

Assembly Committee Document  
7.1.F

21.07.030 Private Open Space – Follow-up Issues  
Anchorage Assembly Title 21 Subcommittee

3/11/2009

## Private Open Space - Follow-up Issues

This memorandum provides research and findings regarding three issues the Assembly Title 21 Subcommittee discussed on February 19 regarding Section 030, *Private Open Space*:

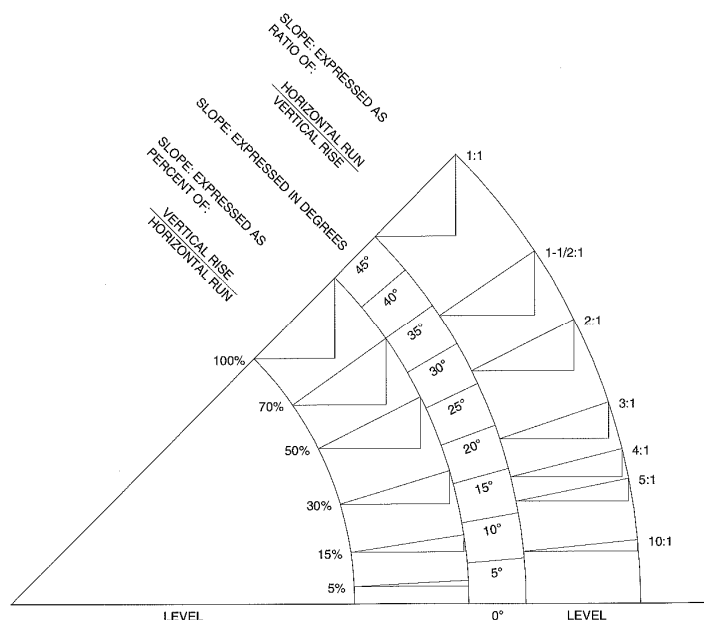
- (1) **Maximum Slope:** Is the maximum allowed slope appropriate for private open space or should it be increased?
- (2) **Nonresidential Uses:** Are there certain uses that should be exempted from the non-residential private open space requirement?
- (3) **Minimum Area Requirement:** Is the required minimum amount of private open space area adequate or should it be increased?

### Issue 1. Maximum Allowed Slope:

The November 10, 2008 draft as approved by PZC would establish a maximum slope of 10 percent for private open spaces within setbacks to be credited. In addition, it would require that individual private open spaces for exclusive use of an individual dwelling have a maximum slope of 5 percent in order to be credited.

A concern was raised that the recommended maximum allowed slopes would too restrictive and impractical. At least some slope is needed to ensure drainage, and some claim that slopes of 5 percent or between 5 – 10 percent are considered to be gentle, almost flat.

Percent slope is the change in vertical elevation between two points divided by the horizontal distance between two points. If point A and point B are 10 feet apart, and point B is 3 feet higher in elevation than point A, then the slope =  $( 3 / 10 ) \times 100 = 30$  percent. The following graphic<sup>1</sup> illustrates percent slope compared to other measures:



<sup>1</sup> Anderson, Lars, Planning the Built Environment

Slopes over 10 percent are considered by many to be hillsides, and slopes over 15 percent are usually classified as very steep. For example, in San Francisco, the cable cars are used on streets with a 15 percent grade. Cordova Street between 15<sup>th</sup> and 16<sup>th</sup> Avenues has a 15 percent grade. Traffic engineering standards are such that parking garage entrance ramps should not exceed 12.5 percent slope<sup>2</sup>.

Slope determines what uses for the land are suitable. As slope increases above 2-4 percent, more recreational uses become impractical. Reference resources from the fields of civil engineering and landscape design establish that areas in the 2 to 5 percent slope category are generally suitable for outdoor amenities including walkways, playgrounds, gardens, picnic areas and informal, lawn areas for non-competitive games, and small-group field sports. Following are slope standards for a variety of activities<sup>3</sup>:

<u>Activity</u>	<u>Recommended Maximum Slope (Percent)</u>
Tennis	1
Lawn Croquet	1.5
Team Sports	2
Bicycling with little effort	3
Gardening without erosion control	3
Gardening without a retaining wall	10
Walkway cross slopes (ADA)	2
Walkway running slopes (ADA, DCM)	5

Areas in the 5 to 10 percent slope category are suitable for a much more limited range of outdoor recreational activities, such as hiking, informal play and picnicking. According to PM&E, any walkway slope exceeding 5 percent is by definition a ramp, and therefore has handrail, landing requirements, etc. Walkway slopes greater than 5 percent are difficult for many people, including people with less stamina or wheelchairs.

The range and quality of recreational activities becomes more limited in areas in the 10 – 15 percent slope category. In slopes of over 15 percent, no recreational uses are considered feasible which require a concentration of people.

The intent of the ordinance is to ensure that the required minimum private open space area is usable and suitable for a wide range of recreational uses. Areas in the 10 – 15 percent slope category do not meet this criteria. When such areas with 10 percent slope or greater are adjacent to and sloping into a street or fenced lot line, the space is unsuitable, undesirable or impractical for nearly all outdoor recreational activities.

Based on these findings, Planning staff would support the following amendments:

Page 19, line 38, amend as follows: "Setbacks with **average** slopes over 10 percent."

Page 20, lines 14-15, amend as follows: "Individual private open space for the exclusive use of each dwelling unit shall have a **n average** slope of less than five percent."

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<sup>2</sup> Urban Land Institute (ULI), The Dimensions of Parking, 4<sup>th</sup> Ed.

<sup>3</sup> Harris, Charles, Time-Saver Standards for Landscape Architecture

## **Issue 2. Nonresidential Uses**

It was requested during the February 19 Assembly Title 21 Subcommittee meeting that staff review the non-residential land use types that would be subject to the private open space requirement, to resolve whether certain uses should be exempt.

Based on a general review of all Use Categories in Chapter 21.05, it appears consistent with the purpose statement of section 21.07.030 to apply the non-residential private open space requirement to the following Use Categories:

Adult Care	Entertainment and Recreation
Child Care	Food and Beverage Service
Community Service	Office
Cultural Facility	Personal Services
Health Care Facility	Retail Sales
Animal Sales, Service and Care	Visitor Accommodations
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Some of the individual use types in these Use Categories are mostly outdoor spaces for people, with little or no building floor area: Cemetery; Botanical Gardens; General Outdoor Recreation; Golf Course; Shooting Range; Alpine Skiing Facility; Farmers Market; Camper Park; Recreational and Vacation Camp. Since these uses will easily far exceed the private open space requirement, they will not be materially affected by it and therefore need no protection or exemption.

However, the following Use Categories from Chapter 21.05 should probably be exempt:

Park and Open Space	Agricultural Uses
Public Safety Facility	Vehicles and Equipment
Transportation Facility	Manufacturing and Production
Utility Facility	Warehouse and Storage
Telecommunication Facility	Waste and Salvage

Some Use Categories merited a closer investigation. Group Living uses such as assisted living facilities and roominghouses are “Residential Uses”, but do not have “dwellings”. Therefore they seem to fall in a loophole within the private open space applicability language. The language should be clarified to ensure that Group Living uses provide private open space equal to 5 percent of their gross floor area.

Educational Facility land uses include both public and private institutions: Boarding schools, Colleges or universities, Elementary, Middle and High Schools; Instructional services; Vocational or Trade Schools. ASD facilities, UAA and APU will far exceed the private open space requirement and/or will be zoned PLI. Therefore these uses will not be materially affected by the private open space requirement and need no exemption.

Some private schools, charter schools, instructional services and vocational schools occupy commercial tenant space. These uses generate as many on-site employees, customers and users as other commercial uses, and should be subject to the same private open space as their neighboring commercial tenants.

The Industrial Service Use Category includes three Use Types that would be allowed in commercial or mixed-use districts and therefore subject to the private open space requirement: Data Processing Facility, Dry Cleaning Establishment, and Research Laboratory. These uses should be expected to fit into and contribute to pedestrian-oriented commercial/mixed-use districts. Turnover in establishments could result in a retail store, office or restaurant occupying the space in the future. Moreover, these uses are encouraged to locate in industrial districts, where the private open space requirement does not apply. An exemption is not recommended.

Small buildings present another applicability question. Food and Beverage Kiosks, Fueling Stations, or Parking Structures are very small and/or generate few employees and no walk-in customers on foot. These uses will usually have less than 1,000 square feet of gross floor area, and should probably be exempted. However, small customer oriented establishments such as fast food restaurants and coffee shops occupy spaces between as small as 1,000 to 5,000 square feet in size, and still generate outdoor use of pedestrian space. For example, a new Starbucks Coffee franchise occupies a 1,800 square foot tenant space in The Shops Building at 110 West Tudor and incorporates an outdoor seating patio.

Based on these findings, Planning staff would support the following amendments:

Page 19, after line 33, add a new subsection C as follows, and renumber subsequent subsections accordingly:

**C. Exemptions**

The following are exempt from the private open space requirement:

1. Parks and Open Areas, Public Safety Facility, Transportation Facility, Utility Facility, Telecommunication Facility, Agricultural Uses, Vehicles and Equipment, Manufacturing and Production, Warehouse and Storage, and Waste and Salvage Use Categories;
2. Any building floor area devoted to parking and/or loading; and
3. Any development with less than 1,000 square feet of gross floor area.

Page 19, line 16, amend as follows, "... or an area equal to a minimum of five percent of the gross floor area of group living or nonresidential development."

Page 19, lines 18-19 and 24-25, amend as follows: "Group living uses and [N]nonresidential development shall provide an area equal to a minimum of five percent of the gross floor area for private open space.

### **Issue 3. Minimum Area Requirement**

It was requested during the February 19 Assembly Title 21 Subcommittee meeting that staff compared the draft private open space requirement to equivalent requirements in other cities and to local community policies as a means to help reevaluate the adequacy of the draft minimum area requirement.

The proposed code would require the same or less private open space than current code, depending on the district. Builders can receive a further 10 percent area reduction, and indoor space can also be credited. The concern raised at the meeting was that this seems inconsistent with adopted policies and community expectations for adequate open space in residential developments.

The comment is that, if adopted policies reflect the intent to raise minimum standards for quality and livability in multifamily development, then it would seem appropriate to at least maintain or increase the minimum area requirement. If increasing the private open space requirement from November 10, 2008 draft would not materially impact the overall Title 21 land area requirements for residential developments, why not increase?

A review of other cities' codes indicates that some communities require more and others require less than Anchorage does, with no clear trend. Nor does the amount of private open space required seem to relate to the residential density of a city. For example, Seattle requires more outdoor private open space than smaller cities like Boise.

Staff conducted site testing using the Title 21 EIA Model to determine the potential land area impacts of an increase in the minimum open space requirement from the November 10, 2008 draft. The tests also incorporated an increase in the incentive reduction for providing good quality spaces. The following table shows the hypothetical increase tested in the R-3 and R-4 districts:

#### **HYPOTHETICAL REVISION TO OPEN SPACE REQUIREMENT:**

District	Revised Requirement	...with 25% Reduction
R-3	400 sf per dwelling unit	300 sf per unit
R-4 and R-4A:	120 sf per dwelling unit	90 sf per unit

The tests were conducted using the A.L. Spenard Apartments example development, which consists of an apartment building surrounded by parking, landscaping and yard.



Spenard Apartments at 1082 West 26<sup>th</sup> Avenue



Rear Yard

Findings on the hypothetical revision to the open space requirement:

1. The hypothetical open space requirement would more effectively achieve adopted community policies and objectives that emphasize residential open space than would the November 10, 2008 draft code as amended by PZC.
2. Overall land area requirements for site development would remain substantially lower than current code:
  - 15% lower than current code in R-4 district, according to site test
  - 11% lower than current code in R-3 district, according to site test
3. Overall land area requirements for site development would be moderately higher than under the November 10, 2008 draft code:
  - 2%-3% higher in R-4 district, according to site test
  - 8% higher in R-3 district, according to site test
4. The credit for providing “high quality” spaces would increase substantially, bringing the private open space requirement back down to the same level as that of the the PZC approved (November 10, 2008) draft code
  - the credit would triple in square footage
  - the higher reward would be more attractive, yielding more “high quality” spaces
  - the credit would lower the open space requirement to below current code
5. The graphs on the following page compare the overall land area requirements of the current code to: (a) the November 10, 2008 draft code reflecting PZC amendments, and (b) the draft code with the hypothetical revised private open space requirement.

Based on these findings, Planning staff would support the following amendments:

Page 19, line 15, amend as follows: “R-2M district: 480[400] square feet of private open space per dwelling unit...”

Page 19, line 17, amend as follows: “R-3 district: 400[300] square feet of private open space per dwelling unit...”

Page 19, lines 20-23, amend as follows: “R-4 and R-4A districts:...120[100] square feet of private open space per dwelling unit...”

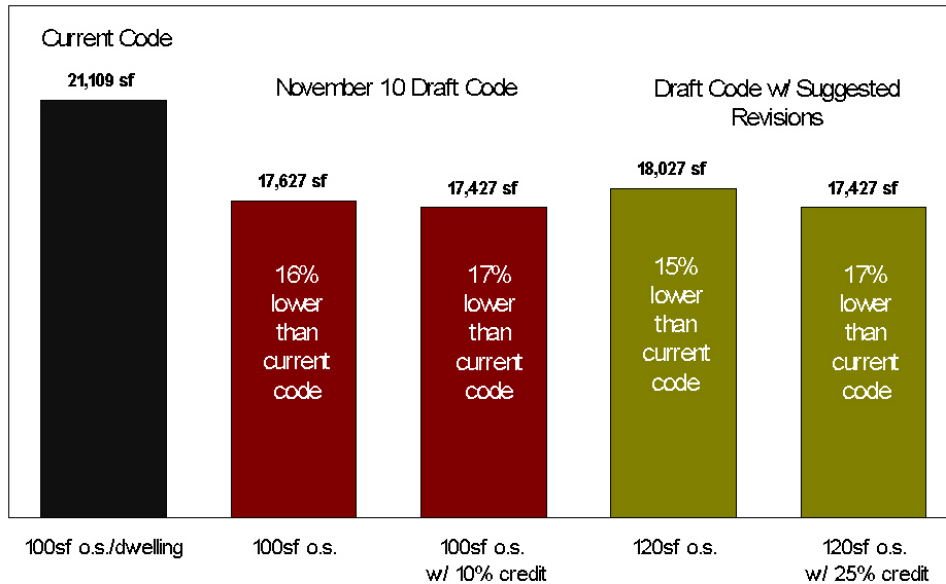
Page 19, line 29, amend non-residential districts as follows: “...120 [100] square feet of private open space per dwelling unit...”

Page 21, line 15, amend as follows: “The total open space area requirement may be reduced by 25[10] percent...”

Page 21, line 23, delete subsection 6.e.

## Overall Land Area Requirements for Site Development:

### Spenard Apartments using R-4 District



### Spenard Apartments using R-3 District

