mixed-use districts, where the lot line runs within 30 degrees of east-west.				
[3] No sign of any kind is permitted along freeways within the planting area of L4 Screening perimeter landscaping. <sup>33</sup>				
[4] Existing natural vegetation in any required L4 Screening perimeter landscaping area shall not be disturbed, provided that, if that vegetation does not meet the standards for L4 Screening, screening landscaping shall be planted. Existing vegetation cannot be disturbed to achieve the screening standard through supplemental plantings. If disturbed, it shall be restored. <sup>34</sup>				

2

**6. Parking Lot Landscaping<sup>35</sup>**

**a. Purpose**

Parking lot landscaping softens and adds texture to extensive paved surfaces associated with multifamily residential and non-residential development. It also contributes to storm water management, provides orientation to entrances, increases outdoor comfort levels, and mitigates wind and dust in large parking areas. Parking lot landscaping is intended as a visual buffer that softens visual impacts, not a barrier that eliminates natural surveillance. It consists of perimeter and interior parking lot landscaping.

**b. Applicability of Parking Lot Landscaping**

Parking lot landscaping requirements shall apply to parking lots with six (6) or more parking spaces that are accessory to any multifamily

3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

1 or non-residential building or use established, and to parking lots that  
2 are the principal use on a site.

3 **c. *Parking Lot Perimeter Landscaping***

4 Perimeter parking lot landscaping shall be required for all parking lots  
5 having more than five spaces where the parking lot is adjacent to a  
6 public street or a non-retail use such as a residential area,  
7 institutional use (e.g., hospital), or office, as provided below.

8 **i. *General Requirement***

9 The parking lot perimeter landscaping requirement may be  
10 satisfied by complying with one of the following options:

11 **(A) *Option 1:*** L4 Screening as defined in subsection  
12 21.07.080F.5.a.iv. and Table 21.07-4; or

13 **(B) *Option 2:*** L3 Separation as defined in subsection  
14 21.07.080F.5.a.iii. and Table 21.07-4, with  
15 ornamental fencing and a maximum two-foot vehicle  
16 overhang area or no parking spaces adjacent to the  
17 landscaping. This option shall be available only to  
18 parking lots with fewer than 100 spaces, or if less  
19 than 70 percent of the parking spaces are located in  
20 the Front Parking Area; or

21 **(C) *Option 3:*** L2 Buffer as defined in subsection  
22 21.07.080F.5.a.ii. and Table 21.07-4, with ornamental  
23 fencing and no vehicle overhang or no parking  
24 spaces adjacent to the landscaping. This option shall  
25 be available only to parking lots with fewer than 40  
26 spaces, or if less than 50 percent of the parking  
27 spaces are located in the Front Parking Area.

28 **(D) *Option 4:*** Where lots are being developed under a  
29 common site plan, master site plan, or joint  
30 parking/circulation plan in a mixed-use district, the  
31 parking lot perimeter landscaping requirement may  
32 be waived along an interior lot line, providing that  
33 interior parking lot landscaping applies to both  
34 parking lots together.

35 **ii. *Exceptions - Mixed Use Zoning Districts***

36 **(A)** Option 2 from the subsection above is available to any  
37 parking lot;

38 **(B)** Option 3 from the subsection above is available to any  
39 parking lot in which less than 50 percent of the  
40 parking spaces are located in the Front Parking Area.

41 **(C)** L1 Edge Treatment perimeter landscaping as defined  
42 in subsection 21.07.080F.5.a.i. and Table 21.07-4,  
43 may be used to satisfy a parking lot perimeter  
44 requirement along interior lot lines. It may also be

- 1 used to satisfy a parking lot perimeter requirement  
2 along a public street frontage, where the street right-  
3 of-way improvements include a planted landscaping  
4 strip that provides street trees.
- 5 iii. *Exceptions - Central Business Zoning Districts*  
6 L1 Edge Treatment perimeter landscaping as defined in  
7 subsection 21.07.080F.5.a.i. and Table 21.07-4, may be used  
8 to satisfy the parking lot perimeter requirement.
- 9 iv. *Vehicle Headlight Screening*  
10 In order to reduce the impact of obtrusive glare on residences  
11 during the darker months, parking stalls that face an abutting  
12 residentially zoned property shall be screened from the  
13 adjacent property by a fence with a maximum height of 42  
14 inches measured from the surface of the parking stall, and  
15 that is a screening (opaque) fence between 20 and 42 inches  
16 in height. The Director may waive this requirement where the  
17 applicant demonstrates this standard will inhibit needed  
18 surveillance, or that other obstructions or topography satisfy  
19 this standard.
- 20 v. *Perimeter Landscaped Areas Wider than 20 Feet*  
21 For any landscaped areas wider than 20 feet, the required  
22 trees and shrubs shall be located within ten feet of the  
23 property line and adjacent public right-of-way or sidewalk.
- 24 d. **Parking Lot Interior Landscaping<sup>36</sup>**  
25 i. *Amount Required*  
26 Parking lot interior landscaping shall be required for all  
27 development with 20 or more parking spaces, as follows:
- 28 (A) *More than 40 spaces*  
29 An area equal to at least ten percent of the surface of  
30 the parking area on the site, including appurtenant  
31 driveways shall be devoted to landscaping.
- 32 (B) *20 to 40 spaces*  
33 An area equal to at least five percent of the surface of  
34 the parking area on the site including appurtenant  
35 driveways shall be devoted to landscaping,
- 36 ii. *Minimum Landscaping Area Size*  
37 The minimum size of any interior planting area shall be eight  
38 feet wide measured from back-of-curb and 200 square feet in  
39 area.
- 40 iii. *Minimum Stocking Requirements*  
41 In any required interior parking lot landscaping area, a  
42 minimum of 3 landscape units per 100 square feet (0.03 units  
43 per 1 square foot) of planting area shall be provided, with at  
44 least half of the landscape units being trees.

- 1  
2  
3  
4  
5  
6  
7
- iv. ***Landscape Massing***  
Landscaping should be massed rather than spread throughout the interior of a lot to create a more significant visual impact, to increase the rate of survival of the landscaping, and to facilitate snow removal. Trees and shrubs should be massed within planting areas to protect them from damage and to facilitate snow removal/storage.
- 8  
9  
10  
11  
12
- v. ***Preferred Locations***  
The preferred locations for planting areas within parking lots are along major drives and entryways, dividing more than two double-loaded parking bays, and outlining pedestrian walkways within the parking areas.<sup>37</sup>
- 13  
14  
15  
16  
17  
18  
19  
20
- vi. ***Natural Surveillance and Safety***  
Good visibility in parking lots is important for both security and traffic safety reasons. Plants and trees that restrict visibility, such as tall shrubs and low branching trees, should be avoided. Therefore, parking lot interior landscaping shall minimize vegetation and solid or semi-open fences between 3 feet and 7 feet above grade. Berms used as part of interior landscaping areas shall not exceed three feet in height.
- 21  
22  
23
- vii. ***Central Business Zone Districts***  
No interior landscaping shall be required for parking lots within the CBD Districts.
- 24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36
7. **Trees<sup>38</sup>**
- a. ***Purpose***  
This section is a tree requirement for new residential development. It encourages the retention of trees, minimizes the impact of tree loss during construction, and promotes a sustained presence of trees and woodlands in urbanized areas of Anchorage. Trees are an important characteristic of Anchorage, providing economic support of local property values; enhancing the Anchorage's natural beauty and identity; reinforcing the pleasant physical character of residential neighborhoods; protecting anadromous fish and wildlife habitat; ameliorating impacts of development on drainage, soil erosion, air quality, and water quality in Anchorage's water ways; sheltering from inclement weather; and visual buffering of urban development.
- 37  
38  
39  
40  
41  
42  
43  
44  
45  
46
- b. ***Applicability of Tree Requirement***  
The tree requirement applies to new multifamily development and residential subdivisions. The tree requirement does not apply to individual single-family, two-family and townhouse dwellings on a separate lot, where such residential use is the primary use on the lot, or to new single-family, two-family and townhouse subdivisions with fewer than 5 lots and less than 5 dwellings. Nor does it apply to the removal of dead, diseased or naturally fallen trees or vegetation, or trees or vegetation that the Director finds to be a threat to the public health, safety or welfare.



1  
2  
3  
4  
5  
6  
7  
8  
  
9  
10  
11  
  
12  
13  
  
14  
15  
16  
17  
18  
  
19  
20  
21  
22  
23  
24  
25  
  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
  
36  
37  
38  
  
39  
40  
41  
42  
43  
44  
45  
46

- c. Minimum Tree Density**  
A minimum of number of tree landscape units, as defined in Table 21.07-2 in subsection 21.07.080F, is required on the buildable area of residential development, as provided below. Tree density may consist of retained trees, installed trees, or a combination of retained and installed trees. For the purpose of calculating required minimum tree density, “buildable area” shall not include areas to be dedicated as public right-of-way.
- i. A minimum tree density of 165 tree landscape units per acre is required on each single family lot in new residential subdivisions.
  - ii. A minimum tree density of 165 tree landscape units per acre is required on each multifamily residential development site.
- d. Tree Retention and Planting**  
The minimum tree density requirement may be met using trees on the lot. Trees to be retained shall be depicted on the landscaping plan. Where site characteristics or construction preferences to not support tree preservation, tree plantings may be used to satisfy this standard.
- e. Tree Retention Priorities**  
Priorities for preservation of existing trees are listed below, in order of descending priority. Landscaping plans should preserve existing trees in the highest priority category of on-site location possible. No tree retention area used to meet the requirements of this section may be located in public or private rights-of-way, utility easements or visibility clearance areas as defined in subsection 21.06.020A.8.

  - i. *Landmark Trees*
  - ii. *Signature Trees*
  - iii. *Sensitive Environmental Areas and Existing Wooded Areas*  
Sensitive environmental areas and features, including areas with large numbers of mature trees, areas containing multiple signature trees, wetland areas, stream corridors, the margins of existing lakes or ponds, natural drainages, wildlife habitat areas, steep slopes or geological hazard areas.
  - iv. *Required Perimeter Landscaping Areas*  
Areas where site perimeter or parking lot perimeter landscaping is required pursuant to this section 21.07.080.
  - v. *Other Individual Trees or Groups of Trees*
- f. Tree Tracts**  
For residential subdivisions consisting of more than 50 residential lots, at least 75% of the required minimum tree density shall be located within separate deeded tree tracts held in common ownership by the homeowners association, or comparable entity. Tree tracts shall be a condition of approval and identified on the face of the plat.

1 The applicant shall also execute a covenant in a form agreeable to  
2 the municipality which shall require compliance of the owner and  
3 homeowner's association with the maintenance requirements of this  
4 section.

5 **G. General Landscaping Requirements and Standards<sup>39</sup>**

6 All required landscaping, screening or fences shall comply with the following  
7 standards:

8 **1. Plant Materials**

9 **a. *Plant Choices and Quality*<sup>40</sup>**

10 Plant species selected shall be adapted to the local climate and  
11 suitable for the site. Trees, shrubs, and groundcover plants affected  
12 by streets, driveways, and parking lots shall be salt-resistant, tolerant  
13 to urban conditions such as pollution, and should be drought-tolerant  
14 to ensure a low-maintenance landscape and increase survival rates.  
15 All plant materials for required landscaping and screening shall be  
16 selected from the Anchorage Master Tree and Shrub List, and shall  
17 be living and free of defects; and of normal health, height, and spread  
18 as defined by the American Standard for Nursery Stock, ANSI Z60.1,  
19 latest available edition, American Nursery and Landscaping  
20 Association. Plants may be nursery grown, field grown, or  
21 transplanted, provided transplanting meets ANSI standards.

22 **b. *Credit for Retaining Existing Plant Materials***

23 Given the short growing season, difficulty in establishing vegetation,  
24 and the size and character of individual trees, the retention of existing  
25 vegetation typically produces a far more beneficial effect in  
26 Anchorage than installed landscaping. Therefore, existing vegetation  
27 may be retained to meet the standards in a required landscaping  
28 area, if vegetation retention areas are protected and maintained  
29 during and after construction as specified in [x-ref], *Planting Beds and*  
30 *Vegetation Areas*, below, and if the vegetation is not listed as  
31 prohibited on the Anchorage Master Tree and Shrub List. If existing  
32 vegetation does not meet the standards for the required landscaping  
33 area, then it may be supplemented with installed landscaping as  
34 necessary to comply with the requirement. Applicants receive greater  
35 credit for retained trees than for planted trees, as provided in Table  
36 21.07-2, *Landscape Units Awarded*.

37 **c. *Winter Color and Interest***

38 The use of plants with year-round color and texture to offset the  
39 reduced daylight and whites, browns, and grays of the seven months  
40 outside of the growing season is encouraged. The use of permanent  
41 hardscape features such as landscape lighting, landscape boulders,  
42 or landscape structures that provide color and interest year-round  
43 may be counted toward the total landscaping units required for  
44 landscaping, as provided in table 21.07-2. Awarding of landscaping  
45 units for artistic sculptures and aesthetic landscape lighting shall be  
46 determined by the Urban Design Commission through a non-public  
47 hearing review.

- 1  
2  
3  
4  
5  
6  
7  
8
- d. **Tree Plantings**  
Planted and transplanted trees shall be mulched with composed mulch 4 inches or more in depth. Species selection and spacing of trees to be planted shall be such that it provides for the eventual mature size of the trees. Soil type, soil conditions and other site constraints shall be considered when selecting species for planting or transplanting. Evergreen trees installed shall meet the ANSI standard of having a minimum 5:3 height to spread ratio.
- 9  
10  
11
2. **Planting Location<sup>41</sup>**  
Tree planting shall take into consideration the growth habits of each species and shall allow adequate space for healthy growing conditions.
- 12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22
- a. **Adequate Distance from Curb**  
Plants placed adjacent to public sidewalks and curbs where issues of obstruction and interference with pedestrians and vehicles are likely to occur shall include appropriate plant materials such as trees with high canopies. Trees installed to meet the requirements of this title shall provide a minimum of 8 foot vertical clearance over sidewalks and walkways and 14 foot vertical clearance over streets, parking, driveways and other vehicle operation areas. Plant materials that can accommodate vehicle overhangs including low shrubs and perennials are required for the first 3 feet from back-of-curb where there will be vehicle overhang.
- 23  
24  
25  
26  
27  
28  
29  
30  
31  
32
- b. **Wind Protection and Sunlight Access**  
Location of trees and landscaping areas to increase the hospitability of outdoor climates and extend the warm outdoor season is encouraged. Planting clusters or shelterbelts can shelter proposed building entrances, parking areas, or outdoor pedestrian spaces against prevailing winter winds and precipitation, and airborne dust during early spring after breakup. Evergreen trees should be located in careful consideration of wind protection and/or maintaining sun exposure for windows, sidewalks, and outdoor spaces during fall and spring.
- 33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44
- c. **Utility Easements<sup>42</sup>**  
Where required landscaping areas are parallel to utility easements, fifty percent of the landscaping area may be located in the utility easement, provided that any required trees are planted in that part of the landscaping area that does not coincide with the utility easement. Where a utility easement crosses a required landscaping area, trees shall not be planted in the area that coincides with the utility easement. The utility is not responsible for replacement of disturbed landscaping within the utility easements. The utility must provide written notice to the affected property owner at least one week prior to disturbance of the landscaping, except in emergencies involving life or safety.
- 45  
46  
47
- d. **Visibility Clearance Areas**  
All landscaping and screening materials shall comply with the visibility clearance requirements of chapter 21.06.020A.8.

1                   3.     **Planting Beds and Areas**

2                   a.     ***Protection of Landscaping***

3                   All required landscaped areas, particularly trees and shrubs, shall be  
4                   protected from potential damage by adjacent activities and uses,  
5                   including parking and storage areas. Concrete barrier curbs or other  
6                   approved barriers at least six inches high shall be provided between  
7                   vehicular use areas and landscaped areas. Landscaped areas shall  
8                   be marked or otherwise made to be visible during snow removal  
9                   operations.

10                  b.     ***Tree Retention Area Protection***

11                  Tree retention areas used toward landscaping requirements under  
12                  this section 21.07.080 shall be adequately protected from damage  
13                  through adherence to the following:

14                  i.     ***Construction Fence***

15                  A construction fence shall be placed around each tree to be  
16                  retained at or beyond the edge of the critical root zone. The  
17                  fence shall be placed before construction starts and remain in  
18                  place until construction is complete. The fence shall meet  
19                  one of the following:

20                  (A)     The fence shall be 6-foot high orange plastic and be  
21                  secured to the ground with 8-foot metal posts; or

22                  (B)     The fence shall be 6-foot high steel, such as chain  
23                  link, on concrete blocks.

24                  ii.    ***Development Limitations in Tree Retention Areas***

25                  Within the root protection zone of each tree, the following  
26                  development is not allowed:

27                  (A)     Grade change, excavations, or cut and fill, either  
28                  during or after construction;

29                  (B)     New impervious surfaces;

30                  (C)     Utility or drainage field placement;

31                  (D)     Attachment of objects to a tree designated for  
32                  retention;

33                  (E)     Staging or storage of materials and equipment,  
34                  vehicle maneuvering areas, or other activities likely to  
35                  cause soil compaction or above-ground damage;

36                  (F)     Placement, storage or dumping of solvents, soil  
37                  deposits, excavated material, or concrete washout.

38                  iii.   ***Subsequent Landscaping Work***

39                  Any landscaping done in the critical root zone subsequent to  
40                  the removal of construction barriers shall be accomplished  
41                  with light machinery or hand labor.

- 1  
2  
3  
4  
5  
6  
7  
8
- c. **Raised Planting Beds**  
Raised planting beds are encouraged to increase the durability and effectiveness of landscaping and to protect the landscaping investment. Raised planting beds surrounded by a minimum 18-inch high wall may be reduced in width by two feet from the minimum required planting area width of any site perimeter or parking lot perimeter landscaping area. Wall height may be reduced to 12-inches where there will be no vehicle overhang.
- 9  
10  
11  
12  
13  
14  
15
- d. **Berms**  
Berms may be incorporated into any required landscaping or screening area, except that berms are prohibited in mixed-use and central business zoning districts. Berms for on-site landscaping shall not be placed in a public right of way, and shall not interfere with natural drainage or cause water to be drained onto streets. No installed berm shall have a slope of greater than 3:1.
- 16  
17  
18  
19  
20  
21
- e. **Retention Ponds**  
Retention ponds shall be physically, functionally, and visually integrated into adjacent landscape uses through the use of topography, building and parking lot placement, plantings, permanent water features, recreational or open space amenities, or other methods.
- 22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41
4. **Installation of Landscaping<sup>43</sup>**  
All required landscaping and screening shall be installed by the developer. All landscaping shall be installed before a certificate of zoning compliance is issued. If a certificate of zoning compliance is requested between September and May, then the certificate shall be conditioned upon the landscaping being installed before the following June 30. A letter of credit, escrow, performance bond, or other surety approved by the municipal attorney for proper installation of the landscaping and equal in value to 125 percent of the value of the landscaping, as determined by the project landscape architecture firm, shall remain in place with the Director for 24 months after installation to ensure survival and proper maintenance of the landscaping in accordance with this section. Any landscape element that dies or is otherwise removed or is seriously damaged shall be removed within 30 days of the beginning of the growing season and replaced based on the requirements of this section. The bond shall be subject to forfeit if inspection has not been requested within 18 months. If the owner or other responsible party fails to fulfill this obligation during the first 18 months after installation of the landscaping, the Municipality shall either perform the work and seek reimbursement from the responsible party's or owner's surety, or demand performance by the surety. An initial inspection fee shall be charged as part of the permitting process.<sup>44</sup>
- 42  
43  
44  
45
5. **Use of Landscaped Areas**  
Except as provided in F.5.b. above, no structure, parking or loading area, driveway, or paved area may be located in areas required for landscaping pursuant to this title.
- 46  
47
6. **Maintenance and Replacement**  
a. **Maintenance**

1 Trees, shrubs, and other vegetation, irrigation systems, fences, and  
2 other landscaping, screening, and fencing elements shall be  
3 considered as elements of a development in the same manner as  
4 other requirements of this title. The property owner shall be  
5 responsible for regularly maintaining all landscaping elements in good  
6 condition. All landscaping shall be maintained free from disease,  
7 weeds, and litter to the extent reasonably feasible. Plants that die  
8 shall be replaced in kind. All landscaping, screening, and fencing  
9 materials and structures shall be repaired and replaced periodically to  
10 maintain them in a structurally sound and aesthetically pleasing  
11 condition.

12 **b. Irrigation**  
13 To ensure that plants will survive, particularly during the critical two-  
14 year establishment period when they are most vulnerable due to lack  
15 of watering, the bonding requirement established in subsection  
16 21.07.080G.4 above may be waived for any landscaping area that will  
17 be irrigated by one of the following:

- 18 i. A built-in irrigation system with an automatic controller; or  
19 ii. An irrigation system designed and certified by a licensed  
20 landscape architect as part of the landscape plan, which  
21 provides sufficient water to ensure that the plants will become  
22 established.

23 **H. Screening<sup>45</sup>**

24 **1. Purpose**  
25 Screening consists of landscaping, the retention of natural vegetation, or the  
26 use of physical structures to block views of specific activities or specific parts  
27 of a property or structure. Applicants are encouraged to locate the types of  
28 features listed in this section where they are not visible from off-site or public  
29 areas of a site, so that screening is unnecessary.

30 **2. Applicability**  
31 Notwithstanding the exemptions of 21.07.080.C.2.a. and b., all townhouse  
32 residential, multi-family residential, public/institutional, commercial, and  
33 industrial uses shall be required to provide screening as specified in this  
34 subsection 21.07.080.E. to block the views of the specified features from any  
35 adjacent street or public open space or any adjacent property or public areas  
36 of a site. Public areas of a site include public parking areas, sales areas,  
37 outside eating areas, or other areas to which customers, clients, and guests  
38 are given regular access.

39 **3. Refuse Collection**  
40 In order to improve the image of Anchorage's streets and neighborhoods, to  
41 reduce the visual impacts of multi-family and nonresidential development, and  
42 to avoid problems with blown trash, snow, and pests, all refuse collection  
43 receptacles shall adhere to the standards that follow. For purposes of this  
44 section, the term "refuse collection receptacles" includes dumpsters, garbage  
45 cans, debris piles, or grease containers, but does not include trash or  
46 recycling receptacles for pedestrians or for temporary construction sites. This

1 section also does not apply to refuse collection receptacles such as garbage  
2 cans that are normally stored indoors and brought outdoors on garbage  
3 pickup days.

4 **a. Location**

5 Outdoor refuse collection receptacles shall not be located in a  
6 required front setback, and should, depending on the size of the site  
7 and need for access by refuse collection vehicles, be set back from  
8 the front plane of the principal structure. Refuse collection  
9 receptacles for non-residential uses shall not be located in any  
10 setback area or required landscaping area which abuts an adjacent  
11 residential use. Refuse collection receptacles shall not be located  
12 within any area used to meet the minimum landscaping or parking  
13 and loading area requirements of this chapter, or be located in a  
14 manner that obstructs or interferes with any designated vehicular or  
15 pedestrian circulation routes onsite.

16 **b. Screening Enclosure**

17 Each refuse collection receptacle shall be screened from view on all  
18 sides by a durable sight-obscuring enclosure consisting of a solid  
19 fence or wall of between six feet and eight feet in height. Where the  
20 access to the enclosure is visible from adjacent streets or residential  
21 properties, the access shall be screened with an opaque gate of at  
22 least five feet in height. Gates which swing open shall have a one-  
23 foot height clearance above grade to account for snow. The walls  
24 and gate shall be compatible in architectural design and materials  
25 with the principal building(s). The enclosure shall be maintained in  
26 working order, and remain closed except during trash deposits and  
27 pick-ups.

28 **c. Maintenance of Refuse Collection Receptacle**

29 The lids of receptacles in screening enclosures without roof structures  
30 shall remain closed between pick-ups, and shall be maintained in  
31 working order.

32 **d. Amortization of Nonconforming Refuse Collection Receptacles<sup>46</sup>**

33 Any lawful permanent refuse collection receptacle erected prior to the  
34 adoption of this chapter that does not comply with the requirements of  
35 this section shall be removed or altered to comply within [five] years  
36 from the effective date of this title.

37 **4. Service and Off-Street Loading Areas**

38 Service and off-street loading areas create visual and noise impacts on  
39 surrounding uses and neighborhoods. These standards visually screen on-  
40 site service and off-street loading areas from public rights-of-way and  
41 adjacent uses.

42 Service and off-street loading areas shall be designed and located to reduce  
43 the visual and acoustic impacts of these functions on adjacent properties and  
44 public streets. Non-enclosed service and off-street loading areas shall be  
45 screened with durable, sight-obscuring walls and/or fences of between six  
46 feet and eight feet in height. Screening materials shall be the same as, or of  
47 equal quality to, the materials used for the primary building and landscaping.

- 1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14
5. **Rooftop Mechanical Equipment<sup>47</sup>**  
Rooftop mechanical equipment, including HVAC equipment and utility equipment that serves the structure, shall be screened. Screening shall be accomplished through the use of parapet walls or a sight-obscuring enclosure around the equipment constructed of one of the primary materials used on the primary facades of the structure, and that is an integral part of the building's architectural design. The parapet or screen shall completely surround the rooftop mechanical equipment to an elevation equal to or greater than the highest portion of the rooftop mechanical equipment being screened. Any parapet wall shall have an elevation of no more than four feet. In the event such parapet wall does not fully screen all rooftop equipment then the rooftop equipment shall be enclosed by a screen constructed of one of the primary materials used on the primary façade of the building so as to achieve complete screening from the property line.
- 15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25
6. **Wall-Mounted Mechanical Equipment and Meters<sup>48</sup>**  
Wall-mounted mechanical equipment, including air conditioning or HVAC equipment and groups of multiple utility meters, that extends six inches or more from the outer building wall shall be screened from view from streets; from residential, public, and institutional properties; and from public areas of the site or adjacent sites; through the use of (a) sight-obscuring enclosures constructed of one of the primary materials used on the primary façade of the structure, (b) sight-obscuring fences, or (c) trees or shrubs that block at least 80 percent of the equipment from view. Wall-mounted mechanical equipment that extends six inches or less from the outer building wall shall be designed to blend in with the color and architectural design of the subject building.
- 26  
27  
28  
29  
30  
31  
32  
33
7. **Ground-Mounted Mechanical Equipment and Utility Fixtures<sup>49</sup>**  
Ground-mounted above-grade mechanical equipment shall be screened from view from streets; from residential, public, and institutional properties; and from public areas of the site or adjacent sites; through the use of ornamental fences or screening enclosures, or through the use of trees or shrubs that block at least 80 percent of the view. Above-grade ground-mounted utilities are prohibited on sidewalks in the central business and mixed-use zoning districts.
- 34  
35  
36
8. **Outdoor Merchandise Display Areas<sup>50</sup>**  
Screening shall be required of outdoor merchandise display areas as set forth in section 21.05.070D.17.
- 37  
38  
39
9. **Outdoor Storage Areas<sup>51</sup>**  
Screening shall be required of outdoor storage areas as set forth in section 21.05.070D.18.
- 40
- I. **Fences<sup>52</sup>**
- 41  
42  
43  
44  
45  
46
1. **Applicability**  
Notwithstanding the exemptions of 21.07.080.C.2, the provisions of this subsection 21.07.080.F shall apply to all construction, substantial reconstruction, or replacement of fences, retaining walls not required for support of a principal or accessory structure, or any other linear barrier intended to delineate different portions of a lot or to separate lots from each



1 other. The provisions of this subsection do not apply to temporary fencing for  
2 construction, emergencies or special public events or performance areas.

3 **2. Location**

4 A fence may be constructed within property boundaries, or at the lot line,  
5 subject to the limitations in this section. No fence shall be installed so as to  
6 block or divert a natural drainage flow onto or off of any other property.

7 **3. Maximum Height**

8 Fences shall not exceed the maximum heights set forth below. Such  
9 maximum heights shall be measured from the top of any retaining wall, or if  
10 no retaining wall has been constructed, then from natural grade. Unless  
11 specifically allowed by this title, no fence shall exceed eight feet in height.

12 a. In the R-1, R-2, R-3, R-4, and RMX districts, fences in front setbacks  
13 shall not exceed four feet in height.

14 b. In the R-5, R-6, R-9, and R-10 zone districts, fences in front setbacks  
15 shall not exceed six feet in height if the fencing material is sight-  
16 obscuring. Examples of non-sight obscuring fencing include chain-  
17 link and split rail fencing.

18 c. In the CBD, AC, NMU, CCMU, RCMU, MMU, and MC districts, fences  
19 in front yards shall not exceed three feet in height and shall not  
20 exceed eight feet in side or rear yards.

21 d. Enclosures provided as a part of a permitted tennis court, ball field, or  
22 other recreational facility shall be exempt from the height restrictions  
23 of this section.

24 **4. Through Lots**

25 In the case of a through lot, as defined in chapter 21.13, which abuts a street  
26 of collector or greater classification, a fence may be constructed within the  
27 secondary front setback up to a maximum of eight feet in height, provided that  
28 vehicular access to the street is prohibited. A fence higher than four feet, or  
29 six feet in zoning districts R-5, R-6, R-9, and R-10, shall not be constructed  
30 within a front setback if access to the street is required due to a plat note, by a  
31 conditional use permit, or under other provisions of law.

32 **5. Finished Appearance Outward**

33 Whenever any fence will be visible from adjacent streets, and whenever a  
34 fence is installed as part of required buffering landscaping and is visible from  
35 adjacent properties, it shall be installed so that the more finished side (i.e., the  
36 side with fewer or no visible structural framing or bracing elements) faces  
37 outward from the lot on which it is installed.

38 **6. Prohibited Materials**

39 Fences made of debris, junk, or waste materials are prohibited, unless such  
40 materials have been recycled and reprocessed into building materials  
41 marketed to the general public and resembling new building materials.

21.07.090 OFF-STREET PARKING AND LOADING<sup>53</sup>

A. Purpose

This section establishes off-street parking requirements as a necessary part of the development and use of land, to ensure the safe and adequate flow of traffic in the public street system, and to ensure that parking areas are designed to perform in a safe, efficient manner. It is also the intent of this section to attenuate the adverse visual, environmental, and economic impacts of parking areas. Specific purposes include to:

1. Ensure that off-street parking, loading, and access demands will be met without adversely affecting other nearby land uses and neighborhoods;
2. Provide for vehicle and pedestrian circulation and safety in parking areas, and create a safe and more pedestrian-friendly environment;
3. Encourage the efficient use of land by avoiding excessive amounts of land being devoted to parking and thus unavailable for other productive uses;
4. Improve the visual appearance of public street corridors by encouraging buildings and other attractive site features to become more prominent relative to parking areas;
5. Provide for better pedestrian movement and encourage alternative modes of transportation by reducing the expanses of parking that must be traversed between destinations;
6. Support a balanced transportation system that is consistent with cleaner air and water, greater transportation choices, and efficient infill and redevelopment; and
7. Allow flexibility in addressing vehicle parking, loading, and access issues, including providing alternatives to standard required surface parking.

B. Applicability

1. Generally

- a. The off-street parking and loading standards of this section 21.07.090 shall apply to all parking lots and parking structures accessory to any new building constructed and to any new use established in every district.
- b. Except for the off-street loading requirements of subsection 21.07.090F., all other requirements of this section shall apply to Girdwood unless specifically preempted in chapter 21.09.
- c. The off-street parking requirements set forth in subsection 21.07.090D shall not apply in the CBD Districts. However, all other standards of this section 21.07.090 shall apply to the CBD Districts.

1 d. Except when specifically exempted, the requirements of this section  
2 21.07.090 shall apply to all temporary parking lots and parking lots  
3 that are the principal use on a site.

4 **2. Expansions and Enlargements<sup>54</sup>**

5 The off-street parking and loading standards of this section shall apply when  
6 an existing structure or use is expanded or enlarged. Additional off-street  
7 parking and loading spaces shall be required to serve the enlarged or  
8 expanded area, provided that in all cases the number of off-street parking and  
9 loading spaces provided for the entire use (pre-existing plus expansion) must  
10 equal 100 percent of the minimum ratio established in this section.

11 **3. Regulation of Parking Space Use<sup>55</sup>**

12 The providers of required off-street parking spaces and the Municipality of  
13 Anchorage may reasonably control the users thereof by means that may  
14 include, but are not limited to, restricting all parking to the users of the facility;  
15 parking lot attendants control gates; tow-away areas; areas for exclusive use  
16 by employees, tenants or staff; areas restricted for use by customers or  
17 visitors; and imposing reasonable time limitations on users other than tenants,  
18 employees, or staff. Direct charges may be made to users who exceed  
19 maximum time limits. The Traffic Engineer may review all methods of control  
20 and may disapprove of any restriction that adversely affects the purpose of  
21 this section. The Municipality may enforce any approved restrictions through  
22 any of the code enforcement provisions set forth in chapter 21.12,  
23 *Enforcement*.

24 **4. Local Improvement Assessments and Parking**

25 Any property against which local improvement assessments have been levied  
26 for the construction of public off-street parking shall be exempted from  
27 providing and maintaining one space for each 100 square feet of property so  
28 assessed.

29 **C. Parking Lot Layout and Design Plan (10 or More Spaces)**

30 **1. Applicability**

31 For all proposed parking lots with 10 or more spaces, the applicant shall  
32 submit a parking lot layout and design plan for review and approval by the  
33 Traffic Engineer.<sup>56</sup> The plan shall contain sufficient detail to enable the Traffic  
34 Engineer to verify compliance with this section 21.07.090. Subject to  
35 approval of the Traffic Engineer, the parking layout and design plan may be  
36 combined with other plans required under this title, such as the landscaping  
37 plan required in 21.07.080, *Landscaping, Screening, and Fences*.

38 **2. Minimum Plan Requirements**

39 **a.** The parking lot layout and design plan shall be prepared by a design  
40 professional.

41 **b.** The Building Official and Traffic Engineer shall establish the minimum  
42 submittal requirements for such plans that will enable staff to  
43 adequately review and ensure compliance with the standards and  
44 requirements of this section 21.07.090. Such submittal requirements,  
45 to be included in the User's Guide, shall include but not be limited to  
46 elements such as placement and dimensions of spaces, landscaping,

pedestrian and vehicle circulation, snow storage, lighting, loading and trash collection areas, and drainage.

- c. The Traffic Engineer shall ensure that provisions have been made for minimum interference with street traffic flow and safe interior vehicular and pedestrian circulation, transit, and parking.

**D. Off-Street Parking Requirements<sup>57</sup>**

**1. Schedule A<sup>58</sup>**

Unless otherwise expressly stated in this title, off-street parking spaces shall be provided in accordance with Table 21.07-5, *Off-Street Parking Schedule A*.

<b>TABLE 21.07-5: OFF-STREET PARKING SCHEDULE A</b> ("du" = dwelling unit; "sf" = square feet; "gfa" = gross floor area)				
<i>[NOTE: The use classifications in the June 2005 draft have not yet been adjusted to match the new use table. They be adjusted so that the first two columns of this table exactly match the first columns of the use tables in chapter 21.05.]</i>				
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090.F	See Stacking Subsection 21.07.090.I
<b>RESIDENTIAL USES (* Ratios for residential uses are still being discussed)</b>				
Household Living	Dwelling, mixed use	See Schedule B.		
	Dwelling, multiple-family	<ul style="list-style-type: none"> <li>• 1.25 per efficiency unit;</li> <li>• 1.5 per one-bedroom unit</li> <li>• 1.5 per two-bedroom unit 800 sf or less</li> <li>• 1.75 per two-bedroom unit over 800 sf</li> <li>• 1.75 per three-bedroom unit 900 sf or less</li> <li>• 2.5 per three-bedroom unit over 900 sf</li> </ul> All multiple-family dwellings shall provide 0.25 guest spaces per unit.	<b>X</b>	
	Dwelling, single-family detached	<ul style="list-style-type: none"> <li>• 2 per du up to 1,800 square feet;</li> <li>• 3 per du over 1,800 square feet, including any unfinished area which may be converted to living area</li> </ul>		
	All other Household Living uses	2 per du		
Group Living	Correctional community residential center	1 per 2,000 sf gfa	<b>X</b>	
	Dormitory	1 per 1,000 sf gfa	<b>X</b>	
	Habilitative Care Facility	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of adults, per 800 sf gfa plus requirement for principal use	<b>X</b>	

**TABLE 21.07-5: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

*[NOTE: The use classifications in the June 2005 draft have not yet been adjusted to match the new use table. They be adjusted so that the first two columns of this table exactly match the first columns of the use tables in chapter 21.05.]*

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090.F	See Stacking Subsection 21.07.090.I
	Residential care (7+ client capacity)	1 per four beds plus 1 per 350 sf of office area plus requirement for dwelling, if located in a dwelling	X	
	Roominghouse	1.5 per two guestrooms		
	All other Group Living uses	1 per two beds plus 1 per 100 sf of assembly area		
<b>PUBLIC/INSTITUTIONAL USES</b>				
Adult Care	Adult care, 1-6 adults	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of adults, per 800 sf gfa (plus requirement for principal use, if approved as accessory use)		
	Adult care, 7+ adults	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of adults, per 800 sf gfa	X	
Child Care	Child care, 1-6 children	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of children, per 800 sf gfa (plus requirement for principal use if approved as accessory use)		
	Child care, 7+ children	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of children, per 800 sf gfa	X	
Community Service	Community assembly	1 per 80 sf of principal assembly area plus 1 per 350 sf of office area	X	
	Community center <sup>59</sup>	1 per 250 sf gfa	X	
	Family self-sufficiency service	1 per 300 sf gfa		
	Homeless and transient shelter	1 per 300 sf gfa		
	Neighborhood recreation center <sup>60</sup>	1 per 300 sf gfa		
Cultural Facility <sup>61</sup>	Aquarium	1 per 500 sf gfa	X	
	Botanical gardens	.75 per acre of site area, plus 1 per 1000 sf gfa	X	
	Library	1 per 400 sf gfa	X	
	Museum or cultural center	1 per 400 sf gfa	X	
	Planetarium	1 per 400 sf gfa	X	
	Zoo	1 per 2,000 sf gross land area	X	

**TABLE 21.07-5: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

*[NOTE: The use classifications in the June 2005 draft have not yet been adjusted to match the new use table. They be adjusted so that the first two columns of this table exactly match the first columns of the use tables in chapter 21.05.]*

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090.F	See Stacking Subsection 21.07.090.I
	All other uses	1 per 300 sf gfa	X	
Educational Facility	Boarding school	See Schedule C.	X	
	College and university	1 per 300 sf of enclosed floor space	X	
	Computer-aided learning center	1 per 300 sf of enclosed floor space	X	
	Elementary school	1 per 50 sf of floor area in the multipurpose room	X	
	High school or middle school	1 per six seats in the main auditorium or assembly room, based on maximum capacity	X	
	All other Educational Facility uses	1 per 300 sf of enclosed floor space	X	
Government Facility	Correctional institution	See Schedule C.	X	
	Governmental office	1 per 300 sf gfa	X	
	Governmental service	1 per 600 sf gfa	X	
	Police/fire station	See Schedule C.		
Health Care Facility	Health care facility or nursing home, all uses other than hospitals	1 per four beds, based upon maximum capacity. If the facility is used exclusively for the housing of the elderly, disabled, or handicapped, the Zoning Board of Examiners and Appeals may allow a portion of the area reserved for off-street parking to be landscaped if the board finds that the landscaping is suitable and is in the best interests of the residents of the neighborhood.	X	
	Health service establishment	1 per 250 sf gfa	X	
	Hospital	1 per two beds, based on maximum capacity, plus 1 per 350 sf of office and administrative area, plus required parking for supplemental uses	X	
Park and Open Area	Cemetery	See Schedule C.		
	Community garden	1 per 5,000 sf of lot area		
	Nursery, public	See Schedule C.		

**TABLE 21.07-5: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

*[NOTE: The use classifications in the June 2005 draft have not yet been adjusted to match the new use table. They be adjusted so that the first two columns of this table exactly match the first columns of the use tables in chapter 21.05.]*

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090.F	See Stacking Subsection 21.07.090.I
	Park, public	See Schedule C. Playfields (soccer, baseball, etc.) shall have minimum of 20 spaces per field.		
Trans- portation Facility	Airport	See Schedule C.	X	
	Airstrip, private	See Schedule C.	X	
	Bus transit center	See Schedule C.	X	
	Heliport	2 per each helicopter based at the facility (2 spaces minimum) plus 1 per 100 sf waiting area	X	
	Railroad freight terminal	See Schedule C.	X	
	Railroad passenger terminal	See Schedule C.		
	Taxicab dispatching office	See Schedule C.		
Utility Facility	All uses	1 per 1,000 sf gfa		
Communica- tion Structures	All uses	None		
<b>COMMERCIAL USES</b>				
Agricultural Uses	Farming, animal husbandry	See Schedule C.		
	Farming, horticultural	See Schedule C.		
Animal Sales, Service & Care	Animal control shelter	1 per 400 sf gfa		
	Animal grooming service	1 per 400 sf gfa		
	Kennel	1 per 800 sf gfa		
	Paddock or stable	1 per 5 stalls		
	Pet shop	1 per 300 sf gfa		
	Veterinary clinic	1 per 600 sf gfa		
Assembly	Civic/convention center	1 per four seats of principal room. If no fixed seating, then based on maximum capacity under provisions of International Building Code.	X	
	Club/lodge/meeting hall	1 per 300 sf gfa	X	
	Entertainment event, major	See Schedule C.	X	

**TABLE 21.07-5: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

*[NOTE: The use classifications in the June 2005 draft have not yet been adjusted to match the new use table. They be adjusted so that the first two columns of this table exactly match the first columns of the use tables in chapter 21.05.]*

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090.F	See Stacking Subsection 21.07.090.I
Entertainment, Indoor	Amusement establishment	Indoor entertainment facility: 1 per 300 sf gfa		
	Bowling Alley	4 per bowling lane		
	Fitness and recreational sports center	1 per 225 sf gfa or 1 per 8 persons based on the maximum allowable occupancy For athletic court areas: 1 per 275 sf		
	Movie theater	1 per four seats of principal room. If no fixed seating, then based on maximum capacity under provisions of International Building Code.		
	Nightclub, licensed or unlicensed	1 per three seats. If no fixed seating, then based on maximum capacity under provisions of International Building Code.	X	
	Theater company or dinner theater	1 per four seats of principal room. If no fixed seating, then based on maximum capacity under provisions of International Building Code.		
Entertainment / Recreation, Outdoor	General outdoor recreation, commercial	1 per 5,000 sf of land area, or 1 per 3 persons capacity (maximum), whichever is greater; playfields (soccer, baseball, etc.) shall have minimum of 20 spaces per field	X	
	Golf course	4 per green		
	Golf driving range	1 per tee		
	Motorized sports facility	1 per 2 spectator seats in a structure such as a grandstand, stadium; or 1 per 2,000 sf of site area; whichever is greater	X	
	Shooting range, outdoor	2 per target area, or 1 per 5 seats, whichever is greater		
	Skiing facility	See Schedule C.	X	
Financial Institutions	Financial institution	1 per 350 sf gfa, except 1 per 300 sf gfa of areas associated with teller services (plus vehicle stacking spaces if drive-through is provided)		X
Food and Beverage Service	Bar or tavern	1 per 100 sf gfa	X	
	Brew pub	1 per 200 sf gfa	X	
	Food and beverage kiosk	1 per establishment, plus vehicle stacking spaces		X



**TABLE 21.07-5: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

*[NOTE: The use classifications in the June 2005 draft have not yet been adjusted to match the new use table. They be adjusted so that the first two columns of this table exactly match the first columns of the use tables in chapter 21.05.]*

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090.F	See Stacking Subsection 21.07.090.I
	Restaurant	1 per 100 sf gfa (plus vehicle stacking spaces if drive-through is provided)	X	X
Office	Office, business or professional	1 per 350 sf gfa	X	
	Broadcasting and recording facility	1 per 300 sf gfa		
Retail (Personal Service)	Pharmacy/Drugstore and Video Rental Store	1 per 400 sf gfa (plus vehicle stacking spaces if drive-through is provided)		X
	Dry-cleaning, drop-off site/Mail Package Service/Locksmith Shop	1 per 600 sf gfa, (plus vehicle stacking spaces if drive-through is provided)		X
	Funeral services	1 per 150 sf gfa in main assembly areas	X	
	All other uses	1 per 300 sf gfa	X	
Retail (Repair and Rental)	All uses	1 per 300 sf gfa	X	
Retail (Sales)	Auction house	1 per 300 sf gfa	X	
	Business service establishment	1 per 300 sf gfa	X	
	Carpet Store	1 per 500 sf gfa		
	Convenience store	1 per 300 sf gfa	X	
	Farmers market	1 per 250 sf, with a minimum of 6		
	Furniture, Home Appliance Store	1 per 800 sf gfa		
	Meat and seafood processing, storage, and sales <sup>82</sup>	1 per 400 sf gfa	X	
	General retail	1 per 300 sf gfa	X	
	Grocery or food store	1 per 250 sf gfa		
	Liquor store	1 per 300 sf gfa	X	
	Lumber yard/building materials store	1 per 300 sf gfa	X	
	Nursery, commercial	1 per 250 sf retail sales area; 1 per 500 sf greenhouse sales area; 1 per 1,000 sf outdoor display area	X	

**TABLE 21.07-5: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

*[NOTE: The use classifications in the June 2005 draft have not yet been adjusted to match the new use table. They be adjusted so that the first two columns of this table exactly match the first columns of the use tables in chapter 21.05.]*

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090.F	See Stacking Subsection 21.07.090.I
	Pawnshop	1 per 300 sf gfa	X	
	Plumbing and heating equipment dealer	1 per 400 sf gfa	X	
Vehicles and Equipment	Aircraft and marine vessel sales	1 per 7,000 sf outdoor display/sales area; 1 per 400 sf indoor floor area	X	
	Fueling station	1 per fueling pump		X
	Heavy equipment, sales and rental	1 per 7,000 sf outdoor display/sales area; 1 per 400 sf indoor floor area	X	
	Impound yard	1 per 500 sf gfa, plus 1 per 5,000 sf of outdoor storage area		
	Vehicle parts and supplies	1 per 400 sf gfa	X	
	Vehicle – large and small, sales and rental	1 per 7,000 sf outdoor display/sales area; 1 per 400 sf indoor floor area	X	
	Vehicle service and repair, major and minor	2 per car wash bay; 4 per other service bay (provided that all vehicles in custody of operator of business for purpose of service, repair or storage shall be stored on premises or on a separate off-street parking lot or building)		
	Vehicle storage yard	1 per 50 vehicles stored, based on maximum capacity <sup>63</sup> , plus 1 per 350 sf gfa of office area, plus vehicle stacking spaces for security gate		X
Visitor Accommodations	Camper park	1.1 spaces for each recreational vehicle space		
	Extended-stay lodgings	1 per guestroom or 1 bedroom unit; 1.25 per 2 bedroom unit; 1.5 per 3 bedroom or more unit	X	
	Hostel	1 per 600 sf gfa		
	Hotel	.9 per guestroom, plus .3 per each 5 occupants of meeting area, plus any supplemental uses	X	
	Inn	1 per guestroom, plus 1 per 90 sf gfa of meeting or lounge area		
	Motel	.9 per guestroom, plus .3 per each 5 occupants of meeting area, plus any supplemental uses	X	
	Recreational and vacation camp	1 per 2 beds, or 1 per cabin, sleeping unit, or tent site, whichever is greater		

**TABLE 21.07-5: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

*[NOTE: The use classifications in the June 2005 draft have not yet been adjusted to match the new use table. They be adjusted so that the first two columns of this table exactly match the first columns of the use tables in chapter 21.05.]*

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090.F	See Stacking Subsection 21.07.090.I
<b>INDUSTRIAL USES [1]</b>				
Industrial Service [1]	Data processing facility	1 per 1,000 sf gfa	X	
	General industrial service	1 per 750 sf gfa (1-3,000 gfa); 1 per 1,000 sf gfa (3,001-5,000 gfa); 1 per 1,500 sf gfa (more than 5,000 gfa)		
	Research laboratory	1 per 300 sf gfa		
Manufacturing and Production [1]	Cottage Crafts	1 per 300 sf gfa	X	
	Food service contractor or caterer	1 per 400 sf gfa for catering; 1 per 800 sf gfa for food processing		
	Manufacturing (heavy and light)	1 per 750 sf gfa (1-3,000 gfa); 1 per 1,000 sf gfa (3,001-5,000 gfa); 1 per 1,500 sf gfa (more than 5,000 gfa)		
	Natural resource extraction	See schedule C.		
Marine Facility [1]	Aquaculture	See Schedule C.	X	
	Boat storage facility	1 per 75 storage units		
	Cold storage and ice processing for marine products	1 per 250 sf gfa of area devoted to customer service; see Manufacturing ratios above for processing and storage areas		
	Facility for combined marine and general construction	See Schedule C.		
	Marine operations (general and limited)	See Schedule C.		
	Marine wholesaling	1 per 400 sf gfa		
Warehouse and Freight Movement [1]	Bulk storage of hazardous materials	See Schedule C.	X	
	Motor freight terminal	see Warehouse		
	Self-storage facility	1 per 75 units, plus 1 per 300 sf of office area, plus vehicle stacking spaces for security gate. Aisles suitable for temporary loading and unloading may be counted as required parking stalls in accordance with Table 21.07-4 as determined by the traffic engineer.	X	X
	Storage yard	1 per 2,000 sf of outdoor storage area		

**TABLE 21.07-5: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

*[NOTE: The use classifications in the June 2005 draft have not yet been adjusted to match the new use table. They be adjusted so that the first two columns of this table exactly match the first columns of the use tables in chapter 21.05.]*

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090.F	See Stacking Subsection 21.07.090.I
	Warehouse	1 per 1,000 sf gfa (1-10,000 sf); 1 per 1,250 sf gfa (10,000-50,000 sf); 1 per 1,500 sf gfa (more than 50,000 sf)		
	Wholesale establishment	1 per 400 sf gfa		
Waste and Salvage	All uses	See Schedule C.	X	
Notes [1] The off-street parking requirements for industrial uses in this Schedule A shall not include space devoted to office or other non-industrial related use. Where a warehousing or industrial facility contains office or other non-industrial related use, off-street parking for such spaces shall be computed using the requirements set forth in the Schedule A.				

1

2

3

**2. Schedule B<sup>64</sup>**

**TABLE 21.07-6: OFF-STREET PARKING SCHEDULE B – MIXED-USE DISTRICTS**

Use Type	Minimum Spaces Required
Residential	Multi-family and mixed-use residential uses within 700 feet of a transit stop on a transit development corridor with peak hour service headways of 30 minutes or less shall be eligible for a reduction from the minimum number of required spaces in Schedule A, as follows: <ul style="list-style-type: none"> <li>▪ Minimum of 1 space per 1-bedroom unit</li> <li>▪ Minimum of 1.33 spaces per 2-bedroom unit</li> <li>▪ Minimum of 1.5 spaces per 3-bedroom unit</li> </ul>
Non-residential	Non-residential uses shall be eligible for a five percent (5%) reduction from the minimum number of required spaces in Schedule A.

4

**3. Schedule C<sup>65</sup>**

Uses that reference “Schedule C” have widely varying parking and loading demand characteristics, making it impossible to specify a single off-street parking or loading standard. Upon receiving a development application for a use subject to Schedule C standards, the Building Official and the Traffic Engineer shall apply the off-street parking and loading standard specified for the listed use that is deemed most similar to the proposed use or establish minimum off-street parking requirements on the basis of a parking and loading study prepared by the applicant. Such a study shall include estimates of parking demand based on recommendations of the Institute of Transportation Engineers (ITE), or other acceptable estimates as approved by

5

6

7

8

9

10

11

12

13

14

15

1 the Traffic Engineer, and shall include other reliable data collected from uses  
 2 or combinations of uses that are the same as or comparable with the  
 3 proposed use. Comparability shall be determined by density, scale, bulk,  
 4 area, type of activity, and location. The study shall document the source of  
 5 data used to develop the recommendations.

6 **4. Maximum Number of Spaces Permitted**

7 **a. Purpose**

8 The purpose of this subsection is to establish an upper limit on the  
 9 number of parking spaces allowed in order to promote efficient use of  
 10 land, enhance urban form, provide for better pedestrian movement,  
 11 encourage alternative modes of transportation, and to protect air and  
 12 water quality. The maximum ratios allow a percent of parking that is  
 13 greater than the minimum amount of parking needed to  
 14 accommodate the majority of auto trips to a site based on typical  
 15 peak parking demand. Exceptions and flexibility procedures are  
 16 provided where a required limit on the number of parking spaces is  
 17 problematic for a certain use.

18 **b. Maximum Number of Spaces**

19 For any use categorized as a Public/Institutional, Commercial or  
 20 Industrial use in Table 21.05-1 or Table 21.05-2, *Tables of Allowed*  
 21 *Uses*, the maximum number of off-street vehicle parking spaces shall  
 22 be as established in Table 21.07-7 below. The table applies the  
 23 maximum number of spaces allowed as a percentage of the minimum  
 24 parking requirements established in Table 21.07-5, *Off-Street Parking*  
 25 *Schedule A*. Uses in the Parks and Open Areas, Transportation  
 26 Facility, and Utility Facility use categories are exempt.

**TABLE 21.07-7 MAXIMUM NUMBER OF ALLOWED PARKING SPACES**

Number of Off-Street Parking Spaces Required	Maximum Allowed (% of minimum required in Table 21.07-8, <i>Off-Street Parking Schedule A</i> )
< 40 spaces	150% [1] [2]
40 – 160 spaces	125% [1]
> 160 spaces	110% [1] [3]
<p><b>Notes:</b></p> <p>[1] Restaurant Uses: In spite of Note [2] below, restaurant, bar/tavern, and brew pub establishments that do not serve fast food and that do not include customer drive-throughs may, in any use district, have up to 200% of the minimum parking required in Table 21.07-8, <i>Off-Street Parking Schedule A</i>.</p> <p>[2] CBD and Mixed-Use Districts: In districts intended for more intense, pedestrian friendly, and mixed-use development, namely the CBD, MMU, CCMU, and RMX districts, the maximum number of spaces allowed shall be 125% of the minimum parking required in Table 21.07-8, <i>Off-Street Parking Schedule A</i>.</p>	

**TABLE 21.07-7 MAXIMUM NUMBER OF ALLOWED PARKING SPACES**

[3] Establishments with more than 160 required parking spaces that wish to provide more than 110% of their required parking, may provide more than 110% of their required parking when they provide a 1% increase in interior landscaping for every 1% increase in parking over 110%, up to a maximum of 135%. (For example, an establishment that desires to provide 115% of their required parking shall add 5% more interior landscaping than required in section 21.07.080F.6.d.)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32

- c. Exceptions**
  - i.** If application of the maximum parking standard would result in fewer than six parking spaces, the development shall be allowed six parking spaces.
  - ii.** For the purpose of calculating parking requirements, the following types of parking spaces shall not count against the maximum parking requirement, but shall count toward the minimum requirement:
    - (A)** Accessible parking
    - (B)** Vanpool and carpool parking
    - (C)** Parking structures, underground parking, and parking within, above, or beneath the building(s) it serves.
  - iii.** For the purpose of calculating parking requirements, fleet vehicle parking shall not count against either the minimum or maximum requirements:
  - iv.** Exceptions to the maximum parking requirement may be allowed by the Traffic Engineer and the Building Official in situations that meet all of the following criteria:
    - (A)** The proposed development has unique or unusual characteristics such as high sales volume per floor area or low parking turnover, which create a parking demand that exceeds the maximum ratio and which typically does not apply to comparable uses; and,
    - (B)** The parking demand cannot be accommodated by on-street parking or shared parking with nearby uses; and,
    - (C)** The request is the minimum necessary variation from the standards; and,
    - (D)** If located in a mixed-use district, the uses in the proposed development and the site design are highly supportive of the mixed-use concept and support

high levels of existing or planned transit and pedestrian activity.

**E. Parking Alternatives<sup>66</sup>**

The Traffic Engineer and Director may approve alternatives to providing the number of off-street parking spaces required by subsection 21.07.090D., in accordance with the following standards.

**1. Shared Parking<sup>67</sup>**

The Traffic Engineer and Director may approve shared parking facilities for developments or uses with different operating hours or different peak business periods if the shared parking complies with all of the following standards:

**a. Location**

Shared parking spaces shall be located within 600 feet of an entrance, unless approved by the Traffic Engineer.

**b. Zoning Classification<sup>68</sup>**

Shared parking areas shall be located on a site with the same or a more intensive zoning classification than required for the primary uses served.

**c. Shared Parking Study**

Those proposing to use shared parking as a means of satisfying off-street parking requirements shall submit a shared parking analysis to staff that clearly demonstrates the feasibility of shared parking. The study shall be provided in a form established by the Traffic Engineer and shall be made available to the public. It shall address, at a minimum, the size and type of the proposed development, location of required parking, the composition of tenants, the anticipated rate of parking turnover, and the anticipated peak parking and traffic loads for all uses that will be sharing off-street parking spaces. The applicant shall also demonstrate that any parking reduction requested as part of the shared parking study will not result in the spillover of parking onto other properties.

**d. Agreement for Shared Parking**

The parties involved in the joint use of off-street parking facilities shall submit a written agreement in a form to be recorded for such joint use, approved by the Traffic Engineer and Administrative Official as to form and content. The agreement shall guarantee the use of the shared parking facilities in perpetuity, and shall provide for the maintenance of jointly used parking facilities. The Traffic Engineer and Director may impose such conditions of approval as may be necessary to ensure the adequacy of parking in areas affected by such an agreement. Recordation of the agreement shall take place before issuance of a building permit for any use to be served by the shared parking area. A shared parking agreement may be revoked only if all required off-street parking spaces will be provided in accordance with the requirements of subsection 21.07.090D.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45

**2. Off-Site Parking<sup>69</sup>**

The Traffic Engineer and Administrative Official may approve the location of required off-site parking spaces on a separate lot from the lot on which the principal use is located if the off-site parking complies with all of the following standards:

**a. Ineligible Activities**

Required parking spaces for residential uses must be located on the site of the use or within a tract owned in common by all the owners of the properties that will use the tract. Required parking spaces for persons with disabilities may not be located off-site.

**b. Location**

No off-site parking space may be located more than 600 feet from an entrance (measured along the shortest legal pedestrian route) unless approved by the Traffic Engineer. Off-site parking spaces shall be connected to the use by acceptable pedestrian facilities. Off-site parking spaces may not be separated from the use served by a street right-of-way with a width of more than 80 feet, unless a grade-separated pedestrian walkway, a traffic signal, a shuttle bus, or other traffic control is provided or other traffic control or remote parking shuttle bus service is provided.

**c. Zoning Classification**

Off-site parking areas shall have the same or a more intensive zoning classification applicable to the primary use served.

**d. Agreement for Off-Site Parking**

In the event that an off-site parking area is not under the same ownership as the principal use served, a written agreement between the record owners shall be required. The agreement shall guarantee the use of the off-site parking area in perpetuity. An attested copy of the agreement between the owners of record shall be submitted to the Municipality for recordation in a form established by the Municipal Attorney. Recordation of the agreement shall take place before issuance of a building permit or certificate of occupancy for any use to be served by the off-site parking area. An off-site parking agreement may be revoked only if all required off-street parking spaces will be provided in accordance with the requirements of this chapter. No use shall be continued if the parking is removed unless substitute parking facilities are provided, and the Traffic Engineer and Administrative Official shall be notified at least 60 days prior to the termination of a lease for off-site parking.

**3. On-street Parking**

In mixed-use districts, on-street parking spaces in the right-of-way along the property line, between the two side lot lines of the site, may be counted to satisfy the minimum off-street parking requirements. In all other districts, on-street parking meeting the above criteria shall be counted towards off-street parking requirements if approved by the Traffic Engineer.



- 1  
2  
3  
4
4. **District Parking**  
Minimum required off-street parking spaces may be waived for properties within the boundaries of a public parking or local improvement district that provides district-wide parking facilities.
- 5  
6  
7  
8  
9
5. **Stacked, Tandem, and Valet Parking**  
Stacked, tandem, or valet parking for nonresidential uses is allowed if an attendant is present to move vehicles. In addition, a guarantee acceptable to the Municipality shall be filed with the Municipality ensuring that a valet parking attendant shall always be on duty when the parking lot is in operation.
- 10  
11  
12  
13  
14
6. **Parking Structures**
- a. **Maximum Parking Waiver**  
Where 75 percent or more of the parking provided for a use is in one or more parking structures, there shall be no maximum cap on the number of parking spaces.
- 15  
16  
17  
18
- b. **Credit for Nearby Public Parking Structures**  
In the mixed-use districts, spaces available in public parking structures located within 600 feet of the subject use may be counted toward the total amount of required off-street parking.
- 19  
20  
21  
22  
23  
24  
25
- c. **Floor Area Bonus for Automated and Underground Parking in the CBD and Mixed-use Districts**  
A floor area bonus shall be granted for underground parking structures and automated parking structures in the CBD and mixed-use districts. The bonus shall be granted at a ratio of three square feet of additional bonus area for each square foot of structured parking that is underground or within an automated parking structure.
- 26  
27  
28  
29
7. **Sites in Mixed-use Districts**  
In the mixed-use districts, the total requirement for off-street parking facilities shall be the sum of the requirements for the various uses computed separately, subject to the modifications set forth below.
- 30  
31  
32
- i. All uses within the mixed-use districts shall be eligible for a five percent parking reduction to reflect the reduced automobile use associated with mixed-use developments.
- 33  
34  
35  
36
- ii. A 10 percent parking reduction for multifamily residential dwellings may be allowed if the proposed use is located within 600 feet of a transit stop with midday service headways of 30 minutes or less in each direction.
- 37  
38  
39  
40
- iii. For non-residential uses, the minimum parking requirement may be reduced 10 percent if the use incorporates a transit stop that meets minimum design standards established by the Municipality.
- 41  
42  
43  
44
- iv. The total number of parking spaces required for a use or uses in a mixed-use District may be further reduced by the Traffic Engineer and Director if the applicant prepares a parking evaluation that demonstrates a reduction is appropriate

1 based on the expected parking needs of the development,  
 2 availability of mass transit, and similar factors. The parking  
 3 evaluation shall be prepared in a form and manner prescribed  
 4 by the Traffic Engineer.

5 **8. Other Eligible Alternatives**

6 The Traffic Engineer may approve any other alternative to providing off-street  
 7 parking spaces on the site of the subject development if the applicant  
 8 demonstrates to the satisfaction of the Traffic Engineer that the proposed plan  
 9 will protect surrounding neighborhoods, maintain traffic circulation patterns,  
 10 and promote quality urban design to at least the same extent as would strict  
 11 compliance with otherwise applicable off-street parking standards.

12 **F. Off-Street Loading Requirements<sup>70</sup>**

13 No building or structure used for any multi-family, commercial, industrial, or  
 14 public/institutional use shall be erected, nor shall any such existing building or  
 15 structure be altered so as to increase its gross floor area by 25 percent or more,  
 16 without prior provision for off-street loading space in conformance with the following  
 17 minimum requirements:

18 **1. Types of Loading Berths**

19 Required off-street loading space shall be provided in berths that conform to  
 20 the following minimum specifications:

- 21 a. Type A berths shall be at least 60 feet long by ten feet wide by 14 feet  
 22 six inches high, inside dimensions.
- 23 b. Type B berths shall be at least 30 feet long by ten feet wide by 14 feet  
 24 six inches high, inside dimensions.
- 25 c. Type C berths shall be located in the rear of a lot and utilize part of an  
 26 adjacent alley. The building setback shall be a minimum of five feet  
 27 from the property line along the alley for the entire width of the lot.

28 **2. Number of Spaces**

29 The following numbers and types of berths shall be provided for the specified  
 30 uses in Table 21.07-8, *Off-Street Loading Berths*; provided, however, that, in  
 31 any mixed-use district, one type C berth may be substituted for one type B  
 32 berth. The uses specified in this subsection shall include all structures  
 33 designed, intended, or arranged for such use.

TABLE 21.07-8: OFF-STREET LOADING BERTHS			
Use	Aggregate Gross Floor Area (square feet)	Berths Required	Type
Residential Uses			
Multiple-family dwellings	25,000--150,000	1	B
	150,000--400,000	2	B

<b>TABLE 21.07-8: OFF-STREET LOADING BERTHS</b>			
<b>Use</b>	<b>Aggregate Gross Floor Area (square feet)</b>	<b>Berths Required</b>	<b>Type</b>
	Each additional 250,000 or fraction thereof	1 additional	B
<b>Public/Institutional Uses</b>			
Cultural facilities <sup>71</sup>	24,000--50,000	1	B
	50,000--100,000	2	B
	Over 100,000, each additional 50,000 or major fraction thereof	1 additional	B
Educational facilities	Over 14,000	1	B
Health care facilities	10,000--100,000	1	B
	Over 100,000	2	B
Railroad freight terminals and other transportation facilities	12,000--36,000	1	A
	36,000--60,000	2	A
	60,000--100,000	3	A
	Each additional 50,000 or fraction thereof	1 additional	A
<b>Commercial Uses</b>			
Assembly uses	25,000--150,000	1	B
	150,000--400,000	2	B
	Each additional 250,000 or fraction thereof	1 additional	B
All commercial establishments not otherwise specified	7,000--24,000	1	B
	24,000--50,000	2	B
	50,000--100,000	3	B
	Over 100,000, each additional 50,000 or major fraction thereof	1 additional	B
Visitor accommodations and office uses	25,000--40,000	1	B
	40,000--100,000	2	B

**TABLE 21.07-8: OFF-STREET LOADING BERTHS**

Use	Aggregate Gross Floor Area (square feet)	Berths Required	Type
	Each additional 100,000 or major fraction thereof	1 additional	B
Industrial Uses			
All industrial uses	12,000--36,000	1	A
	36,000--60,000	2	A
	60,000--100,000	3	A
	Each additional 50,000 or fraction thereof	1 additional	A

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31

**3. Uses Not Specifically Mentioned**

In the case of a use not specifically mentioned in this section, the requirements for off-street loading facilities shall be the same as the use mentioned in this section which, in the opinion of the Traffic Engineer, is most similar to the use not specifically mentioned.

**4. Concurrent Different Uses**

When any proposed structure will be used concurrently for different purposes, final determination of loading requirements shall be made by the Traffic Engineer, but in no event shall the loading requirements be less than the total requirements for each use based upon its aggregate gross floor area, unless approved by the Traffic Engineer.

**5. Location of Off-Street Loading Facilities**

Off-street loading facilities required under this title shall be in all cases on the same lot or parcel of land as the structure they are intended to serve. The required off-street loading space shall not be part of the area used to satisfy the off-street parking requirements unless approved by the Traffic Engineer. To the maximum extent feasible, loading areas shall be located to the rear of a site and/or away from adjacent residential areas. However, noise and glare impacts shall be considered when loading facilities are proposed to be placed adjacent to residential areas, or in an area with a residential zoning classification. Mitigation techniques, including appropriate siting and site design measures, may be required by the Traffic Engineer.

**6. Manner of Using Loading Areas**

No space for loading or unloading of vehicles shall be so located that a vehicle using such loading space projects into any public street. Loading space shall be provided with access to an alley, or, if no alley adjoins the lot, with access to a street. Any required front, side, or rear yard may be used for loading unless otherwise prohibited by this title. Design and location of entrances and exits for required off-street loading areas shall be subject to the approval of the Traffic Engineer. Service and off-street loading areas shall

1 comply with the screening requirements for such areas set forth in subsection  
2 21.07.080H.4.

3 **7. Signs**  
4 The owners of the property shall provide, locate, and maintain loading signs  
5 as specified by the Traffic Engineer. Such signs shall not be counted against  
6 allowed advertising sign area.

7 **G. Computation of Parking and Loading Requirements**

8 **1. Fractions**  
9 For residential uses, when measurements of the number of required spaces  
10 result in a fractional number, any fraction shall be rounded up to the next  
11 higher whole number. For all other uses, when measurements of the number  
12 of required spaces result in a fractional number, any fraction shall be rounded  
13 down to the next lower whole number.

14 **2. Multiple Uses<sup>72</sup>**  
15 Developments containing more than one use shall provide parking and  
16 loading in an amount equal to the total of the requirements for all uses, except  
17 as allowed by this section. However, loading facilities may be shared  
18 between uses when approved by the Traffic Engineer.

19 **3. Area Measurements**  
20 Unless otherwise specified, all square footage-based parking and loading  
21 standards shall be computed on the basis of gross floor area of the use in  
22 question. A parking structure within a building and any enclosed rooftop  
23 mechanical equipment shall not be counted in such measurement.

24 **4. Computation of Off-Street Parking**  
25 Required off-street loading space shall not be included as off-street parking  
26 space in computation of required off-street parking space, unless approved by  
27 the Traffic Engineer pursuant to subsection F.5. above.

28 **5. Parking for Unlisted Uses**  
29 Parking requirements for uses not specifically listed in subsection  
30 21.07.090.C. shall be determined by the Traffic Engineer based on the  
31 requirements for the closest comparable use, as well as on the particular  
32 parking demand and trip generation characteristics of the proposed use. The  
33 Traffic Engineer may alternately require the submittal of a parking demand  
34 study that justifies estimates of parking demand based on the  
35 recommendations of the Institute of Transportation Engineers, and includes  
36 relevant data collected from uses or combinations of uses that are the same  
37 or comparable to the proposed use in terms of density, scale, bulk, area, type  
38 of activity, and location.

39 **6. Dimensions of Parking Spaces<sup>73</sup>**  
40 The parking configuration stated in the following table shall apply to all  
41 required off-street parking, except as stated below.

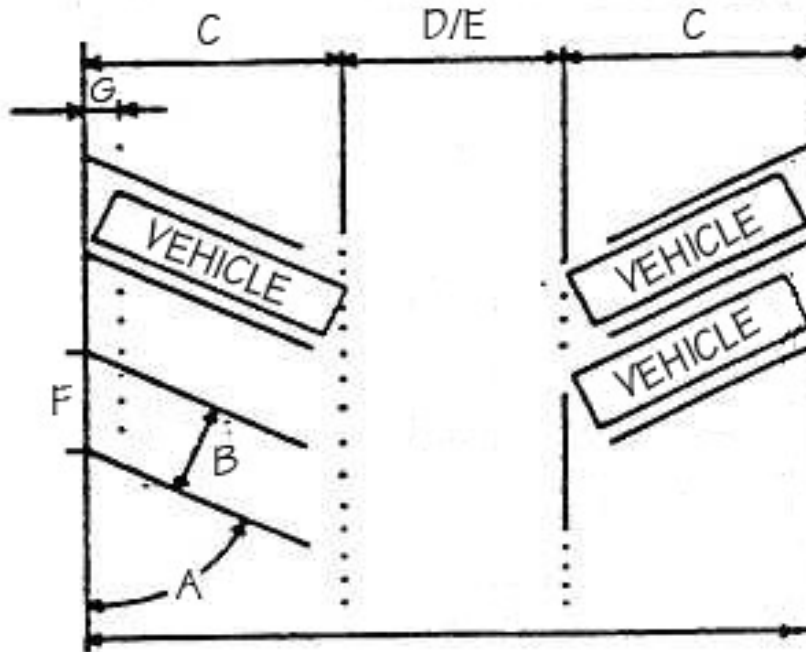
TABLE 21.07-9: PARKING ANGLE DIMENSIONS						
A	B	C	D	E	F	G
Parking Angle	Stall Width	Stall to Curb	Aisle Width 1-way	Aisle Width 2-way	Curb Length	Overhang
0°	9.0	9.0	12.0	24	23.0	0
	9.5	9.5	12.0	24	23.0	
	10.0	10.0	12.0	24	23.0	
20°	9.0	15.0	12.0	24	26.3	0.7
	9.5	15.5	12.0	24	27.8	
	10.0	15.9	12.0	24	29.2	
30°	9.0	17.3	12.0	24	18.0	1.0
	9.5	17.8	12.0	24	19.0	
	10.0	18.2	12.0	24	20.0	
40°	9.0	19.1	12.0	24	14.0	1.3
	9.5	19.5	12.0	24	14.8	
	10.0	19.9	12.0	24	15.6	
45°	9.0	19.8	12.0	24	12.7	1.4
	9.5	20.1	12.0	24	13.4	
	10.0	20.5	12.0	24	14.1	
50°	9.0	20.4	12.0	24	11.7	1.5
	9.5	20.7	12.0	24	12.4	
	10.0	21.0	12.0	24	13.1	
60°	9.0	21.0	18.0	24	10.4	1.7
	9.5	21.2	18.0	24	11.0	
	10.0	21.5	18.0	24	11.5	
70°	9.0	21.0	19.0	24	9.6	1.9
	9.5	21.2	18.5	24	10.1	
	10.0	21.2	18.0	24	10.6	
80°	9.0	20.3	22.0	24	9.1	2.0
	9.5	20.4	21.0	24	9.6	
	10.0	20.5	22.0	24	10.2	
90°	9.0	20.0	23.0	24	9.0	2.0
	9.5	20.0	22.0	24	9.5	
	10.0	20.0	22.0	24	10.0	

NOTE: All dimensions are to the nearest tenth of a foot.

1  
2  
3  
4

**7. Calculation of Parking Space Dimensions**

The spatial relationships described in Table 21.07-9 shall be calculated in the manner depicted in the following diagram<sup>74</sup>:



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

**8. Exception for Employee Parking Spaces**

Parking spaces that are signed for employees only may be a minimum of 8.5 feet wide and 20 feet long.

**9. Recreational Vehicle Spaces**

Parking spaces for recreational vehicles, if provided, shall be a minimum of 10 feet by 40 feet.

**H. Parking Lot Design Standards**

Parking lots and spaces provided in accordance with the requirements of this section shall meet the following standards:

**1. Location of Parking Lots**

Parking lots shall be located on the proposed development site in accordance with the following standards for each use type specified, except when alternate configuration is approved by the Traffic Engineer and the Building Official.

**a. Commercial Developments in the AC, O, IC, I-1, and I-2 Districts**

**i. Relationship to Buildings**

In order to reduce the scale of the paved surfaces, to create a unified streetscape, and to shorten the walking distance between the parked vehicle and the building, off-street parking for all commercial developments shall be located according to one of the following options.

- 1 (A) No more than 70 percent of the off-street surface  
2 parking spaces provided for all uses contained in the  
3 development's primary building(s) shall be located in  
4 the front parking area (i.e., the remaining spaces  
5 must be located to the rear or side of the primary  
6 building), or
- 7 (B) More than 70 percent of the off-street parking spaces  
8 provided for all uses contained in the development's  
9 primary building(s) may be located in the front  
10 parking area, provided the size of the parking lot  
11 perimeter landscaping required by section  
12 21.07.080F.6. is increased by 50 percent. (For  
13 example, if the required parking lot perimeter  
14 landscaping is 10 feet and 75% of the parking is  
15 between the front façade and the street, then the  
16 landscaping area would be increased to 15 feet and  
17 additional landscaping required.) For purposes of  
18 this section, the "primary building" shall be defined as  
19 the building with the most business activity.[ADD  
20 ILLUSTRATION]
- 21 ii. *Parking in Buffers*  
22 No parking shall be permitted in any required perimeter  
23 landscape buffer.
- 24 iii. *Relationship to Residential Areas*  
25 To the maximum extent feasible, parking lots shall be located  
26 away from any adjoining residential uses while still remaining  
27 in compliance with the standards and requirements of this  
28 section.
- 29 b. **Commercial Development in the CBD and Mixed-Use Districts**  
30 i. *Relationship to Street Frontage*  
31 No more than 70 percent of a site's frontage on the primary  
32 adjacent public street shall be occupied by a parking lot,  
33 perimeter parking lot buffer, or driveways. At least 30 percent  
34 must be occupied by a wall of the primary building. [ADD  
35 ILLUSTRATION]
- 36 c. **Multi-Family Development in the R-3, R-4, and O Districts**  
37 i. *Relationship to Street Frontage*  
38 No more than 50 percent of a site's frontage on the primary  
39 adjacent public street shall be occupied by a parking lot,  
40 perimeter parking lot buffer, parking structure, garages, or  
41 carports. [ADD ILLUSTRATION]
- 42 ii. *Parking in Buffers*  
43 No parking shall be permitted in any required perimeter  
44 landscape buffer.



d. **Multi-Family Development in the CBD and Mixed-Use Districts**

i. **Relationship to Street Frontage**

No more than 70 percent of a site's frontage on the primary adjacent public street shall be occupied by a parking lot, perimeter parking lot buffer, or driveways. At least 30 percent must be occupied by a wall of the primary building(s).

ii. **Parking Underneath Buildings**

Parking may be allowed on the ground level underneath a building provided the parking area is fully screened by a wall or façade or other architectural treatment consistent with the rest of the building in terms of style, detail, and materials.

iii. **Parking Structures<sup>75</sup>**

The ground floor of all parking structures must be screened by usable ground-floor commercial, institutional, or residential space of a minimum depth of 25 feet from any property line that abuts a public street.

2. **Location of Parking Spaces<sup>76</sup>**

a. **General**

Except as provided in this section, all required parking spaces shall be on the same lot as the main building served, or on an abutting lot provided that the zoning district in which the lot is located allows for off-street parking as a permitted principal use, site plan review use, or conditional use. Such abutting lot shall be under the same ownership as that of the building to be served, and there shall be a parking agreement, approved by the Municipality and recorded, which provides for parking requirements in perpetuity.

b. **Mixed Use**

Any off-street or structured parking in the mixed-use districts may be on the same lot as the building served, abutting or contiguous lots, or any lot within 600 feet.

c. **Recreational Vehicle Spaces**

All lots with 100 or more spaces associated with a retail commercial use shall provide one designated parking space for recreational vehicles per 100 regular spaces. The recreational vehicle spaces shall be depicted on the parking lot layout plan.

d. **Carpool and Vanpool Spaces**

All non-residential lots with 100 or more spaces or that serve uses with 50 or more employees on a single shift shall designate at least two percent of the long-term employee or student parking spaces for carpool/vanpool parking. These designated spaces shall be located closer to the building entrances than other employee or student parking, with the exception of disabled-accessible and short-term visitor parking. These spaces shall be clearly marked "Reserved – Carpool/Vanpool Only" and include hours of use, per the Manual of Uniform Traffic Control Devices.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45

**3. Pedestrian Access and Circulation**

**a. Purpose**

These standards are intended to provide safe, efficient, and convenient pedestrian access and circulation patterns within parking lots. By creating a safe, continuous network of pedestrian walkways within and between parking lots and developments and adjoining streets and developments, pedestrians will feel more inclined to walk (rather than drive) between stores and other destinations. A pedestrian network that offers clear circulation paths from the parking areas to building entries also creates a safer, more inviting pedestrian environment.

**b. Pedestrian Circulation Plan Required**

Applicants shall submit a pedestrian circulation plan for all parking areas that demonstrates compliance with the following standards.

**c. Pedestrian Connections**

In addition to any pedestrian connections required under this chapter, clearly defined on-site pedestrian walkways shall:

- i. Connect each primary entrance of any multi-family or non-residential building with all parking areas or parking structures that serve such primary building(s), and with any required drop-off areas.
- ii. Within all parking lots containing 40 or more spaces, be provided between a public right-of-way and building entrances when buildings are not located directly adjacent to the sidewalk.

**d. Demarcation of Pedestrian Connections**

Where an on-site pedestrian walkway system abuts a parking lot or internal street or driveway, the walkway shall be clearly marked and physically separated from the parking lot or drive through the use of a (1) an upright curb of six inches or more in height, bollards, or other physical buffer; and (2) a change in paving materials distinguished by its color, texture, edge, or striping. The vehicle overhang shall not encroach into a curbed walkway. Where an on-site pedestrian walkway crosses a parking lot or internal street or driveway, the crosswalk shall be clearly marked and delineated through a change in paving materials distinguished by its color, texture, edge, or striping, and shall meet any requirements of the American with Disabilities Act. Additionally, pedestrian use areas shall be delineated with visual elements such as light poles, bollards, planters, and architectural elements to highlight their location, particularly after a snowfall.

**e. Pedestrian Drop-Off Areas**

For all parking lots with 40 or more spaces, a defined pedestrian drop-off area shall be provided near the primary building entry. The drop-off areas shall meet the standards set forth in the following section.

4. **Vehicular Access and Circulation**<sup>77</sup>

Parking areas should be designed for a safe and orderly flow of traffic throughout the site. Plans shall be reviewed and approved by the Traffic Engineer. Applicants shall submit a vehicular circulation plan for all parking areas that demonstrates compliance with the following standards:

a. **Key Elements**

The vehicular circulation plan shall address the following elements as they relate to parking lots, including but not limited to: fire lanes, emergency access, drive-throughs, drop-offs, and loading areas.

b. **Circulation Patterns**

Circulation patterns within parking areas shall be well defined with curbs, landscaping, landscaped islands, and other similar features. In order to define circulation and provide better site distance, islands at the end of each aisle are encouraged. Parking spaces along major circulation drives are prohibited. Where loading facilities are required, truck circulation shall be considered, and truck turning radii shall be shown on the vehicular circulation plan.

c. **Dead-End Parking Aisles**

To the maximum extent feasible, dead-end parking aisles shall be avoided.

d. **Relationship to Adjacent Properties and Parking Lots**

The plan shall show existing parking and circulation patterns on adjacent properties and potential connections.

e. **Parking Area Entries/Driveways**

Entries and driveways providing access to parking areas shall conform to the Municipality of Anchorage Driveway Design Standards currently adopted by the Traffic Department. A copy of those standards can be obtained from the Traffic Department. Access to roads owned by the State of Alaska requires Department of Transportation and Public Facilities approval and a current valid driveway permit. The Municipality cannot issue driveway permits for State-owned roads.

f. **Passenger Drop-Off Areas**

All institutional, entertainment, and commercial uses such as schools/daycare, stadiums, and theaters that have high-volume peak traffic volumes shall provide an area for drop-offs and pick-ups that meets the following requirements:

i. **Plan**

The vehicle access and circulation plan shall show the location and design of the proposed passenger drop-off area. The plan shall also include information regarding projected usage, hours of operation, peak loading/unloading time, plans for directing traffic, safety measures, and other information deemed necessary by the Traffic Engineer to designing a safe and well-functioning drop-off area.

- 1  
2  
3  
4  
5  
6  
7  
8  
9
- 10  
11  
12  
13  
14
- 15  
16  
17
- 18  
19  
20  
21
- 22  
23  
24  
25
- 26  
27
- 28  
29  
30  
31
- 32  
33  
34  
35
- 36  
37
- 38  
39  
40
- ii. **Schools**  
Drop-off and pick-up areas shall be required for schools (public or private). Drop-off and pick-up areas may be adjacent to a primary driveway access or aisle, but shall be located far enough off the roadway so that they do not cause traffic to stop. Additionally, access to drop-off areas shall not be impeded by location of parking lot access drives. Length and design of the drop-off and pick-up areas shall be approved by the Traffic Engineer.
  
  - g. **Parking and Maneuvering**  
All parking spaces and vehicle maneuvering areas required by this section, except those that serve single-family and duplex residences, shall be located entirely on private property unless specifically provided otherwise by this section.
  
  - h. **Alleys**  
The usable portion of an alley may be credited as aisle space subject to safety approval by the Traffic Engineer.
  
  - i. **Parking Lot Connections**  
Required parking areas serving a site, whether located on that same lot or on an adjacent lot, may be connected by means of a common access driveway within or between the interior of such lots.
  
  - j. **Ingress and Egress Points**
    - i. Ingress and egress to parking facilities shall be designed to maintain adequate sight distance and safety and as prescribed in municipal driveway standards.
  
    - ii. Adequate ingress to and egress from each parking space shall be provided without backing more than 25 feet.
  
  - k. **Parking Space Obstructions**  
No wall, post, guardrail, or other obstruction that would restrict vehicle door opening shall be permitted within five feet of the centerline of a parking space.
  
  - 5. **Snow Storage and Handling**
    - a. **Snow Storage in All Zoning Districts**
      - i. No snow shall be stored in required landscaping areas or on pedestrian walkways or sidewalks.
  
      - ii. No snow pile shall be taller than fifteen (15) feet, except as allowed by 21.05.060E.4., *Snow Disposal Site*.
  
      - iii. Snow shall not be stored on any site (except for a *Snow Disposal Site* pursuant to subsection 21.05.060E.4.) for more than 21 days.

1                   **b.       Snow Storage in Multi-Family Developments of Five (5) or More**  
2                   **Units**

3                   In addition to the general requirements of a. above, multi-family  
4                   developments of five (5) or more units shall meet the following  
5                   requirements:

6                   i.           In addition to the area set aside to meet the off-street parking  
7                   requirements of this chapter, a portion of the site equal to a  
8                   minimum of 20 percent of the area devoted to uncovered and  
9                   unheated surface parking and driveways shall be set aside  
10                  for snow storage. No parking credit shall be given for snow  
11                  storage areas. The snow storage area shall be clearly  
12                  indicated on the parking lot plan.

13                  ii.           The designated snow storage area may overlap with fifty  
14                  percent (50%) of the private open space required in section  
15                  21.07.030C, provided that:

16                                   (A)       No trees or shrubs exist in that portion of private open  
17                                   space which overlaps with the snow storage area;  
18                                   and

19                                   (B)       All areas of the private open space used for snow  
20                                   storage are within fifteen (15) feet of a paved area.

21                  **6.       Refuse and Trash Collection Areas**

22                  a.           All refuse and trash collection areas shall be delineated on the  
23                  parking lot layout and design plan.

24                  b.           All refuse and trash collection areas shall be screened in accordance  
25                  with 21.07.080H.3., *Refuse Collection*.

26                  c.           Refuse and trash collection areas shall not be located within any area  
27                  used to meet the minimum parking specifications of this section or on  
28                  or near any pedestrian use areas such as sidewalks or walkways.

29                  d.           Refuse and trash collection receptacles shall not be located in a  
30                  manner that obstructs or interferes with any designated vehicular or  
31                  pedestrian circulation routes within a parking lot.

32                  **7.       Maximum Grade<sup>78</sup>**

33                  The maximum grade for any parking space or interior drive lanes shall be five  
34                  percent, except that for accessible spaces the maximum grade shall be two  
35                  percent (2%), as required by the Americans with Disabilities Act.

36                  **8.       Paving**

37                  a.           **Material**

38                  Except as provided in b. below and in section 21.07.100D.2.e, *Paved*  
39                  *Driveways*, all parking lots shall be paved. The paving shall be with  
40                  impermeable materials such as a concrete or asphalt compound to  
41                  standards prescribed by the Traffic Engineer, except that a  
42                  permeable surface may be used when approved by the Traffic

1 Engineer. Single- and two-family development in the R-5, R-6, R-9,  
 2 R-10, and TA districts are exempt from this requirement.

3 **b. Temporary Parking Lots**

4 Temporary parking lots shall not be paved, unless required by the  
 5 Municipal Engineer.

6 **9. Bicycle Racks**

7 All parking lots with more than 40 spaces shall provide at least one bicycle  
 8 rack with a minimum of four parking slots. Such racks shall be conveniently  
 9 located near the primary entry of the primary building on the site, but shall not  
 10 obstruct pedestrian use areas.<sup>79</sup>

11 **I. Vehicle Stacking Spaces<sup>80</sup>**

12 The vehicle stacking standards of this section shall apply unless otherwise expressly  
 13 approved by the Traffic Engineer:

14 **1. General**

15 Uses of land and structures requiring a drive-through shall provide sufficient  
 16 queuing space within the site to avoid vehicles waiting within the public right-  
 17 of-way. Such uses shall demonstrate to the Traffic Engineer that sufficient in-  
 18 line waiting spaces are provided as part of the parking plan to avoid  
 19 encroachment into the public rights-of-way.

20 **2. Minimum Number of Spaces**

21 Off-street stacking spaces shall be provided as follows:

TABLE 21.07-10: VEHICLE STACKING AREAS		
Activity Type	Minimum Stacking Spaces	Measured From
Bank teller lane	4	Teller or window
Automated teller machine drive-through	3	Teller machine
Restaurant drive-through	6	Order box
Restaurant drive-through	4	Order box to pick-up window
Car wash stall, automatic	6	Entrance
Car wash stall, self-service	3	Entrance
Food and Beverage Kiosks	4	Pick-up Window
Gasoline pump island	2	Pump island
Security gate entrance for self storage or vehicle storage facility	[1]	Security gate
Other	Determined by Traffic Engineer.	
Note [1]: The required on-site queue lane shall measure no less than 50 feet in length and 24 feet in width. The width of the self-storage facility gate is excluded from this requirement.		

22

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

**3. Design and Layout**

Required stacking spaces are subject to the following design and layout standards.

**a. Size**

Stacking spaces shall be a minimum of eight feet by 20 feet in size, except as noted above in Table 21.07-10, *Vehicle Stacking Areas*, for self-storage and vehicle storage facilities.

**b. Location**

Stacking spaces may not impede on- or off-site traffic movements or movements into or out of off-street parking spaces.

**c. Design**

Stacking spaces shall be separated from other internal driveways by raised medians if deemed necessary by the Traffic Engineer for traffic movement and safety.

**J. Accessible Parking Requirements<sup>81</sup>**

A portion of the total number of required off-street parking spaces in each off-street parking area shall be specifically designated, located, and reserved for the use by persons with physical disabilities.

**1. Number of Spaces Required**

Accessible parking requirements for commercial, industrial, public, and institutional uses, and multi-family developments requiring more than 25 spaces, are as follows:

TABLE 21.07-11: ACCESSIBLE PARKING REQUIREMENTS			
Total Vehicle Spaces in Parking Lot	Minimum Car Accessible Spaces	Minimum Van Accessible Spaces	Total Accessible Parking Spaces, Required Minimum
1--25	0	1	1
26--50	1	1	2
51--75	2	1	3
76--100	3	1	4
101--150	4	1	5
151--200	5	1	6
200--300	6	1	7
301--400	7	1	8
401--500	8	1	9
501--549	9	1	10
550--599	10	1	11
600--649	11	1	12
650--699	12	1	13
700--749	13	1	14
750--799	14	1	15
800--849	14	2	16
850--899	15	2	17
900--949	16	2	18

**TABLE 21.07-11: ACCESSIBLE PARKING REQUIREMENTS**

Total Vehicle Spaces in Parking Lot	Minimum Car Accessible Spaces	Minimum Van Accessible Spaces	Total Accessible Parking Spaces, Required Minimum
950--999	17	2	19
1,000--1,099	18	2	20
1,100--1,199	19	2	21
1,200--1,299	20	2	22
1,300--1,399	21	2	23
1,400--1,499	21	3	24
1,500--1,599	22	3	25
1,600--1,699	23	3	26
1,700--1,799	24	3	27
1,800--1,899	25	3	28
1,900--1,999	26	3	29
2,000--2,099	27	3	30
2,100--2,199	28	3	31
2,200--2,299	28	4	32
2,300--2,399	29	4	33
2,400--2,499	30	4	34
2,500--2,599	31	4	35
2,600+	Total accessible spaces minus total van spaces	1 per each 8 accessible spaces	20 plus 1 for each 100 over 1,000 total vehicle spaces

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21

**2. Dimensions**

Accessible vehicle spaces shall be at least eight feet wide with an access aisle at least five feet wide abutting the space. One in every eight accessible vehicle spaces shall have an abutting aisle eight feet in width for vans. Accessible vehicle space access aisles shall be part of an accessible route to the building or facility entrance as specified in subsection 3. below, *Accessible Routes*. Two accessible vehicle spaces may share a common access aisle. Parked vehicle overhangs shall not reduce the clear width of an accessible route. Accessible vehicle spaces and access aisles shall be level with surface slopes not exceeding two percent in all directions.

**3. Accessible Routes<sup>82</sup>**

**a. Location**

At least one accessible route to the building or facility entrance shall be provided from accessible parking and accessible passenger loading zones.

**b. Width**

The minimum clear width of an accessible route shall be 36 inches.

**c. Surface Textures**

Ground surfaces along accessible routes shall be stable, firm, and slip-resistant.



- 1  
2  
3  
4  
5
- d. **Changes in Levels**  
Changes in level up to 1/4 inch may be vertical and without edge treatment. Changes in level between 1/4 inch and 1/2 inch shall be beveled with a slope no greater than one to two. Changes in level greater than 1/2 inch shall be accomplished by means of a ramp.
- 6  
7  
8  
9  
10  
11
- e. **Gratings**  
If gratings are located in walking surfaces on an accessible route, then they shall have spaces no greater than 1/2 inch wide in one direction. If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominant direction of travel.
- 12  
13  
14
- f. **Ramps**  
ADA ramps cannot protrude into the ADA access aisle. Ramp details shall be included on the plans.
- 15  
16  
17  
18  
19  
20  
21  
22  
23
4. **Location**  
Accessible vehicle spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. The accessible route of travel shall not pass behind parking spaces. In parking facilities that do not serve a particular building, accessible vehicle spaces shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility. In buildings with multiple accessible entrances with adjacent parking, accessible vehicle spaces shall be dispersed and located closest to the accessible entrances.
- 24  
25  
26  
27
5. **Signs**  
Accessible vehicle spaces shall be designated as reserved by a sign showing the symbol of accessibility. Van-accessible spaces shall have an additional sign reading "Van-Accessible" mounted below the symbol of accessibility.
- 28  
29  
30
- a. Eight-foot van accessible aisles require a no-parking sign.
- b. Signs shall be located so that they do not obstruct the ramps or other pedestrian access.
- 31  
32
- c. A handicapped sign detail shall be included in the plan submittal per Municipality sign specifications.
- 33  
34  
35  
36
6. **Implementation of ADA**  
Regulations may be promulgated under section 21.03.040, *Amendments to Text of Title 21*, to implement the requirements of Americans with Disabilities Act of 1991 as it may be amended or interpreted by federal regulation.
- 37  
38  
39  
40
7. **Standards for Parking as Principal Use**<sup>83</sup>  
Where a parking structure or lot is a permitted principal or conditional use and is not providing required parking for another principal use, accessible parking spaces in accordance with this section shall be provided.

1           **K.       Modification of Parking Requirements<sup>84</sup>**

2           The number of required parking spaces shall be that specified in this title unless  
3           modified pursuant to section 21.03.180, *Minor Modifications*, or section 21.03.190,  
4           *Variances*.

5           **21.07.100 RESIDENTIAL BUILDING STANDARDS<sup>85</sup>**

6           **A.       Purpose**

7           The standards of this section 21.07.100 are intended to promote high-quality  
8           residential development and construction; protect property values; encourage visual  
9           variety and architectural compatibility; and promote an integrated character for  
10          Anchorage's neighborhoods. Specifically, the standards:

- 11          1.       Promote new residential developments that are distinctive, have character,  
12          and relate and connect to established neighborhoods;
- 13          2.       Provide variety and visual interest in the exterior design of residential  
14          buildings;
- 15          3.       Provide for a variety of lot sizes and housing types for a range of households  
16          and age groups;
- 17          4.       Enhance the residential streetscape and diminish the prominence of garages  
18          and parking areas;
- 19          5.       Enhance public safety by preventing garages from obscuring main entrances  
20          or blocking views of the street from inside residences;
- 21          6.       Locate active living spaces, entrances, and windows to improve the physical  
22          and visual connection from residences to the street, and foster opportunities  
23          for casual surveillance of the street and outwardly expressed proprietorship of  
24          the neighborhood; and
- 25          7.       Improve the compatibility of attached and multi-family residential development  
26          with the residential character of surrounding neighborhoods.

27          **B.       Applicability**

28          This section applies to all residential development except for residential development  
29          in the R-5, R-6, R-7, R-9, and R-10 districts. This section does not apply in Girdwood.

30          **C.       Alternative Equivalent Compliance**

31          The alternative equivalent compliance procedure set forth in subsection 21.07.010.B.  
32          may be used to propose alternative means of complying with the intent of this section.

33          **D.       Standards for Single-Family and Two-Family Residential Dwellings**

34          1.       **Purpose**

35          This subsection 21.07.100.D. is intended to promote building design that  
36          contributes to a sense of neighborhood and to the overall streetscape by  
37          carefully relating buildings, yards, and garages in relation to public streets and

1 adjacent properties. The standards support visual variety, avoid monotony in  
2 home designs and layouts, and protect property values of both the subject  
3 property and surrounding development.

4 **2. Design Standards**

5 **a. *Mix of Housing Models*<sup>86</sup>**

6 Any development of 5 or more units shall have a mix of housing  
7 models according to the following table:

Table 21.07-12 MIX OF HOUSING MODELS	
Number of units	Number of different models required
5-10	2
11-30	3
31 or more	4

8  
9 Each housing model shall have at least two of the following  
10 variations:

- 11 i. Noticeably different floor plans;
- 12 ii. Noticeably different placement of the building footprint on the  
13 lot;
- 14 iii. Noticeably different garage placement; or
- 15 iv. Noticeably different roof lines.

16 The development shall be arranged to avoid placing identical housing  
17 types on adjacent lots.

18 **b. *Orientation of Dwellings to the Street***

19 Each residence shall have at least one primary pedestrian doorway  
20 for access to the dwelling located on the elevation of the dwelling  
21 facing the front lot line of the property, on or within 8 feet of the most  
22 forward plane of the house, and clearly visible from the street or  
23 public area adjacent to the front lot line. On corner lots, such  
24 pedestrian doorway may be located facing any adjacent street.  
25 Unless prohibited by terrain or other site constraints, the orientation of  
26 new lots shall repeat the predominant relationship of buildings to  
27 buildings and buildings to street along the same block face or the  
28 facing block face.

29 **c. *Garages*<sup>87</sup>**

- 30 i. Garage doors facing the street shall comprise no more than  
31 65 percent of the total length of a dwelling's façade and no  
32 more than 30 percent of the overall square footage of the  
33 dwelling's front façade that faces the street. Ranch-style

- 1 homes are exempted from the overall square footage  
2 limitation.
- 3 ii. Dwelling units with garage doors that face the street and  
4 comprise more than 50 percent of the width of the façade  
5 shall be recessed at least four feet behind the remaining  
6 façade and shall feature at least one design element from List  
7 A and one design element from List B:
- 8 (A) *List A:*  
9 (1) Balcony over the garage  
10 (2) Eyebrow mansard over the entire length of the  
11 garage door extending a minimum of two (2) feet  
12 (3) Entry is pronounced using a porch, columns, or  
13 other similar features
- 14 (B) *List B:*  
15 (1) Windows in the garage door  
16 (2) At least two different materials used on the front  
17 façade  
18 (3) Special paving patterns in the driveway
- 19  
20 iii. The minimum front building setback may be reduced by five  
21 feet when there is a detached garage located in the rear of  
22 the lot behind the principal dwelling structure, or a rear  
23 garage attached to the principal dwelling if the front wall of  
24 the garage is located at least 10 feet behind the façade of the  
25 house.
- 26 d. ***Alleys***<sup>88</sup>  
27 i. If a development includes alleys, the alleys may either be  
28 easements across the rear side of lots, or the alleys may be  
29 dedicated, but in that case, the lot depth requirement is  
30 reduced by half the width of the alley.
- 31 ii. If a residential unit has alley access to a garage, the front  
32 setback for the living portion of the house (but not the garage)  
33 may be reduced to 10 feet.
- 34 iii. If a residential unit is served by an alley, no driveways in the  
35 front yard shall be permitted. All vehicular access, including  
36 to garages, shall be through the alley.
- 37 e. ***Paved Driveways***  
38 For new homes constructed on lots of less than one acre, or in  
39 subdivisions where the majority of lots are less than one acre, all  
40 residential driveways that are less than 150 feet in length shall be  
41 paved with concrete, asphalt, or an asphaltic all-weather surface (not

1 including gravel) to standards prescribed by the Traffic Engineer for  
2 their entire length. For such residential driveways exceeding 150 feet  
3 in length, at least the 100 feet of driveway closest to the public street  
4 shall be paved with such materials. Alternative paving materials may  
5 be used if approved by the Traffic Engineer.

6 **E. Standards for Townhouse Residential<sup>89</sup>**

7 **1. Purpose**

8 The purpose of these standards is to provide a distinctive architectural  
9 character in new townhouse residential development that avoids featureless  
10 design and repetition of facades.

11 **2. Applicability**

12 These standards shall apply to all townhouse structures as well as to  
13 townhouse-style construction on a single lot.

14 **3. Building Articulation and Architectural Variety**

15 **a.** No more than eight townhouse units may be attached in a single row  
16 or building cluster.

17 **b.** The building which is the aggregation of up to eight townhouse units  
18 shall be given architectural and visual interest through two or more of  
19 the following methods:

20 **i.** Providing a projection, recess, or reveal at least every twenty  
21 feet, with a minimum change of plane of two feet;

22 **ii.** Use of two or more distinct materials on each facade;

23 **iii.** Use of distinct variations in architectural style or features,  
24 such as a balcony or similar feature, between individual units;

25 **iv.** Use of distinct variations in roof form.

26 **4. Entryway Treatment**

27 **a.** Entrances should be prominent and visible from the street and from  
28 parking areas.

29 **b.** The main entry of each unit shall be emphasized by the use of at  
30 least two of the following:

31 **i.** A porch or landing;

32 **ii.** Double doors;

33 **iii.** A roofed structure such as a portico, awning, or marquee; or

34 **iv.** The inclusion of side-lights (glazed openings to the side of the  
35 door), and transom-lights (glazed opening above the door) in  
36 the entry design.

1                   **5.     Garages**

- 2                   **a.**     If a development includes alleys, the garages shall be accessed from  
3                                   the alleys, and the front setback may be reduced to ten (10) feet.
- 4                   **b.**     If the development does not include alleys, garages on the street-  
5                                   facing side of the building shall be recessed at least two feet behind  
6                                   the remaining façade.

7                   **F.     Standards for Multi-Family Residential (Four or Fewer Stories)<sup>90</sup>**

8                   **1.     Purpose**

9                   The purpose of these standards is to improve the appearance of design and  
10                   functionality of multi-family development, recognizing the important of design  
11                   in the economic success of urban areas, the need to be more efficient in the  
12                   use of land, and the need to ensure the adequate protection of the  
13                   surrounding area. More specifically, these standards are intended to:

- 14                   **a.**     Provide a distinctive architectural character in new multi-family  
15                                   residential developments that avoids featureless design, large  
16                                   building masses, and repetition of facades;
- 17                   **b.**     Promote sensitive design and planning of multi-family housing units  
18                                   that preserves or improves the characteristics of surrounding  
19                                   development;
- 20                   **c.**     Promote building design, placement, and orientation that contributes  
21                                   to a sense of neighborhood and community; and
- 22                   **d.**     Improve the quality of life of residents of multi-family residential  
23                                   dwellings.

24                   **2.     Applicability**

25                   All development or redevelopment of multi-family residential structures of four  
26                   stories or less shall comply with the following requirements. In the case of  
27                   mixed-use buildings, these standards and the standards of section  
28                   21.04.050.H., *Mixed-Use District Development Standards*, shall both apply.  
29                   In case of conflict, the more stringent standard shall control.

30                   **3.     Building and Parking Location, Layout, and Orientation**

- 31                   **a.**     In multi-building developments, the buildings are encouraged to be  
32                                   arranged to enclose and frame common areas. Common areas and  
33                                   courtyards should be convenient to a majority of units.
- 34                   **b.**     When more than one multi-family structure is constructed:
- 35                                   **i.**     No side, end, or rear wall of a multi-family structure shall be  
36   located within 20 feet of a side, end, or rear wall of any other  
37   multi-family structure;
- 38                                   **ii.**    No side, end, or rear wall of a multi-family structure shall be  
39   located within 30 feet of the front wall of any other multi-family  
40   structure; and

- 1  
2
- iii. No front wall of a multi-family structure shall be located within 40 feet of the front wall of any other multi-family structure.
- 3  
4
- For purposes of measurement in this subsection, projections such as decks and bay windows shall not be counted.
- 5  
6
- c. **Parking<sup>91</sup>**  
All surface parking shall comply with at least two of the following requirements in addition to the parking lot landscaping requirements set forth in section 21.07.080:
- 7  
8
- i. Separated from any building by a landscaped strip of at least six-feet in width, or
- 9  
10
- ii. No more than one double-loaded row of parking between any building on the site and an adjacent public street, or
- 11  
12
- iii. The parking lot is broken up into pods of no more than 40 spaces with pods separated by landscaped areas, raised sidewalks, ornamental fencing, or similar features.
- 13  
14  
15
- 16
- 4. **Building Mass and Articulation<sup>92</sup>**
- 17
- a. Each façade greater than 50 feet in length, measured horizontally, shall incorporate wall plane projections or recesses having a depth of at least 10 percent of the length of the façade, and extending at least 20 percent of the length of the façade. No uninterrupted length of any façade shall exceed 50 horizontal feet.
- 18  
19  
20  
21
- b. The facades of all multi-family buildings shall be articulated through the incorporation of three or more of the following:
- 22  
23
- i. Balconies;
- 24
- ii. Bay or box windows;
- 25
- iii. Porches or arctic entries;
- 26
- iv. Dormers;
- 27
- v. Variations in materials and/or colors;
- 28
- vi. Variations in roof forms;
- 29
- vii. Variation in window sizes and shapes; or
- 30
- viii. Vertical elements that demarcate building modules.
- 31
- c. Buildings located within 20 feet of the public right-of-way shall have a first floor raised at least one foot off the ground to maintain privacy.
- 32  
33
- d. The height of each multi-family building taller than 35 feet shall be stepped down from its highest roofline at least one full story on any
- 34  
35

1 end of the building located within 50 feet of a street-right-of-way or an  
2 adjacent area zoned R-1 or R-2.

3 **5. Roof Form**

4 **a. Roof Design**

5 i. The incorporation of a variety of roof forms is strongly  
6 encouraged. Upper-level residential floors may be  
7 incorporated into the roof form to reduce the apparent height  
8 and mass of buildings.

9 ii. Multi-family residential buildings shall be designed to avoid  
10 any continuous roofline longer than 50 feet. Rooflines longer  
11 than 50 feet shall include at least one vertical elevation  
12 change of at least two feet.

13 **6. Façades and Detail Elements**

14 **a. Facade Materials**

15 i. Highly reflective materials shall not be used in areas where  
16 the location of the building will create undue solar, reflective  
17 gain to surrounding properties

18 ii. Natural, smooth face CMU shall not be used as a primary  
19 exterior finish.

20 iii. Siding material shall be continued down to within nine inches  
21 of finished grade with the following exceptions:

22 (A) If a secondary wainscot finish precludes this condition;  
23 or

24 (B) If grade dictates a siding transition. If this occurs then  
25 the area in question must not exceed 18 inches above  
26 grade and must be screened by approved landscaping.  
27

28 **b. Windows**

29 Except for façades built on side lot lines, all elevations on multi-family  
30 buildings shall contain at least 12 percent windows.

31 **7. Entrances and Porches**

32 **a.** Building/development entries shall comply with at least two of the  
33 following requirements:<sup>93</sup>

34 i. At least one main building entry shall face the primary  
35 adjacent public street;

36 ii. Building entrances face a courtyard that has a direct and  
37 visible connection to an adjacent public street;

38 iii. Building entries are connected to a public sidewalk by  
39 walkways that are not routed through a parking lot;







1 Applicants for alternative equivalent compliance shall demonstrate design strategies  
2 that address each of the four core subject areas set forth below in subsection G.

3 **D. Weather Protection for Pedestrians<sup>97</sup>**

4 **1. General**

5 Sheltering roofs or building projections for protection from rain, wind, snow,  
6 and ice shall be provided in areas of pedestrian activity around  
7 public/institutional and commercial buildings, including sheltered  
8 entranceways at major entrances and pedestrian-oriented facades along  
9 public sidewalks or walkways.

10 **2. Primary Facades and Entrances**

11 Buildings shall incorporate canopies, awnings, or similar sheltering structures  
12 across 60 percent of any ground-floor façade abutting a street sidewalk or  
13 pedestrian walkway. The minimum depth of any canopy or awning shall be  
14 eight feet to minimize snow, ice, and drip lines along pedestrian walkways.  
15 The canopy or awning shall be at least eight feet and no more than 14 feet  
16 above the sidewalk or walkway elevation.

17 **3. Protective Roof Design**

18 Buildings shall avoid roof designs, canopy structures, or other design features  
19 that would allow accumulated snow, ice, or rain to fall or slide onto sidewalks  
20 or walkways. Roofs shall be designed to protect doorways, exterior stairs,  
21 balconies, garage entrances, bicycle parking, and pedestrian sidewalks and  
22 walkways from snow and ice fall. Where sloping roofs incline toward such  
23 areas, protective features such as arcades, loggias, and dormers shall be  
24 used to protect pedestrians from falling snow. Such devices need not be  
25 continuous if foundation planting beds are located to set the walkway away  
26 from the building facades.

27 **4. Wind Study**

28 A wind study shall be performed on all buildings proposed to be over ten (10)  
29 stories tall. When the study results show that the proposed building will  
30 accelerate wind velocity at ground level, then Wind Mitigation  
31 (21.07.110G.4.c) shall be selected as one of the minimum design  
32 requirements as required below.

33 **E. Height Transitions For Neighborhood Protection**

34 The height of each building taller than 35 feet shall be stepped down from its highest  
35 roofline at least one full story on any end of the building abutting an area zoned R-1 or  
36 R-2.

37 **F. Snow Storage**

38 Snow storage areas shall be indicated clearly on all site plans. Location and design of  
39 snow storage areas in parking lots shall comply with the provisions of subsection  
40 21.07.090H.5., *Snow Storage and Handling*.

41 **G. General Standards Menu<sup>98</sup>**

42 All buildings shall meet at least ten of the following requirements, which are organized  
43 into four subject areas: Building Orientation, Building Massing, Façade Appearance,

1 and Human /Northern Climate Response. Each subject area has a minimum number  
2 of options required. "Innovation credits" may be used to satisfy only one of the  
3 minimum ten requirements, and shall not be used to satisfy the minimum requirement  
4 in a subject area when the minimum requirement for that subject area is one. Options  
5 that do not apply in certain situations shall not be chosen (for instance, structures less  
6 than six stories may not choose the "Shadow Impact Analysis and Mitigation" option).  
7 Some building features may satisfy more than one option.

8 **1. Building Orientation (three options required)**

9 **a. Four-sided Design**

10 Architectural features and treatments shall not be restricted to a  
11 single façade of any primary structure. All sides of a building open to  
12 view by the public, whether viewed from public or private property,  
13 shall display a similar level of quality and architectural interest, and  
14 shall include similar varieties of materials, trim, and horizontal and  
15 vertical articulation.

16 **b. Multiple-Building Development Orientation**

17 If the proposed development consists of more than one building, all  
18 primary and pad site buildings shall be arranged and grouped so that  
19 their primary orientation frames and encloses a pedestrian and/or  
20 vehicle access corridor within the development site

21 **c. Streetscape**

22 The primary building is built at the property line or setback line  
23 (whichever is applicable) of the primary abutting street, with any  
24 required parking either to the side or behind the building. An  
25 entrance is provided on the side of the building abutting the primary  
26 abutting street.

27 **d. Screening Service Functions**

28 Building functions that do not directly serve the public, such as  
29 loading bays and utility boxes, shall not be placed directly along the  
30 street. Garages that face streets shall be recessed behind the façade  
31 of primary buildings.

32 **e. Solar Orientation**

33 Primary public entrance areas, outdoor community spaces and  
34 plazas, gallerias and atriums, and other public spaces and pedestrian  
35 areas shall be located and oriented for solar exposure during times of  
36 public use.

37 **f. Shadow Impact Analysis and Mitigation**

38 Structures greater than six stories in height shall be designed so as  
39 not to have an unnecessarily substantial shadow impact on  
40 neighboring properties and public spaces. The applicant shall to  
41 evaluate the impact of shadows potentially cast by proposed  
42 development, and implement appropriate design measures to reduce  
43 or mitigate any undesirable shadow conditions. Example measures  
44 include repositioning of a structure on the lot, increasing the setbacks,  
45 reducing or shifting a building's height or mass, redesigning a  
46 building's shape using a narrow east-west profile, and angled or  
47 terraced roof forms.

- 1  
2  
3  
4  
5
- 6  
7  
8  
9  
10  
11  
12
- 13  
14  
15  
16  
17  
18
- 19  
20  
21
- 22  
23  
24  
25  
26
- 27  
28  
29  
30  
31
- 32  
33
- 34  
35  
36
- 37
- 38
- 39
- 40
- 41
- g. ***Innovation in Orientation***  
Credit will be allowed for special attention to orientation through innovations not covered by above credits. The applicant shall demonstrate a specific orientation quality that enhances the development.
  - 2. **Building Massing and Roof Design (one option required)**
    - a. ***Building Mass***  
A single, large, dominant building mass shall be avoided. Buildings containing 20,000 square feet or more and over one story in height shall be designed to appear more as an aggregation of smaller "building blocks" through variations in height, texture, color, and façade depth.
    - b. ***Sloping Roof Forms***  
Sloping roofs containing top-floor dwelling units or top-floor commercial spaces such as offices are encouraged. Such a top floor may be added above the maximum height limit for the district, where the roof slope does not exceed 8:12 and the total additional height does not exceed 15 feet.
    - c. ***Prominent Roofline***  
Flat portions of roofs shall have distinctive cornice features to provide a visual terminus at the roofline and create visual interest.
    - d. ***Innovation in Design***  
Credit will be allowed for special attention to massing and roof design through innovations not covered by above credits. Applicants shall demonstrate a specific massing quality that enhances the development.
  - 3. **Facade Appearance**
    - a. ***Wall Articulation***  
Primary structures having single walls exceeding 50 feet in length shall incorporate two or more of the following features at least every 50 feet in length:
      - i. Changes in color, graphical patterning, changes in texture, or changes in material;
      - ii. Projections, recesses, and reveals, expressing structural bays or other aspects of the architecture with a minimum change of plane of 12 inches;
      - iii. Windows and fenestration;
      - iv. Gable projections;
      - v. Horizontal/vertical breaks; or
      - vi. Other similar techniques.
    - b. ***Entrances***

- 1 Each primary structure shall have a clearly defined main pedestrian  
2 entrance featuring at least three of the following elements:
- 3 i. Canopies, porticos, overhangs, arcades, or similar sheltering  
4 cover;
  - 5 ii. Recesses or projections;
  - 6 iii. Arches;
  - 7 iv. Peaked roof forms;
  - 8 v. Outdoor patios;
  - 9 vi. Display windows;
  - 10 vii. Architectural tilework or moldings integrated into the building  
11 design; or
  - 12 viii. Integrated planters or wing walls that incorporate landscaped  
13 areas or seating areas.
- 14 c. ***Human Scale at Street Level***  
15 A human scale shall be achieved near ground level on commercial  
16 buildings and along street façades and entryways through the use of  
17 such scale elements as windows, doors, columns, and beams.  
18 “Human scale” means the entrances, windows, doors, columns, and  
19 beams on large buildings are in proportion to and not significantly  
20 larger than the people using the building. For example, a ten-foot  
21 high entrance cover is in proportion to a person using it; a 30-foot  
22 high colonnade is not.
- 23 d. ***Aesthetic Innovation***  
24 Credit will be allowed for special attention to façade treatment through  
25 innovations not covered by above credits. The applicant shall  
26 demonstrate a specific aesthetic intent that enhances the  
27 development.
- 28 4. **Human / Northern Climate Factors (one option required)**  
29 a. ***Weather Protection for Buildings***  
30 Buildings shall incorporate weather-resistant (concrete or cement  
31 board siding) as a protective covering where snow is likely to drift or  
32 accumulate against exterior walls in the winter. Finish shall be  
33 durable as to withstand impacts and abrasion due to snow removal  
34 activities at sidewalks.
- 35 b. ***Heated Sidewalks (this option counts for two requirements)***  
36 Provide automatic snow-melt systems across 60 percent of any  
37 ground-floor façade abutting a street sidewalk or pedestrian walkway.  
38 The minimum depth of any system shall be eight feet and include  
39 provisions to prevent ice accumulation at limits of heated areas.
- 40 c. ***Wind Mitigation***

1 Wind effects shall be minimized on and around tall buildings by use of  
2 one of the following techniques

3 i. *Aerodynamic Profile*

4 The tower portion of tall buildings with more than six stories  
5 should have rounded aerodynamic profiles and turn their  
6 narrow face or be angled diagonal to prevailing winter winds.  
7 Wider buildings with long sides to the wind which increase the  
8 downwash effect shall be avoided.

9 ii. *Stepped Terraced Form*

10 Terrace taller buildings down to the street in stair-step  
11 fashion. Buildings significantly taller (more than twice as tall)  
12 than their neighbors or that are taller than 6 stories shall be  
13 designed with horizontal projections and stepped, setback  
14 facades starting between 20 to 35 feet (4 stories maximum)  
15 above the street. The setback from the street wall to the  
16 tower portion of a tall building shall be at least 20 feet.

17 iii. *Protective Wall Projections*

18 Use projections such as awnings, balconies, and marquees  
19 to protect the public spaces and building entrances below  
20 from wind down drafts.

21 d. *Microclimate Wind Mitigation*

22 Buildings should be relatively low in height, or similar in height to  
23 adjacent buildings. Abrupt changes in building height from one  
24 building to the next significantly impact winter wind velocity in streets  
25 and spaces. Gradual height transitions allow more of the cold wind to  
26 pass over the tops of buildings. Where building heights increase in  
27 the direction of prevailing wind flow, buildings taller than their upwind  
28 neighbors should be less than twice the average height of the nearest  
29 upwind buildings. Height transitions from one building to another  
30 should not exceed 100 percent.

31 e. *Innovation in Northern Design*

32 Credit will be allowed for special attention to specific treatment  
33 through innovations not covered by above credits. The applicant  
34 shall demonstrate a specific northern design strategy that enhances  
35 the development.

36 **21.07.120 LARGE COMMERCIAL ESTABLISHMENTS<sup>99</sup>**

37 **A. Purpose**

38 Large commercial establishments often have high visibility from major public streets, a  
39 large physical scale, and a great volume of use by many residents and visitors. As a  
40 consequence, their design determines much of the character, function, and image of  
41 this community and its streetscapes and commercial areas. The purpose of this  
42 section is to encourage major commercial developments to contribute to and respect  
43 Anchorage as a unique place and to physically integrate with the community in a  
44 positive and architectural and site design sensitive manner. The standards of this  
45 section augment existing basic standards for development found elsewhere in this

1 chapter with more specific interpretations that apply to large commercial  
2 establishments. These standards promote: a basic level of architectural variety and  
3 interest; a compatible appearance and scale; pedestrian and parking lot access;  
4 orientation of buildings and entrances in relation to surrounding streets; provisions for  
5 adaptive reuse of prominent vacant buildings; and mitigation of negative impacts of  
6 large scale commercial developments.

7 **B. Applicability**

8 The standards of this section 21.07.120 shall apply to any use in the Retail (Sales);  
9 Retail (Personal Service); Retail (Repair and Rental); Animal Sales, Service, and  
10 Care; Food and Beverage Service; or Indoor Entertainment use category, or any  
11 combination thereof, occupying more than 25,000 gross square feet of floor area,  
12 including any secondary buildings or pad lots as part of the same development site.

13 **C. Relationship to Other Standards**

14 The provisions of this section shall replace the provisions of section 21.07.110,  
15 Public/Institutional and Commercial Building Standards, but shall apply in addition to  
16 all other generally applicable standards found elsewhere in this chapter and title.  
17 Where there is a conflict with generally applicable standards in this chapter, the  
18 standards of this section shall apply. Where there is a conflict with district-specific  
19 standards in chapter 21.04 of this title, the district-specific standards shall apply.

20 **D. Mandatory Standards**

21 **1. Weather Protection for Pedestrians**

22 Buildings and roofs shall be designed so that precipitation shall not fall on  
23 sidewalks, walkways, or building entrances. Design options in the “Ground  
24 Level Expression” and “Prominent Entries” subject areas may fulfill this  
25 requirement.

26 **2. Adjacent Residential Development**

27 Level 4 Screening landscaping shall be provided along property lines that are  
28 adjacent to residentially-zoned property. The landscaping shall allow for any  
29 pedestrian connections provided by this section.

30 **3. Prohibited Materials**

31 Exterior building materials shall not include the following:

- 32 a. Plywood without board and batten;
- 33 b. Unstained or untreated wood, except for cedar or redwood;
- 34 c. T-111 siding; and
- 35 d. Smooth-face CMU used on more than 20% of each façade.

36 Neon tubing shall not be an acceptable building/roofline outline feature.

37 **4. Outdoor Sales and Display**

38 **a. Intent Statement**



1 To screen storage and display areas of large commercial  
2 establishments from adjacent properties, public streets, and customer  
3 entrances, and to mitigate visual and noise impacts.

4 **b. Permanent Outdoor Display, Sales, and Storage of Merchandise**

5 i. Any outdoor storage, display, or sales location shall be  
6 permanently defined on a site plan.

7 ii. The size of permanent outdoor storage, display, and sales  
8 areas shall be ten percent (10%) of the footprint of the  
9 principal building, or 15,000 square feet, whichever is less.

10 iii. Permanent outdoor storage, display, and sales areas shall be  
11 contiguous to the building and shall not be within 100 feet of  
12 residential property.

13 iv. All outdoor storage, display, and sales areas shall have  
14 permanent walls and/or screening fences, no more than 15  
15 feet high, made of materials and colors designed to be  
16 complementary to those used as predominant materials and  
17 colors on the building. Merchandise shall not be stacked  
18 above the height of the screening wall or fence. Any chain  
19 link fencing used shall be dark-colored and covered with a  
20 windscreen, which shall be maintained in good repair.

21 v. Outdoor storage, display, and sales areas shall be counted  
22 when calculating required parking.

23 **c. Temporary Outdoor Display and Sales**

24 Temporary outdoor display and sales of merchandise shall not be  
25 located in required parking areas, on pedestrian walkways or  
26 sidewalks, or in required landscaping.

27 **5. Master Site Plan and Secondary Buildings**

28 **a. Intent**

29 To integrate the location, orientation, and appearance of all structures  
30 and improvements within a large commercial establishment as a  
31 unified, coherent and accessible site development.

32 **b. Master Site Plan**

33 Large commercial establishments on sites that include more than one  
34 building, or that include multiple pad lots or platted lots for separate  
35 commercial establishments, shall, at the time of plat review or major  
36 site plan review, be required to establish a master site plan for the  
37 location, design and orientation of principal and secondary buildings  
38 on site.

39 **c. Applicability of Large Commercial Establishment Regulations**

40 Building and site design standards for large commercial  
41 establishments in this section, unless stated to apply specifically to  
42 principal buildings, apply to both principal and secondary buildings on  
43 any commercial tract within a large commercial establishment site or  
44 site master plan area.

1                   d.       **Secondary Building Orientation to Public Streets**

2                   Peripheral secondary buildings located at the edge of the site next to  
3                   a public street or street corner shall provide at least one customer  
4                   entrance facing each abutting public street. A corner entrance facing  
5                   both streets may meet this requirement. In such a case, for purposes  
6                   of design requirements in this section for facades with customer  
7                   entrances, the entrance shall be considered to be on both facades.

8                   e.       **Integration of Secondary Buildings with Principal Building and  
9                   Site Design**

10                  Building colors and materials, architectural features, detail elements,  
11                  and roof forms of secondary buildings on the site shall be compatible  
12                  and integrated with the colors, building materials and architectural  
13                  character and design of the principal building(s) on the site.

14           E.       **General Standards Menu**

15                  All large commercial establishments shall meet at least 11 of the following  
16                  requirements, which are organized into six subject areas: Site Layout, Pedestrian  
17                  Connections and Common Spaces, Roof Form, Façade Articulation, Ground Level  
18                  Expression, and Prominent Entries. Each subject area has a minimum number of  
19                  options required. "Innovation credits" may be used to satisfy only one of the minimum  
20                  11 requirements, and shall not be used to satisfy the minimum requirement in a  
21                  subject area when the minimum requirement for that subject area is one. Options that  
22                  do not apply in certain situations shall not be chosen (for instance, a development with  
23                  a flat-roofed building may not choose the "Sloping Roof Form" option). Some building  
24                  features may satisfy more than one option.

25           1.       **Site Layout (one option required)**

26                  a.       **Location of Parking Lots**

27                  No more than 50 percent of vehicle parking spaces provided shall be  
28                  located in the front parking area (defined in 21.13).

29                  b.       **Multiple Entrances**

30                  The principal building(s) shall have customer entrances on at least  
31                  two sides of the building that face an abutting street from which  
32                  access to the site is taken, with at least one of the required entrances  
33                  facing the street to which the building is closest. A corner entrance  
34                  shall be counted as an entrance on either façade.

35                  c.       **Pedestrian-Friendly Entrance**

36                  At least one customer entrance of the principal building is located  
37                  within one hundred (100) feet of the property line abutting the street  
38                  from which the main access to the site is taken.

39                  d.       **Innovation in Site Layout**

40                  Credit will be allowed for special attention to site layout through  
41                  innovations not covered by the above options. The applicant shall  
42                  demonstrate a specific site layout that enhances the development.

43           2.       **Pedestrian Connections and Common Spaces (one option required)**

44                  a.       **Connections to Neighboring Properties**

1 Pedestrian walkways shall be provided from the principal building to  
2 adjacent developments, and to adjacent neighborhoods where trail or  
3 street connections are available.

4 **b. *Building Façade Walkways***

5 Walkways at least six feet wide (at least 8 feet if abutting a parking lot  
6 without wheel stops to prevent vehicle overhang into the walkway)  
7 shall be provided along the full length of every building façade that  
8 has a customer entrance or abuts a customer parking lot. This option  
9 may be incorporated with a covered arcade as part of a “Façade  
10 Articulation” option, or with foundation plantings, as part of a “Ground  
11 Level Expression” option.

12 **c. *Common Space Provided***

13 The establishment shall provide at least one common public space,  
14 such as a plaza, patio, courtyard, or atrium with indoor/outdoor  
15 connections, at or near the principal customer building entrance. The  
16 common space(s) shall total not less than one percent (1%) of the  
17 total gross floor area of the principal building, and no dimension shall  
18 be less than fifteen (15) feet. The common space(s) shall be visible  
19 and central to pedestrian circulation on site. Common spaces are  
20 encouraged to have good solar access and/or provide views of the  
21 Chugach Mountains or other major landmark(s).

22 **d. *Innovation in Pedestrian Connections and Common Spaces***

23 Credit will be allowed for special attention to pedestrian connections  
24 and common spaces through innovations not covered by the above  
25 options. The applicant shall demonstrate a specific pedestrian  
26 amenity that enhances the development.

27 **3. *Roof Form Variation (one option required)***

28 **a. *Sloping Roof Form***

29 The roof of the principal building shall include at least three roof slope  
30 planes.

31 **b. *Parapet Variation***

32 Parapet height shall vary by at least two vertical feet, at least every  
33 100 horizontal feet. Variations to parapet height may include pilasters  
34 and projecting raised entrance features.

35 **c. *Varied Roof Form***

36 Roof form variation shall be achieved by one of the following:

- 37 i. A change in materials and/or color;
- 38 ii. A projecting cornice line;
- 39 iii. Overhanging roof or eaves, extending no less than three (3)  
40 feet past the supporting walls, supported by brackets; or
- 41 iv. Sloping rooflines with an average slope of no less than one  
42 (1) foot of vertical rise for every three (3) feet of horizontal

run, and not greater than one (1) foot of vertical rise for every one (1) foot of horizontal run.

**d. Innovation in Roof Form Variation**

Credit will be allowed for special attention to roof form variation through innovations not covered by the above options. The applicant shall demonstrate a specific roof form variation that enhances the development.

**4. Façade Articulation and Features (one option required)**

**a. Façade Articulation**

All façades longer than 100 feet in length, measured horizontally, shall be articulated into smaller units of building mass by incorporating wall plane offsets having a depth of at least 5 percent of the length of the façade and extending at least 20 percent of the façade.

**b. Façade Variation**

In order for buildings to display the greatest amount of visual interest and appear less industrial whether they function as single or multiple-story buildings, all building façades that face public streets, or residential, parks and recreation, or PLI-zoned land, shall consist of distinguishable base, middle, and top sections.

**i. Base**

Base level or ground floor facades shall provide the greatest collection of architectural detail features to create visual interest at the pedestrian level. Methods shall include two or more of the architectural detail features listed below: (applicable items may also satisfy the "Principal Ground Floor Facades" option below):

- (A) Masonry cladding;
- (B) Windows;
- (C) Architectural bays;
- (D) Changes in materials and/or color;
- (E) Ornamental details and/or artwork;
- (F) Roof overhangs, canopies, or arcades.

**ii. Middle**

The middle shall be distinguishable from the base section, and include one or more of the architectural detail features listed below:

- (A) Windows;
- (B) Signage;

- 1 (C) Changes in materials and/or colors.
- 2  
3 iii. *Top*  
4 The topmost portion of a building shall be made visually  
5 prominent using the features required in subsection 3, Roof  
6 Form Variation.
- 7 c. ***Innovation in Façade Articulation and Features***  
8 Credit will be allowed for special attention to façade articulation and  
9 features through innovations not covered by the above options. The  
10 applicant shall demonstrate specific façade articulation and features  
11 that enhance the development.
- 12 5. **Ground Level Expression (three options required)**
- 13 a. ***Principal Ground Floor Façades***  
14 Façades of any principal or secondary building that front directly onto  
15 onsite walkways, public streets, or parking lots, or that have a  
16 customer entrance, shall incorporate three or more of the following  
17 ground floor detail elements (applicable items may also satisfy the  
18 Base requirement of the “Façade Variation” option above):
- 19 i. Masonry or stone cladding;
- 20 ii. Artwork;
- 21 iii. Ornamental pedestrian lighting and brackets;
- 22 iv. Medallions;
- 23 v. Belt courses;
- 24 vi. Ornamental plinths for columns;
- 25 vii. Kickplates for storefront windows;
- 26 viii. Prominent window sills;
- 27 ix. Tilework.
- 28 b. ***Arcades and Canopies***  
29 Canopies, awnings, arcades, or similar sheltering structures, at least  
30 eight (8) feet in depth and no more than fourteen (14) feet above  
31 ground level, shall be provided along sixty percent (60%) of any  
32 ground floor façade abutting a street sidewalk or pedestrian walkway.
- 33 c. ***Transparency***  
34 A minimum of sixty percent (60%) of the area between two (2) and  
35 ten (10) feet above grade of any ground floor façade that has a  
36 customer entrance or faces a public street, shall be comprised of  
37 windows with views into the interior of the building. A minimum of  
38 twenty-five percent (25%) of ground floor facades that face parking  
39 lots shall be comprised of windows with views into the interior of the  
40 building.

- 1  
2  
3
- d. **Window Bays and Mullions**  
Windows at the ground level shall be divided into increments by mullions and architectural bays.
- 4  
5  
6
- e. **Foundation Landscaping**  
Planting beds at least six (6) feet wide shall be provided at the base of facades that face public streets and/or parking areas.
- 7  
8  
9  
10  
11
- f. **Innovation in Ground Level Expression**  
Credit will be allowed for special attention to ground level expression through innovations not covered by the above options. The applicant shall demonstrate specific ground level expression that enhances the development.
- 12  
13
6. **Prominent Entrances (one option required)**
- 14  
15  
16
- a. **Visual Prominence**  
In order to provide clearly defined and highly visible entrances, principal building(s) and secondary buildings on a site shall have customer entrances featuring at least three of the following:
- 17  
18  
19
- i. Canopies, arcades or porticos that, while satisfying weather protection requirements of subsection A.1. above, also lend visual prominence to the entrance;
- 20
- ii. Overhangs, recesses, or projections;
- 21
- iii. Raised corniced parapets over the door;
- 22
- iv. Peaked roof forms;
- 23  
24
- v. Tower features integrated with the building design that extend above the building roof line;
- 25
- vi. Arches;
- 26
- vii. Outdoor patios;
- 27
- viii. Display windows;
- 28
- ix. Integral planters or wing walls;
- 29
- x. Entrance atriums with visual connections to outside.
- 30  
31  
32
- b. **Transparency and Light**  
The principal customer entrance to any building shall feature at least two of the following elements:
- 33
- i. Clerestory windows;
- 34
- ii. Transom windows;
- 35
- iii. Windows flanking the main entrance door (sidelight windows);

- iv. Large entrance door(s)—transparent and double hung;
- v. Ornamental light fixtures.

**c. *Innovations in Prominent Entrances***

Credit will be allowed for special attention to prominent entrances through innovations not covered by the above options. The applicant shall demonstrate a specific prominent entrance feature that enhances the development.

**21.07.130 EXTERIOR LIGHTING<sup>100</sup>**

**A. Purpose<sup>101</sup>**

Exterior lighting, as a part of the urban infrastructure, is an urban design tool that helps to determine the safety, livability, and ambiance of Anchorage as northern climate community. The purpose of this section is to foster outdoor lighting for municipal, residential, commercial, industrial, and public/institutional developments that is adequate for safety and convenience; in scale with the activity to be illuminated and its surroundings; directed to the surface or activity to be illuminated; and designed to clearly render people and objects and contribute to a pleasant nighttime environment. Specific purposes are to require outdoor lighting that:

1. Provides safety and personal security as well as convenience and utility in areas of public use or traverse, for municipal, commercial, industrial, multifamily residential, and institutional uses where there is outdoor public activity during hours of darkness;
2. Controls glare and excessive brightness to improve visual performance, allow better visibility with relatively less light, and protect residents from nuisance and discomfort;
3. Controls trespass light onto neighboring properties to protect inhabitants from the consequences of stray light shining in inhabitants' eyes or onto neighboring properties;
4. Results in cost and energy savings to establishments by carefully aiming and directing light only at the surface area or activity to be illuminated, using only the amount of light necessary;
5. Fits the needs and tolerances of the surrounding district, to provide adequate illumination levels in commercial districts while protecting residential areas and places of sleep from excessive light; and
6. Controls light pollution to minimize the negative effects of misdirected light and recapture views to the winter night sky.

**B. Applicability**

**1. Outdoor Site Lighting**

All outdoor lighting shall comply with the standards of this section, unless exempted in subsection 21.07.130.C. below.<sup>102</sup> In addition, in certain cases applicants for interior or exterior modifications or expansions of existing

1 structures and uses may be required to comply with the following standards  
2 pursuant to subsection 21.11.010.H, *Expansion, Alteration, or Major Repair*.

3 **2. Attention-Getting Devices**

4 Signs and other attention getting devices as defined in chapter 21.13,  
5 including any lighting of a specific architectural feature, name, or logo  
6 designed to act as advertising devices calling attention to the building owner  
7 or tenant, are subject to the sign illumination standards of chapter 21.10.

8 **C. Exempt Lighting**

9 The following luminaires and lighting systems are exempt from the requirements of  
10 this section:

- 11 1. Single-Family Residential: Soffit or wall-mounted luminaires with a light output  
12 of less than 1000 lumens and permanently attached to residential dwellings,  
13 not to exceed the height of the eave<sup>103</sup> (homeowners may use luminaries with  
14 a higher light output, but will then have to comply with section G. below);
- 15 2. Temporary decorative seasonal lighting provided that individual lamps do not  
16 exceed a light output of 200 lumens;<sup>104</sup>
- 17 3. Temporary lighting for emergency or nighttime work and construction;
- 18 4. Temporary lighting for theatrical, television, and performance areas, or for  
19 special public events;
- 20 5. Lighting for a special district, street, or building that, according to an adopted  
21 municipal plan or ordinance, is determined to require special lighting  
22 aesthetics as part of its physical character;
- 23 6. Lighting required and regulated by the Federal Aviation Administration; and
- 24 7. Public street and right-of-way lighting.

25 **D. Nonconformities<sup>105</sup>**

26 In order to (1) amortize existing nonconforming lighting that may otherwise linger for  
27 years or decades, and (2) maximize fairness between both pre-existing and new  
28 establishments, there shall be a grace period for all outdoor lighting. Outdoor lighting  
29 shall be required to conform to the standards of sections G.1. and G.2., within five  
30 years from the effective date of this title. Project applications received prior to such  
31 conformance date may choose to conform or to postpone conformance until the five-  
32 year deadline.

33 **E. Lighting Zones Established**

34 Using Table 21.07-13 as a guide, the municipality shall determine and maintain three  
35 lighting zones to ensure that lighting standards fit the needs and tolerances of  
36 Anchorage's broad range of urban and rural, commercial and residential, and low  
37 versus high intensity use areas. Lighting zones are intended to allow for relatively  
38 higher illumination intensities in commercial districts, while protecting the more light-  
39 sensitive neighborhoods and residential areas from excessive or misdirected light.



The lighting zone (LZ) of a site or project shall determine the standards for lighting as specified in this section. An increase of one LZ number may be granted to a specific site or project upon special approval through the variance process.

**TABLE 21.07-13: LIGHTING ZONE CHARACTERISTICS**

Lighting Zone	Ambient Light Level	Representative Locations	Zoning Districts
LZ-1	Relatively Low	Rural areas, low-density urban areas, natural open spaces.	W, R-1, R-2, R-5, R-6, R-7, R-9, R-10, OL, TA, AF, PLI [1], Girdwood [2].
LZ-2	Medium	Medium to high density residential neighborhoods.	R-3, R-4, RMX, NMU, O, PLI [1].
LZ-3	Relatively High	Medium to high intensity commercial and industrial districts.	C-2A, C-2B, C-2C, GC, I-1, IC, AD RCMU, CCMU, MC, MI, I-2, PLI [1].
<u>Additional Standards:</u>			
[1] In the PLI District, lighting standards for development shall be that of the Lighting Zone that most closely matches the character of the setting surrounding the project site.			
[2] <i>Girdwood</i> : LZ-1 the default lighting zone for Girdwood zoning districts, except where stated otherwise in section 21.09.[x-ref].			

**F. Standards for Safety, Personal Security, and Convenience.<sup>106</sup>**

**1. Illumination Levels and Locations**

Sufficient lighting shall be provided in pedestrian use areas and in high-risk locations. Key locations and high-risk uses such as parking lots, transit stops, ATMs, and convenience stores shall be illuminated to facilitate nighttime use and enhance security. Lighting shall be designed to avoid excessive brightness or glare which reduces visibility and visual acuity, or the fish-bowl effect which allows users to be observed but makes it difficult for them to observe their surroundings. Parking lot lighting shall adhere to minimums required in subsection I.1 below. Pedestrian walkways leading to primary building entries, exterior stairways, and other pedestrian paths that are used after daylight hours shall be illuminated at least to minimum IESNA standards, using a uniformity ratio not greater than 10:1 maximum to minimum, to avoid extreme contrasts between lighting levels.<sup>107</sup> Dedicated pedestrian lighting, lit interior spaces with retail windows along sidewalks, and other pedestrian-oriented lighting sources are preferred.

**2. Color Rendition<sup>108</sup>**

White light sources improve nighttime vision and reduce reaction time to possible danger by providing superior color recognition, object identification, and peripheral vision detection. Nighttime environments become more visible, comfortable, and inviting at lower light levels with less disability glare. All fixtures for area lighting shall use white light sources that have a color rendering index (CRI) of 70 or greater.

**3. Maintenance, Repair and Replacement<sup>109</sup>**

Poorly maintained luminaires may not provide adequate illuminance for safety and security. Lighting installations shall be maintained such that they continually provide acceptable illuminance levels and glare control required in

1 this section. Damaged and/or inoperative lighting fixtures and luminaires shall  
 2 be promptly repaired or replaced. All luminaires shall be properly and  
 3 permanently installed so as to maintain required shielding. Any structural part  
 4 of the fixture providing this shielding must be permanently fixed.

5 **G. Control of Glare and Light Trespass<sup>110</sup>**

6 **1. Shielding and Glare**

7 **a. Generally Applicable Standard**

8 For all outdoor area lighting, cutoff-type luminaires shall be installed  
 9 pursuant to Table 21.07-14 below. Directional luminaires such as  
 10 floodlights and spotlights shall be so installed pursuant to section I  
 11 below.

12 **b. District-Specific Shielding Standards**

13 Shielding requirements specific to the various districts shall be as  
 14 shown in Table 21.07-14. Residential uses in the R-5, R-6, R-7, R-9,  
 15 and R-10 districts, shall be exempt from the standards of Table 21.07-  
 16 14.

**TABLE 21.07-14: REQUIRED SHIELDING AND MAXIMUM LUMENS**

Lighting Zone	Full Cut-off Luminaire	Cut-off Luminaire	Semi Cut-off Luminaire	Non Cut-off Luminaire
LZ-1	10,000	6,000	1,000	1,000
LZ-2	26,000	10,000	2,000	1,000
LZ-3	40,000	10,000	5,000	2,000

17 [illustrate the luminaire cut-off types here]

18 **c. Glare onto Neighboring Properties**

19 All lighting that emits more than 2,000 lumens shall be aimed,  
 20 shielded, or located such that the source of illumination (bulb or direct  
 21 bulb image) is not visible from any adjacent property, viewed at the  
 22 site's property line.  
 23  
 24

25 **2. Light Trespass**

26 Maximum light levels measured vertically at the site's property line, at eye  
 27 level (measured at five feet in height), shall be as shown in Table 21.07-15:<sup>111</sup>

**TABLE 21.07-15: MAXIMUM LIGHT TRESPASS**

Lighting Zone of Neighboring Property	Maximum Light at the Property Line
LZ-1	0.1 footcandles
LZ-2	0.5 footcandles
LZ-3	1 footcandles

28 **3. Mounting Height**

29 Mounting heights of lighting fixtures shall be limited to avoid defeating the  
 30 purpose of cut-off style shielding, as follows:  
 31

1  
2  
3  
4  
  
5  
6  
7  
8  
9  
  
10  
  
11  
12  
13  
14  
  
15  
16  
17  
18  
  
19  
20  
21  
22  
23  
24  
25  
  
26  
  
27  
28  
29  
  
30  
31  
32

- a. **Pole Mounted Lighting**  
 Lights mounted onto poles or any structures intended primarily for mounting of lighting shall not exceed a maximum mounting height according to the following table:

TABLE 21.07-16: MAXIMUM POLE MOUNTING HEIGHT (ft)		
Lighting Zone	Parking Lots, Driveways, Exterior Sales and Display, Loading Areas.	Pedestrian Walkways and Areas
LZ-1	20	14
LZ-2	25	18
LZ-3	30 [1]	18
Additional Standards: [1] The mounting height may be up to 35 feet where the fixture is located beyond 75' from the site's boundary, provided that for mounting heights in excess of 30 feet, the distance of the fixture to the site's boundary is not less than three times the mounting height.		

- b. **Lighting Mounted to Buildings or Structures**  
 Light fixtures mounted to buildings or other structures shall not exceed the height of the roof or eave of the building or structure at the location of the light.

**H. Timing Controls**

Exterior lighting shall be timer-controlled with photocell override. Simple dusk-to-dawn controls keep lights on for the maximum time during hours of sleep and inactivity, and waste energy. More appropriate timing controls shall be used, as follows:

- a. All non-residential building, service and loading area lighting, except security lighting, shall be turned off one hour after business operations have ceased for the day and shall remain turned off until one hour before business operations resume on the next day.<sup>112</sup>
- b. When provided, security lighting shall be activated with motion sensors so that lights come on only when someone is in the immediate area, except where the applicant can demonstrate that motion-sensor lighting will cause unacceptable increased risk and continuous security lighting levels must be maintained. Maximum average illumination levels for security lighting that is not motion activated shall be 1.5 footcandles.

**I. Standards for Specific Types of Lighting**

The additional standards in this subsection shall be in addition to the generally applicable standards. However, where there is a conflict, the more restrictive standard shall apply.

- 1. **Parking Lot Lighting**
  - a. **Maximum Lighting Level Uniformity at Any Point (Maximum:Minimum)**

- 1 i. Residential: 15:1
- 2 ii. Nonresidential: 10:1
- 3 b. **Maximum Initial Horizontal Illumination at Any Point**
- 4 i. Residential: Five foot-candles
- 5 ii. Nonresidential: Ten foot-candles
- 6 c. **Maximum Initial Lamp Lumens**
- 7 i. Residential: 3,500 lumens for five or less parking spaces;
- 8 8,500 lumens for six or more spaces.
- 9 ii. Nonresidential: 21,500 lumens; 24,000 lumens for 5 acre or
- 10 larger parking lots
- 11 d. **Spillover**
- 12 No parking lot lighting shall result in spillover lighting on adjacent
- 13 property that exceeds one-tenth foot-candle, measured vertically at
- 14 eye level at the property line.
- 15 e. **Hours of Operation**
- 16 All parking lot lighting fixtures, except for the minimum necessary for
- 17 security, shall be extinguished between one hour after the close of
- 18 the facility and one hour before the opening of the facility. No more
- 19 than a maximum average of 1.5 foot-candles shall be maintained for
- 20 security purposes.
- 21 2. **Lighting of Service Canopies** <sup>113</sup>
- 22 a. Service canopy lighting fixtures shall be fully recessed or full cut-off,
- 23 as defined by the IESNA, and the canopy fascia shall extend at least
- 24 twelve (12) inches below the lowest point of the bulb. However,
- 25 indirect up light is permitted under a canopy provided that no direct up
- 26 light is emitted beyond the canopy.
- 27 b. Lights shall not be mounted on the top or sides (fascias) of canopies,
- 28 and the sides (fascias) of canopies shall not be externally illuminated,
- 29 except as part of an internally illuminated sign pursuant to section
- 30 21.10.
- 31 c. Lighting at ground level under a service canopy shall not exceed 50
- 32 footcandles.
- 33 3. **Lighting of Building Façades**
- 34 Building façade lighting shall only be used to highlight important building
- 35 entries or specific architectural features. Uniform floodlighting of building
- 36 facades is discouraged and shall be permitted only by through a variance or
- 37 alternative equivalent compliance review process. To the maximum extent
- 38 feasible, lighting fixtures shall be located, aimed and shielded so that light is
- 39 directed downward rather than upward, and only onto the building façade.
- 40 Such light fixtures shall emit no more than 2,000 lumens.

1                   4.       **Hardscape and Landscape Lighting**

2                   Light fixtures used to illuminate flags, statues, or any other objects mounted  
3                   on a pole, pedestal, or platform shall, to the maximum extent feasible, keep  
4                   light beams entirely within the mass of the display by using shielding and  
5                   luminaires with the correct beam spread. Luminaires should be located and  
6                   aimed so that the source of light cannot be seen directly from any point on the  
7                   property line. Such light fixtures shall emit no more than 2,000 lumens.

8                   5.       **Lighting of Exterior Sports / Performance Facilities**

9                   a.       ***Dual Lighting System***

10                   The main lighting of the event or activity shall be turned off no more  
11                   than forty-five (45) minutes after the end of the event or activity. A  
12                   low level lighting system shall be installed to facilitate patrons leaving  
13                   the facility, cleanup, nighttime maintenance, etc. The low level  
14                   lighting system shall provide an average horizontal illumination level,  
15                   at grade level, of no more than 3.0 foot-candles with a uniformity ratio  
16                   no greater than 10:1.

17                   b.       ***Lighting of Primary Playing or Activity Areas***

18                   Where playing fields, ski slopes, or other special activity areas are to  
19                   be illuminated, lighting fixtures may include spotlighting and  
20                   floodlighting. Regardless, all fixtures shall be shielded, mounted, and  
21                   aimed so that their beams fall within the primary playing area and  
22                   immediate surroundings, and so that no direct illumination is directed  
23                   off the site.

24                   6.       **High Intensity, Special Purpose Lighting**

25                   The following lighting systems are prohibited from being installed or used  
26                   except by special approval by variance, which shall not be granted for any  
27                   use in LZ-1.

28                   a.       Aerial Lasers;

29                   b.       “Searchlight” or beacon style lights;

30                   c.       Blinking, flashing, or changing intensity lights except for temporary  
31                   holiday displays;

32                   d.       Other very intense lighting, defined as having a light source  
33                   exceeding 200,000 lumens or intensity in any direction of 2,000,000  
34                   candelas or more.

35       **21.07.140 OPERATIONAL STANDARDS<sup>114</sup>**

36                   A.       **Purpose**

37                   The purpose of these operational standards is to prevent land or buildings within the  
38                   Municipality from being used or occupied in any manner so as to create any  
39                   dangerous, injurious, noxious, or otherwise objectionable condition that would create  
40                   adverse impacts on the residents, employees, or visitors on the property itself or on  
41                   nearby properties.

1           **B.     Applicability**

2           The provisions of this section 21.07.140 shall apply to all land within the Municipality.  
3           The Director may authorize temporary exemptions from one of more of the standards  
4           in this section during construction.

5           **C.     Standards**

6           **1.     Vibration**

7           No vibration shall be produced that is transmitted through the ground and is  
8           discernible without the aid of instruments at or at any point beyond the lot line.  
9           This standard shall not apply to railroad-related uses.

10          **2.     Air Pollution**

11          There shall not be discharged into the atmosphere any contaminant for which  
12          threshold limit values are listed for working atmosphere by the American  
13          Conference of Governmental Industrial Hygienists in such quantity that the  
14          concentration of the contaminant at ground level at any point beyond the  
15          boundary of the property shall at any time exceed the threshold limit. Visible  
16          emissions of any kind at ground level past the lot line of the property on which  
17          the source of the emissions is located are prohibited.

18          **3.     Odors**

19          Any condition or operation that results in the creation of odors, vapors, or  
20          gaseous emissions of such intensity and character as to be detrimental to the  
21          health and welfare of the public or that interferes unreasonably with the  
22          comfort of the public shall be removed, stopped, or so modified as to remove  
23          the odor.

24          **4.     Electromagnetic Radiation**

25          It shall be unlawful to operate, or cause to be operated, any planned or  
26          intentional source of electromagnetic radiation for such purposes as  
27          communication, experimentation, entertainment, broadcasting, heating,  
28          navigation, therapy, vehicle velocity measurement, weather survey, aircraft  
29          detection, topographical survey, personal pleasure, or any other use directly  
30          or indirectly associated with these purposes that does not comply with the  
31          then-current regulations of the Federal Communications Commission  
32          regarding such sources of electromagnetic radiation.

33          **5.     Fire and Explosion**

34          In all districts in which the storage, use, or manufacture of blasting agent,  
35          combustible fibers, combustible liquid, or compressed gas is permitted, the  
36          requirements as set forth in the Building and Fire Codes, as adopted in title 23  
37          of the Anchorage Municipal Code, shall be met.

38          **6.     Materials and Waste Handling**

39          a.       No person shall cause or permit any materials to be handled,  
40          transported, or stored in a manner that allows particulate matter to  
41          become airborne or liquid matter to drain onto or into the ground.  
42          This provision shall not apply to snow melt and stormwater.

43          b.       All materials or wastes that might cause fumes or dust or that  
44          constitute a fire hazard or that may be edible by or otherwise be

1 attractive to wildlife or insects shall be stored outdoors only in closed,  
2 impermeable trash containers that are screened in accordance with  
3 this title. This provision shall not apply to stacks of building materials,  
4 such as lumber, otherwise allowed by this title.

5 c. Toxic and hazardous materials and chemicals shall be stored,  
6 secured and maintained so that there is no contamination of ground,  
7 air, or water sources at or adjacent to the site. Notwithstanding  
8 anything contained herein, all treatment, storage, disposal, or  
9 transportation of hazardous waste shall be in conformance with all  
10 federal and state statutes, codes, and regulations. Provisions shall  
11 be provided so that all lubrication and fuel substances shall be  
12 prevented from leaking and/or draining onto the property.

---

<sup>1</sup> 2005 NOTE: Northern climate design issues are woven throughout many parts of title 21. Examples include the subdivision design standards to ensure solar access, the building design standards regarding roof form and building orientation, and the snow storage provisions in the parking standards. Rather than consolidate such unrelated provisions into one section, we have decided to separate those sections out into the code in the places where they make the most sense. For example, the revised section on commercial building design has a core area of standards that focuses on many aspects of Northern Climate Design. As a result, a separate section addressing this issue is not included in the revised draft.

<sup>2</sup> NOTE: Suggested new purpose statement.

<sup>3</sup> 2005 NOTE: Name of procedure changed from the prior “alternative compliance.” The purpose section has been revised to make clear that alternative compliance must be equivalent and is not intended as a substitute for a variance or administrative modification. The list of standards to which the section applies has been expanded. Generally, standards related to site and building design will be eligible for alternative compliance, but not those related to natural resources and the environment. The procedure section has been expanded to clarify the process.

<sup>4</sup> 2005 NOTE: The section on avalanche area protection has been removed at the suggestion of staff. They note that the relevant maps are not current and will not be updated in the near future for funding reasons. Further, existing municipal policies address much of what the draft section intended to accomplish, and the municipality intends to continue implementing such policies.

<sup>5</sup> NOTE: This section is based loosely on the existing section 21.45.210, *Stream protection setback*. However, we have made major changes, including: a new purpose statement; a new applicability statement; consolidation of standards for wetlands and streams; and increases in the setback requirement from 25 to 50 feet.

<sup>6</sup> NOTE: Per discussions with staff, we have suggested a new citywide setback requirement of 50 feet, with the current 25 feet standard still applicable in some places (more urban areas). The existing 100-foot setback requirement in the R-10 district is retained.

<sup>7</sup> 2005 NOTE: This section changed to refer to municipal standards, as opposed to leaving discretion to a “qualified professional,” as was done in the previous draft.

<sup>8</sup> NOTE: The current code splits the stream buffer area into a 15-foot section and a 10-foot section, and specifies allowed uses in each. This suggested new section takes a simpler approach and provides uniform standards for the entire buffer.

<sup>9</sup> 2005 NOTE: The previous “Municipal Programs” section was obsolete and has been removed. OLD NOTE: This is the current section 21.05.115. We have made no substantive changes yet, though have reorganized the material and added new subheadings. Is this section necessary? We are not sure of its value, given the new uniform wetlands standards we suggest in the previous section. This section appears to make wetlands protection applicable only to public actions by the Municipality -- correct? The new “Stream and Wetlands Protection” section we drafted above is applicable to both public and private actions. Do the A, B, and C designations used here need to be maintained in the code? (Also, we have removed here the provision dealing with the existing reserve tract provisions in the current section 21.80.100, since we received instructions to remove the reserve tract concept entirely from the new subdivision chapter.)

<sup>10</sup> NOTE: This new section is intended to replace the existing sections 21.80.360 (Hillside lots) and 21.80.370 (R-10 District). The existing standards are fairly vague and general.

<sup>11</sup> NOTE: This section suggests a common approach that has worked in many other communities with steep slopes, such as Reno; Estes Park, Colorado; Salt Lake County, Utah, etc. For Anchorage, a threshold figure of 20 percent is proposed for discussion purposes. Development is limited on steep slopes over 20 percent and banned on slopes of 30 percent or more. The approach in this draft is a more moderate one; other communities ban development on slopes of 20 percent or more, or limit density on slopes of 20 percent or more.

<sup>12</sup> 2005 NOTE: New subheadings added. OLD NOTE: The following voluntary guidelines are proposed to supplement the mandatory code standards. We recommend placing all guidelines in a separate user’s



guide rather than in the code itself. “The following guidelines should be followed by all proposed development on sites where the average slope of the site exceeds 20 percent. Compliance with such guidelines may be considered in development review, but failure to comply with guidelines shall not be independent grounds for denial of development approval.

- a. Orient roads and building sites to minimize grading.
- b. Orientation of buildings should consider views from the site as well as the aesthetic impact of views of the site from surrounding properties.
- c. Hilltops, if graded, should be rounded to blend with natural slopes rather than leveled.
- d. Slopes providing a transition from graded areas into natural areas should be varied in percent grade both up-slope and across the slope, in the undulating pattern of surrounding natural slopes; so that the top or the toe (or both) of the cut or fill slope will vary from a straight line in plan view.
- e. Parking areas should be constructed on multiple levels and follow natural contours as necessary to minimize cut and fill.
- f. Roads should follow natural topography to the extent feasible, to minimize cut and fill. Necessary grading should be constant half-cut and half-fill along the length of the road (versus all cut or all fill at points) unless other arrangements would result in less severe alteration of natural terrain.
- g. Repetitive padding or terracing of a series of lots (stair-stepping up a slope) is discouraged. Creation of a single large pad or terrace (especially creating a single pad or terrace of an entire lot) should be an exception to typical design, to deal with circumstances that cannot be managed with other techniques. Typical design should utilize full split pads (separate level for a down-slope lower story), a split foundation (adapting a single story to a slope), setting the building into a cut in the hillside, or a combination of techniques.”

<sup>13</sup> 2005 NOTE: The final two standards are new and suggested by staff.

<sup>14</sup> 2005 NOTE: This is an entirely new subsection intended to reconcile the various conflicting comments received on the prior draft standards.

<sup>15</sup> NOTE: New section.

<sup>16</sup> 2005 NOTE: These are suggested new percentages. The threshold for residential development has been raised (i.e., the number of developments that will be meet the requirement is smaller). The industrial requirement has been deleted. At workshops in December 2004, representatives of the development community indicated that a total open space set-aside requirement for residential of 10 acres/1000 residents seemed reasonable.

<sup>17</sup> 2005 NOTE: This is a suggested new section in the 2005 draft. If the concept is endorsed, then additional specificity is necessary to define “designated infill and redevelopment areas” and the quantity of such amenities that will be required.

<sup>18</sup> 2005 NOTE: PM&E is working on a new ordinance to address these issues, and it should come up for review sometime in late spring or summer 2005.

<sup>19</sup> NOTE: Existing 21.90.020. Some sections rewritten for clarity.

<sup>20</sup> NOTE: Carried forward from existing 21.90.050. Further discussion needed. Is this policy still in place -- the standard nonconformity provisions do not apply?

<sup>21</sup> 2005 NOTE: The revisions in this and subsequent subsections reflect amendments adopted by the Assembly in AO No. 2005-2.

<sup>22</sup> 2005 NOTE: To replace the more rigid standards in the initial draft regarding connectivity, cul-de-sacs, and related issues, staff has suggested adopting a more flexible approach known as a connectivity index, which has been used in other communities such as Cary, North Carolina, and Rock Hill, South Carolina. The index affords developers significant flexibility in laying out streets, connections, and cul-de-sacs in a development if a certain overall level of connectivity is achieved, which is based on a numerical index. Staff has tested the index on several existing developments and believes it is workable in Anchorage.

<sup>23</sup> 2005 NOTE: The exemption in steep-slope areas is new in this 2005 draft.

<sup>24</sup> NOTE: A suggested new section emphasizing the types of conditions that may be placed on development approvals to minimize impacts on adjacent neighborhoods. This authorization, in combination with the wide variety of new development standards in this chapter, provide significantly more protection for neighborhoods than exists in the current code.

<sup>25</sup> 2005 NOTE: One member of the Assembly has raised the issue whether the Urban Design Commission, which will be reviewing major site plans, should have the authority to impose neighborhood protection standards. Needs further discussion.

<sup>26</sup> 2005 NOTE: This subsection C. is new in the 2005 draft. The prior subsection C. (dealing with setbacks) has been deleted because it repeated a standard contained in the new chapter 21.07.

<sup>27</sup> 2005 NOTE: NOTE: This is a substantially new landscaping section, based on the recommendations of the 1998 draft Landscape Ordinance project, other 1995-2003 audits, and staff experience with landscaping in Anchorage.

<sup>28</sup> 2005 NOTE: This subsection about Landscape Plan submittal requirements appeared at the very end of the section in the previous draft. It has been moved to the front of the landscaping section for clarity. Its content is unchanged from the previous draft. The list of submittal requirements from the current adopted code are removed, for placement in the Title 21 user's guide.

<sup>29</sup> 2005 NOTE: The Planning Department has proposed this system, based on the 1998 draft landscaping ordinance and their experience with local landscaping conditions in Anchorage, with revisions based on public comments from the previous public draft.

<sup>30</sup> 2005 NOTE: The June 2005 draft landscaping section includes parking lot landscaping, which appeared under the off-street parking section in the previous draft. Tree retention, which also appeared under a separate section in the previous draft, is now incorporated into the landscaping section and substantially revised in response to public comment.

<sup>31</sup> 2005 NOTE: The content for this landscaping category has been clarified and streamlined from the previous draft.

<sup>32</sup> 2005 NOTE: The June 2005 draft introduces a new lowest and least stringent level of perimeter landscaping. This level, called "Edge Treatment", provides a tool for situations when a greater landscape buffer does not appear warranted. Level 2 site perimeter landscaping is carried forward from the previous (2004) draft. It replaces existing adopted title 21 street frontage landscaping categories, and provides a low-level buffer between certain uses. Level 3 provides greater buffering and separations. Level 4 screening applies the existing adopted title 21 highway screening landscaping as the most intensive type of site perimeter landscaping.

<sup>33</sup> NOTE: Clarion has eliminated a proposed exception here for small real estate signs; sign regulations should not be content-based.

<sup>34</sup> 2005 NOTE: This language is a modified version of the existing adopted title 21 standard for highway screening landscaping.

<sup>35</sup> 2005 NOTE: Parking lot landscaping standards appeared in the off-street parking section of the previous draft. Parking lot landscaping is now incorporated into the landscaping section, appearing with the other landscaping categories. Planning Department staff has revised its content to make it consistent with the format of the rest of the landscaping section.

<sup>36</sup> NOTE: Need to discuss issue of bringing non-conforming lots into conformity with these new standards.

<sup>37</sup> NOTE: Rather than require that lots be broken up into parking blocks with a specified maximum number of spaces, we have indicated preferred locations. The parking block concept works well in climates with less snow, but we feel may significantly inhibit snow removal.

<sup>38</sup> 2005 NOTE: In response to public comment and testing of the previous draft, tree retention standards have been substantially revised and incorporated into the landscaping section. The landscaping section provides greater incentive for tree preservation, while allowing for tree replacement (new planting) as an option.

<sup>39</sup> NOTE: Most of the material in this section is new.

<sup>40</sup> NOTE: The Planning Department is arranging with the local chapter of the Association of Landscape Architects and local arborists to update the master plant list concurrent with the code rewrite. Among other features, it is intended to identify which plants are drought tolerant, and should identify which provide winter color.

<sup>41</sup> NOTE: From 1998 draft ordinance. For public discussion.

<sup>42</sup> NOTE: Anchorage has a serious problem with overlapping landscaping and utility easements in Anchorage, in part because utility easements tend to be on site and not in public ROW.

<sup>43</sup> NOTE: This provision has been revised to replace the 18-month installation period with a requirement that landscaping be installed early in the next growing season. An alternative approach would be to provide that no final certificate of occupancy may be issued until required landscaping has been installed.

<sup>44</sup> NOTE: This broad maintenance requirement may be moved to the general landscaping or enforcement sections with a cross-reference here.

<sup>45</sup> NOTE: The material in this section is new. The existing screening provisions were better suited to buffering purposes, and the current code does not include effective techniques to block the view of specific areas such as refuse collection areas, rather than a site in general.

<sup>46</sup> NOTE: The proliferation of unscreened dumpsters has been identified in the Diagnosis and in discussions with city leaders as a major concern. The general idea of an amortization provision for dumpsters has been discussed and endorsed in concept by the Assembly, though the specific time frame requires further discussion. Note that the provision does not amortize the dumpsters themselves necessarily, just their screening and location.

<sup>47</sup> 2005 NOTE: Several citizens and organizations provided comments regarding the roof and wall-mounted mechanical equipment screening requirements in the previous draft. Rather than propose changes in this particular draft, Planning Department will consult further with these citizens and organizations, and provide improved draft content in the next iteration draft which reflects further discussion and consultation with the community.

<sup>48</sup> 2005 NOTE: See previous note.

<sup>49</sup> 2005 NOTE: Proposed new content to begin community discussion regarding ground-mounted mechanical equipment. This subsection was an empty placeholder in the previous draft.

<sup>50</sup> NOTE: Staff intends to define this use as both an accessory and primary use type in the new title 21, and so proposes to address its screening requirements in Ch. 21.05.

<sup>51</sup> NOTE: Staff intends to define this use as both an accessory and primary use type in the new title 21, and so proposes to address its screening requirements in Ch. 21.05.

<sup>52</sup> NOTE: Much of this material is new, but it incorporates the standards in section 21.45.110 (Fences) of the current code.

<sup>53</sup> NOTE: This section contains a comprehensive rewrite of the Anchorage parking standards. This draft section was prepared as part of a separate project overseen by the Anchorage Traffic Department. Key new features include a complete new table of off-street parking ratios, a new emphasis on alternative parking arrangements, and a new set of parking lot design standards.

<sup>54</sup> NOTE: The existing section 21.45.080.A.5 regarding the procedure to reduce parking requirements for additions, enlargements, and changes in occupancy has been moved to the last part of this parking section -- *Modifications*. See discussion there regarding current procedures and suggested alternatives.

<sup>55</sup> NOTE: This is existing section 21.45.080.W.5 with revisions. As discussed in the diagnosis, this section has been moved out of the design portion so that it will clarify that control of use is generally applicable to both new and existing parking areas. Other issues that might be addressed in this section are derelict/inoperable vehicle storage and use of surplus parking for other uses.

<sup>56</sup> NOTE: The size trigger for parking lot plans is subject to further discussion. Some jurisdictions require for all; others require only for larger lots.

<sup>57</sup> NOTE: This section contains existing information regarding parking requirements put into table format. Existing requirements have been reviewed, compared to other standards around the nation, and modified as necessary. Additional requirements have been added for uses that were not previously addressed in the existing code. The Institute for Traffic Engineers will release a new edition of their Parking Manual in early 2004, and we recommend reviewing their new standards at that time.

<sup>58</sup> NOTE: Staff feedback indicates that drive-through uses will be considered "accessory uses." Table 21.07-1 Schedule A currently only lists principal uses, based on the revised principal use table contained in revised chapter 21.05 *Use Regulations*. If a principal use may have a drive-through as an accessory use, that has been noted along with a reference to vehicle stacking requirements.

<sup>59</sup> NOTE: Requirements noted in the literature vary widely for this use; staff should review based on use in Anchorage.

<sup>60</sup> NOTE: Requirements noted in the literature vary widely for this use; staff should review based on use in Anchorage.

<sup>61</sup> NOTE: Requirements noted in the literature vary widely for most of these cultural facility uses, especially for library, museum, and planetarium uses. For example, library parking requirements were found to vary from 1 per 250 to 1 per 1000 sf gfa. Staff should review based on use in Anchorage.

<sup>62</sup> NOTE: Requirements noted in the literature vary widely for this use; staff should review based on use in Anchorage.

<sup>63</sup> NOTE: Highlighted text has been added to text from the recent ordinance for clarification.

<sup>64</sup> Note: This is a new section to address multiple activities on one site.

<sup>65</sup> NOTE: This is a new section to provide for uses whose parking requirements may vary widely.

<sup>66</sup> NOTE: This section contains revised shared/joint parking regulations and new sections on off-site parking and other alternative parking topics.

<sup>67</sup> NOTE: This is existing section 21.45.080.W.3 "Joint Use" with revisions highlighted.

<sup>68</sup> NOTE: The intent of this requirement is to ensure that shared parking is not sited on more sensitive sites (e.g., residential areas).

<sup>69</sup> NOTE: This section is new.

<sup>70</sup> NOTE: This is the existing section 21.45.090. It has been moved into this combined section on parking and loading.

<sup>71</sup> NOTE: This category has been added to this table and the requirements for general commercial uses have been used as a starting point.

<sup>72</sup> NOTE: If any accessory uses have their own, additional parking requirements, those requirements are set forth in the accessory use regulations in chapter 21.05.

<sup>73</sup> NOTE: There were comments that Anchorage has a significant percentage of trucks and larger vehicles and that this should be considered. National research about SUV parking indicates that parking spaces 8 feet, 6 inches wide and 18 feet long will accommodate the average SUV but door maneuvers are "less comfortable," there is a smaller margin of error for the driver, and sight distance (which is already inadequate for smaller vehicles) is more restricted. The City of Detroit recently chose to require minimum stall dimensions of 9 feet wide and 20 feet long to accommodate larger American vehicles throughout the city. Anchorage's primary stall dimensions start at a width of 9 feet and therefore may be adequate for larger vehicles. Per staff direction, we have eliminated the existing provisions for compact spaces. However, we heard conflicting advice on this issue from different staff departments, and we note that always requiring larger spaces will increase the overall size of parking lots, which may be contrary to other 2020 Plan goals.

<sup>74</sup> NOTE: The illustration from the current regulations (section 21.45.080.W.9.) is inserted here for now. This illustration will be updated for the final product.

<sup>75</sup> NOTE: This duplicates a standard in the current draft of 21.05, Use Regulations. We recommend the standard should be carried forward as part of the parking regulations rather than the use regulations.

<sup>76</sup> NOTE: Subsection 2.a. "General" is carried over from existing section 21.45.080.W.1. The other subsections are new.

<sup>77</sup> NOTE: This is a mix of new and existing requirements.

<sup>78</sup> 2005 NOTE: Still researching this issue, but plan to suggest accommodations for heated, textured, or covered surfaces.

<sup>79</sup> NOTE: Should move to general standards. Discuss issue of motorcycle parking.

<sup>80</sup> NOTE: Item 1 is carried over from existing section 21.45.080.W.4.j. Items 2 and 3 are new.

<sup>81</sup> NOTE: Most of the material in this section is pulled forward from the existing section 21.45.080.W.8; a general statement and residential requirements have been added. Titles have been added to clarify topics in this section.

<sup>82</sup> NOTE: The existing code contains a reference to the ADA text regarding accessible routes. This section contains relevant information from that section of the ADA text for ease of reference for the user.

<sup>83</sup> NOTE: This subsection is carried over from existing section 21.45.080.Y.

<sup>84</sup> NOTE: This is a new proposed section that replaces existing sections related to modifications to parking requirements. As recommended in the interim report, this is a streamlined option that simply references the minor modifications procedure in chapter 21.03. As part of edits to Module 1, we will ensure that the Traffic Engineer is given the authority to make such modifications. *Also need to address in this section:* Need to discuss requiring conformity with landscaping and lighting provisions within 5-10 years for nonconforming lots.

<sup>85</sup> NOTE: This section incorporates a number of proposed new residential building standards, many of which have been suggested by staff.

<sup>86</sup> 2005 NOTE: Section changed in the 2005 draft. Additional edits by staff following Clarion revisions.

<sup>87</sup> 2005 NOTE: Extensive changes are suggested to these garage standards, based on the December 2004 workshop, staff suggestions, and numerous other comments received. The size requirements for garage doors have been relaxed, and there is a larger menu of tools to use to minimize the visual impact of garage doors.

<sup>88</sup> 2005 NOTE: This is a new subsection in the 2005 draft.

<sup>89</sup> 2005 NOTE: Several changes have been made to this section in the 2005 draft. The applicability section is new. The number of units allowed in a single row in subsection 3. has been increased from six to eight. The section on entryway treatment is new. The garage section has been rewritten.

<sup>90</sup> 2005 NOTE: There are a number of suggested changes in this 2005 draft to this section. These standards now apply just to multi-family residential of four or fewer stories; larger buildings must comply with the public/institutional standards in the following section. Other specific changes are noted in the section.

<sup>91</sup> 2005 NOTE: These are new standards in the 2005 draft. We have not added the standard suggested by staff regarding buffering around parking lots—this is specifically addressed in the proposed parking lot landscaping section.

<sup>92</sup> 2005 NOTE: The menu of tools in this section has been lengthened. Three tools are required instead of two, but the façade length requirement, which was mandatory in the prior draft, is now one of the options.

<sup>93</sup> 2005 NOTE: This is a new subsection in the 2005 draft.

<sup>94</sup> 2005 NOTE: New section in the 2005 draft.

<sup>95</sup> NOTE: Staff has proposed density bonuses as incentives for developing underground parking garages. Further discussion needed. The idea is a good one, but some research would be necessary to determine the appropriate level of bonus that might be necessary in Anchorage to offset the additional cost of providing such parking.

<sup>96</sup> 2005 NOTE: This section has been significantly revised, as noted below. The exemption for special-purpose buildings such as airports is new. OLD NOTE: Suggested new standards. Again, the approach is quite simple and is designed to be both easy to administer and politically palatable, yet also substantive enough to get at some of the key design issues in Anchorage. Menus of standards are offered for purposes of flexibility. Many of these standards were originally considered as part of the draft Retail Design Standards Manual. However, material from that draft manual has been heavily edited and supplemented based on staff suggestions.

<sup>97</sup> 2005 NOTE: To staff: We have extracted several optional standards from the four core areas and kept them mandatory (weather protection, height transitions, snow storage). We feel strongly that these are design elements that should not be optional because of public safety or neighborhood protection reasons.

<sup>98</sup> 2005 NOTE: This is a substantially different approach from the earlier draft. Instead of setting out a list of required standards, the draft allows applicants to choose options from a set of four core areas. We recommend that applicants be required to satisfy at least TWO standards in each core area to prevent “shopping” for the weakest standard in each area—which has been the experience with other “point” systems like this.

<sup>99</sup> 2005 NOTE: In a similar fashion to the Public/Institutional and Commercial Building Standards, the draft allows applicants to choose options from a set of six core areas. A few important standards have remained as mandatory requirements. NOTE: This section drafted by staff, based on work done with another consultant on the Retail Design Standards Manual.

<sup>100</sup> NOTE: This section drafted by staff. Parking lot lighting is exempt from the requirements of this section and instead has to comply with separate lighting requirements in the parking section.

<sup>101</sup> NOTE: Intro paragraph is based in part on IESNA RP 33-99, as well as northern city design considerations. Bulleted specific purpose statements follow the format of other chapter 7 sections in identifying specific issue areas of concern. Primary issues in Anchorage appear to be: safety and visual acuity, glare and misdirected light, and excessive illumination for some uses.

<sup>102</sup> NOTE: Low-intensity lighting for single-family and other residential uses is exempted in subsection C which follows. The lighting standards would only limit very bright or glaring lights in residential areas. It is intended to protect neighborhoods, homeowners, or residents in cases of unusually intense or glaring lights on neighboring properties.

<sup>103</sup> NOTE: This exemption is for single-family and other residential development with low impact lighting. The lumens figure provided is approximately the output of a 75 watt incandescent bulb. The provision would exempt a 60 watt incandescent bulb, for example. It is intended as a starting point for discussion on the most appropriate wattage or brightness level to be exempted.

<sup>104</sup> NOTE: This exemption allows for holiday season and “City of Lights” style decorative wintertime illumination. The lumens figure provided exempts typical hanging decorative lights consisting of 10 watt or even 15 watt incandescent bulbs.

<sup>105</sup> NOTE: Staff recommends amortizing lighting. A grace period for all old and new lighting is suggested as a starting point for community discussion. The issue of concern is that a lighting fixture can last for decades. There are numerous examples of old and fading mercury vapor parking lot lighting still in use around the community, as well as barnyard style non cut-off lights from the 1970s.

<sup>106</sup> NOTE: Public safety and convenience are community priorities in Anchorage. This section establishes the need for adequate lighting which avoids disability glare. It is intended to be further developed pending community review and discussion.

<sup>107</sup> NOTE: Uniformity ratio recommended by IESNA RP-33-99 as a starting point for public discussion.

<sup>108</sup> NOTE: NEMA recommends basing standards on a performance standard such as CRI, rather than just a list of product types. This better accommodates new technology such as LED or induction lamps. Need to define “area lighting” to carefully exempt aesthetic hardscape, façade or landscape lighting.

<sup>109</sup> NOTE: IESNA RP 33-99 recommends ordinance provisions for maintenance, repair, and replacement. This would address safety and maintenance issues that exist in Anchorage.

<sup>110</sup> NOTE: Suggested new section for glare control applicable to all lighting. This approach eliminates the need to provide glare control provisions for each type of lighting—parking, building, etc. It also eliminates potential loopholes in the code for light intensive uses like car sales lots.

<sup>111</sup> Suggested maximum light trespass figures in Table 3 are suggested by the IESNA as a starting point for community discussion for community lighting ordinances.

<sup>112</sup> NOTE: IESNA suggests lowering lighting levels. NEMA suggests lowering lighting levels only in certain areas.

<sup>113</sup> NOTE: Need to move gas station canopy standards from 21.05.050.L.2.b.i.(B) here to be generally applicable, and consolidate it with canopy lighting provisions.

<sup>114</sup> NOTE: Suggested new section. These are relatively simple performance standards intended help protect adjacent properties from the impacts of intensive uses.