

ARTICLE D: AED AIRFIELD ENVIRONS OVERLAY DISTRICT

§ 11-10D-1 PURPOSE AND INTENT.

The Airfield Environs Overlay District is an overlay zone established to accommodate a range of land uses that are compatible with airfield accident hazard and noise exposure areas and to prohibit incompatible uses that are detrimental to the public health, safety and welfare in the airfield environs. The Airfield Environs Overlay District supplements the regulations of the underlying zoning districts. The regulations of the Airfield Environs Overlay District prevail if there is a conflict.

(Prior Code, § 11-10D-1) (Ord. 2006-27, passed 12-5-2006)

Statutory reference:

Similar provisions, see 11 O.S. § 43-101.1

§ 11-10D-2 DEFINITIONS.

For the purpose of this article, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

ACCIDENT POTENTIAL ZONE (APZ)

(1) **APZ I.** Is described as being 3,000 feet wide (1,500 feet to each side of the runway centerline) and extending outward from the end of the CZ an additional 5,000 feet. This zone has a reduced accident potential.

(2) **APZ II.** Is described as being 3,000 feet wide (1,500 feet to each side of the runway centerline) and extending outward from the end of the APZ I an additional 7,000 feet. This zone has a further reduced, although still significant, accident potential.

AIRFIELD. Vance Air Force Base, Enid, Oklahoma.

AIRFIELD ENVIRONS OVERLAY DISTRICT. The area within the Vance Air Force Base vicinity, which is impacted by the combined effects of aircraft noise and accident potential and therefore, must be protected from the noise and safety hazards associated with aircraft operations.

AIRSPACE CONTROL SURFACES PLAN. The standards which determine the approach and departure slopes and imaginary surfaces surrounding Vance AFB. The standards are specified in 14 C.F.R. (Code of Federal Regulations) part 77.21, chapter 1, and are hereby adopted by reference. 14 C.F.R. § 77.21 (military airport imaginary surfaces) reads as follows:

(A) Related to airport reference points. These surfaces apply to all military airports. For the purposes of this section a military airport is any airport operated by an armed force of the United States.

(1) Inner horizontal surface. A plane is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.

(2) Conical surface. A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.

(3) Outer horizontal surface. A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.

(B) Related to runways. These surfaces apply to all military airports.

(1) Primary surface. A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000-foot width may be reduced to the former criteria.

(2) Clear zone surface. A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.

(3) Approach clearance surface. An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500 feet above the established airport elevation. It then continues horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.

(4) Transitional surfaces. These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

CLEAR ZONE (CZ). Two thousand feet wide (1,000 feet to each side of the runway centerline) and extending outward from the end of all active runway surfaces. The CZ starts at the end of the runway and extends outward 3,000 feet. This zone has the highest accident potential.

CLEAR ZONE, ACCIDENT POTENTIAL ZONES AND NOISE ZONES MAP. The official map adopted by reference with this title, designating clear zones, accident potential zones and noise zones per March 2003, *Air Installation Compatible Use Zone (AICUZ) Study*.

DECIBEL (dB). The physical unit commonly used to describe noise levels; the unit of level such as the sound pressure level.

NOISE ZONES (NZ). Areas subject to a degree of exterior noise created by airfield operations. There are four NZs as follows:

(1) 65<70 dB;

(2) 70<75 dB;

(3) 75<80 dB; and

(4) 80+ dB.

NONCONFORMING USE. Any structure or use of land which is lawfully in existence at the time a regulation is prescribed in an ordinance or an amendment thereto becomes effective.

OVERLAY DISTRICT. A set of zoning requirements that are imposed in addition to those of the underlying district.

STRUCTURE. An object constructed or installed by man, including, but without limitation, buildings, towers, smokestacks and overhead transmission lines.

(Prior Code, § 11-10D-2) (Ord. 04-01, passed 1-6-2004)

§ 11-10D-3 AIRFIELD ENVIRONS SUBDISTRICTS.

Within the Airfield Environs Overlay District, there are areas affected similarly by the combined characteristics of noise, flight tracks, altitude and accident potential. These areas are designated as Clear Zones (CZs), Accident Potential Zones (APZs) and Noise Zones (NZs). These areas are consistent with Air Force and local community land use guidelines. These

areas are subdistricts within the Overlay District.

(Prior Code, § 11-10D-3) (Ord. 04-01, passed 1-6-2004)

§ 11-10D-4 CLEAR ZONE (CZ).

This subdistrict is the most severely impacted by the operations of the adjacent airfield, which possesses a significant risk factor for aircraft accidents. The placement of structures is not compatible and is therefore prohibited. CZ also encompasses portions of Noise Zones Ldn 75<80 and 80+. Therefore, noise sensitive uses are not compatible without the incorporation of extensive noise attenuation construction techniques. Exposure to outside noise could be a health hazard to persons and animals. It is intended that the principal use of land shall remain for agriculture production of crops and other miscellaneous agriculture services. Residential uses are not permitted, unless otherwise specified in table 1, § 11-10D-13.

(A) District use regulations.

(1) *Uses permitted.* Property in CZ shall be utilized only for those uses permitted in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(2) *Uses permitted by review.* Property in CZ shall be utilized only for those uses permitted by review in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(B) Site development standards.

(1) *Standards of underlying district.* Property shall be developed in accordance with the development standards of the underlying district.

(2) *Height.* Buildings and structures are prohibited, unless otherwise specified in table 1, §11-10D-13 . No building or structure shall exceed 25 feet in height or the maximum height specified by the airspace control surfaces plan, whichever is less.

(Prior Code, § 11-10D-4) (Ord. 04-01, passed 1-6-2004)

§ 11-10D-5 ACCIDENT POTENTIAL ZONE (APZ) I.

This subdistrict is severely impacted by the operations of the nearby airfield. Due to the number of flight tracks over this subdistrict, a risk factor for aircraft accidents does exist, although not as great as CZ. APZ I encompasses portions of Noise Zones Ldn 65<70, 70<75, 75<80 and 80+. Therefore, noise sensitive uses are not compatible without the incorporation of extensive noise attenuation construction. Exposure to outdoor noise could be a health hazard to persons and animals. It is intended that the primary use of land in this district remain for agriculture production of crops and other agriculture services. Residential uses are not compatible with United States Air Force (USAF) recommendations and are not permitted, unless otherwise specified in table 1, § 11-10D-13.

(A) District use regulations.

(1) *Uses permitted.* Property and buildings in APZ I shall be utilized only for those uses permitted in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(2) *Uses permitted by review.* Property and buildings in APZ I shall be utilized only for those uses permitted by review in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(B) Site development standards.

(1) *Standards of underlying district.* Property shall be developed in accordance with the development standards of the underlying district.

(2) *Height.* No building or structure shall exceed 35 feet in height or the maximum height specified by the airspace control surfaces plan, whichever is less.

(Prior Code, § 11-10D-5) (Ord. 04-01, passed 1-6-2004)

§ 11-10D-6 ACCIDENT POTENTIAL ZONE (APZ) II.

This subdistrict is heavily impacted by the operations of the nearby airfield, which possess a significant risk factor for aircraft accidents. Residential uses, other than low density single-family dwellings, are not compatible. Density in this area is restricted to one dwelling unit per acre, and commercial areas are limited to 50 persons per acre. APZ II encompasses portions of Noise Zones Ldn 65<70 and 70<75. Therefore, noise sensitive uses are not compatible without the incorporation of noise attenuation construction. Most outdoor uses are only marginally compatible. It is intended that the principal use of undeveloped lands within the district remain for agriculture production of crops and other miscellaneous agriculture services until such time as development is warranted. This subdistrict is also intended to accommodate the wholesale, light industrial and retail uses that are permitted in the underlying zoning districts, which do not concentrate large numbers of people.

(A) District use regulations.

(1) *Uses permitted.* Property and buildings in APZ II shall be utilized only for those uses permitted in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(2) *Uses permitted by review.* Property and buildings in APZ II shall be utilized only for those uses permitted by review

in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(B) Site development standards.

(1) *Standards of underlying district.* Property shall be developed in accordance with the development standards of the underlying zoning district.

(2) *Height.* No building or structure shall exceed the height specified in the underlying zoning district, or the maximum height specified by the airspace control surfaces plan, whichever is less.

(Prior Code, § 11-10D-7) (Ord. 04-01, passed 1-6-2004)

§ 11-10D-7 NOISE ZONE (NZ) 65<70 dB.

This subdistrict is moderately impacted by the operations of the nearby airfield. Noise sensitive uses are not compatible in the NZ 65<70 dB without the incorporation of noise attenuation construction techniques. NZ 65<70 dB also encompasses portions of APZ I and APZ II. The district is primarily developed as low density single-family residential subdivisions and a community park, with open space and farmland located near the base. Most outdoor uses would be compatible. It is intended that the uses permitted in the underlying zoning districts shall be permitted in Noise Zone 65<70 dB with noise attenuation required for noise sensitive uses.

(A) District use regulations.

(1) *Uses permitted.* Property and buildings in NZ 65<70 dB shall be utilized only for those uses permitted in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(2) *Uses permitted by review.* Property and buildings in NZ 65<70 dB shall be utilized only for those uses permitted by review in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(B) Site development standards.

(1) *Standards of underlying district.* Property shall be developed in accordance with the development standards of the underlying zoning district.

(2) *Height.* No building or structure shall exceed the height specified in the underlying zoning district, or the maximum height specified by the airspace control surface plan, whichever is less.

(Prior Code, § 11-10D-8) (Ord. 04-01, passed 1-6-2004)

§ 11-10D-8 NOISE ZONE (NZ) 70<75 dB.

This subdistrict is heavily impacted by the operations of the nearby airfield. Noise sensitive uses are not compatible in the NZ 70<75 dB without the incorporation of noise attenuation construction techniques. Moreover, most outdoor uses would remain incompatible. NZ 70<75 dB also encompasses portions of the APZ I and APZ II. It is intended that the uses permitted in the underlying zoning districts shall be permitted in NZ 70<75 dB, with noise attenuation required for noise sensitive uses.

(A) District use regulations.

(1) *Uses permitted.* Property and buildings in NZ 70<75 dB shall be utilized only for those uses permitted in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(2) *Uses permitted by review.* Property and buildings in NZ 70<75 dB shall be utilized only for those uses permitted by review in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(B) Site development standards.

(1) *Standards of underlying district.* Property shall be developed in accordance with the development standards of the underlying zoning district.

(2) *Height.* No building or structure shall exceed 35 feet in height or the maximum height specified by the airspace control surfaces plan, whichever is less.

(Prior Code, § 11-10D-8) (Ord. 04-01, passed 1-6-2004)

§ 11-10D-9 NOISE ZONE (NZ) 75<80 dB.

This subdistrict is severely impacted by the operations of the airfield. Noise sensitive uses are not compatible without the incorporation of noise attenuation construction techniques. NZ 75<80 dB encompasses portions of APZ I and the clear zone. Most outdoor uses would not be compatible.

(A) District use regulations.

(1) *Uses permitted.* Property and buildings in NZ 75<80 dB shall be utilized only for those uses permitted in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(2) *Uses permitted by review.* Property and buildings in NZ 75<80 dB shall be utilized only for those uses permitted by review in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(B) *Site development standards.*

(1) *Standards of underlying district.* Property shall be developed in accordance with the development standards of the underlying zoning district.

(2) *Height.* No building or structure shall exceed 35 feet in height or the maximum height specified by the airspace control surfaces plan, whichever is less.

(Prior Code, § 11-10D-9) (Ord. 04-01, passed 1-6-2004)

§ 11-10D-10 NOISE ZONE (NZ) 80+ dB.

This subdistrict is the most severely impacted by the operations of the adjacent airfield. Noise sensitive uses are not compatible without the incorporation of extensive noise attenuation construction techniques. NZ 80+ also encompasses portions of the Clear Zone, and APZ I. Exposure to outside noise could be a health hazard to persons and animals. It is intended that the principal use of land shall remain for agriculture production of crops and other miscellaneous agriculture services. Residential uses are not permitted unless otherwise specified in table 1, § 11-10D-13.

(A) *District use regulations.*

(1) *Uses permitted.* Property in NZ 80+ shall be utilized only for those uses permitted in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(2) *Uses permitted by review.* Property in NZ 80+ shall be utilized only for those uses permitted by review in the underlying zoning districts, unless otherwise specified in table 1, § 11-10D-13 .

(B) *Site development standards.*

(1) *Standards of underlying district.* Property shall be developed in accordance with the development standards of the underlying district.

(2) *Height.* Buildings and structures are prohibited, unless otherwise specified in §11-10D-13 , table 1. No building or structure shall exceed 25 feet in height or the maximum height specified by the airspace control surfaces plan, whichever is less.

(Prior Code, § 11-10D-10) (Ord. 04-01, passed 1-6-2004)

§ 11-10D-11 CERTAIN LAND USES PROHIBITED.

Within the boundaries of the Airfield Environs Overlay District, there are particular land uses, which are considered airfield hazards and therefore, shall be prohibited:

(A) Uses which release into the air any substance, such as, but not limited to, steam, dust, smoke, fumes or gases, unless such substance is generated from agricultural use, which would impair visibility or otherwise interfere with military operations including ground operations;

(B) Uses which produce light emissions, either direct or indirect (reflective), which would interfere with pilot vision and aerial or ground based night vision training;

(C) Uses which produce electrical emissions which would interfere with military ground and aircraft communication and navigational equipment;

(D) Uses which attract birds or waterfowl, such as, but not limited to, operation of sanitary landfills and maintenance of feeding stations;

(E) Uses which endanger the approach, departure or maneuvering of aircraft by providing structures within ten feet of a defined aircraft approach, departure or transitional surfaces or 100 feet beneath a low level military training route; and

(F) Uses which detract from the aesthetic appearance or otherwise create or promote an unsightly, unsanitary or unhealthy appearance of any entrance into a military installation, including, but not limited to, automobile or truck salvage yards, equipment storage sites or solid waste or disposal sites.

(Prior Code, § 11-10D-11) (Ord. 2006-27, passed 12-5-2006)

§ 11-10D-12 NONCONFORMING USES.

(A) *Continuance.* A nonconforming use lawfully existing at the time this section became effective may be continued except as provided otherwise.

(B) *Discontinuation.* If a nonconforming use of any building, structure or land is discontinued or its normal operation stops for a period of five years, the use shall thereafter conform to a use permitted in conformance with these regulations. For purposes of this section, a **BUILDING** is defined as a structure with a common roof and may include more than one business or use, that are contiguous or adjoining, such as Oakwood Mall, Neilson Square or Sunset Plaza.

(C) *Destruction by calamity.* Any nonconforming use which has been damaged or destroyed by fire or other causes may be repaired or rebuilt to its original condition without regard to these regulations; provided, however, noise attenuation construction shall be required if specified in § 11-10D-13 , table 1.

(D) *Expansion or enlargement.* A nonconforming use may not be expanded, increased, enlarged or extended. However, the size or square feet of a nonconforming building or structure, that is nonconforming due to the concentration of persons (density), may be increased if by doing so the density of the use is decreased by twenty-five percent (25%).

(E) *Single-family dwellings permitted.* Any lot or tract of record or combination of lots of record existing as of the effective date hereof may be utilized for the placement of a single-family dwelling, if so permitted in the underlying zoning district; provided, however, noise attenuation construction shall be required.

(F) *Change of use.* A nonconforming use of a building or structure or land may be changed to an equal or less objectionable use within or outside of the same classification. Once changed, the nonconforming use may not revert back to the original use. For purposes of this section, less **OBJECTIONABLE USES** will primarily refer to uses that result in a less dense concentration of persons.

(Prior Code, § 11-10D-12) (Ord. 2008-17, passed 8-19-2008)

§ 11-10D-13 TABLES; LAND USE COMPATIBILITY.

Table 1 of this section specifies those land uses which are not permitted within the airfield environs overlay district, as well as those uses which may be permitted if certain conditions are met such as low density or noise attenuation as long as the uses are permitted in the underlying zoning district. Table 2 of this section provides an alternative method of determining the compatibility of land uses, but does not address noise attenuation. On density issues, either chart can be used to determine whether the use is allowed. If either one of the charts would permit the use, the use is allowed. On noise attenuation issues, table 1 of this section must be used. These tables must be used in conjunction with the underlying zoning to ensure a use is permitted.

TABLE 1								
LAND USE COMPATIBILITY								
Land Use		Accident Potential Zones			Noise Zones (DNL)			
SLUCM Number	Name	Clear Zone	APZ I	APZ II	65<70 dB	70<75 dB	75<80 dB	80+ dB
TABLE 1								
LAND USE COMPATIBILITY								
Land Use		Accident Potential Zones			Noise Zones (DNL)			
SLUCM Number	Name	Clear Zone	APZ I	APZ II	65<70 dB	70<75 dB	75<80 dB	80+ dB
10	Residential							
11	Household units							
11.11	Single units; detached	N	N	Y ¹	A ¹¹	B ¹¹	N ¹¹	N ¹¹
11.12	Single units; semidetached	N	N	N	A ¹¹	B ¹¹	N	N
11.13	Single units; attached row	N	N	N	A ¹¹	B ¹¹	N	N
11.21	2 units; side by side	N	N	N	A ¹¹	B ¹¹	N	N
11.22	2 units; one above the other	N	N	N	A ¹¹	B ¹¹	N	N
11.31	Apartments; walk up	N	N	N	A ¹¹	B ¹¹	N	N
11.32	Apartments; elevator	N	N	N	A ¹¹	B ¹¹	N	N
12	Group quarters	N	N	N	A ¹¹	B ¹¹	N	N
13	Residential hotels	N	N	N	A ¹¹	B ¹¹	N	N
14	Mobile home parks or courts	N	N	N	N	N	N	N
15	Transient lodgings	N	N	N	A ¹¹	B ¹¹	C ¹¹	N
16	Other residential	N	N	N ¹	A ¹¹	B ¹¹	N	N
20	Manufacturing							
21	Food and kindred products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴

22	Textile mill products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
23	Apparel and other finished products made from fabrics, leather and similar materials; manufacturing	N	N	N	Y	Y ¹²	Y ¹³	Y ¹⁴
24	Lumber and wood products (except furniture); manufacturing	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
25	Furniture and fixtures; manufacturing	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
26	Paper and allied products; manufacturing	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
27	Printing, publishing and allied industries	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
28	Chemicals and allied products; manufacturing	N	N	N ²	Y	Y ¹²	Y ¹³	Y ¹⁴
29	Petroleum refining and related industries	N	N	N	Y	Y ¹²	Y ¹³	Y ¹⁴
30	Manufacturing							
31	Rubber and miscellaneous plastic products; manufacturing	N	N ²	N ²	Y	Y ¹²	Y ¹³	Y ¹⁴
32	Stone, clay and glass products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
33	Primary metal industries	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
34	Fabricated metal products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
35	Professional, scientific and controlling instruments; photographic and optical goods; watches and clocks; manufacturing	N	N	N ²	Y	A	B	N
39	Miscellaneous manufacturing	N	Y ²	Y ²	Y	Y ¹²	Y ¹³	Y ¹⁴
40	Transportation, communications and utilities							
41	Railroad, rapid rail transit and street railroad transportation	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
42	Motor vehicle transportation	N ³	Y	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
43	Aircraft transportation	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
44	Marine craft transportation	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
45	Highway and street right-of-way	N ³	Y	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
46	Automobile parking	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
47	Communications	N ³	Y ⁴	Y	Y	A ¹⁵	B ¹⁵	N
48	Utilities	N ³	Y ⁴	Y	Y	Y	Y ¹²	Y ¹³
49	Other transportation, communications and utilities	N ³	Y ⁴	Y	Y	A ¹⁵	B ¹⁵	N
50	Trade							
51	Wholesale trade	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴

52	Retail trade: building materials, hardware and farm equipment	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
53	Retail trade: general merchandise	N	N ²	Y ²	Y	A	B	N
54	Retail trade: food	N	N ²	Y ²	Y	A	B	N
55	Retail trade: automotive, marine craft, aircraft and accessories	N	Y ²	Y ²	Y	A	B	N
56	Retail trade: apparel and accessories	N	N ²	Y ²	Y	A	B	N
57	Retail trade: furniture, home furnishings and equipment	N	N ²	Y ²	Y	A	B	N
58	Retail trade: eating and drinking establishments	N	N	N ²	Y	A	B	N
59	Other retail trade	N	N ²	Y ²	Y	A	B	N
60	Services							
61	Finance, insurance and real estate services	N	N	Y ⁶	Y	A	B	N
62	Personal services	N	N	Y ⁶	Y	A	B	N
62.4	Cemeteries	N	Y ⁷	Y ⁷	Y	Y ¹²	Y ¹³	Y ^{14,21}
63	Business services	N	Y ⁸	Y ⁸	Y	A	B	N
64	Repair services	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
65	Professional services	N	N	Y ⁶	Y	A	B	N
65.1	Hospitals, nursing homes	N	N	N	A*	B*	N	N
65.1	Other medical facilities	N	N	N	Y	A	B	N
66	Contract construction services	N	Y ⁶	Y	Y	A	B	N
67	Governmental services	N	N	Y ⁶	Y*	A*	B*	N
68	Educational services	N	N	N	A*	B*	N	N
69	Miscellaneous services	N	N ²	Y ²	Y	A	B	N
70	Cultural, entertainment and recreational							
71	Cultural activities (including churches)	N	N	N ²	A*	B*	N	N
71.2	Nature exhibits	N	Y ²	Y	Y*	N	N	N
72	Public assembly	N	N	N	Y	N	N	N
72.1	Auditoriums, concert halls	N	N	N	A	B	N	N
72.11	Outdoor music shell, amphitheaters	N	N	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	N	N	N	Y ¹⁷	Y ¹⁷	N	N
73	Amusements	N	N	Y ⁸	Y	Y	N	N
74	Recreational activities (including golf courses, riding stables, water recreation)	N	Y ^{8,9,10}	Y	Y*	A*	B*	N
75	Resorts and group camps	N	N	N	Y*	Y*	N	N
76	Parks	N	Y ⁸	Y ⁸	Y*	Y*	N	N
79	Other cultural, entertainment and recreation	N	Y ⁹	Y ⁹	Y*	Y*	N	N

80	Resources production and extraction							
81	Agriculture (except livestock)	Y ¹⁶	Y	Y	Y ¹⁸	Y ¹⁹	Y ²⁰	Y ^{20,21}
81.5 to 81.7	Livestock farming and animal breeding	N	Y	Y	Y ¹⁸	Y ¹⁹	Y ²⁰	Y ^{20,21}
82	Agricultural related activities	N	Y ⁵	Y	Y ¹⁸	Y ¹⁹	N	N
83	Forestry activities and related services	N ⁵	Y	Y	Y ¹⁸	Y ¹⁹	Y ²⁰	Y ^{20,21}
84	Fishing activities and related services	N ⁵	Y ⁵	Y	Y	Y	Y	Y
85	Mining activities and related services	N	Y ⁵	Y	Y	Y	Y	Y
89	Other resources production and extraction	N	Y ⁵	Y	Y	Y	Y	Y

Legend:

SLUCM: "Standard Land Use Coding Manual", U.S. Department of Transportation.

Y: Yes - land uses and related structures are compatible without restriction.

N: No - land use and related structures are not compatible and are prohibited.

Y*: See asterisk (*) at the end of note 2 of this table.

Yx: Yes with restrictions - land use and related structures generally compatible; see notes indicated by the superscript.

Nx: No with exceptions - see notes indicated by the superscript.

NLR: Noise level reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation measures into the design and construction of the structures.

DNL: Day/night average sound level.

A, B or C: Land use and related structures are compatible; measures to achieve NLR for A (DNL/65<70), B (DNL/70<75), C (DNL/75<80), need to be incorporated into the design and construction of structures.

A*, B* and C*: Land use and related structures are compatible with NLR. However, measures to achieve an overall noise level reduction do not necessarily solve noise difficulties and additional evaluation is warranted. See appropriate footnotes.

Notes to table:

1. Maximum density is 1 dwelling unit per acre possibly increased under a planned unit development where maximum lot coverage is less than twenty percent (20%).

2. Shopping malls and shopping centers are considered incompatible uses in any accident potential zone (CZ, APZ I or APZ II). Uses are compatible if they do not result in a gathering of individuals in an area that would result in an average density of greater than 25 persons per hour during a 24-hour period, not to exceed 50 persons per acre at any given time. Uses are compatible if they do not result in a gathering of individuals in an area that would result in an average density of greater than 25 persons per acre per hour during a 24-hour period, not to exceed 50 persons per acre at any time. Average densities of persons per hour during a 24-hour period are determined by calculating the number of persons per acre expected on a site, multiplying by the number of hours they will be on the site and dividing the total by 24. (For example: One 8-hour shift of 30 workers on a 1 acre site. Average density = 30 persons expected x 8 hours on site = 240, then 240/24 = 10; thus average density per acre per hour per a 24-hour period. Another example is two 8-hour shifts of 30 workers on a 1 acre site. Average density = 30 persons expected x 16 hours on site = 480. Then 480/24 = 20; thus the average density = 20 persons per acre per hour per a 24-hour period.) The maximum number of persons allowed per acre per hour is calculated by dividing the number of hours persons will be on site by 24 hours, and then dividing 25 persons per acre per hour by the result. The resulting number is the maximum number of persons allowed per acre per hour; provided it does not exceed 50. 50 persons per acre at any one time is the maximum number of persons allowed under the standard. (For example: The maximum density for two 8-hour shifts on a 1 acre site. 25 divided by 16/24 = 37.5 persons per acre per hour allowed.) Application of this formula results in the following table which specifies the maximum persons per acre per hour for the duration of the time that persons are expected to be on site during a 24-hour period.

**Maximum Persons Allowed Per
Acre/
Hours Of Operation Per Day
During Each Hour**

Hours Of Operation Per Day	Maximum Persons Allowed Per Acre/ During Each Hour
24	25
23	26
22	27
21	28
20	30
19	31
18	33
17	35
16	37
15	40
14	42
13	46
12 or less	50*

Note: Fractions in the maximum persons allowed column are rounded to the lowest whole number.

*Concentration of people may not exceed 50 people per acre at any time, or 50 people on any 1 acre regardless of lot size. Additional acreage cannot be aggregated to permit a higher concentration of people on any 1 site. The method for calculating the number of people in a structure shall be in accordance with chapter 10 of the international building code, which details the floor area in square feet per occupant. However, buildings should be limited to 1 story and the lot coverage shall not exceed twenty percent (20%).

3. The placement of structures, buildings or aboveground utility lines in the CZ are prohibited.

4. No passenger terminals and no major aboveground transmission lines in APZ I.

5. Factors to be considered: labor intensity, structural coverage, explosive characteristics and air pollution.

6. Low density office uses only. Meeting places, auditoriums and the like, are prohibited.

7. Excludes chapels.

8. Facilities must be low density.

9. Clubhouses are prohibited.

10. Areas for gatherings of people are prohibited.

11. Residential uses are permitted through a use by review so long as they incorporate measures to achieve outdoor to indoor NLR for DNL 65<70 dB and DNL 70<75 dB into construction of the residence, consistent with the "Guidelines For The Sound Insulation Of Residences Exposed To Aircraft Operation", Wyle research report WR 89-7, which document is hereby incorporated by this reference. Residential uses that do not incorporate these measures are prohibited in the Airfield Environs Overlay District. NLR criteria will not eliminate outdoor noise problems. However, building location and site planning and design and use of berms and barriers can help mitigate outdoor exposure, particularly from near ground level sources. Measures that reduce outdoor noise should be used whenever practical in preference to measures which only protect interior spaces.

12. Measures to achieve the same NLR as required for facilities in the DNL 65<70 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

13. Measures to achieve the same NLR as required for facilities in the DNL 70<75 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

14. Measures to achieve the same NLR as required for facilities in the DNL 75<80 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

15. If noise sensitive, use indicated NLR; if not, the use is compatible.

16. No buildings.

17. Land use is compatible, provided special sound reinforcement systems are installed.

18. Residential buildings required the same NLR as required for facilities in the DNL 65<70 dB range.

19. Residential buildings required the same NLR as required for facilities in the DNL 70<75 dB range.

20. Residential buildings are prohibited.

21. Land use is prohibited for cemeteries and forestry activities. Land use is compatible for agriculture (except for livestock).

TABLE 2

LAND USE COMPATIBILITY IN ACCIDENT POTENTIAL ZONES¹

SLUCM Number	Land Use Name	Clear Zone	APZ I	APZ II	Density
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TABLE 2

LAND USE COMPATIBILITY IN ACCIDENT POTENTIAL ZONES¹

SLUCM Number	Land Use Name	Clear Zone	APZ I	APZ II	Density
10	Residential				
11	Household units				
11.11	Single units; detached	N	N	Y ²	Maximum density of 1 to 2 Du/Ac
11.12	Single units; semidetached	N	N	N	
11.13	Single units; attached row	N	N	N	
11.21	2 units; side by side	N	N	N	
11.22	2 units; one above the other	N	N	N	
11.31	Apartments; walk up	N	N	N	
11.32	Apartments; elevator	N	N	N	
12	Group quarters	N	N	N	
13	Residential hotels	N	N	N	
14	Mobile home parks or courts	N	N	N	
15	Transient lodgings	N	N	N	
16	Other residential	N	N	N	
20	Manufacturing ³				
21	Food and kindred products; manufacturing	N	N	Y	Maximum FAR of 0.56
22	Textile mill products; manufacturing	N	N	Y	Maximum FAR of 0.56
23	Apparel and other finished products made from fabrics, leather and similar materials; manufacturing	N	N	N	
24	Lumber and wood products (except furniture); manufacturing	N	Y	Y	Maximum FAR of 0.28 in APZ I and 0.56 in APZ II
25	Furniture and fixtures; manufacturing	N	Y	Y	Maximum FAR of 0.28 in APZ I and 0.56 in APZ II
26	Paper and allied products; manufacturing	N	Y	Y	Maximum FAR of 0.28 in APZ I and 0.56 in APZ II
27	Printing, publishing and allied industries	N	Y	Y	Maximum FAR of 0.28 in APZ I and 0.56 in APZ II
28	Chemicals and allied products; manufacturing	N	N	N	
29	Petroleum refining and related industries	N	N	N	
30	Manufacturing				
31	Rubber and miscellaneous plastic products; manufacturing	N	N	N	
32	Stone, clay and glass products; manufacturing	N	N	Y	Maximum FAR of 0.56
33	Primary metal industries	N	N	Y	Maximum FAR of 0.56
34	Fabricated metal products; manufacturing	N	N	Y	Maximum FAR of 0.56

35	Professional, scientific and controlling instruments; photographic and optical goods; watches and clocks; manufacturing	N	N	N	
39	Miscellaneous manufacturing	N	Y	Y	Maximum FAR of 0.28 in APZ I and 0.56 in APZ II
40	Transportation, communications and utilities ⁴				See note 3
41	Railroad, rapid rail transit and street railroad transportation	N	Y ⁵	Y	See note 3
42	Motor vehicle transportation	N	Y ⁵	Y	See note 3
43	Aircraft transportation	N	Y ⁵	Y	See note 3
44	Marine craft transportation	N	Y ⁵	Y	See note 3
45	Highway and street right-of-way	N	Y ⁵	Y	See note 3
46	Automobile parking	N	Y ⁵	Y	See note 3
47	Communications	N	Y ⁵	Y	See note 3
48	Utilities	N	Y ⁵	Y	See note 3
48.5	Solid waste disposal (landfills, incineration and the like)	N	N	N	
49	Other transportation, communications and utilities	N	Y ⁵	Y	See note 3
50	Trade				
51	Wholesale trade	N	Y	Y	Maximum FAR of 0.28 in APZ I and 0.56 in APZ II
52	Retail trade: building materials, hardware and farm equipment	N	Y	Y	Maximum FAR of 0.14 in APZ I and 0.28 in APZ II
53	Retail trade: general merchandise	N	N	Y	Maximum FAR of 0.14
54	Retail trade: food	N	N	Y	Maximum FAR of 0.24
55	Retail trade: automotive, marine craft, aircraft and accessories	N	Y	Y	Maximum FAR of 0.14 in APZ I and 0.28 in APZ II
56	Retail trade: apparel and accessories	N	N	Y	Maximum FAR of 0.28
57	Retail trade: furniture, home furnishings and equipment	N	N	Y	Maximum FAR of 0.28
58	Retail trade: eating and drinking establishments	N	N	N	
59	Other retail trade	N	N	Y	Maximum FAR of 0.22
60	Services ⁶				
61	Finance, insurance and real estate services	N	N	Y	Maximum FAR of 0.22 for "general office/office park"
62	Personal services	N	N	Y	Office uses only. Maximum FAR of 0.22
62.4	Cemeteries	N	Y ⁷	Y ⁷	
63	Business services	N	N	Y	Maximum FAR of 0.22 in APZ II
63.7	Warehousing and storage services	N	Y	Y	Maximum FAR of 1.0
64	Repair services	N	Y	Y	Maximum FAR of 0.11 in APZ I and 0.22 in APZ II
65	Professional services	N	N	Y	Maximum FAR of 0.22
65.1	Hospitals, nursing homes	N	N	N	
65.1	Other medical facilities	N	N	N	

66	Contract construction services	N	Y	Y	Maximum FAR of 0.11 in APZ I and 0.22 in APZ II
67	Government services	N	N	Y	Maximum FAR of 0.22
68	Educational services	N	N	N	
69	Miscellaneous services	N	N	Y	Maximum FAR of 0.22
70	Cultural, entertainment and recreational				
71	Cultural activities	N	N	N	
71.2	Nature exhibits	N	Y ⁸	Y ⁸	
72	Public assembly	N	N	N	
72.1	Auditoriums, concert halls	N	N	N	
72.11	Outdoor music shells, amphitheaters	N	N	N	
72.2	Outdoor sports arenas, spectator sports	N	N	N	
73	Amusements	N	N	Y	
74	Recreational activities (including golf courses, riding stables, water recreation)	N	Y ⁸	Y ⁸	
75	Resorts and group camps	N	N	N	
76	Parks	N	Y ⁸	Y ⁸	
79	Other cultural, entertainment and recreation	N	Y ⁸	Y ⁸	
80	Resources production and extraction				
81	Agriculture (except livestock)	Y ⁴	Y ⁹	Y ⁹	
81.5 to 81.7	Livestock farming and animal breeding	N	Y ^{9,10}	Y ^{9,10}	
82	Agriculture related activities	N	Y ⁹	Y ⁹	Maximum FAR of 0.28; no activity which produces smoke, glare, birds or involves explosives
83	Forestry activities ¹¹ and related services	N	Y	Y	Maximum FAR of 0.28; no activity which produces smoke, glare, birds or involves explosives
84	Fishing activities ¹² and related services	N ¹²	Y	Y	Maximum FAR of 0.28; no activity which produces smoke, glare, birds or involves explosives
85	Mining activities and related services	N	Y	Y	Maximum FAR of 0.28; no activity which produces smoke, glare, birds or involves explosives
89	Other resources production and extraction	N	Y		Maximum FAR of 0.28; no activity which produces smoke, glare, birds or involves explosives
90	Other				
91	Undeveloped land	Y	Y	Y	
93	Water areas	N ¹³	N ¹³	N ¹³	

Legend:

SLUCM: "Standard Land Use Coding Manual", U.S. Department of Transportation.

Y: Yes - land use and related structures are compatible without restriction.

N: No - land use and related structures are not compatible and are prohibited.

Yx: Yes with restrictions - land use and related structures are generally compatible. However, see notes indicated by the superscript.

Nx: No with exceptions - land use and related structures are generally incompatible. However, see notes indicated by the superscript.

FAR: Floor area ratio - it is used to measure nonresidential intensities or densities.

A floor area ratio is the difference between the size of the building and the site area measured in square feet. The site area is measured to the property line to include the center of adjacent streets or alleyways, but does not include the area utilized by separate buildings.

For multiple tenants in a building, the following equations should be used to determine the floor area ratio for a particular tenant:

The floor area of a tenant (T) is divided by the combined leasable space of the building plus the tenant's proportionate share of the common space (B) multiplied by the site area, which equals the individual tenant's proportioned site area (ITPSA). (T divided by B multiplied by site area = ITPSA.)

Then, the floor area of the tenant is divided by the ITPSA, which equals the floor area ratio of a tenant. (T divided by ITPSA = FAR.)

Du/Ac: Dwelling units per acre - this metric is customarily used to measure residential densities.

Notes to table:

1. A "yes" or a "no" designation for compatible land use is to be used only for general comparison. Within each, uses exist where further evaluation may be needed in each category as to whether it is clearly compatible, normally compatible or not compatible due to the variation of densities of people and structures. Floor area ratios are provided as a guide to density in some categories. In general, land use restrictions which limit commercial, services or industrial buildings or structure occupants to 25 per acre in APZ I, and 50 per acre in APZ II are the range of occupancy levels considered to be low density. Outside events should normally be limited to assemblies of not more than 25 people per acre in APZ I, and maximum assemblies of 50 people per acre in APZ II.
2. The maximum density for detached single-family housing is 1 to 2 dwelling units per acre. In a planned unit development (PUD) of single-family detached units where clustered housing development results in large open areas, this density could be increased, provided the amount of surface area covered by structures does not exceed twenty percent (20%) of the PUD total area. PUD encourages clustered development that leaves large open areas.
3. Other factors to be considered: labor intensity, structural coverage, explosive characteristics, air pollution, electronic interference with aircraft, height of structures and potential glare to pilots.
4. No structures (except airfield lighting), buildings or aboveground utility/communications lines should be located in clear zone areas on or off the installation. The clear zone is subject to severe restrictions. See NAVFAC P-80.3 or Tri-Service manual AFM 32-1123(I); TM 5-803-7, NAVFAC P-971, "Airfield And Heliport Planning And Design", dated May 1, 1999, for specific design details.
5. No passenger terminals and no major aboveground transmission lines in APZ I.
6. Low intensity office uses only. Accessory uses such as meeting places, auditoriums and the like, are not allowed.
7. No chapels are allowed within APZ I or APZ II.
8. Facilities must be low intensity. Facilities such as clubhouses, meeting places, auditoriums, large classes, are not allowed.
9. Includes livestock grazing but excludes feedlots and intensive animal husbandry. Activities that attract concentrations of birds that create a hazard to aircraft operations are excluded.
10. Includes feedlots and intensive animal husbandry.
11. Lumber and timber products removed due to establishment, expansion or maintenance of clear zones will be disposed of in accordance with appropriate DoD natural resources instructions.
12. Controlled hunting and fishing may be permitted for the purpose of wildlife management.
13. Naturally occurring water features (e.g., rivers, lakes, streams, wetlands) are compatible.

(Prior Code, § 11-10D-13) (Ord. 2008-17, passed 8-19-2008)

§ 11-10D-14 NOISE LEVEL REDUCTION GUIDELINES.

The study, *Guidelines For Sound Insulation Of Residences Exposed To Aircraft Operations*, November 1989, Wyle research report WR89-7 is hereby adopted by reference.

(Prior Code, § 11-10D-14) (Ord. 04-01, passed 1-6-2004)