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# **Military Compatibility Area Overlay Districts (MCAOD)**

## **Unified Development Code (UDC) Text Amendment and Map Amendment Public Hearing**

Joint Meeting  
Planning Commission and City Council  
August 9, 2022

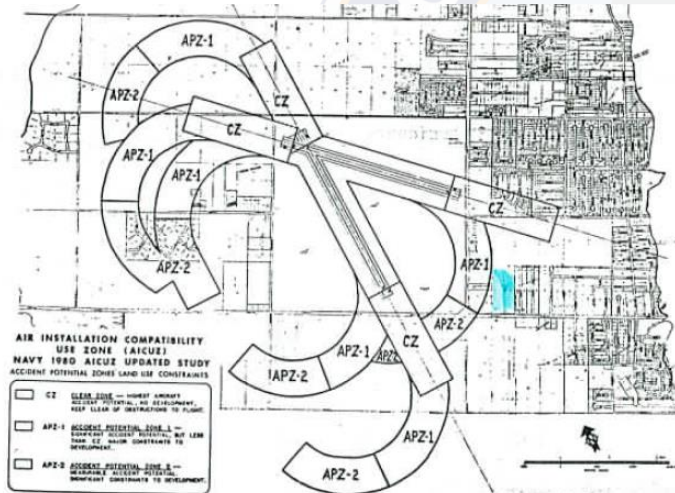
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# Procedure for Joint Meeting

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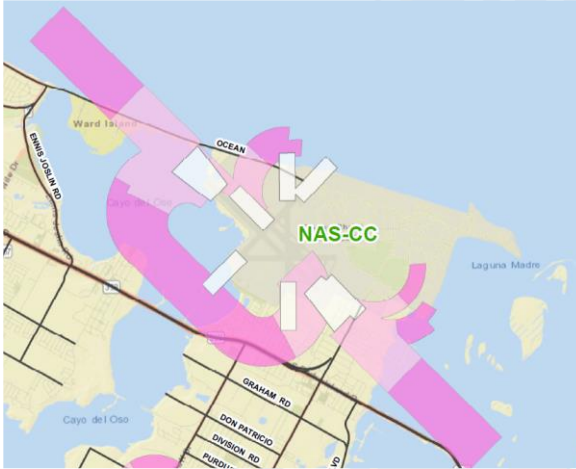
- City Council calls the Joint Public Hearing of the City Council and Planning Commission
- Role Call of Planning Commission
- Joint Public Hearing Conducted
- Planning Commission provides a recommendation on the ordinance adopting the Military Compatibility Area Overlay Districts and related regulations
- City Council acts after hearing on the recommendation of the Planning Commission concerning the Military Compatibility Area Overlay Districts and related regulations

# History



- The United States Department of Defense (DOD) initiated the Air Installations Compatible Use Zones (AICUZ) Program in 1973 to assist governments and communities in identifying and planning for compatible land use and development near military installations
- The first AICUZ study for the Corpus Christi area was conducted in 1980 and addressed Naval Air Station-Corpus Christi (NAS-CC) , Naval Outlying Landing Field (NOLF) Cabaniss, and NOLF Waldron. Following the findings, the City initiated the 1983 Flour Bluff Area Development Plan (ADP) and subsequently conducted an area wide rezoning in effected areas.
- Later AICUZ updates occurred in 2009 and were followed by the 2013 Joint Land Use Study (JLUS). The Joint Land Use Study (JLUS) was done in partnership with the United States Navy involving the declaration of various zones including the Safety, Light, Noise, and Vertical Obstruction Subzones of NAS-CC, NOLF Cabaniss, NOLF Waldron, and the Corpus Christi International Airport (CCIA). Further updates occurred with the 2020 AICUZ of NOLF Cabaniss and NOLF Waldron.
- Today, the Unified Development Code (UDC) via Section 6.5 Air Installations Compatible Use Zones (AICUZ) is used as a guideline during the rezoning process to evaluate the compatibility of land uses within the designated Accident Potential Zones (APZs) of the AICUZ.

# Purpose



- The Military Compatibility Area Overlay Districts (MCAOD) are
- Designed to protect the health, safety, and welfare of civilians and military personnel by encouraging land use that is compatible with aircraft operations, to reduce noise impacts caused by aircraft operations, while meeting operational, training, and flight safety requirements,
- Located in the vicinity of installations, to inform the public and seek cooperative efforts to minimize noise and aircraft accident potential impacts by promoting compatible development, and to protect installation investments by safeguarding the installation's operational capabilities.

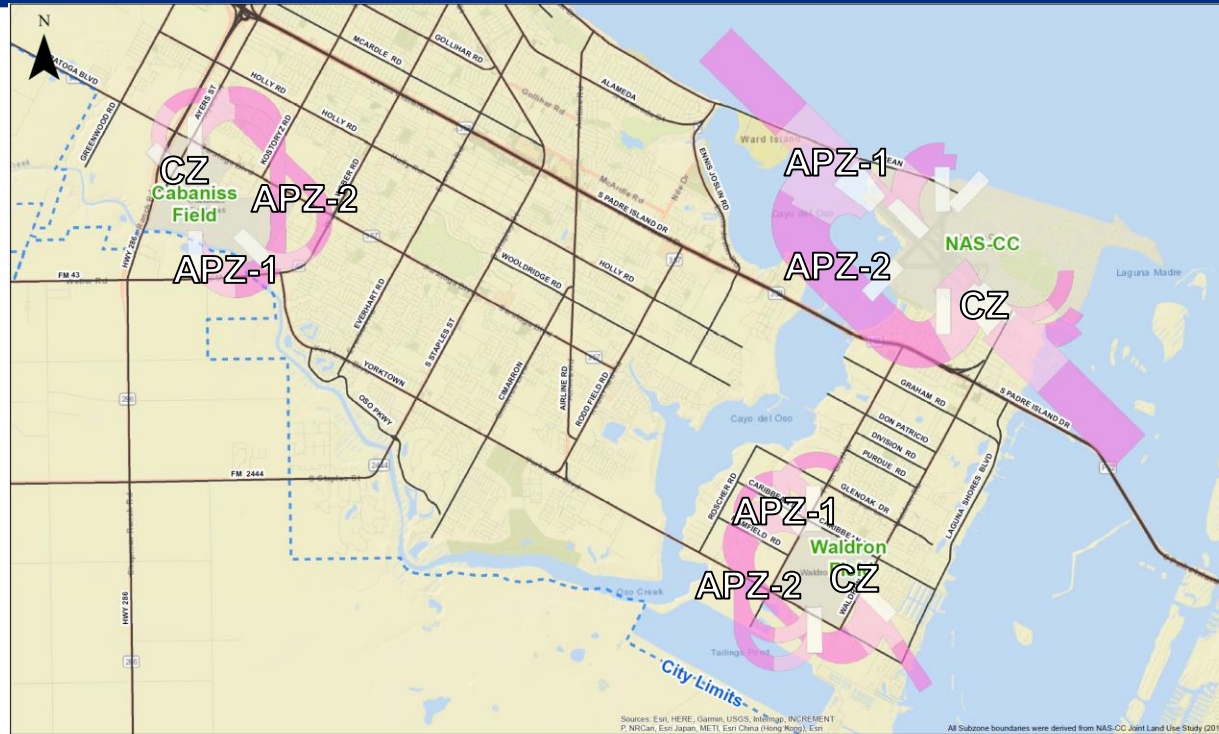


# Public Outreach

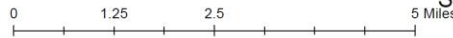
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- A series of Public meetings were held in each City Council district during the month of July. The District 4 meeting was the most attended with over 20 citizens of the Flour Bluff area.
- The following organizations have been briefed on the MCAOD
  - Coastal Bend Home Builders Association
  - United Corpus Christi Chamber of Commerce
  - Corpus Christi Realtors Association
  - City of Corpus Christi Development Task Force

# Military Compatibility Area Overlay District (MCAOD)



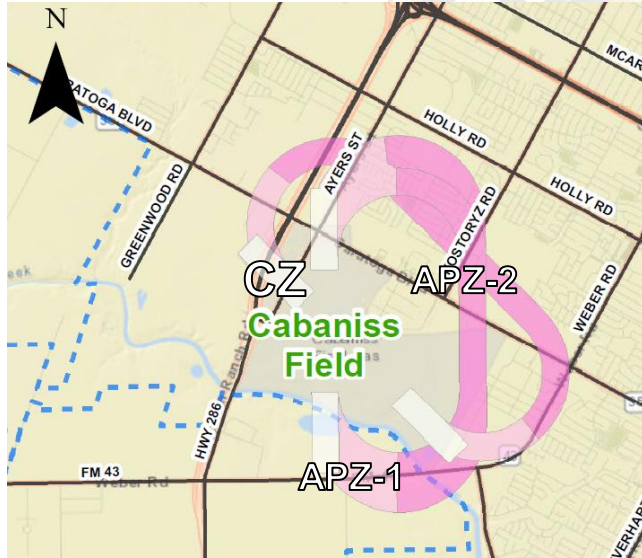
- (CZ)- Clear Zone
- (APZ-1) - Accident Potential Zone 1
- (APZ-2) - Accident Potential Zone 2



Military Compatibility Area Overlay District  
Safety Subzones - City Overview

Scale: 1:55,000

# UDC Section 6.5.2 Definitions and Boundaries



- Clear Zone (CZ)
- Accident Potential Zone 1 (APZ-1)
- Accident Potential Zone 2 (APZ-2)

- Safety Subzone: Safety Subzone is a subzone within the within the Military Compatibility Area Overlay District consisting of the Clear Zone, Accident Potential Zone 1, and Accident Potential Zone 2. Safety Subzone regulates compatible land use types and densities / intensities within the CZ and APZs 1 and 2.
- Noise Subzone (NS): Noise Subzone is a subzone within the Military Compatibility Area Overlay District consisting of the area located off-installation that fall within the noise contours greater than 65 dB DNL noise levels associated with aircraft activities.
- Vertical Obstruction Subzone (VOS): Vertical Obstruction Subzone is a subzone within the Military Compatibility Area Overlay District consisting of a 3-D geographic area comprised of imaginary surfaces.
- Light Zone (LS): Light Subzone is a subzone within the Military Compatibility Area Overlay District consisting of areas that may generate ambient light and the direction of light that have the potential to affect night training missions, operations, and controller vision.
- Military Compatibility Area Overlay District (MCAOD). Military Compatibility Area Overlay District is a zoning district consisting of the Clear Zone, Accident Potential Zone 1, Accident Potential Zone 2., Noise Subzone, Light Subzone, and Vertical Obstruction Subzone. The specific boundaries of the Military Compatibility Area Overlay Districts are shown on the official zoning map maintained by the City of Corpus Christi.

# UDC Section 6.5.3.G Light Subzone



- **Light subzone.** All land within a Light Subzone is subject to the following regulations:
  - All lighting fixtures shall be fully shielded to prevent light output emitted above ninety (90) degrees at any lateral angle around the fixture except incandescent fixtures of 150 watts or less and other sources of 70 watts or less.



# UDC Section 6.5.3.H Noise Subzone

- **Noise subzone.** All land within a Noise Subzone is subject to the following regulations:
- **Noise insulation standards.** New residential buildings shall be constructed with sound insulation or other means to achieve a DNL of 45 dBA or less inside the building. If the cost of modifications to an existing residential building is 75 percent or more of the total assessed improvement value of the site, the building shall also meet this standard. Garages and similar accessory buildings that do not include living space are exempt from this requirement.”
- A building that is only partly located within a Noise Subzone is also subject to these regulations.



6.5.5.A.4. Noise Subzone  
NOLF Waldron

Scale: 1:15,000

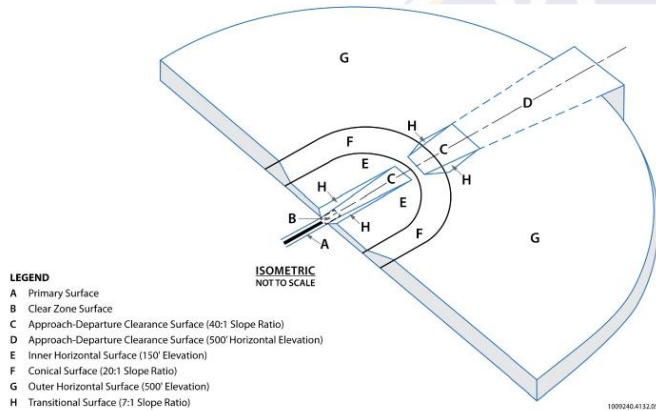


— Noise Subzone

0 0.25 0.5 1 Miles

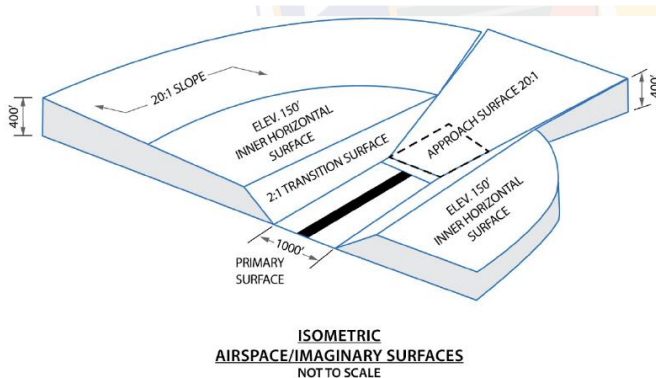
# UDC Section 6.5.3.G

## Vertical Obstruction Subzone



### LEGEND

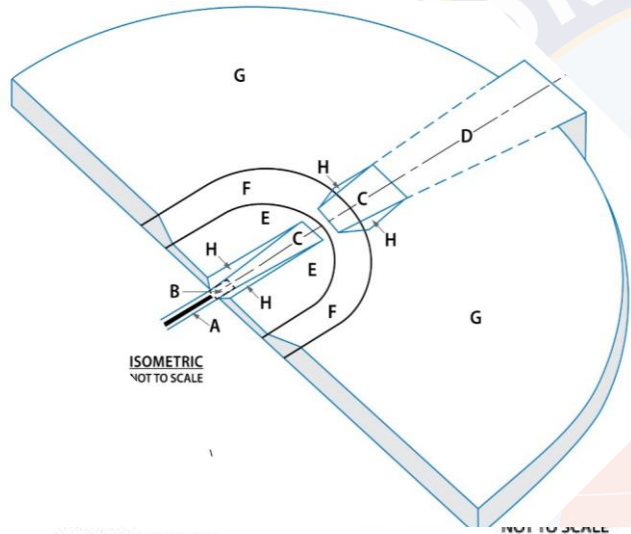
- A Primary Surface
- B Clear Zone Surface
- C Approach-Departure Clearance Surface (40:1 Slope Ratio)
- D Approach-Departure Clearance Surface (500' Horizontal Elevation)
- E Inner Horizontal Surface (150' Elevation)
- F Conical Surface (20:1 Slope Ratio)
- G Outer Horizontal Surface (500' Elevation)
- H Transitional Surface (7:1 Slope Ratio)



- Transition surfaces that define the airspace that needs to remain free of obstructions around an airfield.
- The purpose is to ensure safe flight approaches, departures, and pattern operations.
- Potential obstructions include natural terrain and man-made features, such as buildings, towers, poles, wind turbines, cell towers, and other vertical obstructions to airspace navigation.
- In general, no above ground structures are permitted in the primary surface of Clear Zones, and height restrictions apply to transitional surfaces as well as approach and departure surfaces.
- Height restrictions are more stringent nearing the runway and flight path.

# UDC Section 6.5.3.G

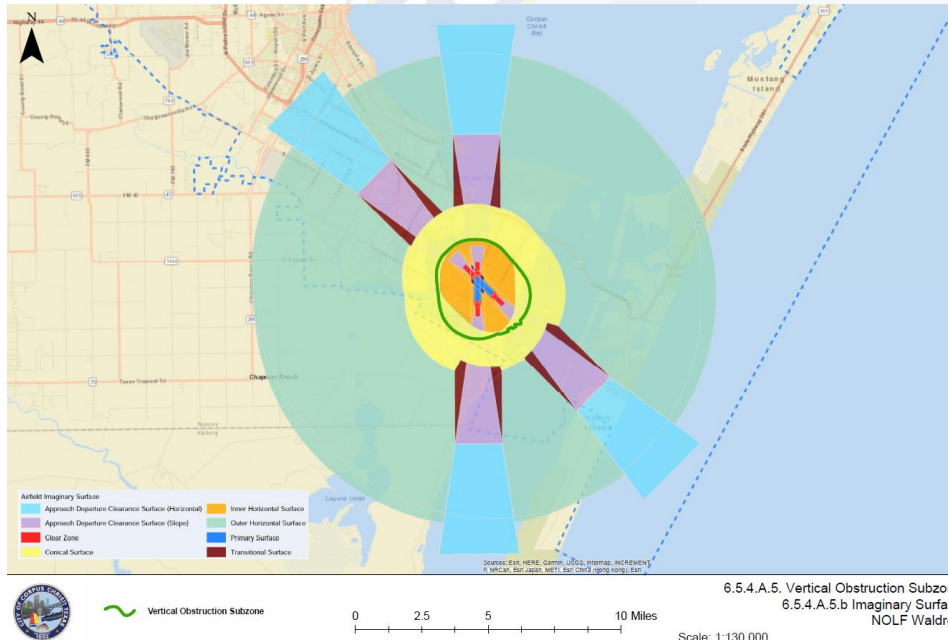
## Vertical Obstruction Subzone



- A Primary Surface
- B Clear Zone Surface
- C Approach-Departure Clearance Surface (40:1 Slope Ratio)
- D Approach-Departure Clearance Surface (500' Horizontal Elevation)
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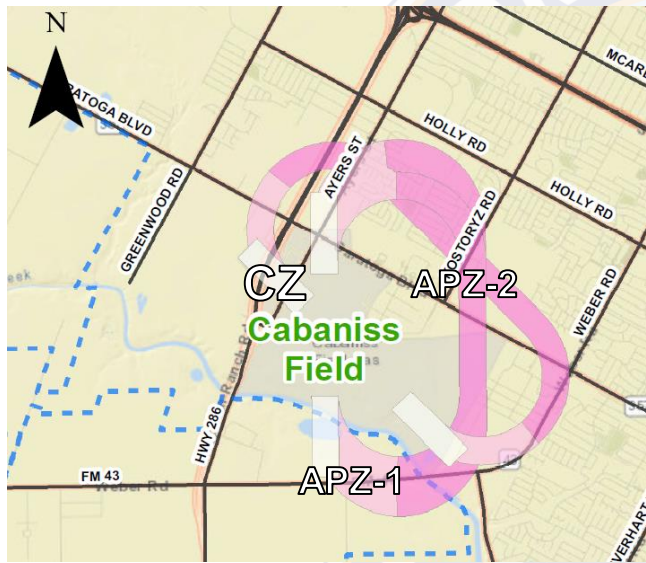
- **Primary Surface:** The width of the primary surface for runways is 1,000 feet.
- **Clear Zone Surface:** A surface located on the ground or water at each end of the primary surface
- **Approach-Departure Clearance Surface (Slope):** An inclined plane extending at a 20:1 angle
- **Approach-Departure Clearance Surface (Horizontal):** A horizontal surface extending from the 400-foot elevation of the glide angle for a distance of 50,000 feet from the point of origin.
- **Inner Horizontal Surface:** A plane that is oval in shape at a height of 150 feet above the established airfield elevation.
- **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 5,000 feet to a height of 400 feet above the established airfield elevation.
- **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.
- **Transitional 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

# Imaginary Surfaces at NAS-CC



- **Structures in Imaginary Surfaces Prohibited:** No structure shall be erected, altered, or maintained, and no tree shall be allowed to grow, in any imaginary surface created by this section to a height in excess of the applicable height limit established in this section for such imaginary surface. Such applicable height limitations are hereby established for each of the imaginary surface in question. An area located in more than one of the following imaginary surfaces is considered to be only in the imaginary surface with the more restrictive height limitation:
- **Visual Impairment Prohibited:** No use shall be made of land within a Vertical Obstruction Subzone in such a manner that releases into the air within an imaginary surface any substance which would impair visibility or otherwise interfere with the operation of aircraft; e.g., steam, dust, smoke, etc.

# Land Use Compatibility



- Clear Zone (CZ)
- Accident Potential Zone 1 (APZ-1)
- Accident Potential Zone 2 (APZ-2)

- The Air Installation Compatibility Use Zones (AICUZ) establishes additional land uses guidelines for specific uses (i.e. residential/commercial) and densities.
- Density: Within Accident Potential Zone (APZ-2) density is limited to 2 dwelling units per acre.
- Uses: Within APZ-1 and APZ-2, land uses are either limited by allowance and/or by size of building.
  - Example: Shopping centers are not allowed in APZ-1. However, shopping centers are allowed in APZ-2 but limited to a floor area ratio (FAR) of 0.22.
- Floor Area Ratio (FAR): FAR is calculated by a formula of a building's gross floor area (B) divided by the size of the lot (L) of where the building is located.  $G/L = FAR$ .
  - Example: A shopping center is an allowed use in APZ-2, however at a maximum FAR of 0.22. The 2-acre parcel (87,120 sq. ft.) would limit the size of the shopping center building to no greater than 19,166 square feet in size (or 22% per lot/parcel).

# UDC Section 6.5.3.J and K

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- **Plat Notice:** A notice shall be placed on all final plats for properties located within Accident Potential Zone 1 and 2 that the property, either partially or wholly, lies within an Accident Potential Zone and is subject to noise and/or aircraft accident potential which may be objectionable.
- **Supplemental Information:** Whenever any application for a change in zoning in a Military Compatibility Area Overlay District is filed, the director of development services should make formal request to the United States Navy at least thirty (30) days prior to the zoning commission hearing for any relevant statistics, operational activities information, technical data, or other studies with bearing on the request.

# Frequently Asked Questions

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- **What if I own a vacant lot that is already platted and zoned for single-family homes?**
    - Vacant platted lots which are zoned for residential uses may be used for single-family residences providing they conform to all other applicable requirements the Military Compatibility Overlay District. Such lots may not be subdivided into lots that exceed a density of one (1) single-family residence per acre.
  - **What if I want to remodel and/or add an accessory dwelling unit to my home located within the APZs?**
    - All other provisions of the Unified Development Code (UDC) must be followed (i.e. setbacks, height, open space, etc.). However, homes constructed within an APZ that constructed in compliance with the UDC at the time of construction may be repaired and enlarged provided (1) the number of primary dwelling units is not increased and (2) all other applicable requirements of the MCAOD are met.
  - **What if I own a home already located within the APZs and it is destroyed by a fire/flood/hurricane?**
    - The Unified Development Code (UDC) has existing provisions within Article 9 (Nonconformities) that allow for the reconstruction or repair of nonconforming uses/structures that were damaged or destroyed by fire, accidental, and/or natural disasters. Additionally, a single-family home may be built on a property regardless of the MCAOD but must be an allowed use granted by the underlying zoning district
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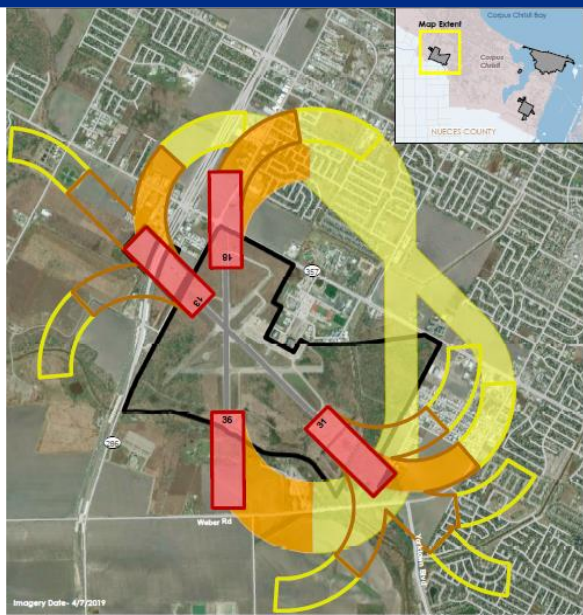
# Staff Recommendation for Joint Meeting

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**Approval** of the proposed Text  
Amendment and Map Amendment  
to the UDC



# 2009 v. 2020 AICUZ Maps



Source: ESRI 2018, May 2020, BRRC 2020  
Ecology and Environment, Inc. 2020  
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Figure 4-3  
Comparison of 2009 and 2020  
AICUZ Clear Zones and  
Accident Potential Zones,  
NOLF Cabaniss  
Naval Air Station  
Corpus Christi, Texas



Source: ESRI 2018, May 2020, BRRC 2020  
Ecology and Environment, Inc. 2020  
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Figure 4-5  
Comparison of 2009 and 2020  
AICUZ Clear Zones and  
Accident Potential Zones,  
NOLF Waldron  
Naval Air Station  
Corpus Christi, Texas

# UDC Section 6.5.3 Permitted Uses (Residential)

Table 6.5.3 Land Use Compatibility in Military Compatibility Area Overlay District					
Land Use and Density					
SLUCM NO.	Land Use Name	Clear Zone	APZ-1	APZ-2	Maximum Density
<b>10</b>	<b>Residential</b>				
<b>11</b>	Household Units:				
<b>11.11</b>	Single Units; Detached	N	N	Y	Maximum density of 2 Du/Acre
<b>11.12</b>	Single Units; Semi-detached	N	N	N	
<b>11.13</b>	Single Units; Attached Row	N	N	N	
<b>11.21</b>	Two Units; Side-by-Side	N	N	N	
<b>11.22</b>	Two Units; One above the other	N	N	N	
<b>11.31</b>	Apartments; Walk up	N	N	N	
<b>11.32</b>	Apartments; Elevator	N	N	N	
<b>12</b>	Group Quarters	N	N	N	
<b>13</b>	Residential Hotels	N	N	N	
<b>14</b>	Mobile home parks or courts	N	N	N	
<b>15</b>	Transient lodgings	N	N	N	
<b>16</b>	Other Residential	N	N	N	

# UDC Section 6.5.3 Permitted Uses (Trade)

Table 6.5.3 Land Use Compatibility in Military Compatibility Area Overlay District					
Land Use and Density					
SLUCM NO.	Land Use Name	Clear Zone	APZ-1	APZ-2	Maximum Density
<b>50</b>	<b>Trade</b>				
51	Wholesale Trade	N	Y	Y	Maximum FAR of 0.28 in APZ-1 & 0.56 in APZ-2
52	Retail trade-building materials, hardware, and farm equipment	N	Y	Y	Maximum FAR of 0.14 in APZ-1 & 0.28 in APZ-2
53	Retail trade-shopping centers	N	N	Y	Maximum FAR of 0.22
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-1 & 0.28 in APZ-2
57	Retail trade-furniture, home furnishings, and equipment	N	N	Y	Same as above
58	Retail trade-eating and drinking establishments	N	N	N	
59	Other retail trade	N	N	Y	Maximum FAR of 0.22