

# **Naval Construction Battalion Center Gulfport and Special Areas Joint Land Use Study Implementation**

**Hancock County Stennis International Airport Overlay District**

---



**Prepared by:**



**2316 Killearn Center Boulevard Suite 102  
Tallahassee, Florida 32309**

**September 2020**

## Contact Information

### **Gulf Regional Planning Commission:**

Jeff Loftus  
Project Manager  
Gulf Regional Planning Commission  
1635 Pops Ferry Road, Suite G  
Biloxi, Mississippi 39532

### **Stantec:**

Raymond W. Greer, AICP  
Project Manager  
2613 Killlearn Center Boulevard, Suite 102  
Tallahassee, Florida 32309  
Phone: 850.878.5001  
Fax: 850.878.5941

Disclaimer: This study was prepared under contract with the Gulf Regional Planning Commission, Mississippi, with financial support from the Office of Economic Adjustment, Department of Defense and the Mississippi Development Authority. The content does not necessarily reflect the views of the Office of Economic Adjustment and the Mississippi Development Authority.

# Table of Contents

---

Introduction .....	1
Stennis International Airport .....	1
Land Use Compatibility .....	1
Land Use Compatibility Recommendations.....	2
Stennis International Airport Overlay District .....	3
Obstruction Zone Requirements.....	3
Noise Zone Requirements.....	6
Overflight Zone Requirements.....	6
Visual or Electronic Interference Zone Requirements.....	7
Wildlife Zone Requirements .....	8
Obstruction Evaluation Requirements.....	9

## **Appendix**

Appendix A – Overlay District

Appendix B – Maps

## **Introduction**

The Naval Construction Battalion Center Gulfport and Special Areas Joint Land Use Study (JLUS), adopted in August 2017, was created in order to respond to the growth surrounding the Naval Construction Battalion Center and associated areas that the installation uses within the neighboring counties. The JLUS provides strategies and tools to reduce conflict between a military installation and the surrounding communities to ensure the continued mission of the military installation. The following report summarizes the recommendations regarding the creation of an overlay district for the area immediately surrounding Stennis International Airport to protect it from land use and compatibility issues.

## **Stennis International Airport**

The Stennis International Airport (SIA) is a 585-acre general aviation airport owned and operated by the Hancock County Port and Harbor Commission (HCPHC). It is located on the eastern edge of the Stennis Space Center Buffer Zone, approximately 10 miles from the Space Center. The airport includes an 8,497-foot long, 150-foot wide, main runway with sufficient pavement strength to support passenger and cargo aircraft.

Training from all branches of the military takes place at SIA, including naval Special Warfare training and operations such as aircraft loading and equipment staging, military free fall and static line jumping, helicopter fast rope and rappelling, drop zone and convoy training. The training is conducted under an airport use agreement between the HCPHC, Hancock County Board of Supervisors, and the U.S. Government.

Plans are being designed to expand SIA to include a 125-acre site to be used exclusively as a military joint use heavy lift drop zone. The additional space would be used by Naval Special Warfare, the Air Force, and the Coast Guard. A 3,500 linear foot military joint use assault landing strip is also in the design stages and additional funding sources are being sought.

## **Land Use Compatibility**

While SIA operates as a general-use airport, it also functions somewhat as a military installation due to its heavy use by the military. This use is planned to expand in the future. Development near SIA must be considered not only in terms of compatibility with the functions of the airport, but also with the functions of a military installation. Without guiding land use controls, growth in close proximity to a military installation can harm its mission by encroaching on the facility leading to reduced or restricted training, altered base missions, and ultimately base closure.

Due to the dynamic nature of military operations and training exercises, many different aspects of development qualify as encroachment. For example, the height of structures, whether they are residential or office high-rise buildings, cell towers, wind towers, or manufacturing plants, can interfere with flight training for military bases. Incompatible uses adjacent to military installations, particularly when located within noise contours or safety zones, include the following:

- Uses that concentrate people into small areas;
- Land Uses that house sensitive populations, such as hospitals, schools, or day cares;
- Uses that attract birds;
- Uses that emit electrical emissions;
- Uses that produce excessive lighting; and
- Uses that releases smoke, dust, steam.

Approximately half of the land contained within the overlay area around SIA is contained within the Stennis Space Center Buffer area. There are specific restrictions on the type and location of development within this buffer area. No residential development is allowed, and the predominant use is agriculture. Residential development is located in the northern and southern portions of the overlay area, along with a few commercial and government/educational parcels. The Future Land Use Map shows residential, commercial, office park, and industrially-designated lands east of the SIA. The current use patterns of agriculture, residential, public facilities, and commercial are predominately compatible with the training exercises and activities taking place on the base. The majority of off-site impacts generated by the installation are noise from aircraft activities. In addition, there are danger zones designated to protect the population from aircraft crashes during takeoff and landing. Although there are no specific land uses, either currently or in the future, that could be identified as detrimental to the installation, there are compatibility concerns with the uses identified above that should be considered when planning for future growth and military activity expansion.

## **Land Use Compatibility Recommendations**

The JLUS developed the following recommendations concerning SIA to help ensure the continued mission of NCBC and Special Areas:

- Establish an Airport Overlay District which encompasses the entirety of the Stennis International Airport Study Area.
- Update Hancock County and other impacted jurisdictions' Comprehensive Plans to incorporate the Airport Overlay District.
- Update Hancock County and other impacted jurisdictions' zoning regulations to incorporate the Airport Overlay District.
- Create an Airport compatibility Element within the Comprehensive Plans of impacted jurisdictions.
- Develop and distribute property owner information to provide details on applicable regulations that govern development within the Airport Overlay District.
- Limit incompatible uses within the Airport Overlay District
- Control Land Use density and Intensity within the Airport overlay District.

## Stennis International Airport Overlay District

The Hancock Stennis Airport Overlay District (HSAOD) corresponds to the Federal Aviation Administration Part 77 surfaces for SIA. The Part 77 surface, in effect, identifies the maximum height at which a structure would be considered an obstacle at any given point around an airport. The HSAOD includes five subdistricts within the Part 77 surfaces of varying height restrictions that correspond to different Part 77 surfaces. Please refer to Map 1: Location Map in Appendix A for the location of the proposed HSAOD.

Many of the parcels that fall within the HSAOD are already developed. Therefore, their occupants have generally experienced the off-site impacts of the airport. However, there are vacant parcels present within the HSAOD, and there is the potential for redevelopment within the HSAOD in the future. Creating an opportunity for greater input from the airport and the military and regulating the type and form of development within the HSAOD will serve to protect the mission at the installation.

The HSAOD is composed of five sub-districts: the Obstruction Zone, the Noise Zone, the Overflight Zone, the Visual or Electronic Interference Zone, and the Wildlife Attractant Zone. The following requirements are proposed for development within the HSAOD.

### Obstruction Zone Requirements

501.03-01 **Obstruction Height Zone.** Zone height limitations and sizes established in this section conform to the standards for determining obstructions to air navigation of 14 Code of Federal Regulations Part 77, ss 77.23. This zone applies to all of the land lying beneath the primary, approach, transitional, horizontal and conical surfaces as they apply to the HSAOD (see Map XX, Airport Height and Safety Zones). For any object or structure with a top elevation in excess of an Obstruction Height Zone surface, as specified in this section, any permit or variance granted shall, as a specific condition, require the owner to mark and light the structure to indicate to aircraft pilots the presence of an obstruction to air navigation. Such marking and lighting shall conform to the specific standards established by Federal Aviation Administration Advisory Circular 70/7460-1, as amended.

Existing structures not in compliance at the effective date of this regulation shall be required to comply whenever the existing marking requires refurbishment, whenever the existing lighting requires replacement, or within three (3) years of the effective date of this code, whichever occurs first.

An area located beneath more than one of the described surfaces is considered to be only affected by the surface with the more restrictive height limitation. No manmade or natural object or structure shall exceed the elevations defined by the various surfaces hereby established and defined as follows:

501.03-01.01 **Primary Surface:** A surface longitudinally centered on each runway, extending 200 feet beyond each end. The width of the

surface will be as specified for the most precise approach existing or planned for either end of that runway as follows:

Runway 18L-36R: 1,000 feet  
Runway 18R-36L: 1,000 feet  
Runway 18C-36CL: 1,000 feet

No object or structure shall be permitted within a primary surface that is not part of the landing and take-off facilities and is of a greater elevation above mean sea level height than the nearest point of the runway centerline.

501.03-01.02 **Approach Surface.** A surface longitudinally centered on the extended runway centerline and extending outward from the end of the Primary Zone. The approach surface is designated for each runway based upon the type of approach available or planned for that runway end.

**Approach Surface Widths:** The inner edge of the approach surface is the same width as the Primary Surface. The outer width of the approach surface is prescribed for the most precise approach existing or planned for that runway and expanding uniformly outward to a width of:

Runway 18L-36R: 16,000 feet  
Runway 18R-36L: 16,000 feet  
Runway 18C-36CL: 16,000 feet

**Approach Surface Lengths:** The approach surface extends for a horizontal distance of:

Runway 18L-36R: 50,000 feet  
Runway 18R-36L: 50,000 feet  
Runway 18C-36C: 50,000 feet

**Approach Surface Heights:** No manmade or natural object or structure will be permitted within an approach surface, beginning at its intersection with the end of the Primary Surface, having a height greater than the runway end elevation, the height above the runway end elevation increasing with horizontal distance outward as follows:

Runway 18L-36R: one (1) foot vertically for every fifty (50) feet horizontally for the first 10,000 feet increasing to one (1) foot vertically for every forty (40) feet horizontally for an additional 40,000 feet.

Runway 18R-36L: one (1) foot vertically for every fifty (50) feet horizontally for the first 10,000 feet increasing to one (1)

foot vertically for every forty (40) feet horizontally for an additional 40,000 feet.

Runway 18C-36C: one (1) foot vertically for every fifty (50) feet horizontally for the first 10,000 feet increasing to one (1) foot vertically for every forty (40) feet horizontally for an additional 40,000 feet.

501.03-01.03 **Horizontal Surface.** A surface surrounding each public use airport with the outer boundary constructed by swinging arcs of specified radii from the center of each Primary Surface end for each airport runway then connecting adjacent arcs by tangents. The arc radii for each runway end will have the same arithmetic value and will be the highest value determined for either end of that runway. When a smaller arc is encompassed by the tangent connecting larger arcs, the smaller shall be disregarded in determining the surface boundary. The radius of each runway arc is:

Runway 18L-36R: 10,000 feet

Runway 18R-36L: 10,000 feet

Runway 18C-36C: 10,000 feet

**Horizontal Surface Height:** No object or structure will be permitted in the horizontal zone that has a height greater than 150 feet above the airport elevation.

501.03-01.04 **Conical Surface.** An area extending outward from the periphery of the Horizontal Surface for a distance of 4,000 feet.

**Conical Surface Height:** No object or structure will be permitted in the conical surface that has a height greater than 150 feet above the airport elevation at its inner boundary with the permitted height increasing one (1) foot vertically for every twenty (20) feet of horizontal distance measured outward from the inner boundary to a height 350 feet above airport elevation at the outer boundary.

501.03-01.04 **Transitional Surface.** A surface extending outward from the sides of each Primary Surface and Approach Surface connecting them to the Horizontal Surface and an area outward 5,000 feet horizontally or until intersection with the Conical Surface from the side of that portion of the Approach Surface of a Precision Instrument Runway extending through and beyond the Conical Surface.

**Transitional Surface Height:** No manmade or natural object or structure will be permitted within the transitional surface which extends from the sides of the Primary Surfaces and the sides of

Approach Surfaces at their adjoining boundary lines increasing at a rate of one (1) foot vertically for every seven (7) feet horizontally, with the horizontal distance measured at right angles to the runway centerline and extended runway centerline. For the portion of the approach surface extending beyond the limits of the Conical Surface, the transitional surface shall extend for a horizontal distance of 5,000 feet measured horizontally from the edge of the Approach Surface and at right angles to the runway centerline.

## Noise Zone Requirements

501.03-02 **Airport Noise Zone.** This zone is set forth in Map XX. This zone shall serve as the means of providing notification of potential impact from aircraft operations. The area under this zone may be subject to objectionable noise levels that may affect the use or enjoyment of the property.

501.03-02.01 Within the 65 Decibel DNL contour, any permit for development or sale of any property shall be accompanied in writing by the following notice:

“NOTICE: The real property which is the subject of this sale is located within the Airport Noise Zone of the Stennis International Airport. As a result, the residential use of the real property may be subject to objectionable noise levels that may affect your enjoyment of the real property.

## Overflight Zone Requirements

501.03-03 **Aircraft Overflight Zone.** This zone is created underlying those recurring, fixed flight paths for aircraft taking off and landing at Stennis International Airport. This Zone consists of the (ground) area underlying the Primary Zone, Approach Zone (limited to the inner 10,000 feet), and adjoining Transitional Zones described on Map XX. The following standards shall apply to all development in the Aircraft Overflight Zone:

501.03-03.01 The construction of a public or private educational facility, except for educational facilities established expressly for flight training, shall be prohibited within this zone or at either end of an existing or planned runway within an area which extends five (5) miles from each runway end in a direct line along the centerline of the runway, and which has a width which measures one-half the length of the runway and is centered on the extended runway centerline.

501.03-03.02 Any tree adjacent to the Stennis International Airport which, due to violation of any height requirement of this Code, has become an obstruction to air navigation operations shall be removed.

## Visual or Electronic Interference Zone Requirements

501.03-04 **In-Flight Visual or Electronic Interference Zone.** The requirements shall apply to each permitted use within a 10,000-foot boundary of the airport site and shall be reviewed on a case-by-case situation.

501.03-04.01 **Lighting.** All lights and illumination used in conjunction with streets, parking, signs or uses of land and structures shall be arranged and operated in such manner that is not misleading to or obscure pilots' vision during critical take-off or landing stages of flight or be otherwise dangerous to aircraft occupants or flight operations at an airport covered in this Code.

2501.03-04.02 **Energy Transmission.** No use of high-energy beam devices (e.g. x-rays, radar, lasers, etc.) is permitted where the energy transmission is not fully contained within a building or some type of absorbing or masking vessel.

501.03-04.03 **Visual Obscurations.** Except for prescribed burns authorized or permitted by the Mississippi Forest Commission, no operations from any type shall produce smoke, glare or other visual obscuration within three miles of any usable runway at the Stennis International Airport. For controlled burns within three miles of any usable runway at the airport and where authorized or permitted by the Mississippi Forest Commission, the name and phone number of the burn operator, and the location, duration, and other characteristics of the planned burn shall be submitted to the executive director of the Stennis International Airport no less than seven (7) days prior to the planned start of the burn. Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner, or operator. No burns shall be conducted that would reduce visibilities associated with aircraft approaches at Stennis International Airport.

501.03-04.04 **Electronic Interference.** No operations from any type of use shall produce electronic interference with navigation signals or radio communication between aircraft, the airport, or an air traffic control facility.

## Wildlife Attractant Zone Requirements

501.03-05 **Wildlife Attractant Hazard Zone.** Waste disposal and other facilities which store, handle, or process organic or any other material that foster or harbor the growth of insects, rodents, amphibians or other organisms will result in significant bird population. Certain uses are incompatible if located within 10,000 feet of any existing or planned runway of the Stennis International Airport. This zone is geographically represented as a 10,000 buffer around the airport (Map XX). These uses shall conform to the specific standards established by Federal Aviation Administration Advisory Circular 150/5200-33C, as amended. With exception to dry retention stormwater management facilities, the following regulations shall apply within this zone, and are encouraged within five miles of Stennis International Airport's aircraft operations area..

501.03-05.01 With the exception of Construction and Demolition (C&D) landfills, landfills shall not be located within 10,000 feet of any existing or planned runway.

501.03-05.02 Stormwater management facilities may be permitted within 10,000 feet of any existing or planned runway provided that:

1. Pond side slopes measure 2:1 and pond bank slopes measure a minimum of 4:1.
2. Rip Rap, electrical fencing, and/or wire grid is placed around the perimeter of the ponds to keep birds out of the water where the depth is less than two (2) feet and to keep birds off the pond banks.
3. Aquatic vegetation in ponds is eliminated and aquatic vegetation growth is prevented through a maintenance program.

501.03-05.03 Wildlife hazards arising from existing wetlands located within 10,000 feet of any existing or planned runway should be corrected with the cooperation of local, state, and Federal regulatory agencies. Mitigation for wetland disturbances shall be designed to not create a wildlife hazard. Mitigation activities are recommended to be placed more than 10,000 feet away from any existing or planned runway.

501.03-05.04 Proposals for new dredge spoil containment areas located within 10,000 feet of any existing or planned runways shall be reviewed in conjunction with the Airport Authority on a case-by-case basis to determine their potential for attracting wildlife.

- 501.03-05.05 Agricultural activities located within 10,000 feet of existing or planned runways are discouraged from certain wildlife-attracting activities. Farmers within this area should coordinate with a qualified Airport Wildlife Biologist to ensure that their activities will not create a wildlife hazard.
- 501.03-05.06 Existing golf courses located within 10,000 feet of existing or planned runways are encouraged to coordinate with a qualified Airport Wildlife Biologist to minimize hazardous wildlife attractions. The construction of new golf courses within 10,000 feet of existing or planned runways is discouraged.

## Obstruction Evaluation Requirements

501.03-06 **Obstruction Evaluation/Airport Airspace Analysis (OE/AAA).** Aeronautical studies are required to be submitted to the Federal Aviation Administration (FAA) for construction or alteration projects within the vicinity of HAS. These studies are required to be submitted at least 45 days prior to start of construction. However, studies are encouraged to be submitted at least 60 days prior to construction. Submission of the study must be through FAA form 7460-1, Notice of Proposed Construction or Alteration, and FAA Form 7640-2, Notice of Actual Construction or Alteration.

- 501.03-06.01 The requirements for filing with the FAA for proposed structures varies based upon height, proximity to airport facilities, location, and frequencies emitted from the structure. Pursuant to 14 CFR Part 77.9, the following types of alteration or construction necessitate the filing of FAA Forms 7460-1 and 7460-2:
1. Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:
    - a. 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest HSA runway to the project.
    - b. 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway at HSA to the project.
  2. Any highway, railroad, waterway, or other corridor for mobile objects whose height, if adjusted upward according to 14 CFR 77.9(c), would exceed the standards within 14 CFR 77.9(a) or 14 CFR 77.9(b).
  3. Any structure that emits frequencies and does not meet the conditions of the FAA Co-location Policy.
  4. Any structure that is in proximity to a navigation facility and may impact the assurance of navigation signal reception.

5. Any construction or alteration exceeding 200 feet above ground level, regardless of location.
6. Any construction or alteration located on an airport described in 14 CFR 77.9(d).
7. Any construction or alteration in which filing has been requested by the FAA.

To assist in determining whether a project needs to file a study with the FAA, a Notice Criteria Tool is available on the OE/AAA website. In addition to the tool, the FAA representative for HSA should be consulted.

501.03-06.02 Form submittal for projects not located on an airport may either be submitted electronically through the FAA's website or through the mail. Form submittal for projects located on an airport should be submitted electronically through the FAA's website.

# Appendix A

## Overlay District

---

## Comprehensive Plan Amendment

Policy 11.3: The Stennis International Airport (HSA) Overlay District (HSA~~SIAOD~~) is established to protect the functions of the airport from incompatible development. The H~~S~~IAD shall consist of the FAA Part 77 surfaces as identified on Map XX. Height and use restrictions for the H~~S~~IAD are outlined in Section 501 of the Zoning Ordinance.

## Zoning Ordinance Amendment

### **Section 501 Stennis International Airport (HSA) Overlay District (HSAOD)**

501.01 **Purpose.** The Stennis International Airport Overlay District (H~~S~~IAD) is established to protect the functions of the airport from incompatible development by placing limitations on the height of objects and structures. The H~~S~~IAD also prevents the creation of objects or structures that: are hazardous to aeronautical operations; could increase the risk to the public's health, safety or well-being in the event of an aviation accident; would not be compatible with airport activities; or would otherwise impair the full utility and operating capacity of the Stennis International Airport.

501.02 **Zones.** Five sub-zones are created for the H~~S~~IAD:

501.02-01 **Obstruction Height Zone.** Height limitations and sizes are established to conform to the standards for determining obstructions to air navigation (Map XX).

501.02-02 **Airport Noise Zone.** This zone is geographically depicted on Map XX.

501.02-03 **Airport Overflight Zone.** This zone is geographically depicted on Map XX.

501.02-04 **Visual or Electronic Interference Zone.** This zone is geographically depicted on Map XX.

501.02-05 **Wildlife Attractant Hazard Zone.** This zone is geographically represented as a 10,000-foot buffer around the Stennis International Airport (Map XX).

501.03 **Zone Standards**

501.03-01 **Obstruction Height Zone.** Zone height limitations and sizes established in this section conform to the standards for determining obstructions to air navigation of 14 Code of Federal Regulations Part 77, ss 77.21. This zone applies to all the land lying beneath the primary, approach, transitional, horizontal, and conical surfaces as they apply to the H~~S~~IAD (see Map XX, Obstruction Height Zones). For any object or structure with a top elevation in excess of an Obstruction Height Zone surface, as specified in this section, any permit or variance granted shall, as a specific condition, require the owner to mark and light the structure to indicate to aircraft pilots the presence of an obstruction to air navigation. Such marking and lighting shall conform to the specific standards established by Federal Aviation Administration Advisory Circular 70/7460-1, as amended.

Existing structures not in compliance at the effective date of this regulation shall be required to comply whenever the existing marking requires refurbishment, whenever the existing lighting requires replacement, or within three (3) years of the effective date of this code, whichever occurs first.

An area located beneath more than one of the described surfaces is only affected by the surface with the more restrictive height limitation. No manmade or natural object or structure shall exceed the elevations defined by the various surfaces hereby established and defined as follows:

501.03-01.01 **Primary Surface:** A surface longitudinally centered on each runway, extending 200 feet beyond each end. The width of the surface will be as specified for the most precise approach existing or planned for either end of that runway as follows:

Runway 18L-36R: 1,000 feet  
Runway 18R-36L: 1,000 feet  
Runway 18C-36CL: 1,000 feet

No object or structure shall be permitted within a primary surface that is not part of the landing and take-off facilities and is of a greater elevation above mean sea level height than the nearest point of the runway centerline.

501.03-01.02 **Approach Surface.** A surface longitudinally centered on the extended runway centerline and extending outward from the end of the Primary Zone. The approach surface is designated for each runway based upon the type of approach available or planned for that runway end.

**Approach Surface Widths:** The inner edge of the approach surface is the same width as the Primary Surface. The outer width of the approach surface is prescribed for the most precise approach existing or planned for that runway and expanding uniformly outward to a width of:

Runway 18L-36R: 16,000 feet  
Runway 18R-36L: 16,000 feet  
Runway 18C-36CL: 16,000 feet

**Approach Surface Lengths:** The approach surface extends for a horizontal distance of:

Runway 18L-36R: 50,000 feet  
Runway 18R-36L: 50,000 feet  
Runway 18C-36C: 50,000 feet

**Approach Surface Heights:** No manmade or natural object or structure will be permitted within an approach surface, beginning at its intersection with the end of the Primary Surface, having a height greater than the runway end elevation, the height above the runway end elevation increasing with horizontal distance outward as follows:

Runway 18L-36R: one (1) foot vertically for every fifty (50) feet horizontally for the first 10,000 feet increasing to one (1) foot vertically for every forty (40) feet horizontally for an additional 40,000 feet.

Runway 18R-36L: one (1) foot vertically for every fifty (50) feet horizontally for the first 10,000 feet increasing to one (1) foot vertically for every forty (40) feet horizontally for an additional 40,000 feet.

Runway 18C-36C: one (1) foot vertically for every fifty (50) feet horizontally for the first 10,000 feet increasing to one (1) foot vertically for every forty (40) feet horizontally for an additional 40,000 feet.

501.03-01.03 **Horizontal Surface.** A surface surrounding each public use airport with the outer boundary constructed by swinging arcs of specified radii from the center of each Primary Surface end for each airport runway then connecting adjacent arcs by tangents. The arc radii for each runway end will have the same arithmetic value and will be the highest value determined for either end of that runway. When a smaller arc is encompassed by the tangent connecting larger arcs, the smaller shall be disregarded in determining the surface boundary. The radius of each runway arc is:

Runway 18L-36R: 10,000 feet

Runway 18R-36L: 10,000 feet

Runway 18C-36C: 10,000 feet

**Horizontal Surface Height:** No object or structure will be permitted in the horizontal zone that has a height greater than 150 feet above the airport elevation.

501.03-01.04 **Conical Surface.** An area extending outward from the periphery of the Horizontal Surface for a distance of 4,000 feet.

**Conical Surface Height:** No object or structure will be permitted in the conical surface that has a height greater than 150 feet above the airport elevation at its inner boundary with the permitted height increasing one (1) foot vertically for every twenty (20) feet of horizontal distance measured outward from

the inner boundary to a height 350 feet above airport elevation at the outer boundary.

501.03-01.04 **Transitional Surface.** A surface extending outward from the sides of each Primary Surface and Approach Surface connecting them to the Horizontal Surface and an area outward 5,000 feet horizontally or until intersection with the Conical Surface from the side of that portion of the Approach Surface of a Precision Instrument Runway extending through and beyond the Conical Surface.

**Transitional Surface Height:** No manmade or natural object or structure will be permitted within the transitional surface which extends from the sides of the Primary Surfaces and the sides of Approach Surfaces at their adjoining boundary lines increasing at a rate of one (1) foot vertically for every seven (7) feet horizontally, with the horizontal distance measured at right angles to the runway centerline and extended runway centerline. For the portion of the approach surface extending beyond the limits of the Conical Surface, the transitional surface shall extend for a horizontal distance of 5,000 feet measured horizontally from the edge of the Approach Surface and at right angles to the runway centerline.

501.03-02 **Airport Noise Zone.** This zone is set forth in Map XX. This zone shall serve as the means of providing notification of potential impact from aircraft operations. The area under this zone may be subject to objectionable noise levels that may affect the use or enjoyment of the property. Within this zone, the means of providing notification of potential impact from aircraft operations shall be as follows:

501.03-02.01 Within the 65 Decibel DNL contour~~Airport Noise Zone~~, any permit for development or sale of any property shall be accompanied in writing by the following notice:

“NOTICE: The real property which is the subject of this sale is located within the Airport Noise Zone of the Stennis International Airport. As a result, the residential use of the real property may be subject to objectionable noise levels that may affect your enjoyment of the real property.”

501.03-03 **Aircraft Overflight Zone.** This zone is created underlying those recurring, fixed flight paths for aircraft taking off and landing at Stennis International Airport. This Zone consists of the (ground) area underlying the Primary Zone, Approach Zone (limited to the inner 10,000 feet), and adjoining Transitional Zones described on Map XX. The following standards shall apply to all development in the Aircraft Overflight Zone:

- 501.03-03.01 The construction of a public or private educational facility, except for educational facilities established expressly for flight training, shall be prohibited within this zone or at either end of an existing or planned runway within an area which extends five (5) miles from each runway end in a direct line along the centerline of the runway, and which has a width which measures one-half the length of the runway and is centered on the extended runway centerline.
- 501.03-03.02 Any tree adjacent to the Stennis International Airport which, due to violation of any height requirement of this Code, has become an obstruction to air navigation operations shall be removed.
- 501.03-04 **In-Flight Visual or Electronic Interference Zone.** The requirements shall apply to each permitted use within a 10,000-foot boundary of the airport site and shall be reviewed on a case-by-case situation.
- 501.03-04.01 **Lighting.** All lights and illumination used in conjunction with streets, parking, signs or uses of land and structures shall be arranged and operated in such manner that is not misleading to or obscure pilots' vision during critical take-off or landing stages of flight or be otherwise dangerous to aircraft occupants or flight operations at an airport covered in this Code.
- 2501.03-04.02 **Energy Transmission.** No use of high-energy beam devices (e.g. x-rays, radar, lasers, etc.) is permitted where the energy transmission is not fully contained within a building or some type of absorbing or masking vessel.
- 501.03-04.03 **Visual Obscurations.** Except for prescribed burns authorized or permitted by the Mississippi Forest Commission, no operations from any type shall produce smoke, glare, or other visual obscuration within three miles of any usable runway at the Stennis International Airport. For controlled burns within three miles of any usable runway at the airport and where authorized or permitted by the Mississippi Forest Commission, the name and phone number of the burn operator, and the location, duration, and other characteristics of the planned burn shall be submitted to the executive director of Stennis International Airport no less than seven (7) days prior to the planned start of the burn. Burning must not occur within 500 yards of commercial airport property, private airfields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner, or operator. No burns shall be conducted that would reduce visibilities associated with aircraft approaches at Stennis International Airport.

501.03-04.04 **Electronic Interference.** No operations from any type of use shall produce electronic interference with navigation signals or radio communication between aircraft, the airport, or an air traffic control facility.

501.03-05 **Wildlife Attractant Hazard Zone.** Waste disposal and other facilities which store, handle, or process organic or any other material that foster or harbor the growth of insects, rodents, amphibians, or other organisms will result in the presence of a significant bird population. Certain uses are incompatible if located within 10,000 feet of any existing or planned runway of the Stennis International Airport. This zone is geographically represented as a 10,000 buffer around the airport (Map XX). These uses shall conform to the specific standards established by Federal Aviation Administration Advisory Circular 150/5200-33C, as amended. With exception of dry retention stormwater management facilities, the following regulations shall apply within this zone, and are encouraged within five miles of Stennis International Airport's aircraft operations area.

501.03-05.01 With the exception of Construction and Demolition (C&D) landfills, landfills shall not be located within 10,000 feet of any existing or planned runway.

501.03-05.02 Stormwater management facilities may be permitted within 10,000 feet of any existing or planned runway provided that:

1. Pond side slopes measure 2:1 and pond bank slopes measure a minimum of 4:1.
2. Rip Rap, electrical fencing, and/or wire grid is placed around the perimeter of the ponds to keep birds out of the water where the depth is less than two (2) feet and to keep birds off the pond banks.
3. Aquatic vegetation in ponds is eliminated and aquatic vegetation growth is prevented through a maintenance program.

501.03-05.03 Wildlife hazards arising from existing wetlands located within 10,000 feet of any existing or planned runway should be corrected with the cooperation of local, state, and Federal regulatory agencies. Mitigation for wetland disturbances shall be designed to not create a wildlife hazard. Mitigation activities are recommended to be placed more than 10,000 feet away from any existing or planned runway.

501.03-05.04 Proposals for new dredge spoil containment areas located within 10,000 feet of any existing or planned runways shall be reviewed in conjunction with the Airport Authority on a case-by-case basis to determine their potential for attracting wildlife.

501.03-05.05 Agricultural activities located within 10,000 feet of existing or planned runways are discouraged from certain wildlife-attracting activities. Farmers within this area should coordinate with a qualified Airport Wildlife Biologist to ensure that their activities will not create a wildlife hazard.

501.03-05.06 Existing golf courses located within 10,000 feet of existing or planned runways are encouraged to coordinate with a qualified Airport Wildlife Biologist to minimize hazardous wildlife attractions. The construction of new golf courses within 10,000 feet of existing or planned runways is discouraged.

501.03-06 Obstruction Evaluation/Airport Airspace Analysis (OE/AAA). Aeronautical studies are required to be submitted to the Federal Aviation Administration (FAA) for construction or alteration projects within the vicinity of HAS. These studies are required to be submitted at least 45 days prior to start of construction. However, studies are encouraged to be submitted at least 60 days prior to construction. Submission of the study must be through FAA form 7460-1, Notice of Proposed Construction or Alteration, and FAA Form 7640-2, Notice of Actual Construction or Alteration.

501.03-06.01 The requirements for filing with the FAA for proposed structures varies based upon height, proximity to airport facilities, location, and frequencies emitted from the structure. Pursuant to 14 CFR Part 77.9, the following types of alteration or construction necessitate the filing of FAA Forms 7460-1 and 7460-2:

1. Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:
  - a. 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest HSA runway to the project.
  - b. 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway at HSA to the project.
2. Any highway, railroad, waterway, or other corridor for mobile objects whose height, if adjusted upward according to 14 CFR 77.9(c), would exceed the standards within 14 CFR 77.9(a) or 14 CFR 77.9(b).
3. Any structure that emits frequencies and does not meet the conditions of the FAA Co-location Policy.
4. Any structure that is in proximity to a navigation facility and may impact the assurance of navigation signal reception.
5. Any construction or alteration exceeding 200 feet above ground level, regardless of location.
6. Any construction or alteration located on an airport described in 14 CFR 77.9(d).
7. Any construction or alteration in which filing has been requested by the FAA.

To assist in determining whether a project needs to file a study with the FAA, a Notice Criteria Tool is available on the OE/AAA website. In addition to the tool, the FAA representative for HSA should be consulted.

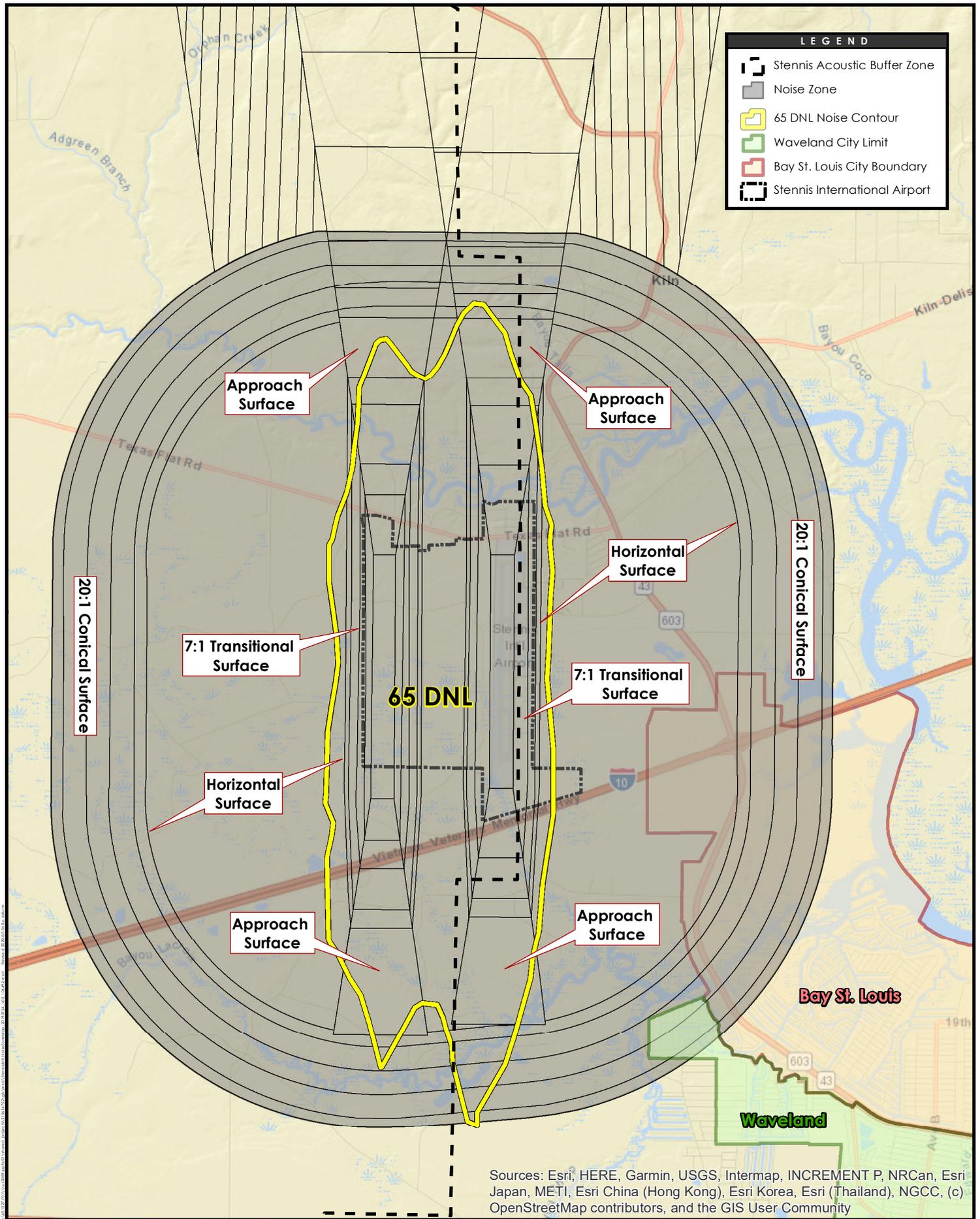
501.03-06.02 Form submittal for projects not located on an airport may either be submitted electronically through the FAA's website or through the mail. Form submittal for projects located on an airport should be submitted electronically through the FAA's website.

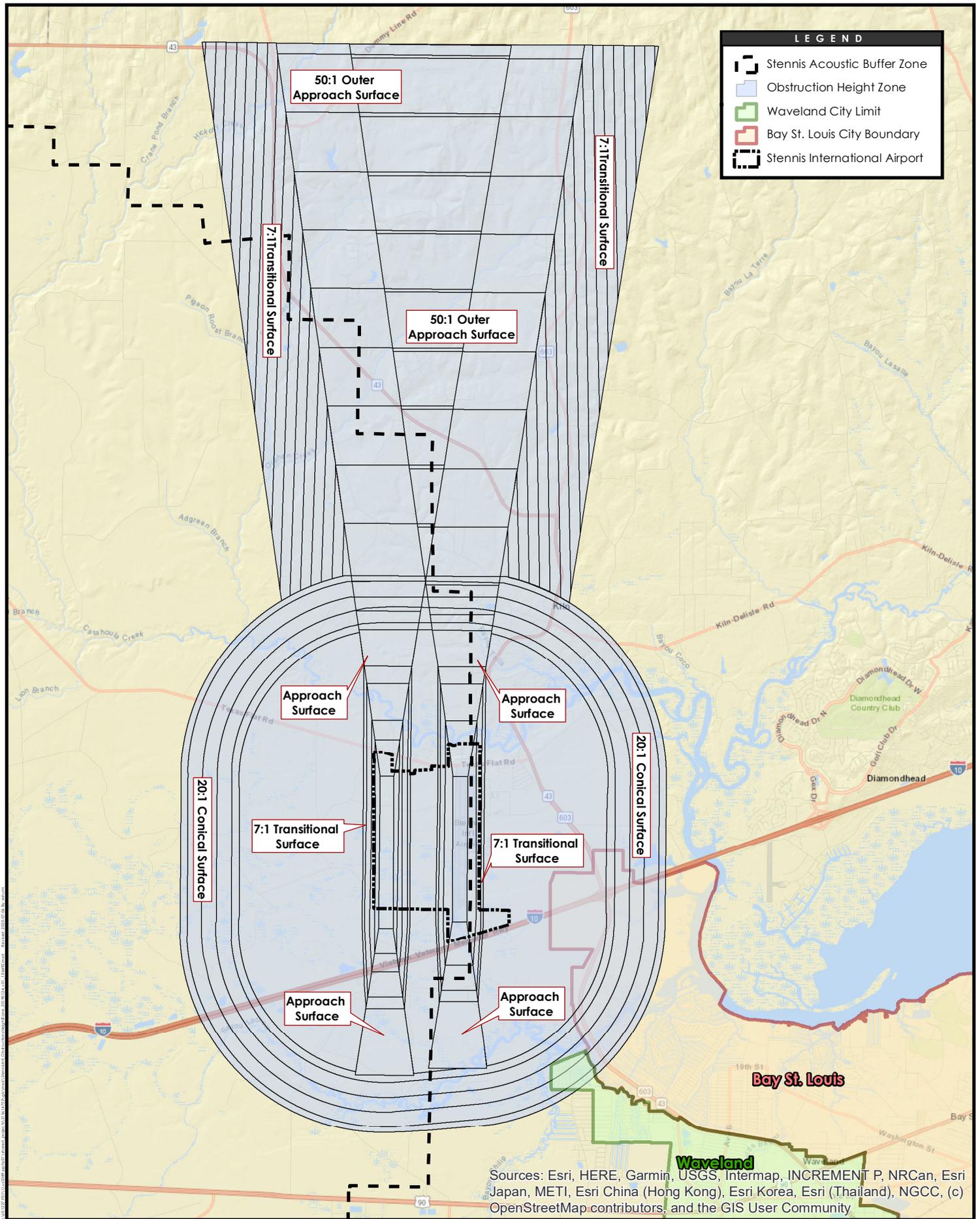
DRAFT

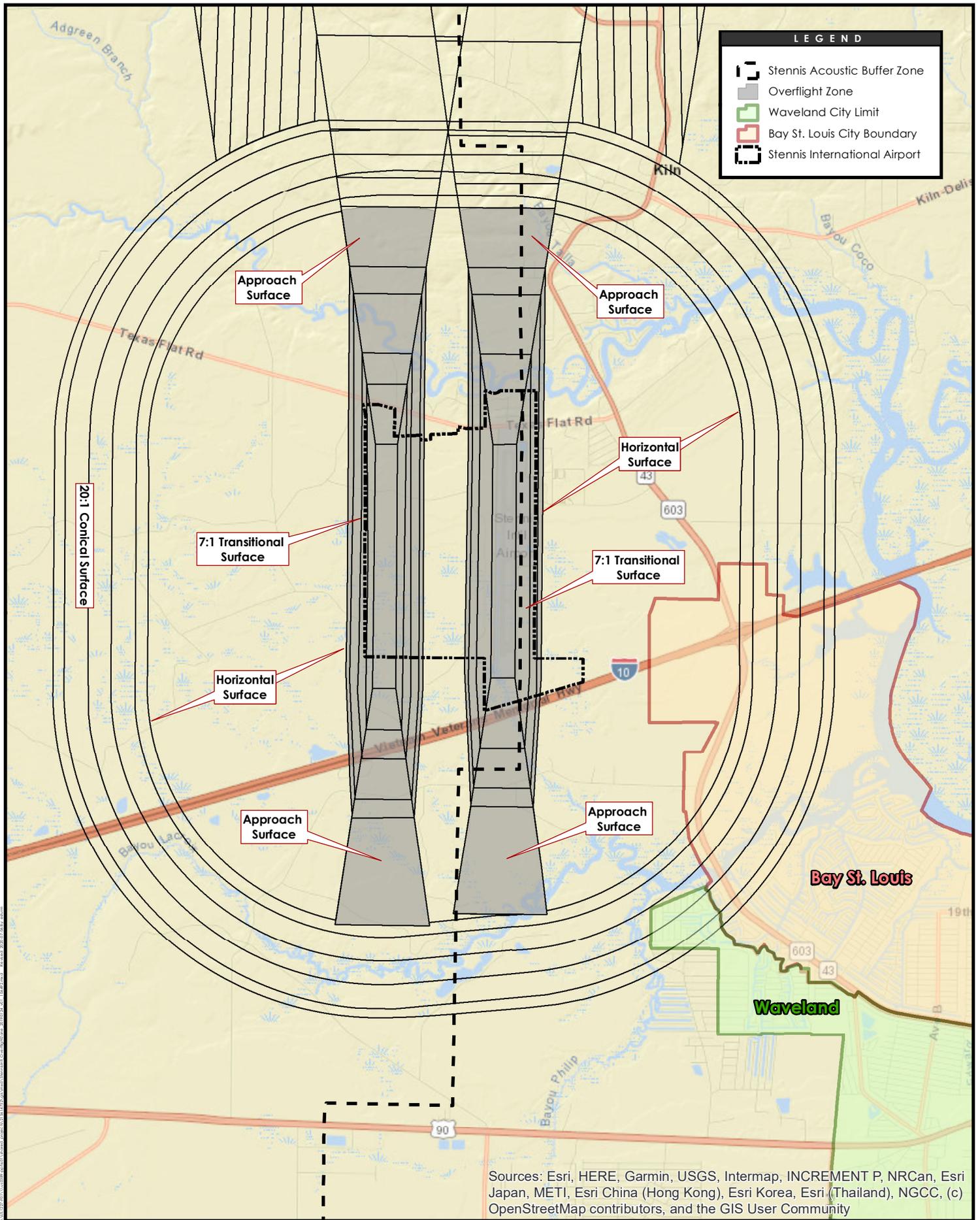
# Appendix B

## Maps

---



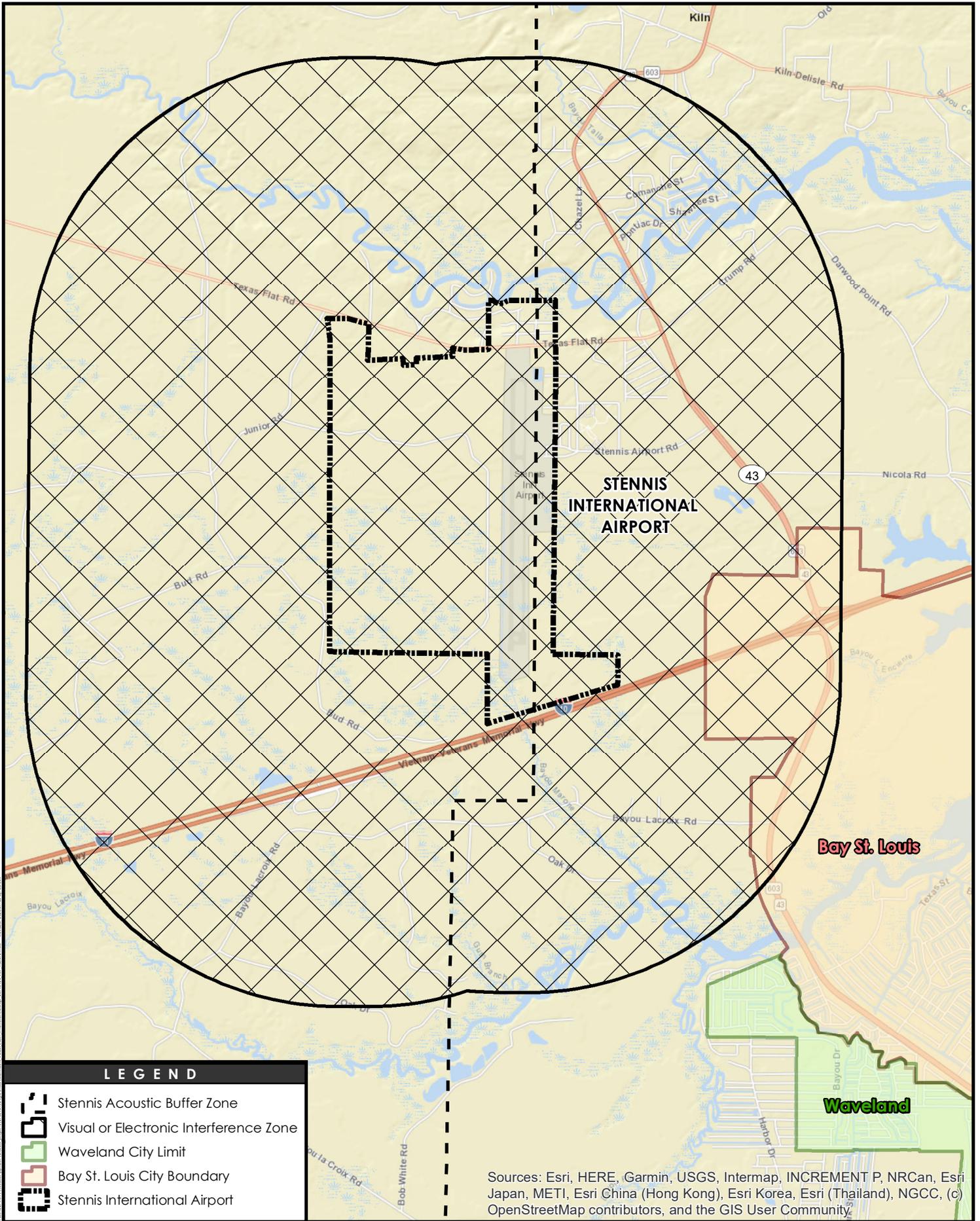




## Stennis International Airport Overflight Zone Map

July 2020





LEGEND	
	Stennis Acoustic Buffer Zone
	Visual or Electronic Interference Zone
	Waveland City Limit
	Bay St. Louis City Boundary
	Stennis International Airport

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community.



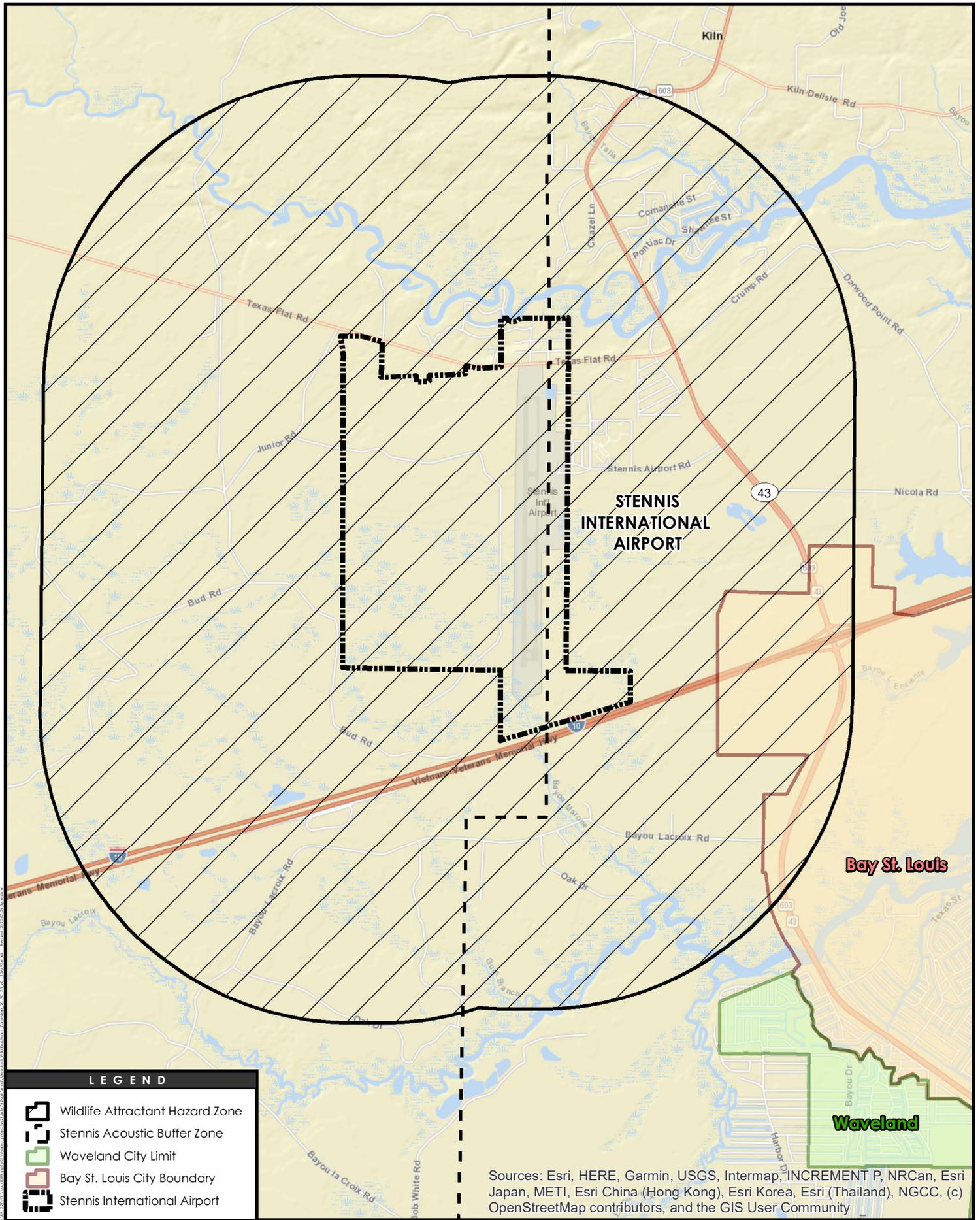
Stantec Consulting Services Inc.  
 6900 Professional Parkway East  
 Sarasota, FL 34240  
 tel 941.907.6900  
 fax 941.907.6911

## Stennis International Airport Visual or Electronic Interference Zone Map

July 2020



Prepared by: E.E.S. 09/21/16



**LEGEND**

-  Wildlife Attractant Hazard Zone
-  Stennis Acoustic Buffer Zone
-  Waveland City Limit
-  Bay St. Louis City Boundary
-  Stennis International Airport

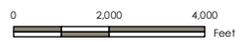
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Stantec Consulting Services Inc.  
 6900 Professional Parkway East  
 Sarasota, FL 34240  
 tel 941.907.6900  
 fax 941.907.6911

## Stennis International Airport Wildlife Attractant Hazard Zone Map

July 2020



Prepared by: E.E.S. 09/21/16