



CASTROVILLE-MEDINA COUNTY JOINT AIRPORT ZONING BOARD Land Use Compatibility and Airport Hazard Regulations

Final Draft December 5, 2022

Land Use Compatibility and Airport Hazards

Section 1. Short title. These regulations shall be known and may be cited as the “Castroville Municipal Airport Zoning Regulations”.

Section 2. Purpose.

The Castroville Municipal Airport (the “Airport”) provides public use aviation facilities serving the essential interests of the City of Castroville, Medina County, and the surrounding area. This *Land Use Compatibility and Safety Hazard Zoning Regulation* (the “Regulation”) is established to promote the safety and welfare of Airport users, and nearby off-Airport activities, while helping assure the continued viability of Airport operations. This Regulation seeks to protect the public from the adverse effects of aircraft noise, to ensure that people are not concentrated in areas susceptible to aircraft accidents, and to ensure that development or activities do not encroach upon or adversely affect the use of navigable airspace. Specifically, Airport zoning is intended to:

- Minimize public exposure to aircraft accidents, excessive noise, and overflight nuisance from incompatible land use around the Airport
- Prevent safety hazards to aircraft operations so as to sustain public-use aviation at the Airport and preserve taxpayer investment

This Regulation enables acceptable development in the vicinity of the Airport by creating appropriate compatibility zones, defining terms of use within created compatibility zones and providing compliance measures. This Regulation is adopted pursuant to the authority conferred by Texas Local Government Code, Chapter 241, Municipal and County Zoning Authority around Airports, known as the *Airport Zoning Act of 1987*.

Section 3. Definitions. The following words, terms and phrases, when used in this Regulation, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Administrative Agency - The appropriate person or office of a political subdivision which is responsible for the administration and enforcement of this Regulation. The Administrative Agency is set forth in Section 16 of this Regulation.

Airport means the Castroville Municipal Airport, Castroville, Texas; including the ultimate development of that facility.

Airport Board of Adjustment (ABoA) means a board consisting of five members appointed by the Castroville-Medina County Joint Airport Zoning Board, as provided by V.T.C.A., Local Government Code § 241.032.

Airport elevation means the established elevation of the highest point on the usable landing area measured in feet from mean sea level, which is **772 feet above mean sea level** located on the runway centerline at the end of runway 16 at the Airport.

Airport hazard means any structure or tree or use of land which obstructs the airspace required for the flights of aircraft or which obstructs or interferes with the control or tracking and/or data acquisition in the landing, taking off or flight of aircraft at the Airport, or at any installation or facility relating to flight, and tracking and/or data acquisition of the flight craft; is hazardous, interferes with or obstructs such landing, taking off or flight of aircraft or which is hazardous to or interferes with tracking and/or data acquisition pertaining to flight and flight vehicles.

Airport hazard area means any area of land or water, as described in the Castroville Municipal Airport Hazard Zoning Map (figure 1), upon which an airport hazard might be established if not prevented as provided in this Regulation.

Airport Jurisdictional Area means the combined area encompassed by the established Airport hazard zones and Airport overlay zones as shown on the Castroville Municipal Airport Hazard Zoning Map (Figure 1) and Castroville Municipal Airport Compatible Land Use Zoning Map (Figure 2).

Airport Manager means the Airport Manager of the Castroville Municipal Airport or his/her designee.

Airport reference point means the point established as the approximate geographic center of the Airport landing area and so designated. The coordinates of the Airport reference point are **north latitude 29 degrees, 20 minutes, 32.0 seconds; west longitude 98 degrees, 51 minutes, 02.9 seconds.**

Approach surface means a surface longitudinally centered on the extended runway centerline, extending outward and upward from the ends of the primary surface and at the same slope as the approach zone height limitation slope set forth in Section 5 *Height limitations*. In plane, the perimeter of the approach surface coincides with the perimeter of the approach zone.

Approach, transitional, horizontal, and conical zones. These zones are set forth in Section 4 *Zones established*.

Compatible land use means any use of land adjacent to or in the immediate vicinity of the Airport that does not endanger the health, safety, and welfare of the owners, occupants, or users of the land because of levels of noise or vibrations, or the risk of personal injury or property damage created by the operations of the Airport, including the taking off or landing of aircraft.

Conical surface means a surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to one for a horizontal distance of 4,000 feet extending to a height of 350 feet above the Airport elevation.

Controlled compatible land use area means an area of land located outside the boundaries of the Airport and within a rectangle bounded by lines located no farther than 1½ statute miles from the runway centerline and lines no farther than 5 statute miles from each end of Runway 16-34.

Dwelling unit means One or more rooms, designed or intended for use by an individual or family in which culinary and sanitary convenience are provided for the exclusive use of such individual or family.

Hazard to air navigation means an obstruction determined to have a substantial adverse effect on the safe and efficient utilization of the navigable airspace within the zoning boundaries as set forth in this Regulation.

Hazardous facilities means those occupancies or structures housing or supporting toxic or explosive chemicals or substances and any nonbuilding structures housing, supporting or containing quantities of toxic or explosive substances. Fuel tanks installed underground at a sufficient depth shall not be considered hazardous facilities.

Height. For the purpose of determining the height limits in all zones set forth in this Regulation and shown on the Castroville Municipal Airport Hazard Zoning Map, the datum shall be height above mean sea level elevation.

Horizontal surface means a horizontal plane 150 feet above the established Airport elevation, the perimeter of which, in plane, coincides with the perimeter of the horizontal zone.

Joint Airport Zoning Board means the Castroville-Medina County Joint Airport Zoning Board.

Landing area means the surface area of the Airport used for landing, takeoff or taxiing of aircraft.

Nonconforming use means any structure, object of natural growth, or use of land which is inconsistent with the provisions of this Regulation or an amendment thereto.

Nonprecision instrument runway means a runway having an existing instrument approach procedure utilizing air navigation equipment, for which a straight-in nonprecision instrument approach procedure has been approved or planned.

Obstruction means any structure which exceeds a height limit as set forth in Section 5 *Height limitations*.

Person means an individual, firm, partnership, corporation, company, association, joint stock association, or body politic, and includes a trustee, receiver, assignee, administrator, executor, guardian, or other representative.

Primary surface means a surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway. The width of the primary surface of the runway will be that width prescribed in Part 77 of the Federal Aviation Regulations (FAR) for the most precise approach existing or planned for either end of the runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is 500 feet for a utility runway having a nonprecision instrument approach on one end and a visual approach on the other end.

Runway means a defined area at the Airport prepared for landing and takeoff of aircraft along its length.

Structure means an object constructed or installed by man, including, but not limited to, buildings, towers, cranes, smokestacks, overhead transmission lines, earth formations and any objects of natural growth.

Transitional surfaces. These surfaces extend outward at 90-degree angles to the runway centerline and the runway centerline extended at a slope of seven feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal surface.

Tree means any object of natural growth.

Section 4. Zones established.

- a) **Hazard Zones.** In order to carry out the provisions of this Regulation, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surface and conical surface as they apply to the Airport. Such zones for height limitations are shown on Castroville Municipal Airport Hazard Zoning Map (Figure 1). The various zones are hereby established and defined as follows:
- i) *Approach zones.*
 - (1) Runway 34: Approach zone is established beneath the approach surface at the end of runway 34 on the Airport for nonprecision instrument landings and takeoffs. The inner edge of the approach zone shall have a width of 500 feet, which coincides with the width of the primary surface at a distance of 200 feet beyond the end of the runway, widening thereafter uniformly to a width of 3,500 feet at a horizontal distance of 5,000 feet beyond the end of the primary surface, its centerline being the continuation of the centerline of the runway.
 - (2) Runway 16. Approach zone is established beneath the approach surface at the end of runway 16 on the Airport for visual landings and takeoffs. The inner edge of the approach zone shall have a width of 500 feet, which coincides with the width of the primary surface at a distance of 200 feet beyond the end of the runway, widening thereafter uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet beyond the end of the primary surface, its centerline being the continuation of the centerline of the runway.
 - ii) *Transitional Zones.* Transitional zones are hereby established beneath the transitional surface adjacent to the runway and approach surfaces as indicated on the Castroville Municipal Airport Hazard Zoning Map (Figure 1). Transitional surfaces, symmetrically located on either side of the runway, have variable widths as shown on the zoning map. Transitional surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of seven to one from the sides of the primary surface and from the sides of the approach surfaces.
 - iii) *Horizontal Zone.* The horizontal zone is hereby established as that area beneath a horizontal plane 150 feet above the established Airport elevation, the perimeter of which is constructed by swinging arcs of 10,000 feet radii from the center of each end of the primary surface of runway 16-34 and connecting the adjacent arcs by lines tangent to those arcs.
 - iv) *Conical Zone.* The conical zone is hereby established as that area beneath the conical surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to one for a horizontal distance of 4,000 feet.
- b) **Airport Overlay Zones.** In order to carry out the provisions of this Regulation, there are hereby created and established certain Airport overlay zones for the purposes of regulating and developing uses of land within each zone that do not endanger the health, safety, and general welfare of the owners, occupants, or users of the land because of noise or vibrations or the risk of personal injury or property damage created by the operations of the Airport, including the taking off and landing of aircraft. The controlled compatible land use area is hereby divided into 3 zones, shown on the Castroville Municipal Airport Compatible Land Use Zoning Map (Figure 2), which is attached to and made part of this Regulation. The Airport overlay zones are hereby established as follows:
- i) **Zone A is the Runway Zone.** This zone encompasses areas overflown at low altitudes, typically 200 feet or less above Airport elevation. Risk of public exposure to aircraft accidents, excessive noise, and overflight nuisance is high (elevated risk). The width of Zone

A is 3200', centered on the centerline of the runway. Zone A extends 9000' from the inner edges of the approach zones, along the runway centerline.

- ii) Zone B is the Maneuvering Airspace Zone. This zone encompasses areas overflown at low altitudes, typically 200 to 400 feet above Airport elevation. Risk of public exposure to aircraft accidents, excessive noise, and overflight nuisance is moderate (significant risk). The width of Zone B to the east of the runway extends from 1600' to 1.5 miles from the centerline of the runway, while the length is identical to that of Zone A. On the west of the runway, Zone B extends from 1600' to 4600' from the centerline of the runway, and has a length of 14420', centered at the runway center. The north and south ends of this zone are curved to a radius of 6535'.
- iii) Zone C is the Overflight Zone. This zone encompasses areas overflown at altitudes greater than 400 feet above Airport elevation. Risk of public exposure to aircraft accidents, excessive noise, and overflight nuisance is low (minimal risk). Zone C comprises 3 areas:
 - (1) The area west of the runway, bound by the line 1.5 miles west of the runway, and by the line 9000' from the inner edges of the approach zones along the runway centerline, minus the B zone to the west of the runway.
 - (2) The area north of the airport, 3 miles wide by 3.25 miles long, starting at 9000' north of the north approach zone inner edge, centered along the runway centerline.
 - (3) The area south of the airport, 3 miles wide by 3.25 miles long, starting at 9000' south of the south approach zone inner edge, centered along the runway centerline.

Section 5. Height limitations.

- a) Except as otherwise provided in this Regulation, no structure shall be erected, altered, or maintained, and no tree shall be allowed to grow, in any zone created by this Regulation to a height in excess of the applicable height limit established in this section for such zone. An area located in more than one of the following zones is considered to be only in the zone with the more restrictive height limitation. The following maximum height limitations shall apply:
 - i) *Approach Zones.* Runway 16-34: One foot (1') in height for each twenty feet (20') in horizontal distance beginning at the end of and at the elevation of the primary surface and extending to a point 5,000 feet from the end of the primary surface.
 - ii) *Transitional Zones.* Slopes seven feet (7') outward for each one foot (1') upward beginning at the sides of and at the same elevation as the primary surface and the approach surfaces, and extending to a height of 150 feet above the Airport elevation.
 - iii) *Horizontal Zone.* Established at 150 feet above the Airport elevation.
 - iv) *Conical Zone.* Slopes twenty feet (20') outward for each one foot (1') upward beginning at the periphery of the horizontal zone and at 150 feet above the Airport elevation and extending to a height of 350 feet above the Airport elevation.
- b) Pursuant to Title 14 CFR Part 77, proposed structures within the established zones are subject to a FAA height hazard survey. To see if the proposed structure requires FAA paperwork to be filed, FAA provides an online interactive tool named Obstruction Evaluation/Airport Airspace Analysis.

Section 6. Interference prohibited.

- a) No use may be made of land or water within any zone established herein in such a manner as to create electrical interference with navigational signals or radio communication between the Airport and aircraft, make it difficult for pilots to distinguish between Airport lights and others, result in glare in the eyes of pilots using the Airport, impair visibility in the vicinity of the Airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the Airport
- b) Solar panels installed within the Airport hazard zones, as identified on the Castroville Municipal Airport Hazard Zoning Map (Figure 1), shall have a low glare finish and installed in such a manner as to not result in glare in the eyes of pilots using the Airport.

Section 7. Nonconforming uses and structures.

- a) *This Regulation is not retroactive.* The policies prescribed herein shall not be construed to require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations as of the effective date of this Regulation, or to otherwise interfere with the continuance of any nonconforming use. Nothing contained in this Regulation shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the passing of this Regulation.
- b) *Marking and lighting.* Notwithstanding the preceding provisions of this section, the owner of any nonconforming structure or tree is hereby required to give permission for the installation, operation, and maintenance of markers and lights that are deemed necessary by the Airport Manager or his/her designee to indicate to the operators of aircraft in the vicinity of the Airport the presence of such airport hazards. Such markers and lights shall be installed, operated, and maintained at the expense of the Airport.

Section 8. Compatible Land Uses.

In an effort to minimize the public's exposure to risk, the following standards are prescribed:

Zone A: Residential uses are allowed so long as 1 dwelling unit per acre is not exceeded. Nonresidential uses for activities which attract people (such as theaters, auditoriums, or stadiums) are prohibited. In addition, schools, day care centers, hospitals, nursing homes, and other hazardous uses (such as petroleum refining or above ground bulk fuel storage) are prohibited. High intensity commercial or heavy industrial uses may be prohibited. Any use that constitutes an airport hazard is prohibited. Within reason, locate structures the maximum possible distance from the extended runway centerline.

For Zones B and C, revert to county regulation or city ordinance as it applies to population density.

Zone B: Nonresidential uses for activities which attract people (such as outdoor stadiums or similar uses with high intensities) are prohibited. Any use that constitutes an airport hazard is also prohibited.

Zone C: Any use that constitutes an airport hazard is prohibited.

Plat note. A plat note shall be added to all subdivision plats located within the overlay zones indicating that the subdivision is subject to this Regulation.

Section 9. Construction methods and materials.

All newly constructed occupied structures within the A and B Airport overlay zones constructed after the effective date of this Regulation are to be constructed to achieve a minimum 25 decibel sound level reduction from the exterior to the interior of the structure. Structures excluded from these standards include hangars, warehouses, barns and other similar structures and additions to existing occupied structures.

Section 10. Lighting requirements. All exterior or outdoor lighting installed on property within the A, B and C Airport overlay zones and constructed after the effective date of this Regulation shall conform with the following standards:

- a) Lighting must be hooded, shielded, aimed downward and have a cutoff angle of 90 degrees or less.
- b) The hood or shield must mask the direct horizontal surface of the light source. The light must be aimed so as to ensure that the illumination is only pointing downward onto the ground surface or into the building. No illumination may spill onto adjacent property.
- c) Outdoor lighting shall be designed to provide the minimum lighting necessary to ensure adequate safety, night vision, and comfort, and not create or cause excessive glare onto adjacent properties and public street rights of way.
- d) Spot lights and upward facing lighting are prohibited.
- e) No outdoor lighting shall cause visual interference in accordance with Section 6 *Interference prohibited*.

Section 11. Airport disclosure statement. As part of certain real estate transactions involving residential property wholly or partially located within the A, B and C Airport overlay zones, information regarding Airport proximity and the existence of aircraft overflights must be disclosed.

Section 12. Permits.

- a) A permit must be obtained from the Administrative Agency authorized to administer and enforce the regulations before:
 - i) A nonconforming structure may be replaced, rebuilt, or substantially changed or repaired;
 - ii) A nonconforming object of natural growth may be replaced, substantially changed, allowed to grow higher, or replanted.
- b) A permit may not allow:
 - i) The establishment of an airport hazard;
 - ii) A nonconforming use to be made;

- iii) A nonconforming structure or object of natural growth to become higher than it was at the time of the adoption of the Regulation relating to the structure or object of natural growth or at the time of the application for the permit;
 - iv) A nonconforming structure, object of natural growth, or use to become a greater hazard to air navigation than it was at the time of the adoption of the Regulation relating to the structure, object of natural growth, or use at the time of the application for the permit.
- c) Except as provided in section b), an application for a permit shall be granted.

Section 13. Variances. Any person desiring to erect or increase the height of any structure, or permit the growth of any tree, or use his property in violation of this Regulation may apply to the Airport Board of Adjustment (ABoA) for a variance from such regulations in question. The application for variance shall be accompanied by a determination from the Federal Aviation Administration as to the effect of the proposal on the operation of air navigation facilities and the safe, efficient use of navigable airspace. Such variance shall be allowed where it is duly found that a literal application or enforcement of this Regulation will result in unnecessary hardship and the relief granted would not be contrary to the public interest, but would do substantial justice and be in accordance with the spirit of this Regulation. The ABoA may impose any reasonable conditions on the variance it considers necessary to accomplish the purposes of this Regulation. Additionally, a copy of the variance application shall be provided to the Airport Manager or his/her designee for advice as to the aeronautical effects of the variance.

Section 14. Appeals.

- a) A decision of the administrative agency made in its administration of this Regulation may be appealed to the ABoA by:
 - i) a person who is aggrieved by the decision;
 - ii) a taxpayer who is affected by the decision; or
 - iii) the governing body of a political subdivision or a joint Airport Zoning Board that believes the decision is an improper application of the Regulation.
- b) The appellant must file with the ABoA and the Administrative Agency a notice of appeal specifying the grounds for the appeal. The appeal must be filed within a reasonable time as determined by the rules of the board. On receiving the notice, the Administrative Agency shall immediately transmit to the ABoA all the papers constituting the record of the action that is appealed.
- c) An appeal stays all proceedings in furtherance of the action that is appealed unless the Administrative Agency certifies in writing to the ABoA facts supporting the agency's opinion that a stay would cause imminent peril to life or property. In that case, the proceedings may be stayed only by an order of the ABoA, after notice to the Administrative Agency, if due cause is shown.
- d) The ABoA shall set a reasonable time for the appeal hearing and shall give public notice of the hearing and due notice to the parties in interest. A party may appear at the appeal hearing in person or by agent or attorney. The ABoA shall decide the appeal within a reasonable time.
- e) The ABoA may reverse or affirm, in whole or in part, or modify the Administrative Agency's order, requirement, decision, or determination from which an appeal is taken and make the

correct order, requirement, decision, or determination, and for that purpose the ABoA has the same authority as the Administrative Agency.

Section 15. Board of Adjustment (ABoA).

- a) The ABoA shall be comprised of five (5) members appointed for terms of two years by the Castroville-Medina County Joint Zoning Board. The Castroville-Medina County Joint Airport Zoning Board may remove a board member for cause on a written charge after a public hearing. A vacancy on the board shall be filled for the unexpired term.
- b) The ABoA shall adopt rules for its governance and procedure in harmony with the provisions of this Regulation. Meetings of the ABoA shall be held at the call of the chairman and at such times as the ABoA may determine. The chairman, or in his/her absence the acting chairman, may administer oaths and compel the attendance of witnesses. All hearings of the ABoA shall be public. The ABoA shall keep minutes of its proceedings showing the vote of each member upon each question or if any member is absent or fails to vote, indicating such fact and shall keep records of its examinations and other official actions. The minutes and records shall be filed immediately in the office of the ABoA. All such records shall be public records.
- c) The authority of the ABoA is outlined below.
The ABoA shall:
 - i) hear and decide an appeal, as provided by Section 14 *Appeals*, from an order, requirement, decision, or determination made by the Administrative Agency in the enforcement of an Airport zoning provision;
 - ii) hear and decide special exceptions to the terms of an Airport zoning regulation when the regulation requires the board to do so; and
 - iii) hear and decide specific variances under Section 13 *Variances*.
- d) The ABoA shall make written findings of fact and conclusions of law stating the facts upon which it relied when making its legal conclusions in reversing, affirming, or modifying any order, requirement, decision, or determination which comes before it under the provisions of this Regulation.
- e) The concurring vote of four (4) members of the ABoA shall be necessary to reverse any order, requirement, decision, or determination of the Administrative Agency, to decide in favor of the applicant on any matter upon which it is required to pass under this Regulation, or to effect any variance to this Regulation.
- f) *Judicial review of board decisions.* A person who is aggrieved or a taxpayer who is affected by a decision of the ABoA, or the City of Castroville, Texas, or Medina County, Texas, or the Castroville-Medina County Joint Airport Zoning Board that believes a decision of the ABoA is illegal, may present to a court of record a verified petition stating that the decision of the ABoA is illegal in whole or in part and specifying the grounds of the illegality. The petition must be presented within 10 days after the date the decision is filed in the board's office.

Section 16. Administration. It shall be the duty of the City of Castroville, through the City Manager or his/her designee, to administer and enforce the policies in this Regulation and is hereby designated as the Administrative Agency.

Section 17. *Conflicting regulations.* Where there exists a conflict between any of the policies or limitations prescribed herein and any other regulation applicable to the same area, whether the conflict be with respect to the use of land, or any other matter, the more stringent limitation or requirement shall control.

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Figure 1 –Castroville Municipal Airport Hazard Zoning Map
Figure 2 –Municipal Airport Compatible Land Use Zoning Map

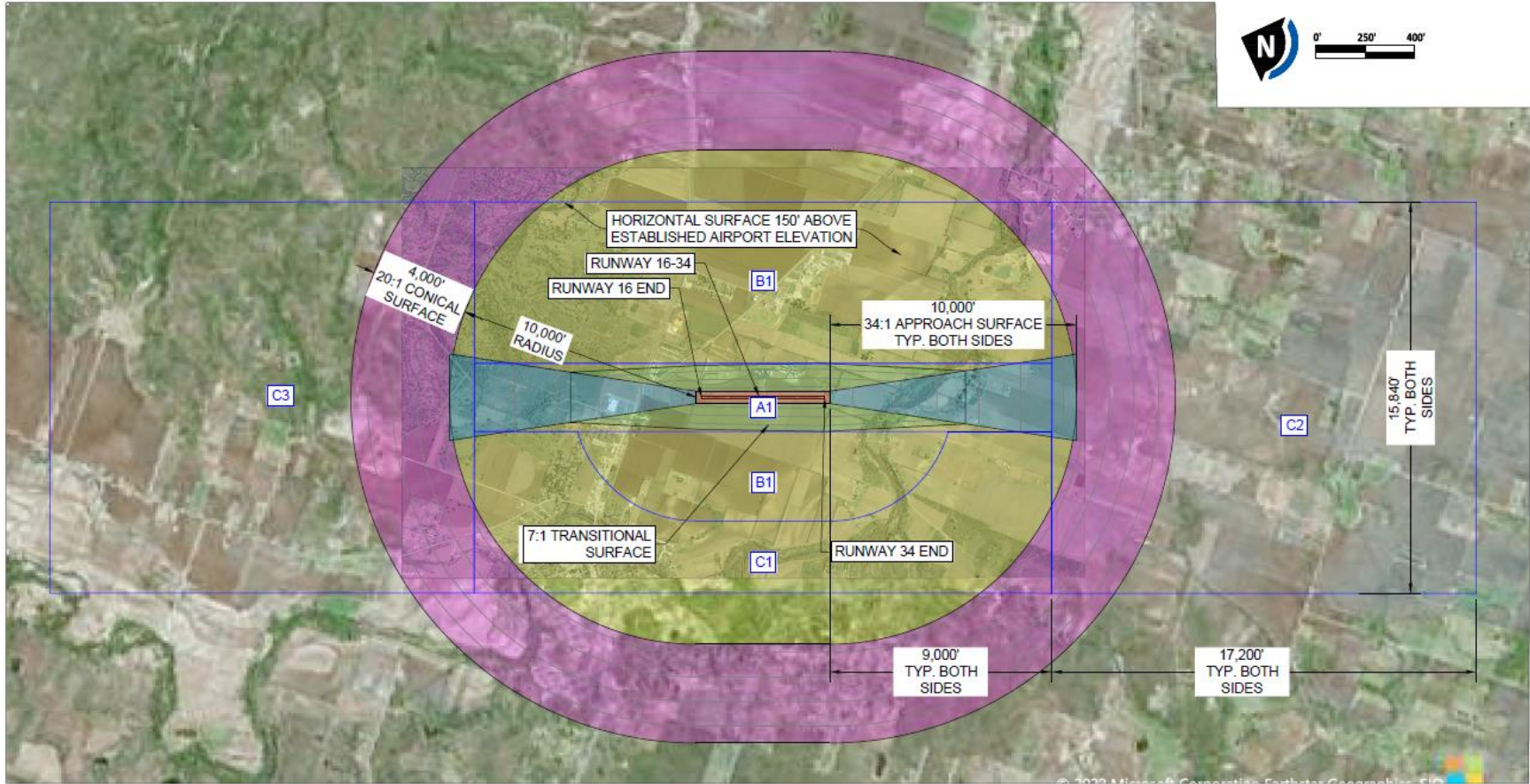


Exhibit 1 - AIRSPACE DRAWING

