

# **Sheridan County Airport Noise Zoning Resolution**

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# Sheridan County Airport Noise Zoning Resolution

## Chapter 1

### General Provisions

Section 1. Title. A resolution guiding, regulating and providing for the compatible uses of land in the vicinity of the Sheridan County Airport by creating appropriate zones and establishing their boundaries; establishing certain development standards and defining certain terms used herein; referring to the Land Use Zoning Map which is incorporated in and made a part of this resolution; designating the County Planning Commission as the County Zoning Commission: providing for receipt of applications and review by the Board of County Commissioners and County Engineer for development projects; providing reasonable grounds for review and revision on this resolution; establishing a process of appeal; and establishing penalty for non-compliance. This resolution shall be known, cited and referred to as the "Sheridan County Airport Noise Zoning Resolution".

Section 2. Authority. This resolution is adopted pursuant to the authority conferred by Title 18, Chapter 5, Article 201-207, and Title 10, Chapter 4, Article 106 of the Wyoming Statutes (1977). It is hereby deemed necessary to guide and regulate the land uses of property surrounding the Sheridan County Airport and its vicinity in order to insure orderly development protecting the property and occupants, both existing and future in noise impact areas from encroachment by unprotected noise sensitive uses; it further contends that airport operations and functions will create noises and expose certain designated areas to sound produced by users of said airport in landing, maneuvering, and takeoff and that measures must be taken that protect the size location and configuration of areas available for approach to the airport landing and takeoff areas of the aircraft from encroachment of incompatible land uses which could tend to destroy or impair the utility of the Sheridan County Airport and the public investment therein. Accordingly, it is hereby resolved that the Sheridan County Airport Noise Zoning Resolution:

- a. Be supportive of and in accordance with the Comprehensive Plan of Sheridan County.
- b. Delineate the areas of influence and impact of the Sheridan County Airport, referring to the Land Use Map.
- c. Specify land use suitability delineations in the vicinity according to other critical factors considered in preparation of the Land Use Map.

- (1) Areas of natural hazard or physical limitation.

- (2) Areas of concern created by man-made alteration of the environment.
- (3) Peculiarities of specific land uses limiting their compatibility.
- d. Provide guidance in the form of Standards and Codes to aid the developer in design and construction with compliance being voluntary and the burden of inspection being upon the property owner and developer unless it is determined, after investigation by the County Engineer, that a dire state of emergency endangering life, health, or property exists.
- e. Designate the county Engineer as the official to receive applications and to review provisions herein contained for compliance and authorizing him to submit said application to the Board of County Commissioners for said body to act upon or recommend future development or alteration to existing development in accordance with Standards and Codes herein provided and in compliance with the letter and intent of subdivision regulations of the County.
- f. Provide reasonable grounds for review and revision of this resolution, its Standards and Codes.
- g. Designate the Board of County commissioners as the body to receive appeals from the acts of the County engineer's office or from regulations contained within this resolution.
- h. Establish penalty for non-compliance as provided by 18-5-207 of the Statutes of the State of Wyoming, determining that correction or loss of efficiency in use of land developed in non-compliance with this resolution be without compensation.

### Section 3. Definitions.

- a. Airport. Sheridan County Airport, Sheridan, Wyoming.
- b. Board of commissioners. The Board of County Commissioners of Sheridan County, Wyoming consisting of 3 members elected by the public.
- c. Certificate of Zoning. The permit issued by the County Engineer following approval of application for development which states compliance with or variance of provisions of this Resolution.
- d. Compatibility. Ability of land uses to harmoniously co-exist.

- e. Composite Noise Rating. A noise environment descriptor describing aircraft noise which makes corrections for number of operations and time of day, etc., to weight sound measurements of aircraft noise. Ratings used in this Resolution were based on data in VTN's Master Plan, Sheridan County Airport, Sheridan County, Wyoming and conversions from HUD's Air Craft Noise Impact Planning Guidelines for Local Agencies by Wilsey and Ham, November, 1972, and HUD's A study-Insulating Houses from Aircraft Noise by BOH Beranek and Newman, Inc., November, 1966.
- f. County Engineer. County Engineer of Sheridan County, Wyoming.
- g. Dense Residential Development. Housing area land uses of 8 dwelling units per acre or more considered as high density.
- h. Developer. The individual, firm, corporation or governmental agency undertaking construction or alteration of the physical improvements upon or use of land on any given parcel of land lying within the designated zones under the jurisdiction of this Resolution.
- i. High Residential Density. Same as Dense Residential Development.
- j. Land Use. The prime functions or activities which allow their uses to be basically classified in the following groups: Agricultural, Residential, Commercial, Industrial, or Public and Semi-Public.
- k. Medium Residential Density. Housing land uses of about one dwelling unit per two acres.
- l. Non-conforming Use. Any pre-existing use of land, structure, object or natural growth, which is inconsistent with the provisions of this Resolution or any amendment thereto.
- m. Person. An individual, firm, partnerships, corporation, company, association, joint stock association, or governmental entity; includes a trustee, a receiver, and assignee, or a similar representative of any of them.
- n. Sparse Development. Same as low density.
- o. Structure. An object, including a mobile object, constructed or installed by man, including but without limitation to buildings, towers, cranes, smokestacks, earth formation, and overhead transmission lines.

- p. Zoning. Delineation of areas of homogeneous quality grouping according to classification criteria.

Section 4. Policies and Intent. Provisions of this Resolution are supportive and in accordance with the general policies of the Comprehensive Plan of Sheridan County:

- a. Rural growth to be supportive of urban development.
  - (1) Agricultural uses are encouraged in areas of high noise level on and around property.
  - (2) Land undeveloped for other purposes can be utilized agriculturally.
- b. Equal emphasis to old and new development with new development to be harmonious with adjacent existing land uses:
  - (1) Zoning allows existing uses to continue and provides guidelines and standards for sound insulation in retrofit as well as for new construction.
  - (3) High noise level zones (100 CNR and above) are entirely on acquired airport property.
- c. Separate non-compatible land uses; co-locate compatible land uses.
  - (1) High noise level areas have been acquired as airport property (separating it from private development areas, thus allowing opportunity for airport-related administrative offices, commercial and general along with gravel extraction) industrial uses having adequate noise abatement features to be placed compatible to airport operations.
  - (2) Zones of less than 100 CNR to 90 CNR can be developed as industrial, commercial, or residential with types of soundproofing, which would provide energy savings to the occupants as well. Other physical, sanitation and natural factors are more limiting than airport noise abatement in many cases.
- d. Coordinate land uses with municipality:
  - (1) Northeast of the axis of the new west runway all the area within one-half mile limit of the airport boundaries should be considered for imminent annexation to the rapidly growing City of Sheridan to provide essential sanitation, construction

inspection services, and noise insulation since it is already becoming dense development.

- (2) In areas where the zones of Composite Noise Ratings of 90 or more overlap the areas of municipal jurisdiction it is essential that the City of Sheridan adopt measures providing for protective sound insulation herein contained.
- (3) Developers outside the municipality should use the Standards and Codes herein provided to ensure uniformity and future compliance with requirement of the City of Sheridan if annexation is foreseeable.

## **Chapter II**

### **Standards and Enforcement**

Section 1. Zone Delineation. In order to carry out the provisions of this Resolution, there are hereby created and established certain zones which include all the land, and the airspace over said land, within one-half mile of the airport boundaries and the area along the approach and takeoff paths, which in no case shall exceed six (6) nautical miles along the approach path from the end of the instrument runway; said limits on approach and takeoff paths shall further be limited to the furthest extent of estimated 85 CNR for aircraft noise based on projections in the Mater plan for the Sheridan County Airport, 1975. Aforementioned zones of influence and impact are attached to thei Resolution and made a part hereof, and shall be known as the Sheridan County Airport Compatible Land Use Zoning Map. The zones are more specifically defined as Noise Abatement Zones of the following types.

- a. Zone A. High interference- the land area within the Sheridan County Airport boundaries under the ownership of Sheridan County and under the authority of the Board of County Commissioners, Sheridan County, Wyoming as provided by Wyoming Statutes 10-1-101 to 10-4-107. This zone should be carefully administered, limiting uses to agriculture and selective airport oriented administrative offices, public, commercial and light industrial uses which have adequate sound insulation or internal background noise to reduce the influence of aircraft noise to an interior level below the levels for activities listed in Figures 1 and 2 of the standards herein contained. Nothing in this Resolution shall limit or prohibit subsurface or surface extraction of gravel in this zone and such land uses as re allowed shall not interfere with, nor in any way alter, the operation of the airport nor its radio

transmission.

- b. Zone B. Medium interference-those land areas requiring sound insulation treatment should be developed in accordance with noise abatement standards herein specified as Figures 1 and 2. The extent to which the developer abates noise and the sensitivity of the land use activity proposed determines the appropriateness of various land uses. It should be emphasized that residential uses should insure reduction of outdoor aircraft noise levels to an interior rating not to exceed 60 CNR.
- c. Zone C. Low interference - the land areas designated as needing only Normal measures for noise abatement. Figures 1 and 2 indicate the extent to which specifically sensitive land use activities are affected. Residential uses with adequate energy conservation measures – thermoglass or conventional windows with storm sashes, dampers in fireplaces, weather covers over crawl space openings, conventional insulation in ceiling and walls, absence of mail box or pert door perforations, and solid core doors well sealed according to standards herein provided should suffice for exterior or interior noise abatement to obtain a 60 CNR rating.

## Section 2. Standards and Codes.

- a. For the purpose of ensuring uniform guidance and future compliance in event of annexation to the City of Sheridan, Wyoming, certain codes and standards are hereby designated as applicable to development in the areas regulated by this Resolution. Administration of these codes and standards and determination of compliance in plan review shall be the duties of the County Engineer or any person on the County Engineer’s staff designated to carry out this function. Compliance to these codes and standards is voluntary and the responsibility of the developer with the burden of inspection being upon the property owner and developer unless it is determined, after investigation by the County Engineer, that a dire state of emergency endangering life, health or property exists. Where there exists a conflict between any of the regulations or limitations prescribed in this Resolution and any other regulation or standard applicable to the same area, the more stringent limitation or requirement shall govern and prevail. Non-conforming uses existing at the time of passage of this Resolution cannot be made to conform as provided by Wyoming Statutes 18-5-207.
- b. Technological advances, airport operation alterations, and obsolescence of methods or materials constitute reasonable grounds for amendment of this Resolution as provided in Wyoming Statutes 18-5-201 to 18-5-

207 and 10-4-106.

- c. The codes and standards are more specifically designated as: The Uniform Building Code 1976: with deletion of Chapter 2, Sections 201, 202, 204, and 205 and Chapter 3, Sections 301 to 306 and where reference is made to the "City" as the political jurisdiction to which the code applies it shall instead read "County". Amendment is made to Chapter 35, adding Section 3503: "Noise Abatement Standards, attached to, and thereby made a part of this Resolution, the design guides being Figures 1 and 2 contained on the attached sheet designated Sheridan County Airport Compatible Land Use Zoning Map. Nothing herein contained shall give cause to interpret standards and codes as being more than minimum standards and guides. Design of specific developments is the burden of the developer".

Section 3. Enforcement and Appeal. It shall be the duty of the County Engineer to administer and enforce the regulations prescribed herein. Applications for permits and variances shall be made to the County Engineer upon a form published for that purpose. Applications for the Certificate of Zoning required by this Resolution as provided in Wyoming Statutes 18-5-203 shall be promptly transmitted to the Board of County Commissioners and promptly considered and granted or denied. If granted, the Board of County Commissioners shall authorize the County Engineer to issue the Certificate of Zoning. The decision of the County Commissioners upon any variance or exception made may be reviewed by the district court of the county upon appeal taken in accordance with Wyoming Statutes 18-5-202 and denials may be appealed in accordance to Wyoming Statutes 18-5-203 to district court and upon appeal of that decision to Supreme Court.

Section 4. Violation and Penalty. Failure to comply with provisions of this Resolution or failure to make application for the Certificate of Zoning shall comprise violation and shall be penalized in accordance with Wyoming Statutes 18-5-204 through 18-5-207. Necessity for correction or loss of efficiency in use of land developed in non-compliance with provisions of this Resolution shall be without compensation.

Section 5. Severability. If any of the provisions of this Resolution or the application thereof to any person or circumstances are held invalid, such invalidity shall not affect other provisions or applications of the Resolution which can be given effect without the invalid provision or application, and to this end, the provisions of this Resolution are declared to be severable.

Filed for record in the Office of the County Clerk on September 4, 1979 and duly recorded in Book 2 of Miscellaneous records on page 67.

(Addition to Uniform Building Code, 1976 Edition)

## SOUND ABATEMENT METHODS AND STANDARDS FOR AIRCRAFT NOISE

Section 3503. Sound abatement methods and standards for noises created by the approach, landing and takeoff of aircraft shall be sufficient to prevent hindrance to activities carried out inside structures constructed in the zones designated on the Sheridan County Airport Land Use Compatibility Map. General guidelines are given to land use with respect to CNR levels in Figures 1 and 2 on the same map.

The differences between Perceptible Noise in decibels with respect to various house windows, walls, and roofs are shown in Figure A below.

Methods of reducing air infiltration, and therefore, reduction in sound transfer are shown in Architectural design sketches, Figured B-1 to B-16, illustrating house modification for improved noise insulation. Most of these modifications, which can be used in existing structures as well as in new construction, are of energy insulation value as well.